Source Test Report

The Chemours Company, FC, LLC
Fayetteville Works
22828 Highway 87W
Fayetteville, North Carolina

Source Tested: Vinyl Ethers North (VEN)
Carbon Bed (Inlet/Outlet)
Test Date: May 25, 2022

Project No. AST-2022-1651-002

Prepared By
Alliance Technical Group, LLC
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East Syracuse, NY 13057

Regulatory Information

Permit No.	North Carolina Department of Air Quality (NCDAQ) Title V Air Permit No. 03735T48

Source Information

Source Name	*Target Parameter*
Vinyl Ethers North (VEN) Carbon Bed	HFPO-DA

Contact Information

Test Location
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22828 Highway 87W
Fayetteville, North Carolina

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Alliance Technical Group, LLC (Alliance) has completed the source testing as described in this report. Results apply only to the source(s) tested and operating condition(s) for the specific test date(s) and time(s) identified within this report. All results are intended to be considered in their entirety, and Alliance is not responsible for use of less than the complete test report without written consent. This report shall not be reproduced in full or in part without written approval from the customer.

To the best of my knowledge and abilities, all information, facts and test data are correct. Data presented in this report has been checked for completeness and is accurate, error-free and legible. Onsite testing was conducted in accordance with approved internal Standard Operating Procedures. Any deviations or problems are detailed in the relevant sections in the test report.

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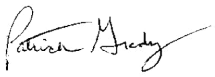

Patrick Grady
Alliance Technical Group, LLC

July 5, 2022
Date

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Introduction

1.0 Introduction

Alliance Technical Group, LLC (Alliance) was retained by The Chemours Company (Chemours) to conduct compliance testing at the Fayetteville Works Facility in Fayetteville, North Carolina. The facility operates under North Carolina Department of Air Quality (NCDAQ) Title V Air Permit No. 03735T48. Testing was conducted to determine the emission rate of hexafluoro-propylene oxide-dimer acid (HFPO-DA) from the inlet and outlet of the Vinyl Ethers North (VEN) Carbon Bed.

1.1 Source and Control System Descriptions

The Chemours Company (Chemours) owns and operates the Vinyl Ethers North (VEN) Carbon Bed. VEN is part of the fluoromonomer area at the Fayetteville facility. This area produces fluorocarbon compounds used to produce Chemours products, such as Nafion® Krytox® and Viton®. Indoor air fugitive emissions from VEN are vented to a carbon bed which is then vented to atmosphere through the Division Stack. Process emissions from VEN are directed to a thermal oxidizer.

1.2 Project Team

Personnel involved in this project are identified in the following table.

Table 1-1: Project Team

Facility Personnel	Christel Compton Eddie Vega
Regulatory Personnel	Evageline Lowery-Jacobs (NCDENR)
Alliance Personnel	Patrick Grady Antonio Anderson Kathleen DeMong Brian Goodhile Jeff Sheldon Angel Solis

Summary of Results

2.0 Summary of Results

Alliance conducted compliance testing at the Fayetteville Works Facility in Fayetteville, NC on May 25, 2022. Testing consisted of determining the emission rates of HFPO-DA at the inlet and outlet of the VEN Carbon Bed.

Tables 2-1 provides a summary of the emission testing results. Any difference between the summary results listed in the following table and the detailed results contained in appendices is due to rounding for presentation.

Table 2-1: Summary of Results

Run Number	Run 1	Run 2	Run 3	Average
Date	**5/25/22**	**5/25/22**	**5/25/22**	**--**
HFPO-DA Inlet Data				
Concentration, ng/dscm	2.0E+05	2.3E+05	2.9E+05	2.4E+05
Emission Rate, lb/hr	1.1E-02	1.3E-02	1.6E-02	1.3E-02
HFPO-DA Outlet Data				
Concentration, ng/dscm	2.6E+04	3.0E+04	3.4E+04	3.0E+04
Emission Rate, lb/hr	1.5E-03	1.6E-03	1.8E-03	1.6E-03
Reduction Efficiency, %	86.8	87.5	88.6	87.6

Testing Methodology

3.0 Testing Methodology

The emission testing program was conducted in accordance with the test methods listed in Table 3-1. Method descriptions are provided below while quality assurance/quality control data is provided in Appendix D.

Table 3-1: Source Testing Methodology

Parameter	U.S. EPA Reference Test Methods	Notes/Remarks
Volumetric Flow Rate	1 & 2	Full Velocity Traverses
Moisture Content	4	Gravimetric Analysis
Hexafluoro-Propylene Oxide-Dimer Acid	Modified Method 0010	Isokinetic Sampling

3.1 U.S. EPA Reference Test Methods 1 and 2 – Sampling/Traverse Points and Volumetric Flow Rate

The sampling location and number of traverse (sampling) points were selected in accordance with U.S. EPA Reference Test Method 1. To determine the minimum number of traverse points, the upstream and downstream distances were equated into equivalent diameters and compared to Figure 1-1 (for isokinetic sampling) and/or Figure 1-2 (measuring velocity alone) in U.S. EPA Reference Test Method 1.

Full velocity traverses were conducted in accordance with U.S. EPA Reference Test Method 2 to determine the average stack gas velocity pressure, static pressure and temperature. The velocity and static pressure measurement system consisted of a pitot tube and inclined manometer. The stack gas temperature was measured with a K-type thermocouple and pyrometer.

Stack gas velocity pressure and temperature readings were recorded during each test run. The data collected was utilized to calculate the volumetric flow rate in accordance with U.S. EPA Reference Test Method 2.

3.2 U.S. EPA Reference Test Method 4 – Moisture Content

The stack gas moisture content (BWS) was determined in accordance with U.S. EPA Reference Test Method 4. The gas conditioning train consisted of a series of chilled impingers. Prior to testing, each impinger was filled with a known quantity of water or silica gel. Each impinger was analyzed gravimetrically before and after each test run on the same balance to determine the amount of moisture condensed.

3.3 Method 0010 – Hexafluoro-Propylene Oxide-Dimer Acid

HFPO-DA emissions were evaluated in accordance with Modified Method 0010. Testing followed the submitted protocol in the execution of our onsite sampling and analysis activities. Modified Method 0010 procedure was followed as outlined in the protocol submitted to NC Division of Air Quality. Modified Method 0010 sampling and analysis procedures performed for this project are consistent with OTM-45, which was released by EPA in January 2021, subsequent to Chemours submittal of plans to DAQ.

The sample train consisted of a borosilicate glass nozzle attached directly to a heated borosilicate glass-lined probe. The probe was connected directly to a heated borosilicate glass filter holder containing a solvent-extracted glass fiber filter. In order to minimize possible thermal degradation of the HFPO-DA, the probe and particulate filter were heated to just above stack temperature to minimize water vapor condensation before the filter. The filter holder exit was connected to a water-cooled coil condenser followed by a water-cooled sorbent module containing

approximately 40 grams of XAD-2 resin. The XAD-2 inlet temperature was monitored to ensure that the module is maintained at a temperature below 20°C.

The XAD-2 resin trap was followed by a condensate knockout impinger and a series of three impingers each containing 100-ml of high purity deionized water. The water impingers were followed by another condensate knockout impinger equipped with a second XAD-2 resin trap to account for any sample breakthrough. The final impinger contained approximately 250 grams of dry pre-weighed silica gel. The water impingers and condensate impingers were submerged in an ice bath through the duration of the testing. The water in the ice bath was also used to circulate around the coil condenser and the XAD-2 resin traps.

Exhaust gases were extracted from the sample locations isokinetically using a metering console equipped with a vacuum pump, a calibrated orifice, oil manometer and probe/filter heat controllers

3.4 HFPO-DA Sample Train and Equipment Preparation

Prior to conducting the field work the following procedures were conducted to prepare the field sampling glassware and sample recovery tools.

1. Wash all glassware, brushes, and ancillary tools with low residue soap and hot water.
2. Rinse all glassware, brushes, and ancillary tools three (3) times with D.I. H_20.
3. Bake glassware (with the exception of probe liners) at 450˚C for approximately 2 hours, (XAD-2 resin tube glassware is cleaned by Eurofins/TestAmerica by this same procedure).
4. Solvent rinse three (3) times all glassware, brushes, and ancillary tools with the following sequence of solvents: acetone, methylene chloride, hexane, and methanol.
5. Clean glassware and tools will be sealed in plastic bags or aluminum foil for transport to the sampling site.
6. Squirt bottles will be new dedicated bottles of known history and dedicated to the D.I. Water and methanol/ammonium hydroxide (MeOH/ 5% NH_4OH) solvent contents. Squirt bottles will be labelled with the solvent content it contains.

3.5 HFPO-DA Sample Train Recovery

Following completion of each test run, the sample probe, nozzle and front-half of the filter holder were brushed and rinsed three times each with the MeOH/ 5% NH_4OH solution (Container #1). The glass fiber filter was removed from its housing and transferred to a polyethylene bottle (Container #2). Any particulate matter and filter fibers which adhered to the filter holder and gasket were also placed in Container #2. The XAD-2 resin trap was sealed, labelled and placed in an iced sample cooler. The back-half of the filter holder, coil condenser condensate trap and connecting glassware were rinsed with the same MeOH/ 5% NH_4OH solution and placed in Container #3.

The volume of water collected in all impingers was measured for moisture determinations and then placed in Container #4. All impingers and connecting glassware were then rinsed with the MeOH/ 5% NH_4OH solution and placed in Container #5. The second (breakthrough) XAD-2 resin trap was sealed, labelled and placed in an iced sample cooler. The contents of the fifth impinger were placed in its original container and weighed for moisture determinations.

Containers were sealed and labeled with the appropriate sample information. Samples remained chilled until analysis. HFPO-DA analysis was conducted using liquid chromatography/dual mass spectrometry (LC/MS/MS).

Appendix A

Location: Chemours Company - Fayetteville Works Facility, NC
Source: VEN Carbon Bed Inlet
Project No.: 2022-1651
Run No.: 1
Parameter: HFPO-DA

Meter Pressure (Pm), in. Hg

$$Pm = Pb + \frac{\Delta H}{13.6}$$

where,

Pb	30.20	= barometric pressure, in. Hg
ΔH	1.304	= pressure differential of orifice, in H_2O
Pm	30.30	= in. Hg

Absolute Stack Gas Pressure (Ps), in. Hg

$$Ps = Pb + \frac{Pg}{13.6}$$

where,

Pb	30.20	= barometric pressure, in. Hg
Pg	-3.40	= static pressure, in. H_2O
Ps	29.95	= in. Hg

Standard Meter Volume (Vmstd), dscf

$$Vmstd = \frac{17.636 \times Y \times Vm \times Pm}{Tm}$$

where,

Y	1.011	= meter correction factor
Vm	63.616	= meter volume, cf
Pm	30.30	= absolute meter pressure, in. Hg
Tm	533.0	= absolute meter temperature, °R
Vmstd	64.472	= dscf

Standard Wet Volume (Vwstd), scf

$$Vwstd = 0.04716 \times Vlc$$

where,

Vlc	54.8	= volume of H_2O collected, ml
Vwstd	2.584	= scf

Moisture Fraction (BWSsat), dimensionless (theoretical at saturated conditions)

$$BWSsat = \frac{10^{6.37-\left(\frac{2,827}{Ts+365}\right)}}{Ps}$$

where,

Ts	75.4	= stack temperature, °F
Ps	29.95	= absolute stack gas pressure, in. Hg
BWSsat	0.029	= dimensionless

Moisture Fraction (BWS), dimensionless (measured)

$$BWS = \frac{Vwstd}{(Vwstd + Vmstd)}$$

where,

Vwstd	2.584	= standard wet volume, scf
Vmstd	64.472	= standard meter volume, dscf
BWS	0.039	= dimensionless

Moisture Fraction (BWS), dimensionless

$$BWS = BWSmsd \text{ unless } BWSsat < BWSmsd$$

where,

BWSsat	0.029	= moisture fraction (theoretical at saturated conditions)
BWSmsd	0.039	= moisture fraction (measured)
BWS	0.029	

Location: Chemours Company - Fayetteville Works Facility, NC
Source: VEN Carbon Bed Inlet
Project No.: 2022-1651
Run No.: 1
Parameter: HFPO-DA

Molecular Weight (DRY) (Md), lb/lb-mole

$$Md = (0.44 \times \%CO_2) + (0.32 \times \%O2) + (0.28\,(100 - \%CO_2 - \%O2))$$

where,

CO_2	0.1	= carbon dioxide concentration, %
O_2	20.9	= oxygen concentration, %
Md	28.85	= lb/lb mol

Molecular Weight (WET) (Ms), lb/lb-mole

$$Ms = Md\,(1 - BWS) + 18.015\,(BWS)$$

where,

Md	28.85	= molecular weight (DRY), lb/lb mol
BWS	0.029	= moisture fraction, dimensionless
Ms	28.53	= lb/lb mol

Average Velocity (Vs), ft/sec

$$Vs = 85.49 \times Cp \times (\Delta P^{1/2})\,avg \times \sqrt{\frac{Ts}{Ps \times Ms}}$$

where,

Cp	0.840	= pitot tube coefficient
$\Delta P^{1/2}$	0.628	= velocity head of stack gas, (in. H_2O)$^{1/2}$
Ts	535.0	= absolute stack temperature, °R
Ps	29.95	= absolute stack gas pressure, in. Hg
Ms	28.53	= molecular weight of stack gas, lb/lb mol
Vs	35.7	= ft/sec

Average Stack Gas Flow at Stack Conditions (Qa), acfm

$$Qa = 60 \times Vs \times As$$

where,

Vs	35.7	= stack gas velocity, ft/sec
As	7.07	= cross-sectional area of stack, ft^2
Qa	15,127	= acfm

Average Stack Gas Flow at Standard Conditions (Qs), dscfm

$$Qs = 17.636 \times Qa \times (1 - BWS) \times \frac{Ps}{Ts}$$

where,

Qa	15,127	= average stack gas flow at stack conditions, acfm
BWS	0.029	= moisture fraction, dimensionless
Ps	29.95	= absolute stack gas pressure, in. Hg
Ts	535.0	= absolute stack temperature, °R
Qs	14,496	= dscfm

Dry Gas Meter Calibration Check (Yqa), dimensionless

$$Yqa = \frac{Y - \left(\frac{\Theta}{Vm} \sqrt{\frac{0.0319 \times Tm \times 29}{\Delta H@ \times \left(Pb + \frac{\Delta Havg.}{13.6}\right) \times Md}}\,\sqrt{\Delta H}\,avg.\right)}{Y} \times 100$$

where,

Y	1.011	= meter correction factor, dimensionless
Θ	96	= run time, min.
Vm	63.616	= total meter volume, dcf
Tm	533.0	= absolute meter temperature, °R
ΔH@	1.655	= orifice meter calibration coefficient, in. H_2O
Pb	30.20	= barometric pressure, in. Hg
ΔH avg	1.304	= average pressure differential of orifice, in H_2O
Md	28.85	= molecular weight (DRY), lb/lb mol
$(\Delta H)^{1/2}$	1.141	= average squareroot pressure differential of orifice, (in. H2O)$^{1/2}$
Yqa	0.6	= dimensionless

Location: Chemours Company - Fayetteville Works Facility, NC
Source: VEN Carbon Bed Inlet
Project No.: 2022-1651
Run No.: 1
Parameter: HFPO-DA

Volume of Nozzle (Vn), ft^3

$$Vn = \frac{Ts}{Ps}\left(0.002669 \times Vlc + \frac{Vm \times Pm \times Y}{Tm}\right)$$

where,

Ts	535.0	= absolute stack temperature, °R
Ps	29.95	= absolute stack gas pressure, in. Hg
Vlc	54.8	= volume of H_2O collected, ml
Vm	63.616	= meter volume, cf
Pm	30.30	= absolute meter pressure, in. Hg
Y	1.011	= meter correction factor, unitless
Tm	533.0	= absolute meter temperature, °R
Vn	67.921	= volume of nozzle, ft^3

Isokinetic Sampling Rate (I), % *

$$I = .09450 \times \left(\frac{T_s \times V_{mstd}}{P_s \times \theta \times An \times Vs \times (1 - BWS)}\right)$$

where, *

Vmstd	64.472	= standard meter volume, dscf
θ	96.0	= run time, minutes
An	0.00033	= area of nozzle, ft^2
Vs	35.7	= average velocity, ft/sec
BWS	0.029	= moisture fraction, dimensionless
Ts	535.0	= absolute stack temperature, °R
Ps	29.95	= absolute stack gas pressure, in. Hg
I	100.0	= %

Location: Chemours Company - Fayetteville Works Facility, NC
Source: VEN Carbon Bed Inlet
Project No.: 2022-1651
Run No.: 1
Parameter: HFPO-DA

HFPO-DA Concentration (C), ng/dscm

$$C = \frac{M \times 35.313}{Vmstd}$$

where,

M	359,894	= HFPO-DA mass, ng
Vmstd	64.472	= standard meter volume, dscf
C_{NH3}	197132.92	= ng/dscm

HFPO-DA Emission Rate (ER), lb/hr

$$ER = \frac{M \times Qs \times 60}{Vmstd \times 4.54E + 11}$$

where,

M	359,894	= HFPO-DA mass, ng
Qs	14,496	= average stack gas flow at standard conditions, dscfm
Vmstd	64.472	= standard meter volume, dscf
ER	1.1E-02	= lb/hr

Appendix B

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Inlet
Project No. 2022-1651
Parameter HFPO-DA

Run Number		Run 1	Run 2	Run 3	Average
Date		5/25/22	5/25/22	5/25/22	--
Start Time		9:20	12:40	16:19	--
Stop Time		11:27	14:45	18:22	--
Run Time, min	(θ)	96.0	96.0	96.0	96.0
INPUT DATA					
Barometric Pressure, in. Hg	(Pb)	30.20	30.20	30.20	30.20
Meter Correction Factor	(Y)	1.011	1.011	1.011	1.011
Orifice Calibration Value	(ΔH @)	1.655	1.655	1.655	1.655
Meter Volume, ft^3	(Vm)	63.616	65.612	65.385	64.871
Meter Temperature, °F	(Tm)	73.3	83.3	89.1	81.9
Meter Temperature, °R	(Tm)	533.0	543.0	548.8	541.6
Meter Orifice Pressure, in. WC	(ΔH)	1.304	1.388	1.379	1.357
Volume H_2O Collected, mL	(Vlc)	54.8	53.6	52.0	53.5
Nozzle Diameter, in	(Dn)	0.245	0.245	0.245	0.245
Area of Nozzle, ft^2	(An)	0.0003	0.0003	0.0003	0.0003
FH HFPO-DA Mass, ng	$M_{(HFPODA)}$	128,000	199,000	224,000	183,667
BH HFPO-DA Mass, ng	$M_{(HFPODA)}$	226,000	219,000	298,000	247,667
Imp HFPO-DA Mass, ng	$M_{(HFPODA)}$	5,800	6,850	12,000	8,217
Breakthrough HFPO-DA Mass, ng	$M_{(HFPODA)}$	94.4	610.0	464.0	389.47
Total HFPO-DA Mass, ng	$M_{(HFPODA)}$	359,894.4	425,460.0	534,464.0	439,939.5
ISOKINETIC DATA					
Standard Meter Volume, ft^3	(Vmstd)	64.472	65.284	64.375	64.710
Standard Water Volume, ft^3	(Vwstd)	2.584	2.528	2.452	2.521
Moisture Fraction Measured	(BWSmsd)	0.039	0.037	0.037	0.038
Moisture Fraction @ Saturation	(BWSsat)	0.029	0.035	0.041	0.035
Moisture Fraction	(BWS)	0.029	0.035	0.037	0.034
Meter Pressure, in Hg	(Pm)	30.30	30.30	30.30	30.30
Volume at Nozzle, ft^3	(Vn)	67.921	69.418	69.051	68.80
Isokinetic Sampling Rate, (%)	(I)	100.0	100.6	100.2	100.3
DGM Calibration Check Value, (+/- 5%)	(Y_{qa})	0.6	-0.2	-0.7	-0.1
EMISSION CALCULATIONS					
HFPO-DA Concentration, ng/dscm	$C_{(HFPODA)}$	2.0E+05	2.3E+05	2.9E+05	2.4E+05
HFPO-DA Emission Rate, lb/hr	$ER_{(HFPODA)}$	1.1E-02	1.3E-02	1.6E-02	1.3E-02

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Inlet
Project No. 2022-1651
Parameter HFPO-DA

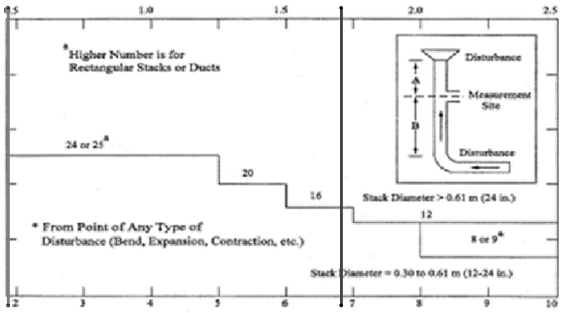
Run Number		Run 1	Run 2	Run 3	Average
Date		5/25/22	5/25/22	5/25/22	--
Start Time		9:20	12:40	16:19	--
Stop Time		11:27	14:45	18:22	--
Run Time, min		96.0	96.0	96.0	96.0
VELOCITY HEAD, in. WC					
Point 1		0.32	0.34	0.31	0.32
Point 2		0.34	0.35	0.31	0.33
Point 3		0.36	0.35	0.34	0.35
Point 4		0.37	0.34	0.36	0.36
Point 5		0.37	0.34	0.36	0.36
Point 6		0.36	0.38	0.36	0.37
Point 7		0.37	0.38	0.34	0.36
Point 8		0.37	0.39	0.36	0.37
Point 9		0.37	0.39	0.35	0.37
Point 10		0.38	0.40	0.37	0.38
Point 11		0.36	0.39	0.37	0.37
Point 12		0.38	0.39	0.38	0.38
Point 13		0.46	0.48	0.39	0.44
Point 14		0.45	0.48	0.42	0.45
Point 15		0.44	0.50	0.48	0.47
Point 16		0.45	0.49	0.52	0.49
Point 17		0.46	0.50	0.52	0.49
Point 18		0.46	0.50	0.50	0.49
Point 19		0.42	0.41	0.50	0.44
Point 20		0.40	0.41	0.48	0.43
Point 21		0.39	0.42	0.45	0.42
Point 22		0.40	0.40	0.44	0.41
Point 23		0.40	0.40	0.43	0.41
Point 24		0.40	0.40	0.42	0.41
CALCULATED DATA					
Square Root of ΔP, $(\text{in. WC})^{1/2}$	(ΔP)	0.628	0.639	0.636	0.634
Pitot Tube Coefficient	(Cp)	0.840	0.840	0.840	0.840
Barometric Pressure, in. Hg	(Pb)	30.20	30.20	30.20	30.20
Static Pressure, in. WC	(Pg)	-3.40	-3.40	-3.60	-3.47
Stack Pressure, in. Hg	(Ps)	29.95	29.95	29.94	29.95
Stack Cross-sectional Area, ft^2	(As)	7.07	7.07	7.07	7.07
Temperature, °F	(Ts)	75.4	81.1	85.9	80.8
Temperature, °R	(Ts)	535.0	540.8	545.5	540.448
Moisture Fraction Measured	(BWSmsd)	0.039	0.037	0.037	0.038
Moisture Fraction @ Saturation	(BWSsat)	0.029	0.035	0.041	0.035
Moisture Fraction	(BWS)	0.029	0.035	0.037	0.034
O_2 Concentration, %	(O_2)	20.9	20.9	20.9	20.9
CO_2 Concentration, %	(CO_2)	0.1	0.1	0.1	0.1
Molecular Weight, lb/lb-mole (dry)	(Md)	28.85	28.85	28.85	28.85
Molecular Weight, lb/lb-mole (wet)	(Ms)	28.53	28.47	28.45	28.49
Velocity, ft/sec	(Vs)	35.7	36.5	36.5	36.2
VOLUMETRIC FLOW RATE					
At Stack Conditions, acfm	(Qa)	15,127	15,492	15,495	15,371
At Standard Conditions, dscfm	(Qs)	14,496	14,597	14,445	14,512

Method 1 Data

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Inlet
Project No. 2022-1651
Date: 05/24/22

