FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

DUBLIN AIRPORT

2025 ENVIRONMENTAL MONITORING REPORT

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2025 ENVIRONMENTAL MONITORING REPORT

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Abstract: Fehily Timoney (FT) was retained by daa plc (daa) to prepare an environmental monitoring report for the airport site for 2025. This report has been produced following the completion of environmental monitoring activities conducted within the curtilage of the airport and its environs. FT previously conducted environmental monitoring and prepared the environmental monitoring report for the 2021 - 2024 period.

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1
1. INTRODUCTION 2
1.1 Introduction 2
1.2 Background 2
1.2.1 PFAS at Dublin Airport 2
1.2.2 Emerging Pollutant Monitoring in Europe 4
1.2.3 PFAS Emerging Regulatory Thresholds for Groundwater and Surface Water 6
1.2.4 Groundwater Generic Assessment Criteria (GAC) 7
1.2.5 Surface Water Generic Assessment Criteria 7
1.2.6 Scope of Report 8
2. HISTORICAL USE AND STORAGE OF PFAS AT DUBLIN AIRPORT 9
2.1 Introduction 9
2.2 Historic Site Operations 9
2.2.1 Brief History of Dublin Airport 9
2.2.2 Former Fire Station Within the North Apron 9
2.2.3 East Area of North Apron 10
2.2.4 North Runway Development /Former Firefighting Training Ground – APEC 5 10
2.2.5 Castlemoate House – Historic Unregulated Waste Disposal Site 10
2.3 Current Site Operations 11
2.3.1 Current Fire Station and FFTG 11
3. ENVIRONMENTAL CHARACTERISTICS WITHIN AND EXTERNAL TO DUBLIN AIRPORT 13
3.1 Site Location 13
3.2 Hydrogeology 13
3.2.1 Ground Water Body Description 13
3.2.2 Aquifer Classification 17
3.2.3 Aquifer Vulnerability 19
3.2.4 Aquifer Recharge 19
3.2.5 Ground Water Flow Direction 21
3.2.6 Ground Well Abstraction Wells 21
3.3 Hydrology 23
3.3.1 Nanny-Delvin Catchment/Broadmeadows SC 010 23
3.3.2 Liffey and Dublin Catchment/Mayne SC 010 23

3.4 Geology 25
3.4.1 Bedrock Geology 25
3.4.2 Quaternary Geology 27
4. 2025 ENVIRONMENTAL MONITORING PROGRAMME AND RESULTS 29
4.1 Introduction 29
4.2 Groundwater Monitoring 29
4.2.1 Sampling Methodology and Statistical Analysis 31
4.2.2 Groundwater Generic Assessment Criteria (GAC) 33
4.2.3 North Apron 33
4.2.4 North Runway/APEC 5 38
4.2.5 Castlemoate House (Historic Unregulated Waste Disposal Site) 43
4.2.6 Water Supply Well 45
4.3 Surface Water Monitoring 47
4.3.1 Sampling Methodology & Statistical Analysis 50
4.3.2 Surface Water Generic Assessment Criteria (GAC) 51
4.3.3 Landside 51
4.3.4 Airside 55
4.3.5 2025 EPA Monitoring of Surface Water 57
4.4 Quality Assurance/ Quality Control 60
4.4.1 Blanks 60
4.4.2 Duplicates 60
5. SUMMARY AND CONCLUSIONS 61
5.1 Introduction 61
5.1.1 Groundwater 61
5.1.2 Surface Water 61

LIST OF APPENDICES

Appendix 1: List of Sum of 20 PFAS Compounds

Appendix 2: Sampling Methodologies

Appendix 3: Groundwater Results

Appendix 4: Groundwater Laboratory Certificates

Appendix 5: Groundwater Trends

Appendix 6: Groundwater Spearman's Rank Correlation Analysis Results

Appendix 7: Surface Water Results

Appendix 8: Surface Water Laboratory Certificates

Appendix 9: Surface Water Trends

Appendix 10: Surface Water Spearman's Rank Correlation Analysis Results

LIST OF FIGURES

		Page
Figure 1-1:	Site Location	3
Figure 1-2:	Percentage of EU Sites Above EQS for PFOS Per year and Water Body Type[7]	5
Figure 1-3:	Annual Average PFOS Concentrations in Ireland for Surface and Groundwater (2018-2022)[7]	5
Figure 2-1:	Site Layout	12
Figure 3-1:	Groundwater Bodies	16
Figure 3-2:	Aquifer Classification	18
Figure 3-3:	Aquifer Vulnerability	20
Figure 3-4:	GSI Wells and Springs	22
Figure 3-5:	Regional Hydrology	24
Figure 3-6:	Bedrock Geology	26
Figure 3-7:	Quaternary Geology	28
Figure 4-1:	2025 Groundwater Monitoring Locations	30
Figure 4-2:	2025 North Apron and Castlemoate House Groundwater Monitoring Locations	34
Figure 4-3:	2025 North Apron Groundwater Depth Profile	36
Figure 4-4:	2025 North Runway Groundwater Monitoring Locations	39
Figure 4-5:	2025 North Runway Groundwater Depth Profile	41
Figure 4-6:	2025 Castlemoate House Groundwater Level Depth Profile	44
Figure 4-7:	2025 Surface Water Monitoring Locations	48
Figure 4-8:	2025 North of North Apron Surface Water Monitoring Locations	49
Figure 4-9:	EPA PFOS Monitoring Locations	59

LIST OF TABLES

		Page
Table 3-1:	GSI Guidelines – Aquifer Mapping	19
Table 4-1:	2025 North Apron Groundwater Monitoring Locations	33
Table 4-2:	2025 North Apron Groundwater Monitoring Events	35
Table 4-3:	2025 Depth to Groundwater at the North Apron	36
Table 4-4:	2025 North Apron Groundwater Monitoring Summary Results	37
Table 4-5:	2025 North Runway/APEC 5 Groundwater Monitoring Locations	38
Table 4-6:	2025 North Runway Groundwater Monitoring Events	40
Table 4-7:	2025 Depth to Groundwater at the North Runway	41
Table 4-8:	2025 North Runway Groundwater Monitoring Summary Results	42
Table 4-9:	2025 Castlemoate House Groundwater Monitoring Locations	43
Table 4-10:	2025 Castlemoate House Groundwater Monitoring Events	43
Table 4-11:	2025 Depth to Groundwater at Castlemoate House	44
Table 4-12:	2025 Castlemoate House Groundwater Monitoring Summary Results	45
Table 4-13:	2025 Water Supply Well Location	46

Table 4-14: 2025 Water Supply Well Sampling Events 46
Table 4-15: 2025 Water Supply Well Monitoring Summary Results 46
Table 4-16: 2025 Landside Surface Water Monitoring Locations 51
Table 4-17: 2025 Landside Surface Water Monitoring Events 52
Table 4-18: 2025 Landside Surface Water Monitoring Results 53
Table 4-19: 2025 Airside Surface Water Monitoring Locations 55
Table 4-20: 2025 Airside Surface Water Monitoring Events 55
Table 4-21: 2025 Airside Surface Water Monitoring Results 56
Table 4-22: 2025 Ward_030 PFOS Results 58
Table 4-23: 2025 Sluice_010 PFOS Results 58

EXECUTIVE SUMMARY

The 2025 Environmental Monitoring Report for Dublin Airport presents the outcomes of the annual programme to monitor the presence of per- and polyfluoroalkyl substances (PFAS) in groundwater and surface water. PFAS are a group of persistent synthetic chemicals historically associated with the use of aqueous film-forming foams (AFFF) for firefighting training at the airport.

The groundwater Generic Assessment Criteria (GAC) used in this report is 100ng/l for the sum of 20 PFAS of most concern as identified by the EU Drinking Water Directive (EU 2020/2184).

Groundwater was monitored from 27 monitoring wells across four areas: the North Apron, the North Runway/Former Fire Training Ground (APEC 5), Castlemoate House (a historic unregulated waste disposal site), and a Water Supply Well. PFAS detections in groundwater were generally below the GAC. The highest concentrations were identified within the North Runway/APEC 5 (GW11, GW14 and GW16) and within the North Apron (GW015D). Concentrations at Castlemoate House and Gardener's Well remained below the GAC.

Trend analysis indicates that PFAS concentrations are stable or decreasing in 14 of the 27 monitoring wells (including 7 wells with decreasing trends and 7 wells showing stable behaviour), while increasing trends are observed in the remaining wells.

The Water Framework Directive (Directive 2000/60/EC, as amended by Directive 2013/39/EC) and Ireland's Environmental Objectives (Surface Waters) Regulations (S.I. No. 77, as amended) set PFOS Environmental Quality Standards (EQS) at 0.65ng/L (annual average, also referred to as AA) and 36,000ng/L (maximum admissible concentration, also referred to as MAC), which this report uses as the surface water GAC.

Surface water monitoring was carried out at 36 locations, both within the airport boundary and in downstream watercourses. At 9 locations, PFOS, the only PFAS regulated in Ireland for surface water, reported concentrations below the laboratory limit of detection during all monitoring rounds. PFOS was detected at remaining locations on at least one occasion, although most locations also recorded results below the LOD during other sampling events.

In 2025, average Total PFOS concentrations were below the AA EQS at 14 locations confirming that several locations remain consistently low on an annual average basis, but they were above the EQS in the 22 remaining locations. The highest average PFOS concentrations in surface waters are located to the east of the airport in the Kealy's Stream, Sluice and Cuckoo Stream.

Trend analysis indicates that 28 of the 36 monitored locations show stable or decreasing PFOS trends, with increasing trends confined to 8 locations.

The surface water monitoring indicates there be may other sources of PFOS/PFAS in surface waters external to the airport. The Mayne, Ward and Santry reported PFOS at greater concentrations in downstream monitoring locations than upstream locations which are closer to the airport.

1. INTRODUCTION

1.1 Introduction

Since 2021, Fehily Timoney and Company (FT) has been retained by daa plc (daa) to conduct surface water and groundwater monitoring and to prepare an environmental monitoring and interpretation report for per- and poly-fluoroalkylated substances (herein referred to as PFAS) at Dublin Airport.

This report presents monitoring and interpretation of PFAS results for the monitoring period of 2025 and compares these results to those obtained between 2021 to 2024. The purpose of this comparison is to examine trends in PFAS concentrations in surface and groundwater over the past four years. Previously, detailed environmental monitoring and interpretation documents, entitled *2021 – 2023 Environmental Monitoring Report* and *2024 Environmental Monitoring Report* were prepared for the 2021 to 2024 period.

The site location is shown in Figure 1-1.

1.2 Background

1.2.1 PFAS at Dublin Airport

PFAS are an extremely large group of long-lasting, synthetic chemicals containing multiple fluorine atoms attached to a carbon chain[1]. They comprise a diverse family of approximately 10,000 individual compounds, although the exact number varies depending on the definition applied[2].

PFAS have several physical and chemical properties including water and oil resistance, and chemical and heat stability, which made them ideal for industrial, commercial and consumer products since the 1950s. They have been used in many different industries, including aerospace, automotive, food processes, pharmaceutical, the manufacture of clothing, construction, household products, and firefighting since the 1950s. Historically, PFAS chemicals were used globally in firefighting foams since the initial development of aqueous film-forming foam (AFFF) materials in the mid-1960's[3]. Based on available information, the predominant source of PFAS at the airport is interpreted as being associated with the historical use of firefighting foams.

[1] https://www.epa.ie/our-services/monitoring--assessment/waste/chemicals/pfas/
[2] European Environment Agency (EEA). PFAS Pollution in European Waters. EEA Briefing, December 2024. https://www.eea.europa.eu/en/analysis/publications/pfas-pollution-in-european-waters
[3] Place, Benjamin J.; Field, Jennifer A. (3 July 2012). "Identification of Novel Fluorochemicals in Aqueous Film-Forming Foams (AFFF) Used by the US Military". Environmental Science and Technology. 46 (13): 7120–7127. doi:10.1021/es301465n. ISSN 0013-936X.

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World Topographic Map: Esri UK, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA
World Topographic Map: Esri, HERE, Garmin, FAO, USGS
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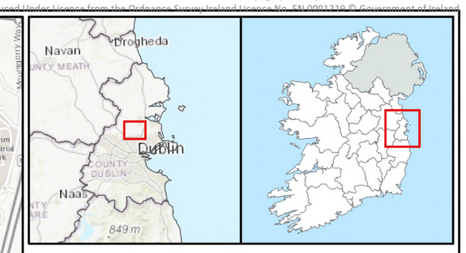

Legend

Dublin Airport Boundary

TITLE:	Site Location (Environmental Monitoring/Site Investigation Locations)
PROJECT:	Environmental Monitoring Report
FIGURE NO:	1-1
CLIENT:	daa
SCALE:	1:22,500
REVISION:	0
DATE:	03/09/2025
PAGE SIZE:	A3

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1.2.2 Emerging Pollutant Monitoring in Europe

PFAS are a large group of highly persistent synthetic chemicals, several of which (including PFOS, PFOA and PFHxS) are listed as Persistent Organic Pollutants (POPs)[4]. Many PFAS are bioaccumulative[5], meaning they can progressively increase in organisms when uptake exceeds the ability to eliminate the substance. PFAS are globally ubiquitous in the aquatic environment and organisms[6], and have been widely detected in air, soil, plants and biota.

In December 2024, the European Environmental Agency (EEA) released a publication on PFAS pollution in European water[7], based on monitoring data reported to EEA's water base. This database provides comprehensive information on the status and quality of Europe's rivers, lakes, groundwater bodies and coastal waters, as well the quantity of water resources and pollutant emissions from both point and diffuse sources.

The publication provides water monitoring data from 22 European countries over the period 2018 to 2022 indicating variability of PFOS (one type of PFAS) levels in water bodies. The data demonstrates that PFOS is widespread throughout European waters, often exceeding regulatory threshold levels set to avoid potential risk to human health and the environment. According to Figure 1-2, PFOS levels exceeded the annual average environmental quality standards (EQS) in:

- 51-60% of rivers
- 11-35% of lakes
- 47-100% of transitional and coastal waters

In 2022, PFOS levels in surface water across Europe varied by country. Monitoring data from 14 countries showed that all reported water bodies in Belgium, France, and Iceland exceeded their applicable EQS. In the Netherlands, 96% of water bodies surpassed EQS, followed by 83% in Germany and 54% in Italy. In contrast, five countries reported less than 20% of sites exceeding EQS: Spain (18%), Ireland (6%), Poland (5%), Croatia (5%), and Estonia (2%). Meanwhile, Bulgaria, Latvia, and Montenegro reported no exceedances of the PFOS EQS.

From 2018 to 2022 groundwater monitoring data on PFOS were reported to the EEA by six Member States: Czechia, Denmark, France, Ireland, Italy, and Slovakia. These data are displayed in an interactive map, where triangle sizes vary based on PFOS concentrations at each monitoring site. Figure 1-3 shows annual average PFOS concentrations in surface and groundwater in Ireland.

[4] *UNEP (Stockholm Convention), Annexes A–C: Listings for PFOS, PFOA and PFHxS.*
[5] *A progressive increase in the amount of a substance in an organism or part of an organism that occurs because the rate of intake exceeds the organism's ability to remove the substance.* Source: https://www.oxfordreference.com/display/10.1093/oi/authority.20110803095506729
[6] Valsecchi, S., et al., 2013, 'Determination of perfluorinated compounds in aquatic organisms: a review', Analytical and Bioanalytical Chemistry 405(1), pp. 143-157 (DOI: 10.1007/s00216-012-6492-7)
[7] PFAS pollution in European waters | European Environment Agency's home page

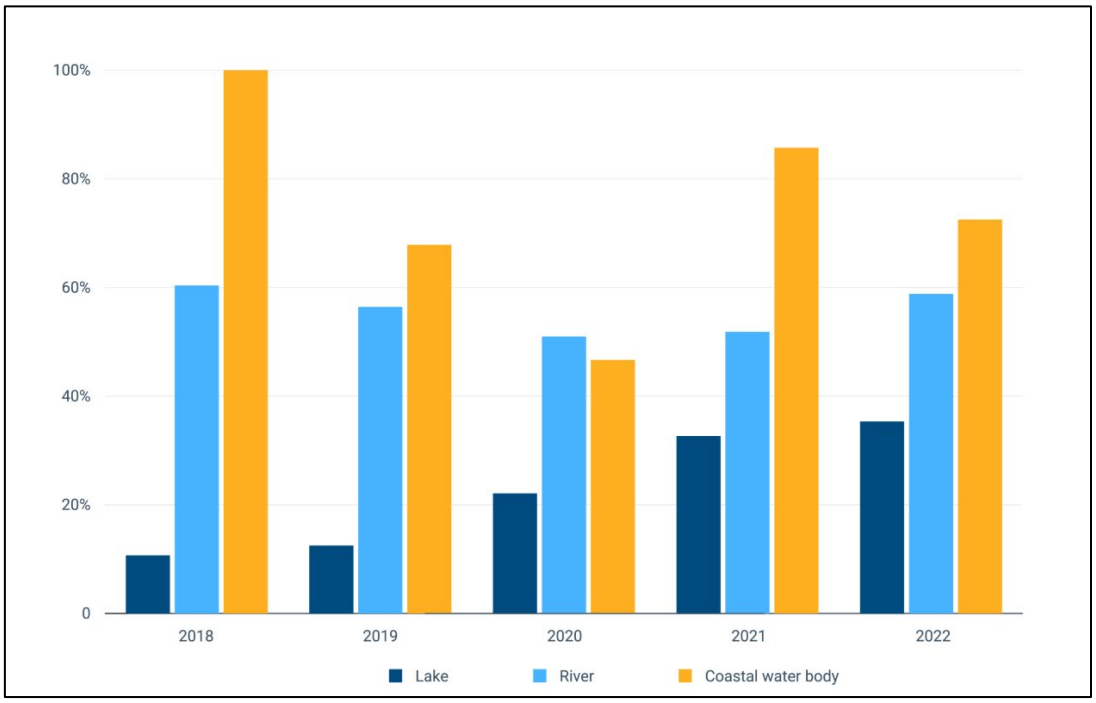

Figure 1-2: Percentage of EU Sites Above EQS for PFOS Per year and Water Body Type[7]

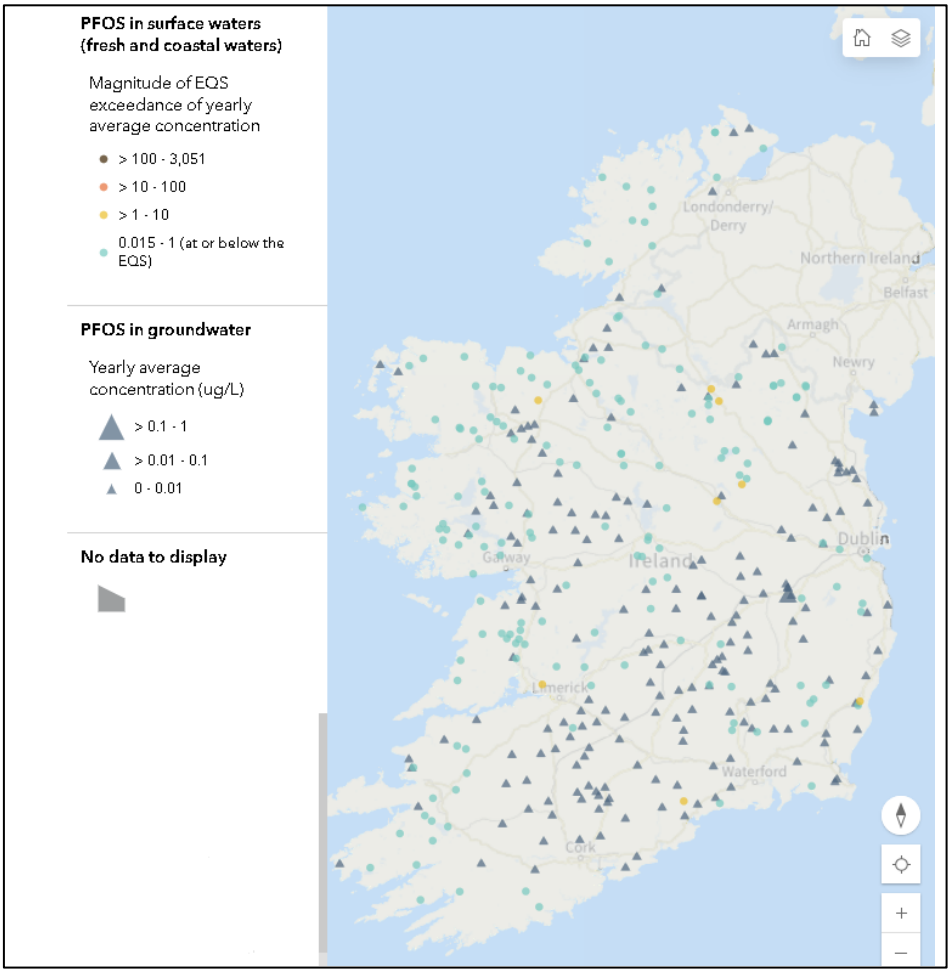

Figure 1-3: Annual Average PFOS Concentrations in Ireland for Surface and Groundwater (2018-2022)[7]

As per the EEA publication, it is difficult to draw conclusions on the extent to which regulatory threshold values are exceeded across Europe and the trend over time is not currently clear. This is due to uncertainties in the reported data, data quality and geographical coverage, as well as the increasing number of results. The granularity of the reported data also varies between countries and regions.

These variations in monitoring effort and data availability account for much of the observed variability in reported results and limit the ability to undertake robust Europe-wide trend analysis at present. Nonetheless, the EEA concluded that, when considered collectively, the available monitoring data provide clear and consistent evidence that PFOS contamination is widespread across Europe, with frequent exceedances of applicable Environmental Quality Standards observed across many monitored surface water bodies in diverse geographical and land-use settings.

Since publication of the EEA's first EU-wide synthesis of PFAS monitoring data, the widespread and persistent occurrence of PFAS in European surface water and groundwater has been formally acknowledged at policy level through revisions to EU water legislation. In September 2025, the Council of the European Union and the European Parliament reached political agreement on updates to the Water Framework Directive and Groundwater Directive to expand the regulatory focus on substances of concern, explicitly including PFAS as a group[8]. These revisions reflect recognition that PFAS contamination is widespread across Member States and water body types, rather than confined to specific locations or sectors. The revised legislative framework also places increased emphasis on harmonised and expanded monitoring and reporting, with further monitoring programmes ongoing across Europe to improve spatial coverage, compound coverage and long-term understanding of PFAS occurrence and trends.

1.2.3 PFAS Emerging Regulatory Thresholds for Groundwater and Surface Water

This section provides an overview of emerging legislative requirements for PFAS in groundwater and surface water in Ireland, including recently adopted EU provisions that will apply following transposition into national legislation. These future requirements are presented for context and have not been used as Generic Assessment Criteria (GAC) in the assessment of the 2025 monitoring results. The GACs applied in this report are described in Sections 1.2.4 and 1.2.5.

In 2026, Directive (EU) 2026/805 entered into force as part of the revised EU water legislation package, amending the Water Framework Directive, the Groundwater Directive and the Environmental Quality Standards Directive. The Directive introduces PFAS-specific provisions for both groundwater and surface water. For groundwater, a quality standard for the sum of 20 PFAS is set by dynamic cross-reference to the parametric value in the Drinking Water Directive (EU) 2020/2184, currently 100ng/L, together with a new quality standard of 4.4ng/L for the sum of four PFAS (PFOA, PFNA, PFHxS and PFOS) based on the opinion of the European Food Safety Authority. For surface water, an environmental quality standard of 4.4ng/L, expressed as PFOA equivalents, is introduced for the sum of 25 PFAS.

Member States are required to transpose the Directive into national legislation by 22 December 2027, from which date the new groundwater quality standards take effect. Supplementary monitoring programmes are required by the same date, a preliminary programme of measures by 22 December 2030, and a final programme of measures within the 2033 river basin management plan, with the objective of achieving good groundwater chemical status in relation to these substances by 22 December 2039. While these requirements are not yet transposed into Irish legislation at the time of writing, they represent a significant future regulatory development and are expected to result in increased PFAS monitoring and reporting obligations.

[8] Council of the European Union, 2025. Water pollution: Council and Parliament reach provisional deal to update priority substances in surface and ground waters.

1.2.4 Groundwater Generic Assessment Criteria (GAC)

In Ireland, there are currently no nationally established threshold values for PFAS in groundwater. The EU Groundwater Directive (2006/118/EC) does not set EU-wide limits for PFAS; instead, it requires Member States to identify pollutants that pose a risk to groundwater and establish appropriate threshold values at national level. Some Member States have introduced their own drinking water or groundwater standards for PFAS. For example, Germany has set a value of 100ng/L for the sum of 13 PFAS, while Sweden has adopted a guideline value of 90ng/L for the sum of 11 PFAS.

The EU Drinking Water Directive (EU 2020/2184) establishes two PFAS-related parametric values for drinking water: 500ng/L for total PFAS and 100ng/L for the sum of 20 PFAS of most concern. The list of these 20 PFAS is provided in Appendix 1. Ireland transposed the Directive through the European Union (Drinking Water) Regulations 2023 (S.I. No. 99 of 2023), published on 10 March 2023. From 12 January 2026, new EU rules require Member States to monitor PFAS in drinking water in a harmonised manner to ensure compliance with the limit values set under the recast Drinking Water Directive[9].

The drinking water limit (100ng/L for Sum of 20 PFAS) is used as the groundwater Generic Assessment Criteria (GAC) for this report. The GAC is used to indicate the threshold of PFAS concentrations at which there is no unacceptable risk to environmental receptors or for human consumption. In the absence of groundwater limits, it is appropriate to apply the drinking water limit. This value has also been adopted as the groundwater quality standard for the sum of 20 PFAS under Directive (EU) 2026/805 and will apply in Ireland following transposition of the Directive into national legislation.

1.2.5 Surface Water Generic Assessment Criteria

The Water Framework Directive (WFD) (Directive 2000/60/EC) as amended by Directive 2013/39/EC and the European Union Environmental Objectives (Surface Waters) Regulations (S.I. No. 77, as amended) include limits for PFOS in surface water. The limits referred to as Environmental Quality Standards (EQS) are set for water to meet a 'Good' status under the WFD:

- 0.65ng/L PFOS Annual Average (AA)[10]
- 36,000ng/L PFOS MAC (maximum admissible concentration)

The EQS is used as the surface water GAC in this report. The GAC represents the threshold at which PFOS concentrations are highly unlikely to cause impacts to receptors. The annual average limit is very low having been based on the risk of fish consumption by humans.

[9] European Commission, "New EU rules to limit PFAS in drinking water,"12 January 2026

[10] The AA-EQS of 0.65 ng/L is based on the potential for secondary poisoning in humans due to fish consumption. It is a guideline limit and defined as "the level at which no harmful effects are expected, based on annual average concentrations". The limit is often criticized for being very low. Several researchers across the EU (e.g., Cousins et al, 2022; Ahrens 2013; MacLachlan et al 2007) have noted that concentrations of PFOS in freshwaters regularly exceed the EQS, even in rainwater in urban environments.

1.2.6 Scope of Report

The scope of this report includes:

- Presentation of 2025 environmental monitoring data
- Comparative review of surface and groundwater monitoring data against the GAC
- Identification of trends in the monitoring data over the period 2021 to 2025
- Summary and Conclusions

This report is structured as follows:

- Section 1 – Introduction (this section)
- Section 2 – Historic Use and Storage of PFAS at Dublin Airport
- Section 3 – Environmental Characteristics within and External to Dublin Airport
- Section 4 – 2025 Environmental Monitoring Programme and Results
- Section 5 – Summary and Conclusions

2. HISTORICAL USE AND STORAGE OF PFAS AT DUBLIN AIRPORT

2.1 Introduction

This section describes historic, current and future operations at Dublin Airport where the historic use of PFAS containing products may:

- Have environment effects within or external to the airport site boundary
- Affect future development with the airport campus

For clarity, two fire stations and two fire-fighting training grounds (FFTGs) have been identified at Dublin Airport (Figure 2-1). The original fire station (Section 2.2.2) and original FFTG (Section 2.2.4) have been decommissioned and replaced by the current fire station and FFTG (Section 2.3.1).

Known locations of historical use of PFAS containing products and/or storage of PFAS chemicals are outlined in Section 2.2. These locations have been identified as some of the potential sources of PFAS in groundwater and surface water within the airport campus. This is based on a review of available information at this time.

2.2 Historic Site Operations

2.2.1 Brief History of Dublin Airport

In 1940, airfield operations commenced with the development of Dublin Airport. In 1948 and 1950, new concrete runways were completed. In 1959, a new terminal building was opened with new departure gate piers added to the terminal to facilitate larger aircraft. A new terminal building was opened in 1972 and was subsequently extended. Since 1972 a new terminal, new departure gate piers, a new runway and taxiways were opened. A stormwater drainage network which flows to various open drains and local watercourses was constructed and remains in operation. In 2010, Terminal 2 and its connected boarding gate pier were opened. Construction of the North Runway Development is complete, and the runway is operational as of August 2022. The North Runway Development has constructed a new surface drainage system with outfalls to local streams and rivers.

In 1941, hangar development in the North Apron commenced with the construction of Hangar 1. Construction continued with the development of Hangars 2, 4 and 5 through the 1950's and 1960's. In 1972, the Garage was constructed. In 1990 and 1992, Hangar 6 and Hangar 3 were respectively constructed. The former fire station, as detailed in the next section, was developed to provide firefighting services to the airport.

2.2.2 Former Fire Station Within the North Apron

The original fire station (herein referred to as the Former Fire Station) likely operated from the opening of Dublin Airport in 1940. Operations at the former fire station ceased c. 2000. This fire station was located within the North Apron. AFFF containing PFAS was stored at the original fire station. PFAS may have been historically released to ground during the discharge of fire extinguishers.

The location of the North Apron and Former Fire Station is shown on Figure 2-1.

2.2.3 East Area of North Apron

Environmental monitoring undertaken by FT during the monitoring programme indicates there is a potential second source of PFAS within the eastern area of the North Apron. This is further discussed in Section 4.2.3.1.

The location of the North Apron is shown in Figure 2-1.

2.2.4 North Runway Development /Former Firefighting Training Ground – APEC 5

The original FFTG site, also referred to as APEC 5 operated post-1983[11] until ceasing use in c. 2000. It was built and operated in accordance with common practice at the time. According to a report prepared on behalf of the EPA[12], the FFTG site was a similar standard to other firefighting training grounds in Ireland, where the capture of AFFF was "typically non-existent, with infiltration to ground being common or discharge to foul sewer network" depending on the particular site. In 2017, PFAS was identified at this location during the North Runway Development. Following the cessation of firefighting training at APEC 5 no other activity prior to the construction of the North Runway Development was undertaken at this location.

The location of the North Runway Development and APEC 5 are shown on Figure 2-1.

2.2.5 Castlemoate House – Historic Unregulated Waste Disposal Site

Environmental monitoring identified PFAS in groundwater at a historic unregulated waste disposal site at Castlemoate House. PFAS is commonly present in unregulated waste disposal leachate in Ireland[13]. The results of the environmental monitoring are discussed in Section 4.2.3.1.

In 2008, buried waste material was encountered during the excavation of a foul sewer connection on the grounds of Castlemoate House[14]. The Regulators, consisting of Fingal County Council, Environmental Protection Agency and Department of Agriculture were notified. Intrusive investigations were undertaken in consultation with Fingal County Council as the lead Regulator.

The intrusive investigations determined the buried material comprised a mix of historical general waste and historical aircraft catering waste. It was estimated the waste was emplaced at the site between 1975 and 1984.

No waste has been buried at the site since the mid-1980's.

The location of Castlemoate House is shown on Figure 2-1.

[11] A review of aerial photography from 1983 indicates APEC 5 had not been developed.
[12] https://www.epa.ie/publications/monitoring--assessment/waste/PFAS-in-fire-fighting-foam-report-web-version.pdf
[13] https://www.epa.ie/publications/research/environment--health/Research_Report_345.pdf
[14] RPS. 2010. Investigation at Unregulated Waste Disposal Site at Castlemoate House Dublin Airport.

2.3 Current Site Operations

2.3.1 Current Fire Station and FFTG

In the early 2000's daa developed the current fire station and an engineered FFTG at its current location adjacent to the West Apron and south of the Irish Aviation Authority (IAA) Control Tower Building. The current FFTG can be accessed via gated entrance off the R108 road and internal access road within the airport from the West Apron. It provides the location for world class training to the Fire and Rescue Services crew at Dublin Airport.

AFFF for emergency events was stored in IBC tanks in a chemical bunded area. Intrinsic testing of the tanks is carried out every three years. Firefighting training commenced at the current FFTG at Dublin Airport in the early 2000's. Current fire-fighting training practices are carried out on an impermeable concrete base surrounded by ACO open channel grating. Typically, firefighting events were and are designed to target fire using water only. The water is supplied from overhead tanks and from hydrants.

Combustion is generated using kerosene. Runoff from respective fire-fighting exercises is directed off the impermeable concrete slab to ACO drains and to underground tanks prior to release via sewer.

As outlined in Section 1.2.1, as AFFF was used at this location it is a potential source of PFAS.

AFFF storage tanks may still contain residual PFAS. Previous cleaning and decontamination may not have been effective in removing all PFAS bound to the walls of the tanks or containers and may remain a source.

The location of the current Fire Station and FFTG is shown on Figure 2-1.

World Topographic Map: Esri, HERE, Garmin, FAO, NOAA, USGS
World Hillshade: Esri, Intermap, NASA, NGA, USGS
World Topographic Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
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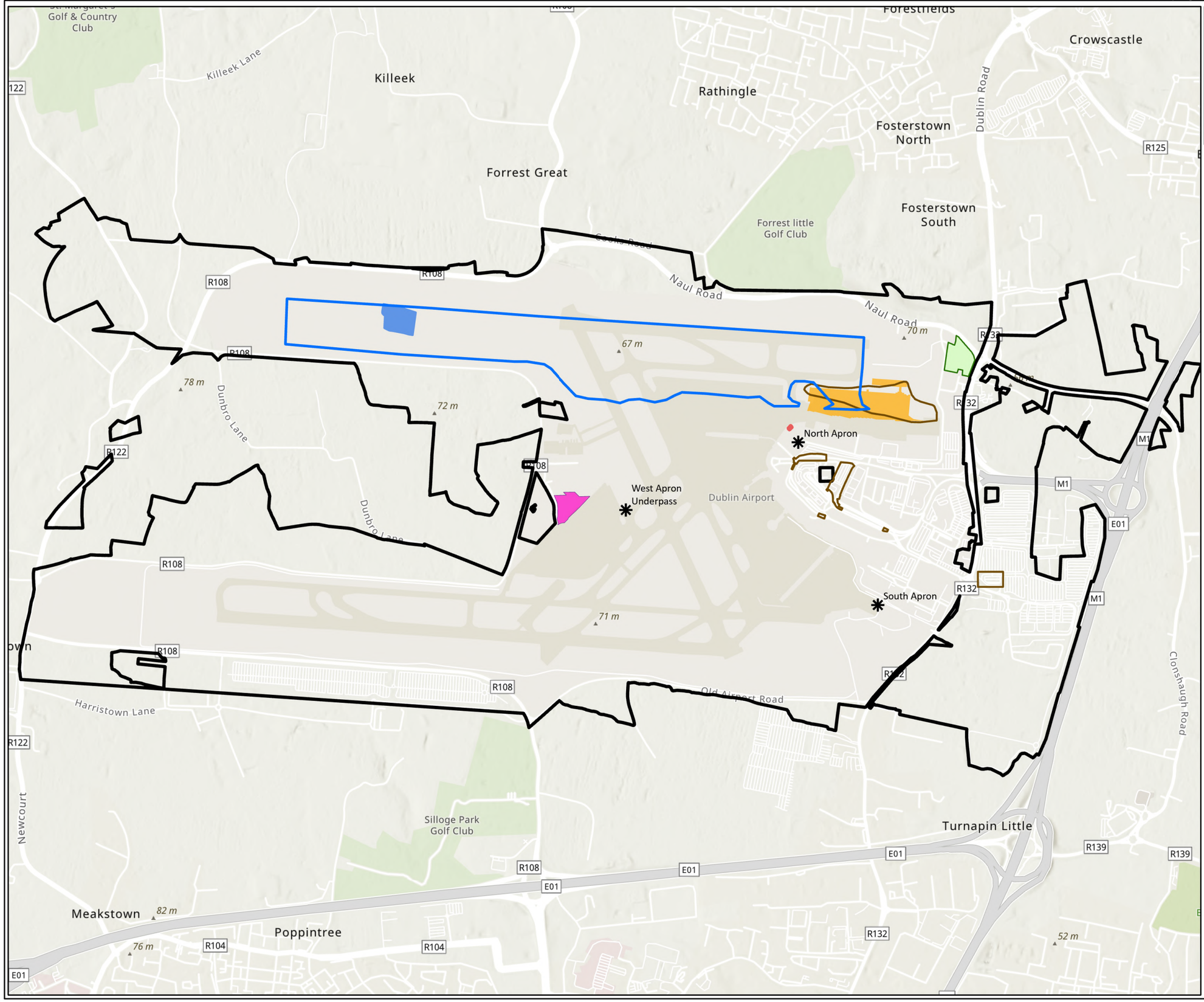

Legend

- Apron Locations
- Dublin Airport Boundary
- North Runway
- Departures Road Project
- Castlemoate House Boundary
- Proposed Apron 5H Development Area
- Current Fire Station & FFTG
- Former Fire Station
- APEC5 – Former Fire Fighting Training Ground

N W E S

0 0.25 0.5 1 Kilometers

TITLE:	Site Layout		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	2-1		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	03/09/2025	**PAGE SIZE:**	A3

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3. ENVIRONMENTAL CHARACTERISTICS WITHIN AND EXTERNAL TO DUBLIN AIRPORT

This section describes the site setting of the environmental monitoring programme study area including its location, the regional geology, hydrogeology and hydrology.

3.1 Site Location

Dublin Airport campus is located approximately 7km north of Dublin City centre, between the M50, M1 and M2 motorways.

The airport complex is located at an elevation of between approximately 55m OD and 80m OD, orientating in a west to east direction. On a regional scale, elevation generally decreases to the east towards the Irish Sea and south towards the River Liffey.

Outside of Dublin Airport, the predominant land use in the area is agricultural, with pastures and arable land being the primary land uses in the region according to the COPERNICUS pan-European (Corine) 2018 landcover mapping.

Dublin Airport is served by an Uisce Éireann mains water supply which provides drinking water for the campus. Drinking water is sourced from Blessington Reservoir and treated at Ballymore Eustace Water Treatment Plant prior to distribution to Dublin Airport. A groundwater abstraction well, referred to as Gardener's Well is located at Corballis Avenue and is used for only for landscaping.

There are numerous streams, rivers and artificial land drains at and surrounding Dublin Airport. As the topography surrounding Dublin Airport falls predominantly from west to east surface water features generally flow in an easterly direction.

3.2 Hydrogeology

This section includes descriptions of groundwater bodies, aquifer classification, aquifer vulnerability, aquifer recharge and groundwater flow direction and groundwater abstraction wells as determined from published sources.

3.2.1 Ground Water Body Description

Dublin Airport is located within three groundwater bodies (GWBs):

- Industrial Facility (P0480-02)
- Swords
- Dublin

The descriptions of the GWBs for Swords and Dublin have been taken from the 'Summary of Initial Characterisation' draft reports for each defined GWB published by the GSI in accordance with the Groundwater Working Group Publication: Guidance Document GW2 (2003). The GWB Characterisation Reports are available from the GSI Public Data Viewer. A description is not available for the Industrial Facility (P0480-02) GWB, but as the GWB is bounded by both the Swords and Dublin GWBs the description is expected to be similar.

According to classification work carried out as part of the Water Framework Directive and published by the EPA, the Dublin, Swords and Industrial Facility (P0480-02) GWB's are classified as having 'Good' status in terms of quality and quantity for the period of 2019-2024. The Industrial Facility (P0480-02) GWB for the period of 2016-2021 was classified as having 'Poor' status in terms of quality (for Trichloroethene - all isomers) and 'Good' in terms of quantity. The overall risk result of 'Not At Risk' is applied to the Swords GWB and 'At Risk' is applied to the Industrial Facility (P0480-02) GWB likely due to its former 'Poor' status. The Dublin GWB risk status is under review at the time of writing.

The Groundwater Body locations are shown in Figure 3-1.

3.2.1.1 Industrial Facility (P0480-02)

The Industrial Facility (P0480-02) GWB area is associated with Industrial Emissions (IE) Licence P0480-02, where two historical contamination plume areas were identified [15]. The contaminants of concern identified in these areas include:

- Chlorinated hydrocarbons
- Total petroleum hydrocarbons
- Sulphate, manganese, nitrite, ammoniacal nitrogen and methane

Dublin Aerospace Limited hold IE Licence P0480-02.

3.2.1.2 Swords Groundwater Body

The Swords GWB is located in north County Dublin with elevations ranging from 100m OD in the west of the GWB to sea level along the coast. The GWB is within a low-lying area with regional elevations reducing in an easterly direction towards the coast and towards streams on a local scale.

The Swords GWB is predominantly comprised of Dinantian Upper Impure Limestones with smaller amounts of Dinantian Lower Impure Limestones, Dinantian mixed sandstone, shales and limestones, Dinantian Sandstones and Ordovician volcanics and metasediments.

Information provided by the GSI indicates that the main recharge mechanism to the GWB is via diffuse recharge percolating through the subsoil. The amount of effective rainfall which will recharge the GWB is determined by the thickness and permeability of the soil, and the slope. Due to the low permeability of the GWB, a high proportion of the recharge will discharge rapidly to surface watercourses from the upper layers of the aquifer.

The main discharge mechanism from the Swords GWB is directly to the Irish Sea along the coast. Discharge to overlying rivers may also occur where surface watercourses are hydraulically connected to the aquifer.

3.2.1.3 Dublin Groundwater Body

The Dublin GWB is located in the Greater Dublin City area and extends southwest towards Kildare. The GWB is generally low lying, with higher elevations to the south at the foothills of the Dublin Mountains and to the northwest. Elevations decrease towards river estuaries.

[15] Groundwater Monitoring Report 2021 available at: https://leap.epa.ie/docs/ec24fb41-a105-4341-ae77-235a775a73a0.pdf

The Dublin GWB is comprised of Dinantian Upper Impure Limestones, Dinantian Lower Impure Limestones, Dinantian Pure Unbedded Limestones, Dinantian Mixed Sandstones, Shales and Limestones and Namurian Undifferentiated rock.

Information provided by the GSI indicates that the main recharge mechanism to the GWB outside of Dublin City locally is via diffuse recharge percolating through the subsoil. The amount of effective rainfall which will recharge the GWB is determined by the thickness and permeability of the soil, and the slope. Due to the low permeability of the GWB, a high proportion of the recharge will discharge rapidly to surface watercourses from the upper layers of the aquifer. Beneath Dublin City, it is conservatively estimated that on 10% of the city area is available for recharge as the remainder is an impermeable layer.

The main discharge mechanism from the Dublin GWB is directly to the Irish Sea along the coast. Discharge to overlying gravel aquifers and to overlying rivers will also occur if they are hydraulic connected to the aquifer.

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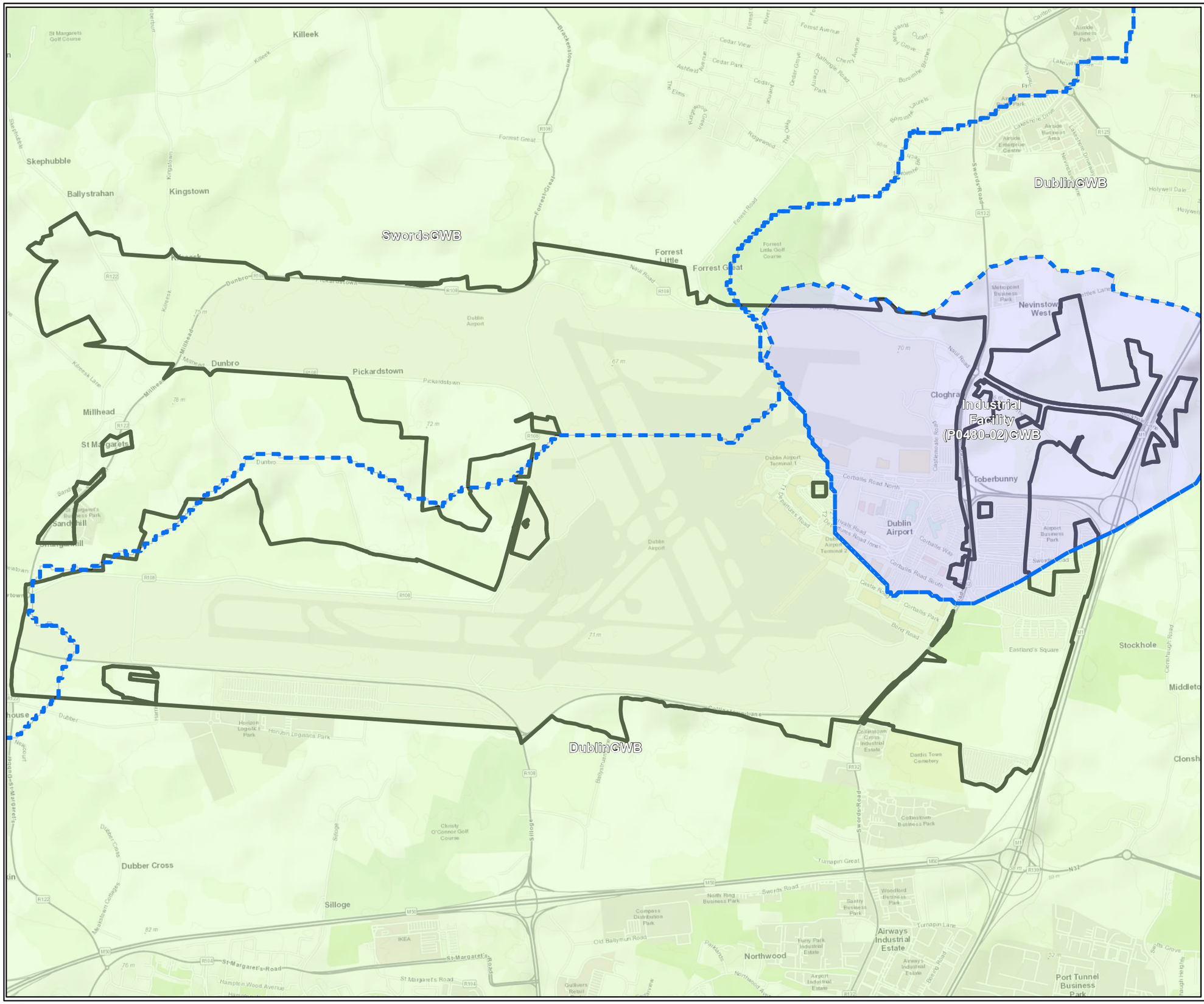

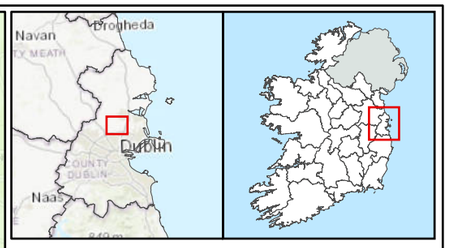

Legend

- Dublin Airport Boundary
- Groundwater Bodies

Groundwater Bodies Risk Categories (as assigned by EPA)

- At Risk
- Not at Risk

TITLE:	Groundwater Bodies		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	3-1		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	27/02/2024	**PAGE SIZE:**	A3

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3.2.2 Aquifer Classification

The GSI mapping describes the Swords, Dublin and Industrial Facility (P0480-02) GWBs as poorly productive and locally important bedrock aquifers.

Dublin Airport and surrounding lands sit on two aquifer classifications. The GSI classify the aquifer beneath the northwest area of Dublin Airport as a 'Locally important aquifer - bedrock which is Moderately Productive only in Local Zones', with the southeast and northwest area described as a 'Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones'.

The aquifer classification mapping is shown in Figure 3-2.

Path: R:\Map Production\2021\P21-195\Workspaces\Environmental Monitoring Report\P21-195_GIS_ENV_Fig3-2_AquiferClassification_A3.mxd

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
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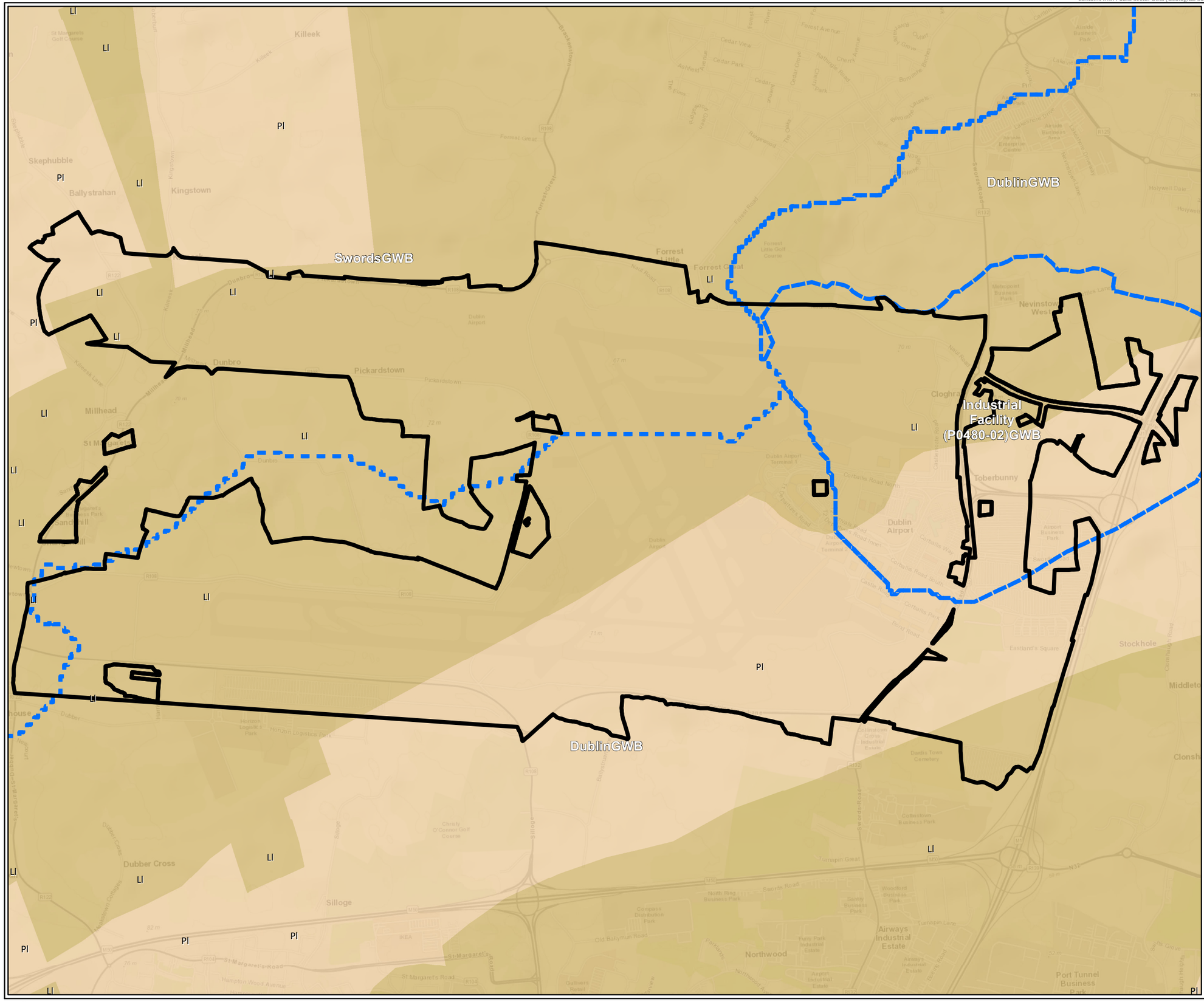
SwordsGWB
DublinGWB
Industrial Facility (P0480-02)GWB
DublinGWB
LI
PI
Killeek
Skephubble
Ballystrahan
Kingstown
Forrest
Dunbro
Pickardstown
Millhead
Dubber Cross
Silloge
Northwood
Stockhole
Toberbunny
Dublin Airport
Airways Industrial Estate
Port Tunnel Business Park
Clonshaugh
Middleton
Nevinstown West
Cloghran
Turnapin Great
Turnapin Lane
Old Ballymun Road
St Margaret's Road
Swords Road
Collinstown Industrial Estate
Eastland's Square
Woodford Business Park
North Ring Business Park
Compass Distribution Park
Sandyl Business Park
Funny Park Industrial Estate
Airport Industrial Estate
Collinstown Business Park
Horizon Logistics Park
Christy O'Connor Golf Course
Davis Town Cemetery
IKEA
Meadowtown Cottages
Hampton Wood Avenue
Dublin Airport Terminal 1
Dublin Airport Terminal 2
Corballis Road North
Corballis Road South
Corballis Park
Corballis Road Inner
Corballis Road Outer
Meteopoint Business Park
Aerodrome Business Park
Aerodrome Enterprise Centre
Aerodrome Business Area
Forrest Little Golf Course
Forrest Great
Forrest Road
Forrest Avenue
Cedar View
Cedar Park
Cedar Grove
Cedar Court
Cedar Drive
Ashfield Terrace
Nutgrove Road
Cherry Road
Bromville Gardens
Bromville Downs
Bromville Drive
Bromville Avenue
Bromville Lawns
Bromville Park
Bromville Rise
Bromville Grove
Bromville Terrace
Ridgewood
The Oaks
The Elms
Brackenstown
Brackenstown Road
Nutgrove Avenue
Nutgrove Terrace
Nutgrove Lawn
Nutgrove Park
Nutgrove Way
Nutgrove Office Park
Nutgrove Shopping Centre
Nutgrove Enterprise Centre
Nutgrove Business Area
Nutgrove Business Park

3.2.3 Aquifer Vulnerability

Groundwater vulnerability, as defined by the GSI, is the term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities.

The factors used in assessing groundwater vulnerability include subsoil type and thickness and recharge type as indicated in Table 3-1. The GSI procedure whereby groundwater protection is assessed is outlined in the EPA-GSI publication Groundwater Protection Schemes (DELG/EPA/GSI, 1999).

Table 3-1: GSI Guidelines – Aquifer Mapping

Vulnerability Rating	Hydrogeological Conditions		
	Subsoil Permeability (Type) and Thickness		
	High Permeability (Shallow Bedrock)	Moderate Permeability (e.g., Sandy soil)	Low Permeability (e.g., Clayey subsoil, clay, peat)
Extreme (E)	0 - 3.0 m	0 - 3.0 m	0 - 3.0 m
High (H)	>3.0 m	3.0 -10.0 m	3.0 - 5.0 m
Moderate (M)	N/A	>10.0 m	5.0 - 10.0 m
Low (L)	N/A	N/A	>10 m

Notes:
N/A = Not Applicable
Precise permeability values cannot be given at present.

GSI classifies the aquifer vulnerability in the region as varying from 'Low' to 'X - Rock at or near surface' (extreme). Low vulnerability areas are observed in the southern half of the airport, increasing in vulnerability towards the northern and western extents. Where vulnerability is classified as being 'X - Rock at or near surface' this coincides with areas of exposed bedrock or subcrop shown on other GSI geological mapping.

Based on these classifications it is expected that subsoil thickness, and depth to groundwater at the airport will vary from 0m to 10m in the northern and western airport extents to greater than 10m in the southern extent.

The aquifer vulnerability mapping is shown in Figure 3-3.

3.2.4 Aquifer Recharge

The GSI groundwater recharge mapping depicts the estimated recharge to the deep groundwater system i.e., groundwater that has the potential to be utilised as a groundwater resource. The GSI method for estimating groundwater recharge utilises data on groundwater vulnerability, subsoil permeability, soil drainage, aquifer type and hydrologically effective rainfall.

GSI estimates an annual groundwater recharge value of up to 66.24mm/yr for most of the Dublin Airport complex with a recharge co-efficient of 20% i.e. 20% of the effective rainfall will reach the aquifer.

The effective rainfall at the airport varies from 308 mm/year up to 356mm/year.

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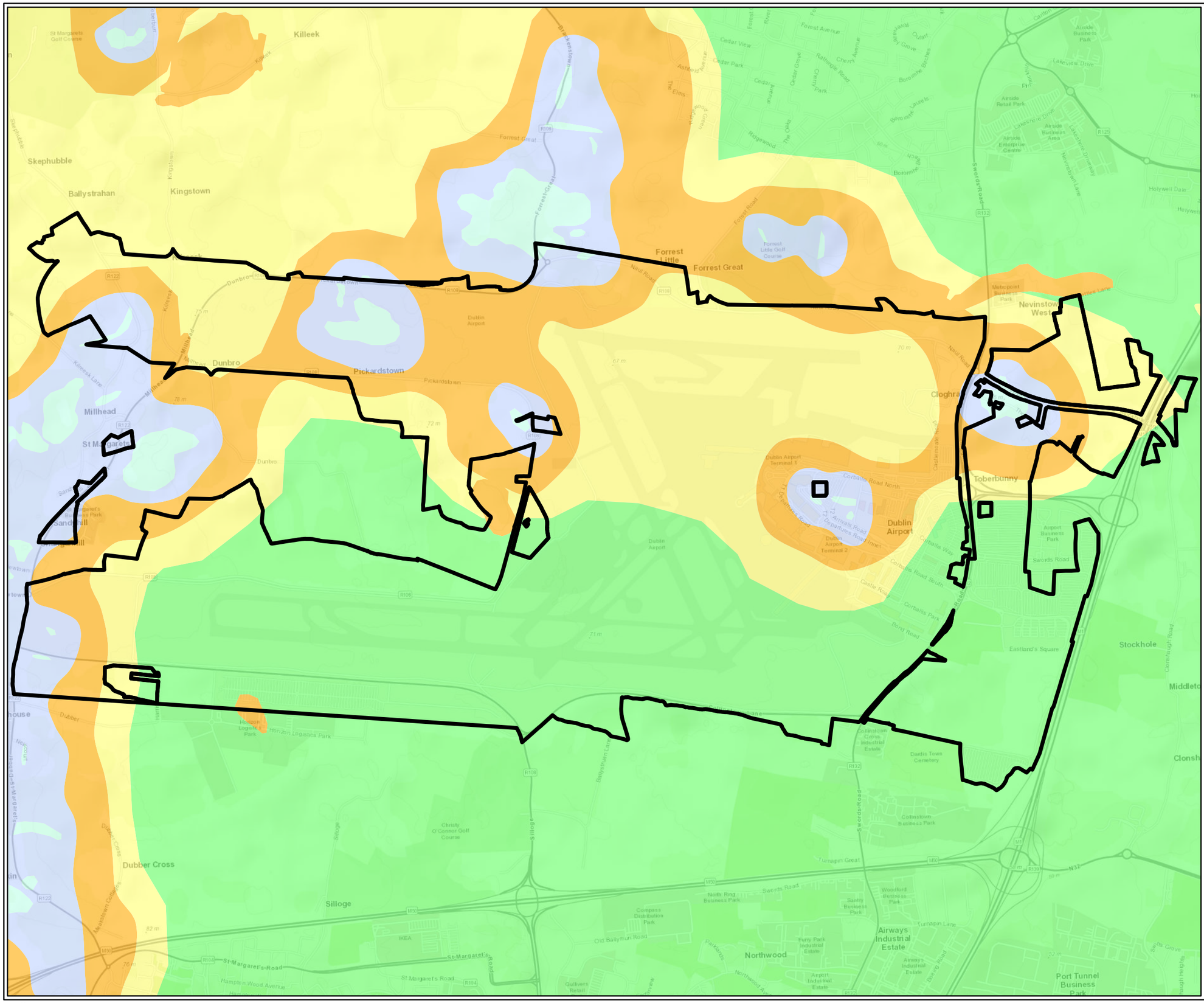

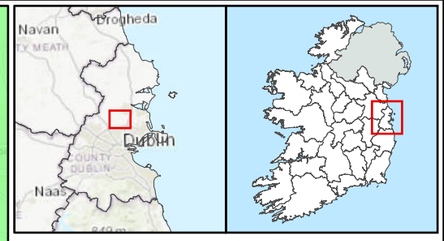

Legend

- Dublin Airport Boundary

Groundwater Vulnerability

- E - Extreme
- H - High
- M - Moderate
- L - Low
- X - Rock Near Surface or Karst

TITLE:	Aquifer Vulnerability		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	3-3		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	27/02/2024	**PAGE SIZE:**	A3

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3.2.5 Ground Water Flow Direction

AECOM Ireland Ltd. prepared a groundwater monitoring report for (IE) License P0480-02 which operates at the North Apron. [16] Based on previous groundwater monitoring events conducted for the licensee, AECOM infer groundwater flow direction at the North Apron is to the north or northeast with discharge occurring to surface water.

A draft 2020 groundwater monitoring report completed by AWN Consultants indicates groundwater flow at Castlemoate House is in an east to southeast direction. Castlemoate House is in the northeast corner of Dublin Airport, downgradient of the North Apron.

Based on the Swords and Dublin GWB descriptions, it is expected regional groundwater flow is generally towards the coast (east) and overlying rivers, including the River Liffey.

3.2.6 Ground Well Abstraction Wells

A review of GSI wells and springs mapping indicates the presence of groundwater abstraction wells surrounding Dublin Airport.

The locations of the GSI Wells and Springs surrounding the site are presented in Figure 3-4.

[16] Groundwater Monitoring Report 2020 available at:
https://leap.epa.ie/docs/bc875474-83a2-4fef-9e7b-878d96055c53.pdf

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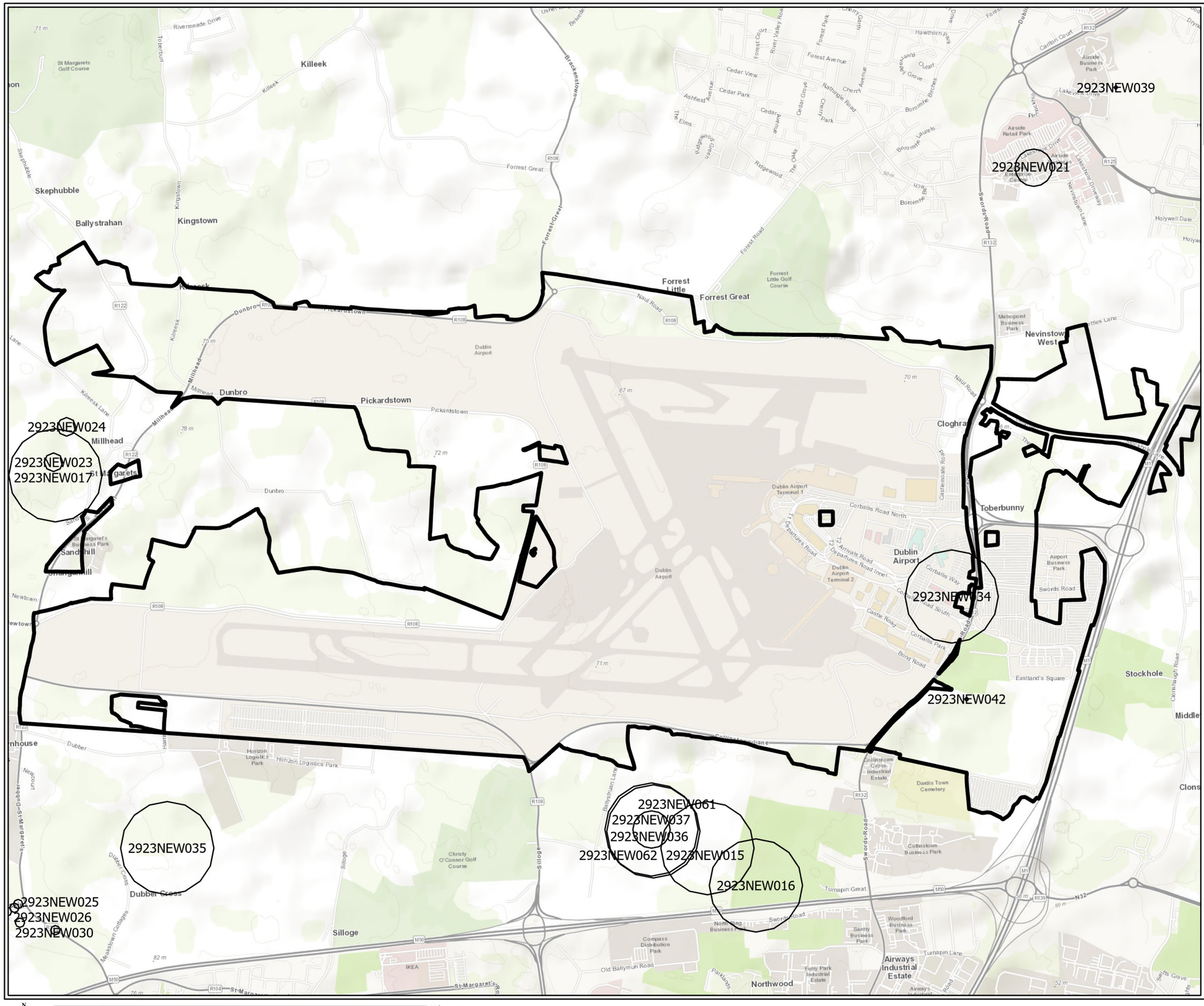

Legend

- Dublin Airport Boundary
- Wells and Springs

TITLE:	GSI Wells and Springs		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	3-4		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	04/09/2025	**PAGE SIZE:**	A3

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N W E S

0 0.5 1 2 Kilometers

3.3 Hydrology

Dublin Airport is located within two catchments, the Nanny-Delvin (northwest portion) and Liffey and Dublin Bay catchment (southeast portion). The airport is located in two sub-catchments, the Broadmeadow_SC_010 (within the Nanny Delvin catchment) and the Mayne_SC_010 (within the Liffey and Dublin Bay catchment).

The Regional Hydrology for the site is presented in Figure 3-5.

3.3.1 Nanny-Delvin Catchment/Broadmeadows SC 010

The area of the airport located within the Nanny-Delvin catchment/ Broadmeadow_SC_010 is within one river sub-basin, the Ward_030. The closest surface water bodies to the airport are the Dunbro and Millhead to the west and the Barberstown 08 to the north. The airport drainage system outfalls to the Dunbro, Millhead and Barberstown 08 via land drains.

The Dunbro and Millhead flow west until they meet approximately 200m west of the airport boundary, turning in a northerly direction to meet Huntstown 08. The Barberstown 08 flows in a north direction and turns west approximately 450m north of the airport boundary until it meets Huntstown 08, approximately 1.1km northwest of the airport boundary. The Huntstown 08 meets the Ward River approximately 1.7km north of the airport flowing in an easterly direction. The Ward River enters the Broadmeadow River approximately 4.0km north of the airport boundary, and subsequently into the Broadmeadow Estuary, Malahide Bay and Irish Sea.

The Dunbro, Millhead, Huntstown 08, Barberstown 08, Ward River, Broadmeadow River and Broadmeadow Estuary have been assigned a ‘moderate’ 2019-2024 WFD water quality status. For the 2013-2018 period, the downstream portion of the Ward River, Broadmeadow River and Broadmeadow Estuary were assigned a ‘poor’ water quality status. Malahide Bay has been assigned a ‘at risk’ status and Irish Sea has been assigned a ‘good’ status. All surface water bodies except for the Irish Sea are described at ‘at risk’ of not meeting their WFD objectives by 2027. The Irish Sea is ‘not at risk’.

3.3.2 Liffey and Dublin Catchment/Mayne SC 010

The area of the airport located within the Liffey and Dublin Bay catchment/ Mayne_SC_010 is within three river sub-basins, the Sluice, Mayne and Santry. The closest surface water bodies to the airport are the Sluice to the north, Cuckoo Stream to the east and Mayne 09 and Santry to the south. The airport drainage system outfalls to the Sluice and Cuckoo Stream, and potentially Mayne 08 and Santry via land drains.

The Sluice and Mayne 09 primarily flow in a southeast direction discharging into the Mayne Estuary prior to entering the Irish Sea. The Irish Sea is approximately 8km from the airport boundary. The Cuckoo Stream flows in a southeast direction until it enters the Mayne 09 approximately 4.6km southeast of the airport boundary. The Santry flows in a southeast direction into the North Bull Island Estuary before entering the Irish Sea.

The Mayne Estuary 2019-2024 WFD water quality status is under review at the time of writing. The Cuckoo Stream, Mayne 09 and Santry have been assigned a ‘poor’ water quality status. North Bull Island has a 'Moderate' status. The Irish Sea has been assigned a ‘good’ status. The risk status of the Mayne Estuary of not meeting their WFD objectives by 2027 is under review. The Cuckoo Stream, Mayne 09 and Santry are ‘at risk’. North Bull Island is in Review. The Irish Sea is ‘not at risk’.

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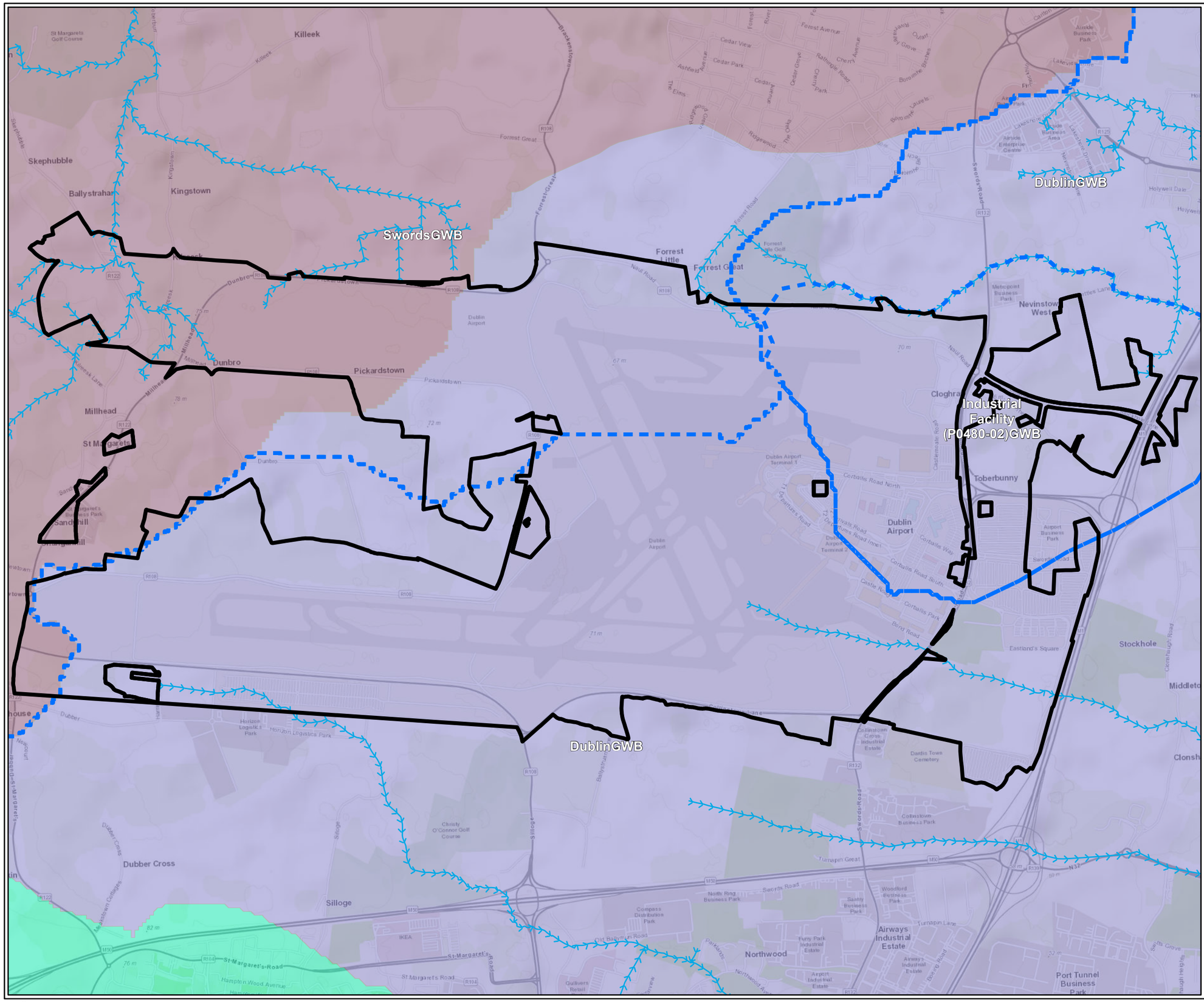

Legend

- Dublin Airport Boundary
- Groundwater Bodies
- Rivers

WFD Sub Catchments

- Broadmeadow_SC_010
- Mayne_SC_010
- Tolka_SC_020

TITLE:	Regional Hydrology		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	3-5		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	23/02/2024	**PAGE SIZE:**	A3

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3.4 Geology

3.4.1 Bedrock Geology

The GSI 1:100,000 scale bedrock geology map shows Dublin Airport and surrounding lands of the airport are underlain by carboniferous limestone consisting of the following four formations, from oldest to youngest:

- Malahide Formation
- Waulsortian Limestones
- Tober Colleen Formation
- Lucan Formation

The Malahide Formation is described as comprising 'argillaceous bioclastic limestone, shale'. The GSI lithological description describes the lower part of the formation as '*calcareous shales, siltstones and sandstones, and occasional thin limestones at its base*'. This formation is located beneath the northern and western areas of the of the airport complex and is lain in a southwest to northeast direction.

The Malahide Formation is overlain by the Waulsortian Limestones which is described as '*pale-grey, crudely bedded or massive limestone*'. The Waulsortian Limestones which extend from Terminal 1 in a northeast direction for approximately 2km, are overlain by the Tober Colleen Formation.

The Tober Colleen Formation is comprised of '*dark-grey, calcareous, commonly bioturbated mudstones and subordinate thin micritic limestones*'. This formation is located beneath the southern area of the of the airport complex and is lain in a southwest to northeast direction.

The Lucan Formation overlies the Waulsortian and Tober Colleen Formations and comprises the youngest rocks in the area. This formation is described as *'dark-grey to black, fine-grained, occasionally cherty, micritic limestones that weather paler, usually to pale grey'*.

According to the GSI online mapping database there are several bedrock structural faults located within the airport. Several north-south and east-west faults are in the western half of the airport with a southwest to northeast fault in the eastern portion of the airport.

GSI mapping shows some small pockets of bedrock outcrop within and surrounding Dublin Airport.

Bedrock geology for the site is presented in Figure 3-6.

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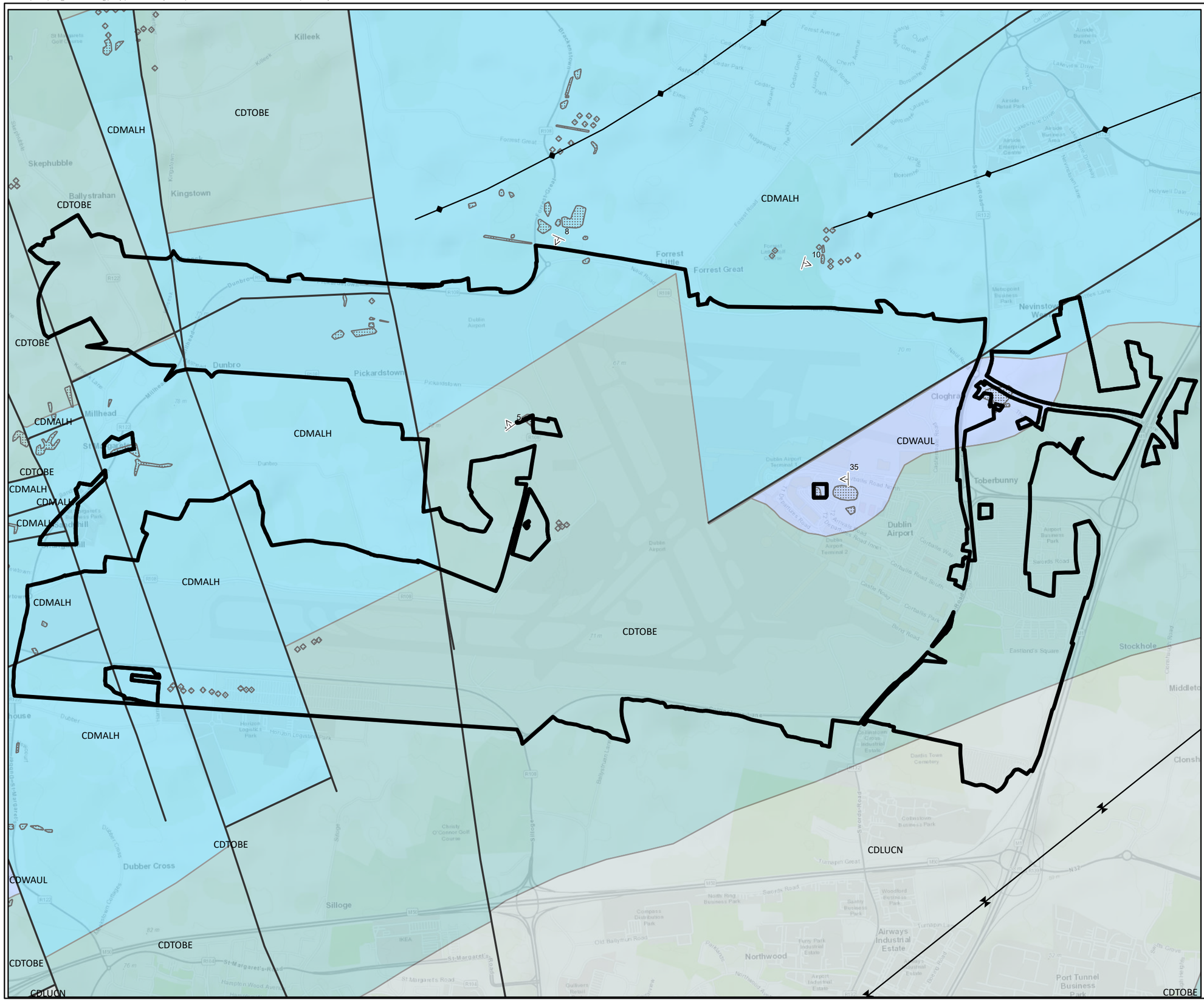

Legend

- Dublin Airport Boundary
- Strike and dip of bedding, right way up
- Anticlinal Axis
- Fault
- Synclinal Axis
- Bedrock Outcrop

Bedrock Geology

- Lucan Formation
- Malahide Formation
- Tober Colleen Formation
- Waulsortian Limestones

N W E S

0 0.5 1 2 Kilometers

TITLE: Bedrock Geology			
PROJECT: Environmental Monitoring Report			
FIGURE NO:	3-6		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	23/02/2024	**PAGE SIZE:**	A3

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3.4.2 Quaternary Geology

The soil type at the site and in the region is predominately classified by the GSI as being till derived from limestones with the predominant soil cover described as BminDW - deep well drained mineral (mainly basic) and BminPD - mineral poorly drained (mainly basic). Pockets of gravels derived from limestones and bedrock outcrop are present throughout the region, with alluvium present along the vicinity of rivers and streams.

Quaternary Geology for the site is presented in Figure 3-7.

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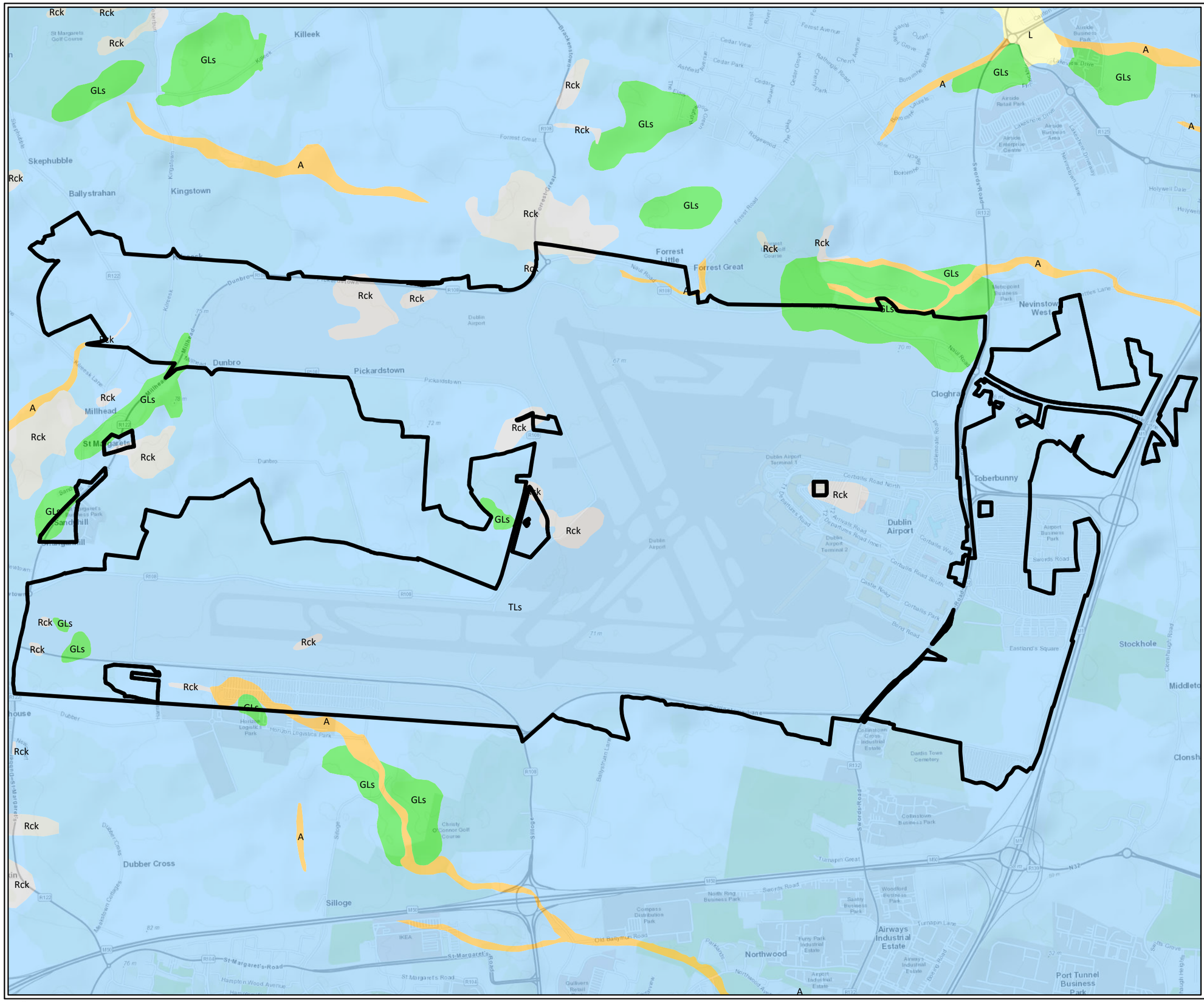

Legend

- Dublin Airport Boundary

Quaternary Sediments

- A, Alluvium
- GLs, Gravels derived from Limestones
- L, Lacustrine sediments
- Rck, Bedrock outcrop or subcrop
- TLs, Till derived from limestones

TITLE:	Quaternary Geology		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	3-7		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	23/02/2024	**PAGE SIZE:**	A3

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4. 2025 ENVIRONMENTAL MONITORING PROGRAMME AND RESULTS

4.1 Introduction

This section describes sampling methodologies that were followed during the environmental monitoring undertaken at the airport and its environs, generic assessment criteria and results for groundwater and surface water.

4.2 Groundwater Monitoring

In 2025, 26 No. groundwater monitoring wells and one groundwater supply well were monitored for PFAS. Groundwater monitoring was undertaken at the following locations:

- North Apron – 9 No. groundwater monitoring wells
- North Runway / APEC 5 – 10 No. groundwater monitoring wells
- Castlemoate House (Historic Unregulated Waste Disposal Site) – 7 No. groundwater monitoring wells
- Groundwater supply well (Gardener's Well) – 1 No. well

Gardener's Well is used by daa for landscaping. Water abstracted from the supply well is not used for human consumption.

Figure 4-1 shows the groundwater monitoring locations.

The sampling methodology and statistical analysis is outlined in Section 4.2.1 and the groundwater GAC is defined in Section 4.2.2.

A summary of the results is presented in Sections 4.2.3 to Section 4.2.6. Tabulated results are in Appendix 3, laboratory certificates are in Appendix 4 and trend charts are in Appendix 5.

World Topographic Map: Esri UK, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA
World Topographic Map: Esri, HERE, Garmin, FAO, USGS, NGA
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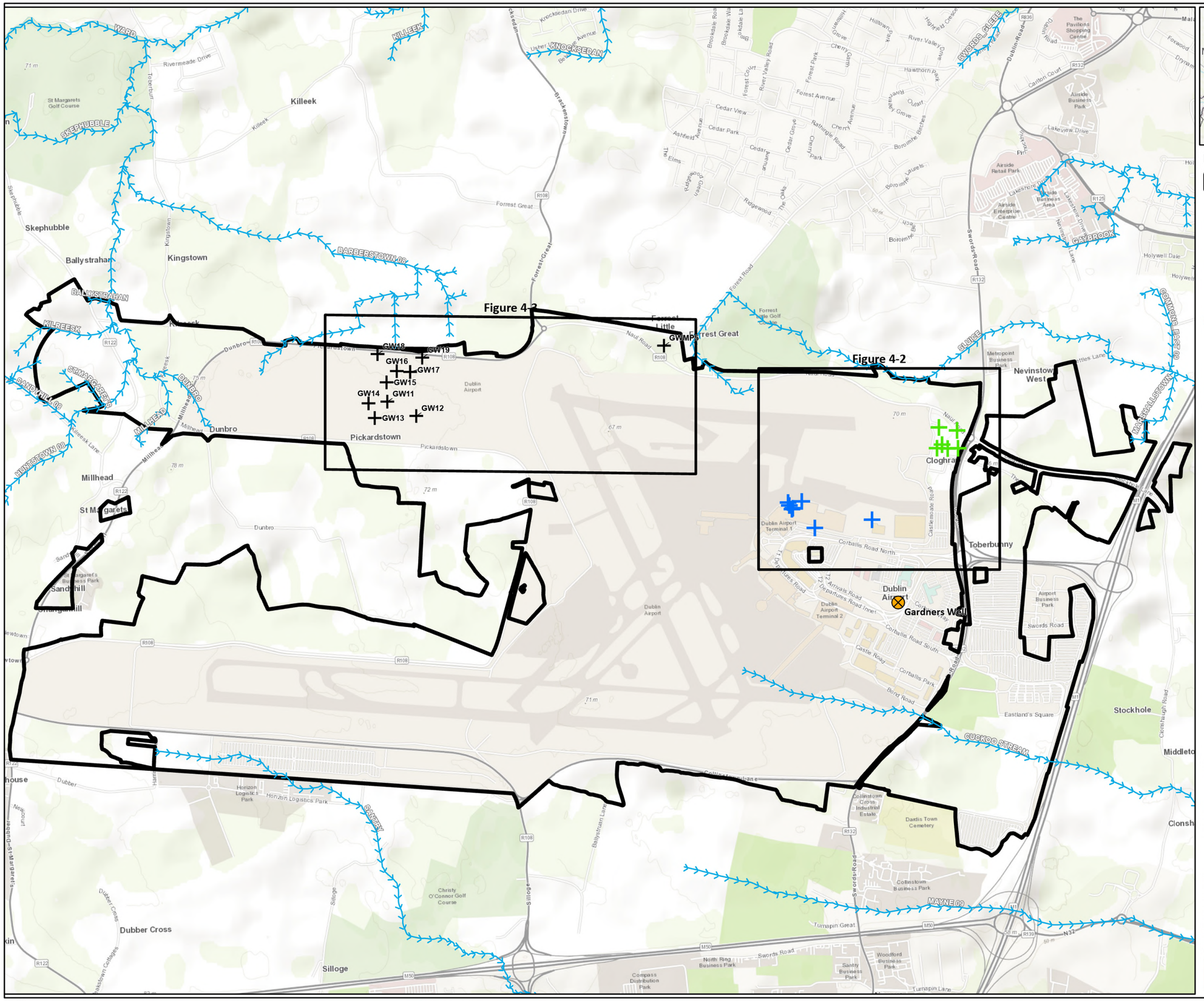

N W E S

0 0.5 1 2 Kilometers

TITLE:	Groundwater Monitoring Locations		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	4-1		
CLIENT:	daa		
SCALE:	1:20,000	**REVISION:**	0
DATE:	03/09/2025	**PAGE SIZE:**	A3

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4.2.1 Sampling Methodology and Statistical Analysis

4.2.1.1 Sampling Methodology

The groundwater sampling methodology is provided in Appendix 2. A summary is provided hereunder.

Dedicated bottleware supplied by the laboratory was used to take the groundwater samples. The monitoring methodology entailed the following:

- The depth of each well and depth to groundwater was determined using a dip-meter. At least 3 well volumes of groundwater were removed from each well prior to sampling. This is in accordance with standard practice (EPA, 2003)[17] and is conducted to remove any stagnant water in the well casing to ensure stable sampling conditions of the aquifer. This is referred to as purging.
- A Waterra pump consisting of a Waterra foot valve attached to the bottom end of Waterra tubing was used for sample collection. Using an oscillation movement the groundwater is slowly pumped from the well through a sampling tube and into a sampling vessel. Each monitoring location contains its own dedicated tubing and foot valves to avoid cross-contamination between locations.
- Duplicate samples were collected at each monitoring location as part of the quality control procedures for the period of March, May and September. In December, duplicate samples were collected for 10% of the total sampling locations as agreed with Fingal County Council and consistent with recognised environmental monitoring practices. Calculation of the Relative Percent Difference (RPD) between the sample and its duplicate to assess data precision is also in place. RPD between a sample and its duplicate was evaluated only where both results were equal to or greater than five times the laboratory LOD (≥ 5×LOD). In these cases, RPDs ≤ 30% were considered acceptable, while higher RPDs were interpreted in the context of PFAS ultra trace concentrations and natural environmental variability. Elevated RPDs did not preclude use of the data for interpretation. Where both results were below the reporting limit, results were treated as non-detect and no RPD was calculated. Where one result was detected and the corresponding duplicate was below the reporting limit, or where both results were detected but < 5× RL, RPD was not evaluated and the data were retained for qualitative interpretation only, as precision metrics are not considered meaningful at low PFAS concentrations.
- A trip blank and a field blank was included.
- The sampling containers were completely filled and then capped and properly stored (in a cooler box, <4ºC).

All groundwater samples collected as part of the monitoring programme were submitted to ALS Global (ALS), an ISO 17025:2017 approved laboratory. Samples were submitted via courier under Chain of Custody procedures and analysed for:

- PFAS under ALS Method No. TM434

FT carried out four rounds of groundwater monitoring between March and December 2025 as detailed in Table 4-2, Table 4-6 and Table 4-10.

[17] EPA. 2003. Landfill Manuals, Landfill Monitoring, 2nd Edition. Environmental Protection Agency, Johnston Castle, Wexford, Ireland

4.2.1.2 Statistical Analysis

Statistical analyses were undertaken using Python, including implementation of the Mann-Kendall trend test, Sen's slope estimation and Spearman's rank correlation analysis.

Analysis was carried out on all available data at each monitoring location between 2021 and 2025. The purpose of the analysis is to evaluate whether the changes observed in the groundwater monitoring results represent a consistent temporal trend (i.e. a clean pattern over time), rather than short term variability, and to provide an objective basis for interpreting the summary of results presented in Section 4.2.3 to Section 4.2.6. The Mann–Kendall method was applied to each monitoring well time series to assess whether concentrations show a consistent increase or decrease over time, regardless of whether the change is linear.

The Mann-Kendall test is a non-parametric trend test used to assess whether concentrations generally increase or decrease over time. It is well suited to environmental monitoring data because it does not assume a normal data distribution and can be applied where datasets include missing values or results below detection limits.

The output includes a p-value, which indicates how likely it is that an observed trend could occur by chance if no real trend is present. A trend is considered statistically significant where the p-value is less than or equal to 0.05, and not significant where the p-value is greater than 0.05.

Sen's slope was calculated for all monitoring locations to estimate the rate of change in concentrations over time. Where the Mann-Kendall test indicates a statistically significant trend, Sen's slope is used to quantify the magnitude of that trend. Sen's slope is a robust, non-parametric measure that represents the typical rate of change over time, based on the median of all pairwise changes in concentration.

For interpretation in this report, the sign of Sen's slope indicates the direction of change, with a positive value reflecting increasing concentrations and a negative value reflecting decreasing concentrations over time. The absolute value of Sen's slope represents the estimated rate of change per year. Where Sen's slope is close to zero, concentrations are interpreted as broadly stable over the period assessed, even where individual results vary between sampling rounds.

Spearman's rank correlation analysis was undertaken to assess whether groundwater Sum of 20 PFAS concentrations exhibited a monotonic relationship[18] with antecedent rainfall conditions[19]. Spearman's rank correlation is a non-parametric statistical technique that does not require normally distributed data and is therefore considered suitable for environmental monitoring datasets. A summary of the results is provided in Section 4.2.3 to Section 4.2.6.

Correlation coefficients range from -1 to +1, where values approaching +1 indicate a strong positive association, values approaching -1 indicate a strong negative association and values close to zero indicate little or no monotonic relationship.

Antecedent rainfall periods of 1, 3, 7, 14, 30, 60, 90 and 120 days were assessed to evaluate both short-term rainfall responses and longer-term recharge influences.

[18] A monotonic relationship is a consistent trend between two variables where they move in the same relative direction, though not always at a constant rate

[19] Dublin Airport Weather Station rainfall data sourced from: https://www.met.ie/climate/available-data/historical-data

Statistical significance was assessed using p-values, with $p < 0.05$ considered statistically significant. The analysis was used as a screening tool to assess whether rainfall may influence PFAS concentrations and whether a consistent rainfall-related response was evident across the groundwater monitoring network. Correlation coefficients and p-values are presented in Appendix 6.

4.2.2 Groundwater Generic Assessment Criteria (GAC)

The drinking water limit (100ng/L for Sum of 20 PFAS) is used as the groundwater GAC in this report. Further information is provided in Section 1.2.4.

When laboratory analyses did not detect PFAS above the Limit of Detection (LOD) these results were recorded as <LOD. For analytical and reporting purposes, any results reported as "<" symbol was assigned a value of zero. For example, a result of <0.65ng/L was recorded as 0ng/L.

4.2.3 North Apron

The North Apron groundwater sampling locations and associated groundwater bodies are in Table 4-1 and Figure 4-2.

Table 4-1: 2025 North Apron Groundwater Monitoring Locations

Monitoring Location	Ground Water Body (GWB)
GW001	Dublin
GW002D	
GW003D	
GW004	
GW005D	
GW007	
GW008	
GW014	Industrial Facility
GW015D	

World Hillshade: Esri, Intermap, NASA, NGA, USGS
World Topographic Map: Esri UK, Esri, HERE, Garmin, USGS, NGA
World Topographic Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
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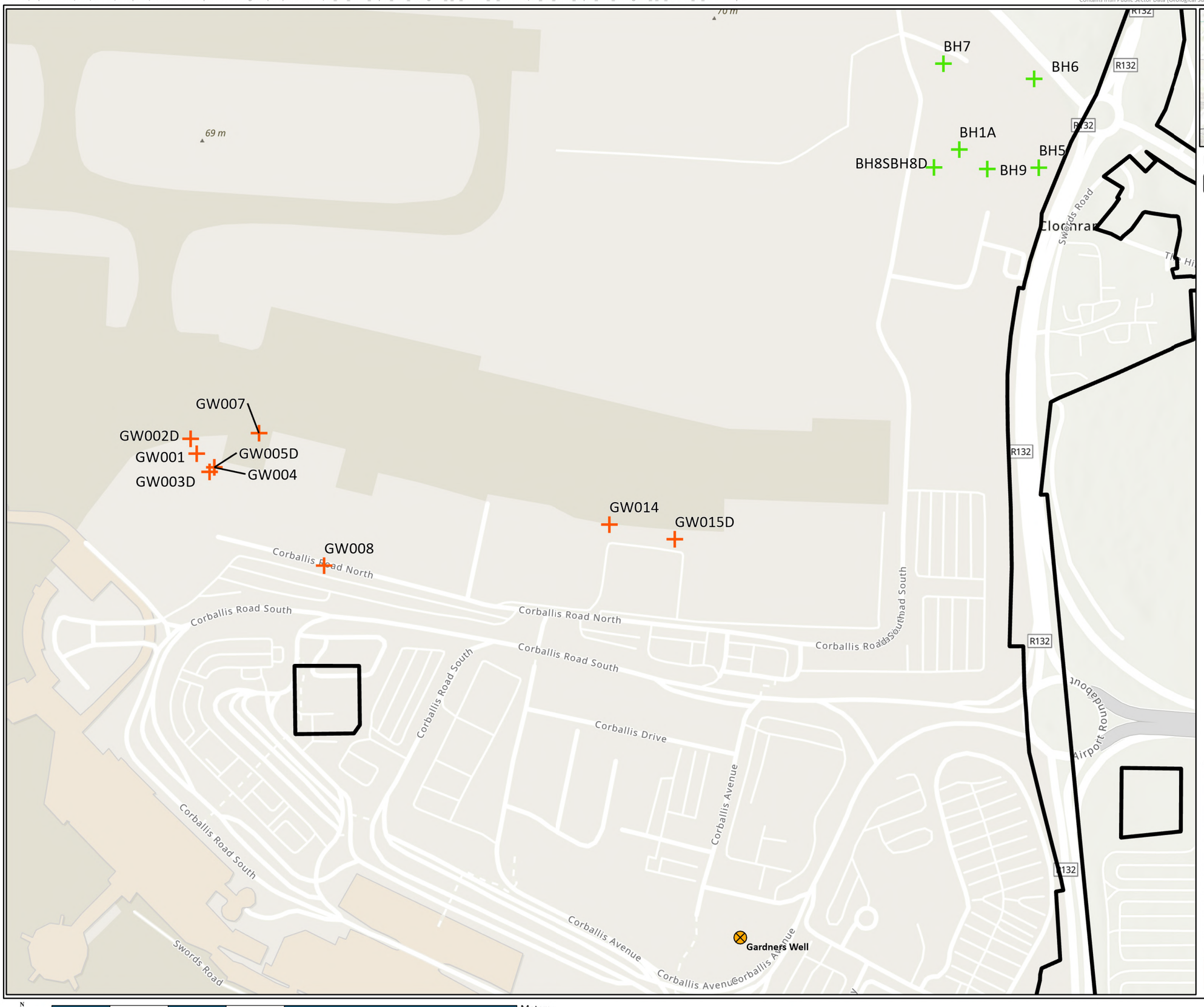

Legend

- Dublin Airport Boundary
- Castlemoate Groundwater Wells
- North Apron Groundwater Wells
- Groundwater Reservoir / Supply Well

0 125 250 500 Meters

TITLE: North Apron and Castlemoate House Groundwater Monitoring Locations			
PROJECT: Environmental Monitoring Report			
FIGURE NO:	4-2		
CLIENT:	daa		
SCALE:	1:4,000	**REVISION:**	0
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4.2.3.1 Groundwater Results

These groundwater monitoring locations were installed as part of groundwater monitoring requirements under IE Licence reg. no. P0480-02 issued by the EPA. The locations and summary of monitoring events are presented in Table 4-2.

Table 4-2: 2025 North Apron Groundwater Monitoring Events

ID	1st Round	2nd Round	3rd Round	4th Round
	04/03/2025	20/05/2025	04/09/2025 05/09/2025	10/12/2025
GW001	✓	✓	✓	✓
GW002D	✓	✓	✓	✓
GW003D	✓	✓	✓	✓
GW004	✓	✓	✓	✓
GW005D	✓	NS[1]	✓	✓
GW007	✓	✓	✓	✓
GW008	✓	✓	✓	✓
GW014	✓	✓	✓	✓
GW015D	✓	✓	✓	✓

Note: A tick denotes a sample was collected. NS denotes a sample could not be collected
[1] GW005 was obstructed and could not be accessed.

On 20 May 2025, GW005D could not be sampled as the location was inaccessible.

The depths to groundwater (metres below ground level) were recorded at all accessible monitoring locations between March and December 2025 as shown in Figure 4-3.

Table 4-3: 2025 Depth to Groundwater at the North Apron

Monitoring Location	Total Well Depth (m)	Depth to Groundwater - Metres Below Ground Level			
		04/03/2025	20/05/2025	04/09/2025 05/09/2025	10/12/2025
GW001	3.00	1.60	1.76	1.71	2.72
GW002D	20.00	10.20	10.31	10.6	9.64
GW003D	19.30	10.21	10.35	10.85	10.1
GW004	3.50	0.68	0.67	0.62	0.83
GW005D	22.00	10.15	ns	10.27	9.29
GW007	2.58	1.21	2.28	1.47	2.1
GW008	4.85	1.19	1.16	1.12	1.1
GW014	3.20	1.47	1.42	1.61	2.02
GW015D	21.40	9.26	9.48	10.12	10.13

Note: ns denotes a depth to groundwater measurement was not possible to be collected

The 2025 groundwater depth at the North Apron is illustrated in Figure 4-3.

No notable variation in groundwater levels was observed during the monitoring period at each monitoring location. Two groundwater zones are present within the North Apron: a shallow water-bearing zone within the overburden and a deeper aquifer within the upper bedrock, as indicated by the measured groundwater levels.

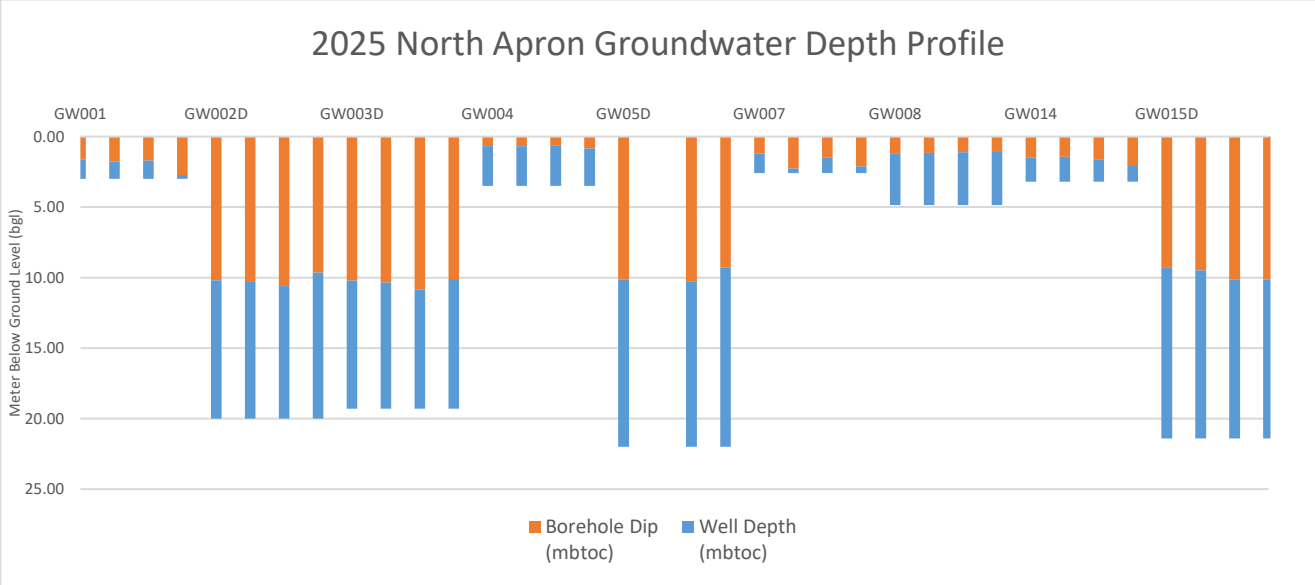

Figure 4-3: 2025 North Apron Groundwater Depth Profile

Table 4-4 presents a summary of the groundwater monitoring results for the North Apron.

Table 4-4: 2025 North Apron Groundwater Monitoring Summary Results

ID	No. of Samples	GAC Limit Value (ng/L)	Min Sum of 20 PFAS (ng/L)	Max Sum of 20 PFAS (ng/L)	Average Sum of 20 PFAS (ng/L)
GW001	7	100	309.64	594.66	457.10
GW002D	7		308.89	549.71	381.26
GW003D	7		0.00	112.60	20.84
GW004	7		42.78	103.75	65.98
GW005D	5		137.20	518.08	426.89
GW007	8		95.04	228.04	134.46
GW008	7		37.50	111.24	66.19
GW014	7		0.00	17.30	10.21
GW015D	7		466.30	1,427.50	821.62

Note: No. of Samples includes a sample and its duplicate. All results are reported in ng/L. Results in Green exceed the GAC (Sum of 20 PFAS) Limit Value[1].
[1] GAC (Sum of 20 PFAS) refers to the drinking water limit of 100ng/L (refer to Section 1.2.4).
PFAS results below LOD were assigned as 0ng/L for analytical and reporting purposes.

The average sum of 20 PFAS concentrations were below the GAC limit value in 4 No. monitoring wells (GW003D, GW004, GW008 and GW014).

Average Sum of 20 PFAS groundwater concentrations were elevated above the GAC in 5 No. monitoring wells (GW001, GW002D, GW005D, GW007, and GW015D).

Except for monitoring location GW014, all monitoring locations recorded Sum of 20 PFAS groundwater concentrations above the GAC, while GW004 is slightly above the GAC limit.

The monitoring location with the highest concentrations at the North Apron is GW015D. This is the most easterly existing monitoring location approximately 500m east and downgradient (based on available information) of GW001, GW002D and GW005D. This indicates there are two potential sources of PFAS within the North Apron; the Former Fire Station and in the vicinity of GW015D.

Within the western area of the North Apron, locations GW001, GW002D, GW005D and GW007 recorded elevated Sum of 20 PFAS concentrations. Monitoring locations GW001 and GW002D are closest to the Former Fire Station which based on available information was a source of PFAS. GW001 is in overburden and GW002D is in bedrock. Sum of 20 PFAS concentrations in groundwater decrease with distance from the Former Fire Station.

The results indicate that PFAS has mobilised but owing to the low permeability overburden and poorly productive bedrock, the extent of the groundwater plumes at the Former Fire Station and in the eastern area of the North Apron are localised. The local extent of the plumes has not been fully delineated.

Manholes at the North Apron were previously sampled (MH1, MH2, MH3 and MH4), with the results presented in the 2021-2023 monitoring report. In 2021, a CCTV survey was conducted of the storm and foul sewer lines at Hangar 2 and Hangar 3 at the North Apron. The survey identified ingress of groundwater through pipe defects and unsealed joints. This ingress potentially includes groundwater from beneath the Former Fire Station. An examination of Sum of 20 PFAS groundwater concentrations in manhole locations MH2 and MH4 (closest manholes to the Former Fire Station) identified similar or higher values reported in GW001 and GW002D. This indicates groundwater ingress at the Former Fire Station is entering the storm and sewer lines and is conveyed through this preferential pathway as surface water.

4.2.3.2 Groundwater Trends

Trends of Sum of 20 PFAS concentrations between 2021 and 2025 are presented in Appendix 5.

The Mann Kendall (MK) and Sen slope outputs indicate a statistically significant decreasing trend at GW004 (negative Sen slope with MK $p < 0.001$) and a statistically significant increasing trend at GW005D (positive Sen slope with MK $p = 0.042$). For the seven remaining wells, no statistically significant trends (MK $p > 0.05$) were identified.

Spearman's rank correlation analysis was undertaken to assess potential relationships between antecedent rainfall and Sum of 20 PFAS concentrations. While statistically significant correlations were identified at some monitoring locations within the North Apron groundwater monitoring network (GW001, GW003D and GW014), the direction (positive or negative association) and timing (antecedent rainfall periods ranging from 1 to 120 days) of these relationships varied between locations and no consistent rainfall-driven response was identified across the area.

4.2.4 North Runway/APEC 5

A network of groundwater monitoring locations was installed as part of the North Runway development. Residual PFAS in bedrock and soil remains as it was not removed during the construction phase. Monitoring wells (GW11 - GW19) are installed within bedrock to confirm the extent of the PFAS plume and groundwater flow direction. Two other monitoring wells, GWMP 4 and GWMP 5 were installed to monitor groundwater quality downgradient of emplaced APEC 5 material. During 2023, GWMP4 was decommissioned. The groundwater sampling locations and associated groundwater body are in Table 4-5 and Figure 4-4.

Table 4-5: 2025 North Runway/APEC 5 Groundwater Monitoring Locations

Monitoring Location	Ground Water Body (GWB)
GWMP 5	Swords
GW11	
GW12	
GW13	
GW14	
GW15	
GW16	
GW17	
GW18	
GW19	

World Topographic Map: Esri, HERE, Garmin, FAO, USGS, NGA
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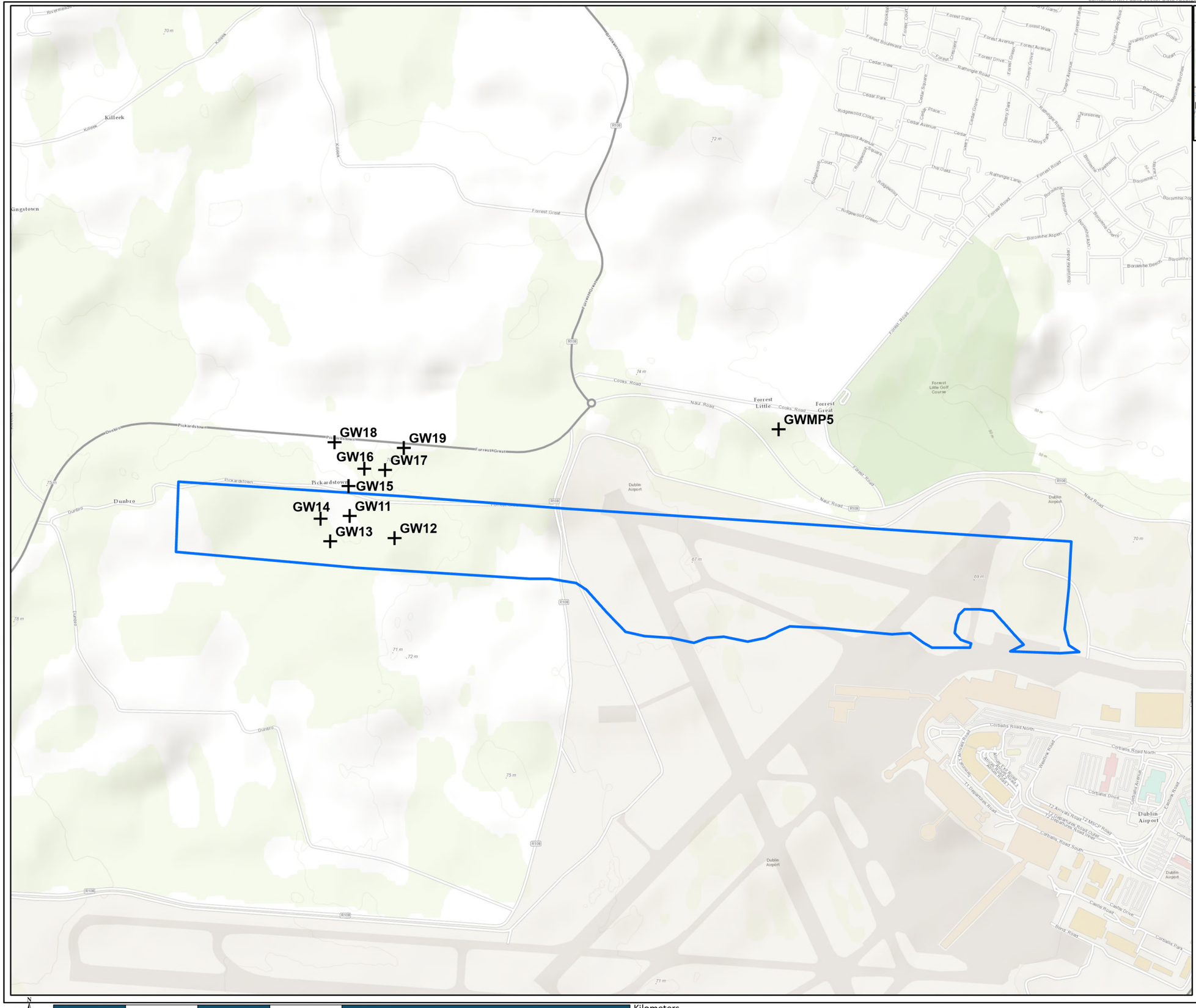

Legend

- North Runway
- Groundwater Monitoring Locations

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DATE:	09/09/2025	**PAGE SIZE:**	A3

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4.2.4.1 *Groundwater Results*

The locations and summary of monitoring events undertaken by FT during the reporting period are presented in Table 4-6. The depths to groundwater (metres below ground level) were recorded at 10 No. monitoring well locations at the North Runway on four occasions between March and December 2025 as outlined in Table 4-7.

Table 4-6: 2025 North Runway Groundwater Monitoring Events

ID	1st Round	2nd Round	3rd Round	4th Round
	05/03/2025	21/05/2025	04/09/2025	15/12/2025
GWMP 5	✓	NS[1]	✓	✓
GW11	✓	✓	✓	✓
GW12	✓	✓	✓	✓
GW13	✓	✓	✓	✓
GW14	✓	✓	✓	✓
GW15	✓	✓	✓	✓
GW16	✓	✓	✓	✓
GW17	✓	✓	✓	✓
GW18	✓	✓	✓	✓
GW19	✓	✓	✓	✓

Note: A tick denotes a sample was collected. NS denotes no sample was collected.
[1] GWMP5 was obstructed and could not be accessed.

Table 4-7: 2025 Depth to Groundwater at the North Runway

Monitoring Location	Total Well Depth (m)	Depth to Groundwater - Metres Below Ground Level			
		05/03/2025	21/05/2025	04/09/2025	15/12/2025
GWMP5	19.50	2.31	2.34[1]	2.21	1.85
GW11	10.00	1.4	1.83	1.83	0
GW12	10.00	2.63	2.78	2.72	2.57
GW13	10.00	1.78	1.95	2.09	1.3
GW14	10.00	0.87	1.02	1.18	0.43
GW15	10.00	1.79	2.05	2.26	1.35
GW16	10.00	1.36	1.47	1.81	1.14
GW17	10.00	1.46	1.6	1.73	1.1
GW18	10.00	1.48	1.65	1.91	1.34
GW19	10.00	1.13	1.2	1.57	0.86

[1] Dip monitoring completed; sampling could not be undertaken due to obstruction.

A bar graph illustrating the groundwater depth at the North Runway between March to December 2025 is shown in Figure 4-5.

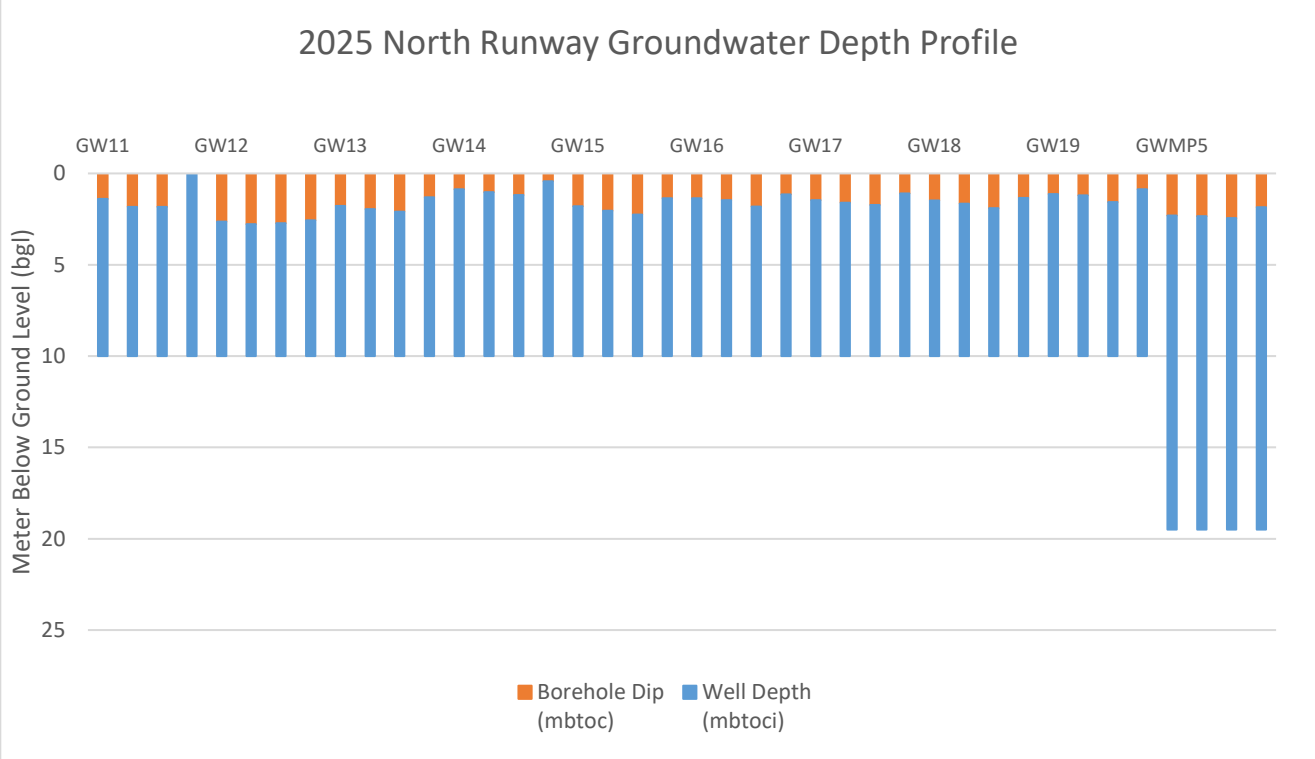

Figure 4-5: 2025 North Runway Groundwater Depth Profile

Table 4-8 presents a summary of the groundwater monitoring results for the North Runway.

Table 4-8: 2025 North Runway Groundwater Monitoring Summary Results

ID	No. of Samples	GAC (Sum of 20 PFAS)	Min Sum of 20 PFAS	Max Sum of 20 PFAS	Average Sum of 20 PFAS
GWMP 5	6	100	2.63	26.29	12.75
GW11	7		1,185.77	5,340.80	2,649.95
GW12	7		70.60	154.52	93.98
GW13	7		0.00	12.30	1.76
GW14	7		573.40	918.44	730.74
GW15	7		17.39	49.71	34.37
GW16	7		125.54	311.14	204.75
GW17	7		0.00	52.27	18.20
GW18	7		0.00	26.58	7.44
GW19	7		0.00	42.40	10.26

Note: No. of Samples includes a sample and its duplicate. All results are reported in ng/L. Results in Green exceed the GAC ((Sum of 20 PFAS) Limit Value[1].
[1] GAC (Sum of 20 PFAS) refers to the drinking water limit of 100ng/L (refer to Section 1.2.4).
PFAS results below LOD were assigned as 0ng/L for analytical and reporting purposes.

The average sum of 20 PFAS concentrations were below the GAC limit value in 7 No. monitoring wells (GWMP5, GW12, GW13, GW15, GW17, GW18 and GW19).

Average Sum of 20 PFAS groundwater concentrations were elevated above the GAC in 3 No. monitoring wells (GW11, GW14 and GW16).

Most wells at the North Runway record average concentrations below the GAC, however, GW11, GW14 and GW16 show sustained elevated averages above the GAC. GW12 is close to the GAC on average and has recorded individual results above the GAC during the monitoring period, despite the average remaining below the threshold.

4.2.4.2 Groundwater Trends

Trends of Sum of 20 PFAS concentrations between 2021 and 2025 are presented in Appendix 5.

Mann-Kendall outputs indicate no statistically significant trends within the North Runway dataset.

Spearman's rank correlation analysis was undertaken to assess potential relationships between antecedent rainfall and Sum of 20 PFAS concentrations. While statistically significant correlations were identified at a limited number of monitoring locations within the North Runway/APEC 5 groundwater monitoring network (GW17 and GW18), the direction (positive or negative association) and timing (antecedent rainfall periods ranging from 1 to 120 days) of these relationships varied between locations and no consistent rainfall-driven response was identified across the area.

4.2.5 Castlemoate House (Historic Unregulated Waste Disposal Site)

Castlemoate House groundwater sampling locations and associated groundwater body are outlined in Table 4-9.

Table 4-9: 2025 Castlemoate House Groundwater Monitoring Locations

Monitoring Location	Ground Water Body (GWB)
BH1A	Industrial Facility
BH5	
BH6	
BH7	
BH8D	
BH8S	
BH9	

4.2.5.1 Groundwater Results

9 No. groundwater monitoring boreholes were installed at Castlemoate House as part of a groundwater investigation at the historic unregulated waste disposal site.

In 2025 FT completed four rounds of groundwater monitoring at seven of the nine monitoring boreholes. The wells monitored were selected from the outer extent of the unregulated waste disposal site to determine if PFAS was entering or exiting the unregulated waste disposal site in the same extent as in the 2024 monitoring.

The locations and summary of monitoring events undertaken by FT during the reporting period are presented in Table 4-10.

Table 4-10: 2025 Castlemoate House Groundwater Monitoring Events

ID	1st Round	2nd Round	3rd Round	4th Round
	05/03/2025	21/05/2025	08/09/2025	11/12/2025
BH1A	✓	✓	✓	✓
BH5	✓	✓	✓	✓
BH6	✓	✓	✓	✓
BH7	✓	✓	✓	✓
BH8D[1]	✓	✓	✓	✓
BH8S[1]	✓	✓	✓	✓
BH9	✓	✓	✓	✓

Note: A tick denotes a sample was collected.
[1] BH8 is a dual installation borehole (nested) installed in January 2018 with a shallow and deep pipe. Although BH8D is a deep well, the installation is in overburden.

The depths to water were recorded at all 7 No. monitoring wells within the Castlemoate House area on four occasions (Table 4-11):

Table 4-11: 2025 Depth to Groundwater at Castlemoate House

Monitoring Location	Total Well Depth (m)	Depth to Groundwater - Metres Below Ground Level			
		05/03/2025	21/05/2025	08/09/2025	11/12/2025
BH1A	3.01	0.85	1.39	1.80	0.49
BH5	12.21	4.13	4.39	5.60	4.41
BH6	6.17	1.38	1.50	1.93	1.13
BH7	14.03	1.90	2.05	2.25	1.70
BH8D[1]	15.02	2.45	2.96	1.91	0.86
BH8S[1]	3.52	1.35	1.68	1.93	0.85
BH9	20.00	10.63	12.35	10.60	9.49

[1] BH8 is a dual installation borehole installed in January 2018 with a shallow and deep pipe. Although BH8D is a deep well, the installation is in overburden.

Groundwater depths at Castlemoate House are shown in Figure 4-6.

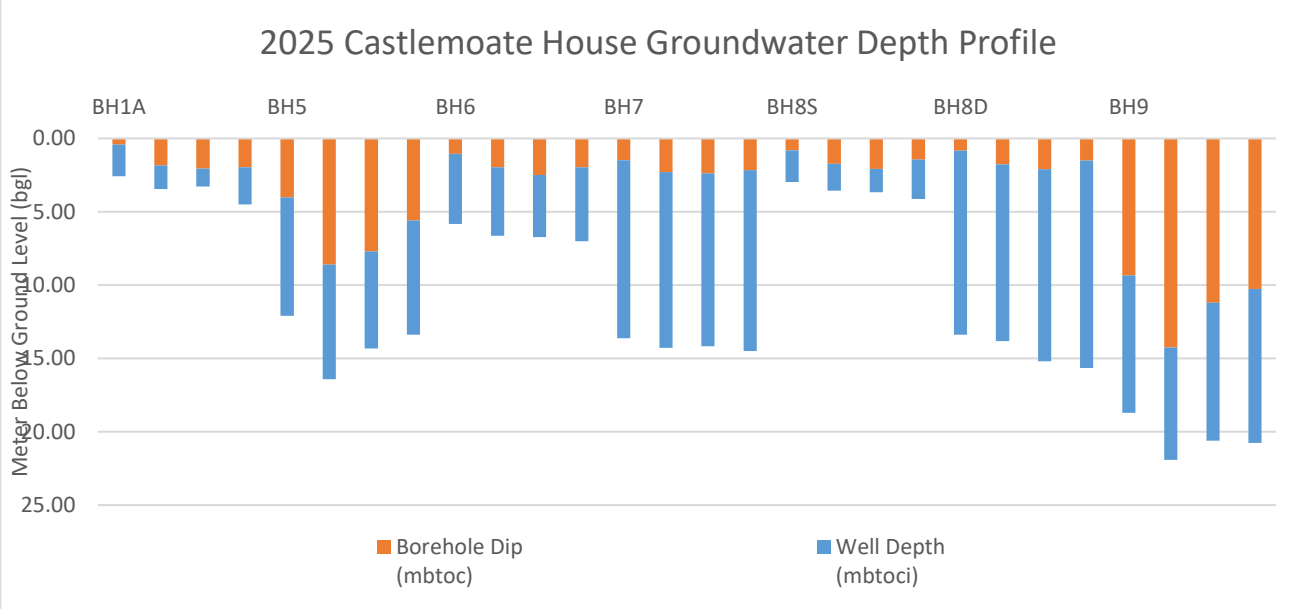

Figure 4-6: 2025 Castlemoate House Groundwater Level Depth Profile

A summary of results is presented in Table 4-12.

Table 4-12: 2025 Castlemoate House Groundwater Monitoring Summary Results

ID	No. of Samples	GAC (Sum of 20 PFAS)	Min Sum of 20 PFAS	Max Sum of 20 PFAS	Average Sum of 20 PFAS
BH1A	7	100	0.00	39.22	13.99
BH5	8		0.00	9.23	3.92
BH6	7		0.00	0.00	0.00
BH7	7		16.30	79.40	48.72
BH8D	7		0.00	97.10	24.16
BH8S	7		0.00	28.67	10.65
BH9	7		0.00	0.00	0.00

Note: No. of Samples includes a sample and its duplicate. All results are reported in ng/L. Results in Green exceed the GAC (Sum of 20 PFAS) Limit Value[1].
[1] GAC (Sum of 20 PFAS) refers to the drinking water limit of 100ng/L (refer to Section 1.2.4).
PFAS results below LOD were assigned as 0ng/L for analytical and reporting purposes.

During the 2025 monitoring period, the Sum of 20 PFAS concentrations remained below the GAC at all monitoring locations.

The average Sum of 20 PFAS concentrations at each location were also below the GAC.

This continued pattern of low-level detections is consistent with the historic unregulated waste disposal activities previously identified at Castlemoate House, which are considered the likely source of PFAS in groundwater. PFAS concentrations across the site remain low and stable, with no exceedances recorded during the 2025 monitoring events.

4.2.5.2 Groundwater Trends

The Mann Kendall (MK) and Sen slope outputs indicate a statistically significant increasing trend at BH7 (positive Sen slope with MK p = 0.031). For the remaining locations, Sen slope directions are small and Mann Kendall p-values exceed 0.05, indicating no statistically significant monotonic trends.

Spearman's rank correlation analysis was undertaken to assess potential relationships between antecedent rainfall and Sum of 20 PFAS concentrations. While statistically significant correlations were identified at some monitoring locations within the Castlemoate House groundwater monitoring network (BH6, BH7 and BH9), the direction (positive or negative association) and timing (antecedent rainfall periods ranging from 1 to 120 days) of these relationships varied between locations and no consistent rainfall-driven response was identified across the area.

4.2.6 Water Supply Well

The Water Supply Well groundwater sampling location and associated groundwater body is in Table 4-13.

Table 4-13: 2025 Water Supply Well Location

Monitoring Location	Ground Water Body (GWB)
Gardeners Well	Industrial Facility

4.2.6.1 Groundwater Results

1 No. water supply well is used for the abstraction of groundwater for landscaping. The water supply well was monitored from March to December 2025 as shown Table 4-14.

Table 4-14: 2025 Water Supply Well Sampling Events

ID	1st Round	2nd Round	3rd Round	4th Round
	04/03/2025	22/05/2025	02/09/2025	10/12/2025
Gardener's Well	✓	✓	✓	✓

Note: A tick denotes a sample was collected.

A summary of results is presented in Table 4-15.

Table 4-15: 2025 Water Supply Well Monitoring Summary Results

ID	No. of Samples	GAC (Sum of 20 PFAS)	Min Sum of 20 PFAS	Max Sum of 20 PFAS	Average Sum of 20 PFAS
Gardeners Well	7	100	0.00	0.00	0.00

Note: No. of Samples includes a sample and its duplicate. All results are reported in ng/L.
[1] GAC (Sum of 20 PFAS) refers to the drinking water limit of 100ng/L (refer to Section 1.2.4).
PFAS results below LOD were assigned as 0ng/L for analytical and reporting purposes.

Sum of 20 PFAS concentrations in 2025 at all samples at Gardener's Well were detected below the laboratory Limit of Detection (LOD).

4.2.6.2 Groundwater Trends

Trends of Sum of 20 PFAS concentrations between 2021 and 2025 are presented in Appendix 5.

Trend analysis no statistically significant monotonic trend was identified (Mann-Kendall p = 0.740).

Spearman's rank correlation analysis was undertaken to assess potential relationships between antecedent rainfall and Sum of 20 PFAS concentrations. Statistically significant positive associations between antecedent rainfall and Sum of 20 PFAS concentrations were identified at Gardener's Well. However, as Gardener's Well represents a single monitoring location, the results do not indicate a broader rainfall-driven response within the groundwater monitoring network.

4.3 Surface Water Monitoring

As part of the surface water monitoring programme conducted between March and December 2025, samples were collected from 24 No. landside locations and 12 No. airside locations. The landside locations are all situated downstream of the boundary of the airport and in all orientations (i.e., north, east, south, west) surrounding the airport. The monitoring locations are in Figure 4-7 and Figure 4-8.

The sampling methodology and statistical analysis is outlined in Section 4.3.1 and the surface water GAC is defined in Section 4.3.2.

A summary of the results is presented in Sections 4.3.3 to Section 4.3.5. A summary of EPA monitoring is included in Section 4.3.6. Tabulated results are in Appendix 7, laboratory certificates are in Appendix 8 and trend charts are in Appendix 9.

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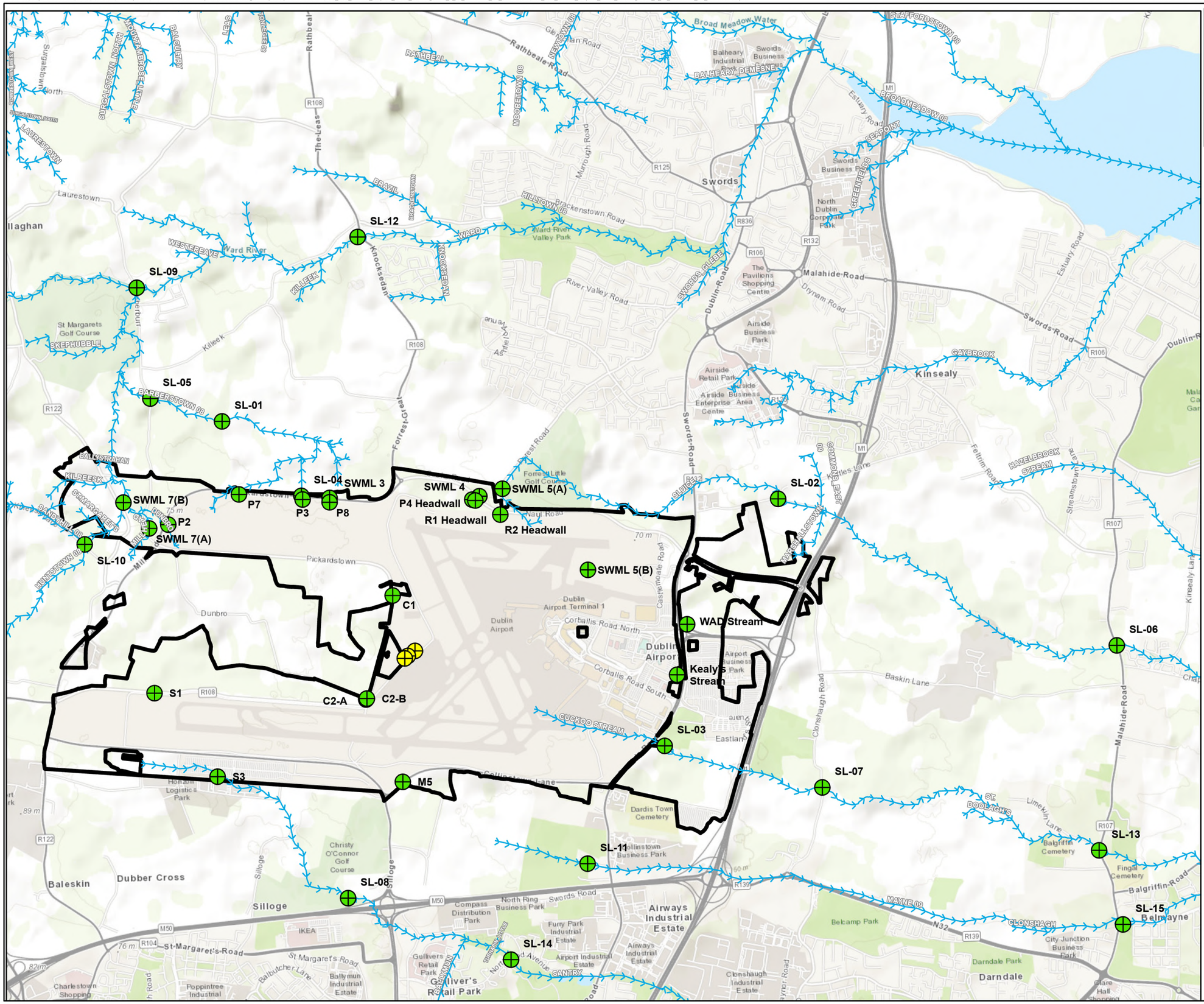

Legend

- Dublin Airport Boundary
- Current Firestation Surface Water Locations
- Surface Water Monitoring Locations
- Rivers

0 0.5 1 2 Kilometers

TITLE:	Surface Water Monitoring Locations		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	4-7		
CLIENT:	daa		
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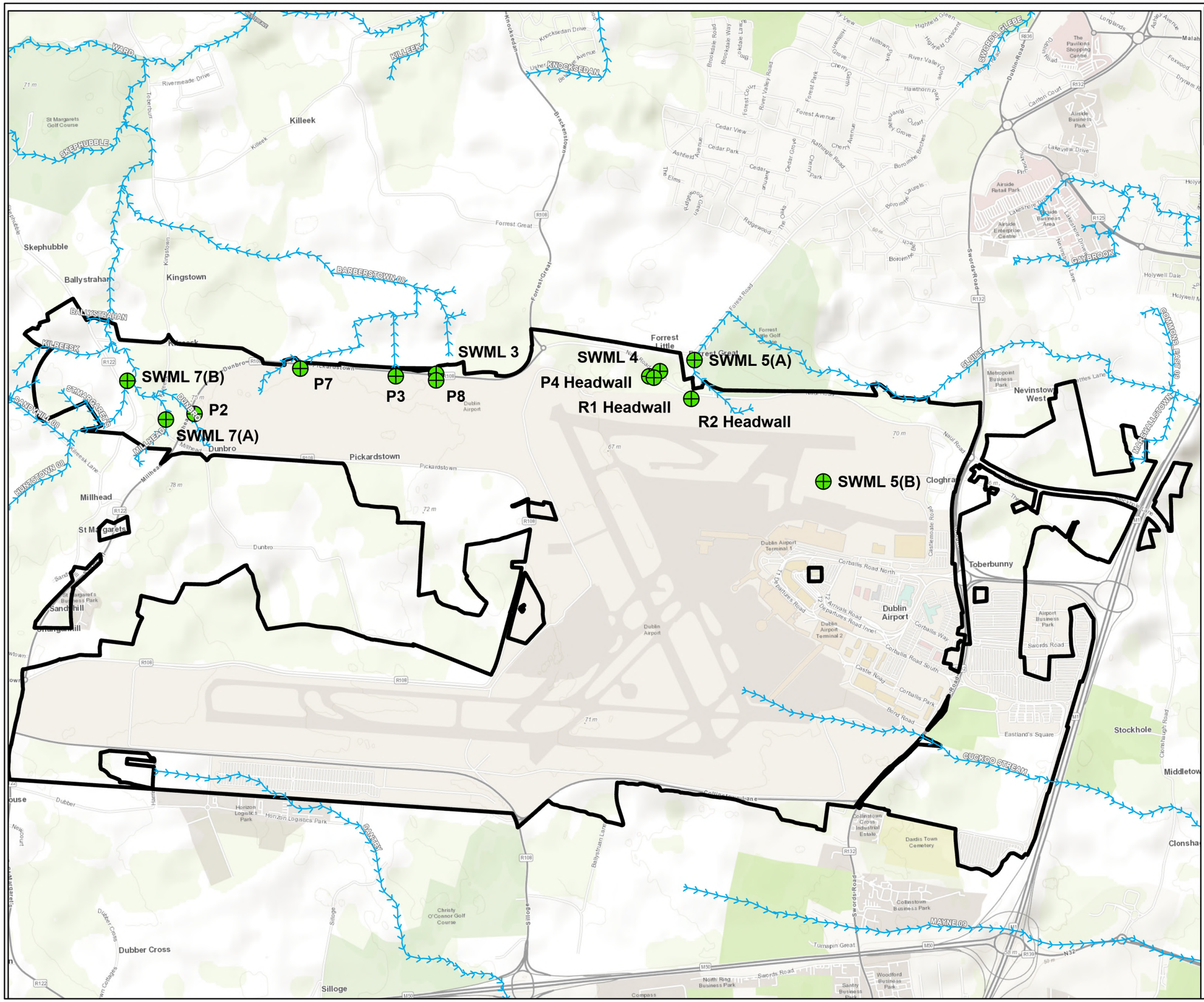

Legend

- Dublin Airport Boundary
- Rivers
- Surface Water Monitoring Locations

TITLE: North of North Apron Surface Water Monitoring Locations			
PROJECT: Environmental Monitoring Report			
FIGURE NO:	4-8		
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4.3.1 Sampling Methodology & Statistical Analysis

4.3.1.1 Sampling Methodology

The sampling methodology is provided in Appendix 2. A summary is provided hereunder.

Dedicated bottleware supplied by the laboratory was used for the surface water samples. The monitoring methodology entailed the following:

- A surface water grab sampler was used to acquire samples safely from the surface water monitoring locations.
- To ensure quality control, all samples were stored and shipped in cooler boxes (<4ºC). All samples were accompanied by a chain-of-custody form on-site for same day delivery to laboratory. The procedure was repeated at all surface water monitoring locations, using new sampling containers.
- Duplicate samples were collected at each monitoring location as part of the quality control procedures for the period of March, May and September. In December, duplicate samples were collected for 10% of the total sampling locations as agreed with Fingal County Council and consistent with recognised environmental monitoring practices. Calculation of the Relative Percent Difference (RPD) between the sample and its duplicate to assess data precision is also in place. RPD between a sample and its duplicate was evaluated only where both results were equal to or greater than five times the laboratory LOD (≥ 5×LOD). In these cases, RPDs ≤ 30% were considered acceptable, while higher RPDs were interpreted in the context of PFAS ultra trace concentrations and natural environmental variability. Elevated RPDs did not preclude use of the data for interpretation. Where both results were below the reporting limit, results were treated as non-detect and no RPD was calculated. Where one result was detected and the corresponding duplicate was below the reporting limit, or where both results were detected but < 5× RL, RPD was not evaluated and the data were retained for qualitative interpretation only, as precision metrics are not considered meaningful at low PFAS concentrations. A trip blank and a field blank was included.

All surface water samples collected as part of the monitoring programme were submitted to ALS, an ISO 17025:2017 approved laboratory. Samples were submitted via courier under Chain of Custody procedures and analysed for:

- PFAS under ALS Method No. TM434

4.3.1.2 Statistical Analysis

A statistical analysis was undertaken to assess the observed changes in surface water monitoring results, with the data processed and presented using the same methodology as that applied to the groundwater data, including Mann-Kendall trend analysis, Sen's slope estimation and Spearman's rank correlation analysis. For the assessment of potential rainfall influences, antecedent rainfall periods of 1, 3, 7, 14 and 30 days were evaluated for surface water locations, reflecting the shorter hydrological response times typically associated with surface water systems. Correlation coefficients and p-values are presented in Appendix 10.

4.3.2 Surface Water Generic Assessment Criteria (GAC)

The Water Framework Directive (WFD) (Directive 2000/60/EC) as amended by Directive 2013/39/EC and the European Union Environmental Objectives (Surface Waters) Regulations (S.I. No. 77, as amended) include limits for PFOS in surface water.

PFOS is one type of PFAS. PFOS is currently the only regulated PFAS in surface water in Ireland.

The limits referred to as Environmental Quality Standards (EQS) are set for water to meet a 'Good' status under the WFD. In this report, the surface water EQS is used as the GAC:

- 0.65ng/L PFOS Annual Average
- 36,000ng/L PFOS MAC (maximum admissible concentration)

Further information is provided in Section 1.2.5.

When laboratory analyses did not detect PFAS above the Limit of Detection (LOD) these results were recorded as <LOD. For analytical and reporting purposes, any results reported as "<" symbol was assigned a value of zero. For example, a result of <0.65ng/L was recorded as 0ng/L.

4.3.3 Landside

Landside surface water sampling locations and associated surface water bodies and catchments are outlined in Table 4-16.

Table 4-16: 2025 Landside Surface Water Monitoring Locations

ID	Surface Water Body	Surface Water Catchment	Location
SL1 (also known as 'Proposed SWML 8')	Barberstown 08	Ward_030	Landside
SL2	Sluice	Mayne_010	
SL3	Cuckoo Stream	Mayne_010	
SL4 (also known as 'SWML 2')	Ward_030	Ward_030	
SL5	Ward_030	Ward_030	
SL6	Sluice	Mayne_010	
SL7	Cuckoo Stream	Mayne_010	
SL8	Santry	Mayne_010	
SL9	Westereave	Ward_030	
SL10	Sandyhill 08	Ward_030	
SL11	Mayne 09	Mayne_010	
SL12	Ward	Ward_030	
SL13	Cuckoo Stream	Mayne_010	
SL14	Santry	Mayne_010	

ID	Surface Water Body	Surface Water Catchment	Location
SL15	Mayne 09	Mayne_010	
C1	Drainage Channel	Sluice_010	
C-2A	Manhole	Mayne_010	
C-2B	Manhole	Mayne_010	
Kealy's Stream	Drainage Channel	Sluice_010	
M5	Drainage Channel	Mayne_010	
S1	Drainage Channel	Santry_010	
S3	Santry	Santry_010	
WAD Stream	Drainage Channel	Sluice_010	
M1	Manhole	Mayne_010	

4.3.3.1 Surface Water Results

2025 Landside surface water monitoring completed during the reporting period is outlined in Table 4-17.

Table 4-17: 2025 Landside Surface Water Monitoring Events

ID	1st Round	2nd Round	3rd Round	4th Round
	03-05/03/2025	19-22/05/2025	02/09/2025	09-15/12/2025
SL1	✓	✓	✓	✓
SL2	✓	✓	✓	✓
SL3	✓	✓	✓	✓
SL4	✓	✓	✓	✓
SL5	✓	✓	✓	✓
SL6	✓	✓	✓	✓
SL7	✓	✓	✓	✓
SL8	✓	✓	✓	✓
SL9	✓	✓	✓	✓
SL10	✓	✓	✓	✓
SL11	✓	✓	✓	✓
SL12	✓	✓	✓	✓

ID	1st Round	2nd Round	3rd Round	4th Round
	03-05/03/2025	19-22/05/2025	02/09/2025	09-15/12/2025
SL13	✓	✓	✓	✓
SL14	✓	✓	✓	✓
SL15	✓	✓	✓	✓
C1	✓	✓	✓	✓
C-2A	✓	NS	NS	✓
C-2B	✓	NS	NS	✓
Kealy's Stream	✓	✓	✓	✓
M5	✓	✓	✓	✓
S1	✓	✓	NS	✓
S3	✓	✓	✓	✓
WAD Stream	✓	✓	✓	✓
M1	✓	NS	NS	✓

Note: A tick denotes a sample was collected. NS denotes no sample was collected as the surface water monitoring location was dry.

A summary of results is presented in Table 4-18.

Table 4-18: 2025 Landside Surface Water Monitoring Results

ID	No. of Samples	GAC Limit Value (ng/L)	Min Total PFOS (ng/L)	Max Total PFOS (ng/L)	Average Total PFOS (ng/L)
SL1	7	0.65 (Annual Average)	0.00	1.92	0.65
SL2	7		4.03	9.15	5.64
SL3	7		3.47	15.60	8.48
SL4	7		0.00	3.82	1.81
SL5	7		0.00	1.80	0.60
SL6	8		0.00	7.66	3.53
SL7	7		2.85	12.00	5.06
SL8	7		0.00	0.00	0.00
SL9	7		0.00	0.00	0.00
SL10	7		0.00	0.00	0.00

ID	No. of Samples	GAC Limit Value (ng/L)	Min Total PFOS (ng/L)	Max Total PFOS (ng/L)	Average Total PFOS (ng/L)
SL11	7		0.00	6.62	3.13
SL12	7		0.00	0.69	0.10
SL13	7		2.42	8.32	4.57
SL14	7		0.00	1.84	0.36
SL15	7		0.00	2.24	1.64
C1	7		0.00	0.00	0.00
C-2A	3		0.00	2.20	0.98
C-2B	3		1.55	1.76	1.66
Kealy's Stream	7		3.90	36.40	13.70
M5	7		0.00	0.00	0.00
S1	5		0.00	0.00	0.00
S3	6		0.00	0.00	0.00
WAD Stream	7		1.32	3.60	2.89
M1	3		0.00	1.06	0.35

Note: No. of Samples includes a sample and its duplicate. All results are reported in ng/L. Results in Green exceed the GAC (PFOS) Limit Value[1].
[1] GAC (PFOS) refers to the AA EQS Limit Value of 0.65ng/L is based on the annual average PFOS detected at a given location (refer to Section 1.2.5).
PFAS results below LOD were assigned as 0ng/L for analytical and reporting purposes.

All surface water monitoring results reported over the 2025 monitoring period were below the 36,000ng/L PFOS MAC defined in the S.I. No. 77/2019 - European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019.

PFOS was detected in most of the samples collected over the 2025 monitoring period. Exceptions were SL8, SL9, SL10, C1, M5, S1 and S3 that reported concentrations of PFOS below the laboratory limit of detection for all monitoring events during the reporting period.

Average Total PFOS concentrations in eleven locations were below 0.65ng/L. Twelve locations had average Total PFOS above 0.65 ng/L, with the most elevated results observed at Kealy's Stream (average 13.7ng/L with a maximum of 36.4ng/L). Many locations showed persistent exceedance behaviour with minimum values above the GAC (SL2, SL3, SL7, SL13, C-2B, Kealy's Stream and WAD Stream), while several other locations exceeded on average despite occasional low or non-detect results (SL4, SL6, SL11, SL15 and C-2A).

4.3.3.2 Surface Water Trends

Three locations show statistically significant decreasing trends, namely SL6 (Sen slope -1.856ng/L/yr; p = 0.002), SL7 (Sen slope -2.094ng/L/yr; p = 0.017) and SL13 (Sen slope -1.847ng/L/yr; p = 0.022). For the remaining locations no statistically significant trends (MK p > 0.05) were identified.

Spearman's rank correlation analysis was undertaken to assess potential relationships between antecedent rainfall and PFOS concentrations. While statistically significant correlations were identified at some monitoring locations within the landside surface water monitoring network (C1, Kealy's Stream, S1, S3, SL1, SL3, SL8, SL9, SL10, SL11, SL12 and SL13), the direction (positive or negative association) and timing (antecedent rainfall periods ranging from 1 to 30 days) of these relationships varied between locations and no consistent rainfall-driven response was identified across the area.

4.3.4 Airside

Airside surface water sampling locations and associated surface water bodies and catchments are outlined in Table 4-19.

Table 4-19: 2025 Airside Surface Water Monitoring Locations

ID	Surface Water Body	Surface Water Catchment	Location
P2	Manhole	Ward_030	Airside
P3	Manhole	Ward_030	
P4	Headwall	Sluice_010	
P7	Manhole	Ward_030	
P8	Manhole	Ward_030	
R1	Headwall	Sluice_010	
R2	Headwall	Sluice_010	
SWML3	Unnamed	Sluice_010	
SWML4	Unnamed	Sluice_010	
SWML5a	Sluice	Sluice_010	
SWML7a	Unnamed	Ward_030	
SWML7b	Huntstown 08	Ward_030	

4.3.4.1 Surface Water Results

2025 airside surface water monitoring completed during the reporting period is outlined in Table 4-20.

Table 4-20: 2025 Airside Surface Water Monitoring Events

ID	1st Round	2nd Round	3rd Round	4th Round
	04/03/2025	20/05/2025	02/09/2025	15/12/2025
P2	✓	✓	✓	✓
P3	✓	✓	✓	✓
P4	✓	✓	✓	✓

ID	1st Round	2nd Round	3rd Round	4th Round
	04/03/2025	20/05/2025	02/09/2025	15/12/2025
P7	✓	✓	✓	✓
P8	✓	✓	✓	✓
R1	✓	✓	✓	✓
R2	✓	✓	✓	✓
SWML3	✓	✓	✓	✓
SWML4	✓	✓	✓	✓
SWML5a	✓	✓	✓	✓
SWML7a	✓	✓	✓	✓
SWML7b	✓	✓	✓	✓

Note: A tick denotes a sample was collected.

A summary of results is presented in Table 4-21.

Table 4-21: 2025 Airside Surface Water Monitoring Results

ID	No. of Samples	GAC Limit Value (ng/L)	Min Total PFOS (ng/L)	Max Total PFOS (ng/L)	Average Total PFOS (ng/L)
P2	7	0.65 (Annual Average)	2.25	7.29	3.98
P3	7		0.00	2.47	0.86
P4	7		1.96	14.70	4.78
P7	7		0.00	27.80	4.53
P8	7		0.00	0.00	0.00
R1	7		3.41	17.40	10.32
R2	7		2.40	7.54	4.18
SWML3	7		0.00	4.29	1.91
SWML4	8		3.98	13.90	8.58
SWML5a	7		9.86	13.60	11.91
SWML7a	7		0.00	0.00	0.00

ID	No. of Samples	GAC Limit Value (ng/L)	Min Total PFOS (ng/L)	Max Total PFOS (ng/L)	Average Total PFOS (ng/L)
SWML7b	7		0.00	**0.71**	0.10

Note: No. of Samples includes a sample and its duplicate. All results are reported in ng/L. Results in Green exceed the GAC (PFOS) Limit Value[1].
[1] GAC (PFOS) refers to the AA EQS Limit Value of 0.65ng/L is based on the annual average PFOS detected at a given location (refer to Section 1.2.5).
PFAS results below LOD were assigned as 0ng/L for analytical and reporting purposes.

All surface water monitoring results reported over the monitoring period were below the 36,000ng/L PFOS MAC defined in the Surface Water Regulations.

Several locations recorded Total PFOS results below the LOD during at least one monitoring event, including P3, P7, P8, SWML3, SWML7a and SWML7b. In contrast, P2, P4, R1, R2, SWML4 and SWML5a reported detectable Total PFOS in every sample over the monitoring period.

When compared against the 0.65ng/L GAC annual average, average Total PFOS concentrations were below the limit at P8, SWML7a and SWML7b, while averages at all other locations were above the limit. Most locations recorded at least one result above 0.65ng/L, except for P8 and SWML7a, which remained below laboratory Limit of Detection throughout.

The highest Total PFOS concentrations (maximum values) were recorded at P7 (max 27.8ng/L). The highest average concentrations were observed at SWML5a (average 11.91ng/L) and R1 (average 10.32ng/L), indicating sustained elevation at these locations relative to the annual average limit.

4.3.4.2 Surface Water Trends

Trend analysis of Total PFOS at the Airside surface water monitoring locations indicates that no locations show statistically significant monotonic trends (where Mann-Kendall $p < 0.05$).

Spearman's rank correlation analysis was undertaken to assess potential relationships between antecedent rainfall and PFOS concentrations. While statistically significant correlations were identified at some monitoring locations within the airside surface water monitoring network (P2, P3, P7, R1, SWML4 and SWML7a), the direction (positive or negative association) and timing (antecedent rainfall periods ranging from 1 to 30 days) of these relationships varied between locations and no consistent rainfall-driven response was identified across the area.

4.3.5 2025 EPA Monitoring of Surface Water

The EPA have undertaken surface water monitoring for PFOS and PFOA at the following bodies:

- Ward_030[20]
- Sluice_010[21]

[20] https://www.catchments.ie/data/#/waterbody/IE_EA_08W010300?_k=ng2pyn
[21] https://www.catchments.ie/data/#/waterbody/IE_EA_09S071100?_k=lfhj9i

The locations of National Water Monitoring Stations in the vicinity of Dublin Airport, where PFOS and PFOA monitoring in surface water was undertaken by the EPA and adjacent, upstream or downstream FT monitoring locations are shown in Figure 4-10.

4.3.5.1 Ward_030 Monitoring Results

PFOS and PFOA monitoring was undertaken by the EPA at monitoring station RS08W010300. This monitoring station is approximately 1km downstream to daa surface water monitoring location SL9. PFOS concentrations at SL9 were below the LOD in 2025 in all samples analysed and is located approximately 0.6km upstream of SL12. SL12 recorded PFOS concentrations below the LOD in 2025 in all samples analysed, except for last round of sampling in December (0.691ng/L).

EPA PFOS results are in Table 4-22.

Table 4-22: 2025 Ward_030 PFOS Results

Date	GAC Limit Value (ng/L)	Result (ng/L)
29/01/2025	0.65	<0.48
13/02/2025		<0.48
19/03/2025		<0.48
23/04/2025		<0.48
15/05/2025		<0.48
25/06/2025		<0.48
23/07/2025		<0.48
27/08/2025		<0.48
25/09/2025		<0.48
22/10/2025		<0.48
13/11/2025		<0.48

4.3.5.2 Sluice_010 Monitoring Results

PFOS and PFOA monitoring was undertaken by the EPA at monitoring station RS09S070200. This corresponds to daa surface water monitoring location SWML5a where PFOS concentrations ranged between 9.86 to 13.60ng/L in 2025.

EPA PFOS results can be found in Table 4-23.

Table 4-23: 2025 Sluice_010 PFOS Results

Date	GAC Limit Value (ng/L)	Result (ng/L)
13/02/2025	0.65	6.09
15/05/2025		5.02
25/09/2025		2.42
13/11/2025		3.75

In 2025, results were elevated above the GAC Limit Value in all quarters at this location.

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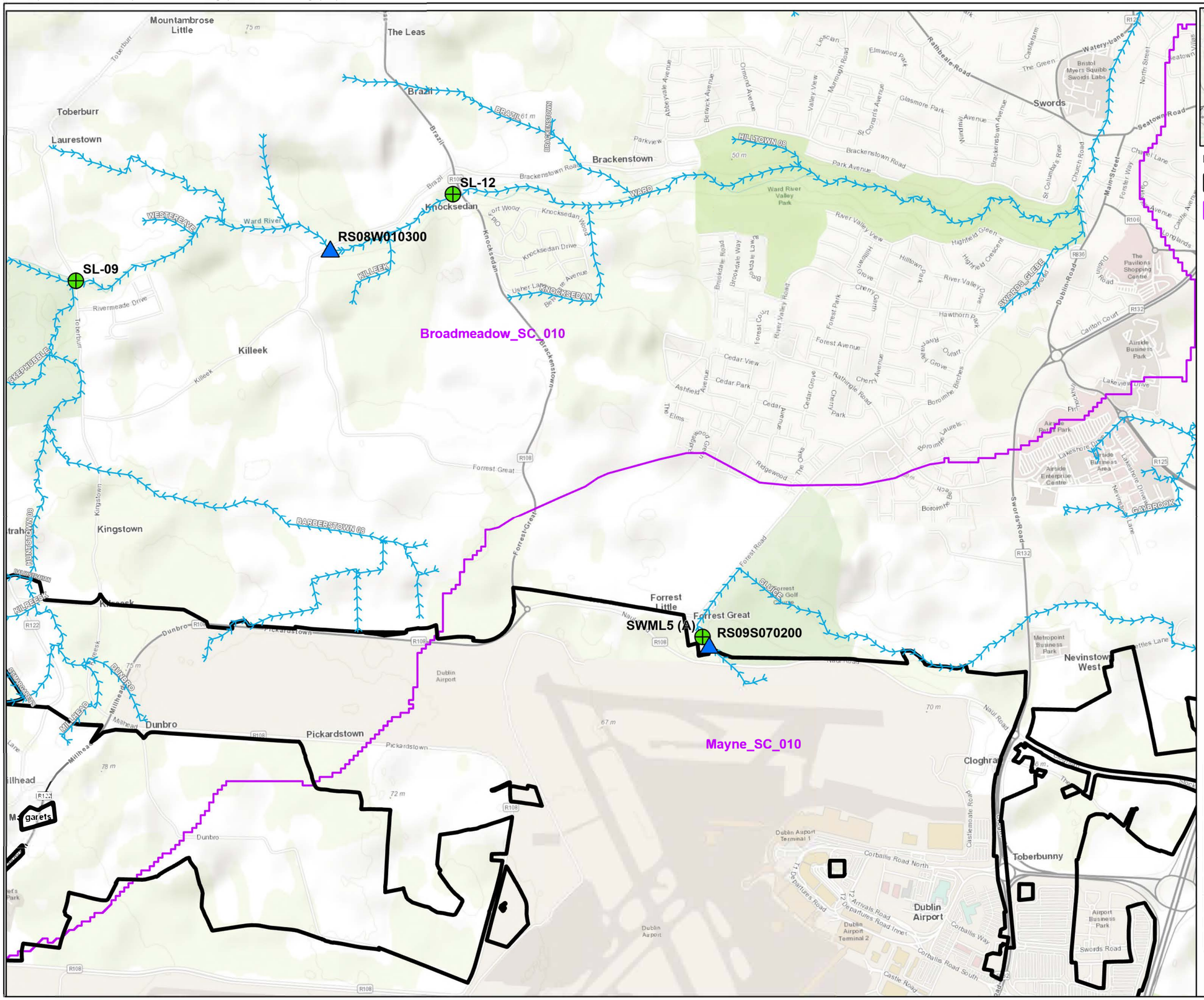

Legend

- Dublin Airport Boundary
- WFD Sub Catchments
- Surface Water Monitoring Locations
- EPA National Water Monitoring Stations
- Rivers

TITLE:	EPA PFOS Monitoring Locations		
PROJECT:	Environmental Monitoring Report		
FIGURE NO:	4-9		
CLIENT:	daa		
SCALE:	1:17,500	**REVISION:**	0
DATE:	03/09/2025	**PAGE SIZE:**	A3

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N W E S

0 0.5 1 2 Kilometers

4.4 Quality Assurance/ Quality Control

4.4.1 Blanks

Special handling and care must be taken when collecting samples for PFAS analysis to avoid cross contamination of the samples. PFAS is detected at extremely low concentrations and is susceptible to cross contamination. The routine analysis of trip and field blanks is to ensure handling and sampling procedures in the field are not contributing to cross contamination of samples and help ensure the validity of the sample results.

Trip blanks are provided by ALS. These blanks consist of de-ionised water which is purchased commercially (Honeywell) with PFAS listed as one of the components certified for analysis. The trips blanks are provided by ALS in sample HDPE bottles. FT bring trip blank bottles during each sampling visit, but they are never opened. They are then returned, unopened along with the water samples and analysed for the PFAS suite.

Field blanks are provided by ALS in a similar fashion. De-ionised water is provided by ALS in 1 litre HDPE bottles which is transported to site. Using the same field sampling techniques for collecting samples, and wearing same site gear, the de-ionised water is transferred into the sample containers by the FT sampler and stored along with the water samples. These are then returned to the laboratory along with the water samples and analysed for the PFAS suite.

ALS have two sources of de-ionised water:

- Commercially produced de-ionised water by Honeywell, that ALS sends to customers for use. This is referred to below as the standard de-ionised water.
- In-house ALS generated de-ionised water which is used for laboratory trip blanks in sampling runs.

PFAS concentrations were not detected above the laboratory limit of detection in any trip or field blank collected during the March-December monitoring period.

4.4.2 Duplicates

In three out of four monitoring rounds, duplicate samples were collected at all groundwater and surface locations. In the other round of monitoring, duplicate samples were collected at a rate of 10%.

The assessment of Relative Percent Difference (RPD) between primary samples and duplicates indicates a high level of analytical precision. Only 1.2% of groundwater and 0.4% of surface water duplicate pairs were above 30% RPD, demonstrating excellent reproducibility and supporting the reliability of the laboratory analytical results.

5. SUMMARY AND CONCLUSIONS

5.1 Introduction

A comprehensive environmental monitoring programme consisting of groundwater and surface water has been undertaken within and external to Dublin Airport by FT. This report presented all the monitoring results undertaken by FT and by the EPA during 2025.

5.1.1 Groundwater

At the North Apron, the results indicate that PFAS has mobilised to groundwater but, owing to the low permeability overburden and poorly productive bedrock, the extent of the groundwater impacts in the Former Fire Station and eastern North Apron area is interpreted as localised. The local extent of the plume has yet to be fully delineated. GW004 shows a statistically significant decreasing trend, while GW005D shows a statistically significant increasing trend. Spearman's rank correlation analysis identified statistically significant correlations at GW001, GW003D and GW014. However, the direction and antecedent rainfall period associated with these relationships varied between locations and no consistent rainfall-driven response was identified across the North Apron groundwater monitoring network.

At the North Runway (APEC 5), most monitoring locations are below the GAC 100ng/L threshold on average, with elevated concentrations detected at three monitoring wells (GW11, GW14 and GW16). GW12 remains close to the threshold on average, while the remaining locations are generally lower. The highest Sum of 20 PFAS concentrations are interpreted as occurring beneath or within bedrock where residual PFAS is present, and the lateral extent of the impacts appears largely confined to the source influence zone. However, the plume extent has yet to be fully delineated. Trend analysis does not identify statistically significant monotonic trends across the wells in the area. Spearman's rank correlation analysis identified statistically significant correlations at GW17 and GW18. However, the direction and antecedent rainfall period associated with these relationships varied between locations and no consistent rainfall-driven response was identified across the North Runway/APEC 5 groundwater monitoring network.

At Castlemoate House, the average Sum of 20 PFAS groundwater concentrations in most monitoring locations are below the GAC, except for one location, BH7. Most monitoring locations demonstrate noticeable variations and fluctuations rather than consistent long-term change. BH7, shows a statistically significant increasing trend. Spearman's rank correlation analysis identified statistically significant correlations at BH6, BH7 and BH9. However, the direction and antecedent rainfall period associated with these relationships varied between locations and no consistent rainfall-driven response was identified across the Castlemoate House groundwater monitoring network.

Sum of 20 PFAS concentrations in Gardeners Well remains below the laboratory limit of detection. Trend analysis indicates no statistically significant monotonic trend.

5.1.2 Surface Water

In 2025, all surface water monitoring results were below the 36,000ng/L PFOS MAC defined in the S.I. No. 77/2019 - European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019.

Several results reported PFOS concentrations at or below the laboratory LOD during one or more sampling events.

Total PFOS results in surface water show variability, with a mixture of low and elevated locations relative to the 0.65 ng/L threshold. SL8, SL9, SL10, C1, S1, S3, M5, P8 and SWML7a reported PFOS concentrations below the laboratory limit of detection during all monitoring rounds. PFOS was detected at all remaining locations on at least one occasion, although most locations also recorded results below the LOD during other sampling events.

Average Total PFOS concentrations were below the AA EQS at SL5, SL8, SL9, SL10, C1, S1, S3, M5, P8 and SWML7a, confirming that several locations remain consistently low on an annual average basis.

Statistically significant decreases are evident at landside locations (SL6, SL7 and SL13).

Across the airside network, the Mann-Kendall outputs indicate no statistically significant monotonic trends ($p > 0.05$).

Spearman's rank correlation analysis identified statistically significant correlations at several surface water monitoring locations. However, the direction and antecedent rainfall period associated with these relationships varied between locations and no consistent rainfall-driven response was identified across the surface water monitoring network.

The highest average PFOS concentrations in surface waters are located to the east of the airport in the Kealy's Stream, Sluice and Cuckoo Stream.

The surface water monitoring indicates there may other be sources of PFOS/PFAS in surface waters external to the airport. The Mayne, Ward and Santry surface water bodies have reported PFOS at greater concentrations in downstream monitoring locations than upstream locations which are closer to the airport.

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DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 1

List of Sum of 20 PFAS Compounds

Sum of 20 PFAS compounds listed in Annex III Part B of Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the Quality of Water Intended for Human Consumption (recast) (the Directive):

- Perfluorobutanoic acid (PFBA)
- Perfluoropentanoic acid (PFPA/PFPeA)
- Perfluorohexanoic acid (PFHxA)
- Perfluoroheptanoic acid (PFHpA)
- Perfluorooctanoic acid (PFOA)
- Perfluorononanoic acid (PFNA)
- Perfluorodecanoic acid (PFDA)
- Perfluoroundecanoic acid (PFUdA) / (PFUnA)/(PFUnDA)
- Perfluorododecanoic acid (PFDoA)/(PFDoDA)
- Perfluorotridecanoic acid (PFTrDA)
- Perfluorobutane sulfonic acid (PFBS)
- Perfluoropentane sulfonic acid (PFPeS) / (PFPS)
- Perfluorohexane sulfonic acid (PFHxS)
- Perfluoroheptane sulfonic acid (PFHpS)
- Perfluorooctane sulfonic acid (PFOS)
- Perfluorononane sulfonic acid (PFNS)
- Perfluorodecane sulfonic acid (PFDS)
- Perfluoroundecane sulfonic acid (PFUnDS)
- Perfluorododecane sulfonic acid (PFDoDS)/(PFDoS)
- Perfluorotridecane sulfonic acid (PFTrDS)

Definition of Sum of 20 PFAS according to the Directive:

'Sum of PFAS' means the sum of per- and polyfluoroalkyl substances considered a concern as regards water intended for human consumption listed in point 3 of Part B of Annex III. This is a subset of 'PFAS Total' substances that contain a perfluoroalkyl moiety with three or more carbons (i.e. –CnF2n–, n ≥ 3) or a perfluoroalkylether moiety with two or more carbons (i. e. –CnF2nOCmF2m–, n and m ≥ 1).

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APPENDIX 2

Sampling Methodologies

Sampling Methodology

This method statement should be read, understood and adhered to by the sampling personnel to ensure the correct procedures are followed. The collection, storage, and coordination of PFAS sampling is the full responsibility of the sampling personnel.

PFAS is detected at extremely low concentrations and is susceptible to cross contamination, therefore it is important that this sampling methodology is followed during the environmental sampling at each designated testing location.

It is required that all environmental sampling is undertaken by a person trained in line with this procedure and has been approved by the Project Manager.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should be laundered multiple times. Appropriate rain gear should be used that does not contain PFAS e.g. PVC, polyurethane, or rubber rain gear is acceptable. Random oversight and spot checks will be conducted to ensure these procedures are being adhered to.

On the day of sample collection do not use cosmetics, moisturisers, hand cream, sunscreen or insect repellent. In summer months, where possible, the sampler should adopt wrist to ankle cover and utilise sun hats to avoid the use of sunscreen.

Do not label the sampling containers with waterproof markers (e.g. Sharpies) as they may contain PFAS, ballpoint pens are acceptable.

1. Take sampling equipment, handheld meters and sampling bottles to each sampling location. Ensure you are wearing mandatory FT PPE and site mandatory PPE.

Surface Water Sampling

1. The sample handler must avoid PFAS contamination during sampling by thoroughly washing their hands and wearing nitrile gloves.
2. If sampling at a difficult location e.g. river edge, ensure another person (from FT or site) is present.
3. For surface water samples when at a safe location to sample from, rinse out sampling scoop three times in the surface water before collecting the sample.
4. When filling any sample container, care should be taken that splashing drops of water from the ground do not enter either the bottle or cap.
5. For collection of duplicate samples partially fill 2 sample bottles, 1 at a time, switching between the two bottles until suitable volume of sample is obtained in both bottles. i.e. fill 1/3 of one bottle and 1/3 of another and repeat until bottle are full.
6. Between sampling locations, rinse grab sample scoop with deionised water to flush beaker and avoid cross contamination of next location.
7. Keep sample sealed and place sample on ice for shipment. Samples to remain <4°C.

Groundwater Sampling

1. The sample handler must avoid PFAS contamination during sampling by thoroughly washing their hands and wearing nitrile gloves.
2. Groundwater levels are determined at each borehole using an electronic dip meter.
3. Purge at least three well/ borehole volumes of water from the well before sampling. This is carried out to remove any stagnant water in the well casing to ensure stable sampling conditions of the aquifer. Dedicated purging/sampling material (e.g. Waterrra tubing and foot valve) is to be used at each monitoring location.
4. Dedicated bottleware supplied by the laboratory to be used to take the groundwater samples.
5. Fill necessary bottles with sample and label according to site plan. Place sample containers in a cooler box.
6. For collection of duplicate samples partially fill 2 sample bottles, 1 at a time, switching between the two bottles until suitable volume of sample is obtained in both bottles. i.e. fill 1/3 of one bottle and 1/3 of another and repeat until bottle are full.
7. Between sampling locations, rinse groundwater pump with deionised water to flush pump and avoid cross contamination of next location.
8. Keep sample sealed and place sample on ice for shipment. Samples to remain <4°C.