Stack Parameters

Duct Orientation:	Horizontal	
Duct Design:	Circular	
Distance from Far Wall to Outside of Port:	51.13	in
Nipple Length:	15.13	in
Depth of Duct:	36.00	in
Cross Sectional Area of Duct:	7.07	ft^2
No. of Test Ports:	2	
Distance A:	5.1	ft
Distance A Duct Diameters:	1.7	**(must be > 0.5)**
Distance B:	5.7	ft
Distance B Duct Diameters:	1.9	**(must be > 2)**
Minimum Number of Traverse Points:	24	
Actual Number of Traverse Points:	24	
Number of Readings per Point:	1	
Measurer (Initial and Date):	PJG 5/24/22	
Reviewer (Initial and Date):	BAG 5/24/22	



CIRCULAR DUCT

LOCATION OF TRAVERSE POINTS

Number of traverse points on a diameter

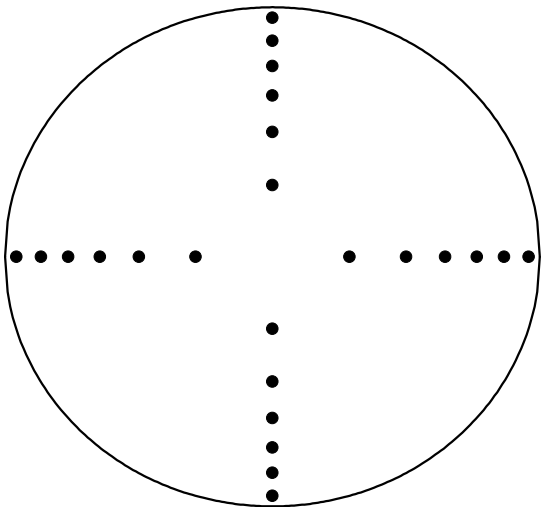
	2	3	4	5	6	7	8	9	10	11	12
1	14.6	--	6.7	--	4.4	--	3.2	--	2.6	--	2.1
2	85.4	--	25.0	--	14.6	--	10.5	--	8.2	--	6.7
3	--	--	75.0	--	29.6	--	19.4	--	14.6	--	11.8
4	--	--	93.3	--	70.4	--	32.3	--	22.6	--	17.7
5	--	--	--	--	85.4	--	67.7	--	34.2	--	25.0
6	--	--	--	--	95.6	--	80.6	--	65.8	--	35.6
7	--	--	--	--	--	--	89.5	--	77.4	--	64.4
8	--	--	--	--	--	--	96.8	--	85.4	--	75.0
9	--	--	--	--	--	--	--	--	91.8	--	82.3
10	--	--	--	--	--	--	--	--	97.4	--	88.2
11	--	--	--	--	--	--	--	--	--	--	93.3
12	--	--	--	--	--	--	--	--	--	--	97.9

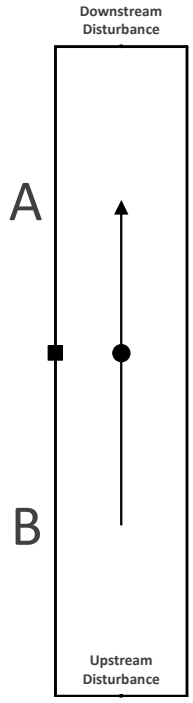
**Percent of stack diameter from inside wall to traverse point.*

Traverse Point	% of Diameter	Distance from inside wall	Distance from outside of port
1	2.1	1.00	16.13
2	6.7	2.41	17.54
3	11.8	4.25	19.37
4	17.7	6.37	21.50
5	25.0	9.00	24.13
6	35.6	12.82	27.94
7	64.4	23.18	38.31
8	75.0	27.00	42.13
9	82.3	29.63	44.75
10	88.2	31.75	46.88
11	93.3	33.59	48.71
12	97.9	35.00	50.13

Stack Diagram
A = 5.1 ft.
B = 5.7 ft.
Depth of Duct = 36 in.

Cross Sectional Area





Cyclonic Flow Check

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Inlet
Project No. 2022-1651
Date 05/05/22

Sample Point	Angle (ΔP=0)
1	12
2	8
3	8
4	8
5	10
6	12
7	12
8	12
9	10
10	8
11	10
12	12
13	10
14	10
15	10
16	10
17	12
18	8
19	10
20	12
21	10
22	10
23	8
24	8
Average	10

Method 4 Data

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Inlet
Project No. 2022-1651
Parameter HFPO-DA
Analysis Gravimetric

Run 1	Date:	5/25/22							
Impinger No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Contents	XAD Trap	Empty	H2O	H2O	H2O	Empty	XAD Trap	Silica	--
Initial Mass, g	291.6	481.6	749.8	748.6	752.0	491.6	318.2	829.6	4663.0
Final Mass, g	312.6	485.4	747.6	749.2	754.6	493.6	333.2	841.6	4717.8
Gain	21.0	3.8	-2.2	0.6	2.6	2.0	15.0	12.0	54.8
Run 2	**Date:**	5/25/22							
Impinger No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Contents	XAD Trap	Empty	H2O	H2O	H2O	Empty	XAD Trap	Silica	--
Initial Mass, g	287.4	497.0	744.2	757.4	738.2	514.6	310.8	829.4	4679.0
Final Mass, g	305.4	503.0	740.6	757.8	740.6	516.8	325.2	843.2	4732.6
Gain	18.0	6.0	-3.6	0.4	2.4	2.2	14.4	13.8	53.6
Run 3	**Date:**	5/25/22							
Impinger No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Contents	XAD Trap	Empty	H2O	H2O	H2O	Empty	XAD Trap	Silica	--
Initial Mass, g	283.0	483.0	750.2	746.8	748.0	494.0	274.2	798.8	4578.0
Final Mass, g	301.4	486.6	749.2	749.4	750.2	495.4	285.8	812.0	4630.0
Gain	18.4	3.6	-1.0	2.6	2.2	1.4	11.6	13.2	52.0

Alliance SOURCE TESTING

Isokinetic Field Data

Location:	Chemours Company - Fayetteville Works Facility, NC		**Start Time:**	9:20	**Source:**	VEN Carbon Bed Inlet	
Date:	5/25/22	Run 1 VALID	**End Time:**	11:27	**Project No.:**	2022-1651	**Parameter:** HFPO-DA

STACK DATA (EST)			EQUIPMENT			STACK DATA (EST)			FILTER NO.	STACK DATA (FINAL)			MOIST. DATA
Moisture:	2.5	% est.	Meter Box ID:	9		Est. Tm:	85	°F	OTM-45	Pb:	30.20	in. Hg	Vlc (ml)
Barometric:	30.21	in. Hg	Y:	1.011		Est. Ts:	92	°F		Pg:	-3.40	in. WC	54.8
Static Press:	-6.80	in. WC	ΔH @ (in.WC):	1.655		Est. ΔP:	0.62	in. WC		O_2:	20.9	%	K-FACTOR
Stack Press:	29.71	in. Hg	Probe ID:	P4-3		Est. Dn:	0.236	in.		CO_2:	0.1	%	3.306
CO_2:	0.1	%	Liner Material:	glass		Target Rate:	0.78	scfm					
O_2:	20.9	%	Pitot ID:	P4-3		LEAK CHECKS	Pre	Mid 1	Mid 2	Mid 3	Post	Check Pt.	Initial / Final / Corr.
N_2/CO:	79.0	%	Pitot Cp/Type:	0.840	S-type	Leak Rate (cfm):	0.005	0.002	0.002	--	0.002	Mid 1 (cf)	839.854 / 839.950 / 0.096
Md:	28.85	lb/lb-mole	Nozzle ID:	G-2	glass	Vacuum (in Hg):	14	6	7	--	10	Mid 2 (cf)	839.950 / 840.022 / 0.072
Ms:	28.58	lb/lb-mole	Nozzle Dn (in.):	0.245		Pitot Tube:	Pass	--	--	--	Pass	Mid 3 (cf)	--
												Mid-Point Leak Check Vol (cf):	0.168

Sample Pt.	Sample Time (minutes) Begin	End	Dry Gas Meter Reading (ft^3)	Pitot Tube ΔP (in WC)	Gas Temperatures (°F) DGM Average Amb.	Stack Amb.	Orifice Press. ΔH (in. WC) Ideal	Actual	Pump Vac (in. Hg)	Gas Temperatures (°F) Probe Amb.	Filter Amb.	Imp Exit Amb.	Aux Amb.	% ISO	Vs (fps)
					68	68				69	69	68	68		
A1	0.00	4.00	808.940	0.32	68	73	1.06	1.10	4	79	77	56	52	103.9	32.17
2	4.00	8.00	811.400	0.34	68	74	1.13	1.10	4	86	78	52	48	106.6	33.20
3	8.00	12.00	814.000	0.36	69	75	1.19	1.20	4	83	80	48	42	103.5	34.19
4	12.00	16.00	816.600	0.37	71	75	1.23	1.20	4	79	83	47	43	101.7	34.66
5	16.00	20.00	819.200	0.37	71	75	1.23	1.20	4	78	83	46	42	101.7	34.66
6	20.00	24.00	821.800	0.36	72	75	1.20	1.20	4	84	82	46	44	99.0	34.19
7	24.00	28.00	824.300	0.37	72	75	1.23	1.20	4	86	82	46	44	101.5	34.66
8	28.00	32.00	826.900	0.37	73	75	1.24	1.20	4	85	83	46	43	101.3	34.66
9	32.00	36.00	829.500	0.37	73	75	1.24	1.20	4	82	82	47	43	97.5	34.66
10	36.00	40.00	832.000	0.38	74	75	1.27	1.30	4	86	82	48	44	101.8	35.13
11	40.00	44.00	834.650	0.36	74	75	1.20	1.20	4	83	83	49	45	100.6	34.19
12	44.00	48.00	837.200	0.38	74	75	1.27	1.30	4	82	82	50	46	101.9	35.13
B1	48.00	52.00	839.854	0.46	71	76	1.53	1.50	5	78	83	55	56	103.6	38.68
2	52.00	56.00	842.800	0.45	73	76	1.50	1.50	5	83	85	44	43	102.7	38.26
3	56.00	60.00	845.700	0.44	74	76	1.47	1.50	5	85	87	44	42	103.6	37.83
4	60.00	64.00	848.600	0.45	75	76	1.50	1.50	5	85	88	43	44	98.8	38.26
5	64.00	68.00	851.400	0.46	75	76	1.54	1.50	5	82	87	44	44	97.7	38.68
6	68.00	72.00	854.200	0.46	75	76	1.54	1.50	5	84	84	44	42	101.2	38.68
7	72.00	76.00	857.100	0.42	75	76	1.40	1.40	4	87	82	44	45	94.9	36.96
8	76.00	80.00	859.700	0.40	76	76	1.34	1.30	4	83	82	44	44	97.0	36.07
9	80.00	84.00	862.300	0.39	76	76	1.31	1.30	4	84	82	44	45	98.3	35.62
10	84.00	88.00	864.900	0.40	77	76	1.34	1.30	4	87	82	45	46	96.9	36.07
11	88.00	92.00	867.500	0.40	77	76	1.34	1.30	4	85	82	45	46	96.9	36.07
12	92.00	96.00	870.100	0.40	77	76	1.34	1.30	4	83	82	45	48	97.8	36.07
	Final DGM:		872.724												

RESULTS	Run Time		Vm		ΔP		Tm		Ts		Max Vac	ΔH		%ISO	BWS	Y_{qa}
	96.0	min	63.616	ft^3	0.40	in. WC	73.3	°F	75.4	°F	5	1.304	in. WC	100.0	0.029	0.6

Alliance SOURCE TESTING

Isokinetic Field Data

Location:	Chemours Company - Fayetteville Works Facility, NC	**Start Time:**	12:40	**Source:**	VEN Carbon Bed Inlet
Date:	5/25/22	Run 2	VALID	**End Time:**	14:45	**Project No.:**	2022-1651	**Parameter:**	HFPO-DA

STACK DATA (EST)			EQUIPMENT			STACK DATA (EST)			FILTER NO.	STACK DATA (FINAL)			MOIST. DATA
Moisture:	2.5	% est.	Meter Box ID:	9		Est. Tm:	73	°F	OTM-45	Pb:	30.20	in. Hg	Vlc (ml)
Barometric:	30.20	in. Hg	Y:	1.011		Est. Ts:	75	°F		Pg:	-3.40	in. WC	53.6
Static Press:	-6.80	in. WC	ΔH @ (in.WC):	1.655		Est. ΔP:	0.40	in. WC		O_2:	20.9	%	K-FACTOR
Stack Press:	29.70	in. Hg	Probe ID:	P4-3		Est. Dn:	0.265	in.		CO_2:	0.1	%	3.34
CO_2:	0.1	%	Liner Material:	glass		Target Rate:	0.78	scfm					
O_2:	20.9	%	Pitot ID:	P4-3		LEAK CHECKS	Pre	Mid 1	Mid 2	Mid 3	Post	Check Pt.	Initial	Final	Corr.
N_2/CO:	79.0	%	Pitot Cp/Type:	0.840	S-type	Leak Rate (cfm):	0.002	0.002	0.002	--	0.002	Mid 1 (cf)	903.997	904.176	0.179
Md:	28.85	lb/lb-mole	Nozzle ID:	G-2	glass	Vacuum (in Hg):	10	8	10	--	10	Mid 2 (cf)	904.176	904.275	0.099
Ms:	28.58	lb/lb-mole	Nozzle Dn (in.):	0.245		Pitot Tube:	Pass	--	--	--	Pass	Mid 3 (cf)			--
												Mid-Point Leak Check Vol (cf):			0.278

Sample Pt.	Sample Time (minutes)		Dry Gas Meter Reading (ft^3)	Pitot Tube ΔP (in WC)	Gas Temperatures (°F)		Orifice Press. ΔH (in. WC)		Pump Vac (in. Hg)	Gas Temperatures (°F)				% ISO	Vs (fps)
					DGM Average	Stack				Probe	Filter	Imp Exit	Aux		
					Amb.	Amb.				Amb.	Amb.	Amb.	Amb.		
	Begin	End			--	--	Ideal	Actual		--	--	--	--		
A1	0.00	4.00	873.064	0.34	76	78	1.14	1.10	4	82	81	64	58	102.8	33.33
2	4.00	8.00	875.600	0.35	77	79	1.17	1.20	5	91	89	62	59	103.8	33.84
3	8.00	12.00	878.200	0.35	79	79	1.17	1.20	5	93	95	60	54	103.4	33.84
4	12.00	16.00	880.800	0.34	80	79	1.14	1.10	4	92	88	58	55	100.7	33.36
5	16.00	20.00	883.300	0.34	80	79	1.14	1.10	4	93	94	58	56	100.7	33.36
6	20.00	24.00	885.800	0.38	81	79	1.28	1.30	5	88	86	55	56	98.9	35.26
7	24.00	28.00	888.400	0.38	81	79	1.28	1.30	5	89	88	55	55	98.9	35.26
8	28.00	32.00	891.000	0.39	82	80	1.31	1.30	5	90	86	56	58	95.7	35.76
9	32.00	36.00	893.550	0.39	82	80	1.31	1.30	5	90	86	56	56	95.7	35.76
10	36.00	40.00	896.100	0.40	83	80	1.35	1.40	5	86	87	57	56	99.9	36.21
11	40.00	44.00	898.800	0.39	83	80	1.31	1.30	5	91	86	58	62	93.6	35.76
12	44.00	48.00	901.300	0.39	83	80	1.31	1.30	5	91	86	60	63	101.0	35.76
B1	48.00	52.00	903.997	0.48	82	82	1.61	1.60	6	93	91	64	52	101.8	39.74
2	52.00	56.00	907.000	0.48	83	82	1.61	1.60	6	94	90	57	48	98.1	39.74
3	56.00	60.00	909.900	0.50	85	83	1.68	1.70	6	95	89	54	54	102.5	40.60
4	60.00	64.00	913.000	0.49	85	83	1.65	1.70	6	94	88	52	48	100.2	40.19
5	64.00	68.00	916.000	0.50	86	83	1.68	1.70	6	94	88	52	50	99.0	40.60
6	68.00	72.00	919.000	0.50	86	83	1.68	1.70	6	96	91	52	52	98.4	40.60
7	72.00	76.00	921.980	0.41	87	83	1.38	1.40	6	95	91	53	53	102.9	36.77
8	76.00	80.00	924.810	0.41	87	83	1.38	1.40	6	96	92	54	55	102.5	36.77
9	80.00	84.00	927.630	0.42	88	83	1.42	1.40	6	96	92	54	51	106.5	37.21
10	84.00	88.00	930.600	0.40	88	83	1.35	1.40	6	94	89	54	47	102.9	36.31
11	88.00	92.00	933.400	0.40	88	83	1.35	1.40	6	95	89	55	48	106.6	36.31
12	92.00	96.00	936.300	0.40	88	83	1.35	1.40	6	95	89	55	47	97.5	36.31
	Final DGM:		938.954												

RESULTS	Run Time	Vm	ΔP	Tm	Ts	Max Vac	ΔH	%ISO	BWS	Y_{qa}
	96.0 min	65.612 ft^3	0.41 in. WC	83.3 °F	81.1 °F	6	1.388 in. WC	100.6	0.035	-0.2

Alliance SOURCE TESTING

Isokinetic Field Data

Location:	Chemours Company - Fayetteville Works Facility, NC	**Start Time:**	16:19	**Source:**	VEN Carbon Bed Inlet
Date:	5/25/22	Run 3	VALID	**End Time:**	18:22	**Project No.:**	2022-1651	**Parameter:**	HFPO-DA

STACK DATA (EST)			EQUIPMENT			STACK DATA (EST)		FILTER NO.	STACK DATA (FINAL)		MOIST. DATA
Moisture:	2.5	% est.	Meter Box ID:	9		Est. Tm:	83 °F	OTM-45	Pb:	30.20 in. Hg	Vlc (ml)
Barometric:	30.20	in. Hg	Y:	1.011		Est. Ts:	81 °F		Pg:	-3.60 in. WC	52.0
Static Press:	-6.80	in. WC	ΔH @ (in.WC):	1.655		Est. ΔP:	0.41 in. WC		O_2:	20.9 %	K-FACTOR
Stack Press:	29.70	in. Hg	Probe ID:	P4-3		Est. Dn:	0.261 in.		CO_2:	0.1 %	3.363
CO_2:	0.1	%	Liner Material:	glass		Target Rate:	0.78 scfm				
O_2:	20.9	%	Pitot ID:	P4-3		LEAK CHECKS	Pre	Mid 1	Mid 2	Mid 3	Post
N_2/CO:	79.0	%	Pitot Cp/Type:	0.840	S-type	Leak Rate (cfm):	0.003	0.002	0.003	--	0.002
Md:	28.85	lb/lb-mole	Nozzle ID:	G-2	glass	Vacuum (in Hg):	10	10	11	--	12
Ms:	28.58	lb/lb-mole	Nozzle Dn (in.):	0.245		Pitot Tube:	Pass	--	--	--	Pass

Check Pt.	Initial	Final	Corr.
Mid 1 (cf)	969.981	970.090	0.109
Mid 2 (cf)	970.090	970.203	0.113
Mid 3 (cf)			--
Mid-Point Leak Check Vol (cf):			0.222

Sample Pt.	Sample Time (minutes)		Dry Gas Meter Reading (ft^3)	Pitot Tube ΔP (in WC)	Gas Temperatures (°F)		Orifice Press. ΔH (in. WC)		Pump Vac (in. Hg)	Gas Temperatures (°F)				% ISO	Vs (fps)
					DGM Average	Stack				Probe	Filter	Imp Exit	Aux		
					Amb.	Amb.				Amb.	Amb.	Amb.	Amb.		
	Begin	End			--	--	Ideal	Actual		--	--	--	--		
A1	0.00	4.00	939.271	0.31	87	86	1.04	1.00	4	91	90	66	63	101.8	32.06
2	4.00	8.00	941.700	0.31	88	86	1.04	1.00	4	92	93	60	56	100.4	32.06
3	8.00	12.00	944.100	0.34	89	86	1.15	1.20	4	92	91	60	57	103.7	33.57
4	12.00	16.00	946.700	0.36	89	87	1.21	1.20	4	98	94	58	56	97.0	34.58
5	16.00	20.00	949.200	0.36	89	86	1.21	1.20	4	97	93	57	57	100.8	34.55
6	20.00	24.00	951.800	0.36	89	86	1.21	1.20	4	95	92	57	57	96.9	34.55
7	24.00	28.00	954.300	0.34	90	86	1.15	1.20	4	92	92	56	56	103.5	33.57
8	28.00	32.00	956.900	0.36	90	86	1.22	1.20	4	92	92	56	55	100.6	34.55
9	32.00	36.00	959.500	0.35	90	86	1.18	1.20	4	95	92	55	56	98.1	34.06
10	36.00	40.00	962.000	0.37	90	86	1.25	1.30	4	93	92	56	56	99.2	35.02
11	40.00	44.00	964.600	0.37	90	86	1.25	1.30	4	92	92	57	55	103.0	35.02
12	44.00	48.00	967.300	0.38	90	86	1.28	1.30	4	94	92	58	57	101.0	35.49
B1	48.00	52.00	969.981	0.39	87	86	1.31	1.30	4	92	95	66	61	101.6	35.96
2	52.00	56.00	972.700	0.42	87	86	1.41	1.40	4	92	92	63	60	104.5	37.31
3	56.00	60.00	975.600	0.48	88	86	1.61	1.60	4	91	91	62	60	97.6	39.89
4	60.00	64.00	978.500	0.52	89	86	1.75	1.80	5	96	92	64	60	100.1	41.52
5	64.00	68.00	981.600	0.52	89	86	1.75	1.80	5	94	92	63	59	96.9	41.52
6	68.00	72.00	984.600	0.50	89	86	1.68	1.70	5	93	91	60	52	98.8	40.71
7	72.00	76.00	987.600	0.50	89	86	1.68	1.70	5	94	93	56	52	98.8	40.71
8	76.00	80.00	990.600	0.48	89	86	1.62	1.60	5	93	92	54	50	104.1	39.89
9	80.00	84.00	993.700	0.45	90	85	1.52	1.50	4	93	94	52	51	103.8	38.59
10	84.00	88.00	996.700	0.44	90	85	1.49	1.50	4	96	96	52	51	91.0	38.16
11	88.00	92.00	999.300	0.43	90	85	1.45	1.50	4	97	95	53	50	102.6	37.72
12	92.00	96.00	1002.200	0.42	90	85	1.42	1.40	4	96	94	52	49	95.9	37.28
	Final DGM:		1004.878												

RESULTS	Run Time	Vm	ΔP	Tm	Ts	Max Vac	ΔH	%ISO	BWS	Y_{qa}
	96.0 min	65.385 ft^3	0.41 in. WC	89.1 °F	85.9 °F	5	1.379 in. WC	100.2	0.037	-0.7

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Outlet
Project No. 2022-1651
Parameter HFPO-DA