Surface Water and Groundwater Trip and Field Blanks

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APPENDIX 3

Groundwater Results

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North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW001																																
		15-11-21	15-11-21	10-02-22	10-02-22	15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	21-06-22	21-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																			<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
3:3 FTCA (356-02-5)	ng/l																			<2	<2	<2	<2	<10	<10	<10	2.9	<4	<10	<4	<4	<2	<4	<25	<10	<5
4:2 FTS (757124-72-4)	ng/l	<2	<10	<10	<2	<2	<2	<10	<20	<10	<10	<20	<20	<2	<2	<10	<2	<10	<10	<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<100	<100	<20	<20	<20	<100	<200	<100	<100	<200	<200	<20	<20	<100	<20	<100	<100	<5	<5	<5	<5	<25	<25	<50	<5	<10	<25	<10	<10	<5	<10	<25	<10	<5
6:2 FTAB (34455-29-3)	ng/l																					<10	<10	<50	<50	<50	<10	<20	<50	<20	<20	11.2	<20	<50	<20	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	67.5	97.6	119	89.6	87.6	84.5	107	107	67.6	101	105	94.3	129	126	96.7	109	101	113	37.8	33.8	78.2	78.2	107	23.4	67	89.9	<2	101	80.9	80	99.8	88.5	103	54.8	58.1
7:3 FTCA (812-70-4)	ng/l																			<5	<5	<5	<5	<25	<25	<25	<5	<10	<25	<10	<10	<5	<10	<25	<10	<5
8:2 FTS (39108-34-4)	ng/l	32.4	25.9			11.9	12	19	<20	16.5	24.6	59.1	52.2	48.6	52	20.1	25.3	22.6	20.8	12.6	12.1	14.5	14.6	20.9	<10	<10	13	<4	17.2	16.9	16.9	17.5	17	23.2	14.4	12.8
9Cl-PF3ONS (756426-58-1)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
ADONA (919005-14-4)	ng/l																			<1	<1	<1	<1	77.4	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
Branched PFOS	ng/l	63.4	68.1	61.9	41.5	61.9	64.8	53.3	61.1	49.6	81	65.3	55.9	86.7	83.5	61.3	81	56.1	58.4	126	108	37.6	36.1	64	14	36.8	36.4	<1.3	63.2	69.7	70	72	64.7	78.6	51.5	43.7
EtFOSAA (2991-50-6)	ng/l																			<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
EtFOSE (1691-99-2)	ng/l																			<10	<10	<10	<10	<50	<50	<50	<10	<20	<50	<20	<20	<10	<20	<50	<20	<10
FBSA (30334-69-1)	ng/l																			1.56	1.44	3.26	3.41	<5	<5	<5	5.11	<2	<5	4.84	4.58	3.84	2.96	<5	<2	2.08
FHxSA (41997-13-1)	ng/l																			6.52	6.24	5.47	5.22	5.66	<5	<5	11.4	<2	6.18	10.8	12.8	12.2	7.12	7.5	2.99	5.18
HFPO-DA (13252-13-6)	ng/l																			<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
HFPO-TA (13252-14-7)	ng/l																			<5	<5	<5	<5	<25	<25	<25	<5	<10	<25	<10	<10	<5	<10	<25	<10	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	70.7	83.1	75.4	80.5	56.3	55.9	64.5	63.4	56.6	84.5	72.8	61.9	87.2	86.2	74.5	77.8	46.6	44.5	119	104	34.6	34.2	54	11.8	17.2	27.7	<1.3	68.3	56.3	61.8	54.3	49	57.3	47	30.9
MeFOSAA (2355-31-9)	ng/l																			<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
MeFOSE (24448-09-7)	ng/l																			<10	<10	<10	<10	<50	<50	<50	<10	<20	<50	<20	<20	<10	<20	<50	<20	<10
N-EtFOSA (4151-50-2)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
NFDHA (151772-58-6)	ng/l																			<3	<3	<3	<3	<15	<15	<15	<3	<6	<15	<6	<6	<3	<6	<15	<6	<3
N-MeFOSA (31506-32-8)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<91.5	<18	<10	<10	<20	<10	45.6	57.5	<35	<30	<20	<20	<25	<30	<10	<35	<24	<38	11.3	12.4	44.6	50.5	<10	<10	10.6	29.6	<4	<10	35.3	51.3	<2	177	<10	14.7	<2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	6.16	12.3	13.2	9.73	9.95	9.52	<10	15.4	9.69	16.8	13.8	12.6	29	28.2	20.1	26.4	14.4	16.6	8.26	6.09	17	17.2	24.3	<5	11.7	15	<2	15.4	17.6	16.7	16.1	12.3	14.9	8.7	10.8
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	1.28	<5	<5	<1	1.23	1.22	<10	<10	<5	<5	<10	<10	1.41	1.44	<5	1.24	<5	<5	<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<5	<5	<1	<1	<1	<10	<10	<5	<5	<10	<10	<1	<1	<5	<1	<5	<5	<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
PFDoS (79780-39-5)	ng/l					<2	<2	<10	<10	<5	<10	<20	<20	<2	<2	<5	<1	<5	<5	<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<5	<5	<1	<1	<1	<10	<10	<5	<5	<10	<10	<1	<1	<5	<1	<5	<5	<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
PFecHS (133201-07-7)	ng/l																			57.1	48.2	64	61.3	86	15.8	47.2	42.2	3.94	64.5	104	106	84.8	88.3	112	79.8	69.3
PFEESA (113507-82-7)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	74.4	38	38.9	41.2	46.7	55.2	45	32.6	25.2	46.9	31.8	28.9	55.9	44.7	35.8	57.1	52.2	65.3	15.3	13	46	45.2	56.3	12.5	25.8	39.1	<2	41	41.9	43.3	49.7	40.9	43.4	32.9	28
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	3.96	<5	<5	2.04	2.93	3.07	<10	<10	<5	<5	<10	<10	4.11	4.05	<5	3.67	<5	<5	4.55	3.87	2.92	2.73	5.41	<5	<5	3.15	<2	<5	4.11	3.41	3.39	2.27	<5	<2	2.5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	36.6	44.8	59	47.7	48.9	44.1	47.4	51.5	37	65.1	60.3	52	70.3	69.6	67	75.7	63.3	73.8	25.9	23.4	72	69.7	92.1	20.8	44.1	65.5	5.15	65.1	54.1	54	55.6	50.5	53.2	31.8	41.6
PFHxDA (67905-19-5)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	42.5	52.2	49.3	44.8	46.3	44	47.9	49.3	38	57.5	53.5	48.6	76	77.5	57.9	69.5	51.8	62.5	42.2	32.9	59.2	57.7	84.2	19	40.4	60.3	3.3	73.3	56.9	53.8	64.6	57	73.4	36.3	50.7
PFMOBA (863090-89-5)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFMOPrA (377-73-1)	ng/l																			<1	<1	<1	<1	104	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	6.72	7.79	8.05	6.21	6.27	6.43	<10	<10	6.98	9.51	<10	<10	9.52	9.2	9.87	8.54	8.05	8.68	3.18	3.16	5.21	5.36	11.3	<5	6.17	6.5	<2	11.3	10.6	10	11.8	9.2	15.1	6.18	5.88
PFNS (68259-12-1)	ng/l					<1	<1	<10	<10	<5	<5	<10	<10	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	20.4	25.8	29.7	19.1	19.8	21	30.3	34.7	27.5	40.3	27	23	31.4	30.4	32.2	31.7	28.5	33.5	15.1	12.4	28.8	28.4	49.1	10.1	21.4	29.7	1.68	38.9	51.5	49.4	44.9	38.2	42.4	30	25
PFODA (16517-11-6)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<10	<10	<2	<2	<2	<20	<20	<10	<10	<20	<20	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	55.9	34	34.5	43.6	36.2	48.6	56.7	55.5	29.5	59.2	53.2	44.5	37.3	38.5	78.8	68.9	35.8	43.2	34.3	32.7	108	104	106	24.5	53	88.8	7.47	79.1	86.2	84.7	96.6	87.2	104	66.8	65.7
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	5.71	9.11	8.23	4.73	6.49	6	<10	<10	6.33	9.04	<10	<10	14.7	13.9	10.2	13.5	7.65	9.98	3.85	2.79	7.52	7.35	11.3	<5	6.9	8.29	<2	5.88	7.13	6.83	6.41	6.09	12.2	3.03	4.86
PFTeA (376-06-7)	ng/l																			<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFTrDA (72629-94-8)	ng/l					<1	<1	<10	<10	<5	<5	<10	<10	<2	<2	<5	<1	<5	<5	<3	<3	<3	<3	<15	<15	<15	<3	<6	<15	<6	<6	<3	<6	<15	<6	<3
PFTrDS (174675-49-1)	ng/l					<2	<2	<10	<10	<5	<25	<20	<20	<2	<2	<5	<1	<5	<5	<1	<1	<1	<1	<5	<5	<5	<1	<2	<5	<2	<2	<1	<2	<5	<2	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<5	<5	<1	<1	<1	<10	<10	<5	<5	<10	<10	<1	<1	<5	<1	<5	<5	<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
PFUnDS (749786-16-1)	ng/l					<2	<2	<10	<10	<5	<5	<10	<10	<2	<2	<5	<1	<5	<5	<2	<2	<2	<2	<10	<10	<10	<2	<4	<10	<4	<4	<2	<4	<10	<4	<2
Total PFAS DWI 47	ng/l																													709	725	693	799	-	481	-
Total PFOS	ng/l	134	151	137	122	118	121	118	125	106	166	138	118	174	170	136	159	103	103	246	211	72.2	70.3	118	25.7	54	64.1	<1.3	132	126	132	126	114	136	98.5	74.6
Sum of PFAS																																				
Sum of 20 PFAS	ng/l	387.63	375.00	377.88	341.11	342.77	360.14	384.90	421.50	286.20	470.35	377.60	327.60	503.64	487.49	447.87	515.25	364.70	416.56	409.94	353.71	463.45	458.44	558.01	112.60	274.07	410.04	17.60	461.98	491.34	505.44	475.10	594.66	494.60	328.91	309.64
Sum of Total PFAS	ng/l	621.63	649.70	634.18	552.71	560.47	577.34	628.70	653.00	476.50	761.45	679.80	591.90	855.14	835.19	700.47	808.35	591.00	653.26	770.52	667.49	701.08	691.47	1056.97	177.60	442.27	638.65	21.54	782.36	834.58	857.50	830.74	912.24	876.20	579.40	531.70
Average Sum of 20 PFAS	ng/l	397.36																																		
Average Total PFAS	ng/l	662.95																																		
Min Sum of 20 PFAS	ng/l	17.60																																		
Max Sum of 20 PFAS	ng/l	594.66																																		

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North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW002D																																
		15-11-21	15-11-21	10-02-22	10-02-22	15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	21-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																		<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																		<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<2	<4	<10	<2	<4	<4	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<40	<100	<20	<40	<40	<20	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<10	<5	<5	<10	<10	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																				<10	<10	<10	<10	<10	<10	<10	<50	<10	<20	<10	<10	<20	<20	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	5.02	5.52	7.86	15.5	2.41	10.4	24.5	23	24.8	18.5	9.47	33.7	35.8	9.31	12.2	13.5	13.6	<1	<1	21.9	21.3	<1	<1	1.85	2.42	1.58	<5	<1	<2	<1	<1	<2	<2	8.92	3.71	<1
7:3 FTCA (812-70-4)	ng/l																		<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<10	<5	<5	<10	<10	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	8.68	14.1			<4	<4	<2	4.18	<10	3.09	8.16	11	12	6.39	3.76	4.81	4.23	<2	<2	4.67	4.17	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
ADONA (919005-14-4)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
Branched PFOS	ng/l	42.3	50.2	55.5	34.5	40.8	36.5	28.8	24.6	66.4	49.9	39.8	61.7	62.4	43.2	54.7	36.8	38.7	53.3	44.9	50.3	52.1	17.2	16.6	23.8	25.3	20.4	31.7	43.3	50.1	27.8	25.3	33.6	30.9	68.5	66.8	27.5
EtFOSAA (2991-50-6)	ng/l																		<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																		<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<20	<10	<10	<20	<20	<10	<10	<10
FBSA (30334-69-1)	ng/l																		1.05	1.21	2.05	1.88	<1	<1	1.15	1.34	<1	<5	1.83	2.24	1.38	1.8	<2	<2	1.82	1.33	<1
FHxSA (41997-13-1)	ng/l																		1.82	1.71	5.69	4.6	2.09	2.26	2.59	2.98	1.5	<5	2.22	2.58	2.42	3.3	<2	<2	5.58	3.5	2.86
HFPO-DA (13252-13-6)	ng/l																		<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																		<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<10	<5	<5	<10	<10	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	48.5	57.9	38.9	58	28.1	25.6	28.8	27.5	45.3	38.9	33.9	48	49.8	46.9	43.2	27.9	27.9	53.2	40.3	40	37.4	14	12.3	15.5	18.4	10.2	18	23	31.5	21.3	17.9	21.1	19.5	49.5	37.5	20.5
MeFOSAA (2355-31-9)	ng/l																		<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																		<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<20	<10	<10	<20	<20	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
NFDHA (151772-58-6)	ng/l																		<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<6	<3	<3	<6	<6	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	27.9	25.7	31.4	19.2	30	28.6	23.2	25.3	46.6	34	34.9	<30	<34	<28	17.6	30.9	31.7	24.3	24.2	39	30.1	21.6	22.1	24.1	27.7	18.3	31.5	29.9	35	25.2	25.2	25.6	25.8	35.1	34.5	29.6
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	2.98	3.25	<5	2.61	3.83	3.26	1.83	<1	6.39	3.67	2.76	5.44	5.37	3.7	4.86	2.2	2.53	2.49	1.81	4.23	3.9	2.43	2.41	2.61	3.15	2.14	5.83	4.15	5.74	3.62	3.21	2.21	2.39	5.81	4.36	3.31
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<2	<5	<1	<2	<2	1.07	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<2	<5	<1	<2	<2	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
PFDoS (79780-39-5)	ng/l					<4	<4	<1	<1	<40	<2	<2	<2	<2	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<2	<5	<1	<2	<2	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
PFecHS (133201-07-7)	ng/l																		112	104	151	147	71.4	73.9	70.2	76.9	54.2	87.1	136	133	95.1	98.7	108	105	134	139	117
PFEESA (113507-82-7)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	79	76.1	81.8	77.3	48.7	45.7	53.7	99.8	84.5	77.9	68.9	68.3	71.4	82	76.8	76.3	81.4	52.8	48.5	69.5	72.3	29.8	30.5	38	44.5	31	41.8	63.6	80.4	45.2	46.1	51.6	51.2	87.1	81.1	47.2
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	2.86	3.59	<5	<1	<2	<2	1.47	1.22	<5	2.49	2.08	2.58	2.53	2.6	2.23	1.89	2	1.09	<1	2.92	2.53	1.36	1.25	1.91	1.68	<1	<5	1.76	3.07	<2.5	<1.5	<2	<2	1.78	<1	1.68
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	58.2	60.2	63.1	57.1	57.1	56.1	43	38.6	88.1	65.7	61.9	55.6	59.6	59.3	68	44.4	49	44.8	45	61.7	64.6	30.7	30.9	47.4	51.7	27.6	43.9	65	80	44.9	45.3	48.9	45.9	72.6	64.8	56
PFHxDA (67905-19-5)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	25.1	29.4	27.5	19.9	22.4	19.7	16.5	14.9	35.9	26.9	25.5	29.4	30.1	27.2	32.4	20.1	21.1	22.9	19.2	30.8	30.2	13.5	14.4	17.8	19.8	12.6	22.9	36.4	39.9	19.6	20.2	21.3	21.1	39.3	36.2	23.1
PFMOBA (863090-89-5)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	6.45	10.2	9.71	10.8	6.94	6.35	6.53	5.73	10.5	7.7	7.85	8.6	8.7	9.11	8.12	5.94	6.06	3.99	2.64	8.57	7.64	2.89	2.64	3.13	3.89	2.23	6.11	5.76	8.83	4.38	4.67	4.79	4.16	6.51	6.51	4.57
PFNS (68259-12-1)	ng/l					<2	<2	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	29.5	34.6	36.2	34.1	27.1	24.6	23.5	20.6	45.7	37.7	35.5	35.5	33.6	36.8	38.1	24.8	25.5	22.9	24.1	37.5	36.9	13.9	14.2	18.1	20.3	12.2	19.5	32.7	43.2	31.4	33.1	24.3	26.9	47.5	41.3	24.4
PFODA (16517-11-6)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<4	<10	<2	<4	<4	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	61.2	57.7	76.7	56.1	66.2	61.4	117	135	128	75.4	81.9	50	55.8	87.1	80.4	39.1	54	79.3	82.7	106	106	60.6	63.1	79.6	85.6	57.5	87.3	110	139	83.1	87.3	92.1	96.4	132	131	97.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	2.36	2.53	<5	2.19	2.22	2.32	1.25	1.05	<5	2.34	2.29	2.74	2.88	2.57	2.93	1.9	1.94	<1	<1	2.61	2.6	1.66	1.7	1.89	1.98	1.51	<5	3.29	3.87	2.39	2.48	2.65	2.23	4.01	3.28	2.11
PFTeA (376-06-7)	ng/l																		<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFTrDA (72629-94-8)	ng/l					<3	<3	<1	<1	<15	<1	<1	<2	<2	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<6	<3	<3	<6	<6	<3	<3	<3
PFTrDS (174675-49-1)	ng/l					<4	<4	<1	<1	<40	<5	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<2	<2	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<2	<5	<1	<2	<2	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
PFUnDS (749786-16-1)	ng/l					<4	<4	<1	<1	<10	<1	<1	<2	<2	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<4	<2	<2	<4	<4	<2	<2	<2
Total PFAS DWI 47	ng/l																														408	415	437	432	-	-	458
Total PFOS	ng/l	90.8	108	94.4	92.5	68.9	62.1	57.6	52.1	112	88.8	73.8	110	112	90	97.8	64.7	66.6	107	85.2	90.2	89.5	31.3	28.9	39.3	43.7	30.6	49.7	66.3	81.6	49.1	43.2	54.7	50.4	118	104	48
Sum of PFAS																																				
Sum of 20 PFAS	ng/l	386.35	411.27	420.81	371.80	333.39	310.13	346.65	394.30	557.69	422.60	397.38	368.16	381.98	400.38	429.24	312.23	341.83	361.57	333.35	453.03	446.27	209.74	212.10	273.84	303.98	195.68	308.54	418.86	520.41	308.89	310.76	328.15	326.48	549.71	507.03	337.77
Sum of Total PFAS	ng/l	490.85	538.99	523.07	479.80	404.70	382.63	428.75	473.58	694.19	532.99	488.71	522.56	541.98	506.18	543.10	395.24	426.26	582.94	525.47	728.64	714.72	314.43	317.16	388.93	431.32	283.56	445.34	625.21	739.83	456.87	457.76	490.85	481.88	818.03	758.67	505.63
Average Sum of 20 PFAS	ng/l	369.23																																		
Average Total PFAS	ng/l	512.25																																		
Min Sum of 20 PFAS	ng/l	195.68																																		
Max Sum of 20 PFAS	ng/l	557.69																																		

FEHILY TIMONEY

North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW03D																																
		15-02-22	15-02-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	21-06-22	21-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
3:3 FTCA (356-02-5)	ng/l																<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<10	<25	<10
4:2 FTS (757124-72-4)	ng/l	<2	<2	<100	<100	<20	<10	<10	<20	<20	<20	<20	<4	<20	<20	<20	<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<1000	<1000	<200	<100	<100	<200	<200	<200	<200	<40	<200	<200	<200	<5	<50	<50	<50	<50	<50	<25	<5	<25	<25	<5	<25	<25	<10	<5	<10	<50	<25	<10	<25	<10
6:2 FTAB (34455-29-3)	ng/l																				<100	<100	<50	<10	<50	<50	<10	<50	<50	<20	<10	<20	<100	<50	<20	<50	<20
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	3.73	3.54	<50	<50	<10	6.32	<5	<10	<10	<10	<10	2.4	<10	<10	<10	1.24	<10	<10	<10	<10	<10	<5	1.35	<5	<5	1.28	<5	<5	2.57	<1	<2	<10	<5	<2	<5	<2
7:3 FTCA (812-70-4)	ng/l																<5	<50	<50	<50	<50	<50	<25	<5	<25	<25	<5	<25	<25	<10	<5	<10	<50	<25	<10	<25	<10
8:2 FTS (39108-34-4)	ng/l	<2	<2	<100	<100	<20	<10	<10	<20	<20	<20	<20	<4	<20	<20	<20	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
9Cl-PF3ONS (756426-58-1)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
ADONA (919005-14-4)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
Branched PFOS	ng/l	7.46	5.94	<32.5	<32.5	7.82	10.2	9.62	<6.5	7.86	<6.5	<6.5	2.99	<6.5	<6.5	<6.5	1.68	<6.5	<6.5	<6.5	<6.5	<6.5	3.79	1.91	<3.25	<3.25	2.29	3.8	3.37	3.9	2.92	3.11	<6.5	4.46	<1.3	<3.25	<1.3
EtFOSAA (2991-50-6)	ng/l																<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
EtFOSE (1691-99-2)	ng/l																<10	<100	<100	<100	<100	<100	<50	<10	<50	<50	<10	<50	<50	<20	<10	<20	<100	<50	<20	<50	<20
FBSA (30334-69-1)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
FHxSA (41997-13-1)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
HFPO-DA (13252-13-6)	ng/l																<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
HFPO-TA (13252-14-7)	ng/l																<5	<50	<50	<50	<50	<50	<25	<5	<25	<25	<5	<25	<25	<10	<5	<10	<50	<25	<10	<25	<10
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	10	8.46	<32.5	<32.5	10.6	16.2	14.5	10.6	13.2	11.2	9.36	4.97	8.4	<6.5	<6.5	2.23	<6.5	<6.5	<6.5	<6.5	<6.5	3.87	2.23	<3.25	<3.25	1.55	4.61	<3.25	3.38	2.56	3.01	<6.5	3.92	<1.3	<3.25	2.69
MeFOSAA (2355-31-9)	ng/l																<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
MeFOSE (24448-09-7)	ng/l																<10	<100	<100	<100	<100	<100	<50	<10	<50	<50	<10	<50	<50	<20	<10	<20	<100	<50	<20	<50	<20
N-EtFOSA (4151-50-2)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
NFDHA (151772-58-6)	ng/l																<3	<30	<30	<30	<30	<30	<15	<3	<15	<15	<3	<15	<15	<6	<3	<6	<30	<15	<6	<15	<6
N-MeFOSA (31506-32-8)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<10	<5	<250	<800	<500	38.5	<35	<20	<20	2180	903	<4	<20	<20	<20	<2	<20	<20	<20	<20	<20	<10	3.41	<10	<10	<2	<10	<10	<4	<2	13.1	<20	<10	<4	<10	<4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.45	1.2	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
PFDoS (79780-39-5)	ng/l	<1	<1	<100	<50	<10	<40	<10	<20	<20	<10	<10	<2	<10	<10	<10	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	3.38	3.74	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
PFecHS (133201-07-7)	ng/l																<1	<10	<10	<10	10.1	10.5	6.97	3.54	<5	<5	2.49	6.35	6.34	7.45	4.83	4.96	15.1	<5	9.85	10	3.36
PFEESA (113507-82-7)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<50	<50	10	6.13	5.12	<10	<10	<10	<10	<2	<10	<10	<10	<1	<10	<10	<10	<10	<10	<5	1.69	<5	<5	1.91	<5	<5	3.1	1.68	10.8	<10	<5	<2	<5	<2
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	4.05	3.92	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	3.99	3.73	<50	<50	<10	7.96	6.03	<10	<10	<10	<10	<2	<10	<10	<10	1.43	<10	<10	<10	<10	<10	<5	2.4	<5	<5	2.46	<5	5.08	2.97	2.33	5.4	<10	<5	<2	<5	<2
PFHxDA (67905-19-5)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<50	<50	<10	7.47	6.3	<10	<10	<10	<10	2.69	<10	<10	<10	<1	<10	<10	<10	<10	<10	5.07	2.2	<5	<5	1.86	5.45	6.5	6.22	3.6	3.73	<10	<5	2.11	<5	<2
PFMOBA (863090-89-5)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFMOPrA (377-73-1)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.67	1.85	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	2.55	<10	<5	<2	<5	<2
PFNS (68259-12-1)	ng/l	<2	<2	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	6.05	4.48	<32.5	<37	14.8	13.9	16	<6.5	<6.5	<17	<13.5	1.97	<6.5	<6.5	<6.5	<0.65	<6.5	<6.5	<6.5	<6.5	<6.5	<3.25	1.38	6.67	<3.25	<0.65	<3.25	<3.25	2.26	<0.65	<1.3	<6.5	<3.25	<1.3	<3.25	<1.3
PFODA (16517-11-6)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	1.06	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<1	<1	<100	<100	<20	<10	<10	<20	<20	<20	<20	<4	<20	<20	<20	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<1	<1	<50	<50	<10	9.2	6.05	<10	<10	14.7	<10	<2	<10	<10	<10	2.19	<10	<10	<10	<10	<10	7.1	4.54	<5	<5	5.07	7.73	<5	4.39	3.56	10.9	<10	<5	<2	<5	3.45
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	17.5	14.4	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFTeA (376-06-7)	ng/l																<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFTrDA (72629-94-8)	ng/l			<50	<50	<10	<15	<5	<10	<10	<10	<10	<2	<10	<10	<10	<3	<30	<30	<30	<30	<30	<15	<3	<15	<15	<3	<15	<15	<6	<3	<6	<30	<15	<6	<15	<6
PFTrDS (174675-49-1)	ng/l			<100	<50	<10	<40	<25	<20	<20	<10	<10	<2	<10	<10	<10	<1	<10	<10	<10	<10	<10	<5	<1	<5	<5	<1	<5	<5	<2	<1	<2	<10	<5	<2	<5	<2
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<50	<50	<10	<5	<5	<10	<10	<10	<10	<2	<10	<10	<10	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
PFUnDS (749786-16-1)	ng/l			<100	<50	<10	<10	<5	<10	<10	<10	<10	<2	<10	<10	<10	<2	<20	<20	<20	<20	<20	<10	<2	<10	<10	<2	<10	<10	<4	<2	<4	<20	<10	<4	<10	<4
Total PFAS DWI 47	ng/l																														<90	<180	<900	<450	-	-	<180
Total PFOS	ng/l	17.5	14.4	<32.5	<32.5	18.4	26.4	24.2	10.6	21.1	11.2	9.36	7.96	8.4	<6.5	<6.5	3.91	<6.5	<6.5	<6.5	<6.5	<6.5	7.66	4.14	<3.25	<3.25	3.83	8.41	3.37	7.28	5.47	6.12	<6.5	8.38	<1.3	<3.25	2.69
Sum of PFAS																																					
Sum of 20 PFAS	ng/l	55.59	47.72	0.00	0.00	43.20	109.56	63.70	10.60	21.10	2205.90	912.36	12.62	8.40	0.00	0.00	7.53	0.00	0.00	0.00	0.00	0.00	19.83	19.76	6.67	0.00	15.13	21.59	14.95	26.22	16.64	112.60	0.00	8.38	2.11	0.00	6.14
Sum of Total PFAS	ng/l	76.78	65.66	0.00	0.00	61.62	142.28	87.82	21.20	42.16	2217.10	921.72	22.98	16.80	0.00	0.00	12.68	0.00	0.00	0.00	10.10	10.50	34.46	28.79	6.67	0.00	23.80	36.35	24.66	43.52	26.75	123.68	15.10	16.76	11.96	10.00	12.19
Average Sum of 20 PFAS	ng/l	104.68																																			
Average Total PFAS	ng/l	114.56																																			
Min Sum of 20 PFAS	ng/l	0.00																																			
Max Sum of 20 PFAS	ng/l	2205.90																																			

FEHILY TIMONEY

North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW004																																			
		15-11-21	15-11-21	10-02-22	10-02-22	15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
3:3 FTCA (356-02-5)	ng/l																	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<5	<5	<10
4:2 FTS (757124-72-4)	ng/l	<2	<20	<20	<2	<20	<2	<20	<20	<10	<10	<10	<20	<20	<2	<10	<20	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<1	<2
5:3 FTCA (914637-49-3)	ng/l	<20	<200	<200	<20	<200	<20	<200	<200	<100	<100	<100	<200	<200	<20	<100	<200	<5	<50	<50	<5	<10	<5	<5	<25	<5	<5	<25	<5	<5	<25	<10	<5	<25	<5	<5	<5	<10
6:2 FTAB (34455-29-3)	ng/l																					<20	<10	<10	<50	<10	<10	<50	<10	<10	<50	<20	<10	<50	<10	<10	<10	<20
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	38	30.1	<10	7.27	<10	4.78	<10	<10	11.9	8.25	6.19	<10	<10	3.54	<5	<10	<1	<10	14.3	1.13	<2	1.14	<1	11.8	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	2.26
7:3 FTCA (812-70-4)	ng/l																	<5	<50	<50	<5	<10	<5	<5	<25	<5	<5	<25	<5	<5	<25	<10	<5	<25	<5	<5	<5	<10
8:2 FTS (39108-34-4)	ng/l	64.9	<20			<20	<2	<20	<20	<10	<10	<10	<20	<20	<2	<10	<20	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
ADONA (919005-14-4)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<5	<1	<5	<2	<1	<5	<1	<1	<1	<2
Branched PFOS	ng/l	27.4	21.9	76.3	38.2	43.3	49.8	52	42.9	43	48.4	49.7	52.6	39.2	27.6	22.6	20.9	50.9	55	26.9	13.9	15.4	13.7	11.9	16	15.1	16.1	12.4	14.4	10.6	18.0	12.6	14.6	27.6	16.9	24.5	18.8	20.4
EtFOSAA (2991-50-6)	ng/l																	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
EtFOSE (1691-99-2)	ng/l																	<10	<100	<100	<10	<20	<10	<10	<50	<10	<10	<50	<10	<10	<50	<20	<10	<50	<10	<10	<10	<20
FBSA (30334-69-1)	ng/l																	<1	<10	<10	1.75	2.13	1.6	<1	<5	1.32	1.28	<5	<1	1.64	<5	<2	<1	<5	1.75	<1	<1	<2
FHxSA (41997-13-1)	ng/l																	<1	<10	<10	<1	<2	<1	1.2	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
HFPO-DA (13252-13-6)	ng/l																	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
HFPO-TA (13252-14-7)	ng/l																	<5	<50	<50	<5	<10	<5	<5	<25	<5	<5	<25	<5	<5	<25	<10	<5	<25	<5	<5	<5	<10
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	48.1	46.8	81.9	77.3	64	71.4	80.8	67	73.1	78.5	74.2	86.4	57.9	47.5	28.4	25.9	53.2	55.4	48.1	23	18	17.5	15.2	21.4	13.8	17.2	11.7	13.4	19	21.7	14.1	15.8	29.1	12.9	25.9	22.5	18.4
MeFOSAA (2355-31-9)	ng/l																	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
MeFOSE (24448-09-7)	ng/l																	<10	<100	<100	<10	<20	<10	<10	<50	<10	<10	<50	<10	<10	<50	<20	<10	<50	<10	<10	<10	<20
N-EtFOSA (4151-50-2)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
NFDHA (151772-58-6)	ng/l																	<3	<30	<30	<3	<6	<3	<3	<15	<3	<3	<15	<6	<3	<15	<6	<3	<15	<3	<3	<3	<6
N-MeFOSA (31506-32-8)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	24.6	28.1	<20	<20	<20	<30	<45	<40	<30	<13	179	318	<20	<12	25.1	<20	<2	<20	<20	<5	<4	<2	<2	<10	8.57	<2	<10	6.5	8.17	<10	<4	8.64	11.9	6.58	5.09	4.52	<4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	2.3	<10	<10	5.58	<10	4.12	<10	<10	<5	<5	9.06	<10	<10	3.81	<5	<10	<1	<10	<10	3.4	3.07	2.85	1.8	5.3	1.95	2.9	<5	2.87	3.03	<5	<2	2.09	5.4	3.16	2.03	1.84	<2
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	3.28	<10	<10	<1	<10	<1	<10	<10	<5	<5	<5	<10	<10	<1	<5	<10	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<10	<10	<1	<10	<1	<10	<10	<5	<5	<5	<10	<10	<1	<5	<10	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
PFDoS (79780-39-5)	ng/l					<10	<2	<10	<10	<5	<5	<10	<10	<10	<1	<5	<10	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<10	<10	<1	<10	<1	<10	<10	<5	<5	<5	<10	<10	<1	<5	<10	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
PFecHS (133201-07-7)	ng/l																	675	618	416	236	84.4	171	518	622	359	378	430	394	396	609	390	240	405	337	1710	1570	775
PFEESA (113507-82-7)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	68.2	19.7	<10	3.55	<10	3.97	10.8	<10	5.17	5.65	<5	<10	<10	3.07	5.02	<10	2.61	<10	<10	3.14	2.54	1.96	1.66	5.58	2.4	2.29	<5	2.45	3.41	<5	3.9	2.69	7.63	3.25	2.66	2.41	<2
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	1.87	<10	<10	<1	<10	<1	<10	<10	<5	<5	<5	<10	<10	<1	<5	<10	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	39.5	18.7	<10	4.76	<10	4.28	<10	<10	<5	<5	7.05	<10	<10	3.78	5.49	<10	4.22	<10	<10	6.2	5.79	2.81	<1	5.09	6.87	3.69	<5	3.6	4.31	6.95	4	4.12	<5	2.72	2.9	3.6	<2
PFHxDA (67905-19-5)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	26.1	14.2	10.6	6.46	<10	6.03	<10	<10	6.31	7.33	8.65	10.6	<10	5.43	8.82	<10	6.66	<10	16.6	4.76	5.84	6.29	2.34	6.4	3.34	4.14	<10	2.61	3.88	7.93	5.41	3.73	6.58	4.71	5.55	3.18	5.41
PFMOBA (863090-89-5)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<10	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFMOPrA (377-73-1)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<5	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	7.89	<10	<10	<1	<10	<1	<10	<10	<5	<5	<5	<10	<10	1.13	<5	<10	<1	<10	<10	1.46	<2	<1	<1	<5	<1	<1	<5	<2	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFNS (68259-12-1)	ng/l					<10	<1	<10	<10	<5	<5	<5	<10	<10	<1	<5	<10	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	22.7	17.8	9.31	4.01	8.37	2.98	16.2	16	7.79	5.99	6.55	<17	7.32	3.46	4.49	<6.5	2.69	<6.5	9.31	4.06	2.59	2.46	1.93	5.79	1.84	2.01	3.38	2.27	4.06	4.98	2.77	2.83	5.67	3.18	3.23	2.95	<1.3
PFODA (16517-11-6)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<20	<20	<2	<20	<2	<20	<20	<10	<10	<10	<20	<20	<2	<10	<20	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	57.1	19.2	<10	7.76	<10	4.8	<10	<10	5.51	<5	<5	38.2	<10	12.3	<5	<10	5.19	<10	<10	<5	<2	<1	4.96	<5	<1	<1	6.95	4.68	7.89	7.79	<2	5.22	9.87	10.6	9.23	6.48	<2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	2.04	<10	<10	<1	<10	<1	<10	<10	<5	<5	<5	<10	<10	<1	<5	<10	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFTeA (376-06-7)	ng/l																	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<1	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFTrDA (72629-94-8)	ng/l					<10	<1	<10	<10	<5	<5	<10	<10	<10	<1	<5	<10	<3	<30	<30	<3	<6	<3	<3	<15	<3	<3	<15	<3	<3	<15	<6	<3	<15	<3	<3	<3	<6
PFTrDS (174675-49-1)	ng/l					<10	<2	<10	<10	<5	<5	<10	<10	<10	<1	<5	<10	<1	<10	<10	<1	<2	<1	<1	<5	<1	<1	<5	<2	<1	<5	<2	<1	<5	<1	<1	<1	<2
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<10	<10	<1	<10	<1	<10	<10	<5	<5	<5	<10	<10	<1	<5	<10	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
PFUnDS (749786-16-1)	ng/l					<10	<2	<10	<10	<5	<5	<10	<10	<10	<1	<5	<10	<2	<20	<20	<2	<4	<2	<2	<10	<2	<2	<10	<2	<2	<10	<4	<2	<10	<2	<2	<2	<4
Total PFAS DWI 47	ng/l																															433	300	509	403	-	-	821
Total PFOS	ng/l	75.5	68.8	158	116	107	121	133	110	116	127	124	139	97.1	75.1	51	46.8	104	110	75	36.8	33.5	31.2	27.2	37.4	28.9	33.3	24.1	27.8	38.5	40.2	26.7	30.4	56.7	29.8	50.3	41.4	38.8
Sum of PFAS																																					
Sum of 20 PFAS	ng/l	331.08	186.50	177.91	148.12	115.37	147.18	160.00	126.00	140.78	145.97	334.31	505.80	104.42	108.08	99.92	46.80	125.37	110.00	100.91	59.82	53.33	47.57	39.89	65.56	53.87	48.33	34.43	52.78	73.25	67.85	42.78	59.72	103.75	64.00	80.99	66.38	44.21
Sum of Total PFAS	ng/l	509.48	285.30	336.11	270.89	222.67	273.16	292.80	235.90	268.78	281.12	464.40	644.80	201.52	186.72	150.92	93.60	904.47	838.40	606.21	335.60	173.26	252.51	586.19	736.76	443.09	460.91	488.53	474.58	509.49	717.05	459.48	330.12	565.45	432.55	1841.39	1677.68	860.27
Average Sum of 20 PFAS	ng/l	115.49																																			
Average Total PFAS	ng/l	497.63																																			
Min Sum of 20 PFAS	ng/l	34.43																																			
Max Sum of 20 PFAS	ng/l	505.80																																			

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North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW005D																														
		15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	21-06-22	21-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l															<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
3:3 FTCA (356-02-5)	ng/l															<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<50
4:2 FTS (757124-72-4)	ng/l	<2	<2	<2	<2	<10	<4	<2	<2	<2	<2	<2	<2	<20	<20	<1	<10	1.62	1.92	<1	<1	1.3	<1	<1	<1	<1	<1	1.64	1.58	1.71	1.29	<2	<2	<10
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<20	<20	<100	<40	<20	<20	<20	<20	<20	<20	<200	<200	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<50
6:2 FTAB (34455-29-3)	ng/l																			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<100
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	59.3	57.3	39	49.1	72.3	46.6	20.3	23.2	6.78	6.77	6.97	5.96	23.6	24.3	35.3	25.8	39.1	37.6	85.3	85.2	75.5	94.1	75.2	72.9	71.2	70.1	125	122	117	132	135	149	12.7
7:3 FTCA (812-70-4)	ng/l															<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<50
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<10	<4	<2	<2	<2	<2	<2	<2	<20	<20	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
9Cl-PF3ONS (756426-58-1)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
ADONA (919005-14-4)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
Branched PFOS	ng/l	56.2	48.6	25.5	35.4	69.3	40.6	12.2	13.4	<2.5	<2.5	<0.65	<0.65	20.7	16.3	37.6	27.7	9.16	11.2	25.4	32.2	13.9	5.97	13.2	12.9	6.63	3.61	38	42.2	40.2	41.6	65.1	56.1	<6.5
EtFOSAA (2991-50-6)	ng/l															<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
EtFOSE (1691-99-2)	ng/l															<10	<100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<20	<100
FBSA (30334-69-1)	ng/l															1.8	<10	4.5	5.31	5.23	5.14	6.25	7.97	3.35	2.99	<1	5.91	7.93	9.23	9.33	13.3	<2	3.85	<10
FHxSA (41997-13-1)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	2.76	<10
HFPO-DA (13252-13-8)	ng/l															<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
HFPO-TA (13252-14-7)	ng/l															<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<50
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	9.01	8.01	3.82	5.16	9.73	7.88	1.67	1.88	<0.65	<1	<0.65	<0.65	<6.5	<6.5	35.5	27.2	1.23	1.98	4.33	7.29	2.06	2.35	1.29	1.25	1.63	1.36	1.26	1.92	2.54	2.59	<1.3	<1.3	<6.5
MeFOSAA (2355-31-9)	ng/l															<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
MeFOSE (24448-09-7)	ng/l															<10	<100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<20	<100
N-EtFOSA (4151-50-2)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
NFDHA (151772-58-6)	ng/l															<3	<30	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<6	<6	<30
N-MeFOSA (31506-32-8)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	12.3	12.5	<12.5	<10	60.3	16.1	13.2	16.8	<14	<14	13.5	10.6	<20	<20	12.1	<20	28.6	25.9	26.7	36.4	19.2	22.3	18.1	16.3	13.8	13.3	26.1	35.2	23.2	25.1	17.3	19.1	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	12.5	12.6	6.69	7.86	18.6	12	9.08	9.33	10.4	9.3	9.53	8.67	11	<10	11.1	<10	21.3	22.5	23.6	23.8	22.3	24.6	16.1	16.4	15.3	15.1	29.2	27.7	35.3	36	30.5	28.8	16.1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<10	<10	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<10	<10	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
PFDoS (79780-39-5)	ng/l	<2	<4	<1	<2	<10	<2	<1	<2	<2	<2	<1	<1	<10	<10	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<10	<10	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
PFecHS (133201-07-7)	ng/l															21.6	<10	36.6	39.2	56.6	55.6	54.4	75.9	45.1	46.9	47.6	45.7	97.7	90.2	101	98.8	102	77.1	236
PFEESA (113507-82-7)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	9.65	8.93	5.87	10.9	16.3	11.1	9.3	9.2	5.84	5.53	7.17	5.75	<10	20.6	7.53	<10	22.7	21.1	27.9	29.2	22.9	26.9	18.3	19	15.8	15.2	30.2	28.4	27.6	30.5	31.2	31.8	<10
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	2.91	2.39	1.78	2.28	5.88	3.17	1.09	1.15	<1	<1	<1	<1	<10	<10	1.74	<10	<1	1.13	1.39	2.02	<1	<1	<1	<1	<1	1.67	1.85	1.51	<2.5	2.68	<2	<2	<10
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	37.2	36.1	24.4	29.2	56.2	38.1	32	37.4	23.2	21.6	26.3	22.6	31.1	33.2	32.3	27.8	69	69.5	77.2	73.1	58.8	70.1	46.2	51.9	38.7	40.6	75.1	76.3	68.2	69.3	61.1	61.2	32.1
PFHxDA (67905-19-5)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	42.3	40.2	25.8	33.3	61.4	40.2	16.2	17.7	5.72	5.39	5.46	4.54	19.8	18.9	44.7	34.5	60.7	63.8	108	110	103	122	86.3	88.8	84.8	87	165	154	144	164	166	154	40.9
PFMOBA (863090-89-5)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFMOPrA (377-73-1)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	4.9	4.52	3.64	4.93	9.86	5.55	1.8	2.12	<1	<1	<1	<1	<10	<10	3.91	<10	1.7	1.74	2.89	4.14	2.36	2.39	2.09	2	2.58	2.81	4.89	4.89	5.89	6.6	9	8.8	<10
PFNS (68259-12-1)	ng/l	<1	<2	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	8.18	8.38	6.83	7.79	34.1	11	3.75	4.34	2	2.03	2.31	1.89	6.73	13.8	8.85	<6.5	12.8	13.7	21.7	23.8	21.5	23.9	17.5	16.4	15.7	17.2	32.1	31.3	37.9	41.6	37.5	42.1	<6.5
PFODA (16517-11-6)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<10	<4	<2	<2	<2	<2	<2	<2	<20	<20	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	19.5	18	22.5	31	37.9	24.2	28.9	31.1	15.8	15.3	21.3	18.5	21.2	22.4	36.3	30	73.5	74.6	74.5	71.1	56.9	67.1	43.8	42.9	42.7	41.9	80.5	81.4	66.6	71.1	70	74.1	48.1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	7.01	7.08	4.45	5.92	10.1	7.58	5.09	5.55	3.85	3.77	4.02	3.53	<10	<10	5.18	<10	14.4	15.7	19.5	19	19.7	20.6	14.6	15.1	13.5	13.9	25.5	25	23.8	26.8	24.7	15.6	<10
PFTeA (376-06-7)	ng/l															<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFTrDA (72629-94-8)	ng/l	<1	<2	<1	<2	<5	<2	<2	<1	<2	<2	<1	<1	<10	<10	<3	<30	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<6	<6	<30
PFTrDS (174675-49-1)	ng/l	<2	<4	<1	<1	<25	<2	<1	<2	<2	<2	<1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<10
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<10	<10	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
PFUnDS (749786-16-1)	ng/l	<2	<4	<1	<1	<5	<2	<1	<1	<2	<2	<1	<1	<10	<10	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<4	<20
Total PFAS DWI 47	ng/l																													705	764	750	724	<900
Total PFOS	ng/l	65.2	56.6	29.3	40.5	79.1	48.5	13.8	15.3	<2.5	<2.5	<0.65	<0.65	20.7	16.3	73.1	54.8	10.4	13.2	29.8	39.5	16	8.31	14.5	14.2	8.26	5.17	39.2	44.1	42.7	44.4	65.1	56.1	<6.5
Sum of PFAS																																		
Sum of 20 PFAS	ng/l	221.65	207.30	131.26	173.68	389.74	217.50	134.21	149.99	66.81	62.92	89.59	76.08	110.53	125.20	236.81	147.10	315.10	322.87	413.18	432.06	342.66	388.20	277.49	283.00	251.14	253.85	509.64	509.80	475.19	518.08	512.40	491.60	137.20
Sum of Total PFAS	ng/l	346.16	321.21	199.58	263.34	541.07	312.58	168.38	188.47	73.59	69.69	96.56	82.04	154.83	165.80	368.61	227.80	407.31	420.08	590.04	617.49	496.07	574.49	415.63	419.94	378.20	380.73	781.17	776.93	746.97	807.96	814.50	780.41	385.90
Average Sum of 20 PFAS	ng/l	271.93																																
Average Total PFAS	ng/l	405.26																																
Min Sum of 20 PFAS	ng/l	62.92																																
Max Sum of 20 PFAS	ng/l	518.08																																

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North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW007																																			
		15-11-21	15-11-21	10-02-22	10-02-22	15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<5	<10	<10	<50
4:2 FTS (757124-72-4)	ng/l	<20	<10	<20	<20	<2	<20	<10	<20	<10	<4	<2	<2	<2	<10	<10	<20	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
5:3 FTCA (914637-49-3)	ng/l	<200	<100	<200	<200	<20	<200	<100	<200	<100	<40	<20	<20	<20	<100	<100	<200	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<25	<25	<25	<25	<50	<5	<10	<10	<50
6:2 FTAB (34455-29-3)	ng/l																					<10	<50	<10	<10	<10	<10	<10	<10	<50	<50	<50	<50	<50	<100	<10	<20	<20	<100
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	23	20.1	20.2	19.2	17.9	14.8	15.4	18.5	16.6	14.5	13.2	13.1	16.9	12	12.9	14.1	11.7	12.3	5.9	5.51	6.5	10.3	3.04	3.79	<1	<1	<1	1.17	<5	288	<5	<5	6.43	<10	<1	<2	53.6	27.6
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<25	<25	<25	<25	<50	<5	<10	<10	<50
8:2 FTS (39108-34-4)	ng/l	<20	<10			<3.5	<20	<10	<20	<10	6.88	3.16	<3	<2	<10	<10	<20	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	48	<10	<10	<10	<20	<2	<4	<4	<20
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
Branched PFOS	ng/l	9.49	12.8	15.4	14.3	12.4	15.6	10.2	9.92	14.4	8.21	10.2	10.3	11.7	7.35	9.51	17.1	5.46	6.16	7.13	6.34	6.36	8	7.35	9.01	14.9	12.8	6.55	6.67	6.48	223	13.7	11	7.53	11.7	8.57	11.3	27.8	<6.5
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<50	<50	<50	<50	<100	<10	<20	<20	<100
FBSA (30334-69-1)	ng/l																	<1	<1	2.01	2.15	1.72	<5	1.34	1.19	<1	<1	<1	<1	<5	9.34	<5	<5	<5	<10	<1	<2	<2	<10
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<5	1.12	<1	<1	<1	<1	<1	<5	22.8	<5	<5	<5	<10	<1	<2	<2	<10
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<25	<25	<25	<25	<50	<5	<10	<10	<50
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	11.3	8.85	11.5	10.8	10.2	13.5	6.03	8.41	13.2	11.6	5.31	5.02	5.47	5.92	6.22	10.1	5.97	6.54	3.2	3.45	3.35	4.36	2.92	3.24	6.86	6.33	2.82	3	5.6	207	6.56	7.04	4.31	<6.5	6.6	6.28	1.79	<6.5
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<50	<50	<50	<50	<100	<10	<20	<20	<100
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<15	<15	<15	<15	<15	<30	<3	<6	<6	<30
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<22	<19.5	<20	<20	20.7	20.6	21	55.3	67.3	17.5	<18.5	<23	<5	<10	16.7	<20	14.2	11.1	14	13.9	10.4	15.3	15.6	13.2	12.7	14.1	14.4	9.78	<10	<10	16.3	14.5	<10	<20	9.99	9.97	20.9	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<10	<5	<10	<10	<10	<10	7.49	<10	10.1	10.1	10.4	11.1	12.2	9.03	9.08	16.4	6.34	5.91	9.15	9.12	6.97	9.08	10.2	10.6	3.42	3.53	5.3	5.51	<5	48.1	8.84	8.28	5.97	<10	3.59	2.82	11.6	15.7
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<10	<5	<10	<10	<10	<10	<5	<10	<5	<2	<1	<1	<1	<5	<5	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<10	<5	<10	<10	<10	<10	<5	<10	<5	<2	<1	<1	<1	<5	<5	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
PFDoS (79780-39-5)	ng/l					<10	<10	<5	<10	<10	<2	<2	<2	<1	<5	<5	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<10	<5	<10	<10	<10	<10	<5	<10	<5	<2	<1	<1	<1	<5	<5	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
PFecHS (133201-07-7)	ng/l																	217	228	143	135	152	167	147	172	14.8	14.6	22.6	15.7	21.2	283	194	181	155	183	55.7	59.3	38.4	178
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<10	6.61	<10	<10	<10	<10	9.34	12.6	12.2	9.6	7.88	7.84	9.13	8.47	10.3	11.9	<1	5.94	7	6.92	5.66	7.98	8.11	8.65	9.32	8.45	11.4	9.89	7.04	139	8.99	9.88	7.73	11.5	7.42	7.59	12.6	<10
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<10	<5	<10	<10	<10	<10	<5	<10	<5	<2	<1	<1	<1	<5	<5	<10	<1	<1	<1	<1	<1	<5	<1	1.15	<1	<1	<1	<1	<5	14.4	<5	<5	<5	<10	<1	<2	<2	<10
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	13.4	11.1	22.2	21.2	27.3	26.1	24.5	29.8	31.9	32.8	25.1	25.7	32.4	26.3	29.3	45.4	21.7	23.1	28.2	26	24.4	27	35.2	32.4	20.5	19.1	26.6	19.1	16.2	204	23.4	24.4	19.1	22.4	12.8	13.7	29.7	36
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	14.2	17.3	27.9	26.3	32	32.5	27.6	35.4	34.6	32.6	30.5	31.3	36.9	30.5	27.5	39	26.1	22.5	28.4	26.9	19.6	22	27.9	31.7	17.1	16.3	26.2	25.4	10.2	236	32.9	33.4	19.6	24.7	11.3	15	55.5	32.8
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<10	<5	<10	<10	<10	<10	<5	<10	<5	<2	1.01	1.09	1.14	<5	<5	<10	<1	<1	<1	<1	<1	<5	<1	<1	2.95	2.7	2.04	1.15	<5	30.6	<5	<5	<5	<10	1.54	<2	4.24	<10
PFNS (68259-12-1)	ng/l					<10	<10	<5	<10	<5	<2	<1	<1	<1	<5	<5	<10	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	8.48	4.91	14	9.46	10.1	10.7	16	24.8	20.2	8.87	6.24	6.26	7.71	7.66	6.67	12	6.59	6.02	6.94	6.24	5.19	6.95	5.93	6.8	5.68	5.54	6.08	5.02	4.46	125	5.51	8.03	7.7	9.16	4.09	3.48	15.7	<6.5
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<20	<10	<20	<20	<20	<20	<10	<20	<10	<4	<2	<2	<2	<10	<10	<20	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	13.5	15.9	16.3	15.8	21.6	19.5	27.7	33.6	26.6	21	15.2	14.1	27.4	21.4	21.4	39.1	24.1	21.9	30.2	29.4	26.8	29	43	42.5	25.5	25	30	20.9	24.1	292	27.5	29.3	26.9	32.2	27.6	26.9	37.1	46.9
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<10	<5	<10	<10	<10	<10	5.06	<10	6.45	6.26	6.09	6	6.85	5.51	5.64	<10	2.85	2.97	4.8	4.74	3.99	5.22	5.5	5.97	2.5	2.43	4.26	4.85	<5	19.6	6.86	7.26	5.33	<10	1.51	2.63	11.1	<10
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFTrDA (72629-94-8)	ng/l					<10	<10	<5	<10	<5	<2	<2	<2	<1	<5	<5	<10	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<15	<15	<15	<15	<15	<30	<3	<6	<6	<30
PFTrDS (174675-49-1)	ng/l					<10	<10	<5	<10	<25	<4	<2	<2	<1	<5	<5	<10	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<10	<1	<2	<2	<10
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<10	<5	<10	<10	<10	<10	<5	<10	<5	<2	<1	<1	<1	<5	<5	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
PFUnDS (749786-16-1)	ng/l					<10	<10	<5	<10	<5	<2	<2	<2	<1	<5	<5	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<10	<20	<2	<4	<4	<20
Total PFAS DWI 47	ng/l																															<450	<450	<450	<900	151	<180	320	<900
Total PFOS	ng/l	20.8	21.7	26.9	25.1	22.6	29.1	16.2	18.3	27.6	19.8	15.5	15.3	17.2	13.3	15.7	27.3	11.4	12.7	10.3	9.78	9.7	12.4	10.3	12.3	21.7	19.2	9.37	9.67	12.1	430	20.3	18.1	11.8	11.7	15.2	17.6	29.6	<6.5
Sum of PFAS																																					
Sum of 20 PFAS	ng/l	70.38	77.52	107.30	97.86	134.30	138.50	154.89	209.80	236.95	158.53	117.92	118.69	150.93	122.17	142.29	191.10	113.28	112.14	138.99	133.00	112.51	134.93	161.74	165.27	121.37	116.35	135.65	111.27	74.10	1538.70	150.60	153.15	104.13	111.66	95.04	99.69	228.04	133.40
Sum of Total PFAS	ng/l	114.17	119.27	154.40	142.16	174.80	182.40	186.52	246.63	281.15	199.72	149.79	147.11	185.00	147.44	170.92	232.40	353.41	363.14	300.23	285.45	282.44	324.59	324.51	354.50	157.93	150.08	167.62	137.81	107.38	2619.84	364.86	352.19	277.40	306.36	165.91	176.57	349.63	339.00
Average Sum of 20 PFAS	ng/l	170.37																																			
Average Total PFAS	ng/l	291.97																																			
Min Sum of 20 PFAS	ng/l	70.38																																			
Max Sum of 20 PFAS	ng/l	1538.70																																			

FEHILY TIMONEY

North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW008																																		
		15-11-21	15-11-21	10-02-22	10-02-22	15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<5	<5	<25
4:2 FTS (757124-72-4)	ng/l	<2	<2	<20	<2	<10	<10	<10	<10	<4	<4	<2	<2	<2	<2	<10	<10	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<200	<20	<100	<100	<100	<100	<40	<40	<20	<20	<20	<20	<100	<100	<5	<5	<5	<5	<25	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<5	<25
6:2 FTAB (34455-29-3)	ng/l																					<50	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<10	<1	<5	<5	<5	<5	<2	<2	<1	<1	<1	<1	<5	<5	1.86	1.58	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<25	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<5	<25
8:2 FTS (39108-34-4)	ng/l	<2	<2			<10	<10	<10	<10	<4	<4	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
Branched PFOS	ng/l	16.4	16.4	18.3	9.46	12.2	11.4	15.2	15.2	17.1	16.4	16.7	15.6	13.5	16.8	11.6	13.4	44.8	49.7	13.7	12.3	11.6	14.8	13.5	12.9	17.6	19.9	8.28	11.8	11.3	9.72	8.11	10.3	10.9	10.5	18.1	21.1	11.2
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<50	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50
FBSA (30334-69-1)	ng/l																	1.28	1.48	2.61	2.6	<5	1.9	<5	<5	2.11	2.72	4.93	1.21	<1	1.61	<1	<5	<5	<5	2.02	1.03	<5
FHxSA (41997-13-1)	ng/l																	1.66	1.91	2.7	2.49	<5	1.86	<5	<5	1.41	1.78	6.71	1.07	<1	<1	<1	<5	<5	<5	<1	<1	<5
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<25	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<5	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	27.5	26.2	24.4	23	18.8	17.2	25.4	28.2	36.1	35	29.5	28.7	21.5	30	20.8	24	44.7	49.9	31.3	30.7	17.4	25.3	22	21.1	30.9	36.4	17.6	13.9	16.2	13.6	12.7	18.1	15.7	12.7	24.9	27.7	14.7
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<50	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<15	<3	<15	<15	<3	<3	<3	<3	<3	<3	<3	<15	<15	<15	<3	<3	<15
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	4.34	5.54	<20	4.34	<10	<10	<27	<27	8.31	13.8	<15	<13.5	8.42	8.43	<10	<10	4.63	3.83	7.16	6.7	<10	6.85	13	10.5	10.3	11.7	6.7	5.47	8.61	7.92	6.72	10.1	<10	<10	10.7	10.5	<10
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.52	1.78	<10	2.2	<5	<5	<5	<5	4.54	4.17	5.16	4.23	3.69	3.95	<5	<5	1.7	1.3	3.79	3.55	<5	3.22	6.99	<5	3.7	3.82	3.28	2.8	2.66	2.76	2.69	<5	<5	<5	4.99	3.41	5.87
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<10	<1	<5	<5	<5	<5	<2	<2	<1	<1	<1	<1	<5	<5	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<10	<1	<5	<5	<5	<5	<2	<2	<1	<1	<1	<1	<5	<5	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
PFDoS (79780-39-5)	ng/l					<5	<5	<5	<5	<2	<2	<2	<2	<1	<1	<5	<5	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<10	<1	<5	<5	<5	<5	<2	<2	<1	<1	<1	<1	<5	<5	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
PFecHS (133201-07-7)	ng/l																	7.58	8.07	15.7	15.1	13.4	12.7	14.8	14	19	21.6	11.2	11.2	13.3	12.4	10.6	10.5	<5	<5	27.1	20.8	15.8
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	3.26	2.25	<10	1.12	<5	<5	<5	<5	<2	<2	1.89	1.9	1.33	1.82	10.6	<5	<1	<1	2.16	2.41	<5	1.6	<5	<5	2.56	2.45	<1	1.19	1.96	1.98	1.85	<5	<5	<5	2.59	2.16	<5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	1.35	1.42	<10	<1	<5	<5	<5	<5	<2	<2	<1	<1	<1	1.01	<5	<5	<1	<1	1.25	1.08	<5	1.19	<5	<5	1.3	1.37	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	4.61	3.27	<10	3.33	<5	<5	<5	<5	6.33	5.62	4.68	4.37	4.05	5.31	6.99	<5	2.76	3.05	6.37	5.56	5.23	3.74	5.34	<5	6.63	7.82	3.3	2.75	4.29	3.57	4.08	6.16	<5	<5	6.75	6.42	<5
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	12	12.4	12.8	8.76	10.7	10.2	13.4	12.9	17.4	16.5	17.7	17.5	13.8	19.1	11.2	11.2	13	14.8	23	20.6	14.9	16.7	16.8	15.6	26.7	28.4	15.7	13.1	15	14.5	12.8	16.3	14.6	14.3	23.7	25.8	14.1
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<10	<1	<5	<5	<5	<5	<2	<2	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFNS (68259-12-1)	ng/l					<5	<5	<5	<5	<2	<2	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.33	2	<6.5	1.87	<3.25	3.78	7.48	7.81	3.63	4.38	2.35	2.41	2.24	2.58	8.18	<3.25	2	1.98	3.32	3.24	4.62	2.24	4.51	4.15	3.12	3.32	2.23	2.17	2.35	3.2	1.78	<3.25	<3.25	<3.25	2.9	2.69	<3.25
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<20	<2	<10	<10	<10	<10	<4	<4	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	3.2	2.07	<10	1.45	<5	<5	<5	<5	2.61	2.73	2.21	2.1	2.45	3.06	<5	<5	2.71	2.13	5.44	4.59	<5	2.69	6.41	5.58	4.22	4.6	3.62	3.36	5.25	4.13	4.17	<5	5.56	<5	5.97	8.06	<5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	1.41	1.45	<10	1.55	<5	<5	<5	<5	2.57	2.68	2.56	2.39	2.3	2.78	<5	<5	<1	<1	2.9	2.88	<5	2.23	5.21	<5	3.73	4.17	2.7	2.56	2.5	2.63	2.19	<5	<5	<5	3.55	3.5	<5
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFTrDA (72629-94-8)	ng/l					<5	<5	<5	<5	<2	<2	<2	<2	<1	<1	<5	<5	<3	<3	<3	<3	<15	<3	<15	<15	<3	<3	<3	<3	<3	<3	<3	<15	<15	<15	<3	<3	<15
PFTrDS (174675-49-1)	ng/l					<5	<5	<5	<5	<4	<4	<2	<2	<1	<1	<5	<5	<1	<1	<1	<1	<5	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<10	<1	<5	<5	<5	<5	<2	<2	<1	<1	<1	<1	<5	<5	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
PFUnDS (749786-16-1)	ng/l					<5	<5	<5	<5	<2	<2	<2	<2	<1	<1	<5	<5	<2	<2	<2	<2	<10	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<10
Total PFAS DWI 47	ng/l																															<90	<450	<450	<450	-	-	<450
Total PFOS	ng/l	44	42.6	42.7	32.5	31	28.5	40.6	43.4	53.1	51.4	46.3	44.3	35	46.8	32.4	37.5	89.5	99.6	45	43	29	40.1	35.5	34	48.5	56.3	25.8	25.7	27.5	23.3	20.8	28.3	26.6	23.2	43	48.7	25.8
Sum of PFAS																																						
Sum of 20 PFAS	ng/l	78.02	74.78	55.50	57.12	41.70	42.48	61.48	64.11	98.49	101.28	82.85	79.20	73.28	94.84	69.37	48.70	116.30	126.69	100.39	93.61	53.75	80.56	93.76	69.83	110.76	123.95	63.33	59.10	70.12	63.99	57.08	60.86	46.76	37.50	104.15	111.24	45.77
Sum of Total PFAS	ng/l	121.92	117.38	98.20	89.58	72.70	71.08	102.08	107.51	151.69	152.68	129.05	123.50	108.28	141.64	101.77	86.10	218.18	239.31	166.40	156.80	96.15	137.12	144.06	117.83	181.78	206.35	112.05	98.28	110.92	101.32	88.49	99.76	73.36	60.70	176.27	181.87	87.27
Average Sum of 20 PFAS	ng/l	76.02																																				
Average Total PFAS	ng/l	125.12																																				
Min Sum of 20 PFAS	ng/l	37.50																																				
Max Sum of 20 PFAS	ng/l	126.69																																				

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North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW014																																	
		10-02-22	10-02-22	15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	21-06-22	21-06-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
3:3 FTCA (356-02-5)	ng/l																<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<10	<10	<10
4:2 FTS (757124-72-4)	ng/l	<10	<2	<2	<20	<20	<20	<10	<4	<20	<20	<10	<2	<2	<10	<10	<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
5:3 FTCA (914637-49-3)	ng/l	<100	<20	<20	<200	<200	<200	<100	<40	<200	<200	<100	<20	<20	<100	<100	<5	<5	<5	<5	<50	<25	<5	<25	<5	<5	<5	<25	<50	<5	<10	<50	<25	<25	<10	<10	<10
6:2 FTAB (34455-29-3)	ng/l																				<100	<50	<10	<50	<10	<10	<10	<50	<100	<10	<20	<100	<50	<50	<20	<20	<20
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	4.18	4.4	1.8	<1	<10	<5	<1	<5	8.48	2.09	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<4
7:3 FTCA (812-70-4)	ng/l																<5	<5	<5	<5	<50	<25	<5	<25	<5	<5	<5	<25	<50	<5	<10	<50	<25	<25	<10	<10	<10
8:2 FTS (39108-34-4)	ng/l			<2	<20	<20	<20	<10	<4	<20	<20	<10	<2	<2	<10	<10	<2	2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
9Cl-PF3ONS (756426-58-1)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
ADONA (919005-14-4)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
Branched PFOS	ng/l	<3.25	<0.65	<0.65	<6.5	<6.5	<6.5	<3.25	<1.3	<6.5	<6.5	<3.25	<0.65	<0.65	<3.25	<3.25	1.34	1.16	<0.65	<0.65	<6.5	<3.25	<0.65	<3.25	<0.65	<0.65	<0.65	3.48	<6.5	<0.65	<1.3	<6.5	<3.25	<3.25	<1.3	<1.3	<1.3
EtFOSAA (2991-50-6)	ng/l																<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
EtFOSE (1691-99-2)	ng/l																<10	<10	<10	<10	<100	<50	<10	<50	<10	<10	<10	<50	<100	<10	<20	<100	<50	<50	<20	<20	<20
FBSA (30334-69-1)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
FHxSA (41997-13-1)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
HFPO-DA (13252-13-6)	ng/l																<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
HFPO-TA (13252-14-7)	ng/l																<5	<5	<5	<5	<50	<25	<5	<25	<5	<5	<5	<25	<50	<5	<10	<50	<25	<25	<10	<10	<10
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<0.65	0.698	<6.5	<6.5	<6.5	<3.25	<1.3	<6.5	<6.5	<3.25	<0.65	<0.65	<3.25	<3.25	10.7	11.2	<0.65	<0.65	<6.5	<3.25	<0.65	<3.25	<0.65	<0.65	<0.65	<3.25	<6.5	<0.65	<1.3	<6.5	<3.25	<3.25	<1.3	<1.3	<1.3
MeFOSAA (2355-31-9)	ng/l																<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
MeFOSE (24448-09-7)	ng/l																<10	<10	<10	<10	<100	<50	<10	<50	<10	<10	<10	<50	<100	<10	<20	<100	<50	<50	<20	<20	<20
N-EtFOSA (4151-50-2)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
NFDHA (151772-58-6)	ng/l																<3	<3	<3	<3	<30	<15	<3	<15	<3	<3	<3	<15	<30	<3	<6	<30	<15	<15	<6	<6	<6
N-MeFOSA (31506-32-8)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<10	5.64	6.28	<20	<30	36.2	<20	17.1	<20	<20	<80	8.76	7.92	<10	<10	9.97	9.07	6.82	5.62	<20	<10	5.39	19.1	6.12	7.53	2.48	<10	<20	5.38	5.22	<20	<10	<10	6.58	6.97	<4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
PFDoS (79780-39-5)	ng/l			<2	<10	<10	<10	<10	<2	<20	<20	<10	<1	<1	<5	<5	<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
PFecHS (133201-07-7)	ng/l																<1	<1	<1	<1	<10	<5	1.1	<5	<1	<1	1.23	<5	<10	1.19	<2	<10	<5	<5	<2	<2	<2
PFEESA (113507-82-7)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<5	<1	1.62	<10	<10	<10	5.88	4.3	<10	<10	<5	1.21	1.03	<5	<5	2.11	2.39	1.52	1.4	<10	<5	1.13	<5	<1	1.08	<1	<5	<10	1.35	<2	<10	<5	<5	<2	<2	<2
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<5	<1	3.72	<10	<10	<10	8.76	7.06	<10	<10	<5	2.3	2.32	<5	<5	9.95	11.4	3.17	2.9	<10	<5	2.64	<5	1.65	1.77	<1	<5	<10	1.67	2.83	<10	<5	<5	2.77	2.83	2.67
PFHxDA (67905-19-5)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<1	<1	1.05	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	1.24	<2	<10	<5	<5	<2	<2	<2
PFMOBA (863090-89-5)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFMOPrA (377-73-1)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFNS (68259-12-1)	ng/l			<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	<0.65	0.96	<6.5	<12.5	<16	14.8	4.56	<6.5	<6.5	<6.5	<3.25	0.77	0.702	<3.25	<3.25	1.83	1.73	1.51	1.01	<6.5	<3.25	0.842	<3.25	<0.65	<0.65	0.757	<3.25	<6.5	1.18	<1.3	<6.5	<3.25	<3.25	<1.3	<1.3	<1.3
PFODA (16517-11-6)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<2	<2	<20	<20	<20	<10	<4	<20	<20	<10	<2	<2	<10	<10	<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<5	<1	5.17	11.4	<10	10.3	14.3	10.9	<10	<10	<5.5	4.55	4.17	5.83	<5	13.7	15.6	6.21	5.11	<10	7.23	6.51	8.33	3.11	3.52	2.04	<5	<10	5.44	6.21	<10	5.66	5.74	7.22	7.7	9.44
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFTeA (376-06-7)	ng/l																<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFTrDA (72629-94-8)	ng/l			<1	<10	<10	<10	<5	<2	<10	<10	<10	<1	<1	<5	<5	<3	<3	<3	<3	<30	<15	<3	<15	<3	<3	<3	<15	<30	<3	<6	<30	<15	<15	<6	<6	<6
PFTrDS (174675-49-1)	ng/l			<2	<10	<10	<10	<25	<2	<20	<20	<10	<1	<1	<5	<5	<1	<1	<1	<1	<10	<5	<1	<5	<1	<1	<1	<5	<10	<1	<2	<10	<5	<5	<2	<2	<2
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<1	<1	<10	<10	<10	<5	<2	<10	<10	<5	<1	<1	<5	<5	<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
PFUnDS (749786-16-1)	ng/l			<2	<10	<10	<10	<5	<2	<10	<10	<10	<1	<1	<5	<5	<2	<2	<2	<2	<20	<10	<2	<10	<2	<2	<2	<10	<20	<2	<4	<20	<10	<10	<4	<4	<4
Total PFAS DWI 47	ng/l																														<180	<900	<450	<450	-	-	<180
Total PFOS	ng/l	<3.25	<0.65	0.698	<6.5	<6.5	<6.5	<3.25	<1.3	<6.5	<6.5	<3.25	<0.65	<0.65	<3.25	<3.25	12.1	12.4	-	<0.65	<6.5	<3.25	<0.65	<3.25	<0.65	<0.65	<0.65	3.48	<6.5	<0.65	<1.3	<6.5	<3.25	<3.25	<1.3	<1.3	<1.3
Sum of PFAS																																					
Sum of 20 PFAS	ng/l	0.00	5.64	18.45	11.40	0.00	46.50	43.74	43.92	0.00	0.00	0.00	17.59	16.14	5.83	0.00	49.66	52.59	20.28	16.04	0.00	7.23	16.51	27.43	10.88	13.90	5.28	3.48	0.00	16.26	14.06	0.00	5.66	5.74	16.57	17.30	12.11
Sum of Total PFAS	ng/l	0.00	5.64	19.15	11.40	0.00	46.50	43.74	43.92	0.00	0.00	0.00	17.59	16.14	5.83	0.00	65.88	71.35	22.08	16.04	0.00	7.23	17.61	27.43	19.36	15.99	6.51	6.96	0.00	17.45	14.06	0.00	5.66	5.74	16.57	17.30	12.11
Average Sum of 20 PFAS	ng/l	14.45																																			
Average Total PFAS	ng/l	15.98																																			
Min Sum of 20 PFAS	ng/l	0.00																																			
Max Sum of 20 PFAS	ng/l	52.59																																			

FEHILY TIMONEY

North Apron Monitoring Results
(Groundwater)

Parameter	Unit	GW015D																																
		15-11-21	15-11-21	10-02-22	10-02-22	15-03-22	15-03-22	19-04-22	19-04-22	24-05-22	24-05-22	15-11-22	15-11-22	14-02-23	14-02-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	20-05-25	20-05-25	05-09-25	05-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l															<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
3:3 FTCA (356-02-5)	ng/l															<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<50	<50	<25
4:2 FTS (757124-72-4)	ng/l	<2	<2	<10	<20	<10	<2	<10	<10	<10	<10	<20	<2	<10	<10	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<100	<200	<100	<20	<100	<100	<100	<100	<200	<20	<100	<100	<5	<5	<25	<25	<25	<25	<5	<5	<5	<5	<25	<25	<50	<25	<25	<25	<50	<50	<25
6:2 FTAB (34455-29-3)	ng/l																	285	356	<50	56.5	112	119	144	258	804	1330	1250	971	1020	813	2750	1870	981
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	14.7	14.1	8.6	<10	22.3	31.4	9.56	7.84	15.7	18	13.6	14.1	5.86	6.86	3.55	3.55	17.9	21.1	<5	6.38	14.5	14.6	20.5	22.5	10.7	<5	<10	<5	25.6	19.9	53.9	20.4	72.6
7:3 FTCA (812-70-4)	ng/l															<5	<5	<25	<25	<25	<25	<5	<5	<5	<5	<25	<25	<50	<25	<25	<25	<50	<50	<25
8:2 FTS (39108-34-4)	ng/l	2.96	<2			<11	13.9	<10	<10	<10	<10	<20	3.29	<10	<10	<2	<2	<10	<10	<10	<10	<2	<2	2.09	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
9Cl-PF3ONS (756426-58-1)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
ADONA (919005-14-4)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
Branched PFOS	ng/l	2.51	2.6	<3.25	<6.5	<3.25	<6.5	<3.25	<3.25	<3.25	<3.25	<6.5	1.24	<3.25	<3.25	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<0.65	<0.65	0.883	<0.65	<3.25	<3.25	<6.5	<3.25	<3.25	<3.25	<6.5	<6.5	<3.25
EtFOSAA (2991-50-6)	ng/l															<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
EtFOSE (1691-99-2)	ng/l															<10	<10	<50	<50	<50	<50	<10	<10	<10	<10	<50	<50	<100	<50	<50	<50	<100	<100	<50
FBSA (30334-69-1)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
FHxSA (41997-13-1)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
HFPO-DA (13252-13-8)	ng/l															<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
HFPO-TA (13252-14-7)	ng/l															<5	<5	<25	<25	<25	<25	<5	<5	<5	<5	<25	<25	<50	<25	<25	<25	<50	<50	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	3.33	3.62	3.55	<6.5	3.32	<6.5	<3.25	<3.25	3.91	<3.25	<6.5	1.75	<3.25	<3.25	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<0.65	<0.65	0.834	<0.65	<3.25	<3.25	<6.5	<3.25	<3.25	<3.25	<6.5	<6.5	<3.25
MeFOSAA (2355-31-9)	ng/l															<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
MeFOSE (24448-09-7)	ng/l															<10	<10	<50	<50	<50	<50	<10	<10	<10	<10	<50	<50	<100	<50	<50	<50	<100	<100	<50
N-EtFOSA (4151-50-2)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
NFDHA (151772-58-6)	ng/l															<3	<3	<15	<15	<15	<15	<3	<3	<3	<3	<15	<15	<30	<15	<15	<15	<30	<30	<15
N-MeFOSA (31506-32-8)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	335	340	166	157	121	162	97.8	75.5	79.1	108	105	136	24.7	19.2	10.9	10.9	27.5	36.9	18.6	19.6	26.8	24.3	43.3	43.6	84	125	88.5	84.4	98	107	146	168	60.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<3	<5	<10	<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<5	<10	<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<5	<10	<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
PFDoS (79780-39-5)	ng/l					<5	<10	<5	<5	<5	<40	<10	<1	<5	<5	<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<5	<10	<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
PFecHS (133201-07-7)	ng/l															<1	<1	7.78	7.54	<5	<5	2.48	2.5	4.07	4.26	8.25	17.4	12.4	9.2	15.9	19.6	50.8	32.4	11.4
PFEESA (113507-82-7)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	207	257	88.2	64	59.4	78.8	31.6	31.3	27.3	44.9	43.9	62	7.28	7.43	3.99	4.13	9.48	11	5.63	6.08	5.2	4.96	9.42	11.2	29.9	44.9	37.5	31.8	37.1	39.3	69.3	38.3	20.4
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<5	<10	<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	669	626	215	212	157	227	112	102	94	147	165	190	22.4	21.6	15.7	14.4	35.8	42.5	12.2	13.8	26.5	25.4	40.2	49.4	142	205	112	113	136	149	255	152	66.7
PFHxDA (67905-19-5)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	5.53	4.99	<5	<10	<5	<10	<5	<5	<5	<5	<10	1.39	<5	<5	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	10.4	<5	<5	<5	<10	<10	<5
PFMOBA (863090-89-5)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFMOPrA (377-73-1)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	7.87	7.49	5.91	<10	5.54	<10	<5	<5	<5	<5	<10	2.12	<5	<5	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFNS (68259-12-1)	ng/l					<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	80.2	72.6	17.2	22.6	13.2	20.6	14.5	13	11.1	18.8	13.3	12	<3.25	<3.25	1.36	1.3	5.43	5.37	<3.25	<3.25	0.935	1.21	2.44	2.58	8.61	14.8	<6.5	6.73	9.89	10.2	14.2	12.4	<3.25
PFODA (16517-11-6)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<10	<20	<10	<20	<10	<10	<10	<10	<20	<2	<10	<10	<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	1870	1170	541	457	268	433	322	301	204	306	427	469	48.5	46.8	59.2	62.5	133	163	54.8	60.8	103	106	199	202	458	671	416	412	514	580	943	494	319
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<5	<10	<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFTeA (376-06-7)	ng/l															<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFTrDA (72629-94-8)	ng/l					<5	<10	<5	<5	<5	<15	<10	<1	<5	<5	<3	<3	<15	<15	<15	<15	<3	<3	<3	<3	<15	<15	<30	<15	<15	<15	<30	<30	<15
PFTrDS (174675-49-1)	ng/l					<5	<10	<5	<5	<5	<40	<10	<1	<5	<5	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1	<5	<5	<10	<5	<5	<5	<10	<10	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<5	<10	<5	<10	<5	<5	<5	<5	<10	<1	<5	<5	<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
PFUnDS (749786-16-1)	ng/l					<5	<10	<5	<5	<5	<10	<10	<1	<5	<5	<2	<2	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<20	<10	<10	<10	<20	<20	<10
Total PFAS DWI 47	ng/l																											<900	657	836	926	-	NDP	550
Total PFOS	ng/l	5.84	6.21	3.55	<6.5	3.32	<6.5	<3.25	<3.25	3.91	<3.25	<6.5	2.98	<3.25	<3.25	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<0.65	<0.65	1.72	<0.65	<3.25	<3.25	<6.5	<3.25	<3.25	<3.25	<6.5	<6.5	<3.25
Sum of PFAS																																		
Sum of 20 PFAS	ng/l	3180.44	2484.29	1036.86	912.60	627.46	921.40	577.90	522.80	419.41	624.70	754.20	875.49	102.88	95.03	91.15	93.23	211.21	258.77	91.23	100.26	162.44	161.87	296.08	308.78	722.51	1060.70	664.40	647.93	794.99	885.50	1427.50	864.70	466.30
Sum of Total PFAS	ng/l	3203.94	2504.61	1049.01	912.60	653.08	966.70	587.46	530.64	439.02	642.70	767.80	895.87	108.74	101.89	94.70	96.78	521.89	643.41	91.23	163.14	291.42	297.97	468.46	593.54	1545.46	2408.10	1926.80	1628.13	1856.49	1738.00	4282.20	2787.50	1531.30
Average Sum of 20 PFAS	ng/l	680.15																																
Average Total PFAS	ng/l	1100.93																																
Min Sum of 20 PFAS	ng/l	91.15																																
Max Sum of 20 PFAS	ng/l	3180.44																																

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APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit	GWMP 4							
		30-09-20	08-10-20	14-10-20	21-07-20	03-12-20	06-01-21	22-01-21	27-05-21
11Cl-PF3OUdS (763051-92-9)	ng/l								
3:3 FTCA (356-02-5)	ng/l								
4:2 FTS (757124-72-4)	ng/l								
5:3 FTCA (914637-49-3)	ng/l								
6:2 FTAB (34455-29-3)	ng/l								
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	4.56	5.94	<5	1.46	<1	2.37	<1	<2
7:3 FTCA (812-70-4)	ng/l								
8:2 FTS (39108-34-4)	ng/l								
9Cl-PF3ONS (756426-58-1)	ng/l								
ADONA (919005-14-4)	ng/l								
Branched PFOS	ng/l	1.33	<1	<5	1.68	<1	<1	<1	<2
EtFOSAA (2991-50-6)	ng/l								
EtFOSE (1691-99-2)	ng/l								
FBSA (30334-69-1)	ng/l								
FHxSA (41997-13-1)	ng/l								
HFPO-DA (13252-13-6)	ng/l								
HFPO-TA (13252-14-7)	ng/l								
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.53	0.817	<3.25	1.33	<0.65	<0.65	<0.65	1.84
MeFOSAA (2355-31-9)	ng/l								
MeFOSE (24448-09-7)	ng/l								
N-EtFOSA (4151-50-2)	ng/l								
NFDHA (151772-58-6)	ng/l								
N-MeFOSA (31506-32-8)	ng/l								
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	82.5	<12	14.2	207	5.6	12.2	<5	5.93
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	1.9	<5	1.29	<1	<1	<1	<2
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<5	<1	<1	<1	<1	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<5	<1	<1	<1	<1	<2
PFDoS (79780-39-5)	ng/l								
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l								
PFecHS (133201-07-7)	ng/l								
PFEESA (113507-82-7)	ng/l								
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.26	<2	<5	1.74	2.39	3.94	<1	2.46
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<5	<1	<1	<1	<1	<2
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	2.51	1.9	<5	1.31	1.21	3.17	<1	<2
PFHxDA (67905-19-5)	ng/l								
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<2.5	<1	<5	<1	<1	<1	<1	<2
PFMOBA (863090-89-5)	ng/l								
PFMOPrA (377-73-1)	ng/l								
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<5	<1	<1	<1	<1	<2
PFNS (68259-12-1)	ng/l								
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.15	<0.65	<3.25	1.8	1.22	1.27	<0.65	1.4
PFODA (16517-11-6)	ng/l								
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<10	<2	<2	<2	<2	<4
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<1	<3	<5	<1	<1	5.54	<1	<2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l								
PFTeA (376-06-7)	ng/l								
PFTrDA (72629-94-8)	ng/l								
PFTrDS (174675-49-1)	ng/l								
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<5	<1	<1	<1	<1	<2
PFUnDS (749786-16-1)	ng/l								
Total PFAS DWI 47	ng/l								
Total PFOS	ng/l	2.86	<1	<5	3.01	<1	<1	<1	<2
Sum of PFAS									
Sum of 20 PFAS	ng/l	91.28	3.80	14.20	216.15	10.42	26.12	0.00	9.79
Sum of Total PFAS	ng/l	98.70	10.56	14.20	220.62	10.42	28.49	0.00	11.63
Average Sum of 20 PFAS	ng/l	46.47							
Average Total PFAS	ng/l	49.33							
Min Sum of 20 PFAS	ng/l	0.00							
Max Sum of 20 PFAS	ng/l	216.15							

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APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GWMP 5																							
		08-10-20	14-10-20	21-10-20	03-12-20	06-01-21	22-01-21	27-05-21	22-03-23	22-03-23	31-05-23	31-05-23	16-08-23	16-08-23	22-11-23	22-11-23	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	05-03-25	05-03-25
11Cl-PF3OUdS (763051-92-9)	ng/l										<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l										<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l								<4	<4	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l								<40	<40	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l														<10	<10	<50	<10	<10	<10	<10	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	2.23	<5	1.15	2.37	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l										<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l								<4	<4	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<10	<10	<1	<1	<1	<1
Branched PFOS	ng/l	<1	<5	1.61	<1	<1	1.78	<1	<1.3	<1.3	1.28	1.21	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	1.23	0.96	<0.65	11.6	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l										<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l										<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l										<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l										<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<3.25	1.19	<0.65	<0.65	2.62	<0.65	4.84	4.72	1.22	1.16	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	0.728	<0.65	10.5	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l										<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l										<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l										<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	16.2	28.3	178	12.2	<2.5	12.3	20.7	<9.5	<9.5	4.6	6.29	4.04	5.93	5.97	9.45	<10	3	2.66	2.56	6.44	6.24	<2	2.26
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<2.5	<5	1.67	<1	<1	<1	<1	<2	<2	<1	<1	<1	1.16	<1	<1	<5	<1	1.08	1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<5	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<5	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l								<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l								<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1.5	<5	1.57	3.94	<1	5.76	2.92	<2	<2	<1	<1	1.18	1.43	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<5	<1	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	3.91	<5	1.77	3.17	<1	3.84	4.51	2.53	2.67	1.35	1.35	<1	1.87	2.25	1.87	<5	<1	<1	<1	1.65	1.63	<1	<1
PFHxDA (67905-19-5)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<5	<1	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<10	<25	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<5	<1	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l								<2	<2	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<3.25	1.54	1.27	1.02	1.95	0.717	1.61	1.63	0.79	<0.65	0.915	1.33	1.12	1.1	7.79	<0.65	0.867	0.948	0.807	<0.65	0.676	0.773
PFODA (16517-11-6)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<10	<2	<2	<2	<2	<2	<4	<4	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	8.91	10.4	<2	5.54	<1	2.49	13.6	3.99	3.46	4.64	4.52	2.76	3.7	3	4.49	<5	<1	1.01	<1	3.61	3.81	1.95	2.27
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l								<2	<2	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l										<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l								<2	<2	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l								<2	<2	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<5	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l								<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																						<90	<90
Total PFOS	ng/l	<1	<5	2.8	<1	<1	4.4	<1	4.84	4.72	2.5	2.38	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	1.23	1.69	<0.65	22	<0.65	<0.65
Sum of PFAS																								
Sum of 20 PFAS	ng/l	29.02	38.70	187.35	26.12	1.02	30.74	42.45	12.97	12.48	13.88	14.54	8.90	15.42	12.34	16.91	7.79	3.00	6.85	6.20	12.51	33.68	2.63	5.30
Sum of Total PFAS	ng/l	31.25	38.70	191.30	28.49	1.02	35.14	42.45	17.81	17.20	16.38	16.91	8.90	15.42	12.34	16.91	7.79	3.00	8.08	7.89	12.51	55.78	2.63	5.30
Average Sum of 20 PFAS	ng/l	22.57																						
Average Total PFAS	ng/l	24.51																						
Min Sum of 20 PFAS	ng/l	1.02																						
Max Sum of 20 PFAS	ng/l	187.35																						

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APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit				
		04-09-25	04-09-25	15-12-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<5	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	4.75	5.75	9.97	10.3
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	1.21	1.13
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	1.17	1.31
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.56	1.16	2.44	2.22
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	1.2	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.08	0.855	1.13	0.831
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.67	2.6	9.17	6.07
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65
Sum of PFAS					
Sum of 20 PFAS	ng/l	10.06	10.37	26.29	21.86
Sum of Total PFAS	ng/l	10.06	10.37	26.29	21.86
Average Sum of 20 PFAS	ng/l				
Average Total PFAS	ng/l				
Min Sum of 20 PFAS	ng/l				
Max Sum of 20 PFAS	ng/l				

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APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW11																							
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	03-04-24	03-04-24	16-07-24	16-07-24	25-09-24	25-09-24	10-12-24	10-12-24	05-03-25	05-03-25	21-05-25	21-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
3:3 FTCA (356-02-5)	ng/l						<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
4:2 FTS (757124-72-4)	ng/l				<10	<20	<1	<10	1.14	1.57	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
5:3 FTCA (914637-49-3)	ng/l				<100	<200	<5	<50	<5	<5	<5	<50	<50	<5	<5	<5	<25	<25	<25	<25	<25	<25	<25	<25
6:2 FTAB (34455-29-3)	ng/l										4720	7380	5460	5040	5080	3800	5340	4590	4480	4070	3240	2680	4900	5030
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	523	428	192	774	862	489	609	664	1230	439	583	427	247	278	272	583	675	840	645	213	246	379	399
7:3 FTCA (812-70-4)	ng/l						<5	<50	<5	<5	<5	<50	<50	<5	<5	<5	<25	<25	<25	<25	<25	<25	<25	<25
8:2 FTS (39108-34-4)	ng/l				168	206	135	171	93.3	128	95.6	142	120	67.2	80.6	80.8	95.2	89.2	99.2	67.9	53.3	48.8	86.2	82.2
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
ADONA (919005-14-4)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
Branched PFOS	ng/l	58.4	57.5	37.1	19.2	24	95.9	169	18.4	26.1	22.6	36.9	29.1	10.8	15.6	15.2	35	27.8	45.5	34.5	15.3	18.3	44.5	52.4
EtFOSAA (2991-50-6)	ng/l						<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
EtFOSE (1691-99-2)	ng/l						<10	<100	<10	<10	<10	<100	<100	<10	<10	<10	<50	<50	<50	<50	<50	<50	<50	<50
FBSA (30334-69-1)	ng/l						3.36	<10	17.5	24.4	7.86	<10	<10	2.05	2.35	2.89	<5	<5	11.6	11.9	<5	<5	7.25	5.85
FHxSA (41997-13-1)	ng/l						8.02	<10	28.8	48	17.7	25.9	17.4	5.75	6.08	7.22	<5	<5	20.6	24.6	12.6	12.6	21	18.9
HFPO-DA (13252-13-6)	ng/l						<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
HFPO-TA (13252-14-7)	ng/l						<5	<50	<5	<5	<5	<50	<50	<5	<5	<5	<25	<25	<25	<25	<25	<25	<25	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	49.1	45.8	23.9	72.5	82	96.5	151	58.7	75.6	59.6	123	90.9	39	47.2	46.3	50.9	45	98.8	68.5	48.8	52.9	93.1	124
MeFOSAA (2355-31-9)	ng/l						<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
MeFOSE (24448-09-7)	ng/l						<10	<100	<10	<10	<10	<100	<100	<10	<10	<10	<50	<50	<50	<50	<50	<50	<50	<50
N-EtFOSA (4151-50-2)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
NFDHA (151772-58-6)	ng/l						<3	<30	<3	<3	<3	<30	<30	<3	<3	<3	<15	<15	<15	<15	<15	<15	<15	<15
N-MeFOSA (31506-32-8)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	138	180	144	113	129	77.4	54.6	184	323	154	179	92.9	62.5	54.7	51.2	68.9	75.9	203	194	113	105	176	182
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	5.59	9.95	3.84	11.6	13.8	8.43	<10	15.9	24.3	9.58	15.7	12.2	5	4.07	4.02	7.6	10.7	25.1	22.4	13.3	11	9.91	13.7
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<5	<1	<5	<10	<2	<20	<2	2.11	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<5	<1	<5	<10	<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
PFDoS (79780-39-5)	ng/l				<5	<10	<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<5	<1	<5	<10	<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
PFecHS (133201-07-7)	ng/l						<1	<10	<1	<1	<1	<10	<10	3.08	1.25	1.23	<5	<5	<5	<5	<5	<5	5.71	<5
PFEESA (113507-82-7)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	55.8	69.4	84.4	168	177	112	106	198	370	133	154	71.9	48	38.7	38.5	46.1	50.3	207	194	78.7	78	117	127
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<5	1.24	<5	<10	<1	<10	1.2	2.08	2.08	<10	<10	<1	1.04	1.1	<5	<5	<5	<5	<5	<5	<5	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	209	282	219	270	273	195	187	468	886	300	341	158	105	95.6	89.6	153	151	645	535	245	234	364	363
PFHxDA (67905-19-5)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	6.97	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	26.5	33.1	22.2	62.6	67.4	61.6	56	103	126	58.8	77.6	40.7	22.4	24	22.8	41.7	45.7	132	101	33.9	34.8	65.2	66.5
PFMOBA (863090-89-5)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
PFMOPrA (377-73-1)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<5	2.64	13.8	15.3	15.1	14.6	16.5	25	14.1	21.6	15.8	7.05	6.13	6.44	8.64	8.84	15.1	11.4	9.3	7.27	13.6	<5
PFNS (68259-12-1)	ng/l				<5	<10	<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	24.8	24.2	14.5	58.6	79.4	52.1	62.6	157	223	79.1	95.2	48.6	28.2	24.9	24.5	31.5	38.4	127	109	60.9	55.2	75.3	75.6
PFODA (16517-11-6)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	6.6	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<10	<2	<10	<20	<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	311	419	254	326	378	440	383	979	2010	738	824	353	281	193	198	303	333	1350	1370	639	583	974	974
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	5.33	3.89	8.29	<10	4.99	<10	13.6	16.6	6.37	10.2	10.7	2.99	3.08	2.98	7.05	8.74	17.5	14.3	8.02	6.3	5.48	9.87
PFTeA (376-06-7)	ng/l						<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
PFTrDA (72629-94-8)	ng/l				<5	<10	<3	<30	<3	<3	<3	<30	<30	<3	<3	<3	<15	<15	<15	<15	<15	<15	<15	<15
PFTrDS (174675-49-1)	ng/l				<5	<10	<1	<10	<1	<1	<1	<10	<10	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<5	<1	<5	<10	<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
PFUnDS (749786-16-1)	ng/l				<5	<10	<2	<20	<2	<2	<2	<20	<20	<2	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10
Total PFAS DWI 47	ng/l																				1540	1490	2450	2490
Total PFOS	ng/l	108	103	61	91.7	106	192	320	77.1	102	82.2	160	120	49.9	62.8	61.5	85.9	72.8	144	103	64.1	71.2	138	177
Sum of PFAS																								
Sum of 20 PFAS	ng/l	878.69	1125.98	810.71	1123.59	1238.90	1158.62	1183.80	2213.30	4110.09	1577.23	1878.30	923.80	612.04	508.02	500.64	753.39	795.38	2865.70	2654.10	1265.22	1185.77	1938.49	1988.67
Sum of Total PFAS	ng/l	1509.19	1657.28	1063.71	2157.29	2412.90	1986.40	2283.80	3095.14	5643.76	6939.59	10169.10	7068.20	6026.92	6019.10	4726.28	6857.49	6222.38	8461.40	7576.50	4848.22	4244.37	7488.82	7701.02
Average Sum of 20 PFAS	ng/l	1748.53																						
Average Total PFAS	ng/l	5398.97																						
Min Sum of 20 PFAS	ng/l	500.64																						
Max Sum of 20 PFAS	ng/l	5340.80																						

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APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit			
		04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<10	<10	<2
3:3 FTCA (356-02-5)	ng/l	<25	<25	<5
4:2 FTS (757124-72-4)	ng/l	<5	<5	<1
5:3 FTCA (914637-49-3)	ng/l	<25	<25	<5
6:2 FTAB (34455-29-3)	ng/l	4070	4240	1450
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	663	631	245
7:3 FTCA (812-70-4)	ng/l	<25	<25	<5
8:2 FTS (39108-34-4)	ng/l	99.2	96.2	51.4
9Cl-PF3ONS (756426-58-1)	ng/l	<5	<5	<1
ADONA (919005-14-4)	ng/l	<5	<5	<1
Branched PFOS	ng/l	31	39.6	13.1
EtFOSAA (2991-50-6)	ng/l	<10	<10	<2
EtFOSE (1691-99-2)	ng/l	<50	<50	<10
FBSA (30334-69-1)	ng/l	21.9	14.3	5.97
FHxSA (41997-13-1)	ng/l	29.6	23.9	13.7
HFPO-DA (13252-13-6)	ng/l	<10	<10	<2
HFPO-TA (13252-14-7)	ng/l	<25	<25	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	122	126	47.6
MeFOSAA (2355-31-9)	ng/l	<10	<10	<2
MeFOSE (24448-09-7)	ng/l	<50	<50	<10
N-EtFOSA (4151-50-2)	ng/l	<5	<5	<1
NFDHA (151772-58-6)	ng/l	<15	<15	<3
N-MeFOSA (31506-32-8)	ng/l	<5	<5	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	475	434	232
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	41.7	49.3	21.5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<10	<10	2.06
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<10	<10	<2
PFDoS (79780-39-5)	ng/l	<10	<10	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<10	<10	<2
PFecHS (133201-07-7)	ng/l	6.67	<5	1.66
PFEESA (113507-82-7)	ng/l	<5	<5	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	349	363	118
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<5	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1270	1250	428
PFHxDA (67905-19-5)	ng/l	<5	<5	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	170	159	39.8
PFMOBA (863090-89-5)	ng/l	<5	<5	<1
PFMOPrA (377-73-1)	ng/l	<5	<5	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	22.2	21.9	10.3
PFNS (68259-12-1)	ng/l	<5	<5	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	173	170	60.5
PFODA (16517-11-6)	ng/l	<5	<5	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<10	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2660	2580	637
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	26.9	20.4	7.21
PFTeA (376-06-7)	ng/l	<5	<5	<1
PFTrDA (72629-94-8)	ng/l	<15	<15	<3
PFTrDS (174675-49-1)	ng/l	<5	<5	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<10	<10	<2
PFUnDS (749786-16-1)	ng/l	<10	<10	<2
Total PFAS DWI 47	ng/l	6160	5990	1930
Total PFOS	ng/l	153	166	60.7
Sum of PFAS				
Sum of 20 PFAS	ng/l	5340.80	5213.60	1617.07
Sum of Total PFAS	ng/l	10384.17	10384.60	3445.50
Average Sum of 20 PFAS	ng/l			
Average Total PFAS	ng/l			
Min Sum of 20 PFAS	ng/l			
Max Sum of 20 PFAS	ng/l			

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APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW12																						
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	03-04-24	03-04-24	16-07-24	16-07-24	25-09-24	25-09-24	10-12-24	10-12-24	05-03-25	05-03-25	21-05-25	21-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
3:3 FTCA (356-02-5)	ng/l						<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
4:2 FTS (757124-72-4)	ng/l				<50	<20	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
5:3 FTCA (914637-49-3)	ng/l				<500	<200	<5	<5	<5	<5	<5	<5	<25	<25	<5	<5	<25	<5	<25	<25	<5	<5	<25	<25
6:2 FTAB (34455-29-3)	ng/l										<10	13.7	<50	<50	14.2	11.2	<50	<10	<50	<50	11	<10	<50	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<2	<1	47.4	41.1	26.7	4.04	45.3	6.48	13.1	16.2	24.9	22.8	6.29	6.06	11.2	7.26	7.37	7.44	4.71	4.84	6.69	17.3
7:3 FTCA (812-70-4)	ng/l						<5	<5	<5	<5	<5	<5	<25	<25	<5	<5	<25	<5	<25	<25	<5	<5	<25	<25
8:2 FTS (39108-34-4)	ng/l				<50	<20	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
ADONA (919005-14-4)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
Branched PFOS	ng/l	<3.25	2.84	1.54	<16.3	<6.5	2.03	2.17	4.09	2.04	1.86	1.69	5.24	4.1	1.63	1.92	<3.25	1.81	<3.25	<3.25	3.17	2.94	<3.25	<3.25
EtFOSAA (2991-50-6)	ng/l						<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
EtFOSE (1691-99-2)	ng/l						<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<50	<10	<50	<50	<10	<10	<50	<50
FBSA (30334-69-1)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
FHxSA (41997-13-1)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
HFPO-DA (13252-13-6)	ng/l						<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
HFPO-TA (13252-14-7)	ng/l						<5	<5	<5	<5	<5	<5	<25	<25	<5	<5	<25	<5	<25	<25	<5	<5	<25	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	3.81	1.45	0.72	<16.3	6.57	2.43	1.45	3.71	1.83	1.4	1.65	5.11	3.98	1.2	1.17	<3.25	1.38	<3.25	<3.25	1.78	1.76	<3.25	<3.25
MeFOSAA (2355-31-9)	ng/l						<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
MeFOSE (24448-09-7)	ng/l						<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<50	<10	<50	<50	<10	<10	<50	<50
N-EtFOSA (4151-50-2)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
NFDHA (151772-58-6)	ng/l						<3	<3	<3	<3	<3	<3	<15	<15	<3	<3	<15	<3	<15	<15	<3	<3	<15	<15
N-MeFOSA (31506-32-8)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<22	<35	15	<100	24	8.28	7.07	5.57	5.46	5.47	6.38	<10	13.2	10.2	9.4	10.3	4.86	11.6	11.3	9.77	9.77	11.4	13
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<2	<1	<25	<10	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<2	<1	<25	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<2	<1	<25	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
PFDoS (79780-39-5)	ng/l				<25	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<2	<1	<25	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
PFecHS (133201-07-7)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFEESA (113507-82-7)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	6.19	5.61	3.31	<25	<10	4.24	3.63	4.15	3.27	3.12	3.92	6.88	6.19	3.05	3.12	6.52	1.82	7.97	7.68	4.68	4.81	<5	7.08
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<2	<1	<25	<10	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	22.8	20.5	16.8	<25	11.4	12.9	12.1	8.1	7.26	8.03	8.61	10.8	10.9	11.9	11.5	<5	6.04	16	13.8	15.1	14.7	15.7	17
PFHxDA (67905-19-5)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<2	1.25	<25	<10	1.4	1.99	6.79	3.79	1.54	1.95	5.64	<5	1.66	1.69	<5	1.3	<5	<5	2.71	2.72	<5	<5
PFMOBA (863090-89-5)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFMOPrA (377-73-1)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<2	<1	<25	<10	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFNS (68259-12-1)	ng/l				<25	<10	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	1.42	0.906	90.2	8.29	1.96	1.17	3.62	1.39	1.5	1.89	6.22	4.46	0.995	1.05	<3.25	1.27	4.96	4.52	2.35	1.98	<3.25	<3.25
PFODA (16517-11-6)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<4	<2	<50	<20	<2	<2	<2	<2	<2	<2	10.6	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	49.3	28.7	30.7	<25	16.3	35.6	40.4	19.2	17.1	22.4	24.2	25.8	27.4	34.6	33.4	20.9	20.3	43.1	41.8	41.9	42.3	43.5	51.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<2	<1	<25	<10	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	1.13	<1	<5	<5
PFTeA (376-06-7)	ng/l						<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFTrDA (72629-94-8)	ng/l				<25	<10	<3	<3	<3	<3	<3	<3	<15	<15	<3	<3	<15	<3	<15	<15	<3	<3	<15	<15
PFTrDS (174675-49-1)	ng/l				<25	<10	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<5	<1	<5	<5	<1	<1	<5	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<2	<1	<25	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
PFUnDS (749786-16-1)	ng/l				<25	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<10	<2	<10	<10	<2	<2	<10	<10
Total PFAS DWI 47	ng/l																				<90	<90	<450	<450
Total PFOS	ng/l	3.81	4.3	2.26	<16.3	6.57	4.47	3.62	7.8	3.87	3.26	3.34	10.3	8.08	2.83	3.09	<3.25	3.18	<3.25	<3.25	4.94	4.7	<3.25	<3.25
Sum of PFAS																								
Sum of 20 PFAS	ng/l	82.10	60.53	70.23	90.20	66.56	68.85	69.98	55.23	42.14	45.32	50.29	65.64	70.23	65.24	63.25	37.72	38.77	83.63	79.10	82.58	80.98	70.60	88.58
Sum of Total PFAS	ng/l	85.91	64.82	72.49	137.60	114.23	100.01	77.64	108.33	52.49	61.68	83.53	100.89	101.11	88.56	83.60	48.92	49.22	91.00	86.54	103.24	90.52	77.29	105.88
Average Sum of 20 PFAS	ng/l	71.65																						
Average Total PFAS	ng/l	90.13																						
Min Sum of 20 PFAS	ng/l	37.72																						
Max Sum of 20 PFAS	ng/l	154.52																						

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APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit			
		04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	3.63	2.49	4.06
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1
Branched PFOS	ng/l	<0.65	3.31	3.01
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	2.59	3.69
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	13.5	20.5	12.5
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	4.17	7.12	5.64
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	16.3	27.8	13
PFHxDA (67905-19-5)	ng/l	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.25	3.85	3.41
PFMOBA (863090-89-5)	ng/l	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.69	2.45	2.73
PFODA (16517-11-6)	ng/l	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	52.4	86.9	46.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2
Total PFAS DWI 47	ng/l	93.9	157	94.3
Total PFOS	ng/l	<0.65	5.9	6.7
Sum of PFAS				
Sum of 20 PFAS	ng/l	90.31	154.52	90.28
Sum of Total PFAS	ng/l	93.94	162.91	101.04
Average Sum of 20 PFAS	ng/l			
Average Total PFAS	ng/l			
Min Sum of 20 PFAS	ng/l			
Max Sum of 20 PFAS	ng/l			

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APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW13																					
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	03-04-24	03-04-24	16-07-24	16-07-24	25-09-24	25-09-24	10-12-24	10-12-24	05-03-25	05-03-25	21-05-25	21-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
3:3 FTCA (356-02-5)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
4:2 FTS (757124-72-4)	ng/l				<50	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
5:3 FTCA (914637-49-3)	ng/l				<500	<500	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<25	<5	<25	<50	<50
6:2 FTAB (34455-29-3)	ng/l										<10	<10	<10	<10	<10	<10	<50	<50	<50	<50	<10	<50	<100	<100
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
7:3 FTCA (812-70-4)	ng/l						<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<25	<5	<25	<50	<50
8:2 FTS (39108-34-4)	ng/l				<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
ADONA (919005-14-4)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
Branched PFOS	ng/l	<3.25	<3.25	<0.65	<16.3	<16.3	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.776	0.776	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<0.65	<3.25	<6.5	<6.5
EtFOSAA (2991-50-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
EtFOSE (1691-99-2)	ng/l						<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<50	<10	<50	<100	<100
FBSA (30334-69-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
FHxSA (41997-13-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	1.01	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
HFPO-DA (13252-13-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
HFPO-TA (13252-14-7)	ng/l						<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<25	<5	<25	<50	<50
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<3.25	<0.65	<16.3	<16.3	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.781	0.658	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<0.65	<3.25	<6.5	<6.5
MeFOSAA (2355-31-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
MeFOSE (24448-09-7)	ng/l						<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<50	<10	<50	<100	<100
N-EtFOSA (4151-50-2)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
NFDHA (151772-58-6)	ng/l						<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15	<15	<15	<3	<15	<30	<30
N-MeFOSA (31506-32-8)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<10	<10	<2	<100	<90	<2	<2	<2	<2	3.06	<2	10.6	12.6	2.5	2.21	<10	<10	<10	<10	<2	12.3	<20	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	<1	<1	1.07	1.08	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<5	<1	<25	<25	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<5	<1	<25	<25	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
PFDoS (79780-39-5)	ng/l				<25	<25	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<5	<1	<25	<25	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
PFecHS (133201-07-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFEESA (113507-82-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	<1	<1	2.23	2.19	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	1.8	1.88	3.27	3.47	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFHxDA (67905-19-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFMOBA (863090-89-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFMOPrA (377-73-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFNS (68259-12-1)	ng/l				<25	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	<3.25	<0.65	<16.3	<16.3	<0.65	<0.65	<0.85	<0.65	<0.65	<0.65	1.24	1.28	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<0.65	<3.25	<6.5	<6.5
PFODA (16517-11-6)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<10	<2	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	1.86	2.5	6.58	6.9	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<5	<1	<25	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFTeA (376-06-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFTrDA (72629-94-8)	ng/l				<25	<25	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15	<15	<15	<3	<15	<30	<30
PFTrDS (174675-49-1)	ng/l				<25	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<1	<5	<10	<10
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<5	<1	<25	<25	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
PFUnDS (749786-16-1)	ng/l				<25	<25	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<10	<2	<10	<20	<20
Total PFAS DWI 47	ng/l																				<90	<450	<900	<900
Total PFOS	ng/l	<3.25	<3.25	<0.65	<16.3	<16.3	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	1.56	1.43	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<0.65	<3.25	<6.5	<6.5
Sum of PFAS																								
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.72	4.38	26.55	28.95	2.50	2.21	0.00	0.00	0.00	0.00	0.00	12.30	0.00	0.00
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.72	4.38	28.11	31.39	2.50	2.21	0.00	0.00	0.00	0.00	0.00	12.30	0.00	0.00
Average Sum of 20 PFAS	ng/l	3.22																						
Average Total PFAS	ng/l	3.37																						
Min Sum of 20 PFAS	ng/l	0.00																						
Max Sum of 20 PFAS	ng/l	28.95																						

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit			
		04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<10	<10	<10
3:3 FTCA (356-02-5)	ng/l	<25	<25	<25
4:2 FTS (757124-72-4)	ng/l	<5	<5	<5
5:3 FTCA (914637-49-3)	ng/l	<25	<25	<25
6:2 FTAB (34455-29-3)	ng/l	<50	<50	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<5	<5
7:3 FTCA (812-70-4)	ng/l	<25	<25	<25
8:2 FTS (39108-34-4)	ng/l	<10	<10	<10
9Cl-PF3ONS (756426-58-1)	ng/l	<5	<5	<5
ADONA (919005-14-4)	ng/l	<5	<5	<5
Branched PFOS	ng/l	<3.25	<3.25	<3.25
EtFOSAA (2991-50-6)	ng/l	<10	<10	<10
EtFOSE (1691-99-2)	ng/l	<50	<50	<50
FBSA (30334-69-1)	ng/l	<5	<5	<5
FHxSA (41997-13-1)	ng/l	<5	<5	<5
HFPO-DA (13252-13-6)	ng/l	<10	<10	<10
HFPO-TA (13252-14-7)	ng/l	<25	<25	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<3.25	<3.25
MeFOSAA (2355-31-9)	ng/l	<10	<10	<10
MeFOSE (24448-09-7)	ng/l	<50	<50	<50
N-EtFOSA (4151-50-2)	ng/l	<5	<5	<5
NFDHA (151772-58-6)	ng/l	<15	<15	<15
N-MeFOSA (31506-32-8)	ng/l	<5	<5	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<10	<10	<10
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<5	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<10	<10	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<10	<10	<10
PFDoS (79780-39-5)	ng/l	<10	<10	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<10	<10	<10
PFecHS (133201-07-7)	ng/l	<5	<5	<5
PFEESA (113507-82-7)	ng/l	<5	<5	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<5	<5	<5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<5	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<5	<5	<5
PFHxDA (67905-19-5)	ng/l	<5	<5	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<5	<5
PFMOBA (863090-89-5)	ng/l	<5	<5	<5
PFMOPrA (377-73-1)	ng/l	<5	<5	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<5	<5
PFNS (68259-12-1)	ng/l	<5	<5	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	<3.25	<3.25
PFODA (16517-11-6)	ng/l	<5	<5	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<10	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<5	<5	<5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<5	<5
PFTeA (376-06-7)	ng/l	<5	<5	<5
PFTrDA (72629-94-8)	ng/l	<15	<15	<15
PFTrDS (174675-49-1)	ng/l	<5	<5	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<10	<10	<10
PFUnDS (749786-16-1)	ng/l	<10	<10	<10
Total PFAS DWI 47	ng/l	<450	<450	<450
Total PFOS	ng/l	<3.25	<3.25	<3.25
Sum of PFAS				
Sum of 20 PFAS	ng/l	0.00	0.00	0.00
Sum of Total PFAS	ng/l	0.00	0.00	0.00
Average Sum of 20 PFAS	ng/l			
Average Total PFAS	ng/l			
Min Sum of 20 PFAS	ng/l			
Max Sum of 20 PFAS	ng/l			

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW14																					
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	03-04-24	03-04-24	16-07-24	16-07-24	25-09-24	25-09-24	10-12-24	10-12-24	05-03-25	05-03-25	21-05-25	21-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
3:3 FTCA (356-02-5)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
4:2 FTS (757124-72-4)	ng/l				<20	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
5:3 FTCA (914637-49-3)	ng/l				<200	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<125	<25	<25	<25	<50	<25
6:2 FTAB (34455-29-3)	ng/l										<10	<10	<10	<10	<10	<10	<50	<10	<250	<50	<50	<50	<100	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<5	13.6	9.02	3.56	3.28	15.1	20.5	4.51	4.2	6.75	7.62	7.57	7.15	8.57	6.29	<25	5.61	<5	<5	<10	14.2
7:3 FTCA (812-70-4)	ng/l						<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<125	<25	<25	<25	<50	<25
8:2 FTS (39108-34-4)	ng/l				<20	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
ADONA (919005-14-4)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
Branched PFOS	ng/l	<0.65	<0.65	<3.25	<6.5	<3.25	<0.65	<0.65	0.751	<0.65	<0.65	<0.65	<0.65	<0.65	0.722	0.742	<3.25	1.19	<16.3	<3.25	<3.25	<3.25	<6.5	<3.25
EtFOSAA (2991-50-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
EtFOSE (1691-99-2)	ng/l						<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<250	<50	<50	<50	<100	<50
FBSA (30334-69-1)	ng/l						<1	<1	1.84	1.35	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
FHxSA (41997-13-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
HFPO-DA (13252-13-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
HFPO-TA (13252-14-7)	ng/l						<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<125	<25	<25	<25	<50	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	0.77	<0.65	<3.25	<6.5	<3.25	<0.65	<0.65	0.862	<0.65	<0.65	<0.65	<0.65	0.683	<0.65	<0.65	<3.25	1.02	<16.3	<3.25	<3.25	<3.25	<6.5	<3.25
MeFOSAA (2355-31-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
MeFOSE (24448-09-7)	ng/l						<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<250	<50	<50	<50	<100	<50
N-EtFOSA (4151-50-2)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
NFDHA (151772-58-6)	ng/l						<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<75	<15	<15	<15	<30	<15
N-MeFOSA (31506-32-8)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<4	<2.5	<10	116	84.5	60.6	42.6	90.8	122	61.8	86.1	75.4	76.9	68.9	71	62.4	42.8	78.8	67.6	67	60.3	77.9	77.9
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<5	<10	<5	<1	<1	2.08	2.66	<1	<1	1.67	1.63	<1	1.16	<5	<1	<25	<5	<5	<5	<10	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
PFDoS (79780-39-5)	ng/l				<10	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
PFecHS (133201-07-7)	ng/l						<1	<1	<1	<1	<1	<1	1.06	1.02	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFEESA (113507-82-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.07	1.26	<5	40.9	38.5	25.6	22.6	84.8	121	29.2	26.8	46.6	46.6	32	34	35.9	29.8	59.8	53.3	54.9	49.9	50.8	49.5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<5	<10	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	2.6	2.09	<5	158	131	98.1	84.9	302	457	106	107	159	160	148	139	129	85.7	179	168	187	170	191	188
PFHxDA (67905-19-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<5	<10	<5	1.1	1.19	16	7.58	1.97	1.79	3.2	3.36	3.25	3.32	<5	2.75	<25	5.72	<5	6.6	<10	6.13
PFMOBA (863090-89-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFMOPrA (377-73-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<5	<10	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFNS (68259-12-1)	ng/l				<10	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	<3.25	8.13	4.6	3.12	2.48	8.15	12.2	2.2	2.3	6.06	6	4.58	4.81	7.73	4.14	<16.3	6.67	6.44	6.19	<6.5	5.39
PFODA (16517-11-6)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<10	<20	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	4.94	3.72	6.04	310	201	272	263	582	987	298	276	454	442	364	367	325	236	411	416	451	387	442	507
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<5	<10	<5	<1	<1	2.15	2.56	<1	<1	1.37	1.33	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFTeA (376-06-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFTrDA (72629-94-8)	ng/l				<10	<5	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<75	<15	<15	<15	<30	<15
PFTrDS (174675-49-1)	ng/l				<10	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<25	<5	<5	<5	<10	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
PFUnDS (749786-16-1)	ng/l				<10	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<50	<10	<10	<10	<20	<10
Total PFAS DWI 47	ng/l																				766	680	<900	848
Total PFOS	ng/l	0.77	<0.65	<3.25	<6.5	<3.25	<0.65	<0.65	1.61	<0.65	<0.65	<0.65	<0.65	0.683	0.722	0.742	<3.25	2.21	<16.3	<3.25	<3.25	<3.25	<6.5	<3.25
Sum of PFAS																								
Sum of 20 PFAS	ng/l	9.38	7.07	6.04	633.03	459.60	460.52	416.77	1089.59	1712.00	499.17	499.99	747.30	738.50	621.45	621.03	560.03	403.40	728.60	717.29	766.34	679.99	761.70	833.92
Sum of Total PFAS	ng/l	10.15	7.07	6.04	646.63	468.62	464.08	420.05	1108.14	1733.85	503.68	504.19	755.11	747.83	629.74	628.92	568.60	411.90	728.60	722.90	766.34	679.99	761.70	848.12
Average Sum of 20 PFAS	ng/l	617.15																						
Average Total PFAS	ng/l	623.15																						
Min Sum of 20 PFAS	ng/l	6.04																						
Max Sum of 20 PFAS	ng/l	1712.00																						

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APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit			
		04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<10	<20	<4
3:3 FTCA (356-02-5)	ng/l	<25	<50	<10
4:2 FTS (757124-72-4)	ng/l	<5	<10	<2
5:3 FTCA (914637-49-3)	ng/l	<25	<50	<10
6:2 FTAB (34455-29-3)	ng/l	<50	<100	<20
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<10	3.33
7:3 FTCA (812-70-4)	ng/l	<25	<50	<10
8:2 FTS (39108-34-4)	ng/l	<10	<20	<4
9Cl-PF3ONS (756426-58-1)	ng/l	<5	<10	<2
ADONA (919005-14-4)	ng/l	<5	<10	<2
Branched PFOS	ng/l	<3.25	<6.5	1.35
EtFOSAA (2991-50-6)	ng/l	<10	<20	<4
EtFOSE (1691-99-2)	ng/l	<50	<100	<20
FBSA (30334-69-1)	ng/l	<5	<10	<2
FHxSA (41997-13-1)	ng/l	<5	<10	<2
HFPO-DA (13252-13-6)	ng/l	<10	<20	<4
HFPO-TA (13252-14-7)	ng/l	<25	<50	<10
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<6.5	1.59
MeFOSAA (2355-31-9)	ng/l	<10	<20	<4
MeFOSE (24448-09-7)	ng/l	<50	<100	<20
N-EtFOSA (4151-50-2)	ng/l	<5	<10	<2
NFDHA (151772-58-6)	ng/l	<15	<30	<6
N-MeFOSA (31506-32-8)	ng/l	<5	<10	<2
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	64.7	53.5	104
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<10	3.12
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<10	<20	<4
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<10	<20	<4
PFDoS (79780-39-5)	ng/l	<10	<20	<4
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<10	<20	<4
PFecHS (133201-07-7)	ng/l	<5	<10	<2
PFEESA (113507-82-7)	ng/l	<5	<10	<2
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	34.7	29.9	58.3
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<10	<2
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	134	111	218
PFHxDA (67905-19-5)	ng/l	<5	<10	<2
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<10	5.75
PFMOBA (863090-89-5)	ng/l	<5	<10	<2
PFMOPrA (377-73-1)	ng/l	<5	<10	<2
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<10	<2
PFNS (68259-12-1)	ng/l	<5	<10	<2
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.01	<6.5	5.33
PFODA (16517-11-6)	ng/l	<5	<10	<2
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<20	<4
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	344	379	521
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<10	<2
PFTeA (376-06-7)	ng/l	<5	<10	<2
PFTrDA (72629-94-8)	ng/l	<15	<30	<6
PFTrDS (174675-49-1)	ng/l	<5	<10	<2
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<10	<20	<4
PFUnDS (749786-16-1)	ng/l	<10	<20	<4
Total PFAS DWI 47	ng/l	581	<900	922
Total PFOS	ng/l	<3.25	<6.5	2.94
Sum of PFAS				
Sum of 20 PFAS	ng/l	581.41	573.40	918.44
Sum of Total PFAS	ng/l	581.41	573.40	924.71
Average Sum of 20 PFAS	ng/l			
Average Total PFAS	ng/l			
Min Sum of 20 PFAS	ng/l			
Max Sum of 20 PFAS	ng/l			

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APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW15																					
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	03-04-24	03-04-24	16-07-24	16-07-24	25-09-24	25-09-24	10-12-24	10-12-24	05-03-25	05-03-25	21-05-25	21-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
3:3 FTCA (356-02-5)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
4:2 FTS (757124-72-4)	ng/l				<20	<10	<1	<1	<1	<1	<1	<1	<1	<5	1.41	<5	<5	<1	<5	<5	<5	<2	<5	<5
5:3 FTCA (914637-49-3)	ng/l				<200	<100	<5	<5	<5	<5	<5	<5	<5	<25	<5	<25	<25	<5	<25	<25	<25	<10	<25	<25
6:2 FTAB (34455-29-3)	ng/l										<10	<10	<10	<50	15.7	<50	<50	<10	<50	<50	<50	<20	<50	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<2	<1	<1	<10	<5	<1	<1	<1	<1	<1	<1	<1	5.53	1.19	16.1	<5	<1	<5	<5	<5	<2	<10	<5
7:3 FTCA (812-70-4)	ng/l						<5	<5	<5	<5	<5	<5	<5	<25	<5	<25	<25	<5	<25	<25	<25	<10	<25	<25
8:2 FTS (39108-34-4)	ng/l				<20	<10	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.46	<5	<5	<1	<5	<5	<5	<2	<5	<5
ADONA (919005-14-4)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.73	<5	<5	<1	<5	<5	<5	<2	<5	<5
Branched PFOS	ng/l	<1.3	<0.65	<0.65	<6.5	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	3.58	1.24	<3.25	<3.25	1.18	<3.25	3.96	<3.25	1.41	<3.25	<3.25
EtFOSAA (2991-50-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
EtFOSE (1691-99-2)	ng/l						<10	<10	<10	<10	<10	<10	<10	<50	20.3	<50	<50	<10	<50	<50	<50	<20	<50	<50
FBSA (30334-69-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<1	<5	<5	<1	<5	<5	<5	<2	<5	<5
FHxSA (41997-13-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<1	<5	<5	<1	<5	<5	<5	<2	<5	<5
HFPO-DA (13252-13-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
HFPO-TA (13252-14-7)	ng/l						<5	<5	<5	<5	<5	<5	<5	<25	6.77	<25	<25	<5	<25	<25	<25	<10	<25	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<1.3	<0.65	<0.65	<6.5	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	3.72	1.44	<3.25	<3.25	0.751	<3.25	<3.25	<3.25	<1.3	<3.25	<3.25
MeFOSAA (2355-31-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
MeFOSE (24448-09-7)	ng/l						<10	<10	<10	<10	<10	<10	<10	<50	20.1	<50	<50	<10	<50	<50	<50	<20	<50	<50
N-EtFOSA (4151-50-2)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.36	<5	<5	<1	<5	<5	<5	<2	<5	<5
NFDHA (151772-58-6)	ng/l						<3	<3	<3	<3	<3	<3	<3	<15	<3	<15	<15	<3	<15	<15	<15	<6	<15	<15
N-MeFOSA (31506-32-8)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.11	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<4	<2	<10	<20	<10	3.39	2.96	4.88	4.33	4.8	3.43	9.38	14.9	8.51	<10	<10	3.85	<10	<10	<10	8.37	10.7	10.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<2	<1	<1	<10	<5	<1	<1	1.02	<1	<1	<1	<1	<5	1.39	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<1	<1	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<1	<1	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
PFDoS (79780-39-5)	ng/l				<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<1	<1	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
PFecHS (133201-07-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.39	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFEESA (113507-82-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.33	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<2	<1	<1	<10	<5	1.71	<1	3.9	3.28	2.73	2.74	4.01	8.2	4.63	6.64	6.06	1.51	<5	6.73	<5	5.79	8.18	8.6
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<2	<1	<1	<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	1.22	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<2	<1	<1	<10	<5	2.42	2.13	3.32	5.98	3.64	3.94	4.96	6.95	5.12	5.83	5.36	2.27	6.42	5.31	8.14	7.73	10.7	10.3
PFHxDA (67905-19-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	2.1	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<2	<1	<1	<10	<5	<1	<1	2.88	3.35	1.2	1.26	1.35	5.15	2.59	<5	<5	1.48	<5	<5	<5	2.66	<5	<5
PFMOBA (863090-89-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.62	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFMOPrA (377-73-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	1.54	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<2	<1	<1	<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	1.74	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFNS (68259-12-1)	ng/l				<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	1.34	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<1.3	<0.65	<0.65	<7.5	<3.25	0.861	1.12	1.11	2.03	1.21	1.21	2.22	6.27	3.44	5.01	5.36	1.3	4.13	4.83	<3.25	2.27	6.55	4.24
PFODA (16517-11-6)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	2.44	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<4	<2	<2	<20	<10	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.94	<1.5	1.32	<10	<5	3.98	3.71	4.97	4.34	4.7	5.17	6.28	13.1	7.63	6.81	8.05	4.19	9.32	11.2	9.25	8.48	12.2	11.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<2	<1	<1	<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	1.13	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFTeA (376-06-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	2.21	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFTrDA (72629-94-8)	ng/l				<10	<5	<3	<3	<3	<3	<3	<3	<3	<15	<3	<15	<15	<3	<15	<15	<15	<6	<15	<15
PFTrDS (174675-49-1)	ng/l				<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	1.62	<5	<5	<1	<5	<5	<5	<2	<5	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<1	<1	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
PFUnDS (749786-16-1)	ng/l				<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<2	<10	<10	<2	<10	<10	<10	<4	<10	<10
Total PFAS DWI 47	ng/l																				<450	<180	<450	<450
Total PFOS	ng/l	<1.3	<0.65	<0.65	<6.5	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	7.3	2.68	<3.25	<3.25	1.93	<3.25	3.96	<3.25	1.41	<3.25	<3.25
Sum of PFAS																								
Sum of 20 PFAS	ng/l	2.94	0.00	1.32	0.00	0.00	12.36	9.92	22.08	23.31	18.28	17.75	28.20	61.87	43.04	24.29	24.83	16.53	19.87	32.03	17.39	36.71	48.33	44.84
Sum of Total PFAS	ng/l	2.94	0.00	1.32	0.00	0.00	12.36	9.92	22.08	23.31	18.28	17.75	28.20	74.70	129.48	40.39	24.83	18.46	19.87	35.99	17.39	38.12	48.33	44.84
Average Sum of 20 PFAS	ng/l	23.05																						
Average Total PFAS	ng/l	27.86																						
Min Sum of 20 PFAS	ng/l	0.00																						
Max Sum of 20 PFAS	ng/l	61.87																						

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit			
		04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<4	<2
3:3 FTCA (356-02-5)	ng/l	<5	<10	<5
4:2 FTS (757124-72-4)	ng/l	<1	<2	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<10	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<20	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<2	<2
7:3 FTCA (812-70-4)	ng/l	<5	<10	<5
8:2 FTS (39108-34-4)	ng/l	<2	<4	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<2	<1
ADONA (919005-14-4)	ng/l	<1	<2	<1
Branched PFOS	ng/l	<0.65	<1.3	1.36
EtFOSAA (2991-50-6)	ng/l	<2	<4	<2
EtFOSE (1691-99-2)	ng/l	<10	<20	<10
FBSA (30334-69-1)	ng/l	<1	<2	<1
FHxSA (41997-13-1)	ng/l	<1	<2	<1
HFPO-DA (13252-13-6)	ng/l	<2	<4	<2
HFPO-TA (13252-14-7)	ng/l	<5	<10	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<1.3	1.15
MeFOSAA (2355-31-9)	ng/l	<2	<4	<2
MeFOSE (24448-09-7)	ng/l	<10	<20	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<2	<1
NFDHA (151772-58-6)	ng/l	<3	<6	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<2	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.81	6.69	14.1
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<2	1.17
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<4	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<4	<2
PFDoS (79780-39-5)	ng/l	<2	<4	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<4	<2
PFecHS (133201-07-7)	ng/l	<1	<2	<1
PFEESA (113507-82-7)	ng/l	<1	<2	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	2.15	2.82	5.29
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<2	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	3.59	4.55	6.88
PFHxDA (67905-19-5)	ng/l	<1	<2	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.58	<2	3.1
PFMOBA (863090-89-5)	ng/l	<1	<2	<1
PFMOPrA (377-73-1)	ng/l	<1	<2	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<2	<1
PFNS (68259-12-1)	ng/l	<1	<2	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	0.937	1.93	5.66
PFODA (16517-11-6)	ng/l	<1	<2	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<4	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	5.91	9.64	11
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<2	<1
PFTeA (376-06-7)	ng/l	<1	<2	<1
PFTrDA (72629-94-8)	ng/l	<3	<6	<3
PFTrDS (174675-49-1)	ng/l	<1	<2	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<4	<2
PFUnDS (749786-16-1)	ng/l	<2	<4	<2
Total PFAS DWI 47	ng/l	<90	<180	<90
Total PFOS	ng/l	<0.65	<1.3	2.51
Sum of PFAS				
Sum of 20 PFAS	ng/l	17.98	25.63	49.71
Sum of Total PFAS	ng/l	17.98	25.63	52.22
Average Sum of 20 PFAS	ng/l			
Average Total PFAS	ng/l			
Min Sum of 20 PFAS	ng/l			
Max Sum of 20 PFAS	ng/l			

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW16																						
		10-02-22	10-02-22	15-03-22	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	03-04-24	03-04-24	16-07-24	16-07-24	25-09-24	25-09-24	10-12-24	10-12-24	05-03-25	05-03-25	21-05-25	21-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
3:3 FTCA (356-02-5)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
4:2 FTS (757124-72-4)	ng/l				<20	<10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
5:3 FTCA (914637-49-3)	ng/l				<200	<100	<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<25	<5	<5	<25	<5	<5	<10	<5
6:2 FTAB (34455-29-3)	ng/l										<10	<10	<10	234	<50	<10	<50	<10	<10	<50	<10	<10	<20	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	2.8	<5	20.6	18.8	16.5	16.3	13.6	10.8	9.78	10.3	13.1	200	20.4	15.2	10.9	8.02	10.7	12.7	9.6	6.47	17.6	12.5
7:3 FTCA (812-70-4)	ng/l						<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<25	<5	<5	<25	<5	<5	<10	<5
8:2 FTS (39108-34-4)	ng/l				<20	<10	<2	<2	<2	<2	<2	<2	<2	13	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
ADONA (919005-14-4)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
Branched PFOS	ng/l	<3.25	2.37	<3.25	9.63	6.65	6.38	6.49	6.09	3.55	7.5	7.9	<6	<10.5	8.25	6.29	6.72	4.45	7.35	<3.25	2.72	5.19	6.96	6.83
EtFOSAA (2991-50-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
EtFOSE (1691-99-2)	ng/l						<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<50	<10	<10	<50	<10	<10	<20	<10
FBSA (30334-69-1)	ng/l						<1	1.16	1.33	1.5	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
FHxSA (41997-13-1)	ng/l						<1	<1	<1	<1	<1	<1	1.24	5.24	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
HFPO-DA (13252-13-6)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
HFPO-TA (13252-14-7)	ng/l						<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<25	<5	<5	<25	<5	<5	<10	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	0.86	<3.25	8.47	5.35	2.42	7.95	1.27	1.87	1.87	2.12	<2	<6.5	<3.25	1.86	<3.25	1.16	1.68	<3.25	1.15	0.973	1.99	1.26
MeFOSAA (2355-31-9)	ng/l						<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
MeFOSE (24448-09-7)	ng/l						<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<50	<10	<10	<50	<10	<10	<20	<10
N-EtFOSA (4151-50-2)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
NFDHA (151772-58-6)	ng/l						<3	<3	<3	<3	<3	<3	<3	<15	<15	<3	<15	<3	<3	<15	<3	<3	<6	<3
N-MeFOSA (31506-32-8)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	14.3	10.3	15.3	70.4	36.1	20.2	31.9	30.7	22.1	29	23.3	28.5	39.2	31.6	28.5	29	18.7	26.3	19.5	24.1	26.4	31.7	33.4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<1	<5	<10	<5	<1	<1	1.89	1.74	1.45	1.28	1.79	<5	<5	1.96	5.84	1.35	1.93	<5	1.63	1.23	<2	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
PFDoS (79780-39-5)	ng/l				<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
PFecHS (133201-07-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFEESA (113507-82-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	7.24	6.14	6.75	23.1	20.4	13.7	14.5	14.3	11	11.4	11.8	16	19.4	17.5	14.2	15.9	10.5	15.4	10.9	11.8	12.5	16.6	15.7
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<1	<5	<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.2	16.2	20.6	52.7	50.2	41.9	38.8	46.1	33.6	35.2	37.1	35.1	49.5	49	41.9	36.6	25	34.3	30.9	35.5	36.2	49.6	47.1
PFHxDA (67905-19-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	3.83	5.02	13.5	9.63	11.2	9.91	8.62	13.9	7.66	7.9	8.15	12.3	11.4	9.03	11.4	5.74	8.54	9.76	7.49	7.1	10.4	9.15
PFMOBA (863090-89-5)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFMOPrA (377-73-1)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<1	<5	<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFNS (68259-12-1)	ng/l				<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	1.61	<3.25	12.2	6.25	3.89	3.74	3.94	2.75	3.3	3.32	5.55	11.5	8.19	4.33	<3.25	2.72	8.29	4.81	3.1	3.88	4.91	4.26
PFODA (16517-11-6)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<2	<10	<20	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	30.4	22.5	28.2	67.7	46.2	106	101	106	68.9	84.8	88.3	90.9	94.3	93.9	99.3	84	63.4	87	64.3	84.8	93.2	122	120
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<1	<5	<10	<5	<1	<1	1.56	1.26	1.07	1.15	1.38	<5	<5	1.78	<5	1.45	1.7	<5	1.33	1.68	<2	1.18
PFTeA (376-06-7)	ng/l						<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFTrDA (72629-94-8)	ng/l				<10	<5	<3	<3	<3	<3	<3	<3	<3	<15	<15	<3	<15	<3	<3	<15	<3	<3	<6	<3
PFTrDS (174675-49-1)	ng/l				<10	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<5	<1	<1	<5	<1	<1	<2	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<1	<5	<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
PFUnDS (749786-16-1)	ng/l				<10	<5	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<10	<2	<2	<10	<2	<2	<4	<2
Total PFAS DWI 47	ng/l																				183	195	261	251
Total PFOS	ng/l	<3.25	3.23	<3.25	18.1	12	8.8	14.4	7.35	5.42	9.37	10	<6	<10.5	8.25	8.14	6.72	5.61	9.03	<3.25	3.86	6.17	8.95	8.08
Sum of PFAS																								
Sum of 20 PFAS	ng/l	71.14	63.81	75.87	257.70	180.78	205.69	214.25	220.46	160.67	183.25	184.15	187.37	226.20	219.84	209.14	189.46	134.47	192.49	140.17	173.61	188.36	244.16	238.87
Sum of Total PFAS	ng/l	71.14	69.84	75.87	296.40	211.58	230.99	246.15	242.75	178.39	202.40	204.47	201.71	678.44	248.49	232.49	207.08	148.10	212.22	152.87	187.08	200.99	270.71	259.46
Average Sum of 20 PFAS	ng/l	182.70																						
Average Total PFAS	ng/l	218.21																						
Min Sum of 20 PFAS	ng/l	63.81																						
Max Sum of 20 PFAS	ng/l	311.14																						

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APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit			
		04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	4.03	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	3.87	6.34	14.9
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1
Branched PFOS	ng/l	3.24	8.88	8.63
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	1.88
FHxSA (41997-13-1)	ng/l	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	0.814	1.84	1.12
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	17	21	44.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	3.7
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	7.82	10.3	30
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.7	23.9	60.8
PFHxDA (67905-19-5)	ng/l	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	5.17	5.76	15
PFMOBA (863090-89-5)	ng/l	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	1.26
PFNS (68259-12-1)	ng/l	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.79	2.77	9.94
PFODA (16517-11-6)	ng/l	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	70	75.9	134
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	1.24	2.49
PFTeA (376-06-7)	ng/l	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2
Total PFAS DWI 47	ng/l	129	162	328
Total PFOS	ng/l	4.06	10.7	9.75
Sum of PFAS				
Sum of 20 PFAS	ng/l	125.54	151.57	311.14
Sum of Total PFAS	ng/l	133.46	172.66	337.67
Average Sum of 20 PFAS	ng/l			
Average Total PFAS	ng/l			
Min Sum of 20 PFAS	ng/l			
Max Sum of 20 PFAS	ng/l			

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APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW17																					
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	03-04-24	03-04-24	16-07-24	16-07-24	25-09-24	25-09-24	10-12-24	10-12-24	05-03-25	05-03-25	21-05-25	21-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
3:3 FTCA (356-02-5)	ng/l						<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
4:2 FTS (757124-72-4)	ng/l				<10	<20	<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
5:3 FTCA (914637-49-3)	ng/l				<100	<200	<5	<50	<5	<5	<5	<50	<5	<5	<50	<50	<5	<5	<50	<50	<50	<50	<25	<25
6:2 FTAB (34455-29-3)	ng/l										<10	<100	<10	<10	<100	<100	<10	<10	<100	<100	<100	<100	<50	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<1	<1	<5	<10	<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<10	<10
7:3 FTCA (812-70-4)	ng/l						<5	<50	<5	<5	<5	<50	<5	<5	<50	<50	<5	<5	<50	<50	<50	<50	<25	<25
8:2 FTS (39108-34-4)	ng/l				<10	<20	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
ADONA (919005-14-4)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
Branched PFOS	ng/l	<3.25	<0.65	<0.65	<3.25	<6.5	1.53	<6.5	1.01	0.759	<0.65	<6.5	<0.65	1	<6.5	<6.5	<0.65	<0.65	<6.5	<6.5	<6.5	6.54	<3.25	<3.25
EtFOSAA (2991-50-6)	ng/l						<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
EtFOSE (1691-99-2)	ng/l						<10	<100	<10	<10	<10	<100	<10	<10	<100	<100	<10	<10	<100	<100	<100	<100	<50	<50
FBSA (30334-69-1)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
FHxSA (41997-13-1)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
HFPO-DA (13252-13-6)	ng/l						<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
HFPO-TA (13252-14-7)	ng/l						<5	<50	<5	<5	<5	<50	<5	<5	<50	<50	<5	<5	<50	<50	<50	<50	<25	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<0.65	<0.65	<3.25	<6.5	1.43	<6.5	1.42	0.885	<0.65	<6.5	<0.65	0.826	<6.5	<6.5	<0.65	<0.65	<6.5	<6.5	<6.5	<6.5	<3.25	<3.25
MeFOSAA (2355-31-9)	ng/l						<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
MeFOSE (24448-09-7)	ng/l						<10	<100	<10	<10	<10	<100	<10	<10	<100	<100	<10	<10	<100	<100	<100	<100	<50	<50
N-EtFOSA (4151-50-2)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
NFDHA (151772-58-6)	ng/l						<3	<30	<3	<3	<3	<30	<3	<3	<30	<30	<3	<3	<30	<30	<30	<30	<15	<15
N-MeFOSA (31506-32-8)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	14.3	<4.5	<2	<10	<40	7.45	<20	13.1	12.1	18.2	<20	15.8	17.3	<20	28.2	5.9	5.91	<20	<20	<20	<20	<10	<10
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<1	<1	<5	<10	<1	<10	<1	<1	<1	<10	1.34	1.22	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<1	<1	<5	<10	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<1	<1	<5	<10	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
PFDoS (79780-39-5)	ng/l				<5	<10	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<1	<1	<5	<10	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
PFecHS (133201-07-7)	ng/l						<1	<10	<1	<1	<1	<10	1.36	2.92	<10	<10	<1	1.01	<10	<10	<10	<10	<5	<5
PFEESA (113507-82-7)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	7.24	<1	<1	<5	<10	<1	<10	3.91	3.56	5.33	<10	5.47	4.94	<10	<10	1.24	1.1	<10	<10	<10	<10	<5	<5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<1	<1	<5	<10	<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.2	1.03	<1	<5	<10	1.14	<10	4.39	4.41	6.21	<10	5.78	5.4	<10	<10	1.83	1.77	<10	<10	<10	11.2	<5	<5
PFHxDA (67905-19-5)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<1	<1	<5	<10	<1	<10	<1	<1	<1	<10	<1	1.14	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFMOBA (863090-89-5)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFMOPrA (377-73-1)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<1	<1	<5	<10	<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFNS (68259-12-1)	ng/l				<5	<10	<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	<0.65	<0.65	<3.25	<13	<0.65	<6.5	2.49	2.31	2.41	<6.5	2.38	2.2	<6.5	<6.5	1.15	1.04	<6.5	<6.5	<6.5	<6.5	3.47	3.53
PFODA (16517-11-6)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<2	<2	<10	<20	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	30.4	2.39	2.55	<5	<10	3.28	<10	7.97	7.82	7.16	<10	9.25	8.47	<10	<10	3.99	3.73	<10	<10	<10	14.3	5.58	6.11
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<1	<1	<5	<10	<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFTeA (376-06-7)	ng/l						<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFTrDA (72629-94-8)	ng/l				<5	<10	<3	<30	<3	<3	<3	<30	<3	<3	<30	<30	<3	<3	<30	<30	<30	<30	<15	<15
PFTrDS (174675-49-1)	ng/l				<5	<10	<1	<10	<1	<1	<1	<10	<1	<1	<10	<10	<1	<1	<10	<10	<10	<10	<5	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<1	<1	<5	<10	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
PFUnDS (749786-16-1)	ng/l				<5	<10	<2	<20	<2	<2	<2	<20	<2	<2	<20	<20	<2	<2	<20	<20	<20	<20	<10	<10
Total PFAS DWI 47	ng/l																				<900	<900	<450	<450
Total PFOS	ng/l	<3.25	<0.65	<0.65	<3.25	<6.5	2.96	<6.5	2.44	1.64	<0.65	<6.5	<0.65	1.83	<6.5	<6.5	<0.65	<0.65	<6.5	<6.5	<6.5	6.54	<3.25	<3.25
Sum of PFAS																								
Sum of 20 PFAS	ng/l	71.14	3.42	2.55	0.00	0.00	14.83	0.00	34.30	31.84	39.31	0.00	40.02	42.50	0.00	28.20	14.11	13.55	0.00	0.00	0.00	32.04	9.05	9.64
Sum of Total PFAS	ng/l	71.14	3.42	2.55	0.00	0.00	17.79	0.00	36.73	33.48	39.31	0.00	41.38	47.25	0.00	28.20	14.11	14.56	0.00	0.00	0.00	38.58	9.05	9.64
Average Sum of 20 PFAS	ng/l	17.82																						
Average Total PFAS	ng/l	18.61																						
Min Sum of 20 PFAS	ng/l	0.00																						
Max Sum of 20 PFAS	ng/l	71.14																						

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit			
		04-09-25	04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<20	<2	<10
3:3 FTCA (356-02-5)	ng/l	<50	<5	<25
4:2 FTS (757124-72-4)	ng/l	<10	<1	<5
5:3 FTCA (914637-49-3)	ng/l	<50	<5	<25
6:2 FTAB (34455-29-3)	ng/l	<100	<10	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<10	<1	<18
7:3 FTCA (812-70-4)	ng/l	<50	<5	<25
8:2 FTS (39108-34-4)	ng/l	<20	<2	<10
9Cl-PF3ONS (756426-58-1)	ng/l	<10	<1	<5
ADONA (919005-14-4)	ng/l	<10	<1	<5
Branched PFOS	ng/l	<6.5	<0.65	<3.25
EtFOSAA (2991-50-6)	ng/l	<20	<2	<10
EtFOSE (1691-99-2)	ng/l	<100	<10	<50
FBSA (30334-69-1)	ng/l	<10	<1	<5
FHxSA (41997-13-1)	ng/l	<10	<1	<5
HFPO-DA (13252-13-6)	ng/l	<20	<2	<10
HFPO-TA (13252-14-7)	ng/l	<50	<5	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<6.5	<0.65	<3.25
MeFOSAA (2355-31-9)	ng/l	<20	<2	<10
MeFOSE (24448-09-7)	ng/l	<100	<10	<50
N-EtFOSA (4151-50-2)	ng/l	<10	<1	<5
NFDHA (151772-58-6)	ng/l	<30	<3	<15
N-MeFOSA (31506-32-8)	ng/l	<10	<1	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<20	9.01	15.4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<10	<1	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<20	<2	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<20	<2	<10
PFDoS (79780-39-5)	ng/l	<20	<2	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<20	<2	<10
PFecHS (133201-07-7)	ng/l	<10	<1	<5
PFEESA (113507-82-7)	ng/l	<10	<1	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<10	3.28	11.1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<10	<1	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<10	3.13	7.41
PFHxDA (67905-19-5)	ng/l	<10	<1	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<10	1.17	<5
PFMOBA (863090-89-5)	ng/l	<10	<1	<5
PFMOPrA (377-73-1)	ng/l	<10	<1	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<10	<1	<5
PFNS (68259-12-1)	ng/l	<10	<1	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<6.5	2.13	9.2
PFODA (16517-11-6)	ng/l	<10	<1	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<20	<2	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<10	5.7	9.16
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<10	<1	<5
PFTeA (376-06-7)	ng/l	<10	<1	<5
PFTrDA (72629-94-8)	ng/l	<30	<3	<15
PFTrDS (174675-49-1)	ng/l	<10	<1	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<20	<2	<10
PFUnDS (749786-16-1)	ng/l	<20	<2	<10
Total PFAS DWI 47	ng/l	<900	<90	<450
Total PFOS	ng/l	<6.5	<0.65	<3.25
Sum of PFAS				
Sum of 20 PFAS	ng/l	0.00	24.42	52.27
Sum of Total PFAS	ng/l	0.00	24.42	52.27
Average Sum of 20 PFAS	ng/l			
Average Total PFAS	ng/l			
Min Sum of 20 PFAS	ng/l			
Max Sum of 20 PFAS	ng/l			

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW18																							
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	02-04-24	02-04-24	15-07-24	15-07-24	25-09-24	25-09-24	11-12-24	11-12-24	04-03-25	04-03-25	21-05-25	21-05-25	04-09-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
3:3 FTCA (356-02-5)	ng/l						<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<125
4:2 FTS (757124-72-4)	ng/l				<20	<50	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
5:3 FTCA (914637-49-3)	ng/l				<200	<500	<5	<50	<5	<5	<25	<5	<50	<5	<50	<5	<50	<5	<125	<125	<50	<50	<25	<25	<125
6:2 FTAB (34455-29-3)	ng/l										<50	<10	<100	<10	<100	<10	<100	<10	<250	<250	<100	<100	<50	553	<250
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	8.87	<25
7:3 FTCA (812-70-4)	ng/l						<5	<50	<5	<5	<25	<5	<50	<5	<50	<5	<50	<5	<125	<125	<50	<50	<25	<25	<125
8:2 FTS (39108-34-4)	ng/l				<20	<50	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
ADONA (919005-14-4)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<75	<1	<25	<25	<10	<10	<5	<5	<25
Branched PFOS	ng/l	<3.25	<3.25	<0.65	<6.5	<16.3	<0.65	<6.5	<0.65	<0.65	<3.25	<0.65	<6.5	<0.65	<6.5	<0.65	<6.5	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	<3.25	<16.3
EtFOSAA (2991-50-6)	ng/l						<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
EtFOSE (1691-99-2)	ng/l						<10	<100	<10	<10	<50	<10	<100	<10	<100	<10	<100	<10	<250	<250	<100	<100	<50	<50	<250
FBSA (30334-69-1)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
FHxSA (41997-13-1)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
HFPO-DA (13252-13-6)	ng/l						<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
HFPO-TA (13252-14-7)	ng/l						<5	<50	<5	<5	<25	<5	<50	<5	<50	<5	<50	<5	<125	<125	<50	<50	<25	<25	<125
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<3.25	<0.65	<6.5	<16.3	<0.65	<6.5	<0.65	<0.65	<3.25	<0.65	<6.5	<0.65	<6.5	0.945	<6.5	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	<3.25	<16.3
MeFOSAA (2355-31-9)	ng/l						<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
MeFOSE (24448-09-7)	ng/l						<10	<100	<10	<10	<50	<10	<100	<10	<100	<10	<100	<10	<250	<250	<100	<100	<50	<50	<250
N-EtFOSA (4151-50-2)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
NFDHA (151772-58-6)	ng/l						<3	<30	<3	<3	<15	<3	<30	<3	<30	<3	<30	<3	<75	<75	<30	<30	<15	<15	<75
N-MeFOSA (31506-32-8)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<10	<10	<2	<20	<65	<2	<20	<2	<2	<10	<2	<20	2.51	<20	<2	<20	<2	<50	<50	<20	<20	11.6	12.4	<50
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<5	<1	<10	<25	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<5	<1	<10	<25	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
PFDoS (79780-39-5)	ng/l				<10	<25	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<5	<1	<10	<25	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
PFecHS (133201-07-7)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFEESA (113507-82-7)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	6.18	6.44	<25
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFHxDA (67905-19-5)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	1.23	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFMOBA (863090-89-5)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFMOPrA (377-73-1)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<100	<1	<25	<25	<10	<10	<5	<5	<25
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFNS (68259-12-1)	ng/l				<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	<3.25	<0.65	<6.5	<16.3	<0.65	<6.5	<0.85	<0.65	<3.25	<0.65	<6.5	<0.65	<6.5	0.947	<6.5	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	<3.25	<16.3
PFODA (16517-11-6)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	1.19	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<10	<2	<20	<50	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	7.74	7.74	<25
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<5	<1	<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFTeA (376-06-7)	ng/l						<1	<10	<1	<1	<5	<1	<10	<1	<10	1.17	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFTrDA (72629-94-8)	ng/l				<10	<25	<3	<30	<3	<3	<15	<3	<30	<3	<30	<3	<30	<3	<75	<75	<30	<30	<15	<15	<75
PFTrDS (174675-49-1)	ng/l				<10	<25	<1	<10	<1	<1	<5	<1	<10	<1	<10	<1	<10	<1	<25	<25	<10	<10	<5	<5	<25
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<5	<1	<10	<25	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
PFUnDS (749786-16-1)	ng/l				<10	<25	<2	<20	<2	<2	<10	<2	<20	<2	<20	<2	<20	<2	<50	<50	<20	<20	<10	<10	<50
Total PFAS DWI 47	ng/l																				<900	<900	<450	<450	<2250
Total PFOS	ng/l	<3.25	<3.25	<0.65	<6.5	<16.3	<0.65	<6.5	<0.65	<0.65	<3.25	<0.65	<6.5	<0.65	<6.5	0.945	<6.5	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	<3.25	<16.3
Sum of PFAS																									
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.00	1.89	0.00	0.00	0.00	0.00	0.00	0.00	25.52	26.58	0.00
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.00	6.43	0.00	0.00	0.00	0.00	0.00	0.00	25.52	588.45	0.00
Average Sum of 20 PFAS	ng/l	2.17																							
Average Total PFAS	ng/l	23.96																							
Min Sum of 20 PFAS	ng/l	0.00																							
Max Sum of 20 PFAS	ng/l	26.58																							

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APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit		
		04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<100	<20
3:3 FTCA (356-02-5)	ng/l	<250	<50
4:2 FTS (757124-72-4)	ng/l	<50	<10
5:3 FTCA (914637-49-3)	ng/l	<250	<50
6:2 FTAB (34455-29-3)	ng/l	<500	<100
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<50	<10
7:3 FTCA (812-70-4)	ng/l	<250	<50
8:2 FTS (39108-34-4)	ng/l	<100	<20
9Cl-PF3ONS (756426-58-1)	ng/l	<50	<10
ADONA (919005-14-4)	ng/l	<50	<10
Branched PFOS	ng/l	<32.5	<6.5
EtFOSAA (2991-50-6)	ng/l	<100	<20
EtFOSE (1691-99-2)	ng/l	<500	<100
FBSA (30334-69-1)	ng/l	<50	<10
FHxSA (41997-13-1)	ng/l	<50	<10
HFPO-DA (13252-13-6)	ng/l	<100	<20
HFPO-TA (13252-14-7)	ng/l	<250	<50
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<32.5	<6.5
MeFOSAA (2355-31-9)	ng/l	<100	<20
MeFOSE (24448-09-7)	ng/l	<500	<100
N-EtFOSA (4151-50-2)	ng/l	<50	<10
NFDHA (151772-58-6)	ng/l	<150	<30
N-MeFOSA (31506-32-8)	ng/l	<50	<10
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<100	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<50	<10
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<100	<20
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<100	<20
PFDoS (79780-39-5)	ng/l	<100	<20
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<100	<20
PFecHS (133201-07-7)	ng/l	<50	<10
PFEESA (113507-82-7)	ng/l	<50	<10
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<50	<10
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<50	<10
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<50	<10
PFHxDA (67905-19-5)	ng/l	<50	<10
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<50	<10
PFMOBA (863090-89-5)	ng/l	<50	<10
PFMOPrA (377-73-1)	ng/l	<50	<10
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<50	<10
PFNS (68259-12-1)	ng/l	<50	<10
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<32.5	<6.5
PFODA (16517-11-6)	ng/l	<50	<10
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<100	<20
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<50	<10
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<50	<10
PFTeA (376-06-7)	ng/l	<50	<10
PFTrDA (72629-94-8)	ng/l	<150	<30
PFTrDS (174675-49-1)	ng/l	<50	<10
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<100	<20
PFUnDS (749786-16-1)	ng/l	<100	<20
Total PFAS DWI 47	ng/l	<4500	<900
Total PFOS	ng/l	<32.5	<6.5
Sum of PFAS			
Sum of 20 PFAS	ng/l	0.00	0.00
Sum of Total PFAS	ng/l	0.00	0.00
Average Sum of 20 PFAS	ng/l		
Average Total PFAS	ng/l		
Min Sum of 20 PFAS	ng/l		
Max Sum of 20 PFAS	ng/l		

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results
(Groundwater)

Parameter	Unit	GW19																							
		17-09-21	01-10-21	18-10-21	21-03-23	21-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	23-11-23	02-04-24	02-04-24	15-07-24	15-07-24	25-09-24	25-09-24	11-12-24	11-12-24	04-03-25	04-03-25	21-05-25	21-05-25	04-09-25
11Cl-PF3OUdS (763051-92-9)	ng/l						<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
3:3 FTCA (356-02-5)	ng/l						<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<125
4:2 FTS (757124-72-4)	ng/l				<10	<50	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
5:3 FTCA (914637-49-3)	ng/l				<100	<500	<5	<5	<5	<5	<5	<5	<50	<5	<50	<50	<5	<5	<125	<125	<50	<50	<25	<25	<125
6:2 FTAB (34455-29-3)	ng/l										<10	<10	<100	<10	<100	<100	<10	<10	<250	<250	<100	<100	<50	<50	<250
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	21.2	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
7:3 FTCA (812-70-4)	ng/l						<5	<5	<5	<5	<5	<5	<50	<5	<50	<50	<5	<5	<125	<125	<50	<50	<25	<25	<125
8:2 FTS (39108-34-4)	ng/l				<10	<50	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
9Cl-PF3ONS (756426-58-1)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
ADONA (919005-14-4)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
Branched PFOS	ng/l	<3.25	<3.25	<3.25	<3.25	<16.3	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<6.5	<0.65	<6.5	<6.5	<0.65	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	3.85	<16.3
EtFOSAA (2991-50-6)	ng/l						<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
EtFOSE (1691-99-2)	ng/l						<10	<10	<10	<10	<10	<10	<100	<10	<100	<100	<10	<10	<250	<250	<100	<100	<50	<50	<250
FBSA (30334-69-1)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
FHxSA (41997-13-1)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
HFPO-DA (13252-13-6)	ng/l						<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
HFPO-TA (13252-14-7)	ng/l						<5	<5	<5	<5	<5	<5	<50	<5	<50	<50	<5	<5	<125	<125	<50	<50	<25	<25	<125
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<3.25	<3.25	<3.25	<16.3	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<6.5	<0.65	<6.5	<6.5	<0.65	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	4.78	<16.3
MeFOSAA (2355-31-9)	ng/l						<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
MeFOSE (24448-09-7)	ng/l						<10	<10	<10	<10	<10	<10	<100	<10	<100	<100	<10	<10	<250	<250	<100	<100	<50	<50	<250
N-EtFOSA (4151-50-2)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
NFDHA (151772-58-6)	ng/l						<3	<3	<3	<3	<3	<3	<30	<3	<30	<30	<3	<3	<75	<75	<30	<30	<15	<15	<75
N-MeFOSA (31506-32-8)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<10	<10	<10	<10	<190	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	14.9	14.9	<50
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<5	<5	<5	<25	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<5	<5	<5	<25	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
PFDoS (79780-39-5)	ng/l				<5	<25	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<5	<5	<5	<25	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
PFecHS (133201-07-7)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	5.17	<25
PFEESA (113507-82-7)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	7.26	6.47	<25
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	1.49	<1	<10	1.15	<10	<10	<1	<1	<25	<25	<10	<10	<5	5.04	<25
PFHxDA (67905-19-5)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFMOBA (863090-89-5)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFMOPrA (377-73-1)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFNS (68259-12-1)	ng/l				<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<3.25	<3.25	<3.25	<3.25	<20	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<6.5	0.855	<6.5	<6.5	<0.65	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	<3.25	<16.3
PFODA (16517-11-6)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<10	<10	<10	<50	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	1.89	<1	<10	2.31	<10	<10	<1	<1	<25	<25	<10	<10	7.29	7.36	<25
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<5	<5	<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFTeA (376-06-7)	ng/l						<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFTrDA (72629-94-8)	ng/l				<5	<25	<3	<3	<3	<3	<3	<3	<30	<3	<30	<30	<3	<3	<75	<75	<30	<30	<15	<15	<75
PFTrDS (174675-49-1)	ng/l				<5	<25	<1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<1	<1	<25	<25	<10	<10	<5	<5	<25
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<5	<5	<5	<25	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
PFUnDS (749786-16-1)	ng/l				<5	<25	<2	<2	<2	<2	<2	<2	<20	<2	<20	<20	<2	<2	<50	<50	<20	<20	<10	<10	<50
Total PFAS DWI 47	ng/l																				<900	<900	<450	<450	<2250
Total PFOS	ng/l	<3.25	<3.25	<3.25	<3.25	<16.3	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<6.5	<0.65	<6.5	<6.5	<0.65	<0.65	<16.3	<16.3	<6.5	<6.5	<3.25	8.63	<16.3
Sum of PFAS																									
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.38	0.00	0.00	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.45	42.40	0.00
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.38	0.00	0.00	4.32	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.45	56.20	0.00
Average Sum of 20 PFAS	ng/l	3.06																							
Average Total PFAS	ng/l	4.41																							
Min Sum of 20 PFAS	ng/l	0.00																							
Max Sum of 20 PFAS	ng/l	42.40																							

FEHILY TIMONEY

APEC 5/North Runway Monitoring Results (Groundwater)

Parameter	Unit		
		04-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<100	<20
3:3 FTCA (356-02-5)	ng/l	<250	<50
4:2 FTS (757124-72-4)	ng/l	<50	<10
5:3 FTCA (914637-49-3)	ng/l	<250	<50
6:2 FTAB (34455-29-3)	ng/l	<500	<100
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<50	<10
7:3 FTCA (812-70-4)	ng/l	<250	<50
8:2 FTS (39108-34-4)	ng/l	<100	<20
9Cl-PF3ONS (756426-58-1)	ng/l	<50	<10
ADONA (919005-14-4)	ng/l	<50	<10
Branched PFOS	ng/l	<32.5	<6.5
EtFOSAA (2991-50-6)	ng/l	<100	<20
EtFOSE (1691-99-2)	ng/l	<500	<100
FBSA (30334-69-1)	ng/l	<50	<10
FHxSA (41997-13-1)	ng/l	<50	<10
HFPO-DA (13252-13-6)	ng/l	<100	<20
HFPO-TA (13252-14-7)	ng/l	<250	<50
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<32.5	<6.5
MeFOSAA (2355-31-9)	ng/l	<100	<20
MeFOSE (24448-09-7)	ng/l	<500	<100
N-EtFOSA (4151-50-2)	ng/l	<50	<10
NFDHA (151772-58-6)	ng/l	<150	<30
N-MeFOSA (31506-32-8)	ng/l	<50	<10
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<100	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<50	<10
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<100	<20
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<100	<20
PFDoS (79780-39-5)	ng/l	<100	<20
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<100	<20
PFecHS (133201-07-7)	ng/l	<50	<10
PFEESA (113507-82-7)	ng/l	<50	<10
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<50	<10
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<50	<10
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<50	<10
PFHxDA (67905-19-5)	ng/l	<50	<10
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<50	<10
PFMOBA (863090-89-5)	ng/l	<50	<10
PFMOPrA (377-73-1)	ng/l	<50	<10
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<50	<10
PFNS (68259-12-1)	ng/l	<50	<10
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<32.5	<6.5
PFODA (16517-11-6)	ng/l	<50	<10
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<100	<20
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<50	<10
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<50	<10
PFTeA (376-06-7)	ng/l	<50	<10
PFTrDA (72629-94-8)	ng/l	<150	<30
PFTrDS (174675-49-1)	ng/l	<50	<10
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<100	<20
PFUnDS (749786-16-1)	ng/l	<100	<20
Total PFAS DWI 47	ng/l	<4500	<900
Total PFOS	ng/l	<32.5	<6.5
Sum of PFAS			
Sum of 20 PFAS	ng/l	0.00	0.00
Sum of Total PFAS	ng/l	0.00	0.00
Average Sum of 20 PFAS	ng/l		
Average Total PFAS	ng/l		
Min Sum of 20 PFAS	ng/l		
Max Sum of 20 PFAS	ng/l		

FEHILY TIMONEY

Castlemoate Monitoring Results (Groundwater)

Parameter	Unit	BH1A																																				
		09-02-22	09-02-22	16-03-22	16-03-22	21-04-22	21-04-22	24-05-22	24-05-22	24-06-22	24-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	31-05-23	31-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	01-10-24	01-10-24	12-12-24	12-12-24	05-03-25	05-03-25	21-05-25	21-05-25	08-09-25	08-09-25	11-12-25	
11Cl-PF3OUdS (763051-92-9)	ng/l																	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
3:3 FTCA (356-02-5)	ng/l																	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<50	<50	<5	
4:2 FTS (757124-72-4)	ng/l			<10	<10	<20	<10	<10	<10	<20	<20	<20	<20	<10	<2	<10	<10	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	1.19	<5	<25	<5	<5	<5	<10	<10	<10	<1	
5:3 FTCA (914637-49-3)	ng/l			<100	<100	<200	<100	<100	<100	<200	<200	<200	<200	<100	<20	<100	<100	<10	<10	<50	<5	<25	<5	<25	<5	<5	<5	<25	<5	<25	<125	<25	<25	<25	<50	<50	<50	<5	
6:2 FTAB (34455-29-3)	ng/l																					<50	<10	<50	<10	<10	<10	<50	<10	<50	<250	<50	<50	<50	<100	<100	<100	<10	
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	1.31	<5	<5	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<3	
7:3 FTCA (812-70-4)	ng/l																	<10	<10	<50	<5	<25	<5	<25	<5	<5	<5	<25	<5	<25	<125	<25	<25	<25	<50	<50	<50	<5	
8:2 FTS (39108-34-4)	ng/l			<10	<10	<20	<10	<10	<10	<20	<20	<20	<20	<10	<2	<10	<10	<10	<10	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
9Cl-PF3ONS (756426-58-1)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
ADONA (919005-14-4)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
Branched PFOS	ng/l	<0.65	<6.5	<3.25	<3.25	<6.5	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<3.25	1.11	<3.25	<3.25	<1.3	<1.3	<6.5	<0.65	<3.25	1.13	<3.25	0.915	1.19	1.22	<3.25	<0.65	<3.25	<16.3	<3.25	<3.25	<3.25	<6.5	<6.5	<6.5	<0.65	
EtFOSAA (2991-50-6)	ng/l																	<4	<4	<20	2.72	<10	<2	<10	<2	<2	<2	<10	4.01	<10	<50	<10	<10	<10	<20	<20	<20	2.16	
EtFOSE (1691-99-2)	ng/l																	<20	<20	<100	<10	<50	<10	<50	<10	<10	<10	<50	<10	<50	<250	<50	<50	<50	<100	<100	<100	<10	
FBSA (30334-69-1)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
FHxSA (41997-13-1)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
HFPO-DA (13252-13-6)	ng/l																	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
HFPO-TA (13252-14-7)	ng/l																	<10	<10	<50	<5	<25	<5	<25	<5	<5	<5	<25	<5	<25	<125	<25	<25	<25	<50	<50	<50	5.05	
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<6.5	<3.25	<3.25	<6.5	<6.5	9.95	14.4	<6.5	<6.5	<6.5	<6.5	<3.25	0.839	<3.25	<3.25	<1.3	<1.3	<6.5	<0.65	<3.25	<0.65	<3.25	0.718	<0.65	<0.65	<3.25	<0.65	<3.25	<16.3	<3.25	<3.25	<3.25	<6.5	<6.5	<6.5	<0.65	
MeFOSAA (2355-31-9)	ng/l																	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
MeFOSE (24448-09-7)	ng/l																	<20	<20	<100	<10	<50	<10	<50	<10	<10	<10	<50	<10	<50	<250	<50	<50	<50	<100	<100	<100	<10	
N-EtFOSA (4151-50-2)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
NFDHA (151772-58-6)	ng/l																	<6	<6	<30	<3	<15	<3	<15	<3	<3	<3	<15	<3	<15	<75	<15	<15	<15	<30	<30	<30	<3	
N-MeFOSA (31506-32-8)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	<20	<10	<10	<30	<35	<15	<26	<20	<20	642	33.7	<10	<2	<10	<10	<4	<4	<20	7.21	<10	10.3	17.4	9.71	6.88	5.21	<10	10.7	<10	<50	15	<10	10.6	<20	<20	<20	9.12	
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<2	<2	<10	<1	<5	1.1	<5	<1	<1	<1	<5	1.14	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
PFDoS (79780-39-5)	ng/l			<15	<15	<10	<10	<10	<10	<10	<10	<10	<10	<5	<1	<5	<5	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
PFecHS (133201-07-7)	ng/l																	<2	<2	<10	2.72	<5	2.55	13	2.13	2.23	2.06	<5	1.97	<5	<25	<5	<5	<5	<10	<10	<10	1.87	
PFEESA (113507-82-7)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	1.32	<5	<5	<2	<2	<10	1.57	<5	1.73	<5	1.62	1.43	1.66	<5	1.8	<5	<25	5.59	<5	<5	<10	<10	<10	1.6	
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	2.13	<5	<5	<2	<2	<10	3.22	<5	3.39	<5	3.38	3.93	3.77	<5	2.55	<5	<25	7.03	<5	<5	<10	<10	<10	4.08	
PFHxDA (67905-19-5)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<2	<2	<10	<1	<5	1.4	<5	<1	1.24	1.24	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFMOBA (863090-89-5)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFMOPrA (377-73-1)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFNS (68259-12-1)	ng/l			<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<1.8	<10.5	<8	<6	<16	<10	16.7	15.5	<8.5	<6.5	<17.5	<15.5	4.02	2.74	<3.25	5.36	<1.3	<1.3	<6.5	3.31	<3.25	2.82	5.75	2.95	2.41	2.67	<5	3.4	<3.25	<16.3	<3.25	4.16	4.82	<6.5	<6.5	<6.5	2.62	
PFODA (16517-11-6)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<20	<10	<10	<20	<20	<10	<10	<20	<20	<20	<20	<10	<2	<10	<10	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	3.64	<5	<5	<2	<2	<10	4.67	<5	5.88	7.5	5.38	4.5	3.9	5.28	3.31	<5	<25	11.6	9.49	7.83	<10	<10	<10	4.42	
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFTeA (376-06-7)	ng/l																	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFTrDA (72629-94-8)	ng/l			<10	<10	<10	<10	<5	<5	<20	<20	<10	<10	<5	<1	<5	<5	<5	<5	<30	<3	<15	<3	<15	<3	<3	<3	<15	<3	<15	<75	<15	<15	<15	<30	<30	<30	<3	
PFTrDS (174675-49-1)	ng/l			<15	<15	<10	<10	<25	<25	<10	<10	<10	<10	<5	<1	<5	<5	<2	<2	<10	<1	<5	<1	<5	<1	<1	<1	<5	<1	<5	<25	<5	<5	<5	<10	<10	<10	<1	
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<10	<5	<5	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
PFUnDS (749786-16-1)	ng/l			<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<5	<1	<5	<5	<4	<4	<20	<2	<10	<2	<10	<2	<2	<2	<10	<2	<10	<50	<10	<10	<10	<20	<20	<20	<2	
Total PFAS DWI 47	ng/l																															<450	<450	<450	<900	<900	<900	<90	
Total PFOS	ng/l	<0.65	<6.5	<3.25	<3.25	<6.5	<6.5	9.95	14.4	<6.5	<6.5	<6.5	<6.5	<3.25	1.95	<3.25	<3.25	<1.3	<1.3	<6.5	<0.65	<3.25	1.13	<3.25	1.63	1.19	1.22	<3.25	<0.65	<3.25	<16.3	<3.25	<3.25	<3.25	<6.5	<6.5	<6.5	<0.65	
Sum of PFAS																																						
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	26.65	29.90	0.00	0.00	642.00	33.70	4.02	11.78	0.00	5.36	0.00	0.00	0.00	19.98	0.00	27.75	30.65	24.67	21.58	19.67	5.28	22.90	0.00	0.00	39.22	13.65	23.25	0.00	0.00	0.00	21.84	
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	36.60	44.30	0.00	0.00	642.00	33.70	4.02	15.04	0.00	5.36	0.00	0.00	0.00	25.42	0.00	31.43	43.65	28.43	25.00	22.95	5.28	30.07	0.00	0.00	39.22	13.65	23.25	0.00	0.00	0.00	30.92	
Average Sum of 20 PFAS	ng/l	27.67																																				
Average Total PFAS	ng/l	29.74																																				
Min Sum of 20 PFAS	ng/l	0.00																																				
Max Sum of 20 PFAS	ng/l	642.00																																				

FEHILY TIMONEY

Castlemoate Monitoring Results (Groundwater)

| Parameter | Unit | BH5 | | |

FEHILY TIMONEY

Castlemoate Monitoring Results (Groundwater)

Parameter	Unit	BH6																																					
		12-11-21	12-11-21	09-02-22	09-02-22	16-03-22	16-03-22	21-04-22	21-04-22	24-05-22	24-05-22	24-06-22	24-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	31-05-23	31-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	01-10-24	01-10-24	12-12-24	12-12-24	05-03-25	05-03-25	21-05-25	21-05-25	08-09-25	08-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																			<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	60.2	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
3:3 FTCA (356-02-5)	ng/l																			<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	<10	<2	<2	<2	<4	<4	<4	<4	<10	<5	<25
4:2 FTS (757124-72-4)	ng/l	<2	<2			<10	<10	<20	<10	<10	<10	<2	<10	<20	<20	<2	<2	<10	<10	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
5:3 FTCA (914637-49-3)	ng/l	<20	<20			<100	<100	<200	<100	<100	<100	<20	<100	<200	<200	<20	<20	<100	<100	<50	<50	<25	<5	<50	<5	<5	<25	<5	<5	<25	<5	<5	<5	<10	<10	<10	<10	<10	<5	<25
6:2 FTAB (34455-29-3)	ng/l																							<100	<10	<10	<50	<10	<10	<50	<10	<10	<10	<20	<20	<20	<20	<20	<10	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	10.5	5.88	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
7:3 FTCA (812-70-4)	ng/l																			<50	<50	<25	<5	<50	<5	<5	<25	<5	<5	<25	<5	<5	<5	<10	<10	<10	<10	<10	<5	<25
8:2 FTS (39108-34-4)	ng/l	<2	<2			<10	<10	<20	<10	<10	<10	<2	<10	<20	<20	<2	<2	<10	<10	<10	<10	<10	<2	<20	<2	<2	<10	<2	<2	12.5	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
9Cl-PF3ONS (756426-58-1)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	15	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
ADONA (919005-14-4)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
Branched PFOS	ng/l	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<6.5	<3.25	3.95	<3.25	<0.65	<3.25	<6.5	<6.5	<0.65	<0.65	<3.25	<3.25	<6.5	<6.5	<3.25	<0.65	<6.5	<0.65	<0.65	<3.25	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<1.3	<1.3	<1.3	<1.3	<1.3	<0.65	<3.25
EtFOSAA (2991-50-6)	ng/l																			<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	30	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
EtFOSE (1691-99-2)	ng/l																			<100	<100	<50	<10	<100	<10	<10	<50	<10	<10	324	<10	<10	<10	<20	<20	<20	<20	<20	<10	<50
FBSA (30334-69-1)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
FHxSA (41997-13-1)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
HFPO-DA (13252-13-6)	ng/l																			<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	<10	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
HFPO-TA (13252-14-7)	ng/l																			<50	<50	<25	<5	<50	<5	<5	<25	<5	<5	<25	<5	<5	<5	<10	<10	<10	<10	<10	<5	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<6.5	<3.25	51.4	23.2	2.96	3.9	<6.5	<6.5	<0.65	<0.65	<3.25	<3.25	<6.5	<6.5	<3.25	<0.65	<6.5	<0.65	<0.65	<3.25	<0.65	<0.65	4.46	<0.65	<0.65	<0.65	<1.3	<1.3	<1.3	<1.3	<1.3	<0.65	<3.25
MeFOSAA (2355-31-9)	ng/l																			<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	25.8	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
MeFOSE (24448-09-7)	ng/l																			<100	<100	<50	<10	<100	<10	<10	<50	<10	<10	278	<10	<10	<10	<20	<20	<20	<20	<20	<10	<50
N-EtFOSA (4151-50-2)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
NFDHA (151772-58-6)	ng/l																			<30	<30	<15	<3	<30	<3	<3	<15	<3	<3	<15	<3	<3	<3	<6	<6	<6	<6	<6	<3	<15
N-MeFOSA (31506-32-8)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	<2	<10	<10	<10	<10	<44	<13	<20	<10	<3	<10	25	<20	<2	<2	<10	<10	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	<10	2	<2	<2	<4	<4	<4	<4	<4	<2	<10
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	11.7	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	57	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
PFDoS (79780-39-5)	ng/l					<15	<15	<10	<5	<10	<40	<1	<5	<10	<10	<1	<1	<5	<5	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	37.9	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	38.2	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
PFecHS (133201-07-7)	ng/l																			<10	<10	9.99	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFEESA (113507-82-7)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFHxDA (67905-19-5)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	12	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFMOBA (863090-89-5)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFMOPrA (377-73-1)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFNS (68259-12-1)	ng/l					<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	20.1	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	<3.25	<6	<4.5	<4	<13.5	<3.25	11.6	<3.25	<0.65	<3.25	<12	<12	<0.65	<0.65	<3.25	<3.25	<6.5	<6.5	<3.25	<0.65	<6.5	<0.65	<0.65	<3.25	<0.65	<0.65	4.82	<0.65	<0.65	<0.65	<1.3	<1.3	<1.3	<1.3	<1.3	<0.65	<3.25
PFODA (16517-11-6)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	10.6	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<10	<10	<10	<10	<20	<10	<10	<10	<2	<10	<20	<20	<2	<2	<10	<10	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	<10	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	1.44	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	1.02	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	<5	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFTeA (376-06-7)	ng/l																			<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	33.8	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFTrDA (72629-94-8)	ng/l					<10	<10	<10	<5	<5	<15	<1	<10	<10	<10	<1	<1	<5	<5	<5	<5	<15	<3	<30	<3	<3	<15	<3	<3	66.5	<3	<3	<3	<6	<6	<6	<6	<6	<3	<15
PFTrDS (174675-49-1)	ng/l					<15	<15	<10	<5	<25	<40	<1	<5	<10	<10	<1	<1	<5	<5	<10	<10	<5	<1	<10	<1	<1	<5	<1	<1	17.8	<1	<1	<1	<2	<2	<2	<2	<2	<1	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<5	<5	<5	<5	<10	<5	<5	<5	<1	<5	<10	<10	<1	<1	<5	<5	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	28.9	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
PFUnDS (749786-16-1)	ng/l					<10	<10	<10	<5	<5	<10	<1	<5	<10	<10	<1	<1	<5	<5	<20	<20	<10	<2	<20	<2	<2	<10	<2	<2	54.4	<2	<2	<2	<4	<4	<4	<4	<4	<2	<10
Total PFAS DWI 47	ng/l																															<180	<180	<180	<180	<180	<90	<450
Total PFOS	ng/l	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<6.5	<3.25	55.4	23.2	2.96	3.9	<6.5	<6.5	<0.65	<0.65	<3.25	<3.25	<6.5	<6.5	<3.25	<0.65	<6.5	<0.65	<0.65	<3.25	<0.65	<0.65	4.46	<0.65	<0.65	<0.65	<1.3	<1.3	<1.3	<1.3	<1.3	<0.65	<3.25
Sum of PFAS																																							
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.00	23.20	4.40	3.90	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	341.78	3.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.85	52.28	7.36	7.80	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1148.14	3.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Sum of 20 PFAS	ng/l	12.01																																					
Average Total PFAS	ng/l	35.55																																					
Min Sum of 20 PFAS	ng/l	0.00																																					
Max Sum of 20 PFAS	ng/l	341.78																																					

FEHILY TIMONEY

Castlemoate Monitoring Results
(Groundwater)

Parameter	Unit	BH7																																					
		12-11-21	09-02-22	09-02-22	16-03-22	16-03-22	21-04-22	21-04-22	24-05-22	24-05-22	24-06-22	24-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	31-05-23	31-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	01-10-24	01-10-24	12-12-24	12-12-24	05-03-25	05-03-25	21/052025	21-05-25	08-09-25	08-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																		<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
3:3 FTCA (356-02-5)	ng/l																		<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<50	<10	<25
4:2 FTS (757124-72-4)	ng/l	<20			<20	<20	<20	<20	<20	<10	<20	<20	<20	<20	<2	<2	<2	<2	<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	1.17	<5	<2	<5	<10	<5	<5	<10	<2	<5
5:3 FTCA (914637-49-3)	ng/l	<200			<200	<200	<200	<200	<200	<100	<200	<200	<200	<200	<20	<20	<20	<20	<50	<50	<5	<50	<5	<50	<5	<5	<5	<5	<5	<25	<5	<25	<10	<25	<50	<25	<25	<50	<10	<25
6:2 FTAB (34455-29-3)	ng/l																						<10	<100	<10	<10	<10	<10	<50	<10	<50	<20	<50	<100	<50	<50	<100	<20	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
7:3 FTCA (812-70-4)	ng/l																		<50	<50	<5	<50	<5	<50	<5	<5	<5	<5	<5	<25	<5	<25	<10	<25	<50	<25	<25	<50	<10	<25
8:2 FTS (39108-34-4)	ng/l	<20			<20	<20	<20	<20	<20	<10	<20	<20	<20	<20	<2	5.45	<2	<2	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
9Cl-PF3ONS (756426-58-1)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
ADONA (919005-14-4)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
Branched PFOS	ng/l	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<3.25	<6.5	<6.5	<6.5	<6.5	<0.65	<0.65	<0.65	0.726	<6.5	<6.5	<0.65	<6.5	<0.65	<6.5	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<3.25	<1.3	<3.25	<6.5	<3.25	<3.25	<6.5	<1.3	<3.25
EtFOSAA (2991-50-6)	ng/l																		<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
EtFOSE (1691-99-2)	ng/l																		<100	<100	<10	<100	<10	<100	<10	<10	<10	<10	<50	<10	<50	<20	<50	<100	<50	<50	<100	<20	<50
FBSA (30334-69-1)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
FHxSA (41997-13-1)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
HFPO-DA (13252-13-6)	ng/l																		<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
HFPO-TA (13252-14-7)	ng/l																		<50	<50	<5	<50	<5	<50	<5	<5	<5	<5	<25	<5	<25	<10	<25	<50	<25	<25	<50	<10	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<3.25	<6.5	<6.5	<6.5	<6.5	<0.65	<0.65	<0.65	0.686	<6.5	<6.5	<0.65	<6.5	<0.65	<6.5	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<3.25	<1.3	<3.25	<6.5	<3.25	<3.25	<6.5	<1.3	<3.25
MeFOSAA (2355-31-9)	ng/l																		<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
MeFOSE (24448-09-7)	ng/l																		<100	<100	<10	<100	<10	<100	<10	<10	<10	<10	<50	<10	<50	<20	<50	<100	<50	<50	<100	<20	<50
N-EtFOSA (4151-50-2)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
NFDHA (151772-58-6)	ng/l																		<30	<30	<3	<30	<3	<30	<3	<3	<3	<3	<15	<3	<15	<6	<15	<30	<15	<15	<30	<6	<15
N-MeFOSA (31506-32-8)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<20	<10	<10	<20	<20	<37	<40	<20	<16	<20	<20	<20	<20	<3	<4	41.8	44.3	106	114	26	29.7	55.2	65.3	68.2	70.5	42.5	42	27.6	24.9	30.2	26.9	26.3	26.2	15.8	14.9	<20	13.3	22.5
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	1.52	1.52	1.55	2.57	<10	<10	1.66	<10	1.84	<10	3.21	3.41	1.93	1.77	<5	1.81	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
PFDoS (79780-39-5)	ng/l				<30	<20	<10	<10	<80	<10	<10	<10	<10	<10	<1	<1	<1	<1	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
PFecHS (133201-07-7)	ng/l																		<10	<10	<1	19.8	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	5.73
PFEESA (113507-82-7)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	<1	<10	2.11	2.39	1.36	1.16	<5	1.21	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	1.08	1.25	26.4	30.7	4.7	<10	11.4	16.8	25.1	26.9	14.4	13.5	11.5	7.82	16.3	8.12	10.2	12.9	6.11	<5	<10	4.12	<5
PFHxDA (67905-19-5)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	1.18	<10	<1	1.78	1.08	1.09	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFMOBA (863090-89-5)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFMOPrA (377-73-1)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFNS (68259-12-1)	ng/l				<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<6.5	<5	<3.25	<6.5	<7.5	<12.5	<12	<6.5	<12	<6.5	<6.5	<12	<13.5	<0.65	<0.65	<0.65	<0.65	<6.5	<6.5	<0.65	<6.5	<0.65	<6.5	<0.65	0.906	<0.65	<0.65	<3.25	<0.65	<3.25	<1.3	<3.25	<6.5	<3.25	<3.25	<6.5	<1.3	<3.25
PFODA (16517-11-6)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<20	<10	<10	<20	<20	<20	<20	<20	<10	<20	<20	<20	<20	<2	<2	<2	<2	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	1.9	1.91	42.3	40.6	185	202	35.4	36.6	75.6	82.4	120	130	56.4	59.7	42.2	37.9	48.8	38.4	38.4	40.3	27.6	26.1	16.3	16	24
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFTeA (376-06-7)	ng/l																		<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFTrDA (72629-94-8)	ng/l				<20	<10	<10	<10	<30	<5	<20	<20	<10	<10	<1	<1	<1	<1	<10	<10	<3	<30	<3	<30	<3	<3	<3	<3	<15	<3	<15	<6	<15	<30	<15	<15	<30	<6	<15
PFTrDS (174675-49-1)	ng/l				<30	<30	<10	<10	<80	<25	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<1	<10	<1	<10	<1	<1	<1	<1	<5	<1	<5	<2	<5	<10	<5	<5	<10	<2	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<10	<5	<5	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<1	<1	<1	<1	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
PFUnDS (749786-16-1)	ng/l				<20	<10	<10	<10	<20	<5	<10	<10	<10	<10	<1	<1	<1	<1	<20	<20	<2	<20	<2	<20	<2	<2	<2	<2	<10	<2	<10	<4	<10	<20	<10	<10	<20	<4	<10
Total PFAS DWI 47	ng/l																																<450	<900	<450	<450	<900	<180	<450
Total PFOS	ng/l	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<3.25	<6.5	<6.5	<6.5	<6.5	<0.65	<0.65	<0.65	1.41	<6.5	<6.5	<0.65	<6.5	<0.65	<6.5	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<3.25	<1.3	<3.25	<6.5	<3.25	<3.25	<6.5	<1.3	<3.25
Sum of PFAS																																							
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.42	3.43	86.73	90.13	317.40	346.70	67.76	66.30	145.22	164.50	218.62	235.89	117.69	119.22	81.30	73.64	95.30	73.42	74.90	79.40	49.51	41.00	16.30	33.42	46.50
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.42	8.88	86.73	91.54	317.40	346.70	67.76	86.10	145.22	164.50	218.62	235.89	117.69	119.22	81.30	74.81	95.30	73.42	74.90	79.40	49.51	41.00	16.30	33.42	52.23
Average Sum of 20 PFAS	ng/l	73.84																																					
Average Total PFAS	ng/l	70.56																																					
Min Sum of 20 PFAS	ng/l	0.00																																					
Max Sum of 20 PFAS	ng/l	346.70																																					

FEHILY TIMONEY

Castlemoate Monitoring Results
(Groundwater)

Parameter	Unit	BHID																																				
		12-11-21	12-11-21	09-02-22	09-02-22	16-03-22	16-03-22	21-04-22	21-04-22	24-05-22	24-05-22	24-06-22	24-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	31-05-23	31-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	01-10-24	01-10-24	12-12-24	12-12-24	05-03-25	05-03-25	21-05-25	21-05-25	08-09-25	08-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																			<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
3:3 FTCA (356-02-5)	ng/l																			<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<5	<5	<50
4:2 FTS (757124-72-4)	ng/l	<2	<2			<20	<20	<20	<20	<10	<10	<20	<20	<20	<20	<20	<20	<20	<20	<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
5:3 FTCA (914637-49-3)	ng/l	<20	<20			<200	<200	<200	<200	<100	<100	<200	<200	<200	<200	<200	<200	<200	<200	<50	<10	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<125	<50	<25	<50	<50	<5	<5	<50
6:2 FTAB (34455-29-3)	ng/l																							<10	<10	<10	<10	<10	<10	<50	<50	<50	<250	<100	<50	<100	<100	<10	<10	<100
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
7:3 FTCA (812-70-4)	ng/l																			<50	<10	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<125	<50	<25	<50	<50	<5	<5	<50
8:2 FTS (39108-34-4)	ng/l	<2	<2			<20	<20	<20	<20	<10	<10	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
9Cl-PF3ONS (756426-58-1)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
ADONA (919005-14-4)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<3.25	<6.5	<6.5	<6.5	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<1.3	<3.25	<0.65	<0.65	0.825	<0.65	2.36	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<16.3	<6.5	<3.25	<6.5	<6.5	<0.65	<0.65	<6.5
EtFOSAA (2991-50-6)	ng/l																			<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
EtFOSE (1691-99-2)	ng/l																			<100	<20	<50	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<250	<100	<50	<100	<100	<10	<10	<100
FBSA (30334-69-1)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	10.9	<10	<1	<1	<10
FHxSA (41997-13-1)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
HFPO-DA (13252-13-6)	ng/l																			<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
HFPO-TA (13252-14-7)	ng/l																			<50	<10	<25	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<125	<50	<25	<50	<50	<5	<5	<50
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<3.25	<6.5	<6.5	<6.5	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<1.3	<3.25	<0.65	<0.65	<0.65	<0.65	1.62	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<16.3	<6.5	<3.25	<6.5	<6.5	<0.65	<0.65	<6.5
MeFOSAA (2355-31-9)	ng/l																			<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
MeFOSE (24448-09-7)	ng/l																			<100	<20	<50	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<250	<100	<50	<100	<100	<10	<10	<100
N-EtFOSA (4151-50-2)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
NFDHA (151772-58-6)	ng/l																			<30	<6	<15	<3	<3	<3	<3	<3	<3	<3	<15	<15	<15	<75	<30	<15	<30	<30	<3	<3	<30
N-MeFOSA (31506-32-8)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	4.61	7.66	10.8	<20	<20	<37	<42	<25	<16	<20	<20	<20	<20	<20	<20	<20	<20	<20	7.97	10.9	9.98	8.31	8.94	7.82	8.17	13	15.3	<10	<10	<10	<50	<20	<10	<20	<20	20.1	19.7	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	1.85	1.69	1.72	1.97	2.45	1.48	1.48	<5	<5	<5	<5	<25	<10	<5	<10	<10	1.14	<1	<10
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
PFDoS (79780-39-5)	ng/l					<30	<30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
PFecHS (133201-07-7)	ng/l																			12.2	13.4	30	13.1	14.6	15.7	13.7	13.1	8.96	9.98	11.8	14.1	<5	<25	<10	15.5	21.4	<10	10.1	10.5	22.8
PFEESA (113507-82-7)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<1	6.14	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	1.34	<1	<1	1.54	1.36	<1	1.15	<5	<5	<5	<5	<25	<10	<5	14.7	<10	<1	<1	<10
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<1	<1	1.43	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	3.98	7.64	4.21	3.94	4.06	4.14	4.31	4.17	5.02	<5	<5	<5	<5	<25	<10	<5	43.6	<10	1.94	1.94	<10
PFHxDA (67905-19-5)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	3.9	8.35	3.02	3.91	4.23	4.87	6.9	2.6	2.88	<5	<5	<5	<5	<25	<10	<5	<10	<10	1.98	1.96	<10
PFMOBA (863090-89-5)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFMOPrA (377-73-1)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFNS (68259-12-1)	ng/l					<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	<0.65	<3.25	<6.5	<8	<10	<15	<12.5	<10	<6.5	<6.5	<13	<15	<6.5	<6.5	<6.5	<6.5	<6.5	<1.3	<3.25	0.796	<0.65	<0.65	<0.65	0.93	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<16.3	<6.5	<3.25	10	<6.5	<0.65	<0.65	<6.5
PFODA (16517-11-6)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<10	<20	<20	<20	<20	<10	<10	<20	<20	<20	<20	<20	<20	<20	<20	<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<1	1.37	4.96	25.4	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	17.1	16.5	13	11	11.5	18.2	15.4	16.7	17.8	<5	8.15	<5	<25	<10	6.69	28.8	<10	7.8	8.79	<10
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<5	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	<1	1.05	1.04	1.51	2.08	<1	<1	<5	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFTeA (376-06-7)	ng/l																			<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFTrDA (72629-94-8)	ng/l					<20	<20	<10	<10	<5	<5	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<15	<3	<3	<3	<3	<3	<3	<3	<15	<15	<15	<75	<30	<15	<30	<30	<3	<3	<30
PFTrDS (174675-49-1)	ng/l					<30	<30	<10	<10	<25	<25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2	<5	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<25	<10	<5	<10	<10	<1	<1	<10
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<6	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
PFUnDS (749786-16-1)	ng/l					<20	<20	<10	<10	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10	<20	<4	<10	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<50	<20	<10	<20	<20	<2	<2	<20
Total PFAS DWI 47	ng/l																															<900	<450	<900	<900	<90	<90	<900
Total PFOS	ng/l	<0.65	<0.65	<0.65	<3.25	<6.5	<6.5	<6.5	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<6.5	<1.3	<3.25	<0.65	<0.65	0.825	<0.65	3.98	<0.65	<0.65	<3.25	<3.25	<3.25	<3.25	<16.3	<6.5	<3.25	<6.5	<6.5	<0.65	<0.65	<6.5
Sum of PFAS																																						
Sum of 20 PFAS	ng/l	0.00	5.98	14.05	42.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.95	43.39	34.20	29.90	32.32	40.05	45.58	37.95	43.63	0.00	8.15	0.00	0.00	0.00	6.69	97.10	0.00	32.96	32.39	0.00	
Sum of Total PFAS	ng/l	0.00	5.98	14.05	42.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.20	46.35	73.39	47.30	44.50	48.84	53.75	62.66	46.91	53.61	11.80	22.25	0.00	0.00	0.00	22.19	129.40	0.00	43.06	42.89	22.80	
Average Sum of 20 PFAS	ng/l	14.86																																				
Average Total PFAS	ng/l	21.70																																				
Min Sum of 20 PFAS	ng/l	0.00																																				
Max Sum of 20 PFAS	ng/l	97.10																																				