Run Number		Run 1	Run 2	Run 3	Average
Date		5/25/22	5/25/22	5/25/22	--
Start Time		9:20	12:40	16:19	--
Stop Time		11:27	14:45	18:22	--
Run Time, min	(θ)	96.0	96.0	96.0	96.0
INPUT DATA					
Barometric Pressure, in. Hg	(Pb)	30.20	30.20	30.20	30.20
Meter Correction Factor	(Y)	0.985	0.985	0.985	0.985
Orifice Calibration Value	(ΔH @)	1.827	1.827	1.827	1.827
Meter Volume, ft^3	(Vm)	64.483	65.240	63.987	64.570
Meter Temperature, °F	(Tm)	78.0	87.5	92.9	86.1
Meter Temperature, °R	(Tm)	537.6	547.1	552.5	545.8
Meter Orifice Pressure, in. WC	(ΔH)	1.472	1.473	1.398	1.447
Volume H_2O Collected, mL	(Vlc)	52.2	48.8	50.2	50.4
Nozzle Diameter, in	(Dn)	0.239	0.239	0.239	0.239
Area of Nozzle, ft^2	(An)	0.0003	0.0003	0.0003	0.0003
FH HFPO-DA Mass, ng	$M_{(HFPODA)}$	35,700	42,300	43,600	40,533
BH HFPO-DA Mass, ng	$M_{(HFPODA)}$	11,000	9,880	15,300	12,060
Imp HFPO-DA Mass, ng	$M_{(HFPODA)}$	84.5	269.0	87.2	146.9
Breakthrough HFPO-DA Mass, ng	$M_{(HFPODA)}$	11.0	**11.4**	39.3	20.57
Total HFPO-DA Mass, ng	$M_{(HFPODA)}$	46,795.5	52,460.4	59,026.5	52,760.8
ISOKINETIC DATA					
Standard Meter Volume, ft^3	(Vmstd)	63.148	62.780	60.959	62.296
Standard Water Volume, ft^3	(Vwstd)	2.462	2.301	2.367	2.377
Moisture Fraction Measured	(BWSmsd)	0.038	0.035	0.037	0.037
Moisture Fraction @ Saturation	(BWSsat)	0.038	0.043	0.047	0.043
Moisture Fraction	(BWS)	0.038	0.035	0.037	0.037
Meter Pressure, in Hg	(Pm)	30.31	30.31	30.30	30.31
Volume at Nozzle, ft^3	(Vn)	66.547	66.454	64.974	65.99
Isokinetic Sampling Rate, (%)	(I)	100.7	100.9	101.2	100.9
DGM Calibration Check Value, (+/- 5%)	(Y_{qa})	-0.7	0.0	-0.1	-0.3
EMISSION CALCULATIONS					
HFPO-DA Concentration, ng/dscm	$C_{(HFPODA)}$	2.6E+04	3.0E+04	3.4E+04	3.0E+04
HFPO-DA Emission Rate, lb/hr	$ER_{(HFPODA)}$	1.5E-03	1.6E-03	1.8E-03	1.6E-03
REDUCTION CALCULATIONS					
Inlet HFPO-DA Emission Rate, lb/hr	$ER_{(HFPODA)}$	1.1E-02	1.3E-02	1.6E-02	1.3E-02
HFPO-DA Reduction Efficiency, %	$ER_{(HFPODA)}$	86.8	87.5	88.6	87.6

Bold values were J-flagged by the analytical laboratory

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Outlet
Project No. 2022-1651
Parameter HFPO-DA

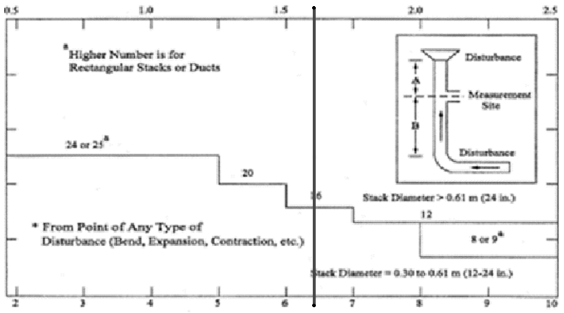
Run Number		Run 1	Run 2	Run 3	Average
Date		5/25/22	5/25/22	5/25/22	--
Start Time		9:20	12:40	16:19	--
Stop Time		11:27	14:45	18:22	--
Run Time, min		96.0	96.0	96.0	96.0
VELOCITY HEAD, in. WC					
Point 1		0.38	0.29	0.29	0.32
Point 2		0.40	0.37	0.40	0.39
Point 3		0.41	0.41	0.43	0.42
Point 4		0.41	0.41	0.43	0.42
Point 5		0.40	0.42	0.43	0.42
Point 6		0.40	0.42	0.40	0.41
Point 7		0.36	0.37	0.36	0.36
Point 8		0.34	0.35	0.33	0.34
Point 9		0.35	0.35	0.34	0.35
Point 10		0.34	0.37	0.34	0.35
Point 11		0.35	0.35	0.34	0.35
Point 12		0.36	0.30	0.35	0.34
Point 13		0.64	0.87	0.50	0.67
Point 14		0.74	0.84	0.82	0.80
Point 15		0.81	0.78	0.80	0.80
Point 16		0.75	0.65	0.71	0.70
Point 17		0.65	0.60	0.59	0.61
Point 18		0.60	0.52	0.33	0.48
Point 19		0.35	0.33	0.28	0.32
Point 20		0.30	0.30	0.26	0.29
Point 21		0.27	0.27	0.24	0.26
Point 22		0.26	0.25	0.25	0.25
Point 23		0.25	0.25	0.25	0.25
Point 24		0.25	0.23	0.24	0.24
CALCULATED DATA					
Square Root of ΔP, (in. WC)$^{1/2}$	(ΔP)	0.647	0.642	0.625	0.638
Pitot Tube Coefficient	(Cp)	0.840	0.840	0.840	0.840
Barometric Pressure, in. Hg	(Pb)	30.20	30.20	30.20	30.20
Static Pressure, in. WC	(Pg)	2.60	2.80	2.60	2.67
Stack Pressure, in. Hg	(Ps)	30.39	30.41	30.39	30.40
Stack Cross-sectional Area, ft^2	(As)	7.07	7.07	7.07	7.07
Temperature, °F	(Ts)	84.0	87.9	90.3	87.4
Temperature, °R	(Ts)	543.7	547.6	550.0	547.073
Moisture Fraction Measured	(BWSmsd)	0.038	0.035	0.037	0.037
Moisture Fraction @ Saturation	(BWSsat)	0.038	0.043	0.047	0.043
Moisture Fraction	(BWS)	0.038	0.035	0.037	0.037
O_2 Concentration, %	(O_2)	20.9	20.9	20.9	20.9
CO_2 Concentration, %	(CO_2)	0.1	0.1	0.1	0.1
Molecular Weight, lb/lb-mole (dry)	(Md)	28.85	28.85	28.85	28.85
Molecular Weight, lb/lb-mole (wet)	(Ms)	28.45	28.47	28.45	28.45
Velocity, ft/sec	(Vs)	36.8	36.7	35.8	36.4
VOLUMETRIC FLOW RATE					
At Stack Conditions, acfm	(Qa)	15,619	15,562	15,179	15,453
At Standard Conditions, dscfm	(Qs)	14,820	14,701	14,240	14,587

Method 1 Data

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Outlet
Project No. 2022-1651
Date: 05/24/22

Stack Parameters

Duct Orientation:	Horizontal	
Duct Design:	Circular	
Distance from Far Wall to Outside of Port:	51.13	in
Nipple Length:	15.13	in
Depth of Duct:	36.00	in
Cross Sectional Area of Duct:	7.07	ft^2
No. of Test Ports:	2	
Distance A:	4.8	ft
Distance A Duct Diameters:	1.6	**(must be > 0.5)**
Distance B:	4.8	ft
Distance B Duct Diameters:	1.6	**(must be > 2)**
Minimum Number of Traverse Points:	24	
Actual Number of Traverse Points:	24	
Number of Readings per Point:	1	
Measurer (Initial and Date):	PJG 5/24/22	
Reviewer (Initial and Date):	BAG 5/24/22	



CIRCULAR DUCT

LOCATION OF TRAVERSE POINTS

Number of traverse points on a diameter

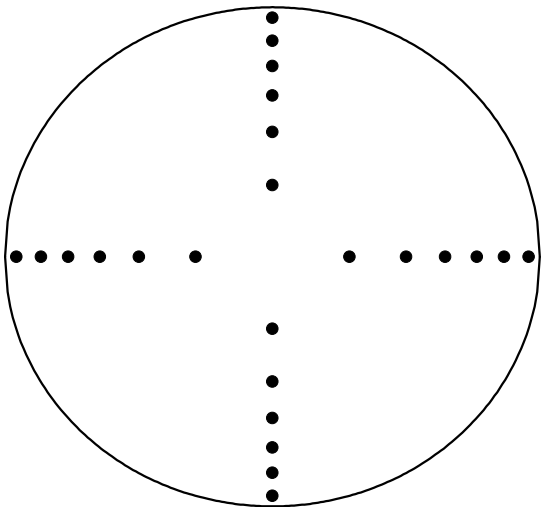
	2	3	4	5	6	7	8	9	10	11	12
1	14.6	--	6.7	--	4.4	--	3.2	--	2.6	--	2.1
2	85.4	--	25.0	--	14.6	--	10.5	--	8.2	--	6.7
3	--	--	75.0	--	29.6	--	19.4	--	14.6	--	11.8
4	--	--	93.3	--	70.4	--	32.3	--	22.6	--	17.7
5	--	--	--	--	85.4	--	67.7	--	34.2	--	25.0
6	--	--	--	--	95.6	--	80.6	--	65.8	--	35.6
7	--	--	--	--	--	--	89.5	--	77.4	--	64.4
8	--	--	--	--	--	--	96.8	--	85.4	--	75.0
9	--	--	--	--	--	--	--	--	91.8	--	82.3
10	--	--	--	--	--	--	--	--	97.4	--	88.2
11	--	--	--	--	--	--	--	--	--	--	93.3
12	--	--	--	--	--	--	--	--	--	--	97.9

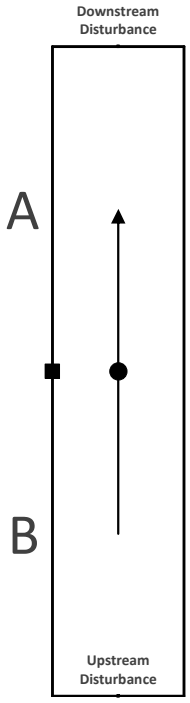
**Percent of stack diameter from inside wall to traverse point.*

Traverse Point	% of Diameter	Distance from inside wall	Distance from outside of port
1	2.1	1.00	16.13
2	6.7	2.41	17.54
3	11.8	4.25	19.37
4	17.7	6.37	21.50
5	25.0	9.00	24.13
6	35.6	12.82	27.94
7	64.4	23.18	38.31
8	75.0	27.00	42.13
9	82.3	29.63	44.75
10	88.2	31.75	46.88
11	93.3	33.59	48.71
12	97.9	35.00	50.13

Stack Diagram
A = 4.8 ft.
B = 4.8 ft.
Depth of Duct = 36 in.

Cross Sectional Area





Alliance SOURCE TESTING

Cyclonic Flow Check

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Outlet
Project No. 2022-1651
Date 05/05/22

Sample Point	Angle (ΔP=0)
1	12
2	15
3	12
4	10
5	10
6	12
7	12
8	10
9	10
10	8
11	8
12	10
13	10
14	10
15	10
16	10
17	12
18	15
19	10
20	10
21	10
22	12
23	8
24	8
Average	11

Method 4 Data

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Outlet
Project No. 2022-1651
Parameter HFPO-DA
Analysis Gravimetric

Run 1	Date:	5/25/22							
Impinger No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Contents	XAD Trap	Empty	H2O	H2O	H2O	Empty	XAD Trap	Silica	--
Initial Mass, g	306.4	475.8	747.6	744.6	744.2	467.2	382.6	810.6	4679.0
Final Mass, g	325.8	482.8	745.8	744.0	746.2	469.4	395.4	821.8	4731.2
Gain	19.4	7.0	-1.8	-0.6	2.0	2.2	12.8	11.2	52.2
Run 2	**Date:**	5/25/22							
Impinger No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Contents	XAD Trap	Empty	H2O	H2O	H2O	Empty	XAD Trap	Silica	--
Initial Mass, g	292.4	499.2	798.2	734.8	745.6	469.4	307.4	818.2	4665.2
Final Mass, g	304.6	505.0	796.6	734.0	747.2	472.0	318.2	836.4	4714.0
Gain	12.2	5.8	-1.6	-0.8	1.6	2.6	10.8	18.2	48.8
Run 3	**Date:**	5/25/22							
Impinger No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Contents	XAD Trap	Empty	H2O	H2O	H2O	Empty	XAD Trap	Silica	--
Initial Mass, g	303.6	478.0	745.6	749.2	744.4	469.2	297.4	821.6	4609.0
Final Mass, g	322.8	479.8	742.8	749.2	746.4	471.4	309.0	837.8	4659.2
Gain	19.2	1.8	-2.8	0.0	2.0	2.2	11.6	16.2	50.2

Alliance SOURCE TESTING

Isokinetic Field Data

Location:	Chemours Company - Fayetteville Works Facility, NC		**Start Time:**	9:20	**Source:**	VEN Carbon Bed Outlet	
Date:	5/25/22	Run 1 / VALID	**End Time:**	11:27	**Project No.:**	2022-1651	**Parameter:** HFPO-DA

STACK DATA (EST)			EQUIPMENT			STACK DATA (EST)			FILTER NO.	STACK DATA (FINAL)			MOIST. DATA
Moisture:	2.5	% est.	Meter Box ID:	7		Est. Tm:	85	°F	OTM-45	Pb:	30.20	in. Hg	Vlc (ml)
Barometric:	30.05	in. Hg	Y:	0.985		Est. Ts:	93	°F		Pg:	2.60	in. WC	52.2
Static Press:	2.80	in. WC	ΔH @ (in.WC):	1.827		Est. ΔP:	0.67	in. WC		O_2:	20.9	%	K-FACTOR
Stack Press:	30.26	in. Hg	Probe ID:	P4-1		Est. Dn:	0.225	in.		CO_2:	0.1	%	3.376
CO_2:	0.1	%	Liner Material:	glass		Target Rate:	0.75	scfm					
O_2:	20.9	%	Pitot ID:	P4-1		LEAK CHECKS	Pre	Mid 1	Mid 2 / Mid 3	Post	Check Pt.	Initial	Final / Corr.
N_2/CO:	79.0	%	Pitot Cp/Type:	0.840	S-type	Leak Rate (cfm):	0.000	--	-- / --	0.000	Mid 1 (cf)	499.240	499.280 / 0.040
Md:	28.85	lb/lb-mole	Nozzle ID:	G-3	glass	Vacuum (in Hg):	10	--	-- / --	6	Mid 2 (cf)	499.280	499.370 / 0.090
Ms:	28.58	lb/lb-mole	Nozzle Dn (in.):	0.239		Pitot Tube:	Pass	--	-- / --	Pass	Mid 3 (cf)		--
											Mid-Point Leak Check Vol (cf):		0.130

Sample Pt.	Sample Time (minutes) Begin	End	Dry Gas Meter Reading (ft^3)	Pitot Tube ΔP (in WC)	Gas Temperatures (°F) DGM Average Amb.	Stack Amb.	Orifice Press. ΔH (in. WC) Ideal	Actual	Pump Vac (in. Hg)	Gas Temperatures (°F) Probe Amb.	Filter Amb.	Imp Exit Amb.	Aux Amb.	% ISO	Vs (fps)
A1	0.00	4.00	468.448	0.38	72	82	1.28	1.30	1	92	90	63	52	100.4	35.04
2	4.00	8.00	471.012	0.40	73	83	1.35	1.40	1	92	90	58	46	99.1	35.98
3	8.00	12.00	473.610	0.41	74	83	1.38	1.40	1	92	90	55	47	100.4	36.43
4	12.00	16.00	476.280	0.41	75	83	1.39	1.40	1	92	91	54	48	102.1	36.43
5	16.00	20.00	479.001	0.40	76	83	1.35	1.40	1	92	89	52	46	100.8	35.98
6	20.00	24.00	481.660	0.40	77	84	1.35	1.40	1	92	91	52	46	100.8	36.01
7	24.00	28.00	484.320	0.36	77	83	1.22	1.20	1	92	89	51	48	100.3	34.13
8	28.00	32.00	486.835	0.34	78	83	1.16	1.20	1	92	93	51	45	101.0	33.17
9	32.00	36.00	489.302	0.35	78	83	1.19	1.20	1	92	89	51	45	100.0	33.66
10	36.00	40.00	491.779	0.34	79	84	1.16	1.20	1	92	90	51	46	100.3	33.20
11	40.00	44.00	494.230	0.35	79	84	1.19	1.20	1	92	91	50	45	100.5	33.69
12	44.00	48.00	496.722	0.36	78	84	1.22	1.20	1	92	89	50	44	100.3	34.16
B1	48.00	52.00	499.240	0.64	76	83	2.16	2.20	2	92	90	61	48	99.7	45.51
2	52.00	56.00	502.690	0.74	77	84	2.50	2.50	3	92	90	48	45	96.4	48.98
3	56.00	60.00	506.140	0.81	78	85	2.73	2.70	4	92	89	47	45	96.3	51.29
4	60.00	64.00	509.750	0.75	78	85	2.53	2.50	4	92	91	48	45	95.6	49.36
5	64.00	68.00	513.200	0.65	79	85	2.20	2.20	4	92	89	48	45	98.0	45.95
6	68.00	72.00	516.500	0.60	80	85	2.04	2.00	4	92	90	47	46	100.2	44.15
7	72.00	76.00	519.750	0.35	81	85	1.19	1.20	2	92	89	48	48	99.3	33.72
8	76.00	80.00	522.220	0.30	81	85	1.02	1.00	1	92	90	48	48	100.7	31.22
9	80.00	84.00	524.540	0.27	81	85	0.92	0.92	1	92	91	49	49	100.0	29.61
10	84.00	88.00	526.725	0.26	81	85	0.89	0.89	1	92	91	48	46	99.6	29.06
11	88.00	92.00	528.860	0.25	81	85	0.85	0.85	1	92	91	48	48	98.9	28.50
12	92.00	96.00	530.940	0.25	82	85	0.85	0.86	1	92	89	49	47	100.7	28.50
	Final DGM:		533.061												

RESULTS	Run Time		Vm		ΔP		Tm		Ts		Max Vac	ΔH		%ISO	BWS	Y_{qa}
	96.0	min	64.483	ft^3	0.43	in. WC	78.0	°F	84.0	°F	4	1.472	in. WC	100.7	0.038	-0.7

Alliance SOURCE TESTING

Isokinetic Field Data

Location:	Chemours Company - Fayetteville Works Facility, NC		**Start Time:**	12:40	**Source:**	VEN Carbon Bed Outlet	
Date:	5/25/22	Run 2 VALID	**End Time:**	14:45	**Project No.:**	2022-1651	**Parameter:** HFPO-DA

STACK DATA (EST)			EQUIPMENT			STACK DATA (EST)			FILTER NO.	STACK DATA (FINAL)			MOIST. DATA
Moisture:	2.5	% est.	Meter Box ID:	7		Est. Tm:	78	°F	OTM-45	Pb:	30.20	in. Hg	Vlc (ml)
Barometric:	30.05	in. Hg	Y:	0.985		Est. Ts:	84	°F		Pg:	2.80	in. WC	48.8
Static Press:	2.80	in. WC	ΔH @ (in.WC):	1.827		Est. ΔP:	0.43	in. WC		O_2:	20.9	%	K-FACTOR
Stack Press:	30.26	in. Hg	Probe ID:	P4-1		Est. Dn:	0.252	in.		CO_2:	0.1	%	3.39
CO_2:	0.1	%	Liner Material:	glass		Target Rate:	0.75	scfm					
O_2:	20.9	%	Pitot ID:	P4-1		LEAK CHECKS	Pre	Mid 1	Mid 2 / Mid 3	Post	Check Pt.	Initial	Final / Corr.
N_2/CO:	79.0	%	Pitot Cp/Type:	0.840	S-type	Leak Rate (cfm):	0.001	--	-- / --	0.002	Mid 1 (cf)	566.400	566.514 / 0.114
Md:	28.85	lb/lb-mole	Nozzle ID:	G-3	glass	Vacuum (in Hg):	10	--	-- / --	7	Mid 2 (cf)	566.514	566.851 / 0.337
Ms:	28.58	lb/lb-mole	Nozzle Dn (in.):	0.239		Pitot Tube:	Pass	--	-- / --	Pass	Mid 3 (cf)		--
											Mid-Point Leak Check Vol (cf):		0.451

Sample Pt.	Sample Time (minutes) Begin	End	Dry Gas Meter Reading (ft^3)	Pitot Tube ΔP (in WC)	Gas Temperatures (°F) DGM Average Amb. --	Stack Amb. --	Orifice Press. ΔH (in. WC) Ideal	Actual	Pump Vac (in. Hg)	Gas Temperatures (°F) Probe Amb. --	Filter Amb. --	Imp Exit Amb. --	Aux Amb. --	% ISO	Vs (fps)
A1	0.00	4.00	535.584	0.29	79	84	0.99	0.99	1	92	91	64	58	99.5	30.66
2	4.00	8.00	537.830	0.37	81	86	1.26	1.30	1	92	91	64	55	100.6	34.70
3	8.00	12.00	540.400	0.41	83	86	1.40	1.40	1	92	89	64	54	101.2	36.53
4	12.00	16.00	543.130	0.41	84	87	1.40	1.40	1	92	91	62	55	100.4	36.56
5	16.00	20.00	545.840	0.42	85	87	1.44	1.40	1	92	90	60	55	100.1	37.00
6	20.00	24.00	548.580	0.42	85	87	1.44	1.40	1	92	90	58	54	100.8	37.00
7	24.00	28.00	551.340	0.37	85	87	1.26	1.30	1	92	92	58	56	101.2	34.73
8	28.00	32.00	553.940	0.35	85	87	1.20	1.20	1	92	90	58	57	104.0	33.78
9	32.00	36.00	556.540	0.35	85	87	1.20	1.20	1	92	90	58	55	98.0	33.78
10	36.00	40.00	558.990	0.37	86	88	1.26	1.30	1	92	91	59	57	99.5	34.76
11	40.00	44.00	561.550	0.35	86	87	1.20	1.20	1	92	90	58	58	100.2	33.78
12	44.00	48.00	564.060	0.30	86	87	1.03	1.00	1	91	91	58	58	100.9	31.27
B1	48.00	52.00	566.400	0.87	86	89	2.96	3.00	5	99	97	60	59	97.6	53.35
2	52.00	56.00	570.680	0.84	88	89	2.86	2.90	5	98	96	62	53	99.2	52.43
3	56.00	60.00	574.520	0.78	90	89	2.67	2.70	5	97	94	60	53	98.0	50.52
4	60.00	64.00	578.190	0.65	90	89	2.23	2.20	4	97	94	57	52	99.3	46.12
5	64.00	68.00	581.590	0.60	91	89	2.06	2.10	4	97	93	56	51	98.0	44.31
6	68.00	72.00	584.820	0.52	91	89	1.79	1.80	4	98	92	56	50	99.3	41.25
7	72.00	76.00	587.870	0.33	92	89	1.14	1.10	3	98	92	56	49	101.4	32.86
8	76.00	80.00	590.360	0.30	92	89	1.04	1.00	2	98	91	56	47	100.4	31.33
9	80.00	84.00	592.711	0.27	92	89	0.93	0.93	2	99	91	57	51	101.7	29.72
10	84.00	88.00	594.970	0.25	92	90	0.86	0.86	2	99	91	58	52	100.6	28.63
11	88.00	92.00	597.120	0.25	92	90	0.86	0.86	2	96	90	59	52	100.5	28.63
12	92.00	96.00	599.267	0.23	93	89	0.80	0.80	2	96	91	59	51	97.7	27.43
	Final DGM:		601.275												

RESULTS	Run Time	Vm	ΔP	Tm	Ts	Max Vac	ΔH	%ISO	BWS	Y_{qa}
	96.0 min	65.240 ft^3	0.43 in. WC	87.5 °F	87.9 °F	5	1.473 in. WC	100.9	0.035	0.0

Alliance SOURCE TESTING

Isokinetic Field Data

Location:	Chemours Company - Fayetteville Works Facility, NC	**Start Time:**	16:19	**Source:**	VEN Carbon Bed Outlet
Date:	5/25/22	Run 3	VALID	**End Time:**	18:22	**Project No.:**	2022-1651	**Parameter:**	HFPO-DA

STACK DATA (EST)			EQUIPMENT			STACK DATA (EST)			FILTER NO.	STACK DATA (FINAL)		MOIST. DATA
Moisture:	2.5	% est.	Meter Box ID:	7		Est. Tm:	87	°F	OTM-45	Pb:	30.20 in. Hg	Vlc (ml)
Barometric:	30.05	in. Hg	Y:	0.985		Est. Ts:	88	°F		Pg:	2.60 in. WC	50.2
Static Press:	2.80	in. WC	ΔH @ (in.WC):	1.827		Est. ΔP:	0.43	in. WC		O_2:	20.9 %	K-FACTOR
Stack Press:	30.26	in. Hg	Probe ID:	P4-1		Est. Dn:	0.251	in.		CO_2:	0.1 %	3.423
CO_2:	0.1	%	Liner Material:	glass		Target Rate:	0.75	scfm				
O_2:	20.9	%	Pitot ID:	P4-1		LEAK CHECKS	Pre	Mid 1	Mid 2	Mid 3	Post	Check Pt. Initial Final Corr.
N_2/CO:	79.0	%	Pitot Cp/Type:	0.840	S-type	Leak Rate (cfm):	0.000	--	--	--	0.000	Mid 1 (cf) 632.850 632.915 0.065
Md:	28.85	lb/lb-mole	Nozzle ID:	G-3	glass	Vacuum (in Hg):	10	--	--	--	7	Mid 2 (cf) 632.915 633.002 0.087
Ms:	28.58	lb/lb-mole	Nozzle Dn (in.):	0.239		Pitot Tube:	Pass	--	--	--	Pass	Mid 3 (cf) --
												Mid-Point Leak Check Vol (cf): 0.152