FEHILY TIMONEY

Castlemoate Monitoring Results (Groundwater)

Parameter	Unit	BH6S																																		
		09-02-22	09-02-22	16-03-22	16-03-22	21-04-22	21-04-22	24-05-22	24-05-22	24-06-22	24-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	31-05-23	31-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	01-10-24	01-10-24	12-12-24	12-12-24	05-03-25	05-03-25	21-05-25	21-05-25	08-09-25	08-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
3:3 FTCA (356-02-5)	ng/l																	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<25	<10	<10
4:2 FTS (757124-72-4)	ng/l			<20	<20	<20	<20	<10	<10	<20	<20	<20	<20	<20	<2	<20	<2	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
5:3 FTCA (914637-49-3)	ng/l			<200	<200	<200	<200	<100	<100	<200	<200	<200	<200	<200	<20	<200	<20	<50	<10	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<10	<25	<50	<10	<10	<25	<10	<10
6:2 FTAB (34455-29-3)	ng/l																					<10	<10	<10	<10	<10	<10	<50	<50	<10	<20	<50	<100	<20	<20	<50	<20	<20
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
7:3 FTCA (812-70-4)	ng/l																	<50	<10	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<10	<25	<50	<10	<10	<25	<10	<10
8:2 FTS (39108-34-4)	ng/l			<20	<20	<20	<20	<10	<10	<20	<20	<20	<20	<20	<2	<20	<2	<20	<20	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
9Cl-PF3ONS (756426-58-1)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
ADONA (919005-14-4)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
Branched PFOS	ng/l	<0.65	<0.65	<6.5	<6.5	<6.5	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<0.65	<6.5	<1.3	<6.5	<1.3	<0.65	<0.65	1.1	0.949	<0.65	<0.65	0.908	0.95	<3.25	<3.25	<0.65	<1.3	<3.25	<6.5	<1.3	<1.3	<3.25	<1.3	<1.3
ElFOSAA (2991-50-6)	ng/l																	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
ElFOSE (1691-99-2)	ng/l																	<100	<20	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<20	<50	<100	<20	<20	<50	<20	<20
FBSA (30334-69-1)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
FHxSA (41997-13-1)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
HFPO-DA (13252-13-6)	ng/l																	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
HFPO-TA (13252-14-7)	ng/l																	<50	<10	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<10	<25	<50	<10	<10	<25	<10	<10
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<6.5	<6.5	<6.5	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<0.65	<6.5	<1.3	<6.5	<1.3	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<3.25	<0.65	<1.3	<3.25	<6.5	<1.3	<1.3	<3.25	<1.3	<1.3
MeFOSAA (2355-31-9)	ng/l																	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
MeFOSE (24448-09-7)	ng/l																	<100	<20	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<20	<50	<100	<20	<20	<50	<20	<20
N-ElFOSA (4151-50-2)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
NFDHA (151772-58-6)	ng/l																	<30	<6	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15	<3	<6	<15	<30	<6	<6	<15	<6	<6
N-MeFOSA (31506-32-8)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	7.42	6.86	<20	<20	<30	<45	<22	<24	<20	<20	<20	21	<20	<2	<20	<7	<20	4.67	<10	8.75	7.71	7.06	9.35	8.73	13.5	14.4	<10	<10	2.47	<4	<10	<20	<4	<4	17.1	17.4	<4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.03	1.23	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	2.15	<10	<2	1.81	2.39	1.92	1.72	2.08	1.9	1.66	1.67	<5	<5	1.42	<2	<5	<10	<2	<2	<5	<2	2.52
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
PFDoS (79780-39-5)	ng/l			<30	<30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1	<10	<1	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
PFecHS (133201-07-7)	ng/l																	11.4	20.8	20.3	27.4	19.1	17.8	14	13.6	12.4	12.8	12.6	9.71	14.7	8.22	23	<10	8.75	12.7	13.8	8.14	18.7
PFEESA (113507-82-7)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<10	<2	1.29	1.55	<1	<1	1.67	1.48	1.54	1.35	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.38	1.35	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	2.65	<10	2.35	3.78	4.74	4.05	3.44	4.28	3.97	4.56	5	<5	<5	<1	<2	<5	<10	<2	<2	<5	2.56	<2
PFHxDA (67905-19-5)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<10	3.12	3.33	6.18	4.97	4.73	4.1	4.5	3.56	3.68	<5	<5	1.64	<2	6.64	<10	<2	<2	<5	2.31	2.69
PFMOBA (863090-89-5)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFMOPrA (377-73-1)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFNS (68259-12-1)	ng/l			<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<1	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	<9	<6.5	<12	<15	<13	<15.5	<6.5	<6.5	<12	<12	<6.5	<0.65	<6.5	1.51	<6.5	<1.3	<0.65	<0.65	<0.65	<0.65	1.07	1.01	<0.65	<0.65	<3.25	<3.25	<0.65	<1.3	<3.25	<6.5	<1.3	<1.3	<3.25	<1.3	<1.3
PFODA (16517-11-6)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<20	<20	<20	<20	<10	<10	<20	<20	<20	<20	<20	<2	<20	<4	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	5.23	4.59	<10	<10	<10	<10	<5	<5	<10	<10	<10	<100	<10	1.03	<10	5.12	<10	9.81	13.5	13.8	9.97	9.77	17.8	17.9	17.1	15.9	7.65	5.83	2.18	<2	6.38	<10	<2	2.03	8.53	6.4	<2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<10	<2	<1	1.6	1.25	1.2	1.53	1.48	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFTeA (376-06-7)	ng/l																	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFTrDA (72629-94-8)	ng/l			<20	<20	<10	<10	<5	<5	<20	<20	<10	<10	<10	<1	<10	<1	<10	<10	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15	<3	<6	<15	<30	<6	<6	<15	<6	<6
PFTrDS (174675-49-1)	ng/l			<30	<30	<10	<10	<25	<25	<10	<10	<10	<10	<10	<1	<10	<1	<10	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<2	<5	<10	<2	<2	<5	<2	<2
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<10	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<2	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
PFUnDS (749786-16-1)	ng/l			<20	<20	<10	<10	<5	<5	<10	<10	<10	<10	<10	<1	<10	<1	<20	<4	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<4	<10	<20	<4	<4	<10	<4	<4
Total PFAS DWI 47	ng/l																															<450	<900	<180	<180	<450	<180	<180
Total PFOS	ng/l	<0.65	<0.65	<6.5	<6.5	<6.5	<6.5	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<6.5	<0.65	<6.5	<1.3	<6.5	<1.3	<0.65	<0.65	1.1	0.949	<0.65	<0.65	0.908	0.95	<3.25	<3.25	<0.65	<1.3	<3.25	<6.5	<1.3	<1.3	<3.25	<1.3	<1.3
Sum of PFAS																																						
Sum of 20 PFAS	ng/l	15.06	14.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00	1.03	0.00	11.43	0.00	19.95	23.71	39.01	30.97	28.87	41.88	40.97	42.83	42.95	7.65	5.83	7.71	0.00	13.02	0.00	0.00	2.03	25.63	28.67	5.21
Sum of Total PFAS	ng/l	15.06	14.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00	1.03	0.00	11.43	11.40	40.75	44.01	66.41	51.17	47.62	55.88	54.57	56.14	56.70	20.25	15.54	22.41	8.22	36.02	0.00	8.75	14.73	39.43	36.81	23.91
Average Sum of 20 PFAS	ng/l	12.69																																				
Average Total PFAS	ng/l	20.90																																				
Min Sum of 20 PFAS	ng/l	0.00																																				
Max Sum of 20 PFAS	ng/l	42.95																																				

FEHILY TIMONEY

Castlemoate Monitoring Results (Groundwater)

Parameter	Unit	BH9																																				
		09-02-22	09-02-22	16-03-22	16-03-22	21-04-22	21-04-22	24-05-22	24-05-22	24-06-22	24-06-22	20-09-22	20-09-22	15-11-22	15-11-22	14-02-23	14-02-23	31-05-23	31-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	01-10-24	01-10-24	12-12-24	12-12-24	05-03-25	05-03-25	21-05-25	21-05-25	08-09-25	08-09-25	10-11-25	
11Cl-PF3OUdS (763051-92-9)	ng/l																	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
3:3 FTCA (356-02-5)	ng/l																	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<50	<50	<50
4:2 FTS (757124-72-4)	ng/l			<20	<10	<20	<20	<10	<10	<20	<20	<20	<20	<2	<20	<20	<20	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
5:3 FTCA (914637-49-3)	ng/l			<200	<100	<200	<200	<100	<100	<200	<200	<200	<200	<20	<200	<200	<200	<50	<10	<5	<5	<25	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<500	<50	<25	<50	<50	<50
6:2 FTAB (34455-29-3)	ng/l																					<50	<10	<10	<10	<10	<10	<50	<10	<10	<10	14.2	<1000	<100	<50	<100	<100	<100
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<9	<10	<10	<10
7:3 FTCA (812-70-4)	ng/l																	<50	<10	<5	<5	<25	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<500	<50	<25	<50	<50	<50
8:2 FTS (39108-34-4)	ng/l			<20	<10	<20	<20	<10	<10	<20	<20	<20	<20	<2	<20	<20	<20	<20	<20	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
9Cl-PF3ONS (756426-58-1)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
ADONA (919005-14-4)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
Branched PFOS	ng/l	<3.25	<3.25	<6.5	<3.25	<6.5	<3.25	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<0.65	<6.5	<6.5	<6.5	<6.5	<1.3	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<65	<6.5	<3.25	<6.5	<6.5	<6.5
EtFOSAA (2991-50-6)	ng/l																	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
EtFOSE (1691-99-2)	ng/l																	<100	<20	<10	<10	<50	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<1000	<100	<50	<100	<100	<100
FBSA (30334-69-1)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
FHxSA (41997-13-1)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
HFPO-DA (13252-13-6)	ng/l																	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
HFPO-TA (13252-14-7)	ng/l																	<50	<10	<5	<5	<25	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<500	<50	<25	<50	<50	<50
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	<3.25	<6.5	<3.25	<6.5	<3.25	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<0.65	<6.5	<6.5	<6.5	<6.5	<1.3	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<65	<6.5	<3.25	<6.5	<6.5	<6.5
MeFOSAA (2355-31-9)	ng/l																	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
MeFOSE (24448-09-7)	ng/l																	<100	<20	<10	<10	<50	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<1000	<100	<50	<100	<100	<100
N-EtFOSA (4151-50-2)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
NFDHA (151772-58-6)	ng/l																	<30	<6	<3	<3	<15	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<300	<30	<15	<30	<30	<30
N-MeFOSA (31506-32-8)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<10	<10	<20	<10	<30	<13	<10	<20	<20	<20	<20	<20	<2	<20	<20	<20	<20	<4	<2	<10	<10	<2	2.7	2.65	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
PFDoS (79780-39-5)	ng/l			<20	<15	<10	<5	<10	<10	<10	<10	<10	<10	<1	<10	<10	<10	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
PFecHS (133201-07-7)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFEESA (113507-82-7)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFHxDA (67905-19-5)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFMOBA (863090-89-5)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFMOPrA (377-73-1)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFNS (68259-12-1)	ng/l			<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<4	<3.25	<7	<3.25	<8	<3.25	<12	<8.5	<6.5	<6.5	<12	<12	<0.65	<6.5	<6.5	<6.5	<6.5	<1.3	<0.65	<0.65	<3.25	<0.65	0.901	0.947	<0.65	<0.65	3.57	<0.65	<0.65	<0.65	<0.65	<65	<6.5	<3.25	<6.5	<6.5	<6.5
PFODA (16517-11-6)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<10	<20	<10	<20	<10	<10	<10	<20	<20	<20	<20	<2	<20	<20	<20	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	1.26	1.19	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFTeA (376-06-7)	ng/l																	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFTrDA (72629-94-8)	ng/l			<10	<10	<10	<5	<5	<5	<20	<20	<10	<10	<1	<10	<10	<10	<10	<10	<3	<3	<15	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<300	<30	<15	<30	<30	<30
PFTrDS (174675-49-1)	ng/l			<30	<15	<10	<5	<25	<25	<10	<10	<10	<10	<1	<10	<10	<10	<10	<2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<100	<10	<5	<10	<10	<10
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<5	<10	<5	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
PFUnDS (749786-16-1)	ng/l			<10	<10	<10	<5	<5	<5	<10	<10	<10	<10	<1	<10	<10	<10	<20	<4	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<200	<20	<10	<20	<20	<20
Total PFAS DWI 47	ng/l																															<90	<9000	<900	<450	<900	<900	<900
Total PFOS	ng/l	<3.25	<3.25	<6.5	<3.25	<6.5	<3.25	<3.25	<3.25	<6.5	<6.5	<6.5	<6.5	<0.65	<6.5	<6.5	<6.5	<6.5	<1.3	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<65	<6.5	<3.25	<6.5	<6.5	<6.5
Sum of PFAS																																						
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.86	4.79	0.00	0.00	3.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.86	4.79	0.00	0.00	3.57	0.00	0.00	0.00	14.20	0.00	0.00	0.00	0.00	0.00	0.00
Average Sum of 20 PFAS	ng/l	0.36																																				
Average Total PFAS	ng/l	0.74																																				
Min Sum of 20 PFAS	ng/l	0.00																																				
Max Sum of 20 PFAS	ng/l	4.86																																				

FEHILY TIMONEY

Water Supply Well Monitoring Results
(Groundwater)

Parameter	Unit	Gardeners Well																																			
		25-08-21	10-02-22	10-02-22	15-03-22	15-03-22	20-04-22	20-04-22	24-05-22	24-05-22	20-09-22	20-09-22	15-11-22	15-11-22	15-02-23	15-02-23	31-05-23	31-05-23	15-08-23	15-08-23	22-11-23	22-11-23	04-04-24	04-04-24	16-07-24	16-07-24	01-10-24	01-10-24	12-12-24	12-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	10-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l		<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l		<20	<20	<20	<20	<20	<20	<20	<100	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l				<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<15	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																<5	<5	<5	<5	<5	<5	<5	9.72	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	1.28	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	<2	<2	<2	<2	<6	<7	<5	<10	<9	<6	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.41	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l				<1	<1	<2	<1	<2	<40	<2	<2	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.86	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	1.32	1.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxDA (67905-19-5)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l				<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<1.7	<1.4	<2	<4.5	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	2.86	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
PFODA (16517-11-6)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	2.01	2.05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l				<1	<1	<2	<1	<1	<15	<2	<2	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l		<1	<1	<1	<1	<1	<1	<5	<40	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1			<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l				<1	<1	<1	<1	<1	<10	<2	<2	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																														<90	<90	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	1.28	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
Sum of PFAS																																					
Sum of 20 PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33	3.32	0.00	0.00	8.36	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sum of Total PFAS	ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33	3.32	0.00	0.00	9.64	12.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Sum of 20 PFAS	ng/l	0.48																																			
Average Total PFAS	ng/l	0.79																																			
Min Sum of 20 PFAS	ng/l	0.00																																			
Max Sum of 20 PFAS	ng/l	8.36																																			

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 4

Groundwater Laboratory Certificates

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	25 March 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250306-83
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	760079
Order Number:	Z4708

We received 18 samples on Thursday March 06, 2025 and 18 of these samples were scheduled for analysis which was completed on Tuesday March 25, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31172112	GW001-A		0.00 - 0.00	04/03/2025
31172154	GW004-A		0.00 - 0.00	04/03/2025
31172103	GW007-A		0.00 - 0.00	04/03/2025
31172163	GW008-A		0.00 - 0.00	04/03/2025
31172145	GW014-A		0.00 - 0.00	04/03/2025
31172128	GW015-A		0.00 - 0.00	04/03/2025
31172116	GW001-B		0.00 - 0.00	04/03/2025
31172149	GW004-B		0.00 - 0.00	04/03/2025
31172107	GW007-B		0.00 - 0.00	04/03/2025
31172158	GW008-B		0.00 - 0.00	04/03/2025
31172140	GW014-B		0.00 - 0.00	04/03/2025
31172076	GW015-B		0.00 - 0.00	04/03/2025
31172120	GW002D-A		0.00 - 0.00	04/03/2025
31172099	GW003D-A		0.00 - 0.00	04/03/2025
31172089	GW005D-A		0.00 - 0.00	04/03/2025
31172124	GW002D-B		0.00 - 0.00	04/03/2025
31172136	GW03D-B		0.00 - 0.00	04/03/2025
31172094	GW005D-B		0.00 - 0.00	04/03/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 18	31172112	GW001-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172154	GW004-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172103	GW007-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172163	GW008-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172145	GW014-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172128	GW015-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172116	GW001-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172149	GW004-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172107	GW007-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172158	GW008-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172140	GW014-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172076	GW015-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172120	GW002D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172099	GW003D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172089	GW005D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172124	GW002D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172136	GW03D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172094	GW005D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-83	250306-83	250306-83	250306-83	250306-83	250306-83
			Lab Sample No.(s)	31172112	31172154	31172103	31172163	31172145	31172128
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		35.3 #	<4 #	16.3 #	6.72 #	5.22 #	88.5 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFPA (2706-90-3)	<1 ng/l	TM434		86.2 #	<2 #	27.5 #	4.17 #	6.21 #	416 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<6 #	<6 #	<15 #	<3 #	<6 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		17.6 #	<2 #	8.84 #	2.69 #	<2 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		54.1 #	4 #	23.4 #	4.08 #	2.63 #	112 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		41.9 #	3.9 #	8.99 #	1.85 #	<2 #	37.5 #
PFPeS (2706-91-4)	<1 ng/l	TM434		7.13 #	<2 #	6.86 #	2.19 #	<2 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<10 #	<10 #	<25 #	<5 #	<10 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		80.9 #	<2 #	<5 #	<1 #	<2 #	<10 #
FBSA (30334-69-1)	<1 ng/l	TM434		4.64 #	<2 #	<5 #	<1 #	<2 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		51.5 #	2.77 #	5.51 #	1.78 #	<1.3 #	<6.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		56.9 #	5.41 #	32.9 #	12.8 #	<2 #	10.4 #
PFNA (375-95-1)	<1 ng/l	TM434		10.6 #	<2 #	<5 #	<1 #	<2 #	<10 #
PFecHS (133201-07-7)	<1 ng/l	TM434		104 #	390 #	194 #	10.6 #	<2 #	12.4 #
PFHpS (375-92-8)	<1 ng/l	TM434		4.11 #	<2 #	<5 #	<1 #	<2 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		16.9 #	<4 #	<10 #	<2 #	<4 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<10 #	<10 #	<25 #	<5 #	<10 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<4 ♦ #	<4 ♦ #	<10 ♦ #	<2 ♦ #	<4 ♦ #	<20 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<10 #	<10 #	<25 #	<5 #	<10 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		56.3 #	14.1 #	6.56 #	12.7 #	<1.3 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		69.7 #	12.6 #	13.7 #	8.11 #	<1.3 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<4 ♦ #	<4 ♦ #	<10 ♦ #	<2 ♦ #	<4 ♦ #	<20 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-83	250306-83	250306-83	250306-83	250306-83	250306-83
			Lab Sample No.(s)	31172112	31172154	31172103	31172163	31172145	31172128
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		10.8 #	<2 #	<5 #	<1 #	<2 #	<10 #
PFDoA (307-55-1)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<6 #	<6 #	<15 #	<3 #	<6 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<4 #	<4 #	<10 #	<2 #	<4 #	<20 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<20 ♦ #	<20 ♦ #	<50 ♦ #	<10 ♦ #	<20 ♦ #	<100 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<20 ♦ #	<20 ♦ #	<50 ♦ #	<10 ♦ #	<20 ♦ #	<100 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<2 #	<2 #	<5 #	<1 #	<2 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<20	<20	<50	<10	<20	1250
Total PFOS	<0.65 ng/l	TM434		126 #	26.7 #	20.3 #	20.8 #	<1.3 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434		709	433	<450	<90	<180	<900

15:19:58 25/03/2025

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-B	GW004-B	GW007-B	GW008-B	GW014-B	GW015-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-83	250306-83	250306-83	250306-83	250306-83	250306-83
			Lab Sample No.(s)	31172116	31172149	31172107	31172158	31172140	31172076
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		51.3 #	8.64 #	14.5 #	10.1 #	<20 #	84.4 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		84.7 #	5.22 #	29.3 #	<5 #	<10 #	412 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<6 #	<3 #	<15 #	<15 #	<30 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		16.7 #	2.09 #	8.28 #	<5 #	<10 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		54 #	4.12 #	24.4 #	6.16 #	<10 #	113 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		43.3 #	2.69 #	9.88 #	<5 #	<10 #	31.8 #
PFPeS (2706-91-4)	<1 ng/l	TM434		6.83 #	<1 #	7.26 #	<5 #	<10 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<10 #	<5 #	<25 #	<25 #	<50 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		80 #	<1 #	<5 #	<5 #	<10 #	<5 #
FBSA (30334-69-1)	<1 ng/l	TM434		4.56 #	<1 #	<5 #	<5 #	<10 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		49.4 #	2.83 #	8.03 #	<3.25 #	<6.5 #	6.73 #
PFHxS (355-46-4)	<1 ng/l	TM434		53.8 #	3.73 #	33.4 #	16.3 #	<10 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		10 #	<1 #	<5 #	<5 #	<10 #	<5 #
PFecHS (133201-07-7)	<1 ng/l	TM434		106 #	240 #	181 #	10.5 #	<10 #	9.2 #
PFHpS (375-92-8)	<1 ng/l	TM434		3.41 #	<1 #	<5 #	<5 #	<10 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		16.9 #	<2 #	<10 #	<10 #	<20 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<10 #	<5 #	<25 #	<25 #	<50 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<4 ♦ #	<2 ♦ #	<10 ♦ #	<10 ♦ #	<20 ♦ #	<10 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<10 #	<5 #	<25 #	<25 #	<50 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		61.8 #	15.8 #	7.04 #	18.1 #	<6.5 #	<3.25 #
Branched PFOS	<0.65 ng/l	TM434		70 #	14.6 #	11 #	10.3 #	<6.5 #	<3.25 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<4 ♦ #	<2 ♦ #	<10 ♦ #	<10 ♦ #	<20 ♦ #	<10 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-B	GW004-B	GW007-B	GW008-B	GW014-B	GW015-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-83	250306-83	250306-83	250306-83	250306-83	250306-83
			Lab Sample No.(s)	31172116	31172149	31172107	31172158	31172140	31172076
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		12.8 #	<1 #	<5 #	<5 #	<10 #	<5 #
PFDoA (307-55-1)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<6 #	<3 #	<15 #	<15 #	<30 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFTeA (376-06-7)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<4 #	<2 #	<10 #	<10 #	<20 #	<10 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<20 ♦ #	<10 ♦ #	<50 ♦ #	<50 ♦ #	<100 ♦ #	<50 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<20 ♦ #	<10 ♦ #	<50 ♦ #	<50 ♦ #	<100 ♦ #	<50 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<2 #	<1 #	<5 #	<5 #	<10 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<20	<10	<50	<50	<100	971
Total PFOS	<0.65 ng/l	TM434		132 #	30.4 #	18.1 #	28.3 #	<6.5 #	<3.25 #
Total PFAS DWI 47	<90 ng/l	TM434		725	300	<450	<450	<900	657

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW002D-A	GW003D-A	GW005D-A	GW002D-B	GW03D-B	GW005D-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-83	250306-83	250306-83	250306-83	250306-83	250306-83
			Lab Sample No.(s)	31172120	31172099	31172089	31172124	31172136	31172094
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		25.2 #	<2 #	23.2 #	25.2 #	13.1 #	25.1 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		83.1 #	3.56 #	66.6 #	87.3 #	70.9 #	71.1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	1.71 #	<1 #	<2 #	1.29 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<6 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		3.62 #	<1 #	35.3 #	3.21 #	<2 #	36 #
PFHxA (307-24-4)	<1 ng/l	TM434		44.9 #	2.33 #	68.2 #	45.3 #	5.4 #	69.3 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		45.2 #	1.68 #	27.6 #	46.1 #	10.8 #	30.5 #
PFPeS (2706-91-4)	<1 ng/l	TM434		2.39 #	<1 #	23.8 #	2.48 #	<2 #	26.8 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<10 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	117 #	<1 #	<2 #	132 #
FBSA (30334-69-1)	<1 ng/l	TM434		1.36 #	<1 #	9.33 #	1.8 #	<2 #	13.3 #
PFOA (335-67-1)	<0.65 ng/l	TM434		31.4 #	<0.65 #	37.9 #	33.1 #	<1.3 #	41.6 #
PFHxS (355-46-4)	<1 ng/l	TM434		19.6 #	3.6 #	144 #	20.2 #	3.73 #	164 #
PFNA (375-95-1)	<1 ng/l	TM434		4.38 #	<1 #	5.89 #	4.67 #	2.55 #	6.6 #
PFecHS (133201-07-7)	<1 ng/l	TM434		95.1 #	4.63 #	101 #	98.7 #	4.96 #	98.8 #
PFHpS (375-92-8)	<1 ng/l	TM434		<2.5 #	<1 #	<2.5 #	<1.5 #	<2 #	2.68 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<10 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 ♦ #	<2 ♦ #	<2 ♦ #	<2 ♦ #	<4 ♦ #	<2 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<10 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		21.3 #	2.56 #	2.54 #	17.9 #	3.01 #	2.59 #
Branched PFOS	<0.65 ng/l	TM434		27.8 #	2.92 #	40.2 #	25.3 #	3.11 #	41.9 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 ♦ #	<2 ♦ #	<2 ♦ #	<2 ♦ #	<4 ♦ #	<2 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW002D-A	GW003D-A	GW005D-A	GW002D-B	GW03D-B	GW005D-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-83	250306-83	250306-83	250306-83	250306-83	250306-83
			Lab Sample No.(s)	31172120	31172099	31172089	31172124	31172136	31172094
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		2.42 #	<1 #	<1 #	3.3 #	<2 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<6 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<4 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #	<20 ♦ #	<10 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #	<20 ♦ #	<10 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<2 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	<10	<20	<10
Total PFOS	<0.65 ng/l	TM434		49.1 #	5.47 #	42.7 #	43.2 #	6.12 #	44.4 #
Total PFAS DWI 47	<90 ng/l	TM434		408	<90	705	415	<180	764

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250306-83 **Report Number:** 760079 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31172112	31172154	31172103	31172163	31172145	31172128	31172116	31172149	31172107	31172158
Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A	GW001-B	GW004-B	GW007-B	GW008-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	25-Mar-2025	24-Mar-2025	23-Mar-2025	23-Mar-2025	25-Mar-2025	23-Mar-2025	25-Mar-2025	23-Mar-2025	23-Mar-2025	23-Mar-2025

Lab Sample No(s)	31172140	31172076	31172120	31172099	31172089	31172124	31172136	31172094
Customer Sample Ref.	GW014-B	GW015-B	GW002D-A	GW003D-A	GW005D-A	GW002D-B	GW03D-B	GW005D-B
AGS Ref.								
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	23-Mar-2025	23-Mar-2025	25-Mar-2025	23-Mar-2025	24-Mar-2025	24-Mar-2025	24-Mar-2025	23-Mar-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	27 March 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250306-91
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	760446
Order Number:	Z4708

We received 18 samples on Thursday March 06, 2025 and 18 of these samples were scheduled for analysis which was completed on Thursday March 27, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31172495	GW11A		0.00 - 0.00	05/03/2025
31172549	GW12A		0.00 - 0.00	05/03/2025
31172557	GW13A		0.00 - 0.00	05/03/2025
31172567	GW14A		0.00 - 0.00	05/03/2025
31172577	GW15A		0.00 - 0.00	05/03/2025
31172508	GW16A		0.00 - 0.00	05/03/2025
31172516	GW17A		0.00 - 0.00	05/03/2025
31172525	GW18A		0.00 - 0.00	04/03/2025
31172535	GW19A		0.00 - 0.00	04/03/2025
31172543	GW11B		0.00 - 0.00	05/03/2025
31172553	GW12B		0.00 - 0.00	05/03/2025
31172561	GW13B		0.00 - 0.00	05/03/2025
31172572	GW14B		0.00 - 0.00	05/03/2025
31172501	GW15B		0.00 - 0.00	05/03/2025
31172512	GW16B		0.00 - 0.00	05/03/2025
31172520	GW17B		0.00 - 0.00	05/03/2025
31172531	GW18B		0.00 - 0.00	04/03/2025
31172539	GW19B		0.00 - 0.00	04/03/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			31172495	GW11A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172549	GW12A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172557	GW13A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172567	GW14A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172577	GW15A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172508	GW16A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172516	GW17A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172525	GW18A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172535	GW19A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172543	GW11B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172553	GW12B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172561	GW13B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172572	GW14B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172501	GW15B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172512	GW16B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172520	GW17B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172531	GW18B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31172539	GW19B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-91	250306-91	250306-91	250306-91	250306-91	250306-91
			Lab Sample No.(s)	31172495	31172549	31172557	31172567	31172577	31172508
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		113 #	9.77 #	<2 #	67 #	<10 #	24.1 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		639 #	41.9 #	<1 #	451 #	9.25 #	84.8 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<3 #	<3 #	<15 #	<15 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		13.3 #	<1 #	<1 #	<5 #	<5 #	1.63 #
PFHxA (307-24-4)	<1 ng/l	TM434		245 #	15.1 #	<1 #	187 #	8.14 #	35.5 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		78.7 #	4.68 #	<1 #	54.9 #	<5 #	11.8 #
PFPeS (2706-91-4)	<1 ng/l	TM434		8.02 #	1.13 #	<1 #	<5 #	<5 #	1.33 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<5 #	<5 #	<25 #	<25 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		213 #	4.71 #	<1 #	<5 #	<5 #	9.6 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		60.9 #	2.35 #	<0.65 #	6.44 #	<3.25 #	3.1 #
PFHxS (355-46-4)	<1 ng/l	TM434		33.9 #	2.71 #	<1 #	<5 #	<5 #	7.49 #
PFNA (375-95-1)	<1 ng/l	TM434		9.3 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		53.3 #	<2 #	<2 #	<10 #	<10 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<5 #	<5 #	<25 #	<25 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<2 ♦ #	<2 ♦ #	<10 ♦ #	<10 ♦ #	<2 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<5 #	<5 #	<25 #	<25 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		48.8 #	1.78 #	<0.65 #	<3.25 #	<3.25 #	1.15 #
Branched PFOS	<0.65 ng/l	TM434		15.3 #	3.17 #	<0.65 #	<3.25 #	<3.25 #	2.72 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<2 ♦ #	<2 ♦ #	<10 ♦ #	<10 ♦ #	<2 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-91	250306-91	250306-91	250306-91	250306-91	250306-91
			Lab Sample No.(s)	31172495	31172549	31172557	31172567	31172577	31172508
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		12.6 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<3 #	<3 #	<15 #	<15 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<2 #	<2 #	<10 #	<10 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 ♦ #	<10 ♦ #	<10 ♦ #	<50 ♦ #	<50 ♦ #	<10 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 ♦ #	<10 ♦ #	<10 ♦ #	<50 ♦ #	<50 ♦ #	<10 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<1 #	<1 #	<5 #	<5 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		3240	11	<10	<50	<50	<10
Total PFOS	<0.65 ng/l	TM434		64.1 #	4.94 #	<0.65 #	<3.25 #	<3.25 #	3.86 #
Total PFAS DWI 47	<90 ng/l	TM434		1540	<90	<90	766	<450	183

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Customer Sample Ref.	GW17A	GW18A	GW19A	GW11B	GW12B	GW13B
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
Date Sampled	05/03/2025	04/03/2025	04/03/2025	05/03/2025	05/03/2025	05/03/2025
Sample Time	.	.	.	.	.	.
Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
SDG Ref	250306-91	250306-91	250306-91	250306-91	250306-91	250306-91
Lab Sample No.(s)	31172516	31172525	31172535	31172543	31172553	31172561
AGS Reference						

Component	LOD/Units	Method						
PFBA (375-22-4)	<2 ng/l	TM434	<20 #	<20 #	<20 #	105 #	9.77 #	12.3 #
PFMOPrA (377-73-1)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434	<10 #	<10 #	<10 #	583 #	42.3 #	<5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434	<30 #	<30 #	<30 #	<15 #	<3 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434	<10 #	<10 #	<10 #	11 #	<1 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434	<10 #	<10 #	<10 #	234 #	14.7 #	<5 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434	<10 #	<10 #	<10 #	78 #	4.81 #	<5 #
PFPeS (2706-91-4)	<1 ng/l	TM434	<10 #	<10 #	<10 #	6.3 #	<1 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434	<50 #	<50 #	<50 #	<25 #	<5 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434	<10 #	<10 #	<10 #	246 #	4.84 #	<5 #
FBSA (30334-69-1)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434	<6.5 #	<6.5 #	<6.5 #	55.2 #	1.98 #	<3.25 #
PFHxS (355-46-4)	<1 ng/l	TM434	<10 #	<10 #	<10 #	34.8 #	2.72 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434	<10 #	<10 #	<10 #	7.27 #	<1 #	<5 #
PFecHS (133201-07-7)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
PFHpS (375-92-8)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434	<20 #	<20 #	<20 #	48.8 #	<2 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434	<50 #	<50 #	<50 #	<25 #	<5 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434	<20 ♦ #	<20 ♦ #	<20 ♦ #	<10 ♦ #	<2 ♦ #	<10 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434	<50 #	<50 #	<50 #	<25 #	<5 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434	<6.5 #	<6.5 #	<6.5 #	52.9 #	1.76 #	<3.25 #
Branched PFOS	<0.65 ng/l	TM434	<6.5 #	<6.5 #	<6.5 #	18.3 #	2.94 #	<3.25 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434	<20 ♦ #	<20 ♦ #	<20 ♦ #	<10 ♦ #	<2 ♦ #	<10 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	Customer Sample Ref.	GW17A	GW18A	GW19A	GW11B	GW12B	GW13B
# ISO17025 accredited.							
M mCERTS accredited.							
aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample.							
tot.unfilt Total / unfiltered sample.							
* Subcontracted - refer to subcontractor report for accreditation status.							
** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
*** 6:2 FTAB (see appendix)							
1-4♦§@ Sample deviation (see appendix)	Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
	Date Sampled	05/03/2025	04/03/2025	04/03/2025	05/03/2025	05/03/2025	05/03/2025
	Sample Time	.	.	.	.	.	.
	Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
	SDG Ref	250306-91	250306-91	250306-91	250306-91	250306-91	250306-91
	Lab Sample No.(s)	31172516	31172525	31172535	31172543	31172553	31172561
	AGS Reference						

Component	LOD/Units	Method					
FHxSA (41997-13-1)	<1 ng/l	TM434	<10 #	<10 #	<10 #	12.6 #	<1 #	<5 #
PFDoA (307-55-1)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<30 #	<30 #	<30 #	<15 #	<3 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFTeA (376-06-7)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<20 #	<20 #	<20 #	<10 #	<2 #	<10 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<100 ♦ #	<100 ♦ #	<100 ♦ #	<50 ♦ #	<10 ♦ #	<50 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<100 ♦ #	<100 ♦ #	<100 ♦ #	<50 ♦ #	<10 ♦ #	<50 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<10 #	<10 #	<10 #	<5 #	<1 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<100	<100	<100	2680	<10	<50
Total PFOS	<0.65 ng/l	TM434	<6.5 #	<6.5 #	<6.5 #	71.2 #	4.7 #	<3.25 #
Total PFAS DWI 47	<90 ng/l	TM434	<900	<900	<900	1490	<90	<450

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-91	250306-91	250306-91	250306-91	250306-91	250306-91
			Lab Sample No.(s)	31172572	31172501	31172512	31172520	31172531	31172539
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		60.3 #	8.37 #	26.4 #	<20 #	<20 #	<20 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFPA (2706-90-3)	<1 ng/l	TM434		387 #	8.48 #	93.2 #	14.3 #	<10 #	<10 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<6 #	<3 #	<30 #	<30 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<2 #	1.23 #	<10 #	<10 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		170 #	7.73 #	36.2 #	11.2 #	<10 #	<10 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		49.9 #	5.79 #	12.5 #	<10 #	<10 #	<10 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<2 #	1.68 #	<10 #	<10 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<10 #	<5 #	<50 #	<50 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<2 #	6.47 #	<10 #	<10 #	<10 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		6.19 #	2.27 #	3.88 #	<6.5 #	<6.5 #	<6.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		6.6 #	2.66 #	7.1 #	<10 #	<10 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<10 #	<5 #	<50 #	<50 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<4 ♦ #	<2 ♦ #	<20 ♦ #	<20 ♦ #	<20 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<10 #	<5 #	<50 #	<50 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<1.3 #	0.973 #	<6.5 #	<6.5 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	1.41 #	5.19 #	6.54 #	<6.5 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<4 ♦ #	<2 ♦ #	<20 ♦ #	<20 ♦ #	<20 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-91	250306-91	250306-91	250306-91	250306-91	250306-91
			Lab Sample No.(s)	31172572	31172501	31172512	31172520	31172531	31172539
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<6 #	<3 #	<30 #	<30 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<4 #	<2 #	<20 #	<20 #	<20 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 ♦ #	<20 ♦ #	<10 ♦ #	<100 ♦ #	<100 ♦ #	<100 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 ♦ #	<20 ♦ #	<10 ♦ #	<100 ♦ #	<100 ♦ #	<100 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<2 #	<1 #	<10 #	<10 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<20	<10	<100	<100	<100
Total PFOS	<0.65 ng/l	TM434		<3.25 #	1.41 #	6.17 #	6.54 #	<6.5 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434		680	<180	195	<900	<900	<900

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250306-91 **Report Number:** 760446 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31172495	31172549	31172557	31172567	31172577	31172508	31172516	31172525	31172535	31172543
Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A	GW17A	GW18A	GW19A	GW11B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	26-Mar-2025	27-Mar-2025	27-Mar-2025	26-Mar-2025	27-Mar-2025	27-Mar-2025	27-Mar-2025	25-Mar-2025	23-Mar-2025	23-Mar-2025

Lab Sample No(s)	31172553	31172561	31172572	31172501	31172512	31172520	31172531	31172539
Customer Sample Ref.	GW12B	GW13B	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B
AGS Ref.								
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	27-Mar-2025	26-Mar-2025	27-Mar-2025	27-Mar-2025	26-Mar-2025	27-Mar-2025	25-Mar-2025	25-Mar-2025

Appendix General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	31 March 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250307-99
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	760710
Order Number:	Z4708

We received 18 samples on Friday March 07, 2025 and 18 of these samples were scheduled for analysis which was completed on Monday March 31, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31180807	BH1A		0.00 - 0.00	05/03/2025
31180799	BH5A		0.00 - 0.00	05/03/2025
31180791	BH6A		0.00 - 0.00	05/03/2025
31180842	BH7A		0.00 - 0.00	05/03/2025
31180811	BH9A		0.00 - 0.00	05/03/2025
31180803	BH1B		0.00 - 0.00	05/03/2025
31180795	BH5B		0.00 - 0.00	05/03/2025
31180854	BH6B		0.00 - 0.00	05/03/2025
31180835	BH7B		0.00 - 0.00	05/03/2025
31180785	BH9B		0.00 - 0.00	05/03/2025
31180822	BH8DA		0.00 - 0.00	05/03/2025
31180817	BH8DB		0.00 - 0.00	05/03/2025
31180831	BH8SA		0.00 - 0.00	05/03/2025
31180826	BH8SB		0.00 - 0.00	05/03/2025
31180782	GWFB	A		
31180778	GWTB	A		
31180769	SWFB	A		
31180774	SWTB	A		

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 18	31180807	BH1A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180799	BH5A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180791	BH6A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180842	BH7A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180811	BH9A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180803	BH1B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180795	BH5B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180854	BH6B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180835	BH7B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180785	BH9B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180822	BH8DA		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180817	BH8DB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180831	BH8SA		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180826	BH8SB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31180782	GWFB	A		Digitube fo PFAS analysis.	GW
			31180778	GWTB	A		Digitube fo PFAS analysis.	GW
			31180769	SWFB	A		Digitube fo PFAS analysis.	SW
			31180774	SWTB	A		Digitube fo PFAS analysis.	SW
			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-99	250307-99	250307-99	250307-99	250307-99	250307-99
			Lab Sample No.(s)	31180807	31180799	31180791	31180842	31180811	31180803
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		15 #	<10 #	<4 #	26.3 #	<2 #	<10 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		11.6 #	<5 #	<2 #	38.4 #	<1 #	9.49 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<15 #	<6 #	<15 #	<3 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		7.03 #	<5 #	<2 #	10.2 #	<1 #	<5 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		5.59 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<25 #	<10 #	<25 #	<5 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<3.25 #	<3.25 #	<1.3 #	<3.25 #	<0.65 #	4.16 #
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<25 #	<10 #	<25 #	<5 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<4 ♦ #	<10 ♦ #	<2 ♦ #	<10 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<25 #	<10 #	<25 #	<5 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	3.76 #	<1.3 #	<3.25 #	<0.65 #	<3.25 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	4.34 #	<1.3 #	<3.25 #	<0.65 #	<3.25 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<4 ♦ #	<10 ♦ #	<2 ♦ #	<10 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-99	250307-99	250307-99	250307-99	250307-99	250307-99
			Lab Sample No.(s)	31180807	31180799	31180791	31180842	31180811	31180803
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<15 #	<6 #	<15 #	<3 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<10 #	<4 #	<10 #	<2 #	<10 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 ♦ #	<50 ♦ #	<20 ♦ #	<50 ♦ #	<10 ♦ #	<50 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 ♦ #	<50 ♦ #	<20 ♦ #	<50 ♦ #	<10 ♦ #	<50 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<5 #	<2 #	<5 #	<1 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<50	<20	<50	14.2	<50
Total PFOS	<0.65 ng/l	TM434		<3.25 #	8.11 #	<1.3 #	<3.25 #	<0.65 #	<3.25 #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<450	<180	<450	<90	<450

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH5B	BH6B	BH7B	BH9B	BH8DA	BH8DB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-99	250307-99	250307-99	250307-99	250307-99	250307-99
			Lab Sample No.(s)	31180795	31180854	31180835	31180785	31180822	31180817
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<10 #	<4 #	26.2 #	<200 #	<20 #	<10 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		<5 #	<2 #	40.3 #	<100 #	<10 #	6.69 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<6 #	<30 #	<300 #	<30 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		<5 #	<2 #	12.9 #	<100 #	<10 #	<5 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<10 #	<50 #	<500 #	<50 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<3.25 #	<1.3 #	<6.5 #	<65 #	<6.5 #	<3.25 #
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	15.5 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<10 #	<50 #	<500 #	<50 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<4 ♦ #	<20 ♦ #	<200 ♦ #	<20 ♦ #	<10 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<10 #	<50 #	<500 #	<50 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		4.39 #	<1.3 #	<6.5 #	<65 #	<6.5 #	<3.25 #
Branched PFOS	<0.65 ng/l	TM434		4.83 #	<1.3 #	<6.5 #	<65 #	<6.5 #	<3.25 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<4 ♦ #	<20 ♦ #	<200 ♦ #	<20 ♦ #	<10 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH5B	BH6B	BH7B	BH9B	BH8DA	BH8DB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-99	250307-99	250307-99	250307-99	250307-99	250307-99
			Lab Sample No.(s)	31180795	31180854	31180835	31180785	31180822	31180817
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<6 #	<30 #	<300 #	<30 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<4 #	<20 #	<200 #	<20 #	<10 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 ♦ #	<20 ♦ #	<100 ♦ #	<1000 ♦ #	<100 ♦ #	<50 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 ♦ #	<20 ♦ #	<100 ♦ #	<1000 ♦ #	<100 ♦ #	<50 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<2 #	<10 #	<100 #	<10 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<20	<100	<1000	<100	<50
Total PFOS	<0.65 ng/l	TM434		9.23 #	<1.3 #	<6.5 #	<65 #	<6.5 #	<3.25 #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<180	<900	<9000	<900	<450

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8SA	BH8SB	GWFB	GWTB	SWFB	SWTB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	.	.	.	.
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	05/03/2025	05/03/2025	-	-	-	-
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-99	250307-99	250307-99	250307-99	250307-99	250307-99
			Lab Sample No.(s)	31180831	31180826	31180782	31180778	31180769	31180774
			AGS Reference			A	A	A	A
PFBA (375-22-4)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFPA (2706-90-3)	<1 ng/l	TM434		6.38 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<30 #	<3 § #	<3 § #	<3 § #	<3 § #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFHxA (307-24-4)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFHpA (375-85-9)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<50 #	<5 § #	<5 § #	<5 § #	<5 § #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFOA (335-67-1)	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<0.65 § #	<0.65 § #	<0.65 § #	<0.65 § #
PFHxS (355-46-4)	<1 ng/l	TM434		6.64 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFecHS (133201-07-7)	<1 ng/l	TM434		23 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<50 #	<5 § #	<5 § #	<5 § #	<5 § #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<20 ♦ #	<2 § #	<2 § #	<2 § #	<2 § #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<50 #	<5 § #	<5 § #	<5 § #	<5 § #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<0.65 § #	<0.65 § #	<0.65 § #	<0.65 § #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<0.65 § #	<0.65 § #	<0.65 § #	<0.65 § #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<20 ♦ #	<2 § #	<2 § #	<2 § #	<2 § #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8SA	BH8SB	GWFB	GWTB	SWFB	SWTB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	.	.	.	.
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	05/03/2025	05/03/2025	-	-	-	-
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-99	250307-99	250307-99	250307-99	250307-99	250307-99
			Lab Sample No.(s)	31180831	31180826	31180782	31180778	31180769	31180774
			AGS Reference			A	A	A	A
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<30 #	<3 § #	<3 § #	<3 § #	<3 § #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<20 #	<2 § #	<2 § #	<2 § #	<2 § #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 ♦ #	<100 ♦ #	<10 § #	<10 § #	<10 § #	<10 § #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 ♦ #	<100 ♦ #	<10 § #	<10 § #	<10 § #	<10 § #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<10 #	<1 § #	<1 § #	<1 § #	<1 § #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<100	<10 §	<10 §	<10 §	<10 §
Total PFOS	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<0.65 § #	<0.65 § #	<0.65 § #	<0.65 § #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<900	<90 §	<90 §	<90 §	<90 §

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250307-99 **Report Number:** 760710 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31180807	31180799	31180791	31180842	31180811	31180803	31180795	31180854	31180835	31180785
Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B	BH5B	BH6B	BH7B	BH9B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	28-Mar-2025	28-Mar-2025	31-Mar-2025	28-Mar-2025	31-Mar-2025	28-Mar-2025	28-Mar-2025	31-Mar-2025	31-Mar-2025	31-Mar-2025

Lab Sample No(s)	31180822	31180817	31180831	31180826	31180782	31180778	31180769	31180774
Customer Sample Ref.	BH8DA	BH8DB	BH8SA	BH8SB	GWFB	GWTB	SWFB	SWTB
AGS Ref.					A	A	A	A
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00				
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	28-Mar-2025	28-Mar-2025	28-Mar-2025	31-Mar-2025	31-Mar-2025	28-Mar-2025	31-Mar-2025	31-Mar-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	26 March 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250306-85
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	760205
Order Number:	Z4708

We received 2 samples on Thursday March 06, 2025 and 2 of these samples were scheduled for analysis which was completed on Wednesday March 26, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250306-85 **Report Number:** 760205 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31172204	Gardeners Well A		0.00 - 0.00	04/03/2025
31172208	Gardeners Well B		0.00 - 0.00	04/03/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-85 **Report Number:** 760205 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			31172204	31172208
Customer Sample Reference			Gardeners Well A	Gardeners Well B
AGS Reference				
Depth (m)			0.00 - 0.00	0.00 - 0.00
Container			Digitube fo PFAS analysis.	Digitube fo PFAS analysis.
Sample Type			GW	GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 2	X	X

CERTIFICATE OF ANALYSIS

SDG: 250306-85 **Report Number:** 760205 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Gardeners Well A	Gardeners Well B				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	04/03/2025	04/03/2025				
			Sample Time	.	.				
			Date Received	06/03/2025	06/03/2025				
			SDG Ref	250306-85	250306-85				
			Lab Sample No.(s)	31172204	31172208				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	<2 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #				
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #				
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	<1 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #				
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #				
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	<1 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #				
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #				
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #				
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 ♦ #	<2 ♦ #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 ♦ #	<2 ♦ #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #				

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-85 **Report Number:** 760205 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Customer Sample Ref.	Gardeners Well A	Gardeners Well B
Depth (m)	0.00 - 0.00	0.00 - 0.00
Sample Type	Ground Water (GW)	Ground Water (GW)
Date Sampled	04/03/2025	04/03/2025
Sample Time	.	.
Date Received	06/03/2025	06/03/2025
SDG Ref	250306-85	250306-85
Lab Sample No.(s)	31172204	31172208
AGS Reference		

Component	LOD/Units	Method		
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 ♦ #	<10 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 ♦ #	<10 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10	<10
Total PFOS	<0.65 ng/l	TM434	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434	<90	<90

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250306-85 **Report Number:** 760205 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31172204	31172208
Customer Sample Ref.	Gardeners Well A	Gardeners Well B
AGS Ref.		
Depth	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water
PFAS Liquids (Full Suite)	24-Mar-2025	26-Mar-2025

Appendix General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	05 June 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250523-96
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	766931
Order Number:	Z4794

We received 16 samples on Friday May 23, 2025 and 16 of these samples were scheduled for analysis which was completed on Thursday June 05, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31562814	GW001-A		0.00 - 0.00	20/05/2025
31562859	GW004-A		0.00 - 0.00	20/05/2025
31562806	GW007-A		0.00 - 0.00	20/05/2025
31562873	GW008-A		0.00 - 0.00	20/05/2025
31562850	GW014-A		0.00 - 0.00	20/05/2025
31562836	GW015-A		0.00 - 0.00	20/05/2025
31562819	GW001-B		0.00 - 0.00	20/05/2025
31562854	GW004-B		0.00 - 0.00	20/05/2025
31562810	GW007-B		0.00 - 0.00	20/05/2025
31562865	GW008-B		0.00 - 0.00	20/05/2025
31562846	GW014-B		0.00 - 0.00	20/05/2025
31562796	GW015-B		0.00 - 0.00	20/05/2025
31562826	GW002D-A		0.00 - 0.00	20/05/2025
31562800	GW003D-A		0.00 - 0.00	20/05/2025
31562830	GW002D-B		0.00 - 0.00	20/05/2025
31562842	GW03D-B		0.00 - 0.00	20/05/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 16	31562814	GW001-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562859	GW004-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562806	GW007-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562873	GW008-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562850	GW014-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562836	GW015-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562819	GW001-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562854	GW004-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562810	GW007-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562865	GW008-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562846	GW014-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562796	GW015-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562826	GW002D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562800	GW003D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562830	GW002D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562842	GW03D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-96	250523-96	250523-96	250523-96	250523-96	250523-96
			Lab Sample No.(s)	31562814	31562859	31562806	31562873	31562850	31562836
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	11.9 #	<10 #	<10 #	<10 #	98 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		96.6 #	9.87 #	26.9 #	5.56 #	5.66 #	514 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<15 #	<15 #	<15 #	<15 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		16.1 #	5.4 #	5.97 #	<5 #	<5 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		55.6 #	<5 #	19.1 #	<5 #	<5 #	136 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		49.7 #	7.63 #	7.73 #	<5 #	<5 #	37.1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		6.41 #	<5 #	5.33 #	<5 #	<5 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<25 #	<25 #	<25 #	<25 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		99.8 #	<5 #	6.43 #	<5 #	<5 #	25.6 #
FBSA (30334-69-1)	<1 ng/l	TM434		3.84 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		44.9 #	5.67 #	7.7 #	<3.25 #	<3.25 #	9.89 #
PFHxS (355-46-4)	<1 ng/l	TM434		64.6 #	6.58 #	19.6 #	14.6 #	<5 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		11.8 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFecHS (133201-07-7)	<1 ng/l	TM434		84.8 #	405 #	155 #	<5 #	<5 #	15.9 #
PFHpS (375-92-8)	<1 ng/l	TM434		3.39 #	<5 #	<5 #	<5 #	<5 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		17.5 #	<10 #	<10 #	<10 #	<10 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<25 #	<25 #	<25 #	<25 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<10 @ #	<10 #	<10 @ #	<10 @ #	<10 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<25 #	<25 #	<25 #	<25 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		54.3 #	29.1 #	4.31 #	15.7 #	<3.25 #	<3.25 #
Branched PFOS	<0.65 ng/l	TM434		72 #	27.6 #	7.53 #	10.9 #	<3.25 #	<3.25 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<10 @ #	<10 #	<10 @ #	<10 @ #	<10 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-96	250523-96	250523-96	250523-96	250523-96	250523-96
			Lab Sample No.(s)	31562814	31562859	31562806	31562873	31562850	31562836
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		12.2 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<15 #	<15 #	<15 #	<15 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<50 @ #	<50 #	<50 @ #	<50 @ #	<50 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<50 @ #	<50 #	<50 @ #	<50 @ #	<50 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<5 #	<5 #	<5 #	<5 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		11.2	<50	<50	<50	<50	1020
Total PFOS	<0.65 ng/l	TM434		126 #	56.7 #	11.8 #	26.6 #	<3.25 #	<3.25 #
Total PFAS DWI 47	<90 ng/l	TM434		693	509	<450	<450	<450	836

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-B	GW004-B	GW007-B	GW008-B	GW014-B	GW015-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-96	250523-96	250523-96	250523-96	250523-96	250523-96
			Lab Sample No.(s)	31562819	31562854	31562810	31562865	31562846	31562796
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		177 #	6.58 #	<20 #	<10 #	<10 #	107 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		87.2 #	10.6 #	32.2 #	<5 #	5.74 #	580 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<6 #	<3 #	<30 #	<15 #	<15 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		12.3 #	3.16 #	<10 #	<5 #	<5 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		50.5 #	2.72 #	22.4 #	<5 #	<5 #	149 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		40.9 #	3.25 #	11.5 #	<5 #	<5 #	39.3 #
PFPeS (2706-91-4)	<1 ng/l	TM434		6.09 #	<1 #	<10 #	<5 #	<5 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<10 #	<5 #	<50 #	<25 #	<25 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		88.5 #	<1 #	<10 #	<5 #	<5 #	19.9 #
FBSA (30334-69-1)	<1 ng/l	TM434		2.96 #	1.75 #	<10 #	<5 #	<5 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		38.2 #	3.18 #	9.16 #	<3.25 #	<3.25 #	10.2 #
PFHxS (355-46-4)	<1 ng/l	TM434		57 #	4.71 #	24.7 #	14.3 #	<5 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		9.2 #	<1 #	<10 #	<5 #	<5 #	<5 #
PFecHS (133201-07-7)	<1 ng/l	TM434		88.3 #	337 #	183 #	<5 #	<5 #	19.6 #
PFHpS (375-92-8)	<1 ng/l	TM434		2.27 #	<1 #	<10 #	<5 #	<5 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		17 #	<2 #	<20 #	<10 #	<10 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<10 #	<5 #	<50 #	<25 #	<25 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<4 @ #	<2 @ #	<20 #	<10 @ #	<10 @ #	<10 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<10 #	<5 #	<50 #	<25 #	<25 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		49 #	12.9 #	<6.5 #	12.7 #	<3.25 #	<3.25 #
Branched PFOS	<0.65 ng/l	TM434		64.7 #	16.9 #	11.7 #	10.5 #	<3.25 #	<3.25 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<4 @ #	<2 @ #	<20 #	<10 @ #	<10 @ #	<10 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-B	GW004-B	GW007-B	GW008-B	GW014-B	GW015-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025	20/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-96	250523-96	250523-96	250523-96	250523-96	250523-96
			Lab Sample No.(s)	31562819	31562854	31562810	31562865	31562846	31562796
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		7.12 #	<1 #	<10 #	<5 #	<5 #	<5 #
PFDoA (307-55-1)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<6 #	<3 #	<30 #	<15 #	<15 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFTeA (376-06-7)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<4 #	<2 #	<20 #	<10 #	<10 #	<10 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<20 @ #	<10 @ #	<100 #	<50 @ #	<50 @ #	<50 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<20 @ #	<10 @ #	<100 #	<50 @ #	<50 @ #	<50 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<2 #	<1 #	<10 #	<5 #	<5 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<20	<10	<100	<50	<50	813
Total PFOS	<0.65 ng/l	TM434		114 #	29.8 #	11.7 #	23.2 #	<3.25 #	<3.25 #
Total PFAS DWI 47	<90 ng/l	TM434		799	403	<900	<450	<450	926

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW002D-A	GW003D-A	GW002D-B	GW03D-B		
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	20/05/2025	20/05/2025	20/05/2025	20/05/2025		
			Sample Time	.	.	.	.		
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025		
			SDG Ref	250523-96	250523-96	250523-96	250523-96		
			Lab Sample No.(s)	31562826	31562800	31562830	31562842		
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		25.6 #	<20 #	25.8 #	<10 #		
PFMOPrA (377-73-1)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFPA (2706-90-3)	<1 ng/l	TM434		92.1 #	<10 #	96.4 #	<5 #		
PFMOBA (863090-89-5)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
NFDHA (151772-58-6)	<3 ng/l	TM434		<6 #	<30 #	<6 #	<15 #		
PFBS (375-73-5)	<1 ng/l	TM434		2.21 #	<10 #	2.39 #	<5 #		
PFHxA (307-24-4)	<1 ng/l	TM434		48.9 #	<10 #	45.9 #	<5 #		
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFEESA (113507-82-7)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
PFHpA (375-85-9)	<1 ng/l	TM434		51.6 #	<10 #	51.2 #	<5 #		
PFPeS (2706-91-4)	<1 ng/l	TM434		2.65 #	<10 #	2.23 #	<5 #		
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<10 #	<50 #	<10 #	<25 #		
ADONA (919005-14-4)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
FBSA (30334-69-1)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
PFOA (335-67-1)	<0.65 ng/l	TM434		24.3 #	<6.5 #	26.9 #	<3.25 #		
PFHxS (355-46-4)	<1 ng/l	TM434		21.3 #	<10 #	21.1 #	<5 #		
PFNA (375-95-1)	<1 ng/l	TM434		4.79 #	<10 #	4.16 #	<5 #		
PFecHS (133201-07-7)	<1 ng/l	TM434		108 #	15.1 #	105 #	<5 #		
PFHpS (375-92-8)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<10 #	<50 #	<10 #	<25 #		
PFDA (335-76-2)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<4 @ #	<20 @ #	<4 @ #	<10 #		
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<10 #	<50 #	<10 #	<25 #		
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		21.1 #	<6.5 #	19.5 #	3.92 #		
Branched PFOS	<0.65 ng/l	TM434		33.6 #	<6.5 #	30.9 #	4.46 #		
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<4 @ #	<20 @ #	<4 @ #	<10 #		
PFUnA (2058-94-8)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
PFNS (68259-12-1)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW002D-A	GW003D-A	GW002D-B	GW03D-B		
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	20/05/2025	20/05/2025	20/05/2025	20/05/2025		
			Sample Time	.	.	.	.		
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025		
			SDG Ref	250523-96	250523-96	250523-96	250523-96		
			Lab Sample No.(s)	31562826	31562800	31562830	31562842		
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
PFDoA (307-55-1)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFDS (335-77-3)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFTrDA (72629-94-8)	<3 ng/l	TM434		<6 #	<30 #	<6 #	<15 #		
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFUnDS (749786-16-1)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFTeA (376-06-7)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
PFOSA (754-91-6)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFDoS (79780-39-5)	<2 ng/l	TM434		<4 #	<20 #	<4 #	<10 #		
PFTrDS (174675-49-1)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
PFHxDA (67905-19-5)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
MeFOSE (24448-09-7)	<10 ng/l	TM434		<20 @ #	<100 @ #	<20 @ #	<50 #		
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
EtFOSE (1691-99-2)	<10 ng/l	TM434		<20 @ #	<100 @ #	<20 @ #	<50 #		
PFODA (16517-11-6)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<2 #	<10 #	<2 #	<5 #		
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<20	<100	<20	<50		
Total PFOS	<0.65 ng/l	TM434		54.7 #	<6.5 #	50.4 #	8.38 #		
Total PFAS DWI 47	<90 ng/l	TM434		437	<900	432	<450		

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250523-96 **Report Number:** 766931 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31562814	31562859	31562806	31562873	31562850	31562836	31562819	31562854	31562810	31562865
Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A	GW001-B	GW004-B	GW007-B	GW008-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	28-May-2025	03-Jun-2025	28-May-2025	29-May-2025	05-Jun-2025	28-May-2025	02-Jun-2025	04-Jun-2025	28-May-2025	29-May-2025

Lab Sample No(s)	31562846	31562796	31562826	31562800	31562830	31562842
Customer Sample Ref.	GW014-B	GW015-B	GW002D-A	GW003D-A	GW002D-B	GW03D-B
AGS Ref.						
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	05-Jun-2025	02-Jun-2025	02-Jun-2025	03-Jun-2025	02-Jun-2025	28-May-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	04 June 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250523-93
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	766760
Order Number:	Z4794

We received 20 samples on Friday May 23, 2025 and 20 of these samples were scheduled for analysis which was completed on Wednesday June 04, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31562511	GW11A		0.00 - 0.00	21/05/2025
31562570	GW12A		0.00 - 0.00	21/05/2025
31562582	GW13A		0.00 - 0.00	21/05/2025
31562591	GW14A		0.00 - 0.00	21/05/2025
31562603	GW15A		0.00 - 0.00	21/05/2025
31562520	GW16A		0.00 - 0.00	21/05/2025
31562530	GW17A		0.00 - 0.00	21/05/2025
31562539	GW18A		0.00 - 0.00	21/05/2025
31562547	GW19A		0.00 - 0.00	21/05/2025
31562562	GW11B		0.00 - 0.00	21/05/2025
31562575	GW12B		0.00 - 0.00	21/05/2025
31562586	GW13B		0.00 - 0.00	21/05/2025
31562596	GW14B		0.00 - 0.00	21/05/2025
31562515	GW15B		0.00 - 0.00	21/05/2025
31562526	GW16B		0.00 - 0.00	21/05/2025
31562534	GW17B		0.00 - 0.00	21/05/2025
31562543	GW18B		0.00 - 0.00	21/05/2025
31562552	GW19B		0.00 - 0.00	21/05/2025
31562558	GWFB		0.00 - 0.00	21/05/2025
31562566	GWTB		0.00 - 0.00	21/05/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 20	31562511	GW11A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562570	GW12A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562582	GW13A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562591	GW14A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562603	GW15A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562520	GW16A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562530	GW17A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562539	GW18A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562547	GW19A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562562	GW11B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562575	GW12B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562586	GW13B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562596	GW14B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562515	GW15B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562526	GW16B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562534	GW17B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562543	GW18B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562552	GW19B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562558	GWFB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

31562566	GWTB		0.00 - 0.00	Digitube fo PFAS analysis.	GW	X

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-93	250523-93	250523-93	250523-93	250523-93	250523-93
			Lab Sample No.(s)	31562511	31562570	31562582	31562591	31562603	31562520
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		176 #	11.4 #	<20 #	77.9 #	10.7 #	31.7 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFPA (2706-90-3)	<1 ng/l	TM434		974 #	43.5 #	<10 #	442 #	12.2 #	122 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<15 #	<30 #	<30 #	<15 #	<6 #
PFBS (375-73-5)	<1 ng/l	TM434		9.91 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFHxA (307-24-4)	<1 ng/l	TM434		364 #	15.7 #	<10 #	191 #	10.7 #	49.6 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFHpA (375-85-9)	<1 ng/l	TM434		117 #	<5 #	<10 #	50.8 #	8.18 #	16.6 #
PFPeS (2706-91-4)	<1 ng/l	TM434		5.48 #	<5 #	<10 #	<10 #	<5 #	<2 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<25 #	<50 #	<50 #	<25 #	<10 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		379 #	6.69 #	<10 #	<10 #	<10 #	17.6 #
FBSA (30334-69-1)	<1 ng/l	TM434		7.25 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFOA (335-67-1)	<0.65 ng/l	TM434		75.3 #	<3.25 #	<6.5 #	<6.5 #	6.55 #	4.91 #
PFHxS (355-46-4)	<1 ng/l	TM434		65.2 #	<5 #	<10 #	<10 #	<5 #	10.4 #
PFNA (375-95-1)	<1 ng/l	TM434		13.6 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFecHS (133201-07-7)	<1 ng/l	TM434		5.71 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		86.2 #	<10 #	<20 #	<20 #	<10 #	<4 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<25 #	<50 #	<50 #	<25 #	<10 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<20 ♦ #	<20 ♦ #	<10 ♦ #	<4 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<25 #	<50 #	<50 #	<25 #	<10 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		93.1 #	<3.25 #	<6.5 #	<6.5 #	<3.25 #	1.99 #
Branched PFOS	<0.65 ng/l	TM434		44.5 #	<3.25 #	<6.5 #	<6.5 #	<3.25 #	6.96 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<20 ♦ #	<20 ♦ #	<10 ♦ #	<4 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-93	250523-93	250523-93	250523-93	250523-93	250523-93
			Lab Sample No.(s)	31562511	31562570	31562582	31562591	31562603	31562520
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		21 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<15 #	<30 #	<30 #	<15 #	<6 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<10 #	<20 #	<20 #	<10 #	<4 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		6.97 #	<5 #	<10 #	<10 #	<5 #	<2 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 ♦ #	<50 ♦ #	<100 ♦ #	<100 ♦ #	<50 ♦ #	<20 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 ♦ #	<50 ♦ #	<100 ♦ #	<100 ♦ #	<50 ♦ #	<20 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		6.6 #	<5 #	<10 #	<10 #	<5 #	<2 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<5 #	<10 #	<10 #	<5 #	<2 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		4900	<50	<100	<100	<50	<20
Total PFOS	<0.65 ng/l	TM434		138 #	<3.25 #	<6.5 #	<6.5 #	<3.25 #	8.95 #
Total PFAS DWI 47	<90 ng/l	TM434		2450	<450	<900	<900	<450	261

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW17A	GW18A	GW19A	GW11B	GW12B	GW13B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-93	250523-93	250523-93	250523-93	250523-93	250523-93
			Lab Sample No.(s)	31562530	31562539	31562547	31562562	31562575	31562586
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<10 #	11.6 #	14.9 #	182 #	13 #	<20 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFPA (2706-90-3)	<1 ng/l	TM434		5.58 #	7.74 #	7.29 #	974 #	51.5 #	<10 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<15 #	<15 #	<15 #	<15 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<5 #	<5 #	13.7 #	<5 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		<5 #	<5 #	<5 #	363 #	17 #	<10 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		<5 #	6.18 #	7.26 #	127 #	7.08 #	<10 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<5 #	<5 #	9.87 #	<5 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<25 #	<25 #	<25 #	<25 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<10 #	<5 #	<5 #	399 #	17.3 #	<10 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<5 #	<5 #	5.85 #	<5 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		3.47 #	<3.25 #	<3.25 #	75.6 #	<3.25 #	<6.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	<5 #	<5 #	66.5 #	<5 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<10 #	<10 #	82.2 #	<10 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<25 #	<25 #	<25 #	<25 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #	<20 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<25 #	<25 #	<25 #	<25 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<3.25 #	<3.25 #	124 #	<3.25 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<3.25 #	<3.25 #	52.4 #	<3.25 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #	<20 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	GW17A	GW18A	GW19A	GW11B	GW12B	GW13B
Customer Sample Ref.			GW17A	GW18A	GW19A	GW11B	GW12B	GW13B
Depth (m)			0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sample Type			Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
Date Sampled			21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
Sample Time			.	.	.	.	.	.
Date Received			23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
SDG Ref			250523-93	250523-93	250523-93	250523-93	250523-93	250523-93
Lab Sample No.(s)			31562530	31562539	31562547	31562562	31562575	31562586
AGS Reference								
FHxSA (41997-13-1)	<1 ng/l	TM434	<5 #	<5 #	<5 #	18.9 #	<5 #	<10 #
PFDoA (307-55-1)	<2 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<15 #	<15 #	<15 #	<15 #	<15 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<20 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<50 ♦ #	<50 ♦ #	<50 ♦ #	<50 ♦ #	<50 ♦ #	<100 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<50 ♦ #	<50 ♦ #	<50 ♦ #	<50 ♦ #	<50 ♦ #	<100 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<50	<50	<50	5030	<50	<100
Total PFOS	<0.65 ng/l	TM434	<3.25 #	<3.25 #	<3.25 #	177 #	<3.25 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434	<450	<450	<450	2490	<450	<900

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-93	250523-93	250523-93	250523-93	250523-93	250523-93
			Lab Sample No.(s)	31562596	31562515	31562526	31562534	31562543	31562552
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		77.9 #	10.2 #	33.4 #	<10 #	12.4 #	14.9 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		507 #	11.5 #	120 #	6.11 #	7.74 #	7.36 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<15 #	<3 #	<15 #	<15 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		188 #	10.3 #	47.1 #	<5 #	<5 #	5.04 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		49.5 #	8.6 #	15.7 #	<5 #	6.44 #	6.47 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<5 #	1.18 #	<5 #	<5 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<25 #	<5 #	<25 #	<25 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		14.2 #	<5 #	12.5 #	<10 #	8.87 #	<5 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		5.39 #	4.24 #	4.26 #	3.53 #	<3.25 #	<3.25 #
PFHxS (355-46-4)	<1 ng/l	TM434		6.13 #	<5 #	9.15 #	<5 #	<5 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	5.17 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<25 #	<5 #	<25 #	<25 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<2 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<25 #	<5 #	<25 #	<25 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<3.25 #	1.26 #	<3.25 #	<3.25 #	4.78 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<3.25 #	6.83 #	<3.25 #	<3.25 #	3.85 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<10 ♦ #	<2 ♦ #	<10 ♦ #	<10 ♦ #	<10 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<5 #	<1 #	<5 #	<5 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	Customer Sample Ref.	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B
# ISO17025 accredited.							
M mCERTS accredited.							
aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample.							
tot.unfilt Total / unfiltered sample.							
* Subcontracted - refer to subcontractor report for accreditation status.							
** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
*** 6:2 FTAB (see appendix)							
1-4♦§@ Sample deviation (see appendix)							
	Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
	Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
	Sample Time	.	.	.	.	.	.
	Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
	SDG Ref	250523-93	250523-93	250523-93	250523-93	250523-93	250523-93
	Lab Sample No.(s)	31562596	31562515	31562526	31562534	31562543	31562552
	AGS Reference						

Component	LOD/Units	Method						
FHxSA (41997-13-1)	<1 ng/l	TM434	<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFDoA (307-55-1)	<2 ng/l	TM434	<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434	<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<15 #	<15 #	<3 #	<15 #	<15 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFTeA (376-06-7)	<1 ng/l	TM434	<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434	<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<10 #	<10 #	<2 #	<10 #	<10 #	<10 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<50 ♦ #	<50 ♦ #	<10 ♦ #	<50 ♦ #	<50 ♦ #	<50 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<50 ♦ #	<50 ♦ #	<10 ♦ #	<50 ♦ #	<50 ♦ #	<50 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434	<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<5 #	<5 #	<1 #	<5 #	<5 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<50	<50	<10	<50	553	<50
Total PFOS	<0.65 ng/l	TM434	<3.25 #	<3.25 #	8.08 #	<3.25 #	<3.25 #	8.63 #
Total PFAS DWI 47	<90 ng/l	TM434	848	<450	251	<450	<450	<450

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4♦§@	Sample deviation (see appendix)

Customer Sample Ref.	GWFB	GWTB
Depth (m)	0.00 - 0.00	0.00 - 0.00
Sample Type	Ground Water (GW)	Ground Water (GW)
Date Sampled	21/05/2025	21/05/2025
Sample Time	.	.
Date Received	23/05/2025	23/05/2025
SDG Ref	250523-93	250523-93
Lab Sample No.(s)	31562558	31562566
AGS Reference		

Component	LOD/Units	Method		
PFBA (375-22-4)	<2 ng/l	TM434	<2 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434	<1 #	<1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434	<1 #	<1 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434	<1 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434	<0.65 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434	<2 ♦ #	<2 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434	<2 ♦ #	<2 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GWFB	GWTB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	21/05/2025	21/05/2025				
			Sample Time	.	.				
			Date Received	23/05/2025	23/05/2025				
			SDG Ref	250523-93	250523-93				
			Lab Sample No.(s)	31562558	31562566				
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #				
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #				
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #				
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #				
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #				
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #				
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 ♦ #	<10 ♦ #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 ♦ #	<10 ♦ #				
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10				
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250523-93 **Report Number:** 766760 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31562511	31562570	31562582	31562591	31562603	31562520	31562530	31562539	31562547	31562562
Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A	GW17A	GW18A	GW19A	GW11B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	30-May-2025	30-May-2025	30-May-2025	30-May-2025	30-May-2025	30-May-2025	30-May-2025	04-Jun-2025	04-Jun-2025	30-May-2025

Lab Sample No(s)	31562575	31562586	31562596	31562515	31562526	31562534	31562543	31562552	31562558	31562566
Customer Sample Ref.	GW12B	GW13B	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B	GWFB	GWTB
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	30-May-2025	30-May-2025	30-May-2025	30-May-2025	30-May-2025	30-May-2025	04-Jun-2025	04-Jun-2025	04-Jun-2025	04-Jun-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	04 June 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250523-92
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	766759
Order Number:	Z4794

This report has been revised and directly supersedes 766310 in its entirety.

We received 14 samples on Friday May 23, 2025 and 14 of these samples were scheduled for analysis which was completed on Wednesday June 04, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31562467	BH1A		0.00 - 0.00	21/05/2025
31562458	BH5A		0.00 - 0.00	21/05/2025
31562443	BH6A		0.00 - 0.00	21/05/2025
31562497	BH7A		0.00 - 0.00	21/05/2025
31562471	BH9A		0.00 - 0.00	21/05/2025
31562463	BH1B		0.00 - 0.00	21/05/2025
31562452	BH5B		0.00 - 0.00	21/05/2025
31562502	BH6B		0.00 - 0.00	21/05/2025
31562493	BH7B		0.00 - 0.00	21/05/2025
31562435	BH9B		0.00 - 0.00	21/05/2025
31562480	BH8DA		0.00 - 0.00	21/05/2025
31562476	BH8DB		0.00 - 0.00	21/05/2025
31562489	BH8SA		0.00 - 0.00	21/05/2025
31562485	BH8SB		0.00 - 0.00	21/05/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 14	31562467	BH1A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562458	BH5A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562443	BH6A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562497	BH7A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562471	BH9A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562463	BH1B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562452	BH5B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562502	BH6B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562493	BH7B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562435	BH9B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562480	BH8DA		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562476	BH8DB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562489	BH8SA		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			31562485	BH8SB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			X	X	X	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-92	250523-92	250523-92	250523-92	250523-92	250523-92
			Lab Sample No.(s)	31562467	31562458	31562443	31562497	31562471	31562463
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		10.6 #	<20 #	<4 #	15.8 #	<20 #	<20 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFPA (2706-90-3)	<1 ng/l	TM434		7.83 #	<10 #	<2 #	27.6 #	<10 #	<10 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<30 #	<6 #	<15 #	<30 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		<5 #	<10 #	<2 #	6.11 #	<10 #	<10 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<50 #	<10 #	<25 #	<50 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		4.82 #	<6.5 #	<1.3 #	<3.25 #	<6.5 #	<6.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<50 #	<10 #	<25 #	<50 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 #	<20 ♦ #	<4 #	<10 #	<20 ♦ #	<20 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<50 #	<10 #	<25 #	<50 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<1.3 #	<3.25 #	<6.5 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<1.3 #	<3.25 #	<6.5 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 #	<20 ♦ #	<4 #	<10 #	<20 ♦ #	<20 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310

Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-92	250523-92	250523-92	250523-92	250523-92	250523-92
			Lab Sample No.(s)	31562467	31562458	31562443	31562497	31562471	31562463
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<30 #	<6 #	<15 #	<30 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<20 #	<4 #	<10 #	<20 #	<20 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 #	<100 ♦ #	<20 #	<50 #	<100 ♦ #	<100 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 #	<100 ♦ #	<20 #	<50 #	<100 ♦ #	<100 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<10 #	<2 #	<5 #	<10 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<100	<20	<50	<100	<100
Total PFOS	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<1.3 #	<3.25 #	<6.5 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<900	<180	<450	<900	<900

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH5B	BH6B	BH7B	BH9B	BH8DA	BH8DB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-92	250523-92	250523-92	250523-92	250523-92	250523-92
			Lab Sample No.(s)	31562452	31562502	31562493	31562435	31562480	31562476
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<10 #	<4 #	14.9 #	<10 #	<20 #	<20 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFPA (2706-90-3)	<1 ng/l	TM434		<5 #	<2 #	26.1 #	<5 #	28.8 #	<10 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<6 #	<15 #	<15 #	<30 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	43.6 #	<10 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	14.7 #	<10 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<10 #	<25 #	<25 #	<50 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<9 #	<10 #	<10 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	10.9 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<3.25 #	<1.3 #	<3.25 #	<3.25 #	10 #	<6.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	21.4 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<10 #	<25 #	<25 #	<50 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 ♦ #	<20 ♦ #	<20 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<10 #	<25 #	<25 #	<50 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<1.3 #	<3.25 #	<3.25 #	<6.5 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<1.3 #	<3.25 #	<3.25 #	<6.5 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 ♦ #	<20 ♦ #	<20 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH5B	BH6B	BH7B	BH9B	BH8DA	BH8DB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025	21/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-92	250523-92	250523-92	250523-92	250523-92	250523-92
			Lab Sample No.(s)	31562452	31562502	31562493	31562435	31562480	31562476
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<6 #	<15 #	<15 #	<30 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<4 #	<10 #	<10 #	<20 #	<20 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 #	<20 #	<50 #	<50 ♦ #	<100 ♦ #	<100 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 #	<20 #	<50 #	<50 ♦ #	<100 ♦ #	<100 #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<2 #	<5 #	<5 #	<10 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<20	<50	<50	<100	<100
Total PFOS	<0.65 ng/l	TM434		<3.25 #	<1.3 #	<3.25 #	<3.25 #	<6.5 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<180	<450	<450	<900	<900

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8SA	BH8SB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	21/05/2025	21/05/2025				
			Sample Time	.	.				
			Date Received	23/05/2025	23/05/2025				
			SDG Ref	250523-92	250523-92				
			Lab Sample No.(s)	31562489	31562485				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<4 #	<4 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<2 #	<2 #				
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<4 #	<4 #				
PFPA (2706-90-3)	<1 ng/l	TM434		<2 #	2.03 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<2 #	<2 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<2 #	<2 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<6 #	<6 #				
PFBS (375-73-5)	<1 ng/l	TM434		<2 #	<2 #				
PFHxA (307-24-4)	<1 ng/l	TM434		<2 #	<2 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<4 #	<4 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<2 #	<2 #				
PFHpA (375-85-9)	<1 ng/l	TM434		<2 #	<2 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<2 #	<2 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<10 #	<10 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<2 #	<2 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<2 #	<2 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<2 #	<2 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		<1.3 #	<1.3 #				
PFHxS (355-46-4)	<1 ng/l	TM434		<2 #	<2 #				
PFNA (375-95-1)	<1 ng/l	TM434		<2 #	<2 #				
PFecHS (133201-07-7)	<1 ng/l	TM434		8.75 #	12.7 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<2 #	<2 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<4 #	<4 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<10 #	<10 #				
PFDA (335-76-2)	<2 ng/l	TM434		<4 #	<4 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<4 ♦ #	<4 #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<10 #	<10 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<1.3 #	<1.3 #				
Branched PFOS	<0.65 ng/l	TM434		<1.3 #	<1.3 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<4 ♦ #	<4 #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<4 #	<4 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<2 #	<2 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<2 #	<2 #				

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8SA	BH8SB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	21/05/2025	21/05/2025				
			Sample Time	.	.				
			Date Received	23/05/2025	23/05/2025				
			SDG Ref	250523-92	250523-92				
			Lab Sample No.(s)	31562489	31562485				
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<2 #	<2 #				
PFDoA (307-55-1)	<2 ng/l	TM434		<4 #	<4 #				
PFDS (335-77-3)	<2 ng/l	TM434		<4 #	<4 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434		<6 #	<6 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<4 #	<4 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434		<4 #	<4 #				
PFTeA (376-06-7)	<1 ng/l	TM434		<2 #	<2 #				
PFOSA (754-91-6)	<2 ng/l	TM434		<4 #	<4 #				
PFDoS (79780-39-5)	<2 ng/l	TM434		<4 #	<4 #				
PFTrDS (174675-49-1)	<1 ng/l	TM434		<2 #	<2 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434		<2 #	<2 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434		<20 ♦ #	<20 #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<2 #	<2 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434		<20 ♦ #	<20 #				
PFODA (16517-11-6)	<1 ng/l	TM434		<2 #	<2 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<2 #	<2 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<20	<20				
Total PFOS	<0.65 ng/l	TM434		<1.3 #	<1.3 #				
Total PFAS DWI 47	<90 ng/l	TM434		<180	<180				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250523-92 **Report Number:** 766759 **Superseded Report:** 766310
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31562467	31562458	31562443	31562497	31562471	31562463	31562452	31562502	31562493	31562435
Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B	BH5B	BH6B	BH7B	BH9B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	28-May-2025	30-May-2025	28-May-2025	28-May-2025	30-May-2025	30-May-2025	28-May-2025	28-May-2025	28-May-2025	29-May-2025

Lab Sample No(s)	31562480	31562476	31562489	31562485
Customer Sample Ref.	BH8DA	BH8DB	BH8SA	BH8SB
AGS Ref.				
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	04-Jun-2025	28-May-2025	30-May-2025	28-May-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
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email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	30 May 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250523-95
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	766343
Order Number:	Z4794

We received 2 samples on Friday May 23, 2025 and 2 of these samples were scheduled for analysis which was completed on Friday May 30, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250523-95 **Report Number:** 766343 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31562771	Gardeners Well A		0.00 - 0.00	22/05/2025
31562776	Gardeners Well B		0.00 - 0.00	22/05/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-95 **Report Number:** 766343 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			31562771	31562776
Customer Sample Reference			Gardeners Well A	Gardeners Well B
AGS Reference				
Depth (m)			0.00 - 0.00	0.00 - 0.00
Container			Digitube fo PFAS analysis.	Digitube fo PFAS analysis.
Sample Type			GW	GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 2	X	X

CERTIFICATE OF ANALYSIS

SDG: 250523-95 **Report Number:** 766343 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Gardeners Well A	Gardeners Well B				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	22/05/2025	22/05/2025				
			Sample Time	.	.				
			Date Received	23/05/2025	23/05/2025				
			SDG Ref	250523-95	250523-95				
			Lab Sample No.(s)	31562771	31562776				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	<2 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #				
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #				
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	<1 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #				
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #				
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	<1 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #				
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #				
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #				
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #				

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-95 **Report Number:** 766343 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Customer Sample Ref.	Gardeners Well A	Gardeners Well B				
Depth (m)	0.00 - 0.00	0.00 - 0.00				
Sample Type	Ground Water (GW)	Ground Water (GW)				
Date Sampled	22/05/2025	22/05/2025				
Sample Time	.	.				
Date Received	23/05/2025	23/05/2025				
SDG Ref	250523-95	250523-95				
Lab Sample No.(s)	31562771	31562776				
AGS Reference						

Component	LOD/Units	Method						
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #	<1 #				
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #				
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #				
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #				
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #				
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #				
PFTrDS (174675-49-1)	<1 ng/l	TM434	<1 #	<1 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 #	<10 #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 #	<10 #				
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10	<10				
Total PFOS	<0.65 ng/l	TM434	<0.65 #	<0.65 #				
Total PFAS DWI 47	<90 ng/l	TM434	<90	<90				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250523-95 **Report Number:** 766343 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31562771	31562776
Customer Sample Ref.	Gardeners Well A	Gardeners Well B
AGS Ref.		
Depth	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water
PFAS Liquids (Full Suite)	30-May-2025	30-May-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

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Website: www.alsenvironmental.co.uk

Fehily Timoney
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Northwood Crescent
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Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	01 October 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250908-24
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	778892
Order Number:	Z4892

We received 18 samples on Monday September 08, 2025 and 18 of these samples were scheduled for analysis which was completed on Wednesday October 01, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32104585	GW001-A		0.00 - 0.00	05/09/2025
32104636	GW004-A		0.00 - 0.00	05/09/2025
32104576	GW007-A		0.00 - 0.00	05/09/2025
32104644	GW008-A		0.00 - 0.00	05/09/2025
32104627	GW014-A		0.00 - 0.00	05/09/2025
32104615	GW015-A		0.00 - 0.00	05/09/2025
32104592	GW001-B		0.00 - 0.00	05/09/2025
32104632	GW004-B		0.00 - 0.00	05/09/2025
32104580	GW007-B		0.00 - 0.00	05/09/2025
32104640	GW008-B		0.00 - 0.00	05/09/2025
32104623	GW014-B		0.00 - 0.00	05/09/2025
32104568	GW015-B		0.00 - 0.00	05/09/2025
32104596	GW002D-A		0.00 - 0.00	05/09/2025
32104572	GW003D-A		0.00 - 0.00	05/09/2025
32104604	GW005D-A		0.00 - 0.00	04/09/2025
32104600	GW002D-B		0.00 - 0.00	05/09/2025
32104619	GW03D-B		0.00 - 0.00	05/09/2025
32104610	GW005D-B		0.00 - 0.00	04/09/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			32104585	GW001-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104636	GW004-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104576	GW007-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104644	GW008-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104627	GW014-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104615	GW015-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104592	GW001-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104632	GW004-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104580	GW007-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104640	GW008-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104623	GW014-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104568	GW015-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104596	GW002D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104572	GW003D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104604	GW005D-A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104600	GW002D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104619	GW03D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104610	GW005D-B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
PFAS Liquids (Full Suite)	All	NDPs: 1 Tests: 18					N	
			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4 ♦ §@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-24	250908-24	250908-24	250908-24	250908-24	250908-24
			Lab Sample No.(s)	32104585	32104636	32104576	32104644	32104627	32104615
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<10 #	5.09 4 #	9.99 4 #	10.7 #	6.58 #	146 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<25 #	<5 4 #	<5 4 #	<5 #	<10 #	<50 #
PFPA (2706-90-3)	<1 ng/l	TM434		104 #	9.23 4 #	27.6 4 #	5.97 #	7.22 #	943 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<3 4 #	<3 4 #	<3 #	<6 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		14.9 #	2.03 4 #	3.59 4 #	4.99 #	<2 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		53.2 #	2.9 4 #	12.8 4 #	6.75 #	2.77 #	255 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		43.4 #	2.66 4 #	7.42 4 #	2.59 #	<2 #	69.3 #
PFPeS (2706-91-4)	<1 ng/l	TM434		12.2 #	<1 4 #	1.51 4 #	3.55 #	<2 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<5 4 #	<5 4 #	<5 #	<10 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		103 #	<1 4 #	<1 4 #	<1 #	<2 #	53.9 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	2.02 #	<2 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		42.4 #	3.23 4 #	4.09 4 #	2.9 #	<1.3 #	14.2 #
PFHxS (355-46-4)	<1 ng/l	TM434		73.4 #	5.55 4 #	11.3 4 #	23.7 #	<2 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		15.1 #	<1 4 #	1.54 4 #	<1 #	<2 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		23.2 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<5 4 #	<5 4 #	<5 #	<10 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 @ #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<5 4 #	<5 4 #	<5 #	<10 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		57.3 #	25.9 4 #	6.6 4 #	24.9 #	<1.3 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		78.6 #	24.5 4 #	8.57 4 #	18.1 #	<1.3 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 @ #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
FHxSA (41997-13-1)	<1 ng/l	TM434		7.5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-24	250908-24	250908-24	250908-24	250908-24	250908-24
			Lab Sample No.(s)	32104585	32104636	32104576	32104644	32104627	32104615
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<3 4 #	<3 4 #	<3 #	<6 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 @ #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<2 4 #	<2 4 #	<2 #	<4 #	<20 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 @ #	<10 4 #	<10 4 #	<10 #	<20 #	<100 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 @ #	<10 4 #	<10 4 #	<10 #	<20 #	<100 #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<10 4	<10 4	<10	<20	2750
Total PFOS	<0.65 ng/l	TM434		136 #	50.3 4 #	15.2 4 #	43 #	<1.3 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434				151 4			
PFecHS (646-83-3)	<1 ng/l	TM434		112 @ #	1710 4 #	55.7 4 #	27.1 @ #	<2 @ #	50.8 @ #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<5 @ #	<1 4 #	<1 4 #	<1 #	<2 #	<10 #

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-B	GW004-B	GW007-B	GW008-B	GW014-B	GW015-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-24	250908-24	250908-24	250908-24	250908-24	250908-24
			Lab Sample No.(s)	32104592	32104632	32104580	32104640	32104623	32104568
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		14.7 4 #	4.52 4 #	9.97 #	10.5 #	6.97 #	168 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<10 4 #	<5 4 #	<10 #	<5 #	<10 #	<50 #
PFPA (2706-90-3)	<1 ng/l	TM434		66.8 4 #	6.48 4 #	26.9 #	8.06 #	7.7 #	494 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<6 4 #	<3 4 #	<6 #	<3 #	<6 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		8.7 4 #	1.84 4 #	2.82 #	3.41 #	<2 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		31.8 4 #	3.6 4 #	13.7 #	6.42 #	2.63 #	152 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		32.9 4 #	2.41 4 #	7.59 #	2.16 #	<2 #	38.3 #
PFPeS (2706-91-4)	<1 ng/l	TM434		3.03 4 #	<1 4 #	2.63 #	3.5 #	<2 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<10 4 #	<5 4 #	<10 #	<5 #	<10 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		54.8 4 #	<1 4 #	<2 #	<1 #	<2 #	20.4 #
FBSA (30334-69-1)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	1.03 #	<2 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		30 4 #	2.95 4 #	3.48 #	2.69 #	<1.3 #	12.4 #
PFHxS (355-46-4)	<1 ng/l	TM434		36.3 4 #	3.18 4 #	15 #	25.8 #	<2 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		6.18 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		14.4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<10 4 #	<5 4 #	<10 #	<5 #	<10 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<10 4 #	<5 4 #	<10 #	<5 #	<10 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		47 4 #	22.5 4 #	6.28 #	27.7 #	<1.3 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		51.5 4 #	18.8 4 #	11.3 #	21.1 #	<1.3 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
FHxSA (41997-13-1)	<1 ng/l	TM434		2.99 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW001-B	GW004-B	GW007-B	GW008-B	GW014-B	GW015-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-24	250908-24	250908-24	250908-24	250908-24	250908-24
			Lab Sample No.(s)	32104592	32104632	32104580	32104640	32104623	32104568
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<6 4 #	<3 4 #	<6 #	<3 #	<6 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<4 4 #	<2 4 #	<4 #	<2 #	<4 #	<20 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<20 4 #	<10 4 #	<20 #	<10 #	<20 #	<100 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<20 4 #	<10 4 #	<20 #	<10 #	<20 #	<100 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<20 4	<10 4	<20	<10	<20	1870
Total PFOS	<0.65 ng/l	TM434		98.5 4 #	41.4 4 #	17.6 #	48.7 #	<1.3 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434		481 4		<180			
PFecHS (646-83-3)	<1 ng/l	TM434		79.8 4 #	1570 4 #	59.3 #	20.8 @ #	<2 @ #	32.4 @ #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<2 4 #	<1 4 #	<2 #	<1 #	<2 #	<10 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW002D-A	GW003D-A	GW005D-A	GW002D-B	GW03D-B	GW005D-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/09/2025	05/09/2025	04/09/2025	05/09/2025	05/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-24	250908-24	250908-24	250908-24	250908-24	250908-24
			Lab Sample No.(s)	32104596	32104572	32104604	32104600	32104619	32104610
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		35.1 #	<4 #	17.3 #	34.5 #	<10 #	19.1 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<10 #	<10 #	<5 #	<25 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		132 #	<2 #	70 #	131 #	<5 #	74.1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<6 #	<6 #	<3 #	<15 #	<6 #
PFBS (375-73-5)	<1 ng/l	TM434		5.81 #	<2 #	30.5 #	4.36 #	<5 #	28.8 #
PFHxA (307-24-4)	<1 ng/l	TM434		72.6 #	<2 #	61.1 #	64.8 #	<5 #	61.2 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
PFHpA (375-85-9)	<1 ng/l	TM434		87.1 #	<2 #	31.2 #	81.1 #	<5 #	31.8 #
PFPeS (2706-91-4)	<1 ng/l	TM434		4.01 #	<2 #	24.7 #	3.26 #	<5 #	15.6 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<10 #	<10 #	<5 #	<25 #	<10 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		8.92 #	<2 #	135 #	3.71 #	<5 #	149 #
FBSA (30334-69-1)	<1 ng/l	TM434		1.82 #	<2 #	<2 #	1.33 #	<5 #	3.85 #
PFOA (335-67-1)	<0.65 ng/l	TM434		47.5 #	<1.3 #	37.5 #	41.3 #	<3.25 #	42.1 #
PFHxS (355-46-4)	<1 ng/l	TM434		39.3 #	2.11 #	166 #	36.2 #	<5 #	154 #
PFNA (375-95-1)	<1 ng/l	TM434		6.51 #	<2 #	9 #	6.51 #	<5 #	8.8 #
PFHpS (375-92-8)	<1 ng/l	TM434		1.78 #	<2 #	<2 #	<1 #	<5 #	<2 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<10 #	<10 #	<5 #	<25 #	<10 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<4 #	<4 @ #	<2 #	<10 @ #	<4 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<10 #	<10 #	<5 #	<25 #	<10 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		49.5 #	<1.3 #	<1.3 #	37.5 #	<3.25 #	<1.3 #
Branched PFOS	<0.65 ng/l	TM434		68.5 #	<1.3 #	65.1 #	66.6 #	<3.25 #	56.1 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<4 #	<4 @ #	<2 #	<10 @ #	<4 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
FHxSA (41997-13-1)	<1 ng/l	TM434		5.58 #	<2 #	<2 #	3.5 #	<5 #	2.76 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW002D-A	GW003D-A	GW005D-A	GW002D-B	GW03D-B	GW005D-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	05/09/2025	05/09/2025	04/09/2025	05/09/2025	05/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-24	250908-24	250908-24	250908-24	250908-24	250908-24
			Lab Sample No.(s)	32104596	32104572	32104604	32104600	32104619	32104610
			AGS Reference	.	.	.	.	.	.
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<6 #	<6 #	<3 #	<15 #	<6 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<4 #	<4 @ #	<2 #	<10 @ #	<4 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<4 #	<4 #	<2 #	<10 #	<4 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<20 #	<20 @ #	<10 #	<50 @ #	<20 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<20 #	<20 @ #	<10 #	<50 @ #	<20 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<2 #	<2 #	<1 #	<5 #	<2 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<20	<20	<10	<50	<20
Total PFOS	<0.65 ng/l	TM434		118 #	<1.3 #	65.1 #	104 #	<3.25 #	56.1 #
Total PFAS DWI 47	<90 ng/l	TM434				750			724
PFecHS (646-83-3)	<1 ng/l	TM434		134 @ #	9.85 @ #	102 #	139 @ #	10 @ #	77.1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<2 #	<2 @ #	<1 #	<5 @ #	<2 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Notification of NDPs (No determination possible)

Date Received : 08/09/2025 12:34:19

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
32104568	GW015-B	0.00 - 0.00	PFAS Liquids (Full Suite)	Insufficient Sample

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250908-24 **Report Number:** 778892 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32104585	32104636	32104576	32104644	32104627	32104615	32104592	32104632	32104580	32104640
Customer Sample Ref.	GW001-A	GW004-A	GW007-A	GW008-A	GW014-A	GW015-A	GW001-B	GW004-B	GW007-B	GW008-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	23-Sep-2025	22-Sep-2025	15-Sep-2025	23-Sep-2025	24-Sep-2025	23-Sep-2025	15-Sep-2025	22-Sep-2025	15-Sep-2025	24-Sep-2025

Lab Sample No(s)	32104623	32104568	32104596	32104572	32104604	32104600	32104619	32104610
Customer Sample Ref.	GW014-B	GW015-B	GW002D-A	GW003D-A	GW005D-A	GW002D-B	GW03D-B	GW005D-B
AGS Ref.								
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	24-Sep-2025	01-Oct-2025	23-Sep-2025	23-Sep-2025	15-Sep-2025	23-Sep-2025	23-Sep-2025	15-Sep-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests.
We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	24 September 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250908-27
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	778152
Order Number:	Z4892

We received 22 samples on Monday September 08, 2025 and 22 of these samples were scheduled for analysis which was completed on Wednesday September 24, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32104977	GW11A		0.00 - 0.00	04/09/2025
32105033	GW12A		0.00 - 0.00	04/09/2025
32105042	GW13A		0.00 - 0.00	04/09/2025
32105050	GW14A		0.00 - 0.00	04/09/2025
32105060	GW15A		0.00 - 0.00	04/09/2025
32104985	GW16A		0.00 - 0.00	04/09/2025
32104993	GW17A		0.00 - 0.00	04/09/2025
32105001	GW18A		0.00 - 0.00	04/09/2025
32105010	GW19A		0.00 - 0.00	04/09/2025
32105024	GW11B		0.00 - 0.00	04/09/2025
32105038	GW12B		0.00 - 0.00	04/09/2025
32105046	GW13B		0.00 - 0.00	04/09/2025
32105054	GW14B		0.00 - 0.00	04/09/2025
32104981	GW15B		0.00 - 0.00	04/09/2025
32104989	GW16B		0.00 - 0.00	04/09/2025
32104997	GW17B		0.00 - 0.00	04/09/2025
32105005	GW18B		0.00 - 0.00	04/09/2025
32105015	GW19B		0.00 - 0.00	04/09/2025
32105020	GWFB		0.00 - 0.00	04/09/2025
32105171	GWMP4 A			
32105167	GWMP4 B			
32105028	GWTB		0.00 - 0.00	04/09/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 22	32104977	GW11A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105033	GW12A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105042	GW13A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105050	GW14A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105060	GW15A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104985	GW16A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104993	GW17A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105001	GW18A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105010	GW19A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105024	GW11B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105038	GW12B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105046	GW13B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105054	GW14B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104981	GW15B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104989	GW16B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32104997	GW17B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105005	GW18B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105015	GW19B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32105020	GWFB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

32105028	GWTB		0.00 - 0.00	Digitube fo PFAS analysis.	GW		X
32105167	GWMP4 B			Digitube fo PFAS analysis.	UNL		X
32105171	GWMP4 A			Digitube fo PFAS analysis.	UNL		X

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-27	250908-27	250908-27	250908-27	250908-27	250908-27
			Lab Sample No.(s)	32104977	32105033	32105042	32105050	32105060	32104985
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		475 #	13.5 #	<10 #	64.7 #	3.81 #	17 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<25 #	<5 #	<25 #	<25 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		2660 #	52.4 #	<5 #	344 #	5.91 #	70 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<3 #	<15 #	<15 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		41.7 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		1270 #	16.3 #	<5 #	134 #	3.59 #	19.7 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		349 #	4.17 #	<5 #	34.7 #	2.15 #	7.82 #
PFPeS (2706-91-4)	<1 ng/l	TM434		26.9 #	<1 #	<5 #	<5 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<5 #	<25 #	<25 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		663 #	3.63 #	<5 #	<5 #	<1 #	3.87 #
FBSA (30334-69-1)	<1 ng/l	TM434		21.9 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		173 #	1.69 #	<3.25 #	4.01 #	0.937 #	1.79 #
PFHxS (355-46-4)	<1 ng/l	TM434		170 #	2.25 #	<5 #	<5 #	1.58 #	5.17 #
PFNA (375-95-1)	<1 ng/l	TM434		22.2 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		99.2 #	<2 #	<10 #	<10 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<5 #	<25 #	<25 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 @ #	<2 @ #	<10 @ #	<10 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<5 #	<25 #	<25 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		122 #	<0.65 #	<3.25 #	<3.25 #	<0.65 #	0.814 #
Branched PFOS	<0.65 ng/l	TM434		31 #	<0.65 #	<3.25 #	<3.25 #	<0.65 #	3.24 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 @ #	<2 @ #	<10 @ #	<10 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		29.6 #	<1 #	<5 #	<5 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-27	250908-27	250908-27	250908-27	250908-27	250908-27
			Lab Sample No.(s)	32104977	32105033	32105042	32105050	32105060	32104985
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<3 #	<15 #	<15 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 @ #	<2 @ #	<10 @ #	<10 @ #	<2 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 @ #	<10 @ #	<50 @ #	<50 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 @ #	<10 @ #	<50 @ #	<50 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<1 #	<5 #	<5 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		4070	<10	<50	<50	<10	<10
Total PFOS	<0.65 ng/l	TM434		153 #	<0.65 #	<3.25 #	<3.25 #	<0.65 #	4.06 #
Total PFAS DWI 47	<90 ng/l	TM434		6160	93.9	<450	581	<90	129
PFecHS (646-83-3)	<1 ng/l	TM434		6.67 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<5 @ #	<1 @ #	<5 @ #	<5 @ #	<1 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW17A	GW18A	GW19A	GW11B	GW12B	GW13B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-27	250908-27	250908-27	250908-27	250908-27	250908-27
			Lab Sample No.(s)	32104993	32105001	32105010	32105024	32105038	32105046
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	434 #	20.5 #	<10 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<50 4 #	<125 #	<125 #	<25 #	<5 #	<25 #
PFPA (2706-90-3)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	2580 #	86.9 #	<5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<30 4 #	<75 #	<75 #	<15 #	<3 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	49.3 #	<1 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	1250 #	27.8 #	<5 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	363 #	7.12 #	<5 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	20.4 #	<1 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<50 4 #	<125 #	<125 #	<25 #	<5 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	631 #	2.49 #	<5 #
FBSA (30334-69-1)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	14.3 #	<1 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<6.5 4 #	<16.3 #	<16.3 #	170 #	2.45 #	<3.25 #
PFHxS (355-46-4)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	159 #	3.85 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	21.9 #	<1 #	<5 #
PFHpS (375-92-8)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	96.2 #	<2 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<50 4 #	<125 #	<125 #	<25 #	<5 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<20 4 @ #	<50 @ #	<50 @ #	<10 @ #	<2 @ #	<10 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<50 4 #	<125 #	<125 #	<25 #	<5 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<6.5 4 #	<16.3 #	<16.3 #	126 #	2.59 #	<3.25 #
Branched PFOS	<0.65 ng/l	TM434		<6.5 4 #	<16.3 #	<16.3 #	39.6 #	3.31 #	<3.25 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<20 4 @ #	<50 @ #	<50 @ #	<10 @ #	<2 @ #	<10 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	23.9 #	<1 #	<5 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW17A	GW18A	GW19A	GW11B	GW12B	GW13B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-27	250908-27	250908-27	250908-27	250908-27	250908-27
			Lab Sample No.(s)	32104993	32105001	32105010	32105024	32105038	32105046
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<30 4 #	<75 #	<75 #	<15 #	<3 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<20 4 @ #	<50 @ #	<50 @ #	<10 @ #	<2 @ #	<10 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<20 4 #	<50 #	<50 #	<10 #	<2 #	<10 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<100 4 @ #	<250 @ #	<250 @ #	<50 @ #	<10 @ #	<50 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<100 4 @ #	<250 @ #	<250 @ #	<50 @ #	<10 @ #	<50 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<100 4	<250	<250	4240	<10	<50
Total PFOS	<0.65 ng/l	TM434		<6.5 4 #	<16.3 #	<16.3 #	166 #	5.9 #	<3.25 #
Total PFAS DWI 47	<90 ng/l	TM434		<900 4	<2250	<2250	5990	157	<450
PFecHS (646-83-3)	<1 ng/l	TM434		<10 4 #	<25 #	<25 #	<5 #	<1 #	<5 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<10 4 @ #	<25 @ #	<25 @ #	<5 @ #	<1 @ #	<5 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-27	250908-27	250908-27	250908-27	250908-27	250908-27
			Lab Sample No.(s)	32105054	32104981	32104989	32104997	32105005	32105015
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		53.5 #	6.69 #	21 #	9.01 #	<100 #	<100 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<50 #	<10 #	<5 #	<5 #	<250 #	<250 #
PFPA (2706-90-3)	<1 ng/l	TM434		379 #	9.64 #	75.9 #	5.7 #	<50 #	<50 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<10 #	<2 #	4.03 #	<1 #	<50 #	<50 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<30 #	<6 #	<3 #	<3 #	<150 #	<150 #
PFBS (375-73-5)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
PFHxA (307-24-4)	<1 ng/l	TM434		111 #	4.55 #	23.9 #	3.13 #	<50 #	<50 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
PFHpA (375-85-9)	<1 ng/l	TM434		29.9 #	2.82 #	10.3 #	3.28 #	<50 #	<50 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<10 #	<2 #	1.24 #	<1 #	<50 #	<50 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<50 #	<10 #	<5 #	<5 #	<250 #	<250 #
ADONA (919005-14-4)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<10 #	<2 #	6.34 #	<1 #	<50 #	<50 #
FBSA (30334-69-1)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<6.5 #	1.93 #	2.77 #	2.13 #	<32.5 #	<32.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		<10 #	<2 #	5.76 #	1.17 #	<50 #	<50 #
PFNA (375-95-1)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
PFHpS (375-92-8)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<50 #	<10 #	<5 #	<5 #	<250 #	<250 #
PFDA (335-76-2)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<20 @ #	<4 @ #	<2 @ #	<2 @ #	<100 @ #	<100 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<50 #	<10 #	<5 #	<5 #	<250 #	<250 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<6.5 #	<1.3 #	1.84 #	<0.65 #	<32.5 #	<32.5 #
Branched PFOS	<0.65 ng/l	TM434		<6.5 #	<1.3 #	8.88 #	<0.65 #	<32.5 #	<32.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<20 @ #	<4 @ #	<2 @ #	<2 @ #	<100 @ #	<100 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
PFNS (68259-12-1)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025	04/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-27	250908-27	250908-27	250908-27	250908-27	250908-27
			Lab Sample No.(s)	32105054	32104981	32104989	32104997	32105005	32105015
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
PFDS (335-77-3)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<30 #	<6 #	<3 #	<3 #	<150 #	<150 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<20 @ #	<4 @ #	<2 @ #	<2 @ #	<100 @ #	<100 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
PFOSA (754-91-6)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<20 #	<4 #	<2 #	<2 #	<100 #	<100 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<100 @ #	<20 @ #	<10 @ #	<10 @ #	<500 @ #	<500 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<100 @ #	<20 @ #	<10 @ #	<10 @ #	<500 @ #	<500 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<10 #	<2 #	<1 #	<1 #	<50 #	<50 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<100	<20	<10	<10	<500	<500
Total PFOS	<0.65 ng/l	TM434		<6.5 #	<1.3 #	10.7 #	<0.65 #	<32.5 #	<32.5 #
Total PFAS DWI 47	<90 ng/l	TM434		<900	<180	162	<90	<4500	<4500
PFecHS (646-83-3)	<1 ng/l	TM434		<10 #	<2 #	<1 @ #	<1 @ #	<50 #	<50 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<10 @ #	<2 @ #	<1 @ #	<1 @ #	<50 @ #	<50 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GWFB	GWMP4 A	GWMP4 B	GWTB		
			Depth (m)	0.00 - 0.00	.	.	0.00 - 0.00		
			Sample Type	Ground Water (GW)	Water	Water	Ground Water (GW)		
			Date Sampled	04/09/2025	-	-	04/09/2025		
			Sample Time	.	.	.	.		
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025		
			SDG Ref	250908-27	250908-27	250908-27	250908-27		
			Lab Sample No.(s)	32105020	32105171	32105167	32105028		
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	4.75 §	5.75 §	<2 #		
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 §	<5 §	<5 #		
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	2.67 §	2.6 §	<1 #		
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 §	<3 §	<3 #		
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	1.56 §	1.16 §	<1 #		
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 §	<5 §	<5 #		
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	1.08 §	0.855 §	<0.65 #		
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 §	<5 §	<5 #		
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 §	<2 §	<2 @ #		
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 §	<5 §	<5 #		
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 §	<0.65 §	<0.65 #		
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 §	<0.65 §	<0.65 #		
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 §	<2 §	<2 @ #		
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		

CERTIFICATE OF ANALYSIS

SDG: 250908-27 **Report Number:** 778152 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
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- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GWFB	GWMP4 A	GWMP4 B	GWTB		
			Depth (m)	0.00 - 0.00	.	.	0.00 - 0.00		
			Sample Type	Ground Water (GW)	Water	Water	Ground Water (GW)		
			Date Sampled	04/09/2025	-	-	04/09/2025		
			Sample Time	.	.	.	.		
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025		
			SDG Ref	250908-27	250908-27	250908-27	250908-27		
			Lab Sample No.(s)	32105020	32105171	32105167	32105028		
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 §	<3 §	<3 #		
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 §	<2 §	<2 @ #		
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 §	<2 §	<2 #		
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 §	<10 §	<10 @ #		
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 §	<10 §	<10 @ #		
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 §	<1 §	<1 #		
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10 §	<10 §	<10		
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 §	<0.65 §	<0.65 #		
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90 §	<90 §	<90		
PFecHS (646-83-3)	<1 ng/l	TM434		<1 @ #	<1 §	<1 §	<1 #		
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 §	<1 §	<1 @ #		

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250908-27 Report Number: 778152 Superseded Report:
Client Ref.: P21-195 Location: Dublin Airport

Test Completion Dates

Lab Sample No(s)	32104977	32105033	32105042	32105050	32105060	32104985	32104993	32105001	32105010	32105024
Customer Sample Ref.	GW11A	GW12A	GW13A	GW14A	GW15A	GW16A	GW17A	GW18A	GW19A	GW11B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	22-Sep-2025	22-Sep-2025	22-Sep-2025	22-Sep-2025	15-Sep-2025	15-Sep-2025	15-Sep-2025	16-Sep-2025	16-Sep-2025	22-Sep-2025

Lab Sample No(s)	32105038	32105046	32105054	32104981	32104989	32104997	32105005	32105015	32105020	32105171
Customer Sample Ref.	GW12B	GW13B	GW14B	GW15B	GW16B	GW17B	GW18B	GW19B	GWFB	GWMP4 A
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Water
PFAS Liquids (Full Suite)	22-Sep-2025	22-Sep-2025	18-Sep-2025	22-Sep-2025	24-Sep-2025	24-Sep-2025	18-Sep-2025	18-Sep-2025	24-Sep-2025	16-Sep-2025

Lab Sample No(s)	32105167	32105028
Customer Sample Ref.	GWMP4 B	GWTB
AGS Ref.		
Depth		0.00 - 0.00
Type	Water	Ground Water
PFAS Liquids (Full Suite)	16-Sep-2025	22-Sep-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	23 September 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250910-61
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	778075
Order Number:	Z4892

This report has been revised and directly supersedes 777764 in its entirety.

We received 14 samples on Wednesday September 10, 2025 and 14 of these samples were scheduled for analysis which was completed on Tuesday September 23, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32116629	BH1A		0.00 - 0.00	08/09/2025
32116618	BH5A		0.00 - 0.00	08/09/2025
32116604	BH6A		0.00 - 0.00	08/09/2025
32116675	BH7A		0.00 - 0.00	08/09/2025
32116633	BH9A		0.00 - 0.00	08/09/2025
32116624	BH1B		0.00 - 0.00	08/09/2025
32116611	BH5B		0.00 - 0.00	08/09/2025
32116679	BH6B		0.00 - 0.00	08/09/2025
32116668	BH7B		0.00 - 0.00	08/09/2025
32116589	BH9B		0.00 - 0.00	08/09/2025
32116646	BH8DA		0.00 - 0.00	08/09/2025
32116641	BH8DB		0.00 - 0.00	08/09/2025
32116660	BH8SA		0.00 - 0.00	08/09/2025
32116651	BH8SB		0.00 - 0.00	08/09/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 14	32116629	BH1A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116618	BH5A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116604	BH6A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116675	BH7A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116633	BH9A		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116624	BH1B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116611	BH5B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116679	BH6B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116668	BH7B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116589	BH9B		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116646	BH8DA		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116641	BH8DB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116660	BH8SA		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			32116651	BH8SB		0.00 - 0.00	Digitube fo PFAS analysis.	GW
			X	X	X	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025
			SDG Ref	250910-61	250910-61	250910-61	250910-61	250910-61	250910-61
			Lab Sample No.(s)	32116629	32116618	32116604	32116675	32116633	32116624
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<50 #	<25 #	<10 #	<50 #	<50 #	<50 #
PFPA (2706-90-3)	<1 ng/l	TM434		<10 #	8.07 #	<2 #	16.3 #	<10 #	<10 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<30 #	<15 #	<6 #	<30 #	<30 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<50 #	<25 #	<10 #	<50 #	<50 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
FBSA (30334-69-1)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<6.5 #	<3.25 #	<1.3 #	<6.5 #	<6.5 #	<6.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<50 #	<25 #	<10 #	<50 #	<50 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<20 ♦ #	<10 #	<4 #	<20 ♦ #	<20 #	<20 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<50 #	<25 #	<10 #	<50 #	<50 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<6.5 #	<3.25 #	<1.3 #	<6.5 #	<6.5 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		<6.5 #	<3.25 #	<1.3 #	<6.5 #	<6.5 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<20 ♦ #	<10 #	<4 #	<20 ♦ #	<20 #	<20 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764

Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025
			SDG Ref	250910-61	250910-61	250910-61	250910-61	250910-61	250910-61
			Lab Sample No.(s)	32116629	32116618	32116604	32116675	32116633	32116624
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<30 #	<15 #	<6 #	<30 #	<30 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<20 ♦ #	<10 #	<4 #	<20 ♦ #	<20 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<20 #	<10 #	<4 #	<20 #	<20 #	<20 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<100 ♦ #	<50 #	<20 #	<100 ♦ #	<100 #	<100 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<100 ♦ #	<50 #	<20 #	<100 ♦ #	<100 #	<100 #
PFODA (16517-11-6)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<100	<50	<20	<100	<100	<100
Total PFOS	<0.65 ng/l	TM434		<6.5 #	<3.25 #	<1.3 #	<6.5 #	<6.5 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434		<900	<450	<180	<900	<900	<900
PFecHS (646-83-3)	<1 ng/l	TM434		<10 #	<5 #	<2 #	<10 #	<10 #	<10 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<10 ♦ #	<5 #	<2 #	<10 ♦ #	<10 #	<10 #

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH5B	BH6B	BH7B	BH9B	BH8DA	BH8DB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025
			SDG Ref	250910-61	250910-61	250910-61	250910-61	250910-61	250910-61
			Lab Sample No.(s)	32116611	32116679	32116668	32116589	32116646	32116641
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<10 #	<2 #	13.3 #	<20 #	20.1 #	19.7 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		5.91 #	<1 #	16 #	<10 #	7.8 #	8.79 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<3 #	<6 #	<30 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	1.14 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		<5 #	<1 #	4.12 #	<10 #	1.94 #	1.94 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<3.25 #	<0.65 #	<1.3 #	<6.5 #	<0.65 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	1.98 #	1.96 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<0.65 #	<1.3 #	<6.5 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<0.65 #	<1.3 #	<6.5 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764

Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
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- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH5B	BH6B	BH7B	BH9B	BH8DA	BH8DB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025	10/09/2025
			SDG Ref	250910-61	250910-61	250910-61	250910-61	250910-61	250910-61
			Lab Sample No.(s)	32116611	32116679	32116668	32116589	32116646	32116641
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<3 #	<6 #	<30 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 #	<10 #	<20 #	<100 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 #	<10 #	<20 #	<100 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<10	<20	<100	<10	<10
Total PFOS	<0.65 ng/l	TM434		<3.25 #	<0.65 #	<1.3 #	<6.5 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<90	<180	<900	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	10.1 #	10.5 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8SA	BH8SB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	08/09/2025	08/09/2025				
			Sample Time	.	.				
			Date Received	10/09/2025	10/09/2025				
			SDG Ref	250910-61	250910-61				
			Lab Sample No.(s)	32116660	32116651				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		17.1 #	17.4 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<2 #				
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<25 #	<10 #				
PFPA (2706-90-3)	<1 ng/l	TM434		8.53 #	6.4 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<2 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<2 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<6 #				
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<2 #				
PFHxA (307-24-4)	<1 ng/l	TM434		<5 #	2.56 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<4 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<2 #				
PFHpA (375-85-9)	<1 ng/l	TM434		<5 #	<2 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<2 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<10 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<2 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	<2 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<2 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		<3.25 #	<1.3 #				
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	2.31 #				
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<2 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<2 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<4 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<10 #				
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<4 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 ♦ #	<4 #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<10 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<1.3 #				
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<1.3 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 ♦ #	<4 #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<4 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<2 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<2 #				
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<2 #				

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8SA	BH8SB
			Depth (m)	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)
			Date Sampled	08/09/2025	08/09/2025
			Sample Time	.	.
			Date Received	10/09/2025	10/09/2025
			SDG Ref	250910-61	250910-61
			Lab Sample No.(s)	32116660	32116651
			AGS Reference		
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<4 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<4 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<6 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<4 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 ♦ #	<4 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<2 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<4 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<4 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<2 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 ♦ #	<20 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<2 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 ♦ #	<20 #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<2 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<2 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<20
Total PFOS	<0.65 ng/l	TM434		<3.25 #	<1.3 #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<180
PFecHS (646-83-3)	<1 ng/l	TM434		13.8 ♦ #	8.14 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<5 ♦ #	<2 #

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250910-61 **Report Number:** 778075 **Superseded Report:** 777764
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32116629	32116618	32116604	32116675	32116633	32116624	32116611	32116679	32116668	32116589
Customer Sample Ref.	BH1A	BH5A	BH6A	BH7A	BH9A	BH1B	BH5B	BH6B	BH7B	BH9B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	17-Sep-2025	19-Sep-2025	19-Sep-2025	17-Sep-2025	19-Sep-2025	19-Sep-2025	19-Sep-2025	19-Sep-2025	19-Sep-2025	19-Sep-2025

Lab Sample No(s)	32116646	32116641	32116660	32116651
Customer Sample Ref.	BH8DA	BH8DB	BH8SA	BH8SB
AGS Ref.				
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	19-Sep-2025	19-Sep-2025	23-Sep-2025	19-Sep-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	24 September 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250908-29
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	778179
Order Number:	POZ4892

We received 2 samples on Monday September 08, 2025 and 2 of these samples were scheduled for analysis which was completed on Wednesday September 24, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250908-29 **Report Number:** 778179 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32105112	Gardeners Well A		0.00 - 0.00	02/09/2025
32105117	Gardeners Well B		0.00 - 0.00	02/09/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-29 **Report Number:** 778179 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			32105112	32105117
Customer Sample Reference			Gardeners Well A	Gardeners Well B
AGS Reference				
Depth (m)			0.00 - 0.00	0.00 - 0.00
Container			Digitube fo PFAS analysis.	Digitube fo PFAS analysis.
Sample Type			GW	GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 2	X	X

CERTIFICATE OF ANALYSIS

SDG: 250908-29 **Report Number:** 778179 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4+§@	Sample deviation (see appendix)

Customer Sample Ref.	Gardeners Well A	Gardeners Well B				
Depth (m)	0.00 - 0.00	0.00 - 0.00				
Sample Type	Ground Water (GW)	Ground Water (GW)				
Date Sampled	02/09/2025	02/09/2025				
Sample Time	.	.				
Date Received	08/09/2025	08/09/2025				
SDG Ref	250908-29	250908-29				
Lab Sample No.(s)	32105112	32105117				
AGS Reference						

Component	LOD/Units	Method						
PFBA (375-22-4)	<2 ng/l	TM434	<2 #	<2 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434	<1 #	<1 #				
3:3 FTCA (356-02-5)	<5 ng/l	TM434	<5 #	<5 #				
PFPA (2706-90-3)	<1 ng/l	TM434	<1 #	<1 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434	<1 #	<1 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434	<1 #	<1 #				
NFDHA (151772-58-6)	<3 ng/l	TM434	<3 #	<3 #				
PFBS (375-73-5)	<1 ng/l	TM434	<1 #	<1 #				
PFHxA (307-24-4)	<1 ng/l	TM434	<1 #	<1 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434	<2 #	<2 #				
PFEESA (113507-82-7)	<1 ng/l	TM434	<1 #	<1 #				
PFHpA (375-85-9)	<1 ng/l	TM434	<1 #	<1 #				
PFPeS (2706-91-4)	<1 ng/l	TM434	<1 #	<1 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434	<5 #	<5 #				
ADONA (919005-14-4)	<1 ng/l	TM434	<1 #	<1 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434	<1 #	<1 #				
FBSA (30334-69-1)	<1 ng/l	TM434	<1 #	<1 #				
PFOA (335-67-1)	<0.65 ng/l	TM434	<0.65 #	<0.65 #				
PFHxS (355-46-4)	<1 ng/l	TM434	<1 #	<1 #				
PFNA (375-95-1)	<1 ng/l	TM434	<1 #	<1 #				
PFHpS (375-92-8)	<1 ng/l	TM434	<1 #	<1 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434	<2 #	<2 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434	<5 #	<5 #				
PFDA (335-76-2)	<2 ng/l	TM434	<2 #	<2 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434	<2 @ #	<2 @ #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434	<5 #	<5 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434	<0.65 #	<0.65 #				
Branched PFOS	<0.65 ng/l	TM434	<0.65 #	<0.65 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434	<2 @ #	<2 @ #				
PFUnA (2058-94-8)	<2 ng/l	TM434	<2 #	<2 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434	<1 #	<1 #				
PFNS (68259-12-1)	<1 ng/l	TM434	<1 #	<1 #				
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #	<1 #				

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-29 **Report Number:** 778179 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend		Customer Sample Ref.	Gardeners Well A	Gardeners Well B				
#	ISO17025 accredited.							
M	mCERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
***	6:2 FTAB (see appendix)							
1-4+§@	Sample deviation (see appendix)							
		Depth (m)	0.00 - 0.00	0.00 - 0.00				
		Sample Type	Ground Water (GW)	Ground Water (GW)				
		Date Sampled	02/09/2025	02/09/2025				
		Sample Time	.	.				
		Date Received	08/09/2025	08/09/2025				
		SDG Ref	250908-29	250908-29				
		Lab Sample No.(s)	32105112	32105117				
		AGS Reference						

Component	LOD/Units	Method						
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #				
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 @ #	<2 @ #				
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #				
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #				
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 @ #	<10 @ #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 @ #	<10 @ #				
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10	<10				
Total PFOS	<0.65 ng/l	TM434	<0.65 #	<0.65 #				
Total PFAS DWI 47	<90 ng/l	TM434	<90	<90				
PFecHS (646-83-3)	<1 ng/l	TM434	<1 #	<1 #				
PFTrDS (791563-89-8)	<1 ng/l	TM434	<1 @ #	<1 @ #				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250908-29 **Report Number:** 778179 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32105112	32105117
Customer Sample Ref.	Gardeners Well A	Gardeners Well B
AGS Ref.		
Depth	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water
PFAS Liquids (Full Suite)	24-Sep-2025	24-Sep-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	29 December 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	251215-6
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	787353
Order Number:	Z5021

We received 10 samples on Friday December 12, 2025 and 10 of these samples were scheduled for analysis which was completed on Monday December 29, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 251215-6 **Report Number:** 787353 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32628768	DUP2		0.00 - 0.00	11/12/2025
32628798	GW001		0.00 - 0.00	10/12/2025
32628783	GW004		0.00 - 0.00	10/12/2025
32628794	GW007		0.00 - 0.00	10/12/2025
32628788	GW008		0.00 - 0.00	10/12/2025
32628779	GW014		0.00 - 0.00	10/12/2025
32628763	GW015		0.00 - 0.00	10/12/2025
32628805	GW002D		0.00 - 0.00	10/12/2025
32628775	GW03D		0.00 - 0.00	10/12/2025
32628810	GW005D		0.00 - 0.00	10/12/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-6 **Report Number:** 787353 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			32628768	DUP2		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628798	GW001		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628783	GW004		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628794	GW007		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628788	GW008		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628779	GW014		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628763	GW015		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628805	GW002D		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628775	GW03D		0.00 - 0.00	50ml digitube (ALE001)	GW
			32628810	GW005D		0.00 - 0.00	50ml digitube (ALE001)	GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 10	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 251215-6 **Report Number:** 787353 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	DUP2	GW001	GW004	GW007	GW008	GW014
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	11/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	12/12/2025	12/12/2025	12/12/2025	12/12/2025	12/12/2025	12/12/2025
			SDG Ref	251215-6	251215-6	251215-6	251215-6	251215-6	251215-6
			Lab Sample No.(s)	32628768	32628798	32628783	32628794	32628788	32628779
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<20 #	<2 4 #	<4 #	20.9 #	<10 #	<4 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<50 #	<5 #	<10 #	<10 #	<25 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		48.9 #	65.7 #	<2 #	37.1 #	<5 #	9.44 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<30 #	<3 #	<6 #	<6 #	<15 #	<6 #
PFBS (375-73-5)	<1 ng/l	TM434		15.7 #	10.8 #	<2 #	11.6 #	5.87 #	<2 #
PFHxA (307-24-4)	<1 ng/l	TM434		36 #	41.6 #	<2 #	29.7 #	<5 #	2.67 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
PFHpA (375-85-9)	<1 ng/l	TM434		<10 #	28 #	<2 #	12.6 #	<5 #	<2 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<10 #	4.86 #	<2 #	11.1 #	<5 #	<2 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<50 #	<5 #	<10 #	<10 #	<25 #	<10 #
ADONA (919005-14-4)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		27.6 #	58.1 #	2.26 #	53.6 #	<5 #	<4 #
FBSA (30334-69-1)	<1 ng/l	TM434		<10 #	2.08 #	<2 #	<2 #	<5 #	<2 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<6.5 #	25 #	<1.3 #	15.7 #	<3.25 #	<1.3 #
PFHxS (355-46-4)	<1 ng/l	TM434		32.8 #	50.7 #	5.41 #	55.5 #	14.1 #	<2 #
PFNA (375-95-1)	<1 ng/l	TM434		<10 #	5.88 #	<2 #	4.24 #	<5 #	<2 #
PFHpS (375-92-8)	<1 ng/l	TM434		<10 #	2.5 #	<2 #	<2 #	<5 #	<2 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<20 #	12.8 #	<4 #	<4 #	<10 #	<4 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<50 #	<5 #	<10 #	<10 #	<25 #	<10 #
PFDA (335-76-2)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<50 #	<5 #	<10 #	<10 #	<25 #	<10 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<6.5 #	30.9 #	18.4 #	1.79 #	14.7 #	<1.3 #
Branched PFOS	<0.65 ng/l	TM434		<6.5 #	43.7 #	20.4 #	27.8 #	11.2 #	<1.3 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
PFNS (68259-12-1)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<10 #	5.18 #	<2 #	<2 #	<5 #	<2 #

CERTIFICATE OF ANALYSIS

SDG: 251215-6 **Report Number:** 787353 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	DUP2	GW001	GW004	GW007	GW008	GW014
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	11/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	12/12/2025	12/12/2025	12/12/2025	12/12/2025	12/12/2025	12/12/2025
			SDG Ref	251215-6	251215-6	251215-6	251215-6	251215-6	251215-6
			Lab Sample No.(s)	32628768	32628798	32628783	32628794	32628788	32628779
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFDS (335-77-3)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<30 #	<3 #	<6 #	<6 #	<15 #	<6 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFTeA (376-06-7)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
PFOSA (754-91-6)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<20 #	<2 #	<4 #	<4 #	<10 #	<4 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<100 #	<10 #	<20 #	<20 #	<50 #	<20 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<100 #	<10 #	<20 #	<20 #	<50 #	<20 #
PFODA (16517-11-6)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<100	<10	<20	<20	<50	<20
Total PFOS	<0.65 ng/l	TM434		<6.5 #	74.6 #	38.8 #	29.6 #	25.8 #	<1.3 #
Total PFAS DWI 47	<90 ng/l	TM434		<900		821	320	<450	<180
PFecHS (646-83-3)	<1 ng/l	TM434		178 #	69.3 #	775 #	38.4 #	15.6 #	<2 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<10 #	<1 #	<2 #	<2 #	<5 #	<2 #

CERTIFICATE OF ANALYSIS

SDG: 251215-6 **Report Number:** 787353 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW015	GW002D	GW03D	GW005D		
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	10/12/2025	10/12/2025	10/12/2025	10/12/2025		
			Sample Time	.	.	.	.		
			Date Received	12/12/2025	12/12/2025	12/12/2025	12/12/2025		
			SDG Ref	251215-6	251215-6	251215-6	251215-6		
			Lab Sample No.(s)	32628763	32628805	32628775	32628810		
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		60.2 #	29.6 #	<4 #	<20 #		
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #		
PFPA (2706-90-3)	<1 ng/l	TM434		319 #	97.8 #	3.45 #	48.1 #		
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<3 #	<6 #	<30 #		
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	3.31 #	<2 #	16.1 #		
PFHxA (307-24-4)	<1 ng/l	TM434		66.7 #	56 #	<2 #	32.1 #		
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
PFHpA (375-85-9)	<1 ng/l	TM434		20.4 #	47.2 #	<2 #	<10 #		
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	2.11 #	<2 #	<10 #		
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #		
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
6:2 FTS (27619-97-2)	<1 ng/l	TM434		72.6 #	<1 #	<2 #	12.7 #		
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
PFOA (335-67-1)	<0.65 ng/l	TM434		<3.25 #	24.4 #	<1.3 #	<6.5 #		
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	23.1 #	<2 #	40.9 #		
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	4.57 #	<2 #	<10 #		
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	1.68 #	<2 #	<10 #		
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #		
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<5 #	<10 #	<50 #		
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	20.5 #	2.69 #	<6.5 #		
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	27.5 #	<1.3 #	<6.5 #		
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	2.86 #	<2 #	<10 #		

CERTIFICATE OF ANALYSIS

SDG: 251215-6 **Report Number:** 787353 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW015	GW002D	GW03D	GW005D		
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	10/12/2025	10/12/2025	10/12/2025	10/12/2025		
			Sample Time	.	.	.	.		
			Date Received	12/12/2025	12/12/2025	12/12/2025	12/12/2025		
			SDG Ref	251215-6	251215-6	251215-6	251215-6		
			Lab Sample No.(s)	32628763	32628805	32628775	32628810		
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<3 #	<6 #	<30 #		
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<2 #	<4 #	<20 #		
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 #	<10 #	<20 #	<100 #		
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 #	<10 #	<20 #	<100 #		
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		981	<10	<20	<100		
Total PFOS	<0.65 ng/l	TM434		<3.25 #	48 #	2.69 #	<6.5 #		
Total PFAS DWI 47	<90 ng/l	TM434		550	458	<180	<900		
PFecHS (646-83-3)	<1 ng/l	TM434		11.4 #	117 #	3.36 #	236 #		
PFTrDS (791563-89-8)	<1 ng/l	TM434		<5 #	<1 #	<2 #	<10 #		

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS in Liquid matrices

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 251215-6 **Report Number:** 787353 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32628768	32628798	32628783	32628794	32628788	32628779	32628763	32628805	32628775	32628810
Customer Sample Ref.	DUP2	GW001	GW004	GW007	GW008	GW014	GW015	GW002D	GW03D	GW005D
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	18-Dec-2025	29-Dec-2025	19-Dec-2025	18-Dec-2025	18-Dec-2025	29-Dec-2025	18-Dec-2025	19-Dec-2025	18-Dec-2025	18-Dec-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests.
We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	02 January 2026
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	251215-14
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	787714
Order Number:	Z5021

This report has been revised and directly supersedes 787578 in its entirety.

We received 11 samples on Monday December 15, 2025 and 11 of these samples were scheduled for analysis which was completed on Friday January 02, 2026. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 251215-14 **Report Number:** 787714 **Superseded Report:** 787578
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32630691	GW11		0.00 - 0.00	10/12/2025
32630701	GW12		0.00 - 0.00	10/12/2025
32630706	GW13		0.00 - 0.00	10/12/2025
32630710	GW14		0.00 - 0.00	10/12/2025
32630714	GW15		0.00 - 0.00	10/12/2025
32630719	GW16		0.00 - 0.00	10/12/2025
32630723	GW17		0.00 - 0.00	10/12/2025
32630727	GW18		0.00 - 0.00	10/12/2025
32630731	GW19		0.00 - 0.00	10/12/2025
32630695	GWFB		0.00 - 0.00	10/12/2025
32630698	GWTB		0.00 - 0.00	10/12/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-14 **Report Number:** 787714 **Superseded Report:** 787578
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			32630691	GW11		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630701	GW12		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630706	GW13		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630710	GW14		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630714	GW15		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630719	GW16		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630723	GW17		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630727	GW18		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630731	GW19		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630695	GWFB		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630698	GWTB		0.00 - 0.00	50ml digitube (ALE001)	GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 11	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 251215-14 **Report Number:** 787714 **Superseded Report:** 787578
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11	GW12	GW13	GW14	GW15	GW16
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251215-14	251215-14	251215-14	251215-14	251215-14	251215-14
			Lab Sample No.(s)	32630691	32630701	32630706	32630710	32630714	32630719
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		232 #	12.5 #	<10 #	104 #	14.1 #	44.2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<10 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		637 #	46.3 #	<5 #	521 #	11 #	134 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<6 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		21.5 #	<1 #	<5 #	3.12 #	1.17 #	3.7 #
PFHxA (307-24-4)	<1 ng/l	TM434		428 #	13 #	<5 #	218 #	6.88 #	60.8 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		118 #	5.64 #	<5 #	58.3 #	5.29 #	30 #
PFPeS (2706-91-4)	<1 ng/l	TM434		7.21 #	<1 #	<5 #	<2 #	<1 #	2.49 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<10 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		245 #	4.06 #	<5 #	3.33 #	<2 #	14.9 #
FBSA (30334-69-1)	<1 ng/l	TM434		5.97 #	<1 #	<5 #	<2 #	<1 #	1.88 #
PFOA (335-67-1)	<0.65 ng/l	TM434		60.5 #	2.73 #	<3.25 #	5.33 #	5.66 #	9.94 #
PFHxS (355-46-4)	<1 ng/l	TM434		39.8 #	3.41 #	<5 #	5.75 #	3.1 #	15 #
PFNA (375-95-1)	<1 ng/l	TM434		10.3 #	<1 #	<5 #	<2 #	<1 #	1.26 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		51.4 #	<2 #	<10 #	<4 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<10 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		2.06 #	<2 #	<10 #	<4 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<10 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		47.6 #	3.69 #	<3.25 #	1.59 #	1.15 #	1.12 #
Branched PFOS	<0.65 ng/l	TM434		13.1 #	3.01 #	<3.25 #	1.35 #	1.36 #	8.63 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		13.7 #	<1 #	<5 #	<2 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-14 **Report Number:** 787714 **Superseded Report:** 787578

Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW11	GW12	GW13	GW14	GW15	GW16
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251215-14	251215-14	251215-14	251215-14	251215-14	251215-14
			Lab Sample No.(s)	32630691	32630701	32630706	32630710	32630714	32630719
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<6 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<4 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<50 #	<20 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<50 #	<20 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		1450	<10	<50	<20	<10	<10
Total PFOS	<0.65 ng/l	TM434		60.7 #	6.7 #	<3.25 #	2.94 #	2.51 #	9.75 #
Total PFAS DWI 47	<90 ng/l	TM434		1930	94.3	<450	922	<90	328
PFecHS (646-83-3)	<1 ng/l	TM434		1.66 #	<1 #	<5 #	<2 #	<1 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<2 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-14 **Report Number:** 787714 **Superseded Report:** 787578
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW17	GW18	GW19	GWFB	GWTB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
			Sample Time	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251215-14	251215-14	251215-14	251215-14	251215-14
			Lab Sample No.(s)	32630723	32630727	32630731	32630695	32630698
			AGS Reference					
PFBA (375-22-4)	<2 ng/l	TM434		15.4 #	<20 #	<20 #	<2 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<25 #	<50 #	<50 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		9.16 #	<10 #	<10 #	<1 #	<1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<15 #	<30 #	<30 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		7.41 #	<10 #	<10 #	<1 #	<1 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		11.1 #	<10 #	<10 #	<1 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<25 #	<50 #	<50 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<18 #	<10 #	<10 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		9.2 #	<6.5 #	<6.5 #	<0.65 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<25 #	<50 #	<50 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<25 #	<50 #	<50 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<6.5 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<6.5 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251215-14 **Report Number:** 787714 **Superseded Report:** 787578
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GW17	GW18	GW19	GWFB	GWTB
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
			Sample Time	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251215-14	251215-14	251215-14	251215-14	251215-14
			Lab Sample No.(s)	32630723	32630727	32630731	32630695	32630698
			AGS Reference					
PFDoA (307-55-1)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<15 #	<30 #	<30 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<10 #	<20 #	<20 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<50 #	<100 #	<100 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<50 #	<100 #	<100 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<50	<100	<100	<10	<10
Total PFOS	<0.65 ng/l	TM434		<3.25 #	<6.5 #	<6.5 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<450	<900	<900	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<5 #	<10 #	<10 #	<1 #	<1 #

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS in Liquid matrices

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 251215-14 **Report Number:** 787714 **Superseded Report:** 787578
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32630691	32630701	32630706	32630710	32630714	32630719	32630723	32630727	32630731	32630695
Customer Sample Ref.	GW11	GW12	GW13	GW14	GW15	GW16	GW17	GW18	GW19	GWFB
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	24-Dec-2025	24-Dec-2025	24-Dec-2025	02-Jan-2026	30-Dec-2025	24-Dec-2025	29-Dec-2025	24-Dec-2025	24-Dec-2025	29-Dec-2025

Lab Sample No(s)	32630698
Customer Sample Ref.	GWTB
AGS Ref.	
Depth	0.00 - 0.00
Type	Ground Water
PFAS Liquids (Full Suite)	29-Dec-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	02 January 2026
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	251215-15
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	787707
Order Number:	Z5021

We received 8 samples on Monday December 15, 2025 and 8 of these samples were scheduled for analysis which was completed on Friday January 02, 2026. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 251215-15 **Report Number:** 787707 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32630768	BH1		0.00 - 0.00	11/12/2025
32630764	BH5		0.00 - 0.00	11/12/2025
32630758	BH6		0.00 - 0.00	11/12/2025
32630752	BH7		0.00 - 0.00	11/12/2025
32630739	BH9		0.00 - 0.00	11/12/2025
32630743	BH8D		0.00 - 0.00	11/12/2025
32630747	BH8S		0.00 - 0.00	11/12/2025
32630772	DUP3		0.00 - 0.00	11/12/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-15 **Report Number:** 787707 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			32630768	BH1		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630764	BH5		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630758	BH6		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630752	BH7		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630739	BH9		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630743	BH8D		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630747	BH8S		0.00 - 0.00	50ml digitube (ALE001)	GW
			32630772	DUP3		0.00 - 0.00	50ml digitube (ALE001)	GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 251215-15 **Report Number:** 787707 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1	BH5	BH6	BH7	BH9	BH8D
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251215-15	251215-15	251215-15	251215-15	251215-15	251215-15
			Lab Sample No.(s)	32630768	32630764	32630758	32630752	32630739	32630743
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		9.12 #	<20 #	<10 #	22.5 #	<20 #	<20 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<50 #	<25 #	<25 #	<50 #	<50 #
PFPA (2706-90-3)	<1 ng/l	TM434		4.42 #	<10 #	<5 #	24 #	<10 #	<10 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<30 #	<15 #	<15 #	<30 #	<30 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFHxA (307-24-4)	<1 ng/l	TM434		4.08 #	<10 #	<5 #	<5 #	<10 #	<10 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFHpA (375-85-9)	<1 ng/l	TM434		1.6 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<50 #	<25 #	<25 #	<50 #	<50 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<3 4 #	<10 #	<5 #	<5 #	<10 #	<10 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFOA (335-67-1)	<0.65 ng/l	TM434		2.62 #	<6.5 #	<3.25 #	<3.25 #	<6.5 #	<6.5 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		5.05 #	<50 #	<25 #	<25 #	<50 #	<50 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<50 #	<25 #	<25 #	<50 #	<50 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<6.5 #	<3.25 #	<3.25 #	<6.5 #	<6.5 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<6.5 #	<3.25 #	<3.25 #	<6.5 #	<6.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		2.16 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-15 **Report Number:** 787707 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1	BH5	BH6	BH7	BH9	BH8D
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251215-15	251215-15	251215-15	251215-15	251215-15	251215-15
			Lab Sample No.(s)	32630768	32630764	32630758	32630752	32630739	32630743
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<30 #	<15 #	<15 #	<30 #	<30 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<20 #	<10 #	<10 #	<20 #	<20 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<100 #	<50 #	<50 #	<100 #	<100 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<100 #	<50 #	<50 #	<100 #	<100 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<100	<50	<50	<100	<100
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<6.5 #	<3.25 #	<3.25 #	<6.5 #	<6.5 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<900	<450	<450	<900	<900
PFecHS (646-83-3)	<1 ng/l	TM434		1.87 #	<10 #	<5 #	5.73 #	<10 #	22.8 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<10 #	<5 #	<5 #	<10 #	<10 #

CERTIFICATE OF ANALYSIS

SDG: 251215-15 **Report Number:** 787707 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8S	DUP3				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	11/12/2025	11/12/2025				
			Sample Time	.	.				
			Date Received	15/12/2025	15/12/2025				
			SDG Ref	251215-15	251215-15				
			Lab Sample No.(s)	32630747	32630772				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<4 #	<20 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<2 #	<10 #				
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<10 #	<50 #				
PFPA (2706-90-3)	<1 ng/l	TM434		<2 #	<10 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<2 #	<10 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<2 #	<10 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<6 #	<30 #				
PFBS (375-73-5)	<1 ng/l	TM434		2.52 #	<10 #				
PFHxA (307-24-4)	<1 ng/l	TM434		<2 #	<10 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<4 #	<20 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<2 #	<10 #				
PFHpA (375-85-9)	<1 ng/l	TM434		<2 #	<10 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<2 #	<10 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<10 #	<50 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<2 #	<10 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<2 #	<10 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<2 #	<10 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		<1.3 #	<6.5 #				
PFHxS (355-46-4)	<1 ng/l	TM434		2.69 #	<10 #				
PFNA (375-95-1)	<1 ng/l	TM434		<2 #	<10 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<2 #	<10 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<4 #	<20 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<10 #	<50 #				
PFDA (335-76-2)	<2 ng/l	TM434		<4 #	<20 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<4 #	<20 #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<10 #	<50 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<1.3 #	<6.5 #				
Branched PFOS	<0.65 ng/l	TM434		<1.3 #	<6.5 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<4 #	<20 #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<4 #	<20 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<2 #	<10 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<2 #	<10 #				
FHxSA (41997-13-1)	<1 ng/l	TM434		<2 #	<10 #				

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-15 **Report Number:** 787707 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH8S	DUP3				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Ground Water (GW)	Ground Water (GW)				
			Date Sampled	11/12/2025	11/12/2025				
			Sample Time	.	.				
			Date Received	15/12/2025	15/12/2025				
			SDG Ref	251215-15	251215-15				
			Lab Sample No.(s)	32630747	32630772				
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<4 #	<20 #				
PFDS (335-77-3)	<2 ng/l	TM434		<4 #	<20 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434		<6 #	<30 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<4 #	<20 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434		<4 #	<20 #				
PFTeA (376-06-7)	<1 ng/l	TM434		<2 #	<10 #				
PFOSA (754-91-6)	<2 ng/l	TM434		<4 #	<20 #				
PFDoS (79780-39-5)	<2 ng/l	TM434		<4 #	<20 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434		<2 #	<10 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434		<20 #	<100 #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<2 #	<10 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434		<20 #	<100 #				
PFODA (16517-11-6)	<1 ng/l	TM434		<2 #	<10 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<2 #	<10 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<20	<100				
Total PFOS	<0.65 ng/l	TM434		<1.3 #	<6.5 #				
Total PFAS DWI 47	<90 ng/l	TM434		<180	<900				
PFecHS (646-83-3)	<1 ng/l	TM434		18.7 #	<10 #				
PFTrDS (791563-89-8)	<1 ng/l	TM434		<2 #	<10 #				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS in Liquid matrices

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 251215-15 **Report Number:** 787707 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32630768	32630764	32630758	32630752	32630739	32630743	32630747	32630772
Customer Sample Ref.	BH1	BH5	BH6	BH7	BH9	BH8D	BH8S	DUP3
AGS Ref.								
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
PFAS Liquids (Full Suite)	29-Dec-2025	29-Dec-2025	29-Dec-2025	24-Dec-2025	29-Dec-2025	29-Dec-2025	29-Dec-2025	02-Jan-2026

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests.
We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	24 December 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	251215-13
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	787193
Order Number:	Z5021

We received 1 sample on Monday December 15, 2025 and 1 of these samples were scheduled for analysis which was completed on Wednesday December 24, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 251215-13 **Report Number:** 787193 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32630651	Gardeners Well		0.00 - 0.00	10/12/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-13 **Report Number:** 787193 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

	Lab Sample No(s)		32630651
	Customer Sample Reference		Gardeners Well
	AGS Reference		
	Depth (m)		0.00 - 0.00
	Container		50ml digitube (ALE001)
	Sample Type		GW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 1	X

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-13 **Report Number:** 787193 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4+§@	Sample deviation (see appendix)

Customer Sample Ref.	Gardeners Well
Depth (m)	0.00 - 0.00
Sample Type	Ground Water (GW)
Date Sampled	10/12/2025
Sample Time	.
Date Received	15/12/2025
SDG Ref	251215-13
Lab Sample No.(s)	32630651
AGS Reference	

Component	LOD/Units	Method	
PFBA (375-22-4)	<2 ng/l	TM434	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434	<1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434	<3 #
PFBS (375-73-5)	<1 ng/l	TM434	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434	<1 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434	<1 #
PFNA (375-95-1)	<1 ng/l	TM434	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434	<5 #
PFDA (335-76-2)	<2 ng/l	TM434	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434	<0.65 #
Branched PFOS	<0.65 ng/l	TM434	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-13 **Report Number:** 787193 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend		Customer Sample Ref.	Gardeners Well
#	ISO17025 accredited.		
M	mCERTS accredited.		
aq	Aqueous / settled sample.		
diss.filt	Dissolved / filtered sample.		
tot.unfilt	Total / unfiltered sample.		
*	Subcontracted - refer to subcontractor report for accreditation status.		
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		
***	6:2 FTAB (see appendix)		
1-4+§@	Sample deviation (see appendix)		
		Depth (m)	0.00 - 0.00
		Sample Type	Ground Water (GW)
		Date Sampled	10/12/2025
		Sample Time	.
		Date Received	15/12/2025
		SDG Ref	251215-13
		Lab Sample No.(s)	32630651
		AGS Reference	

Component	LOD/Units	Method	
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10
Total PFOS	<0.65 ng/l	TM434	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434	<90
PFecHS (646-83-3)	<1 ng/l	TM434	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434	<1 #

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS in Liquid matrices

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

Test Completion Dates

Lab Sample No(s)	32630651	
Customer Sample Ref.	Gardeners Well	
AGS Ref.		
Depth	0.00 - 0.00	
Type	Ground Water	
PFAS Liquids (Full Suite)	24-Dec-2025	

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

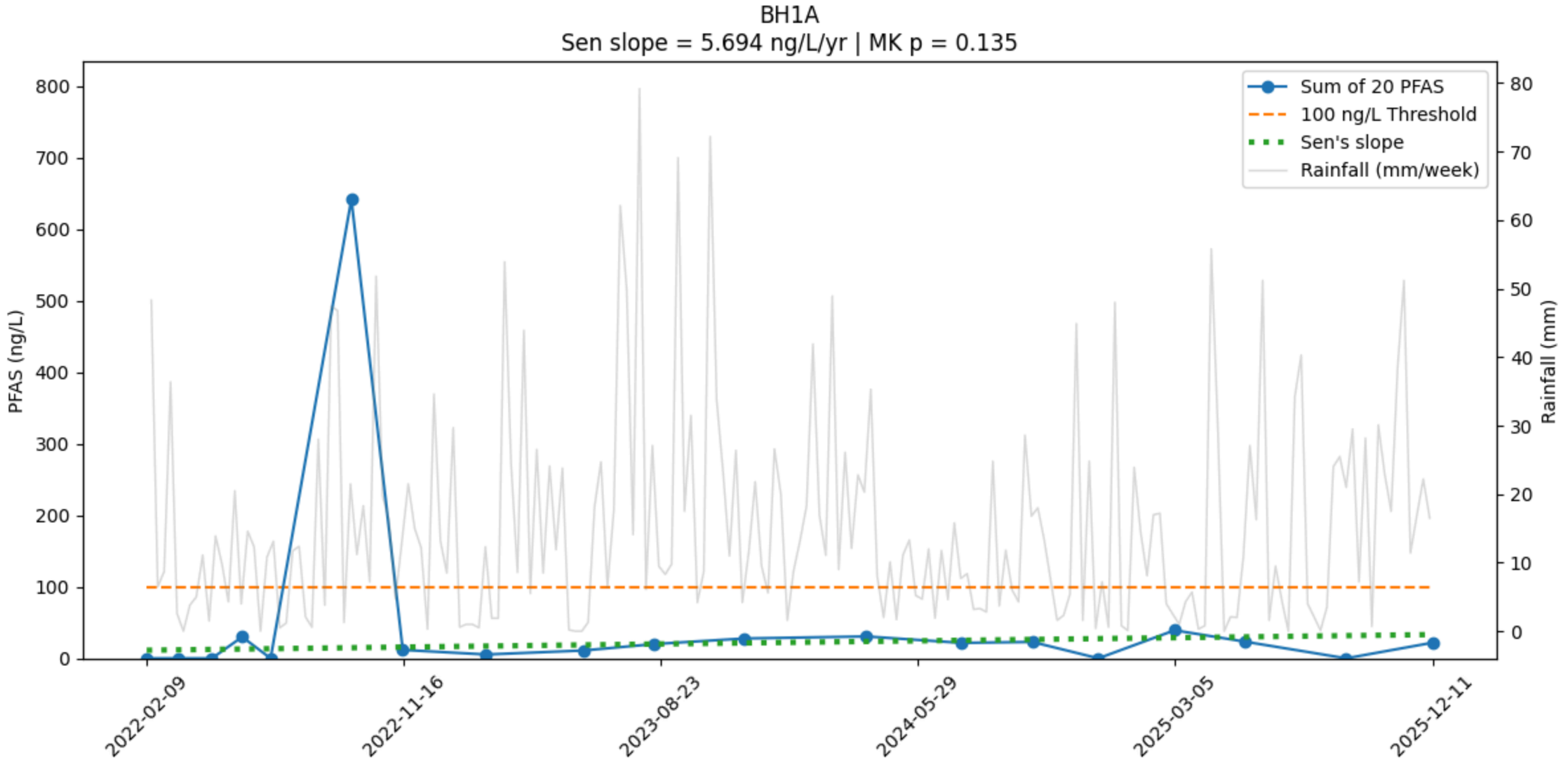
Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

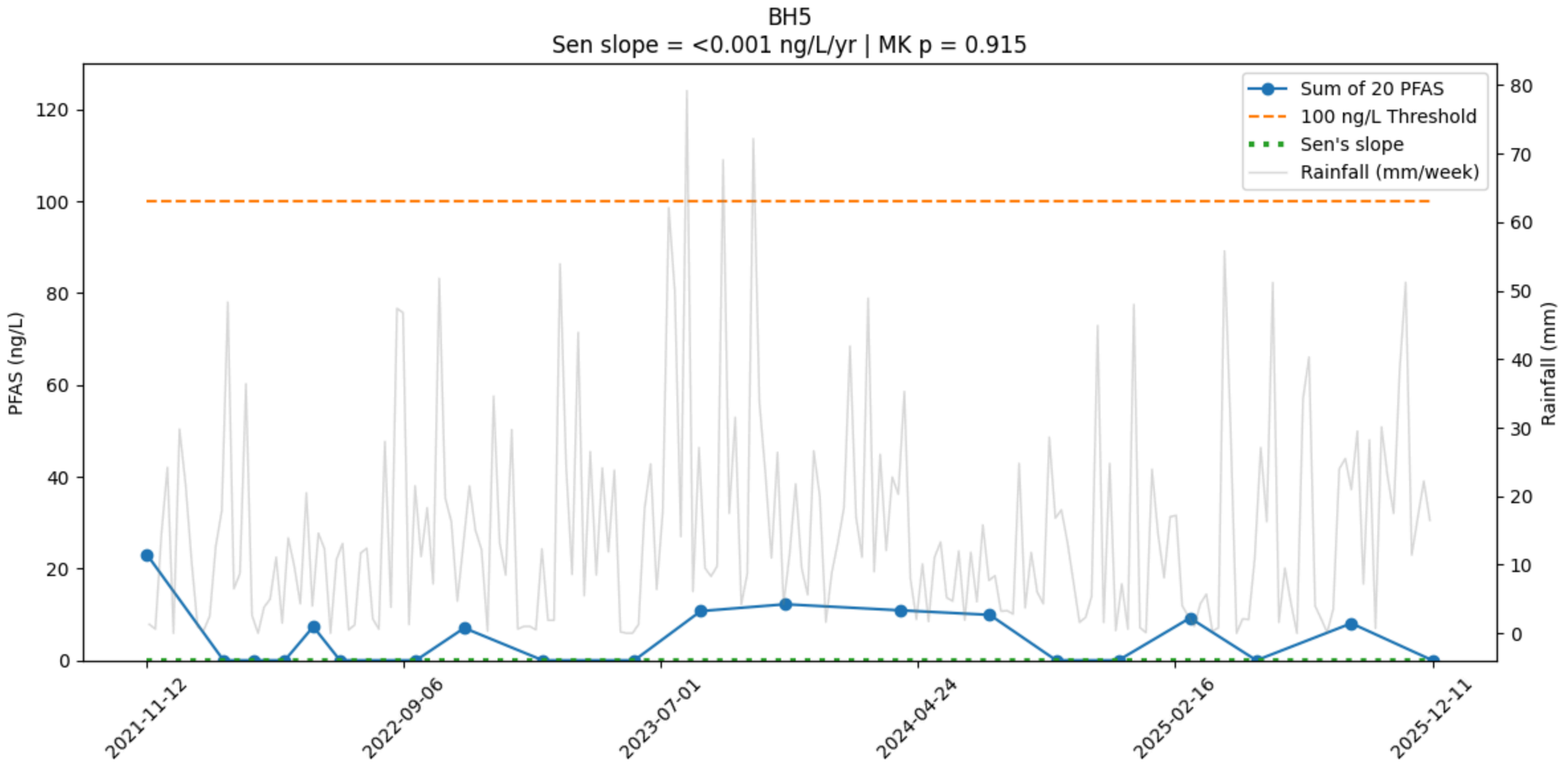
FEHILY TIMONEY

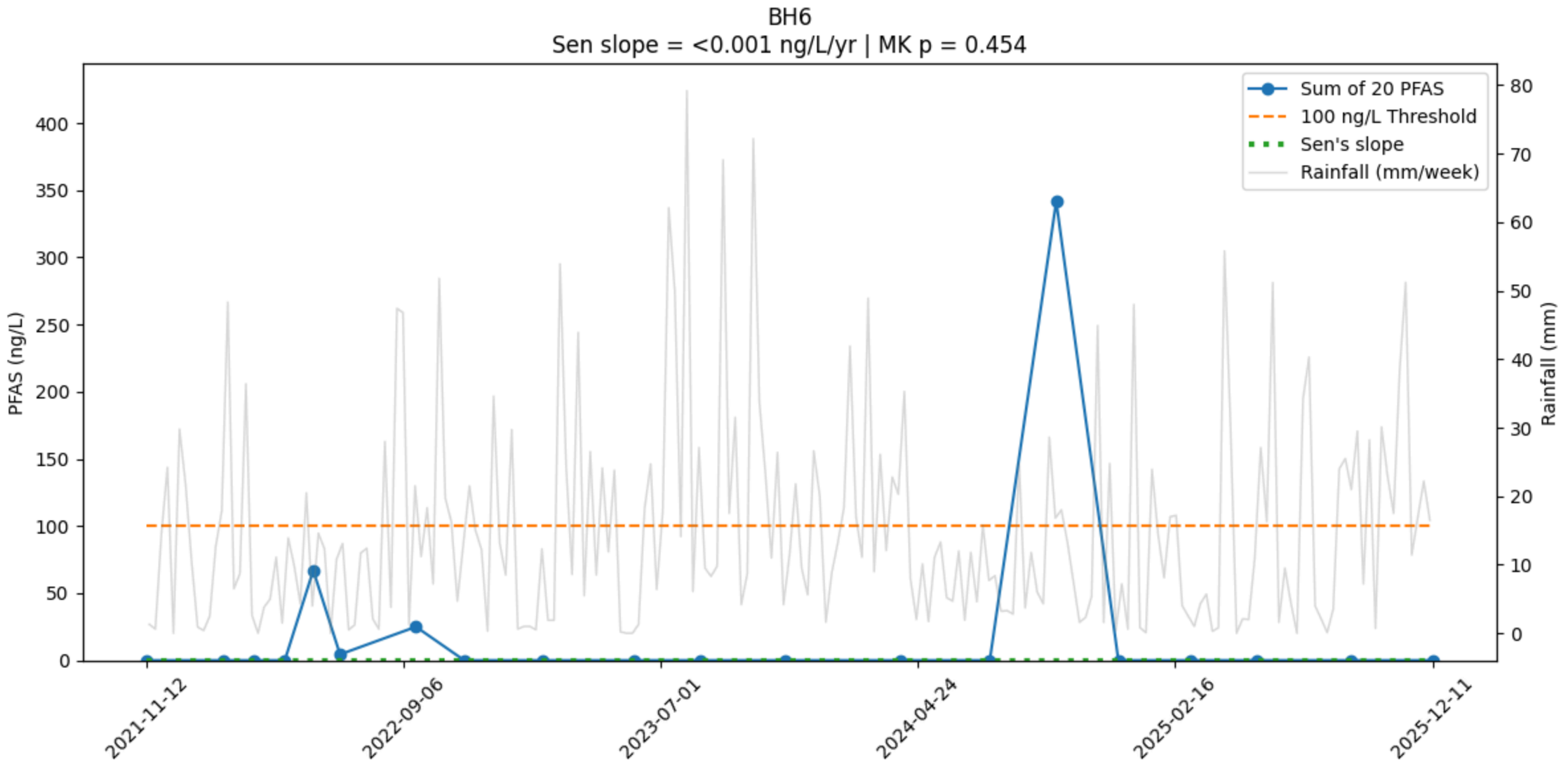
DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

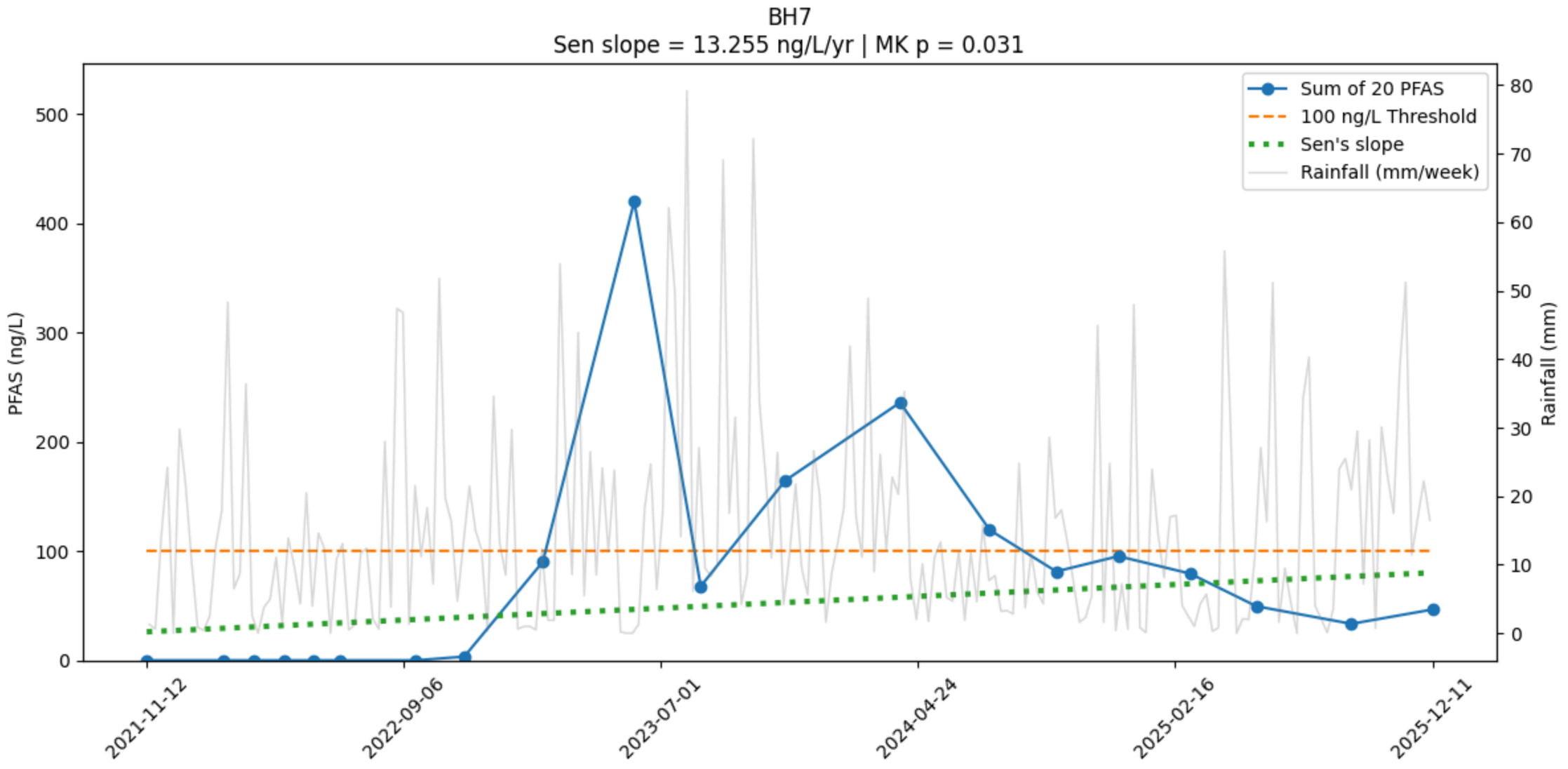
APPENDIX 5

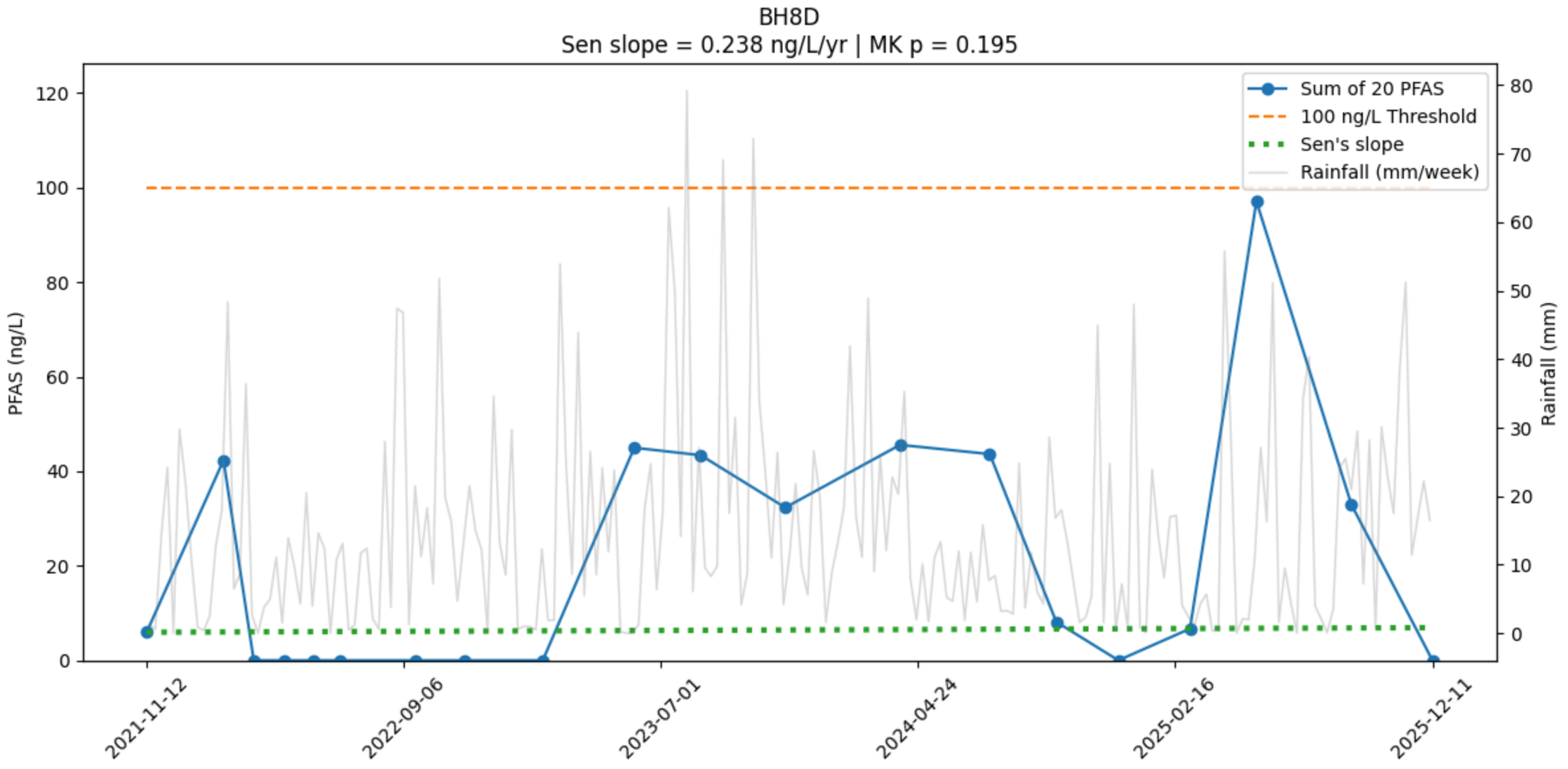
Groundwater Trends

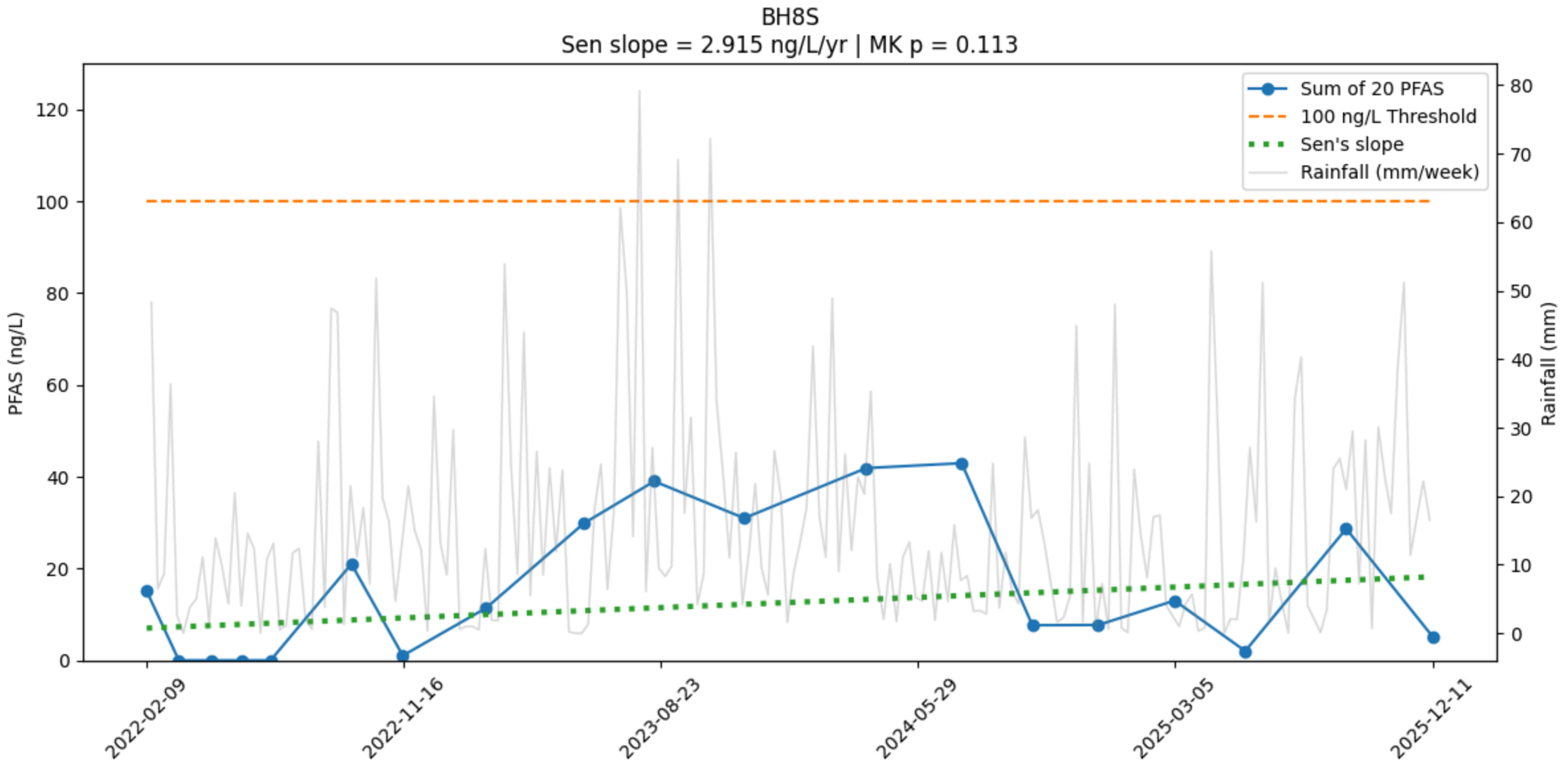

BH1A
Sen slope = 5.694 ng/L/yr | MK p = 0.135
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
100
200
300
400
500
600
700
800
0
10
20
30
40
50
60
70
80
2022-02-09
2022-11-16
2023-08-23
2024-05-29
2025-03-05
2025-12-11

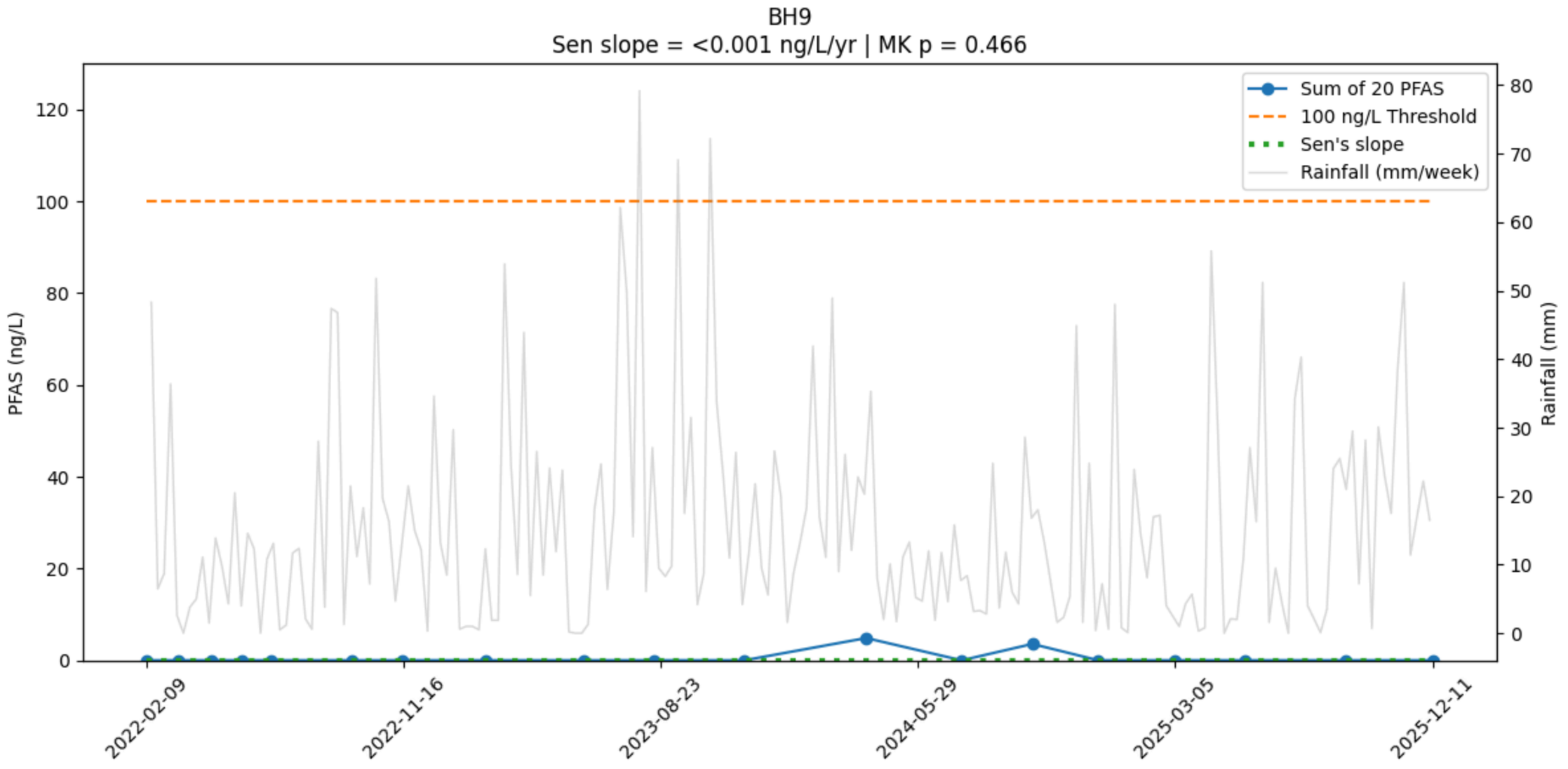

BH5
Sen slope = <0.001 ng/L/yr | MK p = 0.915
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2021-11-12
2022-09-06
2023-07-01
2024-04-24
2025-02-16
2025-12-11

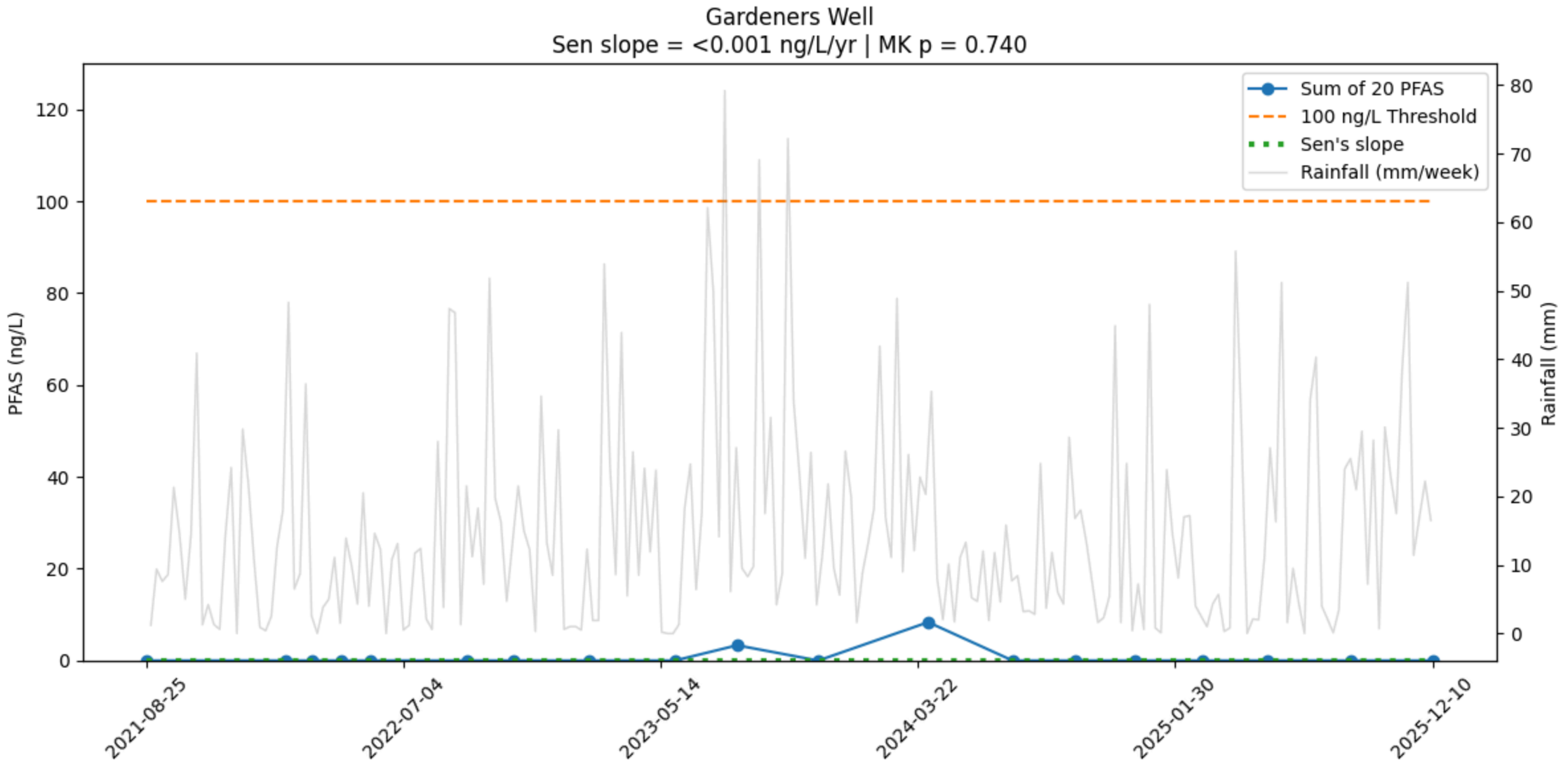

BH6
Sen slope = <0.001 ng/L/yr | MK p = 0.454
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
50
100
150
200
250
300
350
400
0
10
20
30
40
50
60
70
80
2021-11-12
2022-09-06
2023-07-01
2024-04-24
2025-02-16
2025-12-11