Sample Pt.	Sample Time (minutes)		Dry Gas Meter Reading (ft^3)	Pitot Tube ΔP (in WC)	Gas Temperatures (°F)		Orifice Press. ΔH (in. WC)		Pump Vac (in. Hg)	Gas Temperatures (°F)				% ISO	Vs (fps)
					DGM Average	Stack				Probe	Filter	Imp Exit	Aux		
					Amb.	Amb.				Amb.	Amb.	Amb.	Amb.		
	Begin	End			--	--	Ideal	Actual		--	--	--	--		
A1	0.00	4.00	601.656	0.29	92	93	0.99	1.00	1	99	96	64	58	100.9	30.92
2	4.00	8.00	603.970	0.40	93	91	1.38	1.40	1	100	96	64	51	100.3	36.24
3	8.00	12.00	606.680	0.43	93	91	1.48	1.50	1	100	95	63	50	100.7	37.58
4	12.00	16.00	609.500	0.43	93	91	1.48	1.50	1	101	95	63	51	100.0	37.58
5	16.00	20.00	612.300	0.43	93	90	1.48	1.50	1	99	95	61	50	101.0	37.54
6	20.00	24.00	615.130	0.40	93	90	1.38	1.40	1	99	94	59	50	100.6	36.21
7	24.00	28.00	617.850	0.36	93	90	1.24	1.20	1	98	94	58	51	99.0	34.35
8	28.00	32.00	620.390	0.33	93	90	1.14	1.10	1	98	93	58	50	100.1	32.89
9	32.00	36.00	622.850	0.34	93	90	1.17	1.20	1	96	92	57	50	100.7	33.38
10	36.00	40.00	625.360	0.34	93	90	1.17	1.20	1	96	92	58	52	100.2	33.38
11	40.00	44.00	627.859	0.34	93	91	1.17	1.20	1	97	92	58	51	100.8	33.41
12	44.00	48.00	630.370	0.35	93	90	1.21	1.20	1	98	92	59	55	98.0	33.87
B1	48.00	52.00	632.850	0.50	91	90	1.72	1.70	2	93	93	64	56	100.5	40.48
2	52.00	56.00	636.025	0.82	92	90	2.81	2.80	5	90	92	64	54	100.6	51.85
3	56.00	60.00	639.900	0.80	93	90	2.75	2.80	5	89	91	63	51	99.7	51.21
4	60.00	64.00	643.700	0.71	93	90	2.44	2.50	4	89	91	59	51	97.2	48.24
5	64.00	68.00	647.190	0.59	93	90	2.03	2.00	3	88	90	55	51	97.6	43.98
6	68.00	72.00	650.390	0.33	94	90	1.14	1.10	2	88	92	54	49	100.7	32.89
7	72.00	76.00	652.870	0.28	94	90	0.97	0.97	1	87	90	54	48	99.6	30.30
8	76.00	80.00	655.130	0.26	94	90	0.90	0.90	1	87	90	54	48	99.7	29.19
9	80.00	84.00	657.310	0.24	93	90	0.83	0.83	1	87	91	55	49	100.1	28.05
10	84.00	88.00	659.410	0.25	93	90	0.86	0.86	1	86	90	55	51	100.9	28.63
11	88.00	92.00	661.570	0.25	92	90	0.86	0.86	1	86	90	55	52	100.2	28.63
12	92.00	96.00	663.710	0.24	92	90	0.83	0.83	1	86	91	56	52	99.6	28.05
	Final DGM:		665.795												

RESULTS	Run Time	Vm	ΔP	Tm	Ts	Max Vac	ΔH	%ISO	BWS	Y_{qa}
	96.0 min	63.987 ft^3	0.40 in. WC	92.9 °F	90.3 °F	5	1.398 in. WC	101.2	0.037	-0.1

Appendix C

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

Laboratory Job ID: 140-27617-1
Client Project/Site: VEN CB Outlet

For:
The Chemours Company FC, LLC
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, Delaware 19713

Attn: Michael Aucoin

Authorized for release by:
6/6/2022 8:57:54 AM

Courtney Adkins, Project Manager II
(865)291-3019
Courtney.Adkins@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

Qualifiers

LCMS

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 140-27617-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative
140-27617-1

Receipt

The samples were received on 5/27/2022 9:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2º C.

LCMS

Method 537 (modified): The following samples were reported with elevated reporting limits for all analytes: T-0069,0070 VEN CB OUTLET R1 OTM-45 FH (140-27617-1), T-0071,0072,0074 VEN CB OUTLET R1 OTM-45 BH (140-27617-2), T-0076,0077 VEN CB OUTLET R2 OTM-45 FH (140-27617-5), T-0078,0079,0081 VEN CB OUTLET R2 OTM-45 BH (140-27617-6), T-0083,0084 VEN CB OUTLET R3 OTM-45 FH (140-27617-9) and T-0085,0086,0088 VEN CB OUTLET R2 OTM-45 BH (140-27617-10). The sample was analyzed at a dilution based on screening results.

Method 537 (modified): The required dilution factor for the following samples were higher than could be achieved by "in vial" dilution, as it would dilute out the Isotope Dilution Analytes (IDA): T-0069,0070 VEN CB OUTLET R1 OTM-45 FH (140-27617-1), T-0071,0072,0074 VEN CB OUTLET R1 OTM-45 BH (140-27617-2), T-0076,0077 VEN CB OUTLET R2 OTM-45 FH (140-27617-5), T-0078,0079,0081 VEN CB OUTLET R2 OTM-45 BH (140-27617-6), T-0083,0084 VEN CB OUTLET R3 OTM-45 FH (140-27617-9) and T-0085,0086,0088 VEN CB OUTLET R2 OTM-45 BH (140-27617-10). As such, the dilution was achieved by taking a subsample of the undiluted extract, adding sufficient solvent, and re-spiking the extract with IDA.

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

Organic Prep

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

Client Sample ID: T-0069,0070 VEN CB OUTLET R1 OTM-45 FH

Lab Sample ID: 140-27617-1

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	35.7		1.97	1.86	ug/Sample		05/28/22 12:58	06/03/22 13:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*108*		*25 - 150*	*05/28/22 12:58*	*06/03/22 13:31*	*1*

Client Sample ID: T-0071,0072,0074 VEN CB OUTLET R1 OTM-45 BH

Lab Sample ID: 140-27617-2

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	11.0		4.00	2.20	ug/Sample		05/28/22 11:03	06/03/22 16:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*113*		*25 - 150*	*05/28/22 11:03*	*06/03/22 16:38*	*1*

Client Sample ID: T-0073 VEN CB OUTLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27617-3

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0845		0.0762	0.0305	ug/Sample		05/31/22 08:30	06/01/22 19:29	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*110*		*25 - 150*	*05/31/22 08:30*	*06/01/22 19:29*	*1*

Client Sample ID: T-0075 VEN CB OUTLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27617-4

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 11:03	06/03/22 16:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*99*		*25 - 150*	*05/28/22 11:03*	*06/03/22 16:47*	*1*

Client Sample ID: T-0076,0077 VEN CB OUTLET R2 OTM-45 FH

Lab Sample ID: 140-27617-5

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	42.3		2.00	1.88	ug/Sample		05/28/22 12:58	06/03/22 13:40	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	109		25 - 150	05/28/22 12:58	06/03/22 13:40	1

Client Sample ID: T-0078,0079,0081 VEN CB OUTLET R2 OTM-45 BH

Lab Sample ID: 140-27617-6

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	9.88		4.00	2.20	ug/Sample		05/28/22 11:03	06/03/22 16:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	106		25 - 150	05/28/22 11:03	06/03/22 16:55	1

Client Sample ID: T-0080 VEN CB OUTLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27617-7

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.269		0.0725	0.0290	ug/Sample		05/31/22 08:30	06/01/22 19:38	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	99		25 - 150	05/31/22 08:30	06/01/22 19:38	1

Client Sample ID: T-0082 VEN CB OUTLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27617-8

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0114	J	0.0200	0.0110	ug/Sample		05/28/22 11:03	06/03/22 17:04	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	89		25 - 150	05/28/22 11:03	06/03/22 17:04	1

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

Client Sample ID: T-0083,0084 VEN CB OUTLET R3 OTM-45 FH

Lab Sample ID: 140-27617-9

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	43.6		1.96	1.85	ug/Sample		05/28/22 12:58	06/03/22 13:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	106		25 - 150	05/28/22 12:58	06/03/22 13:49	1

Client Sample ID: T-0085,0086,0088 VEN CB OUTLET R2 OTM-45 BH

Lab Sample ID: 140-27617-10

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	15.3		4.00	2.20	ug/Sample		05/28/22 11:03	06/03/22 17:13	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	101		25 - 150	05/28/22 11:03	06/03/22 17:13	1

Client Sample ID: T-0087 VEN CB OUTLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27617-11

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0872		0.0737	0.0295	ug/Sample		05/31/22 08:30	06/01/22 19:47	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		25 - 150	05/31/22 08:30	06/01/22 19:47	1

Client Sample ID: T-0089 VEN CB OUTLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27617-12

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0393		0.0200	0.0110	ug/Sample		05/28/22 11:03	06/03/22 17:22	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	101		25 - 150	05/28/22 11:03	06/03/22 17:22	1

Default Detection Limits

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: None

Analyte	RL	MDL	Units
HFPO-DA	0.00500	0.00470	ug/Sample
HFPO-DA	0.0200	0.0110	ug/Sample

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: PFAS Prep

Analyte	RL	MDL	Units
HFPO-DA	0.000500	0.000200	ug/Sample

Isotope Dilution Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Air

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	HFPODA (25-150)
140-27617-1	T-0069,0070 VEN CB OUTLET	108
140-27617-2	T-0071,0072,0074 VEN CB OUTLET R1 OTM-45 BH	113
140-27617-3	T-0073 VEN CB OUTLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE	110
140-27617-4	T-0075 VEN CB OUTLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	99
140-27617-5	T-0076,0077 VEN CB OUTLET R2 OTM-45 FH	109
140-27617-6	T-0078,0079,0081 VEN CB OUTLET R2 OTM-45 BH	106
140-27617-7	T-0080 VEN CB OUTLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE	99
140-27617-8	T-0082 VEN CB OUTLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	89
140-27617-9	T-0083,0084 VEN CB OUTLET R3 OTM-45 FH	106
140-27617-10	T-0085,0086,0088 VEN CB OUTLET R2 OTM-45 BH	101
140-27617-11	T-0087 VEN CB OUTLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE	108
140-27617-12	T-0089 VEN CB OUTLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	101
LCS 140-62094/2-B	Lab Control Sample	104
LCS 140-62095/2-B	Lab Control Sample	100
LCS 140-62100/2-A	Lab Control Sample	99
LCSD 140-62094/3-B	Lab Control Sample Dup	105
LCSD 140-62095/3-B	Lab Control Sample Dup	107
LCSD 140-62100/3-A	Lab Control Sample Dup	103
MB 140-62094/1-B	Method Blank	104
MB 140-62095/1-B	Method Blank	102
MB 140-62100/1-A	Method Blank	95

Surrogate Legend

HFPODA = 13C3 HFPO-DA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 140-62094/1-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 11:03	06/03/22 15:52	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*104*		*25 - 150*	*05/28/22 11:03*	*06/03/22 15:52*	*1*

Lab Sample ID: LCS 140-62094/2-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62094

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.02448		ug/Sample		122	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*104*		*25 - 150*

Lab Sample ID: LCSD 140-62094/3-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62094

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.02748		ug/Sample		137	60 - 140	12	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*105*		*25 - 150*

Lab Sample ID: MB 140-62095/1-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00500	0.00470	ug/Sample		05/28/22 12:58	06/03/22 13:05	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 150*	*05/28/22 12:58*	*06/03/22 13:05*	*1*

Lab Sample ID: LCS 140-62095/2-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.02055		ug/Sample		103	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*100*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 140-62095/3-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.01959		ug/Sample		98	60 - 140	5	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*107*		*25 - 150*

Lab Sample ID: MB 140-62100/1-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 19:01	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*95*		*25 - 150*	*05/31/22 08:30*	*06/01/22 19:01*	*1*

Lab Sample ID: LCS 140-62100/2-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0100	0.009399		ug/Sample		94	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*99*		*25 - 150*

Lab Sample ID: LCSD 140-62100/3-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0100	0.009709		ug/Sample		97	60 - 140	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*103*		*25 - 150*

LCMS

Prep Batch: 62094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-2	T-0071,0072,0074 VEN CB OUTLET R1 OTM-45	Total/NA	Air	None	
140-27617-4	T-0075 VEN CB OUTLET R1 OTM-45 BREAKTH	Total/NA	Air	None	
140-27617-6	T-0078,0079,0081 VEN CB OUTLET R2 OTM-45	Total/NA	Air	None	
140-27617-8	T-0082 VEN CB OUTLET R2 OTM-45 BREAKTH	Total/NA	Air	None	
140-27617-10	T-0085,0086,0088 VEN CB OUTLET R2 OTM-45	Total/NA	Air	None	
140-27617-12	T-0089 VEN CB OUTLET R3 OTM-45 BREAKTH	Total/NA	Air	None	
MB 140-62094/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62094/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62094/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Prep Batch: 62095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-1	T-0069,0070 VEN CB OUTLET R1 OTM-45 FH	Total/NA	Air	None	
140-27617-5	T-0076,0077 VEN CB OUTLET R2 OTM-45 FH	Total/NA	Air	None	
140-27617-9	T-0083,0084 VEN CB OUTLET R3 OTM-45 FH	Total/NA	Air	None	
MB 140-62095/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Cleanup Batch: 62098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-1	T-0069,0070 VEN CB OUTLET R1 OTM-45 FH	Total/NA	Air	Split	62095
140-27617-5	T-0076,0077 VEN CB OUTLET R2 OTM-45 FH	Total/NA	Air	Split	62095
140-27617-9	T-0083,0084 VEN CB OUTLET R3 OTM-45 FH	Total/NA	Air	Split	62095
MB 140-62095/1-B	Method Blank	Total/NA	Air	Split	62095
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	Split	62095
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62095

Cleanup Batch: 62099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-2	T-0071,0072,0074 VEN CB OUTLET R1 OTM-45	Total/NA	Air	Split	62094
140-27617-4	T-0075 VEN CB OUTLET R1 OTM-45 BREAKTH	Total/NA	Air	Split	62094
140-27617-6	T-0078,0079,0081 VEN CB OUTLET R2 OTM-45	Total/NA	Air	Split	62094
140-27617-8	T-0082 VEN CB OUTLET R2 OTM-45 BREAKTH	Total/NA	Air	Split	62094
140-27617-10	T-0085,0086,0088 VEN CB OUTLET R2 OTM-45	Total/NA	Air	Split	62094
140-27617-12	T-0089 VEN CB OUTLET R3 OTM-45 BREAKTH	Total/NA	Air	Split	62094
MB 140-62094/1-B	Method Blank	Total/NA	Air	Split	62094
LCS 140-62094/2-B	Lab Control Sample	Total/NA	Air	Split	62094
LCSD 140-62094/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62094

Prep Batch: 62100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-3	T-0073 VEN CB OUTLET R1 OTM-45 IMPINGEF	Total/NA	Air	PFAS Prep	
140-27617-7	T-0080 VEN CB OUTLET R2 OTM-45 IMPINGEF	Total/NA	Air	PFAS Prep	
140-27617-11	T-0087 VEN CB OUTLET R3 OTM-45 IMPINGEF	Total/NA	Air	PFAS Prep	
MB 140-62100/1-A	Method Blank	Total/NA	Air	PFAS Prep	
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	PFAS Prep	
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	PFAS Prep	

QC Association Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

LCMS

Analysis Batch: 62172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-3	T-0073 VEN CB OUTLET R1 OTM-45 IMPINGEF	Total/NA	Air	537 (modified)	62100
140-27617-7	T-0080 VEN CB OUTLET R2 OTM-45 IMPINGEF	Total/NA	Air	537 (modified)	62100
140-27617-11	T-0087 VEN CB OUTLET R3 OTM-45 IMPINGEF	Total/NA	Air	537 (modified)	62100
MB 140-62100/1-A	Method Blank	Total/NA	Air	537 (modified)	62100
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	537 (modified)	62100
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62100

Cleanup Batch: 62231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-1	T-0069,0070 VEN CB OUTLET R1 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27617-2	T-0071,0072,0074 VEN CB OUTLET R1 OTM-45	Total/NA	Air	Dilution	62099
140-27617-5	T-0076,0077 VEN CB OUTLET R2 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27617-6	T-0078,0079,0081 VEN CB OUTLET R2 OTM-45	Total/NA	Air	Dilution	62099
140-27617-9	T-0083,0084 VEN CB OUTLET R3 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27617-10	T-0085,0086,0088 VEN CB OUTLET R2 OTM-45	Total/NA	Air	Dilution	62099

Analysis Batch: 62233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27617-1	T-0069,0070 VEN CB OUTLET R1 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27617-2	T-0071,0072,0074 VEN CB OUTLET R1 OTM-45	Total/NA	Air	537 (modified)	62231
140-27617-4	T-0075 VEN CB OUTLET R1 OTM-45 BREAKTH	Total/NA	Air	537 (modified)	62099
140-27617-5	T-0076,0077 VEN CB OUTLET R2 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27617-6	T-0078,0079,0081 VEN CB OUTLET R2 OTM-45	Total/NA	Air	537 (modified)	62231
140-27617-8	T-0082 VEN CB OUTLET R2 OTM-45 BREAKTH	Total/NA	Air	537 (modified)	62099
140-27617-9	T-0083,0084 VEN CB OUTLET R3 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27617-10	T-0085,0086,0088 VEN CB OUTLET R2 OTM-45	Total/NA	Air	537 (modified)	62231
140-27617-12	T-0089 VEN CB OUTLET R3 OTM-45 BREAKTH	Total/NA	Air	537 (modified)	62099
MB 140-62094/1-B	Method Blank	Total/NA	Air	537 (modified)	62099
MB 140-62095/1-B	Method Blank	Total/NA	Air	537 (modified)	62098
LCS 140-62094/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62099
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62098
LCSD 140-62094/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62099
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62098

Client Sample ID: T-0069,0070 VEN CB OUTLET R1 OTM-45 FH

Lab Sample ID: 140-27617-1

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	75 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			38 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			25 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:31	JRC	TAL KNX

Instrument ID: LCA

Client Sample ID: T-0071,0072,0074 VEN CB OUTLET R1 OTM-45 BH

Lab Sample ID: 140-27617-2

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Cleanup	Dilution			50 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 16:38	JRC	TAL KNX

Instrument ID: LCA

Client Sample ID: T-0073 VEN CB OUTLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27617-3

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00656 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:29	JRC	TAL KNX

Instrument ID: LCA

Client Sample ID: T-0075 VEN CB OUTLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27617-4

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 16:47	JRC	TAL KNX

Instrument ID: LCA

Client Sample ID: T-0076,0077 VEN CB OUTLET R2 OTM-45 FH

Lab Sample ID: 140-27617-5

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	80 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			40 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			25 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:40	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0078,0079,0081 VEN CB OUTLET R2 OTM-45 BH

Lab Sample ID: 140-27617-6

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Cleanup	Dilution			50 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 16:55	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0080 VEN CB OUTLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27617-7

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00690 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:38	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0082 VEN CB OUTLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27617-8

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 17:04	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

Client Sample ID: T-0083,0084 VEN CB OUTLET R3 OTM-45 FH

Lab Sample ID: 140-27617-9

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	55 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			28 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			25 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:49	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0085,0086,0088 VEN CB OUTLET R2 OTM-45 BH

Lab Sample ID: 140-27617-10

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Cleanup	Dilution			50 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 17:13	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0087 VEN CB OUTLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27617-11

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00678 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:47	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0089 VEN CB OUTLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27617-12

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 17:22	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62094/1-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 15:52	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62095/1-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:05	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62100/1-A

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:01	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62094/2-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 16:02	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62095/2-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:13	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Job ID: 140-27617-1
Project/Site: VEN CB Outlet

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62100/2-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:11	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62094/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 16:11	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62095/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:22	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62100/3-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:21	JRC	TAL KNX
	Instrument ID: LCA									

Laboratory References:
TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: The Chemours Company FC, LLC
Job ID: 140-27617-1
Project/Site: VEN CB Outlet

Laboratory: Eurofins Knoxville

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-17-22
California	State	2423	06-30-22
Colorado	State	TN00009	02-28-23
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-22
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-22
Kansas	NELAP	E-10349	10-31-22
Kentucky (DW)	State	90101	12-31-22
Louisiana	NELAP	83979	06-30-22
Louisiana (DW)	State	LA019	12-31-22
Maryland	State	277	03-31-23
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-22
New Hampshire	NELAP	299919	01-17-23
New Jersey	NELAP	TN001	06-30-22
New York	NELAP	10781	03-31-23
North Carolina (DW)	State	21705	07-31-22
North Carolina (WW/SW)	State	64	12-31-22
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-22
Oregon	NELAP	TNI0189	12-31-22
Pennsylvania	NELAP	68-00576	12-31-22
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-22
Virginia	NELAP	460176	09-14-22
Washington	State	C593	01-19-23
West Virginia (DW)	State	9955C	12-31-22
West Virginia DEP	State	345	04-30-23
Wisconsin	State	998044300	08-31-22

Method Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL KNX
Dilution	Dilution and Re-fortification of Standards	None	TAL KNX
None	Leaching Procedure	TAL SOP	TAL KNX
None	Leaching Procedure for Filter	TAL SOP	TAL KNX
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL KNX
Split	Source Air Split	None	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure
TAL-SAC = Eurofins Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Outlet

Job ID: 140-27617-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-27617-1	T-0069,0070 VEN CB OUTLET R1 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27617-2	T-0071,0072,0074 VEN CB OUTLET R1 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27617-3	T-0073 VEN CB OUTLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27617-4	T-0075 VEN CB OUTLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15
140-27617-5	T-0076,0077 VEN CB OUTLET R2 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27617-6	T-0078,0079,0081 VEN CB OUTLET R2 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27617-7	T-0080 VEN CB OUTLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27617-8	T-0082 VEN CB OUTLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15
140-27617-9	T-0083,0084 VEN CB OUTLET R3 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27617-10	T-0085,0086,0088 VEN CB OUTLET R2 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27617-11	T-0087 VEN CB OUTLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27617-12	T-0089 VEN CB OUTLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15

Cooler 4

Request for Analysis/Chain-of-Custody – RFA/COC #002
The Chemours Company – Fayetteville NC
VEN Carbon Bed Outlet

eurofins | Environment Testing TestAmerica

Project Identification:	Chemours Emissions Test
Client Name:	The Chemours Company FC, LLC
Client Contact:	Ms. Christel Compton Office: (910) 678-1213 Cell: (910) 975-3386
TestAmerica Project Manager:	Ms. Courtney Adkins Office: (865) 291-3019
TestAmerica Program Manager:	Mr. Billy Anderson Office: (865) 291-3080 Cell: (865) 206-9004

Laboratory Deliverable Turnaround Requirements:	
Analytical Due Date: (Review-Released Data)	21 Days from Lab Receipt
Data Package Due Date:	28 Days from Lab Receipt

Analytical Testing QC Requirements:
The Legend for Project-Specific Quality Control Testing is designated in the "QC" column as follows: "BT" = Blank Train, "RB" = Reagent Blank, "MS" = Matrix Spike, "MSD" = Matrix Spike Duplicate, "DUP" = Duplicate, "PB" = Proof Blank, "TB" = Trip Blank

Laboratory Destination:	Eurofins TestAmerica 5815 Middlebrook Pike Knoxville, TN
Lab Phone Number:	(865) 291-3000
Courier:	Hand Deliver

Project Deliverables:
Report analytical results on TALS Report form Std_Tal_L4. Include "Field Sample Number" ALS Reports.

140-27617 Chain of Custody

Analytical Parameter:	Holding Time Requirements:
HFPO-DA (CAS No. 13252-13-6)	14 Days to Extraction; 40 Days to Analysis

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0069 VEN CB OUTLET R1 OTM-45 Filter (Combine with *T-0070*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0070 VEN CB OUTLET R1 OTM-45 FH of Filter Holder & Probe Methanol Rinse (Combine with *T-0069*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0071 VEN CB OUTLET R1 OTM-45 XAD-2 Resin Tube	1	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0072 VEN CB OUTLET R1 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0071*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0073 VEN CB OUTLET R1 OTM-45 Impingers 1,2 & 3 Condensate	1	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0074 VEN CB OUTLET R1 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0071*)	1	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0075 VEN CB OUTLET R1 OTM-45 Breakthrough XAD-2 Resin Tube	1	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0076 VEN CB OUTLET R2 OTM-45 Filter (Combine with *T-0077*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0077 VEN CB OUTLET R2 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0076*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0078 VEN CB OUTLET R2 OTM-45 XAD-2 Resin Tube	2	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0079 VEN CB OUTLET R2 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0078*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0080 VEN CB OUTLET R2 OTM-45 Impingers 1,2 & 3 Condensate	2	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0081 VEN CB OUTLET R2 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0078*)	2	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0082 VEN CB OUTLET R2 OTM-45 Breakthrough XAD-2 Resin Tube	2	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0083 VEN CB OUTLET R3 OTM-45 Filter (Combine with *T-0084*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0084 VEN CB OUTLET R3 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0083*)	3	5/24/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0085 VEN CB OUTLET R3 OTM-45 XAD-2 Resin Tube	3	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0086 VEN CB OUTLET R3 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0085*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0087 VEN CB OUTLET R3 OTM-45 Impingers 1,2 & 3 Condensate	3	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0088 VEN CB OUTLET R3 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0085*)	3	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0089 VEN CB OUTLET R3 OTM-45 Breakthrough XAD-2 Resin Tube	3	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0090 VEN CB OUTLET R4 OTM-45 Filter (Combine with *T-0091*)	4	5/4		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0091 VEN CB OUTLET R4 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0090*)	4			125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0092 VEN CB OUTLET R4 OTM-45 XAD-2 Resin Tube	4			XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0093 VEN CB OUTLET R4 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0092*)	4			125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0094 VEN CB OUTLET R4 OTM-45 Impingers 1,2 & 3 Condensate	4			500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0095 VEN CB OUTLET R4 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0092*)	4	N/A		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0096 VEN CB OUTLET R4 OTM-45 Breakthrough XAD-2 Resin Tube	4	↓		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.

Sample Receipt Log and Condition of the Samples Upon Receipt:

Please fill in the following information: **Comments**

(Please write "NONE" if no comment applicable)

(1) **Record the identities of any samples that were listed on the RFA but were not found in the sample shipment.** NONE

(2) **Record the sample shipping cooler temperature of all coolers transporting samples listed on this RFA:** AT 0.9/~~GT 1.0~~ 2.7 2.2°C CT 1.2°C

(3) **Record any apparent sample loss/breakage.** NONE

(4) **Record any unidentified samples transported with this shipment of samples:** NONE

(5) **Indicate if all samples were received according to the project's required specifications (i.e. no nonconformances):** HAND DELIVERED, NO CUSTODY SEALS

Custody Transfer:

	Name	Company	Date/Time
Relinquished By:	[signature]	Alliance	5/26/22/2100
Accepted By:	Doug Gill	ETA KNOX	5/27/22 1330
Relinquished By:	Doug Gill	ETA KNOX	5/27/22 2115

	Name	Company	Date/Time
Accepted By:	[signature]	FTA KNX	5-27-22 21:15
Relinquished By:			
Accepted By:			
Relinquished By:			
Accepted By:			

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : SC71 Correction factor: +0.3°C	✓			☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?			✓	☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:	
Lot Number:	
Exp Date:	
Analyst:	
Date:	
Time:	

Project #: _____ PM Instructions: _____

Sample Receiving Associate: _____ Date: 5-24-22

QA026R32.doc, 062719

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

Laboratory Job ID: 140-27618-1
Client Project/Site: VEN CB Inlet

For:
The Chemours Company FC, LLC
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, Delaware 19713

Attn: Michael Aucoin

Authorized for release by:
6/6/2022 8:58:13 AM

Courtney Adkins, Project Manager II
(865)291-3019
Courtney.Adkins@et.eurofinsus.com

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 140-27618-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative
140-27618-1

Receipt

The samples were received on 5/27/2022 9:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2º C.

LCMS

Method 537 (modified): Results for samples T-0054 VEN CB INLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE (140-27618-8) and T-0061 VEN CB INLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE (140-27618-12) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

Method 537 (modified): The following samples were reported with elevated reporting limits for all analytes: T-0041,0042 VEN CB INLET R1 OTM-45 FH (140-27618-1), T-0043,0044,0046 VEN CB INLET R1 OTM-45 BH (140-27618-2), T-0048,0049 VEN CB INLET R2 OTM-45 FH (140-27618-5), T-0050,0051,0053 VEN CB INLET R2 OTM-45 BH (140-27618-6), T-0054 VEN CB INLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE (140-27618-8), T-0055,0056 VEN CB INLET R3 OTM-45 FH (140-27618-9), T-0057,0058,0060 VEN CB INLET R2 OTM-45 BH (140-27618-10) and T-0061 VEN CB INLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE (140-27618-12). The sample was analyzed at a dilution based on screening results.

Method 537 (modified): The required dilution factor for the following samples were higher than could be achieved by "in vial" dilution, as it would dilute out the Isotope Dilution Analytes (IDA): T-0041,0042 VEN CB INLET R1 OTM-45 FH (140-27618-1), T-0043,0044,0046 VEN CB INLET R1 OTM-45 BH (140-27618-2), T-0048,0049 VEN CB INLET R2 OTM-45 FH (140-27618-5), T-0050,0051,0053 VEN CB INLET R2 OTM-45 BH (140-27618-6), T-0055,0056 VEN CB INLET R3 OTM-45 FH (140-27618-9) and T-0057,0058,0060 VEN CB INLET R2 OTM-45 BH (140-27618-10). As such, the dilution was achieved by taking a subsample of the undiluted extract, adding sufficient solvent, and re-spiking the extract with IDA.

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

Organic Prep

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

Client Sample ID: T-0041,0042 VEN CB INLET R1 OTM-45 FH

Lab Sample ID: 140-27618-1

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	128		9.88	9.28	ug/Sample		05/28/22 12:58	06/03/22 13:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*100*		*25 - 150*	*05/28/22 12:58*	*06/03/22 13:58*	*1*

Client Sample ID: T-0043,0044,0046 VEN CB INLET R1 OTM-45 BH

Lab Sample ID: 140-27618-2

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	226		50.0	27.5	ug/Sample		05/28/22 11:03	06/03/22 17:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*101*		*25 - 150*	*05/28/22 11:03*	*06/03/22 17:31*	*1*

Client Sample ID: T-0045 VEN CB INLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27618-3

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	5.80		0.0787	0.0315	ug/Sample		05/31/22 08:30	06/01/22 19:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*100*		*25 - 150*	*05/31/22 08:30*	*06/01/22 19:56*	*1*

Client Sample ID: T-0047 VEN CB INLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27618-4

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0944		0.0200	0.0110	ug/Sample		05/28/22 11:03	06/03/22 17:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*99*		*25 - 150*	*05/28/22 11:03*	*06/03/22 17:39*	*1*

Client Sample ID: T-0048,0049 VEN CB INLET R2 OTM-45 FH

Lab Sample ID: 140-27618-5

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	199		10.0	9.40	ug/Sample		05/28/22 12:58	06/03/22 14:06	1

Client Sample ID: T-0048,0049 VEN CB INLET R2 OTM-45 FH

Lab Sample ID: 140-27618-5

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		25 - 150	05/28/22 12:58	06/03/22 14:06	1

Client Sample ID: T-0050,0051,0053 VEN CB INLET R2 OTM-45 BH

Lab Sample ID: 140-27618-6

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	219		50.0	27.5	ug/Sample		05/28/22 11:03	06/03/22 17:48	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		25 - 150	05/28/22 11:03	06/03/22 17:48	1

Client Sample ID: T-0052 VEN CB INLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27618-7

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	6.85		0.0751	0.0300	ug/Sample		05/31/22 08:30	06/01/22 20:05	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	115		25 - 150	05/31/22 08:30	06/01/22 20:05	1

Client Sample ID: T-0054 VEN CB INLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27618-8

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.610		0.200	0.110	ug/Sample		05/28/22 11:03	06/03/22 17:57	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	110		25 - 150	05/28/22 11:03	06/03/22 17:57	10

Client Sample ID: T-0055,0056 VEN CB INLET R3 OTM-45 FH

Lab Sample ID: 140-27618-9

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	224		9.89	9.30	ug/Sample		05/28/22 12:58	06/03/22 14:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		25 - 150	05/28/22 12:58	06/03/22 14:15	1

Client Sample ID: T-0057,0058,0060 VEN CB INLET R2 OTM-45 BH

Lab Sample ID: 140-27618-10

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	298		50.0	27.5	ug/Sample		05/28/22 11:03	06/03/22 18:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		25 - 150	05/28/22 11:03	06/03/22 18:32	1

Client Sample ID: T-0059 VEN CB INLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27618-11

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	12.0		0.0751	0.0300	ug/Sample		05/31/22 08:30	06/01/22 20:13	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		25 - 150	05/31/22 08:30	06/01/22 20:13	1

Client Sample ID: T-0061 VEN CB INLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27618-12

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.464		0.200	0.110	ug/Sample		05/28/22 11:05	06/03/22 18:41	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	109		25 - 150	05/28/22 11:05	06/03/22 18:41	10

Default Detection Limits

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Inlet

Job ID: 140-27618-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: None

Analyte	RL	MDL	Units
HFPO-DA	0.00500	0.00470	ug/Sample
HFPO-DA	0.0200	0.0110	ug/Sample

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: PFAS Prep

Analyte	RL	MDL	Units
HFPO-DA	0.000500	0.000200	ug/Sample

Isotope Dilution Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Inlet

Job ID: 140-27618-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Air

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	HFPODA (25-150)						
140-27618-1	T-0041,0042 VEN CB INLET R1	100						
140-27618-2	T-0043,0044,0046 VEN CB INLET R1 OTM-45 BH	101						
140-27618-3	T-0045 VEN CB INLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE	100						
140-27618-4	T-0047 VEN CB INLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	99						
140-27618-5	T-0048,0049 VEN CB INLET R2 OTM-45 FH	108						
140-27618-6	T-0050,0051,0053 VEN CB INLET R2 OTM-45 BH	104						
140-27618-7	T-0052 VEN CB INLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE	115						
140-27618-8	T-0054 VEN CB INLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	110						
140-27618-9	T-0055,0056 VEN CB INLET R3 OTM-45 FH	108						
140-27618-10	T-0057,0058,0060 VEN CB INLET R2 OTM-45 BH	102						
140-27618-11	T-0059 VEN CB INLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE	104						
140-27618-12	T-0061 VEN CB INLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	109						
LCS 140-62094/2-B	Lab Control Sample	104						
LCS 140-62095/2-B	Lab Control Sample	100						
LCS 140-62100/2-A	Lab Control Sample	99						
LCSD 140-62094/3-B	Lab Control Sample Dup	105						
LCSD 140-62095/3-B	Lab Control Sample Dup	107						
LCSD 140-62100/3-A	Lab Control Sample Dup	103						
MB 140-62094/14-B	Method Blank	98						
MB 140-62094/1-B	Method Blank	104						
MB 140-62095/1-B	Method Blank	102						
MB 140-62100/1-A	Method Blank	95						

Surrogate Legend

HFPODA = 13C3 HFPO-DA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 140-62094/14-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 11:03	06/03/22 18:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*98*		*25 - 150*	*05/28/22 11:03*	*06/03/22 18:23*	*1*

Lab Sample ID: MB 140-62094/1-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 11:03	06/03/22 15:52	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*104*		*25 - 150*	*05/28/22 11:03*	*06/03/22 15:52*	*1*

Lab Sample ID: LCS 140-62094/2-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62094

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.02448		ug/Sample		122	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*104*		*25 - 150*

Lab Sample ID: LCSD 140-62094/3-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62094

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.02748		ug/Sample		137	60 - 140	12	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*105*		*25 - 150*

Lab Sample ID: MB 140-62095/1-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00500	0.00470	ug/Sample		05/28/22 12:58	06/03/22 13:05	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 150*	*05/28/22 12:58*	*06/03/22 13:05*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 140-62095/2-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.02055		ug/Sample		103	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*100*		*25 - 150*

Lab Sample ID: LCSD 140-62095/3-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.01959		ug/Sample		98	60 - 140	5	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*107*		*25 - 150*

Lab Sample ID: MB 140-62100/1-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 19:01	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*95*		*25 - 150*	*05/31/22 08:30*	*06/01/22 19:01*	*1*

Lab Sample ID: LCS 140-62100/2-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0100	0.009399		ug/Sample		94	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*99*		*25 - 150*

Lab Sample ID: LCSD 140-62100/3-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0100	0.009709		ug/Sample		97	60 - 140	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*103*		*25 - 150*

QC Association Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Inlet

Job ID: 140-27618-1

LCMS

Prep Batch: 62094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-2	T-0043,0044,0046 VEN CB INLET R1 OTM-45 B	Total/NA	Air	None	
140-27618-4	T-0047 VEN CB INLET R1 OTM-45 BREAKTHR(	Total/NA	Air	None	
140-27618-6	T-0050,0051,0053 VEN CB INLET R2 OTM-45 B	Total/NA	Air	None	
140-27618-8	T-0054 VEN CB INLET R2 OTM-45 BREAKTHR(	Total/NA	Air	None	
140-27618-10	T-0057,0058,0060 VEN CB INLET R2 OTM-45 B	Total/NA	Air	None	
140-27618-12	T-0061 VEN CB INLET R3 OTM-45 BREAKTHR(	Total/NA	Air	None	
MB 140-62094/14-B	Method Blank	Total/NA	Air	None	
MB 140-62094/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62094/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62094/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Prep Batch: 62095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-1	T-0041,0042 VEN CB INLET R1 OTM-45 FH	Total/NA	Air	None	
140-27618-5	T-0048,0049 VEN CB INLET R2 OTM-45 FH	Total/NA	Air	None	
140-27618-9	T-0055,0056 VEN CB INLET R3 OTM-45 FH	Total/NA	Air	None	
MB 140-62095/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Cleanup Batch: 62098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-1	T-0041,0042 VEN CB INLET R1 OTM-45 FH	Total/NA	Air	Split	62095
140-27618-5	T-0048,0049 VEN CB INLET R2 OTM-45 FH	Total/NA	Air	Split	62095
140-27618-9	T-0055,0056 VEN CB INLET R3 OTM-45 FH	Total/NA	Air	Split	62095
MB 140-62095/1-B	Method Blank	Total/NA	Air	Split	62095
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	Split	62095
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62095

Cleanup Batch: 62099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-2	T-0043,0044,0046 VEN CB INLET R1 OTM-45 B	Total/NA	Air	Split	62094
140-27618-4	T-0047 VEN CB INLET R1 OTM-45 BREAKTHR(	Total/NA	Air	Split	62094
140-27618-6	T-0050,0051,0053 VEN CB INLET R2 OTM-45 B	Total/NA	Air	Split	62094
140-27618-8	T-0054 VEN CB INLET R2 OTM-45 BREAKTHR(	Total/NA	Air	Split	62094
140-27618-10	T-0057,0058,0060 VEN CB INLET R2 OTM-45 B	Total/NA	Air	Split	62094
140-27618-12	T-0061 VEN CB INLET R3 OTM-45 BREAKTHR(	Total/NA	Air	Split	62094
MB 140-62094/14-B	Method Blank	Total/NA	Air	Split	62094
MB 140-62094/1-B	Method Blank	Total/NA	Air	Split	62094
LCS 140-62094/2-B	Lab Control Sample	Total/NA	Air	Split	62094
LCSD 140-62094/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62094

Prep Batch: 62100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-3	T-0045 VEN CB INLET R1 OTM-45 IMPINGERS	Total/NA	Air	PFAS Prep	
140-27618-7	T-0052 VEN CB INLET R2 OTM-45 IMPINGERS	Total/NA	Air	PFAS Prep	
140-27618-11	T-0059 VEN CB INLET R3 OTM-45 IMPINGERS	Total/NA	Air	PFAS Prep	
MB 140-62100/1-A	Method Blank	Total/NA	Air	PFAS Prep	
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	PFAS Prep	
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	PFAS Prep	

QC Association Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Inlet

Job ID: 140-27618-1

LCMS

Analysis Batch: 62172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-3	T-0045 VEN CB INLET R1 OTM-45 IMPINGERS	Total/NA	Air	537 (modified)	62100
140-27618-7	T-0052 VEN CB INLET R2 OTM-45 IMPINGERS	Total/NA	Air	537 (modified)	62100
140-27618-11	T-0059 VEN CB INLET R3 OTM-45 IMPINGERS	Total/NA	Air	537 (modified)	62100
MB 140-62100/1-A	Method Blank	Total/NA	Air	537 (modified)	62100
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	537 (modified)	62100
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62100

Cleanup Batch: 62231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-1	T-0041,0042 VEN CB INLET R1 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27618-2	T-0043,0044,0046 VEN CB INLET R1 OTM-45 B	Total/NA	Air	Dilution	62099
140-27618-5	T-0048,0049 VEN CB INLET R2 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27618-6	T-0050,0051,0053 VEN CB INLET R2 OTM-45 B	Total/NA	Air	Dilution	62099
140-27618-9	T-0055,0056 VEN CB INLET R3 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27618-10	T-0057,0058,0060 VEN CB INLET R2 OTM-45 B	Total/NA	Air	Dilution	62099

Analysis Batch: 62233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27618-1	T-0041,0042 VEN CB INLET R1 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27618-2	T-0043,0044,0046 VEN CB INLET R1 OTM-45 B	Total/NA	Air	537 (modified)	62231
140-27618-4	T-0047 VEN CB INLET R1 OTM-45 BREAKTHR(	Total/NA	Air	537 (modified)	62099
140-27618-5	T-0048,0049 VEN CB INLET R2 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27618-6	T-0050,0051,0053 VEN CB INLET R2 OTM-45 B	Total/NA	Air	537 (modified)	62231
140-27618-8	T-0054 VEN CB INLET R2 OTM-45 BREAKTHR(	Total/NA	Air	537 (modified)	62099
140-27618-9	T-0055,0056 VEN CB INLET R3 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27618-10	T-0057,0058,0060 VEN CB INLET R2 OTM-45 B	Total/NA	Air	537 (modified)	62231
140-27618-12	T-0061 VEN CB INLET R3 OTM-45 BREAKTHR(	Total/NA	Air	537 (modified)	62099
MB 140-62094/14-B	Method Blank	Total/NA	Air	537 (modified)	62099
MB 140-62094/1-B	Method Blank	Total/NA	Air	537 (modified)	62099
MB 140-62095/1-B	Method Blank	Total/NA	Air	537 (modified)	62098
LCS 140-62094/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62099
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62098
LCSD 140-62094/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62099
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62098

Client Sample ID: T-0041,0042 VEN CB INLET R1 OTM-45 FH

Lab Sample ID: 140-27618-1

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	79 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			40 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			5 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:58	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0043,0044,0046 VEN CB INLET R1 OTM-45 BH

Lab Sample ID: 140-27618-2

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Cleanup	Dilution			4 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 17:31	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0045 VEN CB INLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27618-3

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00635 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:56	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0047 VEN CB INLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27618-4

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 17:39	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0048,0049 VEN CB INLET R2 OTM-45 FH

Lab Sample ID: 140-27618-5

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	88 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			44 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			5 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 14:06	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0050,0051,0053 VEN CB INLET R2 OTM-45 BH

Lab Sample ID: 140-27618-6

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Cleanup	Dilution			4 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 17:48	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0052 VEN CB INLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27618-7

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00666 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 20:05	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0054 VEN CB INLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27618-8

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		10			62233	06/03/22 17:57	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0055,0056 VEN CB INLET R3 OTM-45 FH

Lab Sample ID: 140-27618-9

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	93 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			47 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			5 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 14:15	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0057,0058,0060 VEN CB INLET R2 OTM-45 BH

Lab Sample ID: 140-27618-10

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Cleanup	Dilution			4 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 18:32	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0059 VEN CB INLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27618-11

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00666 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 20:13	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0061 VEN CB INLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27618-12

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:05	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		10			62233	06/03/22 18:41	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62094/14-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 18:23	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62094/1-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 15:52	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62095/1-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:05	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62100/1-A

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:01	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62094/2-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 16:02	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Inlet

Job ID: 140-27618-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62095/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:13	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62100/2-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:11	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62094/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62094	05/28/22 11:03	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62099	05/31/22 06:45	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 16:11	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62095/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:22	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62100/3-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:21	JRC	TAL KNX
	Instrument ID: LCA									

Laboratory References:
TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: The Chemours Company FC, LLC
Job ID: 140-27618-1
Project/Site: VEN CB Inlet

Laboratory: Eurofins Knoxville

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-17-22
California	State	2423	06-30-22
Colorado	State	TN00009	02-28-23
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-22
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-22
Kansas	NELAP	E-10349	10-31-22
Kentucky (DW)	State	90101	12-31-22
Louisiana	NELAP	83979	06-30-22
Louisiana (DW)	State	LA019	12-31-22
Maryland	State	277	03-31-23
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-22
New Hampshire	NELAP	299919	01-17-23
New Jersey	NELAP	TN001	06-30-22
New York	NELAP	10781	03-31-23
North Carolina (DW)	State	21705	07-31-22
North Carolina (WW/SW)	State	64	12-31-22
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-22
Oregon	NELAP	TNI0189	12-31-22
Pennsylvania	NELAP	68-00576	12-31-22
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-22
Virginia	NELAP	460176	09-14-22
Washington	State	C593	01-19-23
West Virginia (DW)	State	9955C	12-31-22
West Virginia DEP	State	345	04-30-23
Wisconsin	State	998044300	08-31-22

Method Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Inlet

Job ID: 140-27618-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL KNX
Dilution	Dilution and Re-fortification of Standards	None	TAL KNX
None	Leaching Procedure	TAL SOP	TAL KNX
None	Leaching Procedure for Filter	TAL SOP	TAL KNX
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL KNX
Split	Source Air Split	None	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure
TAL-SAC = Eurofins Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Inlet

Job ID: 140-27618-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-27618-1	T-0041,0042 VEN CB INLET R1 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27618-2	T-0043,0044,0046 VEN CB INLET R1 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27618-3	T-0045 VEN CB INLET R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27618-4	T-0047 VEN CB INLET R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15
140-27618-5	T-0048,0049 VEN CB INLET R2 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27618-6	T-0050,0051,0053 VEN CB INLET R2 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27618-7	T-0052 VEN CB INLET R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27618-8	T-0054 VEN CB INLET R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15
140-27618-9	T-0055,0056 VEN CB INLET R3 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27618-10	T-0057,0058,0060 VEN CB INLET R2 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27618-11	T-0059 VEN CB INLET R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27618-12	T-0061 VEN CB INLET R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15

Cooler 3

Request for Analysis/Chain-of-Custody – RFA/COC #001
The Chemours Company – Fayetteville NC
VEN Carbon Bed Inlet

eurofins | Environment Testing TestAmerica

Project Identification:	Chemours Emissions Test
Client Name:	Chemours Company
Client Contact:	Christel Compton (910) 678-1213
TestAmerica Contact:	Courtney Adkins (865) 291-3019
TestAmerica Project Manager:	Billy Anderson (865) 291-3080

Analytical Testing QC Requirements:
The Legend for Project-Specific Quality Control Testing is designated in the "QC" column as follows: "BT" = Blank Train, "RB" = Reagent Blank, "MS" = Matrix Spike, "MSD" = Matrix Spike Duplicate, "DUP" = Duplicate, "PB" = Proof Blank, "TB" = Trip Blank

Laboratory Deliverable Turnaround Requirements:	
Analytical Due Date: (Review-Released Data)	21 Days from Lab Receipt
Data Package Due Date:	28 Days from Lab Receipt
Laboratory Destination:	TestAmerica Laboratories, Inc. 5815 Middlebrook Pike Knoxville, TN 37921
Lab Phone Number:	865.291.3000
Courier:	Hand Deliver

Project Deliverables:
Report analytical results on TALS Reports and in data packages. Include "Field Sample Number", "Sample Type", and "Run Number" on all TALS Reports.