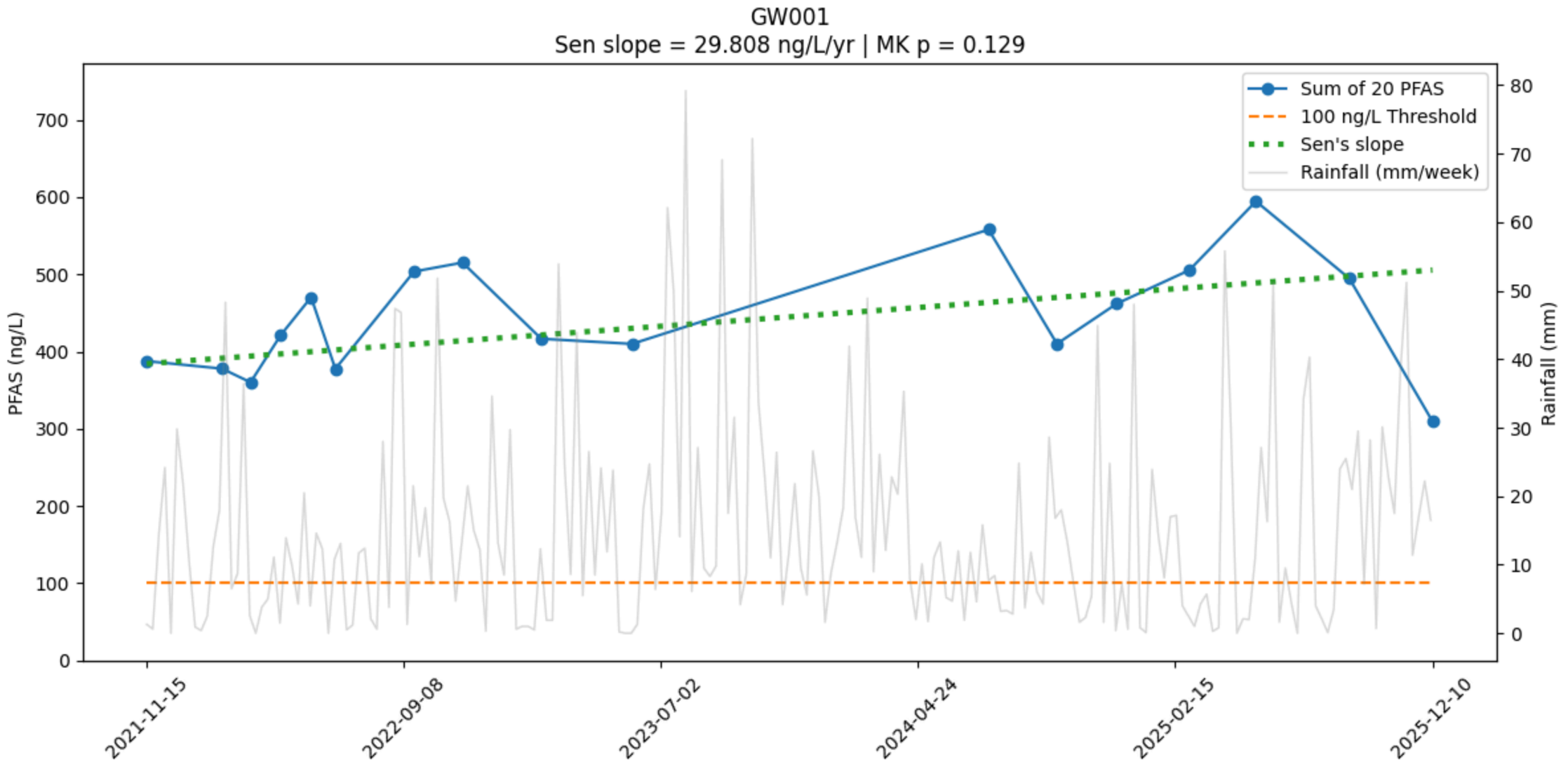

BH7
Sen slope = 13.255 ng/L/yr | MK p = 0.031
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
100
200
300
400
500
0
10
20
30
40
50
60
70
80
2021-11-12
2022-09-06
2023-07-01
2024-04-24
2025-02-16
2025-12-11

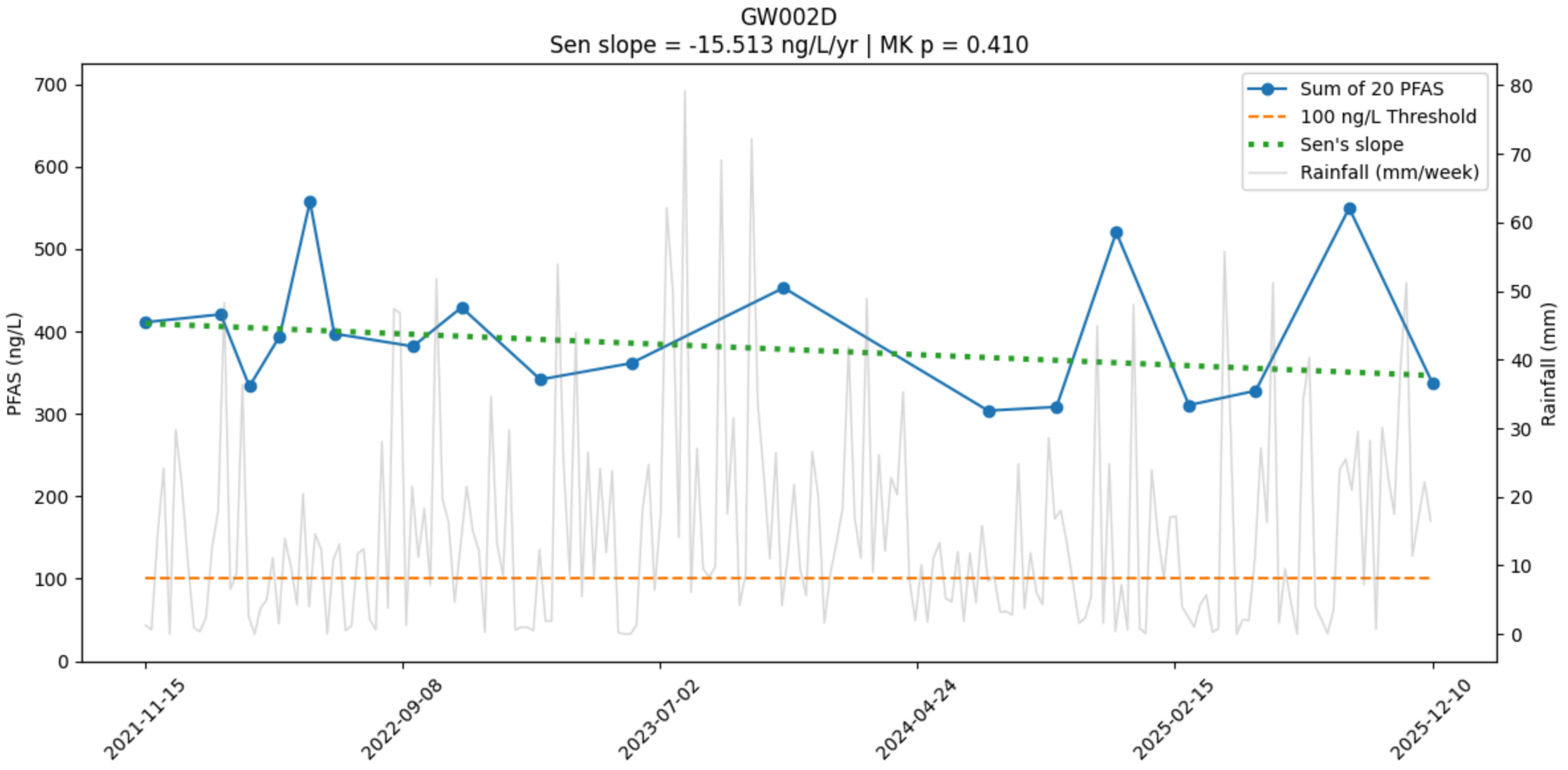

BH8D
Sen slope = 0.238 ng/L/yr | MK p = 0.195
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2021-11-12
2022-09-06
2023-07-01
2024-04-24
2025-02-16
2025-12-11

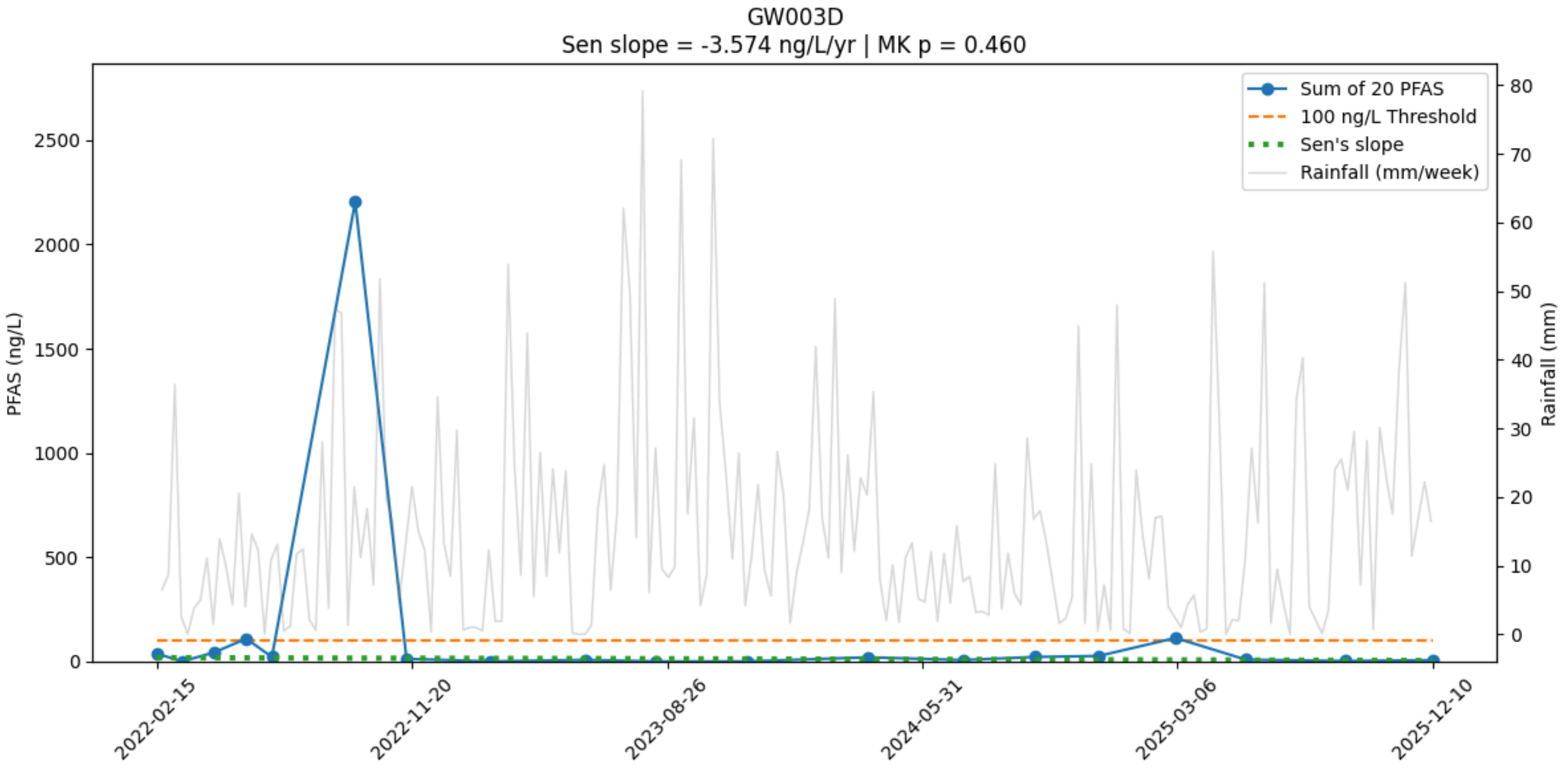

BH8S
Sen slope = 2.915 ng/L/yr | MK p = 0.113
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2022-02-09
2022-11-16
2023-08-23
2024-05-29
2025-03-05
2025-12-11

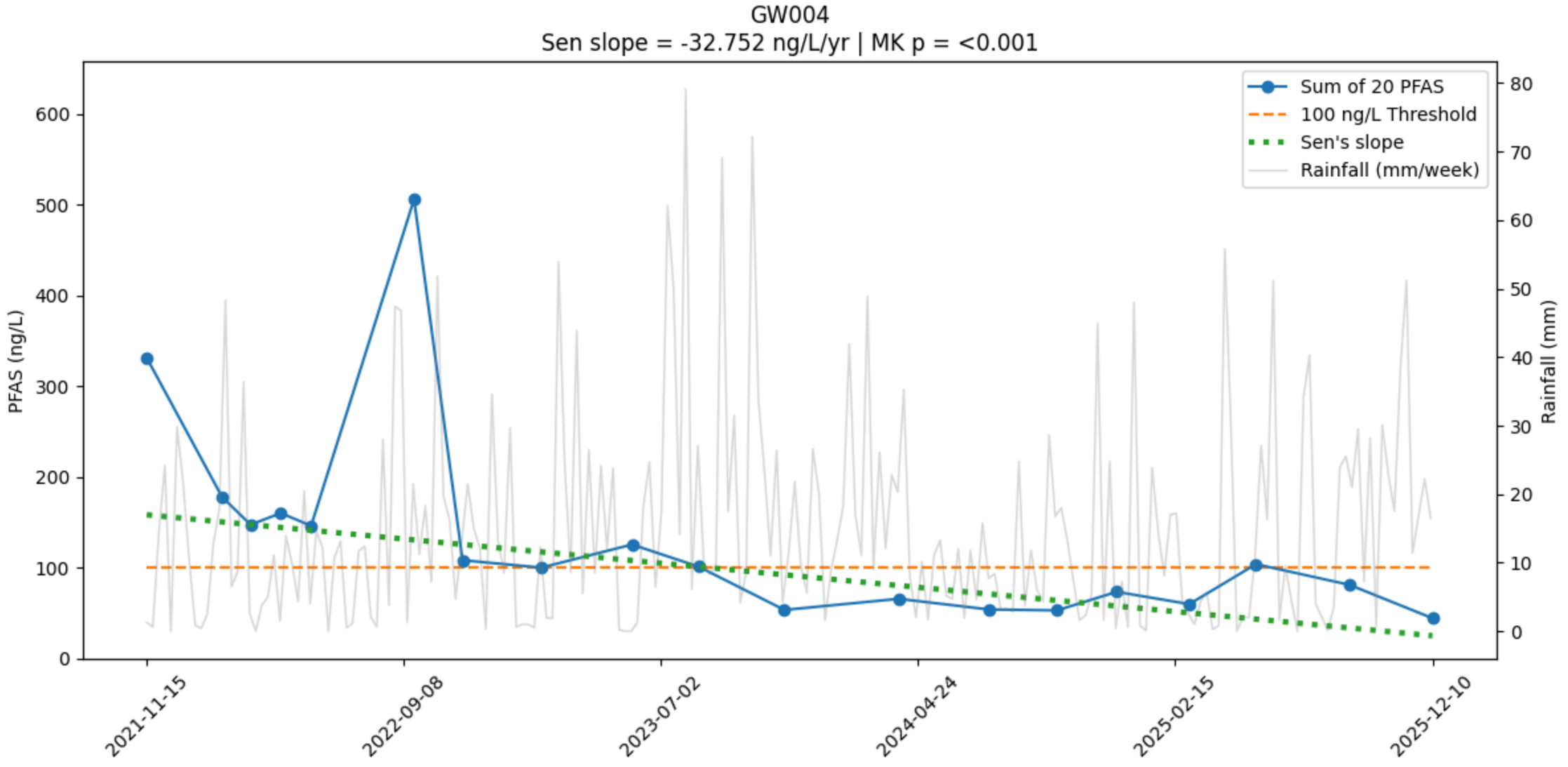

BH9
Sen slope = <0.001 ng/L/yr | MK p = 0.466
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2022-02-09
2022-11-16
2023-08-23
2024-05-29
2025-03-05
2025-12-11

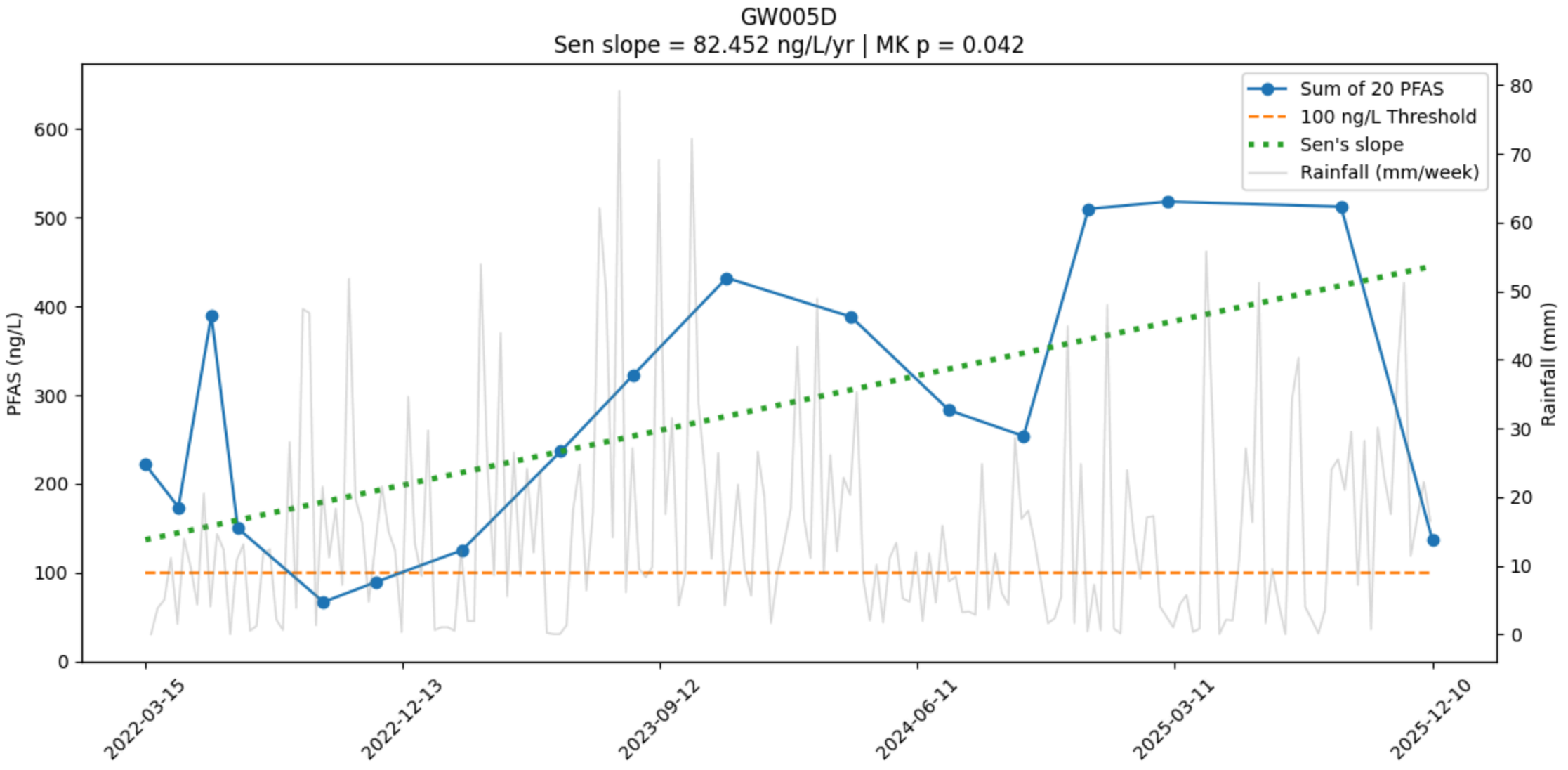

Gardeners Well
Sen slope = <0.001 ng/L/yr | MK p = 0.740
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2021-08-25
2022-07-04
2023-05-14
2024-03-22
2025-01-30
2025-12-10

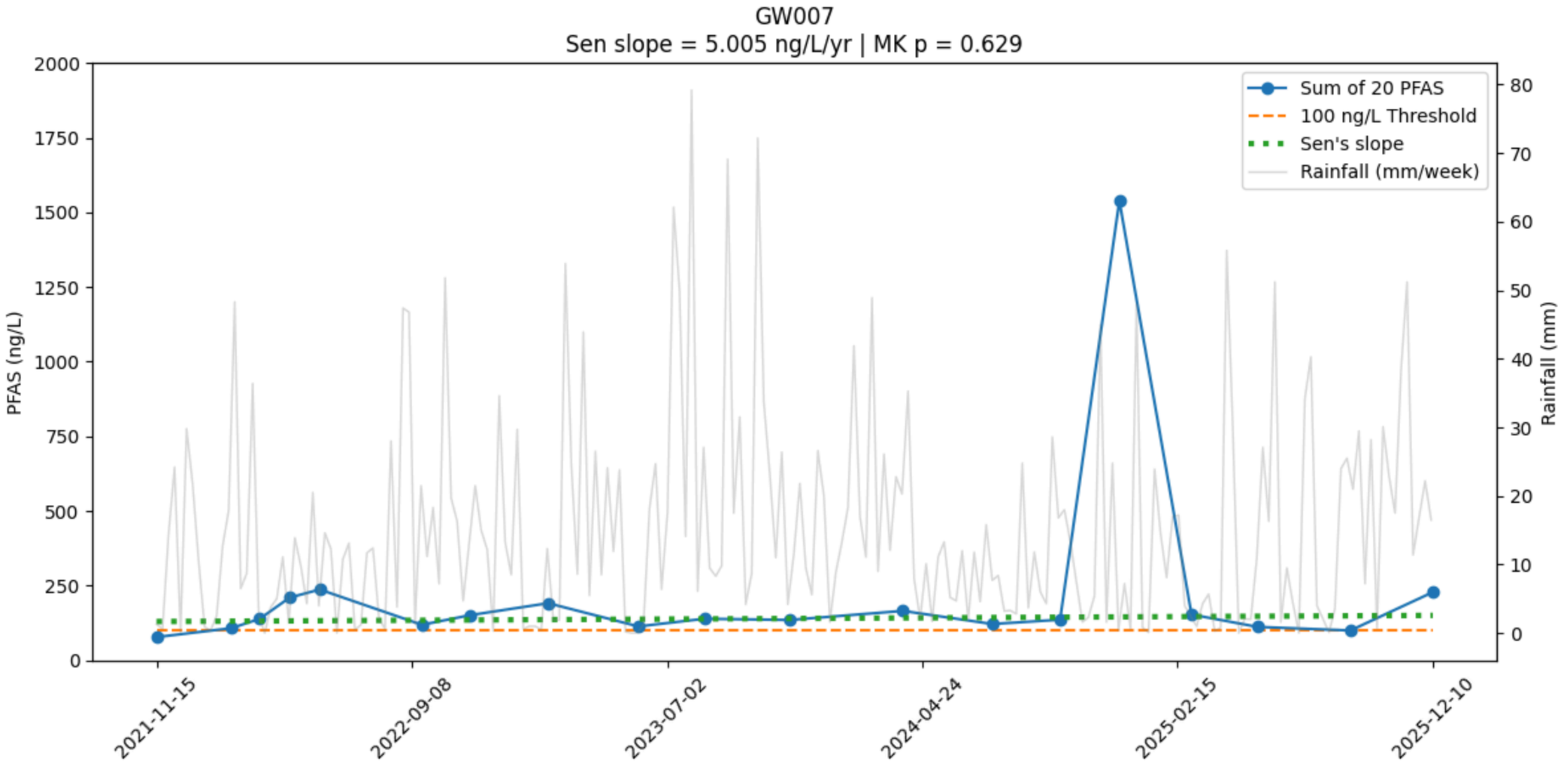

GW001
Sen slope = 29.808 ng/L/yr | MK p = 0.129
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
100
200
300
400
500
600
700
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-10

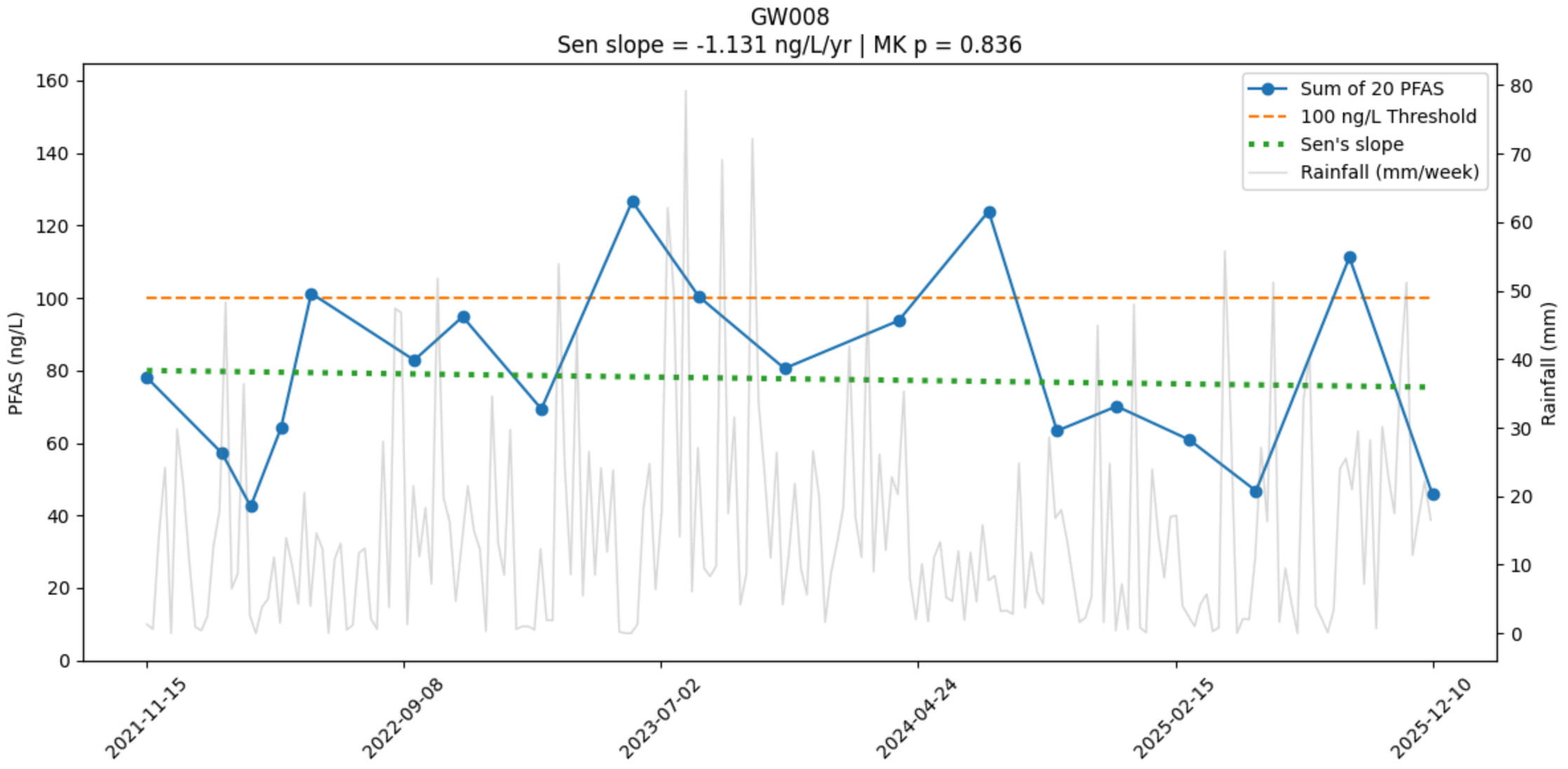

GW002D
Sen slope = -15.513 ng/L/yr | MK p = 0.410
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
100
200
300
400
500
600
700
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-10

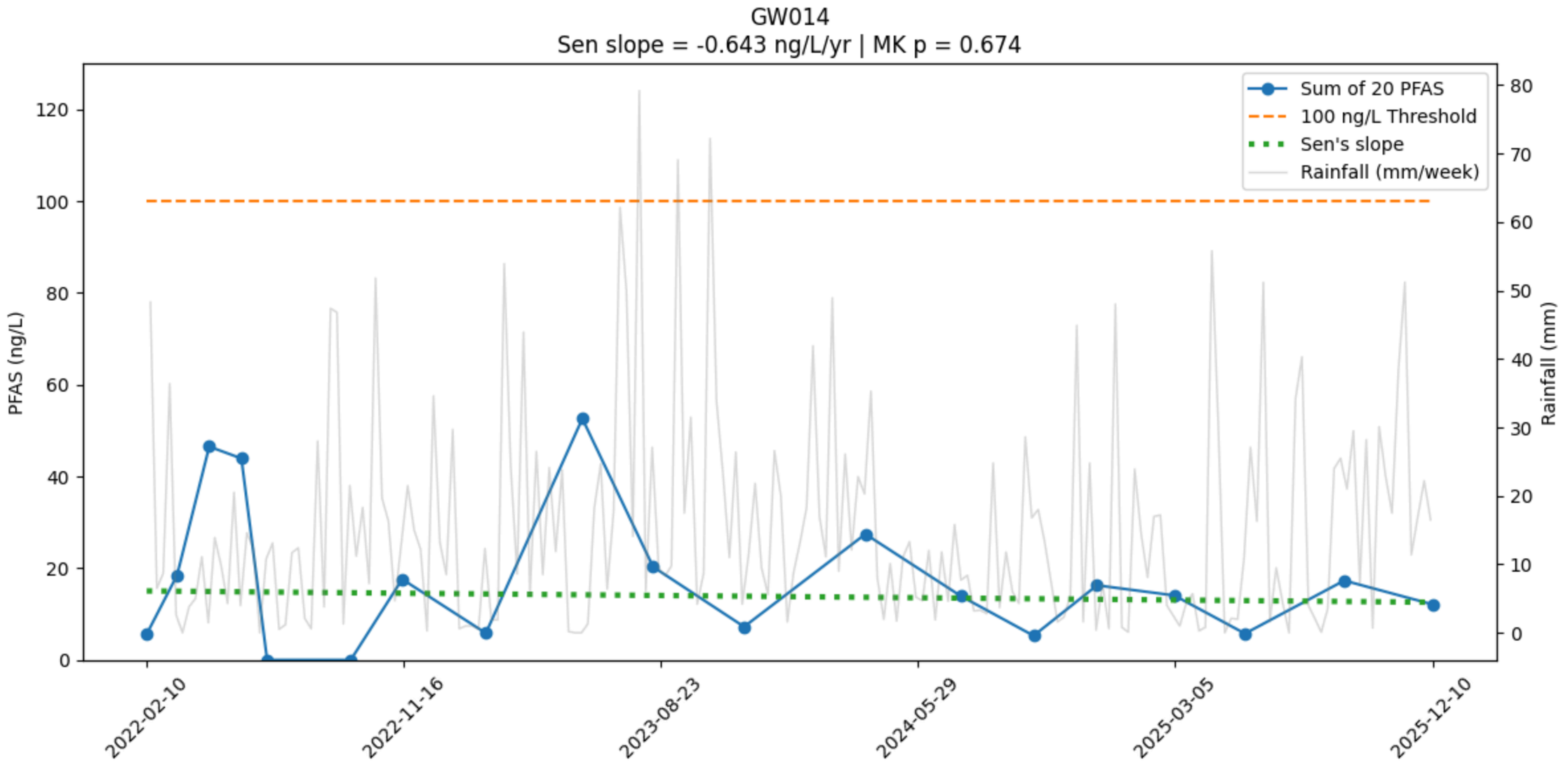

GW003D
Sen slope = -3.574 ng/L/yr | MK p = 0.460
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
500
1000
1500
2000
2500
0
10
20
30
40
50
60
70
80
2022-02-15
2022-11-20
2023-08-26
2024-05-31
2025-03-06
2025-12-10

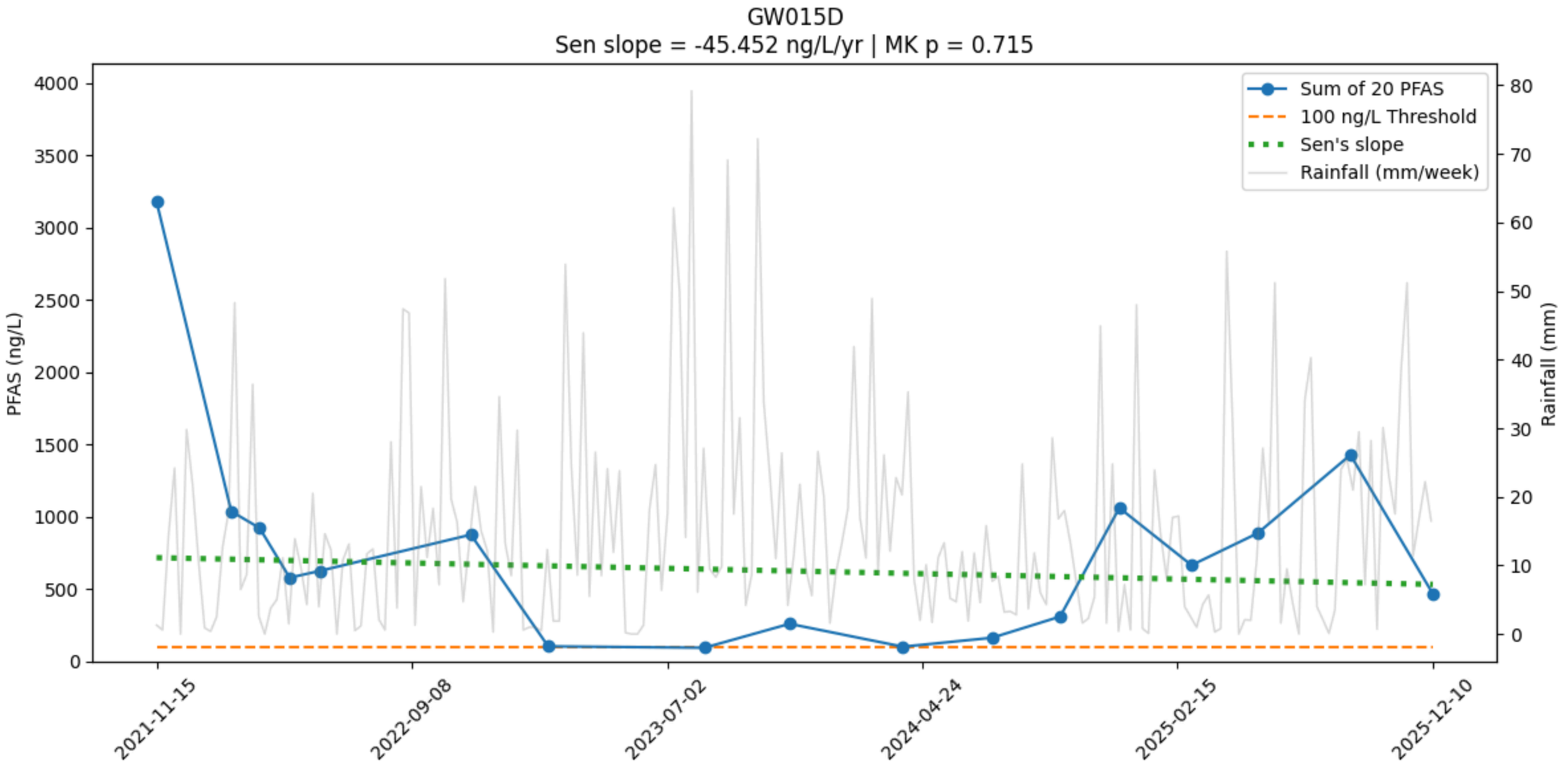

GW004
Sen slope = -32.752 ng/L/yr | MK p = <0.001
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
100
200
300
400
500
600
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-10

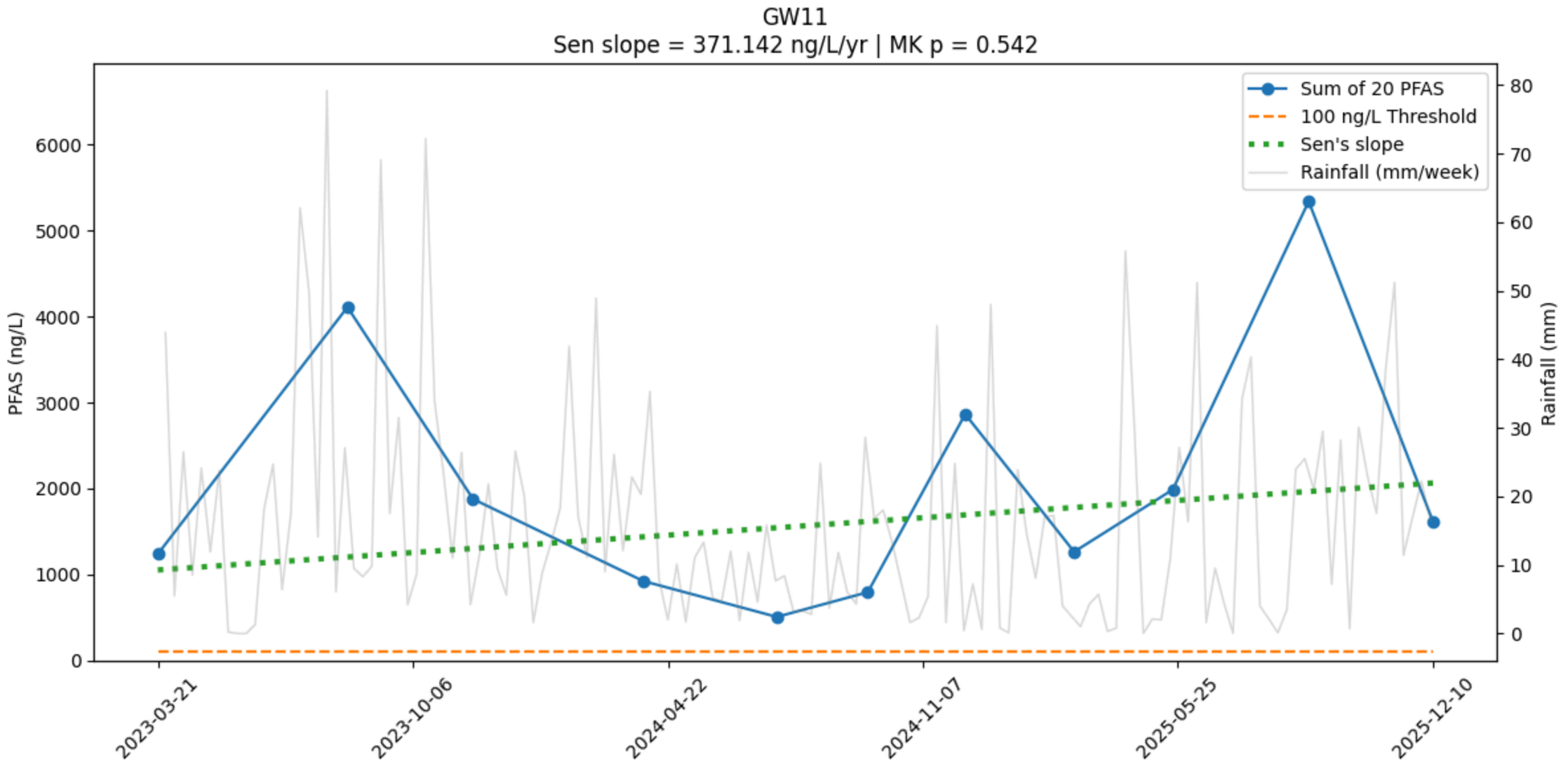

GW005D
Sen slope = 82.452 ng/L/yr | MK p = 0.042
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
100
200
300
400
500
600
0
10
20
30
40
50
60
70
80
2022-03-15
2022-12-13
2023-09-12
2024-06-11
2025-03-11
2025-12-10

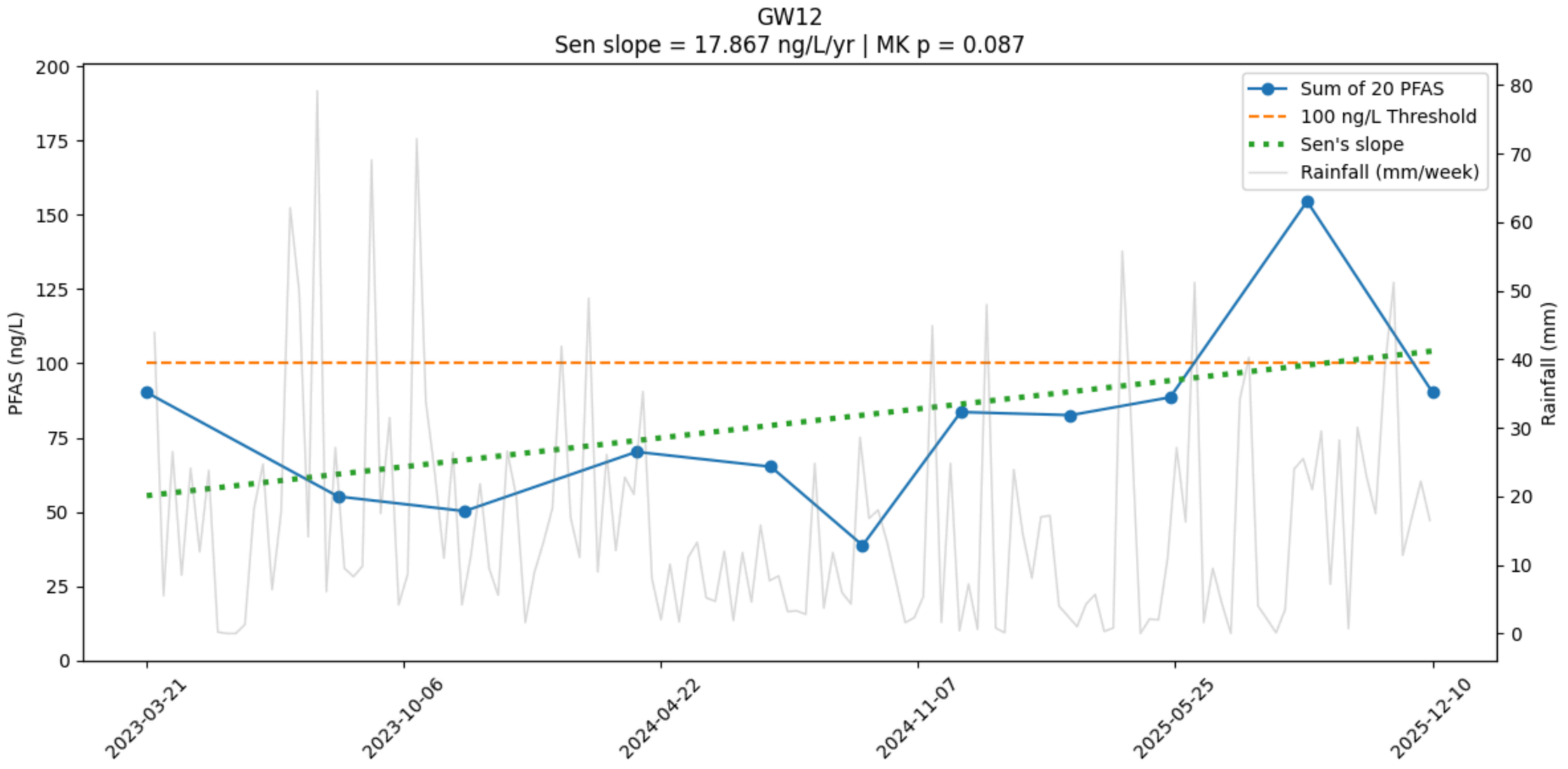

GW007
Sen slope = 5.005 ng/L/yr | MK p = 0.629
PFAS (ng/L)
Rainfall (mm)
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
2000
1750
1500
1250
1000
750
500
250
0
80
70
60
50
40
30
20
10
0
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-10

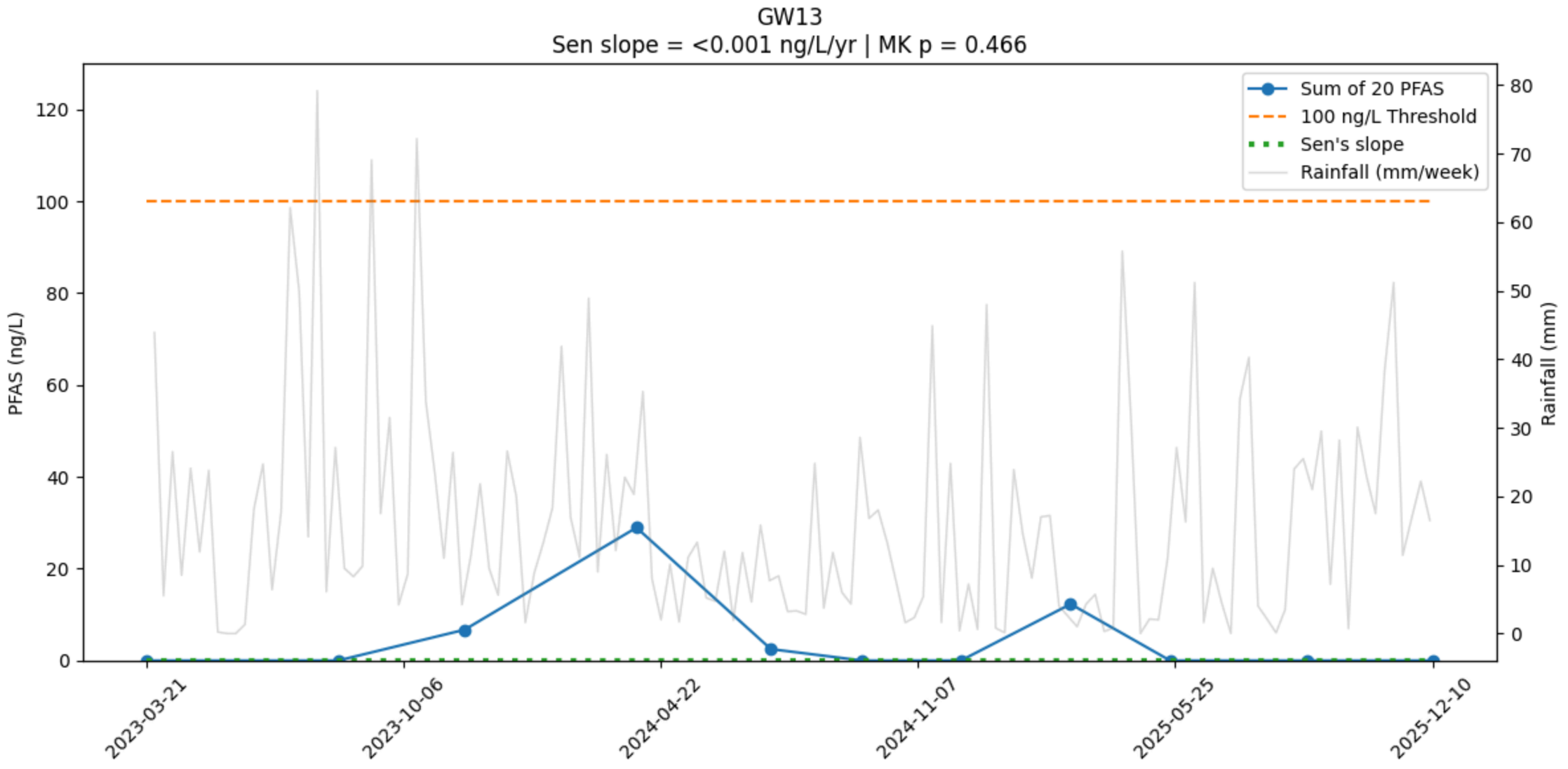

GW008
Sen slope = -1.131 ng/L/yr | MK p = 0.836
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
140
160
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-10

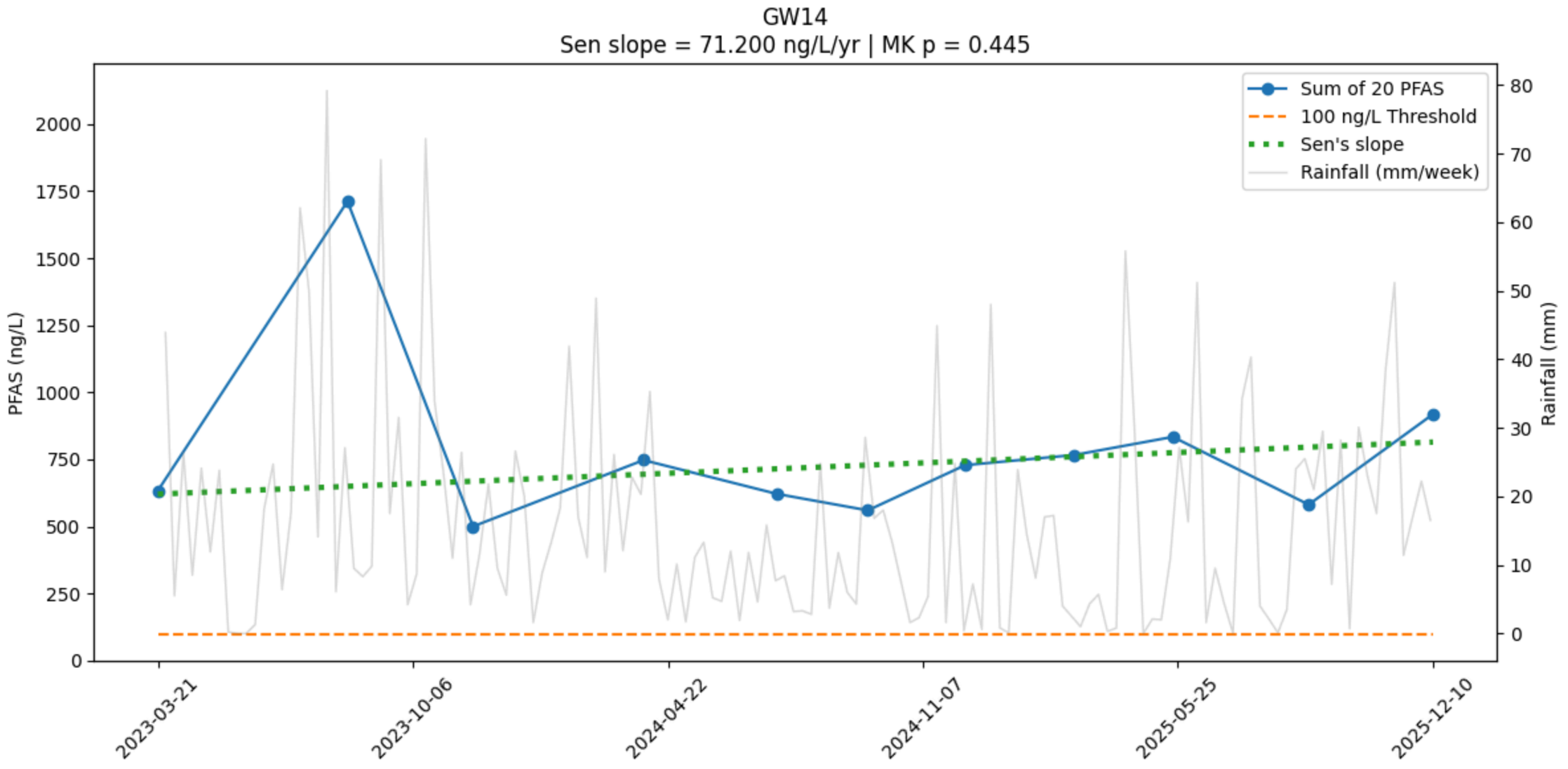

GW014
Sen slope = -0.643 ng/L/yr | MK p = 0.674
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2022-02-10
2022-11-16
2023-08-23
2024-05-29
2025-03-05
2025-12-10

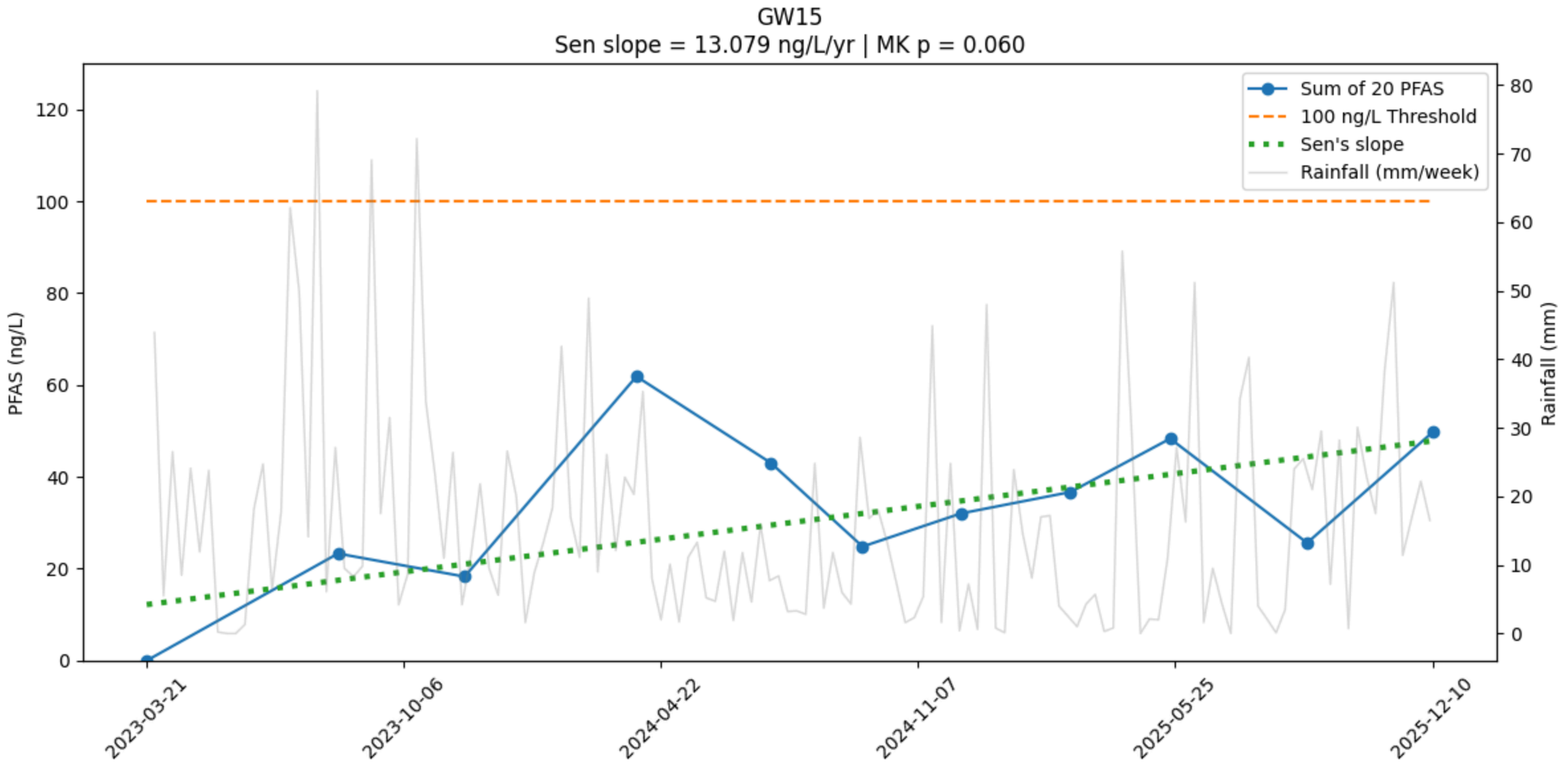

GW015D
Sen slope = -45.452 ng/L/yr | MK p = 0.715
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
500
1000
1500
2000
2500
3000
3500
4000
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-10

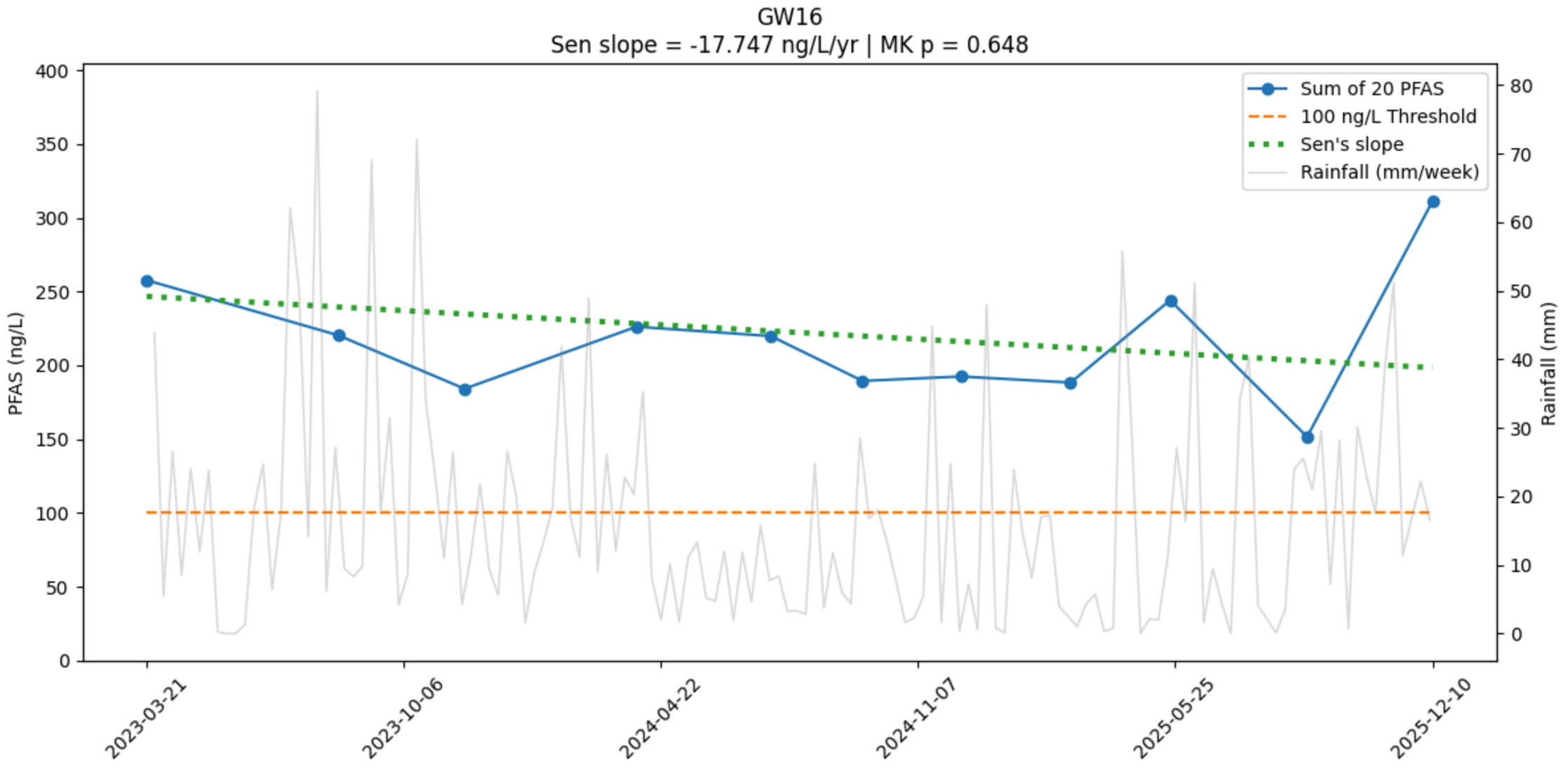

GW11
Sen slope = 371.142 ng/L/yr | MK p = 0.542
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
1000
2000
3000
4000
5000
6000
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10

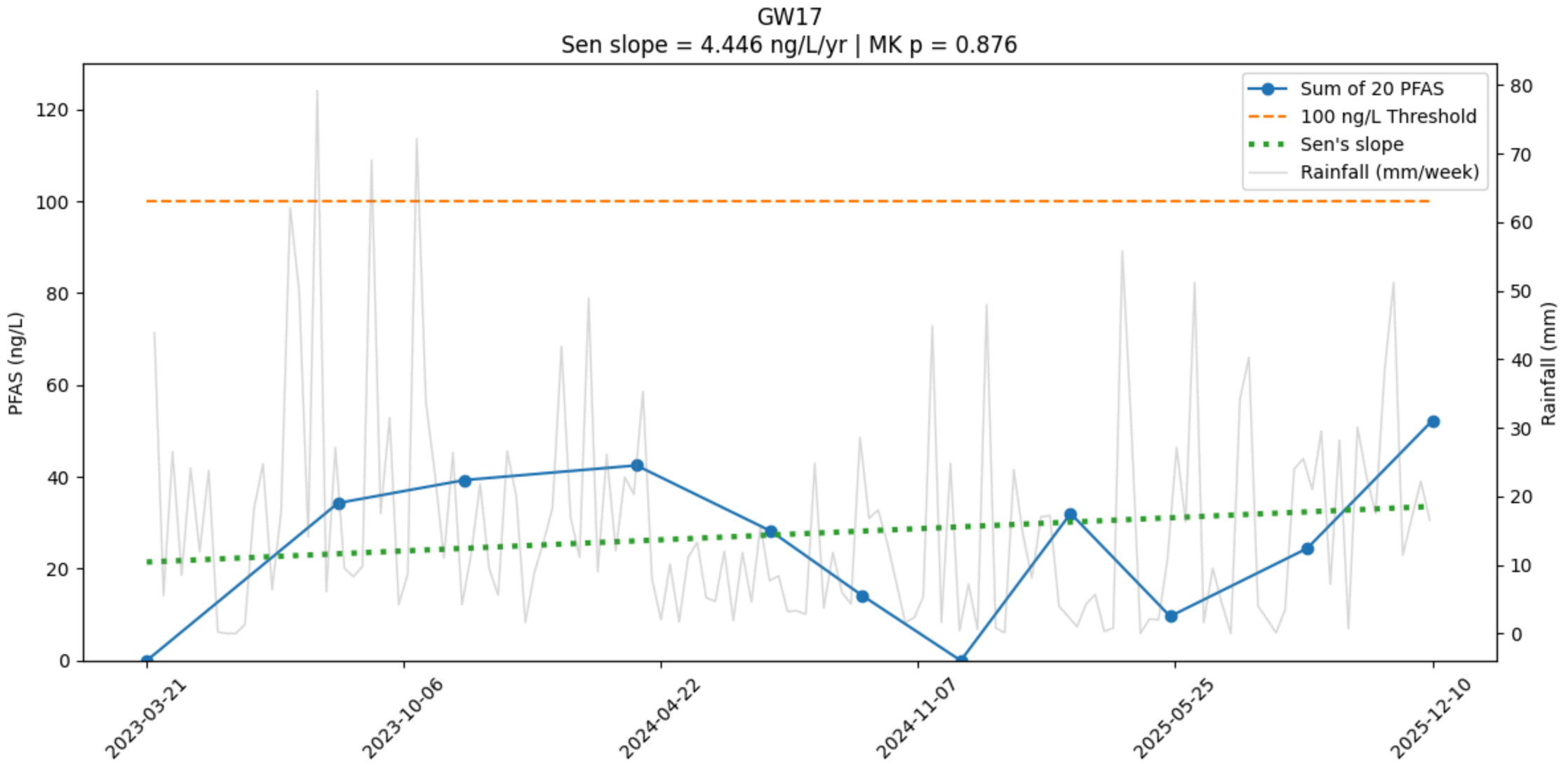

GW12
Sen slope = 17.867 ng/L/yr | MK p = 0.087
PFAS (ng/L)
Rainfall (mm)
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
0
25
50
75
100
125
150
175
200
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10

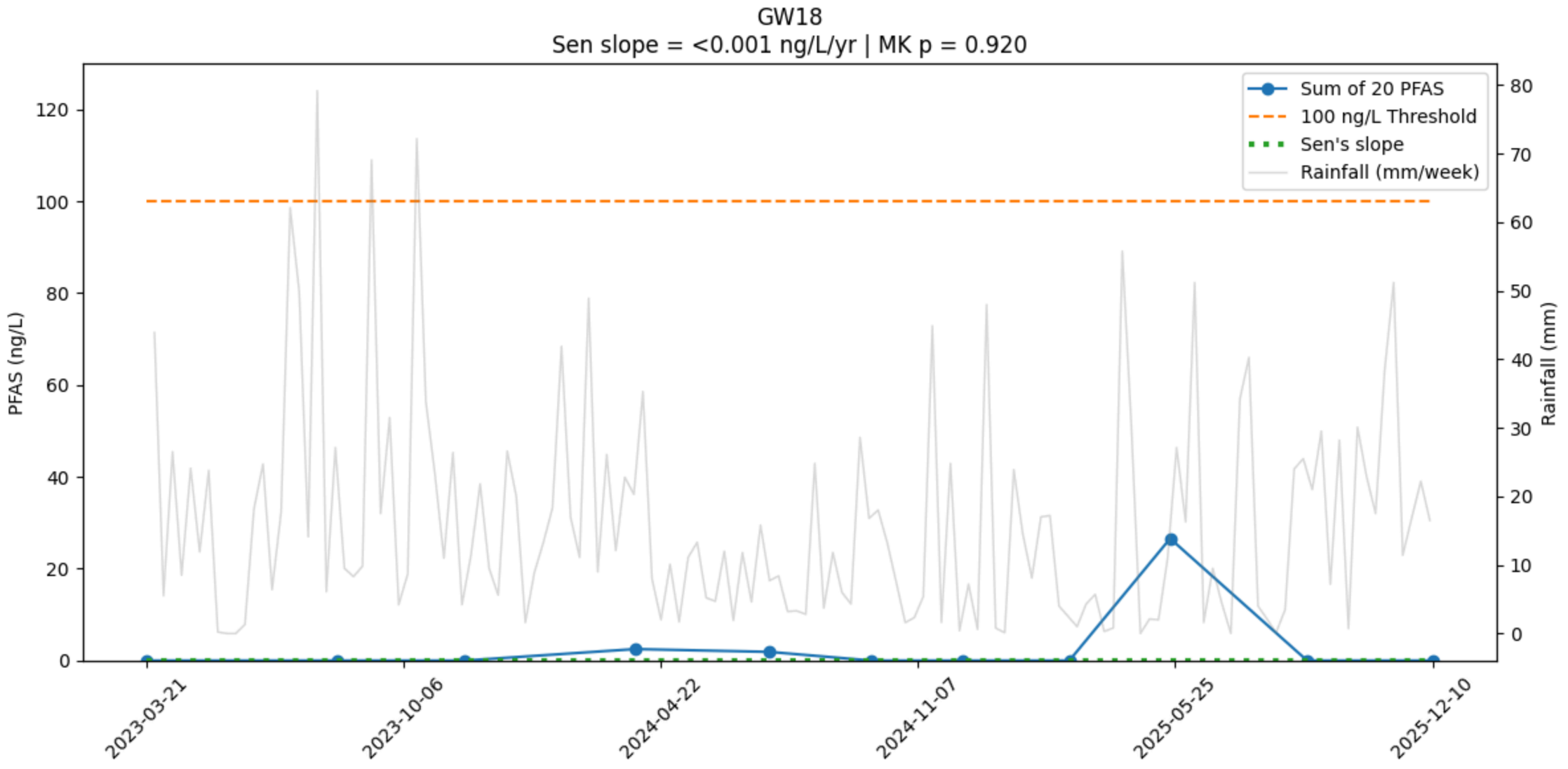

GW13
Sen slope = <0.001 ng/L/yr | MK p = 0.466
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10

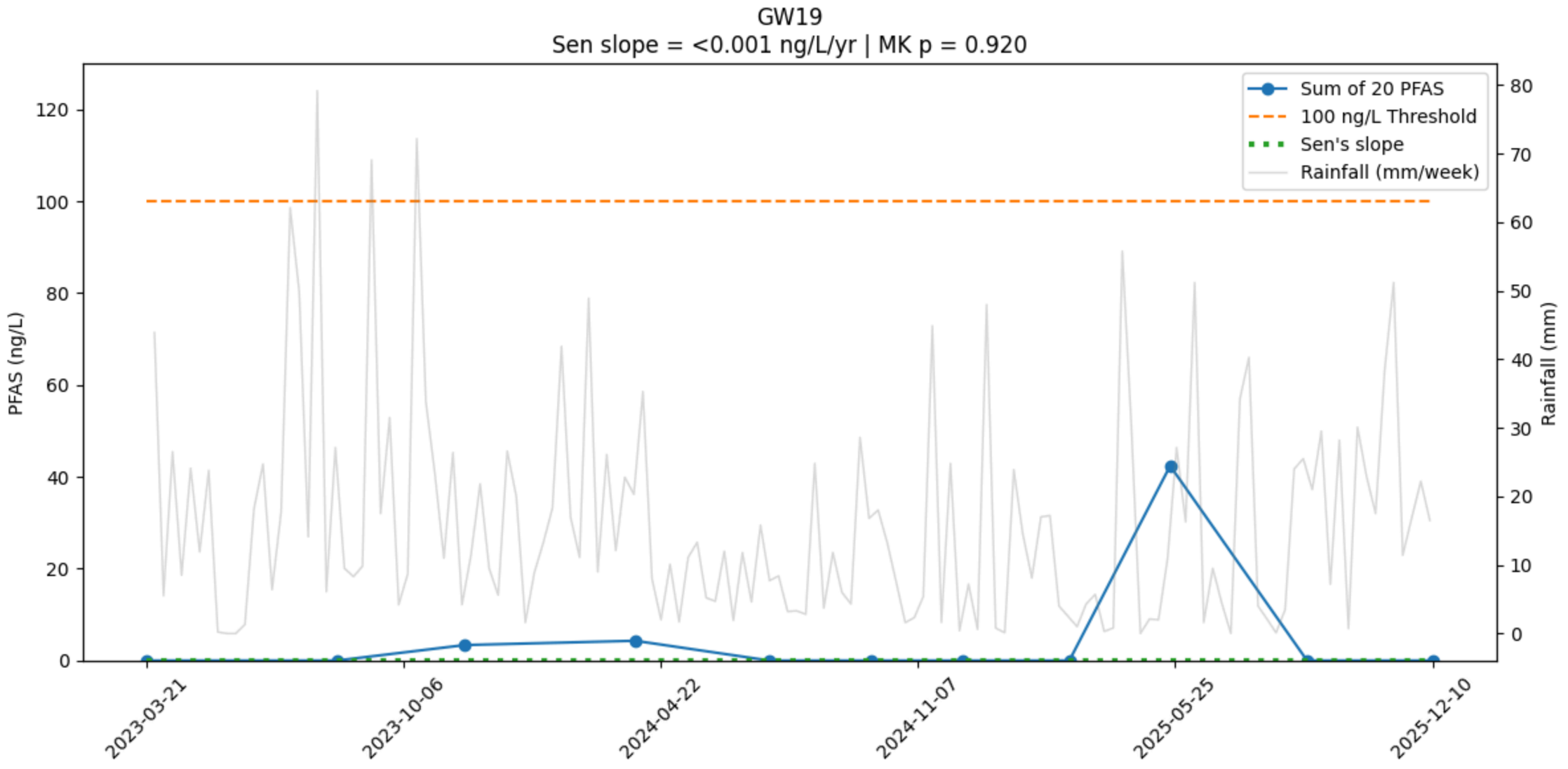

GW14
Sen slope = 71.200 ng/L/yr | MK p = 0.445
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
250
500
750
1000
1250
1500
1750
2000
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10

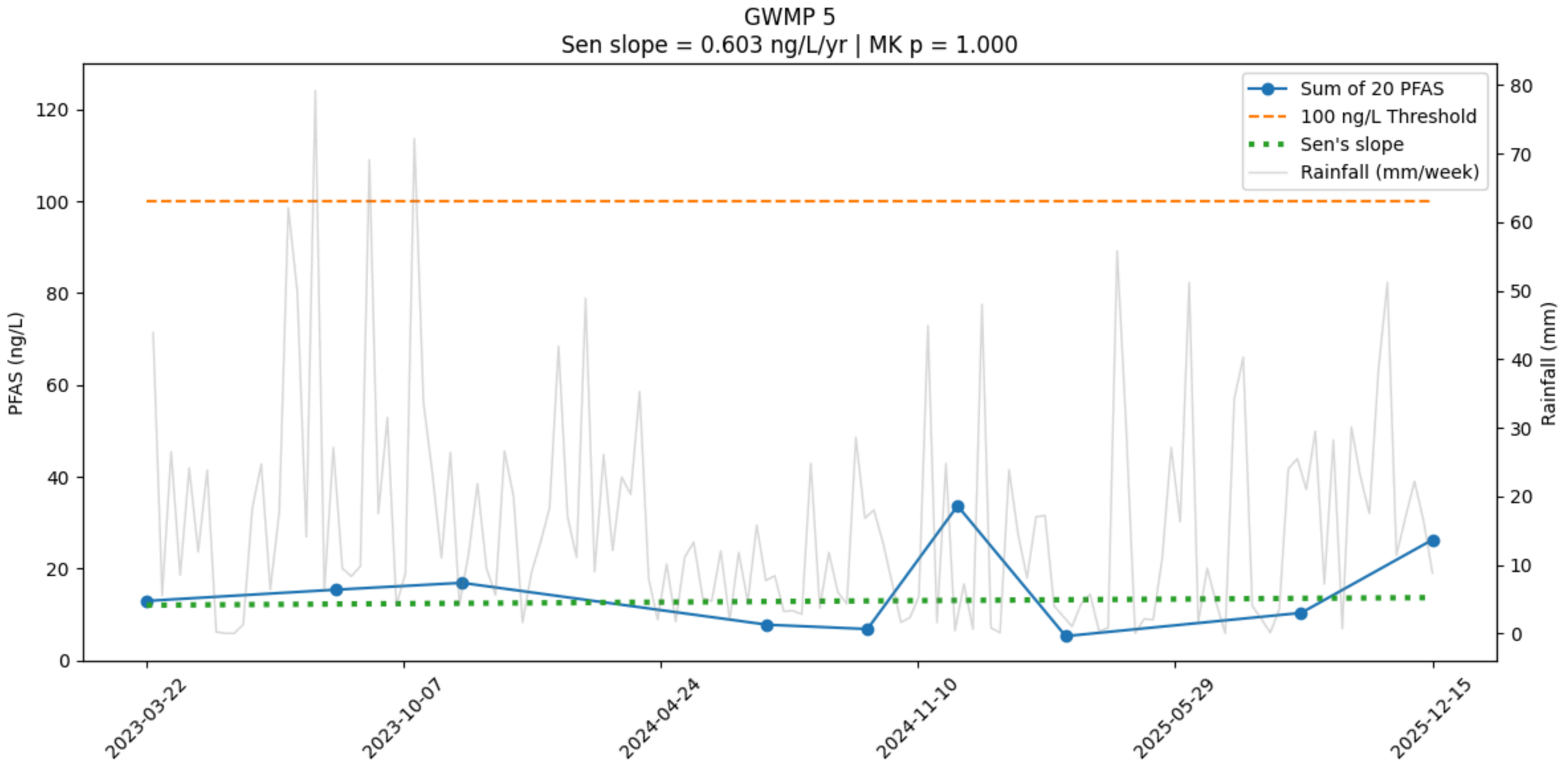

GW15
Sen slope = 13.079 ng/L/yr | MK p = 0.060
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10


GW16
Sen slope = -17.747 ng/L/yr | MK p = 0.648
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
50
100
150
200
250
300
350
400
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10


GW17
Sen slope = 4.446 ng/L/yr | MK p = 0.876
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10


GW18
Sen slope = <0.001 ng/L/yr | MK p = 0.920
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10


GW19
Sen slope = <0.001 ng/L/yr | MK p = 0.920
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-10


GWMP 5
Sen slope = 0.603 ng/L/yr | MK p = 1.000
Sum of 20 PFAS
100 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFAS (ng/L)
Rainfall (mm)
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-24
2024-11-10
2025-05-29
2025-12-15

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 6

Groundwater Spearman's Rank Correlation Analysis Results

Location	Monitoring Location ID	No. of Samples	Antecedent Rainfall Period (days)	Spearman Correlation Coefficient	p-value
North Apron	GW001	18	1	0.524	0.026
			3	-0.109	0.665
			7	-0.111	0.662
			14	-0.059	0.817
			30	-0.032	0.900
			60	-0.059	0.817
			90	-0.090	0.723
			120	0.051	0.842
	GW002D	19	1	0.018	0.941
			3	0.058	0.812
			7	0.028	0.909
			14	0.021	0.932
			30	0.049	0.842
			60	-0.028	0.909
			90	0.068	0.781
			120	0.032	0.898
	GW003D	19	1	-0.258	0.286
			3	-0.193	0.429
			7	-0.293	0.223
			14	-0.157	0.521
			30	-0.214	0.379
			60	-0.311	0.195
			90	-0.402	0.088
			120	-0.538	0.017
	GW004	19	1	-0.061	0.806
			3	-0.067	0.785
			7	-0.456	0.050
			14	-0.365	0.124
			30	-0.156	0.523
			60	-0.118	0.632
			90	-0.286	0.235
			120	-0.388	0.101
	GW005D	17	1	0.264	0.306
			3	0.069	0.791
			7	0.337	0.186
			14	0.270	0.295
			30	-0.032	0.903
			60	-0.039	0.881
			90	0.025	0.926
			120	0.086	0.743
	GW007	19	1	-0.352	0.140
			3	-0.100	0.685
			7	0.092	0.708
			14	0.121	0.622
			30	0.168	0.491
			60	0.011	0.966
			90	0.168	0.491
			120	0.328	0.170
	GW008	19	1	0.301	0.211
			3	-0.254	0.295
			7	-0.197	0.418
			14	-0.068	0.781
			30	-0.042	0.864
			60	-0.005	0.983
			90	0.100	0.684
			120	0.195	0.424
	GW014	19	1	0.123	0.617
			3	0.151	0.539
			7	0.058	0.813
			14	-0.009	0.972
			30	0.131	0.594
			60	0.240	0.323
			90	0.341	0.153
			120	0.476	0.040
	GW015D	17	1	-0.069	0.792
			3	0.219	0.397
			7	0.152	0.560
			14	-0.174	0.504
			30	-0.069	0.794
			60	-0.162	0.535
			90	-0.225	0.384
			120	-0.458	0.064

Location	Monitoring Location ID	No. of Samples	Antecedent Rainfall Period (days)	Spearman Correlation Coefficient	p-value
APEC 5/ North Runway	GW11	11	1	-0.219	0.517
			3	0.009	0.979
			7	0.300	0.370
			14	0.309	0.355
			30	0.373	0.259
			60	0.564	0.071
			90	0.455	0.160
			120	0.345	0.298
	GW12	11	1	-0.114	0.738
			3	0.273	0.417
			7	0.491	0.125
			14	0.345	0.298
			30	0.036	0.915
			60	0.073	0.832
			90	0.118	0.729
			120	0.100	0.770
	GW13	11	1	0.033	0.923
			3	-0.253	0.453
			7	-0.421	0.197
			14	-0.200	0.555
			30	-0.137	0.688
			60	0.095	0.782
			90	0.074	0.829
			120	0.221	0.514
	GW14	11	1	-0.563	0.072
			3	-0.136	0.689
			7	-0.227	0.502
			14	0.127	0.709
			30	0.255	0.450
			60	0.436	0.180
			90	0.164	0.631
			120	0.155	0.650
	GW15	11	1	-0.181	0.594
			3	0.109	0.750
			7	-0.100	0.770
			14	-0.373	0.259
			30	-0.355	0.285
			60	0.045	0.894
			90	-0.155	0.650
			120	-0.118	0.729
	GW16	11	1	-0.181	0.594
			3	0.155	0.650
			7	0.009	0.979
			14	0.218	0.519
			30	0.200	0.555
			60	0.027	0.937
			90	0.073	0.832
			120	0.045	0.894
	GW17	11	1	-0.129	0.705
			3	0.141	0.679
			7	-0.118	0.729
			14	0.191	0.573
			30	0.415	0.205
			60	0.711	0.014
			90	0.615	0.044
			120	0.711	0.014
	GW18	11	1	-0.012	0.972
			3	-0.220	0.516
			7	-0.428	0.189
			14	-0.647	0.031
			30	-0.584	0.059
			60	-0.283	0.399
			90	-0.434	0.183
			120	-0.330	0.322
	GW19	11	1	0.095	0.782
			3	-0.168	0.622
			7	-0.480	0.135
			14	-0.439	0.176
			30	-0.220	0.516
			60	0.133	0.697
			90	0.087	0.800
			120	0.087	0.800
	GWMP 5	9	1	0.030	0.940
			3	-0.067	0.865
			7	0.300	0.433
			14	0.150	0.700
			30	0.650	0.058
			60	0.483	0.187
			90	0.650	0.058
			120	0.533	0.139

Location	Monitoring Location ID	No. of Samples	Antecedent Rainfall Period (days)	Spearman Correlation Coefficient	p-value
Castlemoate House	BH1A	19	1	0.109	0.657
			3	0.144	0.557
			7	-0.212	0.383
			14	0.154	0.529
			30	0.249	0.303
			60	0.279	0.248
			90	0.118	0.632
			120	0.130	0.596
	BH5	20	1	0.075	0.754
			3	0.029	0.903
			7	0.087	0.714
			14	0.239	0.311
			30	0.281	0.229
			60	0.336	0.148
			90	0.176	0.458
			120	0.255	0.278
	BH6	20	1	0.049	0.836
			3	0.201	0.395
			7	-0.073	0.759
			14	0.107	0.655
			30	-0.010	0.968
			60	-0.305	0.190
			90	-0.381	0.098
			120	-0.471	0.036
	BH7	20	1	-0.042	0.861
			3	-0.160	0.499
			7	0.049	0.837
			14	0.000	1.000
			30	0.017	0.944
			60	0.174	0.464
			90	0.315	0.176
			120	0.455	0.044
	BH8D	20	1	-0.002	0.994
			3	0.130	0.584
			7	0.073	0.761
			14	0.048	0.840
			30	-0.181	0.444
			60	0.060	0.802
			90	-0.002	0.995
			120	0.058	0.807
	BH8S	19	1	-0.184	0.451
			3	-0.199	0.414
			7	0.030	0.903
			14	0.251	0.300
			30	0.104	0.672
			60	0.314	0.191
			90	0.265	0.273
			120	0.372	0.117
	BH9	19	1	0.513	0.025
			3	0.505	0.028
			7	0.432	0.065
			14	0.309	0.197
			30	0.095	0.698
			60	0.109	0.658
			90	0.046	0.851
			120	-0.039	0.872

Location	Monitoring Location ID	No. of Samples	Antecedent Rainfall Period (days)	Spearman Correlation Coefficient	p-value
Water Supply Well	Gardeners Well	19	1	0.499	0.030
			3	0.325	0.174
			7	0.168	0.491
			14	0.431	0.065
			30	0.365	0.124
			60	0.464	0.045
			90	0.372	0.117
			120	0.405	0.086

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 7

Surface Water Results

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL1																									
		15-11-21	15-11-21	09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24
11Cl-PF3OUdS (763051-92-9)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l	<2	<2			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																							<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	8.64	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	0.92	0.938	<1	<0.65	<0.65	<0.65	<0.65	<0.65	0.665	<0.65	<0.65	5.96	0.865	0.677	0.766	0.686	<0.65	<0.65	0.824	0.832	<0.65	0.666	0.86	0.922	0.725	0.77
EtFOSAA (2991-50-6)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	0.777	0.749	0.824	<0.65	<0.65	0.771	0.77	0.779	0.819	1.11	0.844	0.704	3.62	0.853	0.859	0.827	0.733	<0.65	<0.65	1.09	0.93	0.686	<0.65	1.18	1.05	1.09	1.2
MeFOSAA (2355-31-9)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<3	5.03	10.7	11.2	2.61	2.95	4.41	5.19	7.66	7.65	<7	<3	<3.5	<14	<6	<8	6.14	5.67	4.24	<2	6.98	8.2	6.35	6.93	8.04	9	3.2	3.89
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.02	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NS	<1	NS	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l					<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.12	2.75	7.97	7.87	1.74	2.21	2.5	1.62	1.03	1.48	1.28	<1	<1	2	2.43	2.74	2.58	2.46	<1	<1	2.8	3.13	2.27	1.96	2.72	2.93	1.24	1.29
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	2.01	4.29	13.1	13.1	3.21	4.04	3.19	3.72	2.42	2.7	1.74	1.4	<1	2.75	4.12	4.28	4.65	4.16	1.85	2.85	6.02	5.73	4.84	5.86	5.2	5.75	1.43	1.35
PFHxDA (67905-19-5)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	26.7	<1	<1	<1	<1	<1	<1	<1	1.24	<1	1.04	<1	1.02	<1	<1
PFMOBA (863090-89-5)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l		NS																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.05	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	0.959	1.26	1.75	1.88	1.06	1.06	2.42	3.24	2.51	2.52	0.955	0.803	1.04	2.37	1.17	1.06	1.07	0.949	<0.65	0.894	1.91	1.74	1.23	1.38	1.63	1.85	1.3	1.24
PFODA (16517-11-6)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	3.92	7.64	33.9	27.9	5.53	6.64	8.66	8.88	4.76	7.33	3.32	1.77	<1	<1	7.41	8.04	9.63	7.51	5.64	6.42	12.2	13.2	10.2	10.9	11.5	12.7	2.46	2.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l					<1	<3	<1	<1	<1	<1								<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l					<2	<3	<2	<2	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1								<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l					<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																												
Total PFOS	ng/l	<0.65	0.777	1.67	1.76	<1	<0.65	0.771	0.77	0.779	0.819	1.77	0.844	0.704	9.58	1.72	1.54	1.59	1.42	<0.65	<0.65	1.91	1.76	0.686	0.666	2.04	1.97	1.82	1.97
SW Threshold (as per S.I No. 77 of 2019.)																													
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.39		1.72		0.00		0.77		0.80		1.31		5.14		1.63		1.51		0.00		1.84		0.68		2.01		1.90	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.78	1.67	1.76	0.00	0.00	0.77	0.77	0.78	0.82	1.77	0.84	0.70	9.58	1.72	1.54	1.59	1.42	0.00	0.00	1.91	1.76	0.69	0.67	2.04	1.97	1.82	1.97

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL1										
		30-09-24	30-09-24	09-12-24	09-12-24	03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	0.929	<0.65	0.817	<0.65	<0.65	0.91
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	0.759	<0.65	<0.65	1.1	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.93	3.62	5.83	5.12	4.8	5.15	3.14	3.54	2.57	2.31	7.49
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	1.18	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	1.08	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.37	1.42	3.29	2.54	2.04	2.11	<1	1.66	<1	<1	2.98
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.79	2.1	6.56	5.79	4.21	4.15	1.59	2.1	1.09	<1	8.66
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	1.41	1.35	1.1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.21	<0.65	1.75	1.32	<0.65	<0.65	0.949	1.02	<0.65	<0.65	1.65
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.47	2.99	13.7	13.1	8.72	9.65	4	4.38	1.95	2.18	16.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l					<90	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	0.759	0.929	<0.65	1.92	<0.65	<0.65	0.91
SW Threshold (as per S.I No. 77 of 2019.)												
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		0.00		0.84		0.96		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00	0.76	0.93	0.00	1.92	0.00	0.00	0.91

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL2																		SL2											
		15-11-21	15-11-21	09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24
11Cl-PF3OUdS (763051-92-9)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
3:3 FTCA (356-02-5)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
4:2 FTS (757124-72-4)	ng/l	<2	<2			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5
6:2 FTAB (34455-29-3)	ng/l																							18.7	26.8	16.2	14.5	20	21.7	<50	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	27.7	30.4	<1	<1	20	20.9	5.49	4.47	13.9	16.3	5.58	6.19	19.4	20	6.6	7.48	1.08	<1	2.08	2.05	4.13	3.41	3.13	3.5	2.68	2.15	3.2	4.16	<5	1.62
7:3 FTCA (812-70-4)	ng/l																			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2			2.39	2.03	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
9Cl-PF3ONS (756426-58-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
ADONA (919005-14-4)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
Branched PFOS	ng/l	9.43	9.62	<0.65	<0.65	12	10.5	4.83	4.89	5.14	6.73	4.84	5.05	9.56	10.2	3.98	4.75	1.16	0.997	3.92	3.37	2.07	1.93	1.5	1.64	2.19	1.68	2.76	2.88	<3.25	1.25
EtFOSAA (2991-50-6)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
EtFOSE (1691-99-2)	ng/l																			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10
FBSA (30334-69-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
FHxSA (41997-13-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
HFPO-DA (13252-13-6)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
HFPO-TA (13252-14-7)	ng/l																			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	9.19	10.7	<0.65	<0.65	13.1	12.9	10.6	10.3	6.99	8.81	8.34	9.84	9.74	10.3	5.81	7.4	1.09	1.01	3.28	2.34	2.36	2.31	1.7	1.96	2.8	2.67	4.07	4.41	3.92	1.61
MeFOSAA (2355-31-9)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
MeFOSE (24448-09-7)	ng/l																			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10
N-EtFOSA (4151-50-2)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
NFDHA (151772-58-6)	ng/l																			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3
N-MeFOSA (31506-32-8)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	16.5	18.8	<2	<2	9.19	11	21.1	18.7	15.5	20.8	<8.5	26.1	20.3	<60	<8	<9	3.17	<2	10.3	11.4	10.6	9.54	7.87	8.45	10.7	8.54	12.3	12.2	<10	3.64
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	1.11	<1	<1	<1	1.83	1.69	<1	<1	1.9	2.4	<1	<1	<1	<1	<1	<1	1.22	1.34	<1	1.2	1.25	<1	1.35	1.17	<5	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.06	1.03	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
PFDoS (79780-39-5)	ng/l					<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
PFecHS (133201-07-7)	ng/l																			<1	<1	3.92	5.37	<1	<1	2.35	1.93	4.48	4.55	10.3	4.65
PFEESA (113507-82-7)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	20	21.1	<1	<1.5	10.1	12.1	13.1	9.39	6.81	10.3	11.7	14.3	16.5	14.5	7.84	8	2.5	2	5.1	6.27	4.9	4.65	4	3.65	4.49	3.8	5.23	5.72	<5	1.9
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	1.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	27.5	28.6	1.09	<1	15.8	16.4	9.95	8.74	19.3	21.6	18.5	21.6	29	36.7	13.2	14.6	3.28	2.9	12.1	12.2	7.47	10.4	8.24	8.71	9.31	7.13	13	14.2	<5	3.54
PFHxDA (67905-19-5)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	12.5	12.5	<1	<1	8.03	8.4	4.28	3.89	7.24	8.67	6.46	6.97	10.6	12.2	4.38	4.07	1.82	1.64	4.76	4.58	3.34	2.91	1.91	1.99	2.26	2.03	3.34	3.15	<5	<1
PFMOBA (863090-89-5)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFMOPrA (377-73-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.99	2.4	<1	<1	2.32	2.79	1.72	1.64	1.34	1.66	1.7	1.89	1.98	2.28	1.28	1.42	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFNS (68259-12-1)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	9.69	11.2	<0.65	<0.65	7.44	7.84	5.75	5.43	5.69	6.87	5.36	5.9	9.24	8.98	4.3	4.76	1.25	1.26	3.86	3.83	2.77	2.39	2.03	2.15	2.73	2.5	3.42	4.19	3.92	1.66
PFODA (16517-11-6)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	38.2	47.2	1.84	<5	26.2	22.4	37.1	36	27.8	57.8	43.2	67	64.3	45	56.9	34.8	4.8	4.24	25.6	24.1	20.1	19.9	16.7	16.9	18.8	15	20.6	21.2	8.42	4.62
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	1.08	1.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.01	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFTeA (376-06-7)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFTrDA (72629-94-8)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3
PFTrDS (174675-49-1)	ng/l					<4	<4	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
PFUnDS (749786-16-1)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	18.6	20.3	<0.65	<0.65	25.2	23.4	15.4	15.2	12.1	15.5	13.2	14.9	19.3	20.5	9.79	12.1	2.25	2.01	7.21	5.71	4.43	4.25	3.19	3.6	4.99	4.35	6.83	7.29	3.92	2.87
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	19.45		0.00		24.30		15.30		13.80		14.05		19.90		10.95		2.13		6.46		4.34		3.40		4.67		7.06		3.40	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	18.60	20.30	0.00	0.00	25.20	23.40	15.40	15.20	12.10	15.50	13.20	14.90	19.30	20.50	9.79	12.10	2.25	2.01	7.21	5.71	4.43	4.25	3.19	3.60	4.99	4.35	6.83	7.29	3.92	2.87