Analytical Parameter:	Holding Time Requirements:	s:
HFPO-DA (CAS No. 13252-13-6)	14 Days to Extraction; 40 Days to Analys	

140-27618 Chain of Custody

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0041 VEN CB INLET R1 OTM-45 Particulate Filter (Combine with *T-0042*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using method 8321A-HFPO.
T-0042 VEN CB INLET R1 OTM-45 FH of Filter Holder & Probe Methanol Rinse (Combine with *T-0041*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0043 VEN CB INLET R1 OTM-45 XAD-2 Resin Tube	1	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0044 VEN CB INLET R1 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0043*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction.
T-0045 VEN CB INLET R1 OTM-45 Impingers 1,2 & 3 Condensate	1	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0046 VEN CB INLET R1 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0043*)	1	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0047 VEN CB INLET R1 OTM-45 Breakthrough XAD-2 Resin Tube	1	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using method 8321A-HFPO.
T-0048 VEN CB INLET R2 OTM-45 Particulate Filter (Combine with *T-0049*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using method 8321A-HFPO.
T-0049 VEN CB INLET R2 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0048*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0050 VEN CB INLET R2 OTM-45 XAD-2 Resin Tube	2	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using method 8321A-HFPO. Analyze.
T-0051 VEN CB INLET R2 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0050*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction.
T-0052 VEN CB INLET R2 OTM-45 Impingers 1,2 & 3 Condensate	2	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0053 VEN CB INLET R2 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0050*)	2	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0054 VEN CB INLET R2 OTM-45 Breakthrough XAD-2 Resin Tube	2	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using method 8321A-HFPO.
T-0055 VEN CB INLET R3 OTM-45 Particulate Filter (Combine with *T-0056*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0056 VEN CB INLET R3 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0055*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0057 VEN CB INLET R3 OTM-45 XAD-2 Resin Tube	3	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using method 8321A-HFPO.
T-0058 VEN CB INLET R3 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0057*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using method 8321A-HFPO.
T-0059 VEN CB INLET R3 OTM-45 Impingers 1,2 & 3 Condensate	3	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0060 VEN CB INLET R3 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0057*)	3	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0061 VEN CB INLET R3 OTM-45 Breakthrough XAD-2 Resin Tube	3	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0062 VEN CB INLET R4 OTM-45 Particulate Filter (Combine with *T-0063*)	4	N/A		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using method 8321A-HFPO.
T-0063 VEN CB INLET R4 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0062*)	4			125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0064 VEN CB INLET R4 OTM-45 XAD-2 Resin Tube	4			XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using method 8321A-HFPO.
T-0065 VEN CB INLET R4 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0064*)	4			125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using method 8321A-HFPO.
T-0066 VEN CB INLET R4 OTM-45 Impingers 1,2 & 3 Condensate	4			500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0067 VEN CB INLET R4 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0064*)	4	V		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0068 VEN CB INLET R4 OTM-45 Breakthrough XAD-2 Resin Tube	4	N/A		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using method 8321A-HFPO.

Sample Receipt Log and Condition of the Samples Upon Receipt:

Please fill in the following information:	Comments (Please write "NONE" if no comment applicable)
(1) Record the identities of any samples that were listed on the RFA but were not found in the sample shipment.	NONE
(2) Record the sample shipping cooler temperature of all coolers transporting samples listed on this RFA:	RT 0.9 / CT 1.2 C
(3) Record any apparent sample loss/breakage.	NONE
(4) Record any unidentified samples transported with this shipment of samples:	NONE
(5) Indicate if all samples were received according to the project's required specifications (i.e. no nonconformances):	NO CUSTODY SEALS, HAND DELIVERED

Custody Transfer:

	Name	Company	Date/Time
Relinquished By:	Patrick Henry	Alliance	5/25/22 1100
Accepted By:	Doug Cahill	ETA KNOX	5/27/22 1330
Relinquished By:	Doug Cahill	ETA KNOX	5/27/22 2115
Accepted By:	Bryan Cannon	ETA KNX	5-27-22 21:15
Relinquished By:			
Accepted By:			
Relinquished By:			
Accepted By:			

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : SC71 Correction factor: +0.3°C	✓			☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?			✓	☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: _____ PM Instructions: _____

Sample Receiving Associate: _____ Date: 5-25-22

QA026R32.doc, 062719

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

Laboratory Job ID: 140-27619-1
Client Project/Site: VEN Stack

For:
The Chemours Company FC, LLC
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, Delaware 19713

Attn: Michael Aucoin

Authorized for release by:
6/6/2022 8:58:32 AM

Courtney Adkins, Project Manager II
(865)291-3019
Courtney.Adkins@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Qualifiers

LCMS

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 140-27619-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative
140-27619-1

Receipt

The samples were received on 5/27/2022 9:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9º C.

LCMS

Method 537 (modified): The following samples were reported with elevated reporting limits for all analytes: T-0097,0098 VEN STACK R1 OTM-45 FH (140-27619-1), T-0104,0105 VEN STACK R2 OTM-45 FH (140-27619-5), T-0111,0112 VEN STACK R3 OTM-45 FH (140-27619-9) and T-0118,0119 VEN STACK R4 OTM-45 FH (140-27619-13). The sample was analyzed at a dilution based on screening results.

Method 537 (modified): The required dilution factor for the following samples were higher than could be achieved by "in vial" dilution, as it would dilute out the Isotope Dilution Analytes (IDA): T-0097,0098 VEN STACK R1 OTM-45 FH (140-27619-1), T-0104,0105 VEN STACK R2 OTM-45 FH (140-27619-5), T-0111,0112 VEN STACK R3 OTM-45 FH (140-27619-9) and T-0118,0119 VEN STACK R4 OTM-45 FH (140-27619-13). As such, the dilution was achieved by taking a subsample of the undiluted extract, adding sufficient solvent, and re-spiking the extract with IDA.

Method 537 (modified): The following samples were reported with elevated reporting limits for all analytes: T-0099,0100,0102 VEN STACK R1 OTM-45 BH (140-27619-2), T-0106,0107,0109 VEN STACK R2 OTM-45 BH (140-27619-6), T-0113,0114,0116 VEN STACK R3 OTM-45 BH (140-27619-10) and T-0120,0121,0123 VEN STACK R4 OTM-45 BH (140-27619-14). The sample was analyzed at a dilution based on screening results.

Method 537 (modified): The required dilution factor for the following samples were higher than could be achieved by "in vial" dilution, as it would dilute out the Isotope Dilution Analytes (IDA): T-0099,0100,0102 VEN STACK R1 OTM-45 BH (140-27619-2), T-0106,0107,0109 VEN STACK R2 OTM-45 BH (140-27619-6), T-0113,0114,0116 VEN STACK R3 OTM-45 BH (140-27619-10) and T-0120,0121,0123 VEN STACK R4 OTM-45 BH (140-27619-14). As such, the dilution was achieved by taking a subsample of the undiluted extract, adding sufficient solvent, and re-spiking the extract with IDA.

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

Organic Prep

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

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Client Sample ID: T-0097,0098 VEN STACK R1 OTM-45 FH

Lab Sample ID: 140-27619-1
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	20.4		1.25	1.18	ug/Sample		05/28/22 12:58	06/03/22 14:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*108*		*25 - 150*	*05/28/22 12:58*	*06/03/22 14:24*	*1*

Client Sample ID: T-0099,0100,0102 VEN STACK R1 OTM-45 BH

Lab Sample ID: 140-27619-2
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	17.0		5.00	2.75	ug/Sample		05/28/22 13:51	06/04/22 14:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*92*		*25 - 150*	*05/28/22 13:51*	*06/04/22 14:33*	*1*

Client Sample ID: T-0101 VEN STACK R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-3
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.139		0.0712	0.0285	ug/Sample		05/31/22 08:30	06/01/22 20:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*107*		*25 - 150*	*05/31/22 08:30*	*06/01/22 20:22*	*1*

Client Sample ID: T-0102 VEN STACK R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-4
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 14:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*80*		*25 - 150*	*05/28/22 13:51*	*06/04/22 14:42*	*1*

Client Sample ID: T-0104,0105 VEN STACK R2 OTM-45 FH

Lab Sample ID: 140-27619-5
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	26.1		1.24	1.16	ug/Sample		05/28/22 12:58	06/03/22 14:50	1

Client Sample ID: T-0104,0105 VEN STACK R2 OTM-45 FH

Lab Sample ID: 140-27619-5

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	109		25 - 150	05/28/22 12:58	06/03/22 14:50	1

Client Sample ID: T-0106,0107,0109 VEN STACK R2 OTM-45 BH

Lab Sample ID: 140-27619-6

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	15.2		5.00	2.75	ug/Sample		05/28/22 13:51	06/04/22 14:51	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	98		25 - 150	05/28/22 13:51	06/04/22 14:51	1

Client Sample ID: T-0108 VEN STACK R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-7

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.117		0.0787	0.0315	ug/Sample		05/31/22 08:30	06/01/22 20:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	100		25 - 150	05/31/22 08:30	06/01/22 20:49	1

Client Sample ID: T-0110 VEN STACK R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-8

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0815		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 15:00	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	95		25 - 150	05/28/22 13:51	06/04/22 15:00	1

Client Sample ID: T-0111,0112 VEN STACK R3 OTM-45 FH

Lab Sample ID: 140-27619-9

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	28.4		1.25	1.18	ug/Sample		05/28/22 12:58	06/03/22 14:59	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	107		25 - 150	05/28/22 12:58	06/03/22 14:59	1

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Client Sample ID: T-0113,0114,0116 VEN STACK R3 OTM-45 BH

Lab Sample ID: 140-27619-10

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	20.7		5.00	2.75	ug/Sample		05/28/22 13:51	06/04/22 15:08	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		25 - 150	05/28/22 13:51	06/04/22 15:08	1

Client Sample ID: T-0115 VEN STACK R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-11

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.419		0.0737	0.0295	ug/Sample		05/31/22 08:30	06/01/22 20:58	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	118		25 - 150	05/31/22 08:30	06/01/22 20:58	1

Client Sample ID: T-0117 VEN STACK R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-12

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0149	J	0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 15:17	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	82		25 - 150	05/28/22 13:51	06/04/22 15:17	1

Client Sample ID: T-0118,0119 VEN STACK R4 OTM-45 FH

Lab Sample ID: 140-27619-13

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	11.6		1.25	1.18	ug/Sample		05/28/22 12:58	06/03/22 15:08	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	109		25 - 150	05/28/22 12:58	06/03/22 15:08	1

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Client Sample ID: T-0120,0121,0123 VEN STACK R4 OTM-45 BH

Lab Sample ID: 140-27619-14

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	26.1		5.00	2.75	ug/Sample		05/28/22 13:51	06/04/22 15:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*97*		*25 - 150*	*05/28/22 13:51*	*06/04/22 15:26*	*1*

Client Sample ID: T-0122 VEN STACK R4 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-15

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.259		0.0751	0.0300	ug/Sample		05/31/22 08:30	06/01/22 21:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*87*		*25 - 150*	*05/31/22 08:30*	*06/01/22 21:06*	*1*

Client Sample ID: T-0124 VEN STACK R4 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-16

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.0134	J	0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 15:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*87*		*25 - 150*	*05/28/22 13:51*	*06/04/22 15:52*	*1*

Default Detection Limits

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: None

Analyte	RL	MDL	Units
HFPO-DA	0.00500	0.00470	ug/Sample
HFPO-DA	0.0200	0.0110	ug/Sample

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: PFAS Prep

Analyte	RL	MDL	Units
HFPO-DA	0.000500	0.000200	ug/Sample

Isotope Dilution Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Air

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	HFPODA (25-150)
140-27619-1	T-0097,0098 VEN STACK R1 O	108
140-27619-2	T-0099,0100,0102 VEN STACK R1 OTM-45 BH	92
140-27619-3	T-0101 VEN STACK R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE	107
140-27619-4	T-0102 VEN STACK R1 OTM-45 BREAKTHROUGH XAD-2 RESI TUBE	80
140-27619-5	T-0104,0105 VEN STACK R2 OTM-45 FH	109
140-27619-6	T-0106,0107,0109 VEN STACK R2 OTM-45 BH	98
140-27619-7	T-0108 VEN STACK R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE	100
140-27619-8	T-0110 VEN STACK R2 OTM-45 BREAKTHROUGH XAD-2 RESI TUBE	95
140-27619-9	T-0111,0112 VEN STACK R3 OTM-45 FH	107
140-27619-10	T-0113,0114,0116 VEN STACK R3 OTM-45 BH	97
140-27619-11	T-0115 VEN STACK R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE	118
140-27619-12	T-0117 VEN STACK R3 OTM-45 BREAKTHROUGH XAD-2 RESI TUBE	82
140-27619-13	T-0118,0119 VEN STACK R4 OTM-45 FH	109
140-27619-14	T-0120,0121,0123 VEN STACK R4 OTM-45 BH	97
140-27619-15	T-0122 VEN STACK R4 OTM-45 IMPINGERS 1,2&3 CONDENSATE	87
140-27619-16	T-0124 VEN STACK R4 OTM-45 BREAKTHROUGH XAD-2 RESI TUBE	87
LCS 140-62095/2-B	Lab Control Sample	100
LCS 140-62096/2-B	Lab Control Sample	96
LCS 140-62100/2-A	Lab Control Sample	99
LCSD 140-62095/3-B	Lab Control Sample Dup	107
LCSD 140-62096/3-B	Lab Control Sample Dup	98
LCSD 140-62100/3-A	Lab Control Sample Dup	103
MB 140-62095/1-B	Method Blank	102
MB 140-62096/1-B	Method Blank	105
MB 140-62100/1-A	Method Blank	95

Surrogate Legend

HFPODA = 13C3 HFPO-DA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 140-62095/1-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00500	0.00470	ug/Sample		05/28/22 12:58	06/03/22 13:05	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 150*	*05/28/22 12:58*	*06/03/22 13:05*	*1*

Lab Sample ID: LCS 140-62095/2-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.02055		ug/Sample		103	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*100*		*25 - 150*

Lab Sample ID: LCSD 140-62095/3-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.01959		ug/Sample		98	60 - 140	5	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*107*		*25 - 150*

Lab Sample ID: MB 140-62096/1-B
Matrix: Air
Analysis Batch: 62249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 14:07	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*105*		*25 - 150*	*05/28/22 13:51*	*06/04/22 14:07*	*1*

Lab Sample ID: LCS 140-62096/2-B
Matrix: Air
Analysis Batch: 62249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62096

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.01947	J	ug/Sample		97	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*96*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 140-62096/3-B
Matrix: Air
Analysis Batch: 62249

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62096

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.01948	J	ug/Sample		97	60 - 140	0	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*98*		*25 - 150*

Lab Sample ID: MB 140-62100/1-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 19:01	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*95*		*25 - 150*	*05/31/22 08:30*	*06/01/22 19:01*	*1*

Lab Sample ID: LCS 140-62100/2-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0100	0.009399		ug/Sample		94	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*99*		*25 - 150*

Lab Sample ID: LCSD 140-62100/3-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0100	0.009709		ug/Sample		97	60 - 140	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*103*		*25 - 150*

LCMS

Prep Batch: 62095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-1	T-0097,0098 VEN STACK R1 OTM-45 FH	Total/NA	Air	None	
140-27619-5	T-0104,0105 VEN STACK R2 OTM-45 FH	Total/NA	Air	None	
140-27619-9	T-0111,0112 VEN STACK R3 OTM-45 FH	Total/NA	Air	None	
140-27619-13	T-0118,0119 VEN STACK R4 OTM-45 FH	Total/NA	Air	None	
MB 140-62095/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Prep Batch: 62096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-2	T-0099,0100,0102 VEN STACK R1 OTM-45 BH	Total/NA	Air	None	
140-27619-4	T-0102 VEN STACK R1 OTM-45 BREAKTHROU	Total/NA	Air	None	
140-27619-6	T-0106,0107,0109 VEN STACK R2 OTM-45 BH	Total/NA	Air	None	
140-27619-8	T-0110 VEN STACK R2 OTM-45 BREAKTHROU	Total/NA	Air	None	
140-27619-10	T-0113,0114,0116 VEN STACK R3 OTM-45 BH	Total/NA	Air	None	
140-27619-12	T-0117 VEN STACK R3 OTM-45 BREAKTHROU	Total/NA	Air	None	
140-27619-14	T-0120,0121,0123 VEN STACK R4 OTM-45 BH	Total/NA	Air	None	
140-27619-16	T-0124 VEN STACK R4 OTM-45 BREAKTHROU	Total/NA	Air	None	
MB 140-62096/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62096/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62096/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Cleanup Batch: 62098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-1	T-0097,0098 VEN STACK R1 OTM-45 FH	Total/NA	Air	Split	62095
140-27619-5	T-0104,0105 VEN STACK R2 OTM-45 FH	Total/NA	Air	Split	62095
140-27619-9	T-0111,0112 VEN STACK R3 OTM-45 FH	Total/NA	Air	Split	62095
140-27619-13	T-0118,0119 VEN STACK R4 OTM-45 FH	Total/NA	Air	Split	62095
MB 140-62095/1-B	Method Blank	Total/NA	Air	Split	62095
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	Split	62095
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62095

Prep Batch: 62100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-3	T-0101 VEN STACK R1 OTM-45 IMPINGERS 1,2	Total/NA	Air	PFAS Prep	
140-27619-7	T-0108 VEN STACK R2 OTM-45 IMPINGERS 1,2	Total/NA	Air	PFAS Prep	
140-27619-11	T-0115 VEN STACK R3 OTM-45 IMPINGERS 1,2	Total/NA	Air	PFAS Prep	
140-27619-15	T-0122 VEN STACK R4 OTM-45 IMPINGERS 1,2	Total/NA	Air	PFAS Prep	
MB 140-62100/1-A	Method Blank	Total/NA	Air	PFAS Prep	
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	PFAS Prep	
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	PFAS Prep	

Cleanup Batch: 62157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-2	T-0099,0100,0102 VEN STACK R1 OTM-45 BH	Total/NA	Air	Split	62096
140-27619-4	T-0102 VEN STACK R1 OTM-45 BREAKTHROU	Total/NA	Air	Split	62096
140-27619-6	T-0106,0107,0109 VEN STACK R2 OTM-45 BH	Total/NA	Air	Split	62096
140-27619-8	T-0110 VEN STACK R2 OTM-45 BREAKTHROU	Total/NA	Air	Split	62096
140-27619-10	T-0113,0114,0116 VEN STACK R3 OTM-45 BH	Total/NA	Air	Split	62096
140-27619-12	T-0117 VEN STACK R3 OTM-45 BREAKTHROU	Total/NA	Air	Split	62096
140-27619-14	T-0120,0121,0123 VEN STACK R4 OTM-45 BH	Total/NA	Air	Split	62096

LCMS (Continued)

Cleanup Batch: 62157 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-16	T-0124 VEN STACK R4 OTM-45 BREAKTHROU	Total/NA	Air	Split	62096
MB 140-62096/1-B	Method Blank	Total/NA	Air	Split	62096
LCS 140-62096/2-B	Lab Control Sample	Total/NA	Air	Split	62096
LCSD 140-62096/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62096

Analysis Batch: 62172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-3	T-0101 VEN STACK R1 OTM-45 IMPINGERS 1,2	Total/NA	Air	537 (modified)	62100
140-27619-7	T-0108 VEN STACK R2 OTM-45 IMPINGERS 1,2	Total/NA	Air	537 (modified)	62100
140-27619-11	T-0115 VEN STACK R3 OTM-45 IMPINGERS 1,2	Total/NA	Air	537 (modified)	62100
140-27619-15	T-0122 VEN STACK R4 OTM-45 IMPINGERS 1,2	Total/NA	Air	537 (modified)	62100
MB 140-62100/1-A	Method Blank	Total/NA	Air	537 (modified)	62100
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	537 (modified)	62100
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62100

Cleanup Batch: 62231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-1	T-0097,0098 VEN STACK R1 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27619-5	T-0104,0105 VEN STACK R2 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27619-9	T-0111,0112 VEN STACK R3 OTM-45 FH	Total/NA	Air	Dilution	62098
140-27619-13	T-0118,0119 VEN STACK R4 OTM-45 FH	Total/NA	Air	Dilution	62098

Analysis Batch: 62233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-1	T-0097,0098 VEN STACK R1 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27619-5	T-0104,0105 VEN STACK R2 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27619-9	T-0111,0112 VEN STACK R3 OTM-45 FH	Total/NA	Air	537 (modified)	62231
140-27619-13	T-0118,0119 VEN STACK R4 OTM-45 FH	Total/NA	Air	537 (modified)	62231
MB 140-62095/1-B	Method Blank	Total/NA	Air	537 (modified)	62098
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62098
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62098

Cleanup Batch: 62248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-2	T-0099,0100,0102 VEN STACK R1 OTM-45 BH	Total/NA	Air	Dilution	62157
140-27619-6	T-0106,0107,0109 VEN STACK R2 OTM-45 BH	Total/NA	Air	Dilution	62157
140-27619-10	T-0113,0114,0116 VEN STACK R3 OTM-45 BH	Total/NA	Air	Dilution	62157
140-27619-14	T-0120,0121,0123 VEN STACK R4 OTM-45 BH	Total/NA	Air	Dilution	62157

Analysis Batch: 62249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27619-2	T-0099,0100,0102 VEN STACK R1 OTM-45 BH	Total/NA	Air	537 (modified)	62248
140-27619-4	T-0102 VEN STACK R1 OTM-45 BREAKTHROU	Total/NA	Air	537 (modified)	62157
140-27619-6	T-0106,0107,0109 VEN STACK R2 OTM-45 BH	Total/NA	Air	537 (modified)	62248
140-27619-8	T-0110 VEN STACK R2 OTM-45 BREAKTHROU	Total/NA	Air	537 (modified)	62157
140-27619-10	T-0113,0114,0116 VEN STACK R3 OTM-45 BH	Total/NA	Air	537 (modified)	62248
140-27619-12	T-0117 VEN STACK R3 OTM-45 BREAKTHROU	Total/NA	Air	537 (modified)	62157
140-27619-14	T-0120,0121,0123 VEN STACK R4 OTM-45 BH	Total/NA	Air	537 (modified)	62248
140-27619-16	T-0124 VEN STACK R4 OTM-45 BREAKTHROU	Total/NA	Air	537 (modified)	62157
MB 140-62096/1-B	Method Blank	Total/NA	Air	537 (modified)	62157
LCS 140-62096/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62157

LCMS (Continued)

Analysis Batch: 62249 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 140-62096/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62157

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Client Sample ID: T-0097,0098 VEN STACK R1 OTM-45 FH

Lab Sample ID: 140-27619-1

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	102 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			51 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 14:24	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0099,0100,0102 VEN STACK R1 OTM-45 BH

Lab Sample ID: 140-27619-2

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62248	06/04/22 12:50	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:33	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0101 VEN STACK R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-3

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00702 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 20:22	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0102 VEN STACK R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-4

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:42	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0104,0105 VEN STACK R2 OTM-45 FH

Lab Sample ID: 140-27619-5

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	99 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			50 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 14:50	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0106,0107,0109 VEN STACK R2 OTM-45 BH

Lab Sample ID: 140-27619-6

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62248	06/04/22 12:50	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:51	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0108 VEN STACK R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-7

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00635 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 20:49	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0110 VEN STACK R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-8

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 15:00	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0111,0112 VEN STACK R3 OTM-45 FH

Lab Sample ID: 140-27619-9

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	70 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			35 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 14:59	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0113,0114,0116 VEN STACK R3 OTM-45 BH

Lab Sample ID: 140-27619-10

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62248	06/04/22 12:50	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 15:08	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0115 VEN STACK R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-11

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00678 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 20:58	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0117 VEN STACK R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-12

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 15:17	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0118,0119 VEN STACK R4 OTM-45 FH

Lab Sample ID: 140-27619-13

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	48 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			24 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62231	06/03/22 11:33	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 15:08	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0120,0121,0123 VEN STACK R4 OTM-45 BH

Lab Sample ID: 140-27619-14

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Cleanup	Dilution			40 uL	10000 uL	62248	06/04/22 12:50	JRC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 15:26	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0122 VEN STACK R4 OTM-45 IMPINGERS 1,2&3 CONDENSATE

Lab Sample ID: 140-27619-15

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.00666 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 21:06	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0124 VEN STACK R4 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE

Lab Sample ID: 140-27619-16

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 15:52	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62095/1-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:05	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62096/1-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:07	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62100/1-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:01	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62095/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:13	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62096/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:16	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62100/2-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:11	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62095/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:22	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62096/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:24	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62100/3-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:21	JRC	TAL KNX
	Instrument ID: LCA									

Laboratory References:
TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: The Chemours Company FC, LLC
Job ID: 140-27619-1
Project/Site: VEN Stack

Laboratory: Eurofins Knoxville

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-17-22
California	State	2423	06-30-22
Colorado	State	TN00009	02-28-23
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-22
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-22
Kansas	NELAP	E-10349	10-31-22
Kentucky (DW)	State	90101	12-31-22
Louisiana	NELAP	83979	06-30-22
Louisiana (DW)	State	LA019	12-31-22
Maryland	State	277	03-31-23
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-22
New Hampshire	NELAP	299919	01-17-23
New Jersey	NELAP	TN001	06-30-22
New York	NELAP	10781	03-31-23
North Carolina (DW)	State	21705	07-31-22
North Carolina (WW/SW)	State	64	12-31-22
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-22
Oregon	NELAP	TNI0189	12-31-22
Pennsylvania	NELAP	68-00576	12-31-22
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-22
Virginia	NELAP	460176	09-14-22
Washington	State	C593	01-19-23
West Virginia (DW)	State	9955C	12-31-22
West Virginia DEP	State	345	04-30-23
Wisconsin	State	998044300	08-31-22

Method Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL KNX
Dilution	Dilution and Re-fortification of Standards	None	TAL KNX
None	Leaching Procedure	TAL SOP	TAL KNX
None	Leaching Procedure for Filter	TAL SOP	TAL KNX
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL KNX
Split	Source Air Split	None	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure
TAL-SAC = Eurofins Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN Stack

Job ID: 140-27619-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-27619-1	T-0097,0098 VEN STACK R1 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-2	T-0099,0100,0102 VEN STACK R1 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-3	T-0101 VEN STACK R1 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27619-4	T-0102 VEN STACK R1 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15
140-27619-5	T-0104,0105 VEN STACK R2 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-6	T-0106,0107,0109 VEN STACK R2 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-7	T-0108 VEN STACK R2 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27619-8	T-0110 VEN STACK R2 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15
140-27619-9	T-0111,0112 VEN STACK R3 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-10	T-0113,0114,0116 VEN STACK R3 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-11	T-0115 VEN STACK R3 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27619-12	T-0117 VEN STACK R3 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15
140-27619-13	T-0118,0119 VEN STACK R4 OTM-45 FH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-14	T-0120,0121,0123 VEN STACK R4 OTM-45 BH	Air	05/25/22 00:00	05/27/22 21:15
140-27619-15	T-0122 VEN STACK R4 OTM-45 IMPINGERS 1,2&3 CONDENSATE	Air	05/25/22 00:00	05/27/22 21:15
140-27619-16	T-0124 VEN STACK R4 OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE	Air	05/25/22 00:00	05/27/22 21:15

Cooler 1

Request for Analysis/Chain-of-Custody – RFA/COC #003
The Chemours Company – Fayetteville NC
VEN Stack Testing

eurofins | Environment Testing TestAmerica

Project Identification:	Chemours Emissions Test
Client Name:	The Chemours Company FC, LLC
Client Contact:	Ms. Christel Compton Office: (910) 678-1213 Cell: (910) 975-3386
TestAmerica Project Manager:	Ms. Courtney Adkins Office: (865) 291-3019
TestAmerica Program Manager:	Mr. Billy Anderson Office: (865) 291-3080 Cell: (865) 206-9004

Analytical Testing QC Requirements:
The Legend for Project-Specific Quality Control Testing is designated in the "QC" column as follows: "BT" = Blank Train, "RB" = Reagent Blank, "MS" = Matrix Spike, "MSD" = Matrix Spike Duplicate, "DUP" = Duplicate, "PB" = Proof Blank, "TB" = Trip Blank

Laboratory Deliverable Turnaround Requirements:	
Analytical Due Date: (Review-Released Data)	21 Days from Lab Receipt
Data Package Due Date:	28 Days from Lab Receipt

Laboratory Destination:	Eurofins TestAmerica 5815 Middlebrook Pike Knoxville, TN
Lab Phone Number:	(865) 291-3000
Courier:	Hand Deliver

Project Deliverables:
Report analytical results on TALS Report form Std_Tal_L4. Include "Field Sample Number", "Sample Type", and "Run Number" on all TALS Reports.

Analytical Parameter:	Holding Time Requirements:
HFPO-DA (CAS No. 13252-13-6)	14 Days to Extraction; 40 Days to Analysis

140-27619 Chain of Custody

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0097 VEN STACK R1 OTM-45 Filter (Combine with *T-0098*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0098 VEN STACK R1 OTM-45 FH of Filter Holder & Probe Methanol Rinse (Combine with *T-0097*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0099 VEN STACK R1 OTM-45 XAD-2 Resin Tube	1	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0100 VEN STACK R1 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0099*)	1	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0101 VEN STACK R1 OTM-45 Impingers 1,2 & 3 Condensate	1	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0102 VEN STACK R1 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0099*)	1	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0103 VEN STACK R1 OTM-45 Breakthrough XAD-2 Resin Tube	1	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0104 VEN STACK R2 OTM-45 Filter (Combine with *T-0105*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0105 VEN STACK R2 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0104*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0106 VEN STACK R2 OTM-45 XAD-2 Resin Tube	2	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0107 VEN STACK R2 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0106*)	2	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0108 VEN STACK R2 OTM-45 Impingers 1,2 & 3 Condensate	2	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0109 VEN STACK R2 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0106*)	2	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0110 VEN STACK R2 OTM-45 Breakthrough XAD-2 Resin Tube	2	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0111 VEN STACK R3 OTM-45 Filter (Combine with *T-0112*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0112 VEN STACK R3 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0111*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0113 VEN STACK R3 OTM-45 XAD-2 Resin Tube	3	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0114 VEN STACK R3 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0113*)	3	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0115 VEN STACK R3 OTM-45 Impingers 1,2 & 3 Condensate	3	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.
T-0116 VEN STACK R3 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0113*)	3	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0117 VEN STACK R3 OTM-45 Breakthrough XAD-2 Resin Tube	3	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0118 VEN STACK R4 OTM-45 Filter (Combine with *T-0119*)	4	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front-Half Probe Rinse to assist the solvent extraction of the Particulate Filter sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0119 VEN STACK R4 OTM-45 Front Half of Filter Holder & Probe Methanol Rinse (Combine with *T-0118*)	4	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Particulate Filter extraction.
T-0120 VEN STACK R4 OTM-45 XAD-2 Resin Tube	4	5/25/22		XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0121 VEN STACK R4 OTM-45 BH of Filter Holder & Coil Condenser Methanol Rinse (Combine with *T-0120*)	4	5/25/22		125 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA using Method 8321A-HFPO.
T-0122 VEN STACK R4 OTM-45 Impingers 1,2 & 3 Condensate	4	5/25/22		500 mL HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Analyze the sample for HFPO-DA.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require -ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0123 VEN STACK R4 OTM-45 Impinger Glassware MeOH Rinse (Combine with *T-0120*)	4	5/25/22		250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0124 VEN STACK R4 OTM-45 Breakthrough XAD-2 Resin Tube	4	5/25/22		XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA using Method 8321A-HFPO.

Sample Receipt Log and Condition of the Samples Upon Receipt:

Please fill in the following information:	Comments (Please write "NONE" if no comment applicable)
(1) Record the identities of any samples that were listed on the RFA but were not found in the sample shipment.	NONE
(2) Record the sample shipping cooler temperature of all coolers transporting samples listed on this RFA:	RT 0.6/CT 0.9°C
(3) Record any apparent sample loss/breakage.	NONE
(4) Record any unidentified samples transported with this shipment of samples:	NONE
(5) Indicate if all samples were received according to the project's required specifications (i.e. no nonconformances):	HAND DELIVERED, NO CUSTODY SEALS

Custody Transfer:

	Name	Company	Date/Time
Relinquished By:	[signature]	Alliance	5/25/22 2400
Accepted By:	Doug Cahill	ETA KNOX	5/27/22 1330
Relinquished By:	Doug Cahill	ETA KNOX	5/27/22 2115

Accepted By:	[signature]	ETA KWX	5.27.22 2115
	Name	Company	Date/Time
Relinquished By:			
	Name	Company	Date/Time
Accepted By:			
	Name	Company	Date/Time
Relinquished By:			
	Name	Company	Date/Time
Accepted By:			
	Name	Company	Date/Time

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ Containers, Broken
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : SC71 Correction factor: +0.3°C	✓			☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt
5. Were all of the sample containers received intact?	✓			☐ Containers, Broken
6. Were samples received in appropriate containers?	✓			☐ Containers, Improper; Client Contacted; Proceed/Cancel
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received
8. Were all of the samples listed on the COC received?	✓			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received
9. Is the date/time of sample collection noted?	✓			☐ COC; No Date/Time; Client Contacted
10. Was the sampler identified on the COC?			✓	☐ Sampler Not Listed on COC
11. Is the client and project name/# identified?	✓			☐ COC Incorrect/Incomplete
12. Are tests/parameters listed for each sample?	✓			☐ COC No tests on COC
13. Is the matrix of the samples noted?	✓			☐ COC Incorrect/Incomplete
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ COC Incorrect/Incomplete
15. Were samples received within holding time?	✓			☐ Holding Time - Receipt
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative
17. Were VOA samples received without headspace?			✓	☐ Headspace (VOA only)
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ Residual Chlorine
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: _____ PM Instructions: _____

Sample Receiving Associate: Kenya Dawson Date: 5-28-22

QA026R32.doc, 062719

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

Laboratory Job ID: 140-27620-1
Client Project/Site: VEN CB Field QC

For:
The Chemours Company FC, LLC
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, Delaware 19713

Attn: Michael Aucoin

Authorized for release by:
6/6/2022 8:58:49 AM

Courtney Adkins, Project Manager II
(865)291-3019
Courtney.Adkins@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Qualifiers

LCMS

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 140-27620-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative
140-27620-1

Receipt

The samples were received on 5/27/2022 9:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7º C.

LCMS

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

Organic Prep

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

Client Sample ID: T-0125,0126 QC OTM-45 FH PBT

Lab Sample ID: 140-27620-1
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00495	0.00466	ug/Sample		05/28/22 12:58	06/03/22 15:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*108*		*25 - 150*	*05/28/22 12:58*	*06/03/22 15:26*	*1*

Client Sample ID: T-0127,0128,0130 QC OTM-45 BH PBT

Lab Sample ID: 140-27620-2
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 16:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*87*		*25 - 150*	*05/28/22 13:51*	*06/04/22 16:01*	*1*

Client Sample ID: T-0129 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE PBT

Lab Sample ID: 140-27620-3
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 21:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*105*		*25 - 150*	*05/31/22 08:30*	*06/01/22 21:24*	*1*

Client Sample ID: T-0131 QC OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE PBT

Lab Sample ID: 140-27620-4
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 16:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*88*		*25 - 150*	*05/28/22 13:51*	*06/04/22 16:10*	*1*

Client Sample ID: T-0132 QC OTM-45 DI WATER RB

Lab Sample ID: 140-27620-5
Matrix: Air
Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 21:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 150*	*05/31/22 08:30*	*06/01/22 21:33*	*1*

Client Sample ID: T-0133 QC OTM-45 MEOH WITH 5% NH4OH RB

Lab Sample ID: 140-27620-6

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 16:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*97*		*25 - 150*	*05/28/22 13:51*	*06/04/22 16:28*	*1*

Client Sample ID: T-0134,0135 QC OTM-45 FH BT

Lab Sample ID: 140-27620-7

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00500	0.00470	ug/Sample		05/28/22 12:58	06/03/22 15:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*107*		*25 - 150*	*05/28/22 12:58*	*06/03/22 15:34*	*1*

Client Sample ID: T-0136,0137,0139 QC OTM-45 BH BT

Lab Sample ID: 140-27620-8

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 16:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*94*		*25 - 150*	*05/28/22 13:51*	*06/04/22 16:37*	*1*

Client Sample ID: T-0138 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE BT

Lab Sample ID: 140-27620-9

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 21:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*110*		*25 - 150*	*05/31/22 08:30*	*06/01/22 21:42*	*1*

Client Sample ID: T-0140 QC OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE BT

Lab Sample ID: 140-27620-10

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15
Sample Container: Air Train

Matrix: Air

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 16:45	1

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Client Sample ID: T-0140 QC OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE BT

Lab Sample ID: 140-27620-10

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	90		25 - 150	05/28/22 13:51	06/04/22 16:45	1

Client Sample ID: T=2256 OTM-45 MEDIA CHECK FILTER

Lab Sample ID: 140-27620-11

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00500	0.00470	ug/Sample		05/28/22 12:58	06/03/22 15:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		25 - 150	05/28/22 12:58	06/03/22 15:43	1

Client Sample ID: T=2257 OTM-45 MEDIA CHECK XAD

Lab Sample ID: 140-27620-12

Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15
Sample Container: Air Train

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 16:54	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	109		25 - 150	05/28/22 13:51	06/04/22 16:54	1

Default Detection Limits

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: None

Analyte	RL	MDL	Units
HFPO-DA	0.00500	0.00470	ug/Sample
HFPO-DA	0.0200	0.0110	ug/Sample

Method: 537 (modified) - Fluorinated Alkyl Substances

Prep: PFAS Prep

Analyte	RL	MDL	Units
HFPO-DA	0.000500	0.000200	ug/Sample

Isotope Dilution Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Air

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	HFPODA (25-150)						
140-27620-1	T-0125,0126 QC OTM-45 FH PE	108						
140-27620-2	T-0127,0128,0130 QC OTM-45 BH PBT	87						
140-27620-3	T-0129 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE PBT	105						
140-27620-4	T-0131 QC OTM-45 BREAKTHROUGH XAD-2 RESI TUBE PBT	88						
140-27620-5	T-0132 QC OTM-45 DI WATER RB	102						
140-27620-6	T-0133 QC OTM-45 MEOH WITH 5% NH4OH RB	97						
140-27620-7	T-0134,0135 QC OTM-45 FH BT	107						
140-27620-8	T-0136,0137,0139 QC OTM-45 BH BT	94						
140-27620-9	T-0138 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE BT	110						
140-27620-10	T-0140 QC OTM-45 BREAKTHROUGH XAD-2 RESI TUBE BT	90						
140-27620-11	T=2256 OTM-45 MEDIA CHECK FILTER	104						
140-27620-12	T=2257 OTM-45 MEDIA CHECK XAD	109						
LCS 140-62095/2-B	Lab Control Sample	100						
LCS 140-62096/2-B	Lab Control Sample	96						
LCS 140-62100/2-A	Lab Control Sample	99						
LCSD 140-62095/3-B	Lab Control Sample Dup	107						
LCSD 140-62096/3-B	Lab Control Sample Dup	98						
LCSD 140-62100/3-A	Lab Control Sample Dup	103						
MB 140-62095/14-B	Method Blank	98						
MB 140-62095/1-B	Method Blank	102						
MB 140-62096/14-B	Method Blank	112						
MB 140-62096/1-B	Method Blank	105						
MB 140-62100/14-A	Method Blank	115						
MB 140-62100/1-A	Method Blank	95						

Surrogate Legend

HFPODA = 13C3 HFPO-DA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 140-62095/14-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00500	0.00470	ug/Sample		05/28/22 12:58	06/03/22 15:17	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*98*		*25 - 150*	*05/28/22 12:58*	*06/03/22 15:17*	*1*

Lab Sample ID: MB 140-62095/1-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.00500	0.00470	ug/Sample		05/28/22 12:58	06/03/22 13:05	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 150*	*05/28/22 12:58*	*06/03/22 13:05*	*1*

Lab Sample ID: LCS 140-62095/2-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.02055		ug/Sample		103	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*100*		*25 - 150*

Lab Sample ID: LCSD 140-62095/3-B
Matrix: Air
Analysis Batch: 62233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62095

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.01959		ug/Sample		98	60 - 140	5	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*107*		*25 - 150*

Lab Sample ID: MB 140-62096/14-B
Matrix: Air
Analysis Batch: 62249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 16:19	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*112*		*25 - 150*	*05/28/22 13:51*	*06/04/22 16:19*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 140-62096/1-B
Matrix: Air
Analysis Batch: 62249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.0200	0.0110	ug/Sample		05/28/22 13:51	06/04/22 14:07	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*105*		*25 - 150*	*05/28/22 13:51*	*06/04/22 14:07*	*1*

Lab Sample ID: LCS 140-62096/2-B
Matrix: Air
Analysis Batch: 62249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62096

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0200	0.01947	J	ug/Sample		97	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*96*		*25 - 150*

Lab Sample ID: LCSD 140-62096/3-B
Matrix: Air
Analysis Batch: 62249

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62096

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0200	0.01948	J	ug/Sample		97	60 - 140	0	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*98*		*25 - 150*

Lab Sample ID: MB 140-62100/14-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 21:15	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*115*		*25 - 150*	*05/31/22 08:30*	*06/01/22 21:15*	*1*

Lab Sample ID: MB 140-62100/1-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	ND		0.000500	0.000200	ug/Sample		05/31/22 08:30	06/01/22 19:01	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*95*		*25 - 150*	*05/31/22 08:30*	*06/01/22 19:01*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 140-62100/2-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HFPO-DA			0.0100	0.009399		ug/Sample		94	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*99*		*25 - 150*

Lab Sample ID: LCSD 140-62100/3-A
Matrix: Air
Analysis Batch: 62172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62100

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HFPO-DA			0.0100	0.009709		ug/Sample		97	60 - 140	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*103*		*25 - 150*

LCMS

Prep Batch: 62095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-1	T-0125,0126 QC OTM-45 FH PBT	Total/NA	Air	None	
140-27620-7	T-0134,0135 QC OTM-45 FH BT	Total/NA	Air	None	
140-27620-11	T=2256 OTM-45 MEDIA CHECK FILTER	Total/NA	Air	None	
MB 140-62095/14-B	Method Blank	Total/NA	Air	None	
MB 140-62095/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Prep Batch: 62096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-2	T-0127,0128,0130 QC OTM-45 BH PBT	Total/NA	Air	None	
140-27620-4	T-0131 QC OTM-45 BREAKTHROUGH XAD-2 R	Total/NA	Air	None	
140-27620-6	T-0133 QC OTM-45 MEOH WITH 5% NH4OH RE	Total/NA	Air	None	
140-27620-8	T-0136,0137,0139 QC OTM-45 BH BT	Total/NA	Air	None	
140-27620-10	T-0140 QC OTM-45 BREAKTHROUGH XAD-2 R	Total/NA	Air	None	
140-27620-12	T=2257 OTM-45 MEDIA CHECK XAD	Total/NA	Air	None	
MB 140-62096/14-B	Method Blank	Total/NA	Air	None	
MB 140-62096/1-B	Method Blank	Total/NA	Air	None	
LCS 140-62096/2-B	Lab Control Sample	Total/NA	Air	None	
LCSD 140-62096/3-B	Lab Control Sample Dup	Total/NA	Air	None	

Cleanup Batch: 62098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-1	T-0125,0126 QC OTM-45 FH PBT	Total/NA	Air	Split	62095
140-27620-7	T-0134,0135 QC OTM-45 FH BT	Total/NA	Air	Split	62095
140-27620-11	T=2256 OTM-45 MEDIA CHECK FILTER	Total/NA	Air	Split	62095
MB 140-62095/14-B	Method Blank	Total/NA	Air	Split	62095
MB 140-62095/1-B	Method Blank	Total/NA	Air	Split	62095
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	Split	62095
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62095

Prep Batch: 62100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-3	T-0129 QC OTM-45 IMPINGERS 1,2&3 CONDEI	Total/NA	Air	PFAS Prep	
140-27620-5	T-0132 QC OTM-45 DI WATER RB	Total/NA	Air	PFAS Prep	
140-27620-9	T-0138 QC OTM-45 IMPINGERS 1,2&3 CONDEI	Total/NA	Air	PFAS Prep	
MB 140-62100/14-A	Method Blank	Total/NA	Air	PFAS Prep	
MB 140-62100/1-A	Method Blank	Total/NA	Air	PFAS Prep	
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	PFAS Prep	
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	PFAS Prep	

Cleanup Batch: 62157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-2	T-0127,0128,0130 QC OTM-45 BH PBT	Total/NA	Air	Split	62096
140-27620-4	T-0131 QC OTM-45 BREAKTHROUGH XAD-2 R	Total/NA	Air	Split	62096
140-27620-6	T-0133 QC OTM-45 MEOH WITH 5% NH4OH RE	Total/NA	Air	Split	62096
140-27620-8	T-0136,0137,0139 QC OTM-45 BH BT	Total/NA	Air	Split	62096
140-27620-10	T-0140 QC OTM-45 BREAKTHROUGH XAD-2 R	Total/NA	Air	Split	62096
140-27620-12	T=2257 OTM-45 MEDIA CHECK XAD	Total/NA	Air	Split	62096
MB 140-62096/14-B	Method Blank	Total/NA	Air	Split	62096
MB 140-62096/1-B	Method Blank	Total/NA	Air	Split	62096

LCMS (Continued)

Cleanup Batch: 62157 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 140-62096/2-B	Lab Control Sample	Total/NA	Air	Split	62096
LCSD 140-62096/3-B	Lab Control Sample Dup	Total/NA	Air	Split	62096

Analysis Batch: 62172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-3	T-0129 QC OTM-45 IMPINGERS 1,2&3 CONDEI	Total/NA	Air	537 (modified)	62100
140-27620-5	T-0132 QC OTM-45 DI WATER RB	Total/NA	Air	537 (modified)	62100
140-27620-9	T-0138 QC OTM-45 IMPINGERS 1,2&3 CONDEI	Total/NA	Air	537 (modified)	62100
MB 140-62100/14-A	Method Blank	Total/NA	Air	537 (modified)	62100
MB 140-62100/1-A	Method Blank	Total/NA	Air	537 (modified)	62100
LCS 140-62100/2-A	Lab Control Sample	Total/NA	Air	537 (modified)	62100
LCSD 140-62100/3-A	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62100

Analysis Batch: 62233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-1	T-0125,0126 QC OTM-45 FH PBT	Total/NA	Air	537 (modified)	62098
140-27620-7	T-0134,0135 QC OTM-45 FH BT	Total/NA	Air	537 (modified)	62098
140-27620-11	T=2256 OTM-45 MEDIA CHECK FILTER	Total/NA	Air	537 (modified)	62098
MB 140-62095/14-B	Method Blank	Total/NA	Air	537 (modified)	62098
MB 140-62095/1-B	Method Blank	Total/NA	Air	537 (modified)	62098
LCS 140-62095/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62098
LCSD 140-62095/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62098

Analysis Batch: 62249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-27620-2	T-0127,0128,0130 QC OTM-45 BH PBT	Total/NA	Air	537 (modified)	62157
140-27620-4	T-0131 QC OTM-45 BREAKTHROUGH XAD-2 R	Total/NA	Air	537 (modified)	62157
140-27620-6	T-0133 QC OTM-45 MEOH WITH 5% NH4OH RE	Total/NA	Air	537 (modified)	62157
140-27620-8	T-0136,0137,0139 QC OTM-45 BH BT	Total/NA	Air	537 (modified)	62157
140-27620-10	T-0140 QC OTM-45 BREAKTHROUGH XAD-2 R	Total/NA	Air	537 (modified)	62157
140-27620-12	T=2257 OTM-45 MEDIA CHECK XAD	Total/NA	Air	537 (modified)	62157
MB 140-62096/14-B	Method Blank	Total/NA	Air	537 (modified)	62157
MB 140-62096/1-B	Method Blank	Total/NA	Air	537 (modified)	62157
LCS 140-62096/2-B	Lab Control Sample	Total/NA	Air	537 (modified)	62157
LCSD 140-62096/3-B	Lab Control Sample Dup	Total/NA	Air	537 (modified)	62157

Client Sample ID: T-0125,0126 QC OTM-45 FH PBT

Lab Sample ID: 140-27620-1

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	109 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			55 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 15:26	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0127,0128,0130 QC OTM-45 BH PBT

Lab Sample ID: 140-27620-2

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 16:01	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0129 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE PBT

Lab Sample ID: 140-27620-3

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 21:24	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0131 QC OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE PBT

Lab Sample ID: 140-27620-4

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 16:10	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0132 QC OTM-45 DI WATER RB

Lab Sample ID: 140-27620-5

Date Collected: 05/25/22 00:00

Matrix: Air

Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 21:33	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0133 QC OTM-45 MEOH WITH 5% NH4OH RB

Lab Sample ID: 140-27620-6

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 16:28	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0134,0135 QC OTM-45 FH BT

Lab Sample ID: 140-27620-7

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	136 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			68 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 15:34	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0136,0137,0139 QC OTM-45 BH BT

Lab Sample ID: 140-27620-8

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 16:37	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0138 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE BT

Lab Sample ID: 140-27620-9

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 21:42	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T-0140 QC OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE BT

Lab Sample ID: 140-27620-10

Date Collected: 05/25/22 00:00
Date Received: 05/27/22 21:15

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 16:45	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Client Sample ID: T=2256 OTM-45 MEDIA CHECK FILTER
Lab Sample ID: 140-27620-11
Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 15:43	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: T=2257 OTM-45 MEDIA CHECK XAD
Lab Sample ID: 140-27620-12
Date Collected: 05/25/22 00:00
Matrix: Air
Date Received: 05/27/22 21:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 16:54	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62095/14-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 15:17	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62095/1-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:05	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62096/14-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 16:19	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62096/1-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:07	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62100/14-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 21:15	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-62100/1-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:01	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62095/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:13	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62096/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:16	JRC	TAL KNX
	Instrument ID: LCA									

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-62100/2-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:11	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62095/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	50 mL	62095	05/28/22 12:58	CAC	TAL KNX
Total/NA	Cleanup	Split			25 mL	10 mL	62098	05/29/22 09:03	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62233	06/03/22 13:22	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62096/3-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	None			1 Sample	360 mL	62096	05/28/22 13:51	CAC	TAL KNX
Total/NA	Cleanup	Split			180 mL	10 mL	62157	06/01/22 10:26	DWS	TAL KNX
Total/NA	Analysis	537 (modified)		1			62249	06/04/22 14:24	JRC	TAL KNX
	Instrument ID: LCA									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-62100/3-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			1 Sample	10 mL	62100	05/31/22 08:30	CAC	TAL KNX
Total/NA	Analysis	537 (modified)		1			62172	06/01/22 19:21	JRC	TAL KNX
	Instrument ID: LCA									

Laboratory References:
TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: The Chemours Company FC, LLC
Job ID: 140-27620-1
Project/Site: VEN CB Field QC

Laboratory: Eurofins Knoxville

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-17-22
California	State	2423	06-30-22
Colorado	State	TN00009	02-28-23
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-22
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-22
Kansas	NELAP	E-10349	10-31-22
Kentucky (DW)	State	90101	12-31-22
Louisiana	NELAP	83979	06-30-22
Louisiana (DW)	State	LA019	12-31-22
Maryland	State	277	03-31-23
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-22
New Hampshire	NELAP	299919	01-17-23
New Jersey	NELAP	TN001	06-30-22
New York	NELAP	10781	03-31-23
North Carolina (DW)	State	21705	07-31-22
North Carolina (WW/SW)	State	64	12-31-22
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-22
Oregon	NELAP	TNI0189	12-31-22
Pennsylvania	NELAP	68-00576	12-31-22
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-22
Virginia	NELAP	460176	09-14-22
Washington	State	C593	01-19-23
West Virginia (DW)	State	9955C	12-31-22
West Virginia DEP	State	345	04-30-23
Wisconsin	State	998044300	08-31-22

Method Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL KNX
None	Leaching Procedure	TAL SOP	TAL KNX
None	Leaching Procedure for Filter	TAL SOP	TAL KNX
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL KNX
Split	Source Air Split	None	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

TAL-SAC = Eurofins Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: The Chemours Company FC, LLC
Project/Site: VEN CB Field QC

Job ID: 140-27620-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-27620-1	T-0125,0126 QC OTM-45 FH PBT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-2	T-0127,0128,0130 QC OTM-45 BH PBT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-3	T-0129 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE PBT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-4	T-0131 QC OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE PBT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-5	T-0132 QC OTM-45 DI WATER RB	Air	05/25/22 00:00	05/27/22 21:15
140-27620-6	T-0133 QC OTM-45 MEOH WITH 5% NH4OH RB	Air	05/25/22 00:00	05/27/22 21:15
140-27620-7	T-0134,0135 QC OTM-45 FH BT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-8	T-0136,0137,0139 QC OTM-45 BH BT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-9	T-0138 QC OTM-45 IMPINGERS 1,2&3 CONDENSATE BT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-10	T-0140 QC OTM-45 BREAKTHROUGH XAD-2 RESIN TUBE BT	Air	05/25/22 00:00	05/27/22 21:15
140-27620-11	T=2256 OTM-45 MEDIA CHECK FILTER	Air	05/25/22 00:00	05/27/22 21:15
140-27620-12	T=2257 OTM-45 MEDIA CHECK XAD	Air	05/25/22 00:00	05/27/22 21:15

Cooler 2

Request for Analysis/Chain-of-Custody – RFA/COC #004
The Chemours Company – Fayetteville NC
Carbon Bed Field QC Samples

eurofins | Environment Testing America

Project Identification:	**Chemours Emissions Test**
Client Name:	The Chemours Company FC, LLC
Client Contact:	Christel Compton Office: (910) 678-1213 Cell: (910) 975-3386
TestAmerica Project Manager:	Courtney Adkins Office: (865) 291-3019
TestAmerica Program Manager:	Billy Anderson Office: (865) 291-3080 Cell: (865) 206-9004

Laboratory Deliverable Turnaround Requirements:	
Analytical Due Date: (Review-Released Data)	21 Days from Lab Receipt
Data Package Due Date:	28 Days from Lab Receipt

Analytical Testing QC Requirements:
The Legend for ProjecB- Specific Quality Control Testing is designated in the "QC" column as follows: "BT" = Blank Train, "RB" = Reagent Blank, "MS" = Matrix Spike, "MSD" = Matrix Spike Duplicate, "DUP" = Duplicate, "PB" = Proof Blank, "TB" = Trip Blank

Laboratory Destination:	Eurofins TestAmerica 5815 Middlebrook Pike Knoxville, TN 37921
Lab Phone Number:	865.291.3000
Courier:	Hand Deliver

Project Deliverables:
Report analytical results on TALS Report form Std_Tal_L4. Include "Field Sample Number", "Sample Type", and "Run Number" on all TALS Reports.

Analytical Parameter:	**Holding Time Requirements:**
HFPO-DA (CAS No. 13252-13-6) & PFOA (CAS No. 335-67-1)	14 Days to Extraction; 40 Days to Analysi

140-27620 Chain of Custody

Field Sample No./Sample Coding ID	**Run No.**	**Sample Collection Date**	**Project QC Require-ments**	**Sample Bottle/ Container**	**Sample Type/Analysis**	**Analytical Specifications**
T-0125 QC OTM-45 Filter PBT (Combine with *T-0126*)	QC	5-25-22	Proof Blank Train	250 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Proof Blank Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front- Half Probe Rinse to assist the solvent extraction of the Filter sample. Analyze for HFPO-DA.
T-0126 QC OTM-45 FH of Filter Holder & Probe MeOH Rinse PBT (Combine with *T-0125*)	QC	5-25-22	Proof Blank Train	250 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Proof Blank Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Filter extraction.
T-0127 QC OTM-45 XAD-2 Resin Tube PBT	QC	5-25-22	Proof Blank Train	XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Proof Blank Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0128 QC OTM-45 BH of Filter Holder & Coil Condenser MeOH Rinse PBT (Combine with *T-0127*)	QC	5/25/22	Proof Blank Train	250 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Proof Blank Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA.
T-0129 QC OTM-45 Impingers 1,2 & 3 Condensate PBT	QC	5/25/22	Proof Blank Train	1 Liter HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Proof Blank Train HFPO-DA Analysis	**Knoxville**: Analyze for HFPO-DA.
T-0130 QC OTM-45 Impinger Glassware MeOH Rinse PBT (Combine with *T-0127*)	QC	5/25/22	Proof Blank Train	250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Proof Blank Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0131 QC OTM-45 Breakthrough XAD-2 Resin Tube PBT	QC	5/25/22	Proof Blank Train	XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Proof Blank Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA.
T-0132 QC OTM-45 DI Water RB	QC	5/25/22	Reagent Blank	250 mL HDPE Wide-Mouth Bottle	**Deionized (DI) Water Reagent Blank** OTM-45 Reagent Blank HFPO-DA Analysis	**Knoxville**: Analyze for HFPO-DA.
T-0133 QC OTM-45 MeOH with 5% NH_4OH RB	QC	5/25/22	Reagent Blank	250 mL HDPE Wide-Mouth Bottle	**Methanol with 5% NH_4OH Reagent Blank** OTM-45 Reagent Blank HFPO-DA Analysis	**Knoxville**: Analyze for HFPO-DA.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0134 QC OTM-45 Filter BT (Combine with *T-0135*)	QC	5/25/22	Field Blank Train	250 mL HDPE Wide-Mouth Bottle	**Particulate Filter (82.6 mm Whatman Glass Microfiber)** OTM-45 Field Blank Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Front- Half Probe Rinse to assist the solvent extraction of the Filter sample. Analyze for HFPO-DA.
T-0135 QC OTM-45 FH of Filter Holder & Probe MeOH Rinse BT (Combine with *T-0134*)	QC	5/25/22	Field Blank Train	250 mL HDPE Wide-Mouth Bottle	**Front Half of Filter Holder & Probe Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Field Blank Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the Filter extraction.
T-0136 QC OTM-45 XAD-2 Resin Tube BT	QC	5/25/22	Field Blank Train	XAD-2 Resin Tube	**XAD-2 Resin Tube** OTM-45 Field Blank Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level. Use the Back-Half Glassware Rinse and the Impinger Glassware Methanol Rinse to assist the solvent extraction of the XAD-2 resin sample. Analyze for HFPO-DA.
T-0137 QC OTM-45 BH of Filter Holder & Coil Condenser MeOH Rinse BT (Combine with *T-0136*)	QC	5/25/22	Field Blank Train	250 mL HDPE Wide-Mouth Bottle	**Back Half of Filter Holder & Coil Condenser Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Field Blank Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample and the Impinger Glassware Methanol Rinse in the XAD-2 Resin extraction. Analyze for HFPO-DA.
T-0138 QC OTM-45 Impingers 1,2 & 3 Condensate BT	QC	5/25/22	Field Blank Train	1 Liter HDPE Wide-Mouth Bottle	**Impinger #1, #2 & #3 Condensate** OTM-45 Field Blank Train HFPO-DA Analysis	**Knoxville**: Analyze for HFPO-DA.

Field Sample No./Sample Coding ID	Run No.	Sample Collection Date	Project QC Require-ments	Sample Bottle/ Container	Sample Type/Analysis	Analytical Specifications
T-0139 QC OTM-45 Impinger Glassware MeOH Rinse BT (Combine with *T-0136)*	QC	5/25/22	Field Blank Train	250 mL HDPE Wide-Mouth Bottle	**Impinger Glassware Methanol/5% Ammonium Hydroxide Rinse** OTM-45 Field Blank Train HFPO-DA Analysis	**Knoxville**: Use this solvent sample in the XAD-2 Resin Extraction.
T-0140 QC OTM-45 Breakthrough XAD-2 Resin Tube BT	QC	5/25/22	Field Blank Train	XAD-2 Resin Tube	**Breakthrough XAD-2 Resin Tube** OTM-45 Field Blank Train HFPO-DA Analysis	**Knoxville**: Spike sample with the Isotope Dilution Internal Standard (IDIS) at the regular level and perform the regular XAD-2 Resin Extraction. Analyze for HFPO-DA.

Sample Receipt Log and Condition of the Samples Upon Receipt:

Please fill in the following information:	Comments (Please write "NONE" if no comment applicable)
(1) Record the identities of any samples that were listed on the RFA but were not found in the sample shipment.	NONE
(2) Record the sample shipping cooler temperature of all coolers transporting samples listed on this RFA:	RT 0.4/CT 0.7°C
(3) Record any aQ2rent sample loss/breakage.	NONE
(4) Record any unidentified samples transported with this shipment of samples:	NONE
(5) Indicate if all samples were received according to the project's required specifications (i.e. no nonconformances):	HAND DELIVERED, NO CUSTODY SEALS

Custody Transfer:

	Name	Company	Date/Time
Relinquished By:	Patrick Sandy	Alliance	5/25/22 / 2100
Accepted By:	Doug Caudill	ETA KNOX	5/27/22 1330
Relinquished By:	Doug Caudill	ETA KNOX	5/27/22 2115
Accepted By:	Ryan Johnson	ETA KNX	5-27-22 21:15
Relinquished By:			
Accepted By:			
Relinquished By:			
Accepted By:			

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID : 5071 Correction factor: +0.3°C	✓ ✓			☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?			✓	☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓ ✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:	
Lot Number:	
Exp Date:	
Analyst:	
Date:	
Time:	

Project #: _____ PM Instructions: _____

Sample Receiving Associate: _____ Date: 5-28-22

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Appendix D

QA/QC Data

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Inlet
Project No. 2022-1651
Parameter HFPO-DA

Date	Nozzle ID	Nozzle Diameter (in.) #1	#2	#3	Dn (Average)	Difference	Criteria	Material
5/24/22	G-2	0.245	0.246	0.245	0.245	0.001	≤ 0.004 in.	glass

Date	Pitot ID	Evidence of damage?	Evidence of mis-alignment?	Calibration or Repair required?
5/24/22	P4-3	no	no	no

Date	Probe or Thermocouple ID	Reference Temp. (°F)	Indicated Temp. (°F)	Difference	Criteria	Probe Length
5/24/22	P4-3	68.0	69.0	0.2%	± 1.5 % (absolute)	5 '

Field Balance Check

Date	**05/25/22**					
Balance ID:	**Citizon**					
Test Weight ID:	**Troemner**					
Certified Weight (g):	**200.0**					
Measured Weight (g):	**200.0**					
Weight Difference (g):	**0.0**	--	--	--	--	--

Date	Barometric Pressure	Evidence of damage?	Reading Verified	Calibration or Repair required?	Weather Station Location
5/25/22	Weather Station	NA	NA	NA	Fayetteville, NC

Date	Meter Box ID	Positive Pressure Leak Check
5/25/22	9	Pass

Reagent	Lot#	Field Prep performed	Field Lot	Date	By
DiH2O	TA/Eurofins	No			
Methanol/Ammonia Mix	TA/Eurofins	No			

QA/QC Data

Location Chemours Company - Fayetteville Works Facility, NC
Source VEN Carbon Bed Outlet
Project No. 2022-1651
Parameter HFPO-DA

Date	Nozzle ID	Nozzle Diameter (in.) #1	#2	#3	Dn (Average)	Difference	Criteria	Material
5/24/22	G-3	0.239	0.238	0.239	0.239	0.001	≤ 0.004 in.	glass

Date	Pitot ID	Evidence of damage?	Evidence of mis-alignment?	Calibration or Repair required?
5/24/22	P4-1	no	no	no

Date	Probe or Thermocouple ID	Reference Temp. (°F)	Indicated Temp. (°F)	Difference	Criteria	Probe Length
5/24/22	P4-1	68.0	68.0	0.0%	± 1.5 % (absolute)	5 '

Field Balance Check

Date	**05/25/22**					
Balance ID:	**Citizon**					
Test Weight ID:	**Troemner**					
Certified Weight (g):	**200.0**					
Measured Weight (g):	**200.0**					
Weight Difference (g):	**0.0**	--	--	--	--	--

Date	Barometric Pressure	Evidence of damage?	Reading Verified	Calibration or Repair required?	Weather Station Location
5/25/22	Weather Station	NA	NA	NA	Fayetteville, NC

Date	Meter Box ID	Positive Pressure Leak Check
5/25/22	7	Pass

Reagent	Lot#	Field Prep performed	Field Lot	Date	By
DiH2O	TA/Eurofins	No			
Methanol/Ammonia Mix	TA/Eurofins	No			

Equipment Detail - Dry Gas Meter

Console ID: MB-9
Meter S/N: 20035534
Critical Orifice S/N: 1393

Calibration Detail

Initial Barometric Pressure, in. Hg	(Pb_I)	29.47					
Final Barometric Pressure, in. Hg	(Pb_F)	29.47					
Average Barometric Pressure, in. Hg	(Pb)	29.47					
Critifcal Orifice ID	(Y)	11	11	18	18	31	31
K' Factor, $ft^3 \cdot R^{1/2}$ / in. WC·min	(K')	0.3060	0.306	0.4961	0.4961	0.8358	0.8358
Vacuum Pressure, in. Hg	(V_P)	23.0	23.0	21.0	21.0	17.5	17.5
Initial DGM Volume, ft^3	(Vm_I)	912.573	920.384	928.233	937.733	947.307	963.364
Final DGM Volume, ft^3	(Vm_F)	920.384	928.195	937.733	947.228	963.364	979.460
Total DGM Volume, ft^3	(Vm)	7.811	7.811	9.500	9.495	16.057	16.096
Ambient Temperature, °F	(Ta)	62	65	65	65	65	64
Initial DGM Temperature, °F	(Tm_I)	62	63	64	64	65	67
Final DGM Temperature, °F	(Tm_F)	63	63	64	65	67	68
Average DGM Temperature, °F	(Tm)	63	63	64	65	66	68
Elapsed Time	(Θ)	20.00	20.00	15.00	15.00	15.00	15.00
Meter Orifice Pressure, in. WC	(ΔH)	0.45	0.45	1.20	1.20	3.50	3.50
Standard Meter volume, ft^3	(Vmstd)	7.7847	7.7773	9.4586	9.4446	16.0173	16.0105
Standard Critical Orifice Volume, ft^3	(Vcr)	7.8963	7.8737	9.5739	9.5739	16.1296	16.1449
Meter Correction Factor	(Y)	1.014	1.012	1.012	1.014	1.007	1.008
Tolerance	--	0.003	0.001	0.001	0.002	0.004	0.003
Orifice Calibration Value	(ΔH @)	1.618	1.626	1.650	1.648	1.698	1.690
Tolerance	--	0.037	0.029	0.005	0.007	0.043	0.035
Orifice Cal Check	--	0.56		0.52		0.56	
Meter Correction Factor	**(Y)**	**1.011**					
Orifice Calibration Value	**(ΔH @)**	**1.655**					
Positive Pressure Leak Check		**Yes**					

Equipment Detail - Thermocouple Sensor

Reference Calibrator Make: Altek
Reference Calibrator Model: Series 22
Reference Calibrator S/N: 8475031

Calibration Detail

Reference Temp.		Display Temp.		Accuracy	Difference
°F	°R	°F	°R	%	°F
0	460	-2	458	0.4	2
100	560	98	558	0.4	2
300	760	299	759	0.1	1
400	860	395	855	0.6	5
500	960	497	957	0.3	3
600	1,060	598	1,058	0.2	2
700	1,160	700	1,160	0.0	0
800	1,260	800	1,260	0.0	0
900	1,360	900	1,360	0.0	0
1,000	1,460	1,000	1,460	0.0	0
1,100	1,560	1,101	1,561	-0.1	1
1,200	1,660	1,199	1,659	0.1	1

Personnel

Calibration By: Steven Milo
Calibration Date: 3/3/2022
Expiration Date: 9/3/2022

Equipment Detail - Dry Gas Meter

Console ID: 7
Meter S/N: OBG032014
Critical Orifice S/N: 1393

Calibration Detail

Initial Barometric Pressure, in. Hg	(Pb_I)	29.81					
Final Barometric Pressure, in. Hg	(Pb_F)	29.81					
Average Barometric Pressure, in. Hg	(Pb)	29.81					
Critifcal Orifice ID	(Y)	18	18	16	16	26	26
K' Factor, $ft^3 \cdot R^{1/2}$ / in. WC·min	(K')	0.4961	0.4961	0.4268	0.4268	0.7131	0.7131
Vacuum Pressure, in. Hg	(V_P)	20.0	20.0	21.0	21.0	17.0	17.0
Initial DGM Volume, ft^3	(Vm_I)	739.041	748.700	758.364	771.352	711.005	724.940
Final DGM Volume, ft^3	(Vm_F)	748.700	758.364	766.777	779.777	724.940	738.914
Total DGM Volume, ft^3	(Vm)	9.659	9.664	8.413	8.425	13.935	13.974
Ambient Temperature, °F	(Ta)	54	54	55	55	55	55
Initial DGM Temperature, °F	(Tm_I)	57	57	57	57	57	58
Final DGM Temperature, °F	(Tm_F)	57	57	57	57	58	58
Average DGM Temperature, °F	(Tm)	57	57	57	57	58	58
Elapsed Time	(Θ)	15.00	15.00	15.00	15.00	15.00	15.00
Meter Orifice Pressure, in. WC	(ΔH)	1.30	1.30	1.00	1.00	2.90	2.90
Standard Meter volume, ft^3	(Vmstd)	9.8617	9.8668	8.5832	8.5955	14.2696	14.2958
Standard Critical Orifice Volume, ft^3	(Vcr)	9.7875	9.7875	8.4121	8.4121	14.0550	14.0550
Meter Correction Factor	(Y)	0.992	0.992	0.980	0.979	0.985	0.983
Tolerance	--	0.007	0.007	0.005	0.007	0.000	0.002
Orifice Calibration Value	(ΔH @)	1.754	1.754	1.825	1.825	1.903	1.901
Tolerance	--	0.073	0.073	0.002	0.002	0.076	0.074
Orifice Cal Check	--	1.31		1.30		0.82	
Meter Correction Factor	**(Y)**	**0.985**					
Orifice Calibration Value	**(ΔH @)**	**1.827**					
Positive Pressure Leak Check		**Yes**					

Equipment Detail - Thermocouple Sensor

Reference Calibrator Make: Altek
Reference Calibrator Model: Series 22
Reference Calibrator S/N: 8475031

Calibration Detail

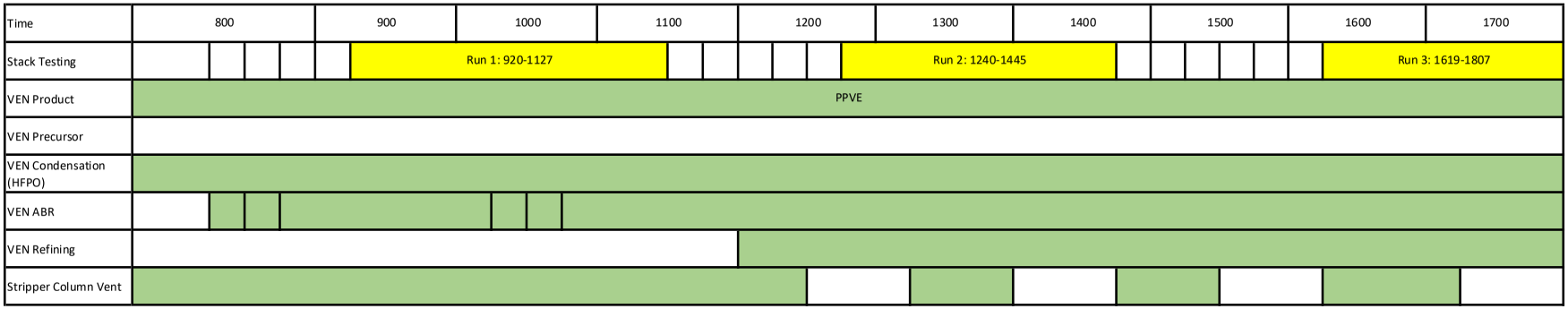
Reference Temp.		Display Temp.		Accuracy	Difference
°F	°R	°F	°R	%	°F
0	460	0	460	0.0	0
100	560	100	560	0.0	0
300	760	300	760	0.0	0
400	860	401	861	-0.1	1
500	960	500	960	0.0	0
600	1,060	598	1,058	0.2	2
700	1,160	700	1,160	0.0	0
800	1,260	798	1,258	0.2	2
900	1,360	901	1,361	-0.1	1
1,000	1,460	999	1,459	0.1	1

Personnel

Calibration By: Jeffrey Sheldon
Calibration Date: 1/19/2022
Expiration Date: 7/19/2022

Appendix E

Date **5/25/2022**



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