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL2								
		09-12-24	09-12-24	03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	23.4	25.3	32.4	41.2	15.2	<10	<10	<10	40.3
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	8.34	9.04	3.49	3.75	1.51	<4	<1	<1	<10
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	3.03	2.4	2.1	3.01	1.93	2.55	4.63	1.69	1.35
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	1.2
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.04	2.15	2.76	3.2	2.1	2.61	4.52	3.55	3.5
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	9.11	8.13	8.26	9.69	10.7	12.7	8.34	10.7	14.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.4	1.53	<1	<1	<1	<1	<1	<1	1.97
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	2.23	<1	1.41	1.74	1.68	<1	18.2	10.3	2.1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	8.44	7.46	5.36	6.02	4.82	4.53	2.99	3.23	7.72
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	14.6	14.4	11.9	12.5	9.12	9.24	5.3	5.48	17.7
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	3.35	3.38	3.19	3.22	2.25	2.81	1.66	1.83	2.47
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.01	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.13	3.49	3.47	3.93	2.43	2.82	1.96	2.47	4.5
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	33.9	31.3	26.3	28.9	19.4	20.5	12.8	12.6	45.4
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	1.08	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l			<90	<90	<90	<90	<90	<90	102
Total PFOS	ng/l	5.06	4.55	4.86	6.2	4.03	5.15	9.15	5.24	4.85
SW Threshold (as per S.I No. 77 of 2019.)										
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	4.81		5.53		4.59		7.20		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	5.06	4.55	4.86	6.20	4.03	5.15	9.15	5.24	4.85

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL3																		SL3											
		15-11-21	15-11-21	09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24
11Cl-PF3OUdS (763051-92-9)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l	<2	<2			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																							52.2	37.4	24.7	21.8	37.4	34.1	194	24.3
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	56.1	53.8	149	148	26.2	27.6	27.5	24.4	79.8	80.5	38.9	51.7	58	54.9	32.9	39.2	67.6	66.7	26.9	21.9	92.3	63.4	33	31.6	17.1	16.6	79.8	74.1	67.4	67.6
7:3 FTCA (812-70-4)	ng/l																			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	21	19.5			4.73	4.32	<3	<4	15.7	16.6	4.69	11.2	11.4	16.7	<2	6.12	<2	<2	4.89	2.24	6.35	4.37	4.12	4.38	3.56	3.35	4.2	4.03	3.27	3.46
9Cl-PF3ONS (756426-58-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	4.72	4.5	2.59	2.66	11.1	10.7	3.73	3.62	5.26	5.6	3.34	4.39	8.33	7.05	6.08	6.23	2.04	1.61	25.4	9.48	4.09	2.78	6.52	5.82	5.67	4.91	3.54	3.37	1.77	1.84
EtFOSAA (2991-50-6)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																			<1	<1	<1	<1	<1	<1	1.29	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	5.69	5.48	3.72	3.93	14.7	13.9	6.24	6.2	5.93	5.73	4.55	5.59	8.27	7.11	9.52	9.18	2.24	2.21	25.2	10.9	5.8	4.24	7.15	6.95	4.25	3.59	3.34	2.99	2.45	2.32
MeFOSAA (2355-31-9)	ng/l																			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<17.5	12.5	17.7	19.5	<9	<10	17.3	15.6	<16	<18	<5	11.5	<54	12.1	<8	9.04	17.3	15.1	8.76	11.2	15.5	11.1	10.3	12.1	9.82	8.39	11.1	10.2	11.2	11.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	1.05	<1	<1	<1	<1	<1	<2	<1.5	<1	<1	1.65	1.57	<1	1.17	<1	<1	<1	<1	1.39	<1	<1	<1	1.16	1.54	1.52	1.23	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l					<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																			17.2	14.5	21.5	16.7	12.5	12.6	11.3	10	44.1	42.4	43.4	42.7
PFEESA (113507-82-7)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	11.4	10.6	13.1	13.6	9.88	9.4	32.5	34.5	8.24	9.44	9.21	13.9	7.57	9.13	7.98	6.8	10.7	9.9	8.27	6.52	9.13	6.19	7.68	6.64	5.17	5.25	6.88	6.36	6.27	7.32
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	14.3	13.1	31.8	31	12.1	12.1	18.3	17.5	18.3	19.6	16.6	20.4	24.1	18.8	12.4	13.4	31.2	31.8	17.2	16.5	24	16.3	17.9	16	10.4	10.8	15.9	16	15.1	16.2
PFHxDA (67905-19-5)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.64	2.36	2.52	2.31	7.68	8.16	3.13	3.05	3.99	4.29	3.61	4.57	5.83	5.09	5.77	7.07	1.5	1.5	10.7	10.6	6.27	4.33	7.6	7.21	6.92	6.67	4.38	3.78	1.68	1.53
PFMOBA (863090-89-5)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.82	1.57	1.43	1.59	2.06	2.29	2.19	2.36	1.27	1.33	1.33	1.66	2.08	1.86	1.05	1.19	1.1	1.19	1.76	1.19	2.01	1.36	<1	<1	<1	<1	1.13	1.14	<1	1.33
PFNS (68259-12-1)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.44	4.33	3.93	4.56	5.89	5.65	8.02	8.15	5.65	5.63	3.99	5.25	5.95	5.54	4.31	3.82	4.42	4.62	6.6	7.38	5.57	4.22	4.83	5.05	4.06	3.77	4.61	4.39	4.77	4.95
PFODA (16517-11-6)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	20.5	18.9	98.8	110	17.4	26.6	45.8	67.3	32	37.5	34.4	26.6	29	27	23.4	22.4	51.6	52.7	31.8	29.3	49.2	31.8	28.8	26.7	21.6	21	29	28.5	33.9	31.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l					<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l					<4	<4	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	10.4	9.98	6.31	6.59	25.8	24.6	9.97	9.82	11.2	11.3	7.89	9.98	16.6	14.2	15.6	15.4	4.28	3.83	50.6	20.3	9.89	7.03	13.7	12.8	9.91	8.5	6.87	6.36	4.21	4.17
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	10.19		6.45		25.20		9.90		11.25		8.94		15.40		15.50		4.06		35.45		8.46		13.25		9.21		6.62		4.19	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	10.40	9.98	6.31	6.59	25.80	24.60	9.97	9.82	11.20	11.30	7.89	9.98	16.60	14.20	15.60	15.40	4.28	3.83	50.60	20.30	9.89	7.03	13.70	12.80	9.91	8.50	6.87	6.36	4.21	4.17

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL3								
		09-12-24	09-12-24	03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	53	58.8	54.9	62.7	29.3	36.5	19.9	22.7	39.4
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	12.4	15.5	14.4	13.6	67.6	73.5	44.3	44.7	68.4
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	2.12	<2	<2	<2	3	3.01	3.42	3.71	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	2.71	3.1	2.99	3.29	7.48	7.86	1.58	1.59	7.9
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	1.43
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.78	2.89	2.92	2.86	3.89	5.26	2.16	1.87	7.73
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	13.3	16.7	15.6	16.7	11.4	12.6	9.74	9.98	10.8
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.41	1.86	<1	<1	<1	<1	<1	<1	1.43
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	61.2	60.8	43.2	41.2	64	51	63.4	54.8	19.9
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	12.3	15.2	11.7	11.4	7.91	7.82	7.54	6.68	7.1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.3	22.2	25.4	25.7	18.6	20.1	14	13.9	18.4
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.45	2.63	2.34	2.25	10.4	10.6	<1	<1	12
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	2.36	2.81	2.03	1.89	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	7.85	9.02	9.29	9.02	5.31	5.2	4.7	4.4	4.59
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	47.7	55.8	62.3	59.5	34.8	43.9	35	36.5	39.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	1.38
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l			192	187	234	241	186	178	200
Total PFOS	ng/l	5.5	5.99	5.91	6.14	11.4	13.1	3.74	3.47	15.6
SW Threshold (as per S.I No. 77 of 2019.)										
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	5.75		6.03		12.25		3.61		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	5.50	5.99	5.91	6.14	11.40	13.10	3.74	3.47	15.60

Landside Monitoring Results
(Surface Water)

Parameter	Unit	21-08-20	26-08-20	01-09-20	07-09-20	26-09-20	30-09-20	08-10-20	22-10-20	03-11-20	11-01-21	21-01-21	28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	06-08-21	13-08-21
11Cl-PF3OUdS (763051-92-9)	ng/l																														
3:3 FTCA (356-02-5)	ng/l																														
4:2 FTS (757124-72-4)	ng/l																														
5:3 FTCA (914637-49-3)	ng/l																														
6:2 FTAB (34455-29-3)	ng/l																														
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	12.1	12.7	12	4.47	4.47	11	5.17	2.36	3.17	23.8	2.06	<1	<1	<1	<1	<1	2.4	<1	<1	<1	2.75	<1	2.92	1	<1	<1	<1	<5	2.75	1.17
7:3 FTCA (812-70-4)	ng/l																														
8:2 FTS (39108-34-4)	ng/l																														
9Cl-PF3ONS (756426-58-1)	ng/l																														
ADONA (919005-14-4)	ng/l																														
Branched PFOS	ng/l	3.89	4.09	7.86	4.93	4.93	4.05	2.72	6.82	2.36	1.42	1.89	1.72	2.53	1.34	2.31	2.11	2.29	2.01	1.46	1.52	1.61	1.18	1.43	1.84	<2	2.74	2.61	<5	1.61	3.69
EtFOSAA (2991-50-6)	ng/l																														
EtFOSE (1691-99-2)	ng/l																														
FBSA (30334-69-1)	ng/l																														
FHxSA (41997-13-1)	ng/l																														
HFPO-DA (13252-13-6)	ng/l																														
HFPO-TA (13252-14-7)	ng/l																														
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	3.29	3.91	9.63	5.65	5.65	3.07	1.93	5.25	1.88	4.1	1.19	0.791	1.27	0.991	1.25	1.06	2.02	1.09	1.02	1.46	1.06	1.21	1.61	1.54	<1	2.12	1.99	4.55	1.06	2.79
MeFOSAA (2355-31-9)	ng/l																														
MeFOSE (24448-09-7)	ng/l																														
N-EtFOSA (4151-50-2)	ng/l																														
NFDHA (151772-58-6)	ng/l																														
N-MeFOSA (31506-32-8)	ng/l																														
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	28.9	30.4	28.2	16.6	16.6	27.9	<80	191	31.7	8.06	16.2	20.3	19.1	19.9	13.2	17.2	13.4	26.3	11.4	<24	9.95	15.3	9.95	20.2	<18.5	16.3	15.3	13.3	9.95	18.4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	1.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFDoS (79780-39-5)	ng/l																														
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																														
PFecHS (133201-07-7)	ng/l																														
PFEESA (113507-82-7)	ng/l																														
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	41.1	37.7	35.3	8.54	8.54	11.5	13.2	19.6	49	7.78	19.5	12	16.4	12.4	11.7	8.32	8.56	9.26	8.08	7.99	10.8	6.44	7.01	12.3	9.26	9.61	10	7.25	10.8	11.6
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	40	40.2	37.5	20.4	20.4	28.2	21.8	36.2	37.7	7.96	15	15.4	18.9	16.1	13.3	16.4	13.8	14.1	12	12	10.5	8.38	7.44	12	14.5	17.5	16	13	10.5	17.8
PFHxDA (67905-19-5)	ng/l																														
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	3.85	3.83	4.1	3.89	3.89	5.15	2.41	4.99	2.63	<1	1.96	2.99	3.82	2.08	3.13	3.26	2.5	2.64	2.39	2.08	2.03	1.23	1.66	2.11	2.69	3.14	3.01	<5	2.03	3.37
PFMOBA (863090-89-5)	ng/l																														
PFMOPrA (377-73-1)	ng/l																														
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.24	1.28	1.77	<1	<1	1.19	<1	1.38	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFNS (68259-12-1)	ng/l																														
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	6.48	7.62	7.6	3.19	3.19	4.55	3.92	4.81	4.33	2.74	2.84	2.37	2.55	2.49	2.75	2.75	2.55	2.22	1.67	2.5	1.83	1.63	1.95	1.82	2.37	3.34	2.56	<3.25	1.83	3.15
PFODA (16517-11-6)	ng/l																														
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	51.5	50	50.9	40.5	40.5	55.4	29.8	65.7	49.7	12.8	27	28.5	37.2	28.1	25.8	29.2	24.7	30.4	22.5	26.6	29.6	19.3	15.7	25.5	28.8	33.4	25.7	25	29.6	31.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																														
PFTeA (376-06-7)	ng/l																														
PFTrDA (72629-94-8)	ng/l																														
PFTrDS (174675-49-1)	ng/l																														
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFUnDS (749786-16-1)	ng/l																														
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	7.18	8	17.5	10.6	10.6	7.12	4.65	12.1	4.24	5.52	3.08	2.51	3.8	2.33	3.56	3.17	4.31	3.1	2.48	2.98	2.67	2.39	3.04	3.38	<3	4.87	4.61	<5	2.67	6.48
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																														
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	7.18	8.00	17.50	10.60	10.60	7.12	4.65	12.10	4.24	5.52	3.08	2.51	3.80	2.33	3.56	3.17	4.31	3.10	2.48	2.98	2.67	2.39	3.04	3.38	0.00	4.87	4.61	0.00	2.67	6.48

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL4																													
		03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	15-11-21	15-11-21	09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24
11Cl-PF3OUdS (763051-92-9)	ng/l																								<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																								<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l						<2	<10			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l						<20	<100			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																												<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	1.02	1.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																								<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l						<2	<10			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																								<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																								<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<3.25	1.61	<6.5	<3.25	<6.5	1.46	<3.25	1.61	1.51	1.64	<1.5	1.1	1.17	1.06	1.04	0.741	0.72	1.99	2.06	0.772	1.45	1.65	1.4	1.21	1.71	1.19	1.11	1.15	1.1	1.35
EtFOSAA (2991-50-6)	ng/l																								<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																								<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																								<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																								<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																								<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																								<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<3.25	0.789	<6.5	<3.25	<6.5	<0.65	<3.25	<0.65	<0.65	1.34	<0.65	0.732	0.734	0.747	0.773	<0.65	0.702	1.08	1.06	0.828	0.828	0.756	<0.65	1.2	1.72	<0.65	<0.65	<0.65	<0.65	0.85
MeFOSAA (2355-31-9)	ng/l																								<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																								<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																								<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																								<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																								<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	10.5	9.9	<20	12	<20	12.8	15.5	18.8	14.4	14.8	11.4	8.21	8.37	10.4	11.1	<4.5	9.9	35.1	29.8	<10	<10	9.52	11.6	11.7	11.6	12.1	11.6	20.1	18.7	27
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.04	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l										<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																								<1	<1	<1	<1	<1	<1	1.22
PFEESA (113507-82-7)	ng/l																								<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	8.57	8.47	<10	8.59	10.8	11.8	7.9	14.5	11.1	14.8	10.8	4.7	5.65	3	3.23	2.04	2.55	16.5	19.2	7.39	8.29	4.71	5.85	3.31	2.97	4.98	4.31	7.61	7.17	10.9
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	13.8	12.1	15.5	14.4	15.9	17.7	18.8	21.8	18.1	19.6	16	7.04	7.66	6.04	6.04	5.03	5.09	31.7	27.8	13.8	13.6	10.2	10.3	8.19	8.36	10.5	9.74	17	15.8	22
PFHxDA (67905-19-5)	ng/l																								<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<5	1.68	<10	<5	<10	1.81	<5	1.98	1.42	1.24	1.01	1.5	1.67	1.08	1.03	<1	<1	2.62	2.45	2.25	2.17	1.63	1.91	<1	1.34	2.65	2.5	2.04	1.75	1.92
PFMOBA (863090-89-5)	ng/l																								<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																								<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.73	1.98	<6.5	<3.25	6.58	2.25	4.88	2.48	1.94	2.98	2.16	3.12	2.6	3.14	2.98	1.01	0.896	3.79	3.73	2.01	1.96	1.66	1.42	1.27	1.08	2.05	1.81	2.33	1.99	3.27
PFODA (16517-11-6)	ng/l																								<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<10	<2	<20	<10	<20	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	26.9	21.3	18.9	17	29.3	28.2	29.4	51.5	48.5	26.3	27.3	10.1	17.1	21.5	13.6	7.9	13.3	71.1	22.7	32.7	39.8	19.3	18.6	21.5	21	22.5	20.6	38.2	35.9	52.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																								<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l										<4	<4	<2	<2	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<5	<1	<10	<5	<10	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	<3.25	2.4	<6.5	<3.25	<6.5	1.46	<3.25	1.61	1.51	2.98	<1.5	1.84	1.91	1.81	1.81	0.741	1.42	3.08	3.11	1.6	2.27	2.41	1.4	2.4	3.43	1.19	1.11	1.15	1.1	2.2
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l						0.73		1.56		1.49		1.88		1.81		1.08		3.10		1.94		1.91		2.92		1.15		1.13		2.25
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	2.40	0.00	0.00	0.00	1.46	0.00	1.61	1.51	2.98	0.00	1.84	1.91	1.81	1.81	0.74	1.42	3.08	3.11	1.60	2.27	2.41	1.40	2.40	3.43	1.19	1.11	1.15	1.10	2.20

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL4													
		03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24	03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<25	<50	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<50	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<100	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<3
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<50	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
Branched PFOS	ng/l	1.27	1.18	1.23	0.86	<4	2.12	<0.65	1.7	1.33	2.76	2.55	<3.25	<6.5	1.3
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<100	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<50	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.03	0.968	0.786	1.33	<5	1.15	<0.65	0.85	<0.65	1.06	1.13	<3.25	<6.5	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<100	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<15	<30	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	21.9	12.5	13.2	5.44	<10	13.6	13.3	14.1	13.9	12.9	11	11	<20	26.8
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<5	1.25	<1	<1	<1	1.29	1.22	<5	<10	1.51
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
PFecHS (133201-07-7)	ng/l	1.11	<1	<1	1.69	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	9.45	4.19	4.17	2.25	<5	13.1	13.9	6.57	6.11	5.99	4.99	<5	<10	15.9
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	17.3	9.59	9.77	3.32	<5	23.8	22.5	15.6	16.2	11.7	10	8.21	<10	34
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.67	1.75	1.75	<1	<5	3.06	2.88	2.77	2.98	3.31	2.88	<5	<10	3.36
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.83	2.7	2.46	1.79	<4	2.88	2.82	1.73	1.54	1.86	<0.65	<3.25	<6.5	3.64
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	43.8	21.5	22	7.51	7.55	44.2	43.3	36.2	34.2	29.1	24.6	26.3	16.5	80.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<5	<1	<1	1.09	<1	<1	<1	<5	<10	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<15	<30	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<10	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<20	<2
Total PFAS DWI 47	ng/l								<90	<90	<90	<90	<450	<900	167
Total PFOS	ng/l	2.3	2.14	2.02	2.19	<5	3.27	<0.65	2.55	1.33	3.82	3.68	<3.25	<6.5	1.3
SW Threshold (as per S.I No. 77 of 2019.)															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		2.08		1.10		1.64		1.94		3.75		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.30	2.14	2.02	2.19	0.00	3.27	0.00	2.55	1.33	3.82	3.68	0.00	0.00	1.30

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL5																SL5													
		09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.16	1.14	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																					<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	1.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	1.34	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.706	0.689	<0.65	0.729	0.726	0.764	0.779	0.894	0.773	<0.65	0.749	0.836	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	1.92	0.778	0.812	0.897	1.32	0.801	1.02	<0.65	<0.65	0.893	0.865	0.684	0.858	0.716	0.755	0.898	0.825	<0.65	<0.65	0.936	0.837	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	8.01	8.46	2.96	5	4.14	4.92	9.54	8.28	2.48	<11.5	<18	<3.5	<8	<13	4.63	3.64	4.39	3.71	4.72	4.79	5.88	5.41	6.8	8.39	3.18	2.99	2.43	2.63	4.92	4.07
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.28	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l			<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.02	1.05	<1	<1
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	4.81	5.21	1.56	2.32	2.34	2.77	1.58	<1	1.04	1.41	<1	<1	2.22	2.08	1.94	1.75	<1	<1	1.85	1.63	1.77	1.83	2.31	2.34	1.07	1.13	<1	<1	<1	2.5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	7.29	7.17	3.2	3.36	2.76	3.35	2.57	2.35	1.38	1.94	<1	<1	4.22	4.11	3.68	3.78	1.32	1.41	3.16	3.3	4.24	4.2	4.56	4.68	1.31	1.44	<1	<1	5.52	4.67
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.26	1.17	0.975	1.69	1.97	2.99	2.77	2.87	0.67	1.02	<0.7	0.977	1.34	1.24	0.695	1.05	<0.65	<0.65	1.27	1.17	1.45	1.05	1.56	1.54	0.781	1.31	1.31	1.48	1.37	1.14
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<20	25.9	4.96	5.37	6.06	4.74	7.57	4.38	1.88	3.39	<1	<1	8.88	10.3	9.27	6.66	3.13	4.28	6.57	5.56	8.61	8.2	10.5	10.4	1.51	1.57	1.9	1.6	12	10.7
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l			<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l			<4	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	<0.65	<0.65	<0.65	3.26	0.778	0.812	0.897	1.32	0.801	1.02	<0.65	<0.65	1.6	1.55	0.684	1.59	1.44	1.52	1.68	1.72	0.773	<0.65	1.68	1.67	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		1.63		0.80		1.11		0.91		0.00		1.58		1.14		1.48		1.70		0.39		1.68		0.00		0.00		0.00	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	3.26	0.78	0.81	0.90	1.32	0.80	1.02	0.00	0.00	1.60	1.55	0.68	1.59	1.44	1.52	1.68	1.72	0.77	0.00	1.68	1.67	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL5						
		03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<6
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	0.937	0.942	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	0.807	0.672	0.853	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.84	2.92	3.44	2.39	2.64	2.15	8.46
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	1.53
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.87	<1	1.53	<1	<1	<1	2.4
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	3.2	3.18	1.6	1.35	1.17	1.04	5.96
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.02	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	0.729	<0.65	0.96	<0.65	<0.65	<0.65
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	7.17	6.29	3.17	2.52	2.49	1.7	15.1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	0.807	1.61	1.8	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)								
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	1.21		0.90		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.81	1.61	1.80	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL6																SL6													
		09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
4:2 FTS (757124-72-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
6:2 FTAB (34455-29-3)	ng/l																					24.1	17.8	<10	<10	10.8	11.2	<10	<50	18	13.7
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	6.59	7.74	12.4	10.7	7.26	5.03	5.89	6.81	4.11	3.99	16.3	17.6	5.55	4.95	3.37	2.94	<1	<1	3.83	3.12	3.56	3.3	1.26	1.09	1.29	1.3	2.06	<5	8.93	7.47
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
8:2 FTS (39108-34-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Branched PFOS	ng/l	3.53	4.65	5.65	3.64	5.1	4	2.82	2.73	2.69	3.02	4.68	5.74	3.97	3.4	3.45	3.26	2.06	2.74	2.52	2.07	1.89	1.67	2.03	1.9	1.78	1.59	1.75	4.82	3.21	2.53
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
FBSA (30334-69-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	5.37	5.83	5.29	4	7.29	6.03	3.82	4.17	4.6	5.1	4.89	5.52	5.47	4.69	7.01	6.61	3.47	3.48	3.46	2.62	1.91	1.57	3.12	2.05	3.08	2.34	2.47	5.19	2.24	1.79
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	16.8	<15	10.6	9.26	34.8	21.2	13.8	20.3	<7.5	<10	22.9	<28	<10	<8	9.91	10.6	9.28	9.1	13.1	9	11	7.9	6.6	6.12	9.84	9.46	5.92	<10	9.15	7.41
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	1.22	1.11	<1	<1	<1.5	1.24	<1	<1	1.78	1.88	1.73	1.19	<1	<1	<1	<1	1.77	1.31	1.31	1.35	2.87	2.9	1.37	<1	<1	<5	1.6	1.22
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1.5	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDoS (79780-39-5)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFecHS (133201-07-7)	ng/l																	<1	<1	<1	2.6	2.65	2.36	2.04	1.94	6.59	5.88	10.2	15.8	3.11	4.23
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	8.89	7.76	11.7	7.91	17.9	11.3	10.5	11.4	16.1	16.4	21	16.1	9.46	9	12	10.4	4.67	4.91	7.13	5.31	4.34	4.02	3.18	2.79	3.89	4.05	3.76	7.38	7.86	6.15
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	14.1	15.4	27.6	23.4	19.4	12.1	44.5	51.8	61.5	59.6	67.6	86.7	19.5	19.4	22.1	20.6	17.6	17.8	23.3	16.7	12	10.5	6.33	5.96	17.5	18.2	10.2	12.6	19.1	15
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	3.49	4.01	3.72	3.44	4.54	3.22	2.79	3.1	3.46	3.25	5.52	6.27	4.04	3.93	4.91	4.39	3.58	2.83	3.12	3.75	2.27	2.04	1.58	1.59	2.12	1.9	1.34	<5	3.18	2.77
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.73	1.45	1.21	1.27	2.18	1.52	1.08	1.19	1.17	1.34	1.24	1.56	1.72	1.45	2.3	2.32	<1	1.24	1.7	<1	<1	<1	<1	<1	<1	<1	<1	<5	1.27	1.03
PFNS (68259-12-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.58	4.16	4.39	3.73	7.12	5.18	3.94	5.13	3.67	3.58	6.07	7.27	5.09	5.31	5.75	5.44	3.25	2.54	4.76	3.08	2.86	2.19	2.49	2.36	2.84	2.09	2.42	5.35	3.34	2.73
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	32.6	28.2	24.5	28.4	58.6	36.4	49	63.4	49.2	53.8	64	60	27.3	56.3	36.2	18	23.9	20.3	31	19	19	16.5	10.7	9.59	13.7	14	11	15.4	31.2	26.9
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFTrDA (72629-94-8)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
PFTrDS (174675-49-1)	ng/l			<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFUnDS (749786-16-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	8.9	10.5	10.9	7.64	12.4	10	6.64	6.9	7.29	8.12	9.57	11.3	9.44	8.09	10.5	9.87	5.53	6.23	5.98	4.69	3.8	3.24	5.15	3.96	4.86	3.93	4.21	10	5.44	4.32
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	9.70		9.27		11.20		6.77		7.71		10.44		8.77		10.19		5.88		5.34		3.52		4.56		4.40		7.11		4.88	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	8.90	10.50	10.90	7.64	12.40	10.00	6.64	6.90	7.29	8.12	9.57	11.30	9.44	8.09	10.50	9.87	5.53	6.23	5.98	4.69	3.80	3.24	5.15	3.96	4.86	3.93	4.21	10.00	5.44	4.32

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL6							
		03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<10	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<10	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	16.5	11.1	<10	<10	<20	<10	19.1	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	2.81	2.66	<2	<2	<2	<1	<5	<6
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<10	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
Branched PFOS	ng/l	2.5	2.28	1.66	2.82	<1.3	<0.65	1.96	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<20	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<10	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.1	2.4	3.65	4.84	<1.3	1.13	2	0.932
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<20	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<6	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	5.81	6.07	6.04	5.6	4.45	5.02	7.31	7.35
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<2	<1	<1	1.39
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	<2	7.84	1.97	1.64
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	3.91	3.83	2.79	2.76	2.25	1.27	2.95	3.21
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	11.4	10.5	7.4	7.39	4.81	4.19	7.72	7.49
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.29	2.17	1.6	1.43	<2	<1	1.35	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.64	1.83	2.07	2.24	2.92	0.819	2.03	2.21
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	17.3	17.9	11.2	11	7.84	7.86	15.4	20.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<6	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<2	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<4	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90	<180	<90	<90	<90
Total PFOS	ng/l	4.6	4.68	5.31	7.66	<1.3	1.13	3.96	0.932
SW Threshold (as per S.I No. 77 of 2019.)									
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	4.64		6.49		0.57		2.45	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	4.60	4.68	5.31	7.66	0.00	1.13	3.96	0.93

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL7																SL7													
		09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
4:2 FTS (757124-72-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
6:2 FTAB (34455-29-3)	ng/l																					62.4	61.9	21.1	18.5	13.9	20	14.5	72.7	21.2	24.2
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	17.1	17.9	15.5	16.4	23.1	22.2	44.5	51.7	35.6	33	3.48	3.82	20.5	18.8	13.3	14.9	16.2	16.5	83.7	73.9	31.5	29	12.4	10.3	14.6	15.3	10.7	10.6	4.45	4.52
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
8:2 FTS (39108-34-4)	ng/l			6.79	7.86	<3	<3	<6	<7.5	<2	<2	<2	<2	3.27	2.65	<2	<2	<2	2.33	3.6	3.11	3.23	3.06	2.65	2.39	<2	<2	<2	<10	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Branched PFOS	ng/l	1.89	2.04	11.6	12.5	4.02	4.22	4.67	4.42	4.04	3.72	2.71	2.58	5.23	4.1	1.87	1.81	7.6	6.61	3.66	2.68	5.64	4.75	5.04	4.26	3.25	2.61	0.889	<3.25	1.92	2.18
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
FBSA (30334-69-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	3.22	3.37	9.79	11.2	7.71	8.15	5.87	5.44	3.08	2.92	3.8	4.39	12.3	10.8	2.31	2.34	10.7	10.2	6.6	6.41	5.61	4.62	3.9	3.21	3.11	2.87	1.46	<3.25	1.78	1.25
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	8.64	13.3	<9	9.04	13.9	15.2	13.2	19.6	32.4	<12.5	14.5	12.5	<8	<2	16.5	15	13.1	11	12.2	13.5	12.1	10	9.28	8.82	12.2	12.8	7.47	<10	14.6	8.8
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<2	<1.5	<1	<1	1.03	1.11	<1	<1	<1	1.03	<1	<1	1.23	<1	1.17	1.13	1.51	<1	1.37	1.62	<1	<5	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	1.3	1.35	<1	<1	1.85	1.78	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.31	<10	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1.5	<1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDoS (79780-39-5)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFecHS (133201-07-7)	ng/l																	11.2	10.7	16.3	24.2	10.3	8.93	9.45	7.71	36.1	36.5	10.3	13	39	39.6
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	6.63	7.67	8.83	8.79	23.3	24.6	9.05	9.21	11.5	11.5	7.9	7.52	7.46	6.59	18.4	12.8	8.28	7.36	7.29	7.15	7.06	6.81	5.09	4.46	6.34	6.05	3.6	<5	9.5	9.95
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	1.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	10.4	10.5	10.8	11.5	12.3	14	18.1	21.7	23.2	20.7	19.4	19.7	12.2	10.6	24.5	23.7	20	19.5	21	18.8	17.3	14.1	10.8	8.84	14.8	14.8	7.51	7.16	12.5	13.7
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.13	1.37	8.94	8.76	3.45	3.49	3.54	3.56	3.37	3.12	3.29	3.75	4.43	4.79	1.38	1.28	6.32	6.89	6.52	5.3	6.61	6.18	5.84	4.57	3.42	3.44	<1	<5	1.87	1.74
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.04	1.51	2.48	2.42	2.3	2.34	1.44	1.58	1.39	1.23	<1	<1	1.26	<1	1.13	1.27	2.04	2.07	<1	1.33	<1	<1	<1	<1	1.35	<1	<1	<5	1.34	1.61
PFNS (68259-12-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.21	3.54	6.74	6.53	7.71	7.48	6.07	6.86	4.82	4.08	3.99	4.25	4.29	3.58	5.21	5.42	6.4	6.41	4.87	4.94	4.01	3.46	4.02	3.36	4.75	4.13	4.19	3.63	7.97	8.1
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	28	32.9	13.4	20.8	25.8	28.4	19.5	37.4	38.3	38	17.4	35.8	23.4	37.9	38.9	36.3	32.7	34	32.5	40.2	30.8	28.8	21.7	17.5	25.5	21.4	12.7	9.46	31.2	34.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFTrDA (72629-94-8)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
PFTrDS (174675-49-1)	ng/l			<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFUnDS (749786-16-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	5.11	5.41	21.4	23.7	11.7	12.4	10.5	9.86	7.12	6.64	6.51	6.98	17.5	14.9	4.19	4.15	18.3	16.8	10.3	9.09	11.3	9.36	8.94	7.47	6.36	5.48	2.35	<3.25	3.7	3.43
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	5.26		22.55		12.05		10.18		6.88		6.75		16.20		4.17		17.55		9.70		10.33		8.21		5.92		1.18		3.57	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	5.11	5.41	21.40	23.70	11.70	12.40	10.50	9.86	7.12	6.64	6.51	6.98	17.50	14.90	4.19	4.15	18.30	16.80	10.30	9.09	11.30	9.36	8.94	7.47	6.36	5.48	2.35	0.00	3.70	3.43

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL7						
		03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	10.2	11.4	23.2	21.6	26.3	24	20.6
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	3.7	1.41	21.7	23.7	60.6	63.9	29.2
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	2.14	2.79	2.58
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.45	1.39	3.11	3.75	1.44	1.57	6.31
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	5.37
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.69	1.46	1.72	2.28	1.61	1.92	5.71
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	7.05	6.86	8.78	8.86	10.1	12.3	8.87
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	9.25	13.9	20.4	20.2	74.7	53.5	14.9
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	4.9	4.78	5.48	5.5	7.62	7.57	5.32
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	9.88	10.3	13.3	13.1	17.9	17.7	14.2
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.61	1.6	4.46	4.54	<1	<1	6.46
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.3	4.17	4.25	4.59	5.16	5.12	4.45
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	23.3	22.5	30.9	28.9	36.8	41.5	24.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	114	115	218	208	128
Total PFOS	ng/l	3.14	2.85	4.84	6.03	3.05	3.48	12
SW Threshold (as per S.I No. 77 of 2019.)								
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	3.00		5.44		3.27		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.14	2.85	4.84	6.03	3.05	3.48	12.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL8																SL8													
		09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.16	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																					<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	2.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.15	1.06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	5.33	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	0.685	<0.65	<0.65	<0.65	0.699	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.664	<0.65	<0.65	0.777	<0.65	<0.65	0.753	<0.65	<0.65	0.663	0.728	<0.65	<0.65	<0.65	<0.65	<0.65	0.738
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	0.785	0.694	<0.65	<0.65	0.67	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.776	<0.65	<0.65	0.772	<0.65	<0.65	1.23	<0.65	<0.65	0.877	0.986	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	5.47	5.43	3.24	3.3	4.43	3.27	<6.5	<8.5	2.03	10.9	4.98	<23	<3	<2	2.35	<2	2.96	<2	4.77	3.53	4.42	5.06	4.92	4.12	3.05	3.32	4.36	3.48	2.44	2.7
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	1.12	<1	1.87	1.93	<1	<1
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	3.68	2.4	<1	<1	2.38	1.51	<1	<1	<1	1.11	2.54	2.41	1.05	1.17	<1	<1	<1	<1	1.6	1.3	<1	<1	1.41	1.41	<1	<1	3.42	3.26	1.39	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.96	1.68	1.08	<1	1.57	<1	1.79	<1.5	1.02	1.14	2.52	3.47	1.26	1.62	<1	<1	<1	<1	2.24	1.57	2.31	2.61	1.5	1.52	2.21	2.27	4.17	3.39	2.03	1.85
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.11	1.02
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	10.5	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.14	3.94	1.55	1.59	<2.8	<2.5	2.06	<2	<0.65	1.01	5.39	4.58	1.61	1.76	0.997	0.968	<0.65	0.955	1.98	1.55	1.13	1.58	1.4	1.23	0.994	<0.65	<0.65	2.06	2.75	2.62
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<18	<6.5	1.39	2.18	3.39	2.08	<1	<1	1.4	2.09	2.17	2.38	1.23	1.43	1.11	<1	1.85	2.06	2.93	2.49	3.41	3.81	2.77	2.68	3.31	2.82	3.98	4.72	3.37	3.04
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l			<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l			<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	<0.65	<0.65	1.47	0.694	<0.65	<0.65	1.37	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	1.44	<0.65	<0.65	1.55	<0.65	<0.65	1.99	<0.65	<0.65	1.54	1.71	<0.65	<0.65	<0.65	<0.65	<0.65	0.738
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		1.08		0.00		0.69		0.00		0.00		0.72		0.00		0.78		1.00		0.00		1.63		0.00		0.00		0.37	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	1.47	0.69	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	1.55	0.00	0.00	1.99	0.00	0.00	1.54	1.71	0.00	0.00	0.00	0.00	0.00	0.74

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL8						
		03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<3
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	5.49
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	2.33	2.39	2.56	2.91	2.88	3.31	3.46
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	2.05	1.1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.19	<1	<1	<1	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.33	1.2	1.62	2.21	1.41	1.36	1.81
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	0.929	<0.65	<0.65	<0.65	1.95
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.53	2.23	3.48	2.62	2.75	3.23	<1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)								
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL9																													
		09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.17	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																					<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	1.18	1.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.16
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	1.39	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.721	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.708	<0.65	<0.65	0.689	<0.65	<0.65	<0.65	<0.65	0.793	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	0.774	0.85	1.13	<0.65	<0.65	0.693	<0.65	<0.65	0.799	0.655	0.72	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	1.1	<0.65	<0.65	<0.65	0.771	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.08	3.37	2.71	<2	3.15	3.15	6.06	9.81	<6.5	<11.5	<13	6.04	<2	<2	2.45	2.15	<2	2.71	3.59	4.01	4.04	3.28	5.16	4.05	3.46	3.48	5.45	4.1	<2	<2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.98	1.46	<1	1.08
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	1.09	<1	<1	2.03	1.48	<1	1.47	1.69	1.86	1.82	1.75	<1	<1	<1	<1	<1	<1	<1	1.28	<1	<1	1.29	1.38	1.64	1.44	1.86	1.06	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.27	1.26	1.29	<1.5	1.48	1.68	2.23	2.55	2.13	2.44	4.7	3.94	1.23	1.49	1.38	1.13	<1	<1	1.32	1.8	1.86	1.78	2	1.63	3.17	3.52	3.54	3.04	1.17	1.28
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	0.938	0.887	0.936	0.84	<1.5	<2.5	1.57	3.18	1.01	0.941	1.14	1.42	0.738	<0.65	<0.65	<0.65	<0.65	<0.65	0.972	1.25	1.09	1.1	1.17	1.23	1.03	1.04	1.72	1.42	<0.65	<0.65
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.45	2.58	1.82	<2	1.96	2.02	3.08	4.96	3.33	4.85	4.42	6.45	1.45	2.03	2.69	1.28	2.01	1.65	1.75	2.51	2.38	2.07	3.8	3.09	4.29	4.47	6.52	5.64	1.81	1.42
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l			<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	<0.65	0.774	0.85	2.51	<0.65	<0.65	0.693	<0.65	<0.65	0.799	0.655	1.44	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.708	<0.65	<0.65	0.689	1.1	<0.65	<0.65	<0.65	1.56	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.39		1.68		0.00		0.35		0.40		1.05		0.00		0.00		0.00		0.35		0.00		0.89		0.00		0.78		0.00	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.77	0.85	2.51	0.00	0.00	0.69	0.00	0.00	0.80	0.66	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.69	1.10	0.00	0.00	0.00	1.56	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL9						
		03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<4	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<10	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<2	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<10	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<20	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<2	<1	1.65
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<10	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<4	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<2	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<2	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<1.3	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<4	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<20	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<2	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<2	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<4	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<10	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	<1.3	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<4	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<20	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<2	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<6	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	<2	<2	<2	<4	3.88	3.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<2	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<4	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<4	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<4	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<4	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.22	1.11	<1	1.06	<2	1.04	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<2	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.35	1.3	1.3	1.34	2.68	2.95	1.55
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<2	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<2	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	0.892	0.968	2.32	<0.65	<0.65
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<4	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.5	2.62	2.66	2.54	4.18	6.42	2.51
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<2	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<6	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<2	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<4	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<4	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90	<180	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<1.3	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)								
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL10																													
		09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l			<2	<2	<10	<10	<10	<20	<10	<10	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.17	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<20	<20	<100	<100	<100	<200	<100	<100	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																					<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l			<2	<2	<10	<10	<10	<20	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	11.6	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	0.724	<3.25	<3.25	<3.25	<6.5	<3.25	<3.25	<0.65	<0.65	0.791	0.66	<0.65	<0.65	<0.65	<0.65	0.757	0.76	1.75	0.875	0.838	0.982	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	0.808	<3.25	<3.25	<3.25	<6.5	<3.25	<3.25	0.77	0.657	0.86	0.963	0.772	0.761	<0.65	<0.65	0.954	0.806	1.7	0.83	0.855	1.08	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	5.34	5.29	<2	3.76	<10	<10	<10	<23.5	<10	<40	<3.5	<10	<7.5	<10	5.28	4.83	<2	2.49	5	6.2	5.48	4.97	7.71	8.22	3.39	3.01	2.42	2.69	4.75	4.79
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.33	1.33	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l			<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.06	<1	<1
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	2.25	1.78	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	2.66	2.56	1.99	2.18	<1	<1	1.78	2.09	2.35	1.63	2.35	2.67	1.15	<1	1.2	1.13	2.62	2.14
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	2.39	2.7	<1.5	1.21	<5	<5	<5	<10	<5	<5	<1	<1	4.17	4.22	3.59	3.85	<1	<1	3.07	3.96	4.28	3.69	4.56	4.7	1.38	1.51	<1	<1	4.97	5.1
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.28
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	20.2	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l			<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.43	1.4	<1	1.15	<11	<10	<5	<15	<3.25	<3.25	0.941	0.759	1.28	1.25	0.85	0.829	0.68	<0.65	1.35	1.47	1.67	1.36	1.55	1.7	1.34	0.817	<0.65	1.4	1.33	1.34
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<10	<10	<10	<20	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<7	6.62	<2	1.83	<5	<5	<5	<10	<5	<5	<1	<1	8.23	8.83	6.06	8.01	1.4	2.5	6.23	8.13	8.64	7.77	10.4	10.9	1.77	1.41	1.9	1.3	10.3	7.28
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l			<1	<1	<5	<5	<5	<10	<10	<5	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l			<2	<2	<10	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l			<1	<1	<5	<5	<5	<10	<5	<5	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	<0.65	<0.65	<0.65	1.53	<3.25	<3.25	<3.25	<6.5	<3.25	<3.25	0.77	0.657	1.65	1.62	0.772	0.761	<0.65	<0.65	1.71	1.57	3.45	1.7	1.69	2.06	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		0.77		0.00		0.00		0.00		0.71		1.64		0.77		0.00		1.64		2.58		1.88		0.00		0.00		0.00	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.66	1.65	1.62	0.77	0.76	0.00	0.00	1.71	1.57	3.45	1.70	1.69	2.06	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL10						
		03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<4
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.71	3.53	2.85	2.59	<2	2.74	3.19
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	1.44
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.76	1.74	<1	1.17	<1	<1	1.43
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	3.1	2.77	1.37	1.21	<1	1.25	1.9
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	0.855	0.927	<0.65	<0.65	1.28
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	6.94	7.3	3.06	2.99	<1	<1	4.68
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)								
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL11																													
		09-02-22	09-02-22	14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	14-07-24	30-09-24	30-09-24	09-12-24	09-12-24
11Cl-PF3OUdS (763051-92-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
3:3 FTCA (356-02-5)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
4:2 FTS (757124-72-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.21	<5	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
6:2 FTAB (34455-29-3)	ng/l																					<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	3.51	3.43	7.93	8.76	3.84	3.62	3.09	3.54	3.99	3.99	3.45	3.64	3.67	4.11	7.4	7.56	1.56	1.31	2.91	3.64	3.2	3.35	5.51	7.25	2.32	2.17	<1	<5	<1	<1
7:3 FTCA (812-70-4)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
8:2 FTS (39108-34-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
ADONA (919005-14-4)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	1.08	<1	<1	<5	<1	<1
Branched PFOS	ng/l	1.05	0.841	<1	1.44	1.85	1.66	1.98	1.74	2.91	2.81	2.78	2.92	1.2	1.03	1.05	1.16	2.15	1.6	1.25	<0.65	0.996	1.14	0.959	1.07	5.01	4.46	0.841	<3.25	<0.65	1.64
EtFOSAA (2991-50-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
EtFOSE (1691-99-2)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	10.8	<10	<10	<50	<10	<10
FBSA (30334-69-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
FHxSA (41997-13-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
HFPO-DA (13252-13-6)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
HFPO-TA (13252-14-7)	ng/l																	<5	<5	<5	<5	<5	<5	<5	<5	5.05	<5	<5	<25	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.3	1.35	<0.65	1.3	2.26	2.18	2.36	2.26	3.74	3.6	3.67	4.34	1.2	1.28	1.36	1.28	2.14	1.65	0.956	1.57	<0.65	0.678	1.06	1.01	4.6	3.81	1.31	<3.25	<0.65	0.71
MeFOSAA (2355-31-9)	ng/l																	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
MeFOSE (24448-09-7)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	10.2	<10	<10	<50	<10	<10
N-EtFOSA (4151-50-2)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
NFDHA (151772-58-6)	ng/l																	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
N-MeFOSA (31506-32-8)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	9.67	21.6	6.03	7.02	18.5	19	19.1	<20	27.3	29.2	11.5	12.5	<7	10	10.7	11.2	9.86	10.3	7.91	12.1	9.48	9.18	6.95	8.77	11.5	11.3	3.18	<10	6.13	5.75
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1.5	<1.5	<1	<1	<1	1.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.35	1.71	1.66	<1	<5	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDoS (79780-39-5)	ng/l			<1	<1	<1	<1	<1	<1	1.62	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFecHS (133201-07-7)	ng/l																	<1	<1	8.71	10.7	2.35	2.33	2.26	2.67	23.6	23.2	5.49	10.9	6.22	6.91
PFEESA (113507-82-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	4.03	6.05	4.17	4.75	12.4	11.3	7.12	7.44	11.2	10.1	6.46	7.46	3.95	3.66	10.6	9.95	3.79	3.68	3.15	3.84	3.41	3.05	2.65	3.33	5.54	5.48	1.72	<5	2.9	2.94
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	9.11	8.47	9.82	9.62	12.6	12.5	21	21.7	24.6	24	16.5	17.8	10.4	12	20.6	20.9	15.6	14.7	10.1	13.5	9.86	9.59	8.3	12.3	16.2	15.4	2.76	<5	8.58	8.72
PFHxDA (67905-19-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	1.4	1.21	<1	<5	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1.5	<1	<1	<1	2.22	1.98	2.21	2.28	3.44	3.51	3.41	3.36	<1	1.18	<1	<1	<1	<1	2.5	<2	1.33	1.28	<1	1.35	6.16	6.19	<1	<5	1.82	1.88
PFMOBA (863090-89-5)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFMOPrA (377-73-1)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	1.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.38	1.16	<1	<5	<1	<1
PFNS (68259-12-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.47	1.42	1.8	2.2	4.21	4.43	3.52	3.57	2.99	3.31	3.29	3.88	1.57	1.56	2.67	2.72	1.72	1.32	2.19	3.26	2.09	1.79	1.61	1.94	3.54	3.35	2.54	4.09	1.79	1.64
PFODA (16517-11-6)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	1.31	1.35	<1	<5	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	24.9	40.6	20	15.4	65.4	66	50.3	51.1	66.2	86.4	29.8	34.8	26	22.1	31.2	28	30.6	29.5	32.4	29.9	17.5	17.8	18.1	24.5	32.4	30.7	5.31	7.98	19	20.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFTeA (376-06-7)	ng/l																	<1	<1	<1	<1	<1	<1	<1	<1	1.41	1.26	<1	<5	<1	<1
PFTrDA (72629-94-8)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
PFTrDS (174675-49-1)	ng/l			<2	<2	<2	<2	<1	<1	3.04	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFUnDS (749786-16-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	2.35	2.19	<1	2.74	4.11	3.84	4.34	3.99	6.65	6.41	6.45	7.26	2.39	2.32	2.41	2.44	4.29	3.25	2.2	1.57	0.996	1.81	2.01	2.07	9.61	8.28	2.15	<3.25	<0.65	2.35
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	2.27		1.37		3.98		4.17		6.53		6.86		2.36		2.43		3.77		1.89		1.40		2.04		8.95		1.08		1.18	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.35	2.19	0.00	2.74	4.11	3.84	4.34	3.99	6.65	6.41	6.45	7.26	2.39	2.32	2.41	2.44	4.29	3.25	2.20	1.57	1.00	1.81	2.01	2.07	9.61	8.28	2.15	0.00	0.00	2.35

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL11						
		03-03-25	03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<2	<3	<1	<1	<5
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	2.15	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	0.968	<0.65	2.08	2.96	2.66	1.97	0.782
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	5.33
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	0.803	<0.65	1.93	1.53	3.96	1.56	0.729
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	5.23	5.61	10.5	8.58	7.88	8.03	4.61
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	4.27	4.56	27.3	31.2	35.5	29.3	3.26
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	3.38	3.31	5.53	5.8	7.25	5.38	2.57
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	10.7	11.1	15.6	17.6	9.7	8.32	9.95
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.46	1.25	3.22	3.39	1.69	1.92	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.08	1.3	2.59	2.66	2.44	1.71	1.5
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	22.5	23.4	39.5	33.6	17.7	16.7	18.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	108	107	90.9	<90	<90
Total PFOS	ng/l	1.77	<0.65	4.02	4.49	6.62	3.53	1.51
SW Threshold (as per S.I No. 77 of 2019.)								
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.89		4.26		5.08		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	1.77	0.00	4.02	4.49	6.62	3.53	1.51

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL12																														
		14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	19-12-22	19-12-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24	03-03-25
11Cl-PF3OUdS (763051-92-9)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.14	<2	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																				<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	27.5	<1	1.02	<1	<1	<1	<1	<1	<1	<1	1.88	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	5.97	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
ADONA (919005-14-4)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
Branched PFOS	ng/l	13.6	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.688	0.706	<0.65	1.25	<0.65	<0.65	<0.65	<0.65	0.847	<0.65	<0.65	<0.65	<0.65	<0.65	0.77	0.717	0.917	0.835	<0.65	1.36	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10
FBSA (30334-69-1)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
FHxSA (41997-13-1)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	8.89	<0.65	<0.65	<0.65	0.691	<0.65	<0.65	<0.65	0.681	<0.65	1.66	<0.65	<0.65	<0.65	<0.65	0.837	<0.65	<0.65	<0.65	<0.65	<0.65	1.14	0.931	1.39	1.04	<0.65	1.44	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l																<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
NFDHA (151772-58-6)	ng/l																<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<6	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	9.51	2.62	2.63	7.69	8.62	<4.5	<12	<10	<22	<2	<2	<2	<2	2.11	<2	3.02	<2	3.44	3.69	3.46	3.53	4.43	3.56	5.01	4.39	5.95	6.76	<2	<2	<2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.35	2.03	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
PFecHS (133201-07-7)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFEESA (113507-82-7)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	12.5	1.33	1.55	<1	1.05	1.56	1.55	1.82	2	<1	3.74	<1	<1	<1	<1	<1	<1	<1	1.26	<1	<1	1.36	1.26	1.77	1.8	2.07	3	<1	<1	1.17
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	16.3	1.55	1.47	2.25	2.38	1.92	2.2	4.17	4.03	1.21	8.8	<1	<1	1.14	1.03	<1	1.02	1.36	1.35	2.23	1.84	1.69	1.64	2.96	2.96	4.21	5.04	1.32	<1	1.33
PFHxDA (67905-19-5)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	8.99	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.06	1.08	<1	<2	<1	<1	<1
PFMOBA (863090-89-5)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	2.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	7.18	2.09	<1.8	2.38	2.66	0.865	1.21	1.35	1.3	0.785	2.25	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	1.14	1.02	<0.65	<0.65	1.32	1.27	1.36	1.36	1.8	1.88	<0.65	<0.65	<0.65
PFODA (16517-11-6)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	30.9	3.88	3.91	2.46	2.24	2.66	4.09	4.18	4.44	1.5	16.5	<1	<1	1.35	1.2	2.24	<1	<1	2.02	1.98	2.44	3.1	2.95	4.68	4.48	7.66	8.06	2.12	1.55	2.28
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFTeA (376-06-7)	ng/l																<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<6	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
Total PFAS DWI 47	ng/l																														<90
Total PFOS	ng/l	22.5	<0.65	<0.65	<0.65	0.691	<0.65	<0.65	0.688	1.39	<0.65	2.9	<0.65	<0.65	<0.65	<0.65	1.68	<0.65	<0.65	<0.65	<0.65	<0.65	1.91	1.65	2.31	1.88	<0.65	2.8	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		0.00		0.35		0.00		1.04		1.45		0.00		0.00		0.84		0.00		0.00		1.78		2.10		1.40		0.00		0.00
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	22.50	0.00	0.00	0.00	0.69	0.00	0.00	0.69	1.39	0.00	2.90	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.00	0.00	0.00	1.91	1.65	2.31	1.88	0.00	2.80	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL12					
		03-03-25	19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<3
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	0.691
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	2.32	<2	4.11	3.75	2.28
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<1	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.21	1.39	1.66	2.14	1.94	1.86
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	0.979	<0.65	<0.65	<0.65	0.981
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.7	2.69	2.04	5.44	5.05	<1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	0.691
SW Threshold (as per S.I No. 77 of 2019.)							
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00	0.00	0.69

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL13																													
		14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24	03-03-25	03-03-25	19-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.18	1.15	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																		29.7	31.4	13.2	20.6	25.4	24.7	<10	<10	<10	15.7	19.1	18	34.4
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	29.2	30.2	24.3	41.6	42.3	20.6	19.5	40.7	43.4	<1	11.6	4.62	5.1	6.83	7.31	29.4	25.3	19.6	20.2	11.1	14.8	24.5	23.7	39.7	39	1.14	3.66	2.14	2	8.75
7:3 FTCA (812-70-4)	ng/l														<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	6.97	<2	<2	<2.5	<2	<2	<2	<2	4.26	<2	<2	<2	<2	<2	<2	3.81	4.09	<2	<2	<2	<2	<2	<2	3.31	3.61	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	13.9	3.32	2.8	3.54	3.89	2.94	3.99	6.62	5.7	0.689	4.53	1.1	1.25	4.3	3.59	3.84	4.93	3.9	4.56	2.72	3.31	3.02	2.8	1.43	1.65	<0.65	1.77	1.26	1.13	2.59
EtFOSAA (2991-50-6)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l														<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	1.15	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l														<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	9.18	7.89	6.43	4.13	4.01	2.41	2.8	5.13	4.51	0.724	7.91	1.35	1.55	2.96	3.06	5.77	6.17	3.61	3.76	2.35	2.83	2.65	2.62	1.93	2.25	<0.65	1.27	1.61	1.29	1.59
MeFOSAA (2355-31-9)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l														<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l														<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	9.79	15.9	12.5	16.7	25.9	11	22.5	<22	22.9	<5	<2	11.3	11	10.8	9.9	11.6	9.93	9.81	10.9	7.81	9.85	16.7	16.5	11.6	14.9	13	7.52	4.94	4.61	9.51
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1.3	<1	<1	<1	1.72	1.35	<1	<1	<1	<1	<1	<1	1.31	<1	<1	<1	<1	1.25	1.63	1.61	1.5	1.57	1.61	1.55	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	1.18	1.28	<1	<1	<1	<1	1.21	1.09	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l														7.38	9.01	26.2	31.6	7.88	8.52	6.47	8.64	46.3	45.9	41.1	44.6	<1	28.6	6.56	6.52	12
PFEESA (113507-82-7)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	12.3	28.2	21.8	9.17	8.71	13.4	12.8	12.1	16.1	<1	5.46	10.9	12.7	8.61	8.19	7.86	5.94	6.31	6.72	4.2	5.24	7.88	7.64	7.37	7.4	<1	7.99	4.03	4.02	7.57
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	17.3	20.3	18.8	24.8	24.5	20.5	20.5	31.5	31.4	1.23	8.84	17.6	17.6	19.4	18.8	15.3	13.3	14.8	14.3	8.11	10.9	21.4	19.6	13.5	12.3	<1	11.2	9.28	8.71	16.1
PFHxDA (67905-19-5)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	9.23	2.77	2.35	2.83	2.81	3.12	3.39	5.51	5.26	<1	4.8	<1	<1	4.5	4.7	6.89	8.07	4.91	5.18	3.59	4.59	3.71	3.24	1.21	1.25	1.47	1.69	1.21	<1	2.55
PFMOBA (863090-89-5)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	2.34	3.31	2.71	1.61	1.44	1.15	1.16	2.1	2.18	<1	<1	<1	<1	<1	<1	1.8	1.23	<1	<1	<1	<1	1.34	1.17	1.88	1.92	<1	1.24	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	6.84	8.2	7.33	6.2	6.76	4.28	4.83	7.04	7.42	0.789	3.13	2.73	3.2	4.73	5.22	5.65	4.84	3.6	3.32	2.79	3.62	5.69	5.71	6.79	7.25	1.23	5.32	2.45	2.34	4.78
PFODA (16517-11-6)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	36.8	38.9	70.7	41.5	46.4	30.4	53.5	38.3	55.2	1.26	33.8	27.4	26.1	35.8	34.9	29.3	23.9	27.4	28	16.7	22.7	34.1	34.8	31.5	31.2	<1	24.5	18.9	17.2	32.1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																												<90	<90	97.5
Total PFOS	ng/l	23.1	11.2	9.23	7.66	7.9	5.35	6.79	11.7	10.2	1.41	12.4	2.45	2.8	7.26	6.65	9.62	11.1	7.5	8.33	5.07	6.14	5.67	5.42	3.36	3.9	<0.65	3.05	2.86	2.42	4.18
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		10.22		7.78		6.07		10.95		6.91		2.63		6.96		10.36		7.92		5.61		5.55		3.63		1.53		2.64		4.15
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	23.10	11.20	9.23	7.66	7.90	5.35	6.79	11.70	10.20	1.41	12.40	2.45	2.80	7.26	6.65	9.62	11.10	7.50	8.33	5.07	6.14	5.67	5.42	3.36	3.90	0.00	3.05	2.86	2.42	4.18

Landside Monitoring Results
(Surface Water)

Parameter	Unit				
		19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	30.6	<10	18.2	24.1
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	7.64	33.4	37	13
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	2.15
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1
Branched PFOS	ng/l	2.39	1.54	3.92	3.95
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	5.69
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.72	1.37	3.24	4.36
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	9.5	12.7	14.1	7.41
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	12.2	76.2	120	15.1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	7.48	10.4	11.7	4.66
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	16.6	17.5	17.4	11.1
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.61	1.41	1.9	4.39
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	1.5	1.05	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.95	7.02	6.97	3.33
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	31	53.2	49.5	21.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	96	216	267	96.7
Total PFOS	ng/l	4.11	2.91	7.16	8.32
SW Threshold (as per S.I No. 77 of 2019.)					
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		5.04		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	4.11	2.91	7.16	8.32

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL14																												
		14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24	03-03-25	03-03-25	19-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	33.7	<2	<10	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																		<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	1.55	<1	<1	<1	<1	<1	<1	<1	12.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l														<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<1	0.874	0.786	0.818	<0.65	<0.65	0.71	1.48	1.45	0.836	5.1	0.668	<0.65	<0.65	<0.65	<0.65	<0.65	0.7	0.791	1.5	1.64	<0.65	1.89	<5	0.849	1.56	1.13	1.02	0.713	<0.65
EtFOSAA (2991-50-6)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l														<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l														<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	0.873	0.834	0.901	0.728	0.751	0.692	1.14	1.12	0.836	8.14	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	3.04	2.54	<0.65	1.02	<4	0.814	0.927	1.07	0.816	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l														<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l														<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l														<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	7.32	6.64	13.5	7.66	<4	<5	9.1	8.31	<3	<2	3.76	3.66	3.58	4.65	6.87	4.46	5.89	6.11	5.32	5.05	<2	4.51	<10	2.47	4.21	4.34	3.18	3.56	3.04
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	1.33	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.26	1.29	<1	<1	<5	<1	1.36	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l														<1	<1	<1	2.19	<1	<1	1.2	1.26	<1	<1	<5	1.23	<1	<1	<1	<1	1.03
PFEESA (113507-82-7)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.44	4.31	3.88	2.19	1.27	1.82	2.13	3.35	3.3	1.74	5.24	1.77	1.52	<1	<1	1.77	1.58	1.33	<1	1.49	1.48	<1	1.27	<5	1.11	1.94	1.97	1.28	1.28	1.3
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	2.47	3.42	3.12	4.58	4.12	4.14	4.28	6.22	6.06	2.66	8.92	2.53	2.52	2.41	2.44	2.89	2.35	3.18	3.02	2.2	2.4	1.95	1.97	<5	2.02	3.23	3.78	1.76	2	2.29
PFHxDA (67905-19-5)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2	<5	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.32	3	2.7	3.48	2.11	1.33	1.42	4.11	3.68	1.54	3.45	1.23	1.11	<0.65	1.18	1.97	1.59	1.8	1.9	1.5	1.63	0.961	1.35	<4.5	1.69	2.9	2.94	<0.65	0.84	<0.65
PFODA (16517-11-6)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<5	6.23	5.31	11.2	5.65	6.53	7.66	6.74	8.55	5.64	31.7	3.64	3.4	6.34	5.12	4.9	3.64	4.96	4.42	4.76	5.09	2.75	3.39	<5	3.13	6.27	7.14	3.83	4.25	4.79
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																												<90	<90	<90
Total PFOS	ng/l	<1	1.75	1.62	1.72	0.728	0.751	1.4	2.62	2.56	1.67	13.2	0.668	<0.65	<0.65	<0.65	<0.65	<0.65	0.7	0.791	4.54	4.18	<0.65	2.91	<5	1.66	2.49	2.19	1.84	0.713	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		1.69		1.22		1.08		2.59		7.44		0.33		0.00		0.00		0.75		4.36		1.46		0.83		2.34		1.28		0.00
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	1.75	1.62	1.72	0.73	0.75	1.40	2.62	2.56	1.67	13.20	0.67	0.00	0.00	0.00	0.00	0.00	0.70	0.79	4.54	4.18	0.00	2.91	0.00	1.66	2.49	2.19	1.84	0.71	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit				
		19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<3
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.44	4.25	3.46	3.48
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	1.2
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	1.09	1.36	<1	1.58
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.07	1.26	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	2.02	2.9	2.93	1.96
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.18	1.06	1.22	1.48
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	5.49	6.44	5.05	5.34
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)					
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	SL15																													
		14-03-22	14-03-22	19-04-22	19-04-22	26-05-22	26-05-22	21-06-22	21-06-22	19-09-22	19-09-22	16-11-22	16-11-22	13-02-23	13-02-23	29-05-23	29-05-23	14-08-23	14-08-23	21-11-23	21-11-23	03-04-24	03-04-24	17-07-24	17-07-24	30-09-24	30-09-24	09-12-24	09-12-24	03-03-25	03-03-25
11Cl-PF3OUdS (763051-92-9)	ng/l															<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l															<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	1.12	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																			<10	<10	<10	<10	10.4	10.3	<50	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	4.56	3.41	<1	1.3	1.04	<1	<1	1.48	1	<1	1.52	6.81	6.13	<1	<1	1.84	1.7	1.38	1.49	1.6	1.4	1.15	<1	<5	1.44	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l															<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<1	1.18	2.41	0.887	0.725	0.765	<0.65	<0.65	1.32	1.27	0.745	0.963	0.786	0.855	<0.65	1.33	1.12	0.93	<0.65	0.836	1.19	0.996	0.896	0.973	<5	0.903	<0.65	1.73	1.03	0.783
EtFOSAA (2991-50-6)	ng/l															<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l															<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l															<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l															<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	1.45	3.01	0.977	0.976	0.995	0.831	0.85	1.69	1.57	0.764	1.15	0.992	0.912	<0.65	1.33	1.23	1.27	<0.65	<0.65	1.26	1.28	1.19	1.06	<5	1.59	<0.65	0.935	0.997	0.912
MeFOSAA (2355-31-9)	ng/l															<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l															<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l															<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	5.73	<7	23.1	6.57	<11	<5	<4	<4	<66	7.34	<2	<2	5.35	4.97	5.81	4.85	7.66	6.87	7.26	7.3	7.17	6.28	5.45	5.26	<10	5.99	4.76	4.89	4.02	2.91
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	1.49	<1	<1	<1	<1	<1	2.03	<1	<1	<1	<1	<1	<1	<1	1.22	1.07	<1	<1	<1	<1	1.4	1.35	<5	<1	<1	1.35	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	1.22	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l															<1	<1	<1	2.12	<1	<1	1.53	1.38	1.78	1.7	10.4	8.82	1.66	1.41	<1	1.01
PFEESA (113507-82-7)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.89	3.58	13.7	4.67	2.5	1.96	2.16	2.5	3.11	3.07	1.71	3.15	3.61	2.84	1.63	1.09	2.99	3.03	2.48	2.46	2.67	2.53	2.39	2.23	<5	2.73	2.19	2.34	2.27	1.88
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	3.05	7.7	18.2	5.54	5.51	5.49	7.64	8.41	9.05	7.28	2.86	7.42	9.39	8.86	4.64	5.53	7.97	8.42	7.55	7.38	7.09	6.23	5.89	6.28	5.76	4.43	5.43	5.71	5.72	6.19
PFHxDA (67905-19-5)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	1.67	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.11	1.07	<1	<1	<5	<1	1.63	1.54	1.23	1.02
PFMOBA (863090-89-5)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.17	1.32	<1	<1	<1	<1	<1	<1	<5	1.28	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.63	1.8	10.2	3.21	3.18	3.03	1.47	1.53	2.55	2.37	1.85	1.71	1.2	1.45	1.42	1.15	2.48	2.96	1.68	1.76	2.02	1.85	3.02	2.31	<5	3.63	1.81	1.74	1.14	1.96
PFODA (16517-11-6)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	5.68	11.4	62.9	22.3	9.09	7.59	9.51	10.3	10.2	9.71	5.41	13.5	19.4	15.3	11.3	12.1	18.6	21.6	12.4	14.7	14.2	12.4	9.58	9.79	10.2	9.95	11.5	13.6	12.5	12.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l															<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<4	<4	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																													<90	<90
Total PFOS	ng/l	<1	2.63	5.41	1.86	1.7	1.76	0.831	0.85	3.01	2.84	1.51	2.11	1.78	1.77	<0.65	2.66	2.34	2.2	<0.65	0.836	2.45	2.27	2.08	2.04	<5	2.49	<0.65	2.67	2.03	1.69
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	1.32		3.64		1.73		0.84		2.93		1.81		1.78		1.33		2.27		0.42		2.36		2.06		1.25		1.34		1.86	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	2.63	5.41	1.86	1.70	1.76	0.83	0.85	3.01	2.84	1.51	2.11	1.78	1.77	0.00	2.66	2.34	2.20	0.00	0.84	2.45	2.27	2.08	2.04	0.00	2.49	0.00	2.67	2.03	1.69

Landside Monitoring Results
(Surface Water)

Parameter	Unit					
		19-05-25	19-05-25	02-09-25	02-09-25	09-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	14.7	19.3	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<4	1.34	<1	<1	<4
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.21	1.19	0.751	0.834	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.03	0.851	0.84	1.07	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.91	4.08	3.59	3.81	8.19
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	1.44
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	2.63	1.7	3.93	3.72	2.92
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	2.41	2.05	2.35	2.38	2.6
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	5.23	4.98	4.85	4.1	7.49
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.84	1.62	1.5	1.65	1.92
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	12	11	8.52	7.88	20.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90	<90	<90
Total PFOS	ng/l	2.24	2.04	1.59	1.9	<0.65
SW Threshold (as per S.I No. 77 of 2019.)						
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	2.14		1.75		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.24	2.04	1.59	1.90	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	C1																		
		16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.98	<5	<1	<1	<1	<1	1.42
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	7.99	11.4	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
Branched PFOS	ng/l	0.784	0.769	<0.65	<0.65	<0.65	0.773	0.778	0.74	0.831	0.935	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	0.916	0.966	<0.65	<0.65	<0.65	0.806	0.713	0.691	1.01	0.688	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.84	3.61	<4	<2	3.69	<2	2.44	<2	8.58	6.83	3.67	<2	<2	<10	<2	<2	<2	<2	3.61
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	1.04	1.07	1.87	1.91	2.54	2.29	<1	1.39	<1	<5	<1	<1	2.47	2.24	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.33	1.32	<1	<1	<1	1.1	<1	<1	1.89	1.82	1.44	<1	<1	<5	<1	<1	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.64	1.87	<1	<1	1.08	1.02	<1	<1	2.82	2.8	1.81	1.74	1.13	<5	<1	<1	<1	<1	1.33
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.34	<1	1.03	<5	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	18.4	27.2	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.26	1.3	<0.65	<0.65	0.828	1.09	0.972	0.856	1.05	1.03	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	3.42	2.24	<1	<1	2.05	1.9	1.12	<1	7.05	6.01	2.86	4.1	1.96	<5	<1	<1	1.96	1.72	2.32
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l													<90	<450	<90	<90	<90	<90	<90
Total PFOS	ng/l	1.7	1.74	<0.65	<0.65	<0.65	1.58	1.49	1.43	1.84	1.62	<0.65	<0.65	<0.65	<3.25	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																				
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	1.72		0.00		0.79		1.46		1.73		0.00		0.00		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	1.70	1.74	0.00	0.00	0.00	1.58	1.49	1.43	1.84	1.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	C-2A										
		16-08-23	16-08-23	22-11-23	22-11-23	02-04-24	02-04-24	11-12-24	11-12-24	04-03-25	04-03-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			<50	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	2.98	2.67	<5	<1	<1	<1	<1	<1	<1	<1	1.44
7:3 FTCA (812-70-4)	ng/l	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<3.25	<0.65	1.51	1.71	<0.65	1.31	<0.65	1.52	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	0.985	<0.65	<3.25	<0.65	1.08	1.46	<0.65	1.04	<0.65	0.68	0.748
MeFOSAA (2355-31-9)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<15	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	34.4	32.3	18.1	6.12	8.99	10.6	6.69	8.06	4.7	5.25	11.1
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	1	<5	<1	1.12	<1	<1	1.2	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<5	<1	1.27	1.01	<1	1.19	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	13.3	12.3	<5	1.88	3.79	3.91	2.39	2.8	2.77	2.8	3.66
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	24.5	22.6	7.67	4.33	7.86	8.02	7.57	7.26	5.05	5.18	7.91
PFHxDA (67905-19-5)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<5	1.01	1.45	1.76	<1	1.22	1.71	1.86	1.32
PFMOBA (863090-89-5)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.87	1.55	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	8.19	6.83	<3.25	1.31	2.35	2.42	1.26	2.82	<0.65	<0.65	1.87
PFODA (16517-11-6)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	73.1	69.9	13.7	8.18	17.9	18.3	15.6	19.4	10.8	12.1	16.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<15	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l									<90	<90	<90
Total PFOS	ng/l	0.985	<0.65	<3.25	<0.65	2.59	3.16	<0.65	2.35	<0.65	2.2	0.748
SW Threshold (as per S.I No. 77 of 2019.)												
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.49		0.00		2.88		1.18		1.10		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.99	0.00	0.00	0.00	2.59	3.16	0.00	2.35	0.00	2.20	0.748

Landside Monitoring Results
(Surface Water)

Parameter	Unit	C-2B										
		16-08-23	16-08-23	22-11-23	22-11-23	02-04-24	02-04-24	11-12-24	11-12-24	04-03-25	04-03-25	15/12/2025
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.42
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.31	1.48	<0.65	<0.65	0.668	<0.65	<0.65	<0.65	0.921	0.918	0.745
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.05	1.09	<0.65	<0.65	0.708	0.837	<0.65	<0.65	0.837	0.749	0.802
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	15.2	14.9	10.6	13.9	8.45	9.4	<2	<2	11.1	11.8	12
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	1.05	<1	<1	<1	1.17	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	6.09	6.55	3.06	3.01	3.35	3.5	<1	<1	4.64	5.02	4.29
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	13.1	14.2	6.51	5.3	5.27	5.06	1.49	1.32	12.9	12.3	9.37
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.21	2.53	<1	<1	<1	<1	<1	<1	1.07	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	1.04	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.27	3.25	1.85	1.92	2.47	2.37	<0.65	<0.65	1.1	0.976	2.55
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	32	33.5	12.8	11	14.2	13.6	2.93	2.78	36.3	37	23.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l									<90	<90	<90
Total PFOS	ng/l	2.37	2.57	<0.65	<0.65	1.38	0.837	<0.65	<0.65	1.76	1.67	1.55
SW Threshold (as per S.I No. 77 of 2019.)												
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	2.47		0.00		1.11		0.00		1.72		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.37	2.57	0.00	0.00	1.38	0.84	0.00	0.00	1.76	1.67	1.55

Landside Monitoring Results
(Surface Water)

Parameter	Unit	Kealy's Stream																		
		16-08-23	16-08-23	22-11-23	22-11-23	02-04-24	02-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	22-05-25	22-05-25	04-09-25	04-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	30.2	23.3	<5	<5	<5	<5	<5	<25	<5	<5	<25	<25	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			118	105	40.5	41.8	24.2	29.7	50.6	137	37	46.3	<50	<50	23.3	25	39.5	<10	17
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	12.4	12.3	20.1	23	4.43	5	4.36	5.45	7.42	11.2	6.74	7.78	<5	<5	3.27	2.73	7.52	4.24	3.13
7:3 FTCA (812-70-4)	ng/l	<5	<5	6.37	<5	<5	<5	<5	<5	<5	<25	<5	<5	<25	<25	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	4.4	4.11	15.2	16.6	5.01	5.18	2.14	2.43	5.64	<10	7.96	7.19	<10	<10	<2	<2	3.4	3.87	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
Branched PFOS	ng/l	7.02	7.96	16	14.6	12.2	11	6.7	6.27	4.01	3.61	10.5	12.3	3.9	3.87	6.98	8.02	2.79	3.64	18.5
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<20	<2	<2	<10	<10	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<50	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	1.27	1.06	1.51	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	1.38
FHxSA (41997-13-1)	ng/l	2.25	1.93	1.54	1.31	1.48	1.49	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<25	<25	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	9.41	7.1	12.6	13.7	10.6	10.8	6.28	6.65	3.62	<3.25	5.47	6.54	<3.25	3.28	6.03	7.89	5.74	7.34	17.9
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50	<50	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<15	<15	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	27.6	25.9	34.6	53.1	14.6	13.5	20.2	20.9	14.2	16.2	18.5	18.6	<10	<10	12.9	13	12	9.83	25.4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	2.2	2.08	2.41	2.6	2.22	2.22	2.57	2.89	1.23	<5	1.95	2.1	<5	<5	1.58	1.89	<1	<1	2.43
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	16.4	10.7	14.4	15.7	20.5	20.7	38.3	39.4	17	22.7	30.8	28.8	<5	<5	45.1	51.3	65	73.9	34.2
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	20.1	20.3	27.5	37.1	9.59	9.81	11.2	11.4	8.2	6.98	12.4	12.6	<5	5.15	7.27	9.07	8.95	9.13	11.3
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	1.23	1.29	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	25.6
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	35.6	34.7	57.5	55.4	16.3	16.2	19.2	21.1	12.9	14.1	23.7	23.8	5.71	6.75	13.4	15	15.4	10.7	<1
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	16.3	12	16.4	18.9	11.4	11.5	8.54	8.63	3.06	<5	10.7	10.7	<5	5.52	7.1	8.34	5.78	3.31	17.2
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	3.69	3.8	6.15	7.98	1.98	1.84	1.74	1.69	1.54	<5	1.1	1.29	<5	<5	1.19	1.25	<1	1.42	1.39
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	15.6	14.7	14.5	17.6	5.99	6.27	6.74	6.89	4.73	6.2	5.85	6.61	<3.25	<3.25	4.41	5.16	4.93	5.94	6.65
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	76.4	75.9	118	136	38.3	36.7	47.6	43.9	32.3	31.1	60.5	60.6	14.8	13.6	31.9	34.7	41.4	43.1	57
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	1.47	1.35	1.41	1.34	1.55	1.55	1.22	<1	<1	<10	1.25	1.08	<5	<5	1.18	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<15	<15	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l													<450	<450	142	158	173	176	222
Total PFOS	ng/l	16.4	15.1	28.6	28.2	22.8	21.8	13	12.9	7.63	3.61	15.9	18.8	3.9	7.15	13	15.9	8.52	11	36.4
SW Threshold (as per S.I No. 77 of 2019.)																				
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	15.75		28.40		22.30		12.95		5.62		17.35		5.53		14.45		18.64		12.88
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	16.40	15.10	28.60	28.20	22.80	21.80	13.00	12.90	7.63	3.61	15.90	18.80	3.90	7.15	13.00	15.90	8.52	11.00	36.40

Landside Monitoring Results
(Surface Water)

Parameter	Unit	M5																		
		16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	1.18	1.19	<1	<1	<1	<1	1.17	1.64	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	0.882	0.718	<0.65	<0.65	0.847	0.885	0.84	1.11	<3.25	0.763	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	0.652	<0.65	<0.65	0.953	0.913	<0.65	<0.65	<3.25	0.661	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	6.01	5.48	6.15	14	5.58	6.72	9.15	11.5	<10	4.26	7.02	7.29	4.64	4.59	12.4	15.6	7.86	10.2	8.02
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	1.14	1.35	1.28	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	4.63	5.24	2.61	3.17	3.16	3.44	23.3	27.1	11.6	8.75	9.83	10.1	7.67	8	71.4	93.7	75.9	67.5	17.5
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	2.93	2.78	2.05	2.43	2.66	3.27	4.3	5	<5	1.41	4.73	5.26	3.64	3.46	6.09	5.61	6.64	8.22	2.71
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	5.5	6.86	3.74	5.71	5.8	6.13	12.2	13.5	<5	2.37	9.33	9.06	7.01	7.27	11	13.3	11.4	10.6	6.97
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.23	1.29	<1	<1	<1	<1	<1	1.25	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.18
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.27	2.15	1.47	2.11	2.16	2.21	2.88	3.19	<3.25	1.53	3.46	6.8	2.06	1.92	2.63	2.54	2.42	2.09	1.9
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	9.93	12.4	8.4	8.35	11.8	13	19.4	23.1	<5	4.52	21	19.6	15.4	15.8	20.3	18.8	20.7	22.6	15.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l													<90	<90	124	150	125	121	<90
Total PFOS	ng/l	0.882	1.37	<0.65	<0.65	1.8	1.8	0.84	1.11	<3.25	1.42	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																				
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	1.13		0.00		1.80		0.98		0.71		0.00		0.00		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.88	1.37	0.00	0.00	1.80	1.80	0.84	1.11	0.00	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	S1												
		16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	0.675	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<4	4.63	12.3	9.86	5.84	6.42	<2	<2	<2	<2	3.3	3.31	3.59
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	1.1	1.02	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<1	1.05	1.5	1.29	<1	<1	<1	<1	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<1	<1	<1	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.85	<0.65	1.17	0.972	2.74	2.77	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	<1	<1	<1	<1	1.52	1.69	<1	<1	<1	<1	1.35	1.39	<1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l									<90	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	<0.65	0.675	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)														
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		0.00		0.34		0.00		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	S3																		
		16-08-23	16-08-23	22-11-23	22-11-23	04-04-24	04-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	1.05	<1	1.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<2
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<10	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	0.689	0.723	<0.65	<0.65	<0.65	0.884	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.38
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65	<0.65	0.954	0.931	<0.65	<0.65	0.707	0.769	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<1
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.78
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<1
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.28
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	4.33	4.77	4.01	5.24	5.73	3.92	<2	<2	2.79	2.62	<2	<2	<2	2.16	<2	<2	<2	<2	<1
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.43
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.65
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1
PFecHS (133201-07-7)	ng/l	<1	<1	<1	<1	1.21	1.2	1.27	1.33	2.38	2.15	2.99	<1	<1	<1	4.34	3.02	2.96	2.48	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.25	1.18	1.22	1.42	1.75	1.71	<1	<1	<1	<1	<1	<1	1.19	<1	<1	<1	<1	<1	<2
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.57	1.53	2.43	2.31	2.32	2.13	1.22	1.18	1.62	2.21	3.24	3.42	1.29	1.24	1.19	<1	<1	<1	<0.65
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<20	<10	<1	<1	<1	<1	<1	<1	<1	<1	<3
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.1	1.1	0.954	1.17	1.46	1.28	1.15	<0.65	0.864	0.92	0.943	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<2
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	3.18	2.76	3.78	4.35	5.07	4.89	1.64	1.88	3.42	3.45	6.55	5.37	2.76	2.89	2.14	2.49	<1	<1	<1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	1.55
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l													<90	<90	<90	<90	<90	<90	<0.65
Total PFOS	ng/l	<0.65	<0.65	<0.65	<0.65	1.64	1.65	<0.65	<0.65	0.707	1.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<90
SW Threshold (as per S.I No. 77 of 2019.)																				
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		0.00		1.65		0.00		1.18		0.00		0.00		0.00		0.00		1.75
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	0.00	1.64	1.65	0.00	0.00	0.71	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Landside Monitoring Results
(Surface Water)

Parameter	Unit	WAD Stream																		
		16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	15-07-24	15-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l			<10	<10	<10	<10	<10	12.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<4
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<10	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.01	1.25	0.795	0.783	1.9	1.84	1.93	2.5	2.6	1.44	<0.65	<0.65	1.62	1.66	2.03	2.32	1.32	1.63	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.23	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	1.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.41	1.59	<0.65	0.776	2.36	1.85	1.61	1.81	1.5	1.51	<0.65	<0.65	1.29	0.948	0.873	1.2	2.03	1.97	1.32
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<6	8.91	4.39	4.84	4.05	6	7.99	7.3	3.64	3.63	8.37	9.1	6.76	6.44	7.8	7.58	6.48	5.92	6.76
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.78	1.88	<1	<1	1.58	1.46	2	2.83	1.98	1.75	1.57	1.96	1.61	1.44	1.59	2.29	2.3	1.99	2.11
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	2.66	2.37	<1	<1	2.31	4.86	2.15	2.4	2.1	1.96	<1	<1	2.07	2.24	<1	<1	3.61	2.69	2.96
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	3.32	4	2.01	1.7	3.17	2.95	2.95	3.26	1.95	1.91	3.61	3.68	2.93	2.84	2.98	3.07	3.26	2.74	2.62
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.71
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	7.13	9.75	4.57	4.82	5.41	5.14	4.95	6.24	2.83	2.76	9.61	10.4	5.94	5.42	6.25	6.09	6.63	5.15	<1
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.15	<2	1.52	1.57	2.18	1.84	2.54	3.47	1.67	1.36	<1	<1	2.23	2.19	2.75	2.67	1.9	1.36	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<20	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	1.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.52	2.92	1.13	1.3	2.77	2.51	1.7	2.67	2.15	1.89	1.53	2.65	1.6	1.42	1.6	1.7	2.31	1.72	2.17
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	16.1	18.7	10.3	10.9	10.7	11.3	9.83	11.6	5.33	4.85	17.9	17.3	14.1	14.3	16.6	15	17.5	11.4	18.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l													<90	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	2.42	2.84	0.795	1.56	4.27	3.68	3.54	4.31	4.1	2.96	<0.65	<0.65	2.91	2.6	2.9	3.52	3.35	3.6	1.32
SW Threshold (as per S.I No. 77 of 2019.)																				
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	2.63		1.18		3.98		3.93		3.53		0.00		2.76		3.21		2.76		0.44
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.42	2.84	0.80	1.56	4.27	3.68	3.54	4.31	4.10	2.96	0.00	0.00	2.91	2.60	2.90	3.52	3.35	3.60	1.32

Landside Monitoring Results
(Surface Water)

Parameter	Unit	M1								
		22-11-23	22-11-23	02-04-24	02-04-24	11-12-24	11-12-24	04-03-25	04-03-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2 FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	0.933	0.836	<0.65	<0.65	<0.65	1.06	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<9	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	2.15	1.55	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	11.1	5.29	9.33	9.36	6.62	6.72	2.8	4.24	9.62
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	1.14	1.05	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	1.7	1.69	1.53	1.34	<1	<1	2.4
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	2	1.33	2.6	2.54	2.76	3.34	1.78	2.45	2.43
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	4.13	3.63	3.98	4.51	6.8	5.87	3.87	4.62	5.03
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	1.17	<1	<1	<1	1.32	1.09
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.36	1.26	2.34	2.21	1.3	1.3	0.974	0.823	1.41
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	5.94	4.55	11.4	12.1	18.7	12.9	7.93	10.7	11.3
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l							<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	3.09	2.39	<0.65	<0.65	<0.65	1.06	<0.65
SW Threshold (as per S.I No. 77 of 2019.)										
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		2.74		0.00		0.53		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	3.09	2.39	0.00	0.00	0.00	1.06	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	26-01-21	05-02-21	11-02-21	12-02-21	18-02-21	28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	23-07-21	30-07-21	06-08-21	13-08-21	20-08-21	27-08-21	10-09-21
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																													
5:3 FTCA (914637-49-3)	ng/l																													
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	1.22	1.62	1.22	<1	<1	<1	<1	1.25	<1	1.52	<1	<1	<1	<1	1.31	<2	1.15	1.22	1.48	<1	<1	<1	<1	1.95	1.64	1.84	4.14	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																													
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	2.14	<1	2.14	<1	<1	1.08	1.54	1.18	1.47	1.79	1.33	1.32	1.27	1.31	1.71	<2	2.11	1.9	1.67	1.69	1.79	1.71	<1	5.11	2.5	3.75	4.45	2.16	1.12	2.19
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.42	0.783	1.42	<0.65	<0.65	0.997	1.43	1.11	1.5	1.84	1.51	1.35	1.48	1.52	2.16	2	2.4	2	1.64	1.58	1.59	1.94	1.27	8.45	2.31	3.03	4.33	2.52	1.66	2.31
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	19.2	15.2	19.2	7.05	8.11	25.7	20.3	19	9.68	13.7	15	31.8	9.6	<16	12.6	45.9	21.5	27.5	<12.5	14.8	19.6	13.3	18.8	28.6	30.4	29.6	48.3	29.2	12.7	28.1
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NS	<1	NS	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2.5	<4	<7.5	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																													
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																											<1	<1	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	19.5	5.39	19.5	5.11	4.08	9.36	13.5	13.4	7.46	9.74	8.48	8.91	8.58	10.7	16.5	6.6	19.7	20	14.7	13.8	14.7	12.6	10.6	35.4	27.4	34.3	47.3	20.6	5.6	20.3
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.6	6.16	19.6	3.16	3.55	10.2	14.1	14.8	7.33	9.63	9.35	8.93	8.01	9.51	11.3	5.72	13.5	12.8	10.7	9.05	10.1	10.2	7.5	29.1	32.6	33.7	52.9	31.3	10.2	30
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.56	<1	1.56	<1	<1	<1	1.06	1.31	1.04	1.11	<1	<1	1.02	<1	<1	<2	1.03	1.05	<1	<1	<1	<1	<1	1.63	2.14	2.38	3.86	1.88	1.18	2
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l		NS																											
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.08	<2	1.4	1.15	1.26	<1	<1	1.02	<1	5.61	1.38	1.33	2.14	1.48	<1	1.5
PFNS (68259-12-1)	ng/l																													
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.59	1.31	2.59	1.46	1.48	1.92	2.13	2.25	2.24	2.62	2.07	1.86	1.94	2.13	2.79	2.88	3.33	2.94	2.87	2.71	2.87	2.59	3.44	11	3.84	4.76	7.09	4.19	2.84	3.92
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	24.6	13.4	24.6	4.32	4.89	16.2	23.7	18.9	11.3	14.7	14.9	12.4	12.8	17	24.3	10.4	22.6	21.9	23.5	15.2	15.5	14.4	10.7	63.8	63.1	89.9	105	39.7	16.1	32.7
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																												<1	<1	<1
PFTeA (376-06-7)	ng/l																														
PFTrDA (72629-94-8)	ng/l																														
PFTrDS (174675-49-1)	ng/l																														
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																														
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	3.56	<1	3.56	<1	<1	2.07	2.97	2.29	2.97	3.63	2.84	2.67	2.75	2.84	3.88	<2	4.51	3.89	3.32	3.26	3.38	3.66	1.27	13.6	4.81	6.78	8.77	4.69	2.78	4.5
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																														
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.56	0.00	3.56	0.00	0.00	2.07	2.97	2.29	2.97	3.63	2.84	2.67	2.75	2.84	3.88	0.00	4.51	3.89	3.32	3.26	3.38	3.66	1.27	13.60	4.81	6.78	8.77	4.69	2.78	4.50

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P2																													
		17-09-21	24-09-21	01-10-21	07-10-21	18-10-21	03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	21-03-23	21-03-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	20-05-25	20-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l											<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l											<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																	<10	<10	<10	<10	12.5	14.4	10.7	<10	<10	<10	<10	<10	10	11.5
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	1.63	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l													<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l											<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	1.08	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.75	2.87	2.64	1.76	2.41	1.88	1.95	2.22	2.14	2.28	1.05	1.04	2.44	1.05	1.18	0.989	1.08	1.04	1.32	1.35	2.08	1.67	2.04	2.31	1.73	<0.65	1.91	2.03	2.25	2.38
EtFOSAA (2991-50-6)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l													<12.5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l													<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.01	2.48	2.44	2.26	2.24	1.05	1.22	1.07	1.3	1.3	0.914	0.948	2.42	1	0.7	0.757	<0.65	<0.65	1.04	1.04	2.71	1.54	2.03	2.47	<0.65	<0.65	0.889	1.4	1.29	1.91
MeFOSAA (2355-31-9)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l													<10	<10	<10	<10	<10	<10	<10	<10	10.1	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l													<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	24.1	29.7	28.4	25.3	30.6	28.7	32	29.2	26.9	31.5	29.6	29.7	24.1	19.8	20.2	26.9	31.9	31.5	35.6	34.2	30.8	28	12.9	16.3	31.6	25.4	30.1	25	27.2	30
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.02	1.04	1.18	1.09	1.32	1.59	1.14	<1	<1	<1	1.56	<1	<1	<1	1.59	1.58
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l											<1	<1	<2.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	1.33	<1	1.05	1.16	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	1.08	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	16.8	25.4	24.2	20.3	21.9	33.9	28.7	31.3	29.9	28.2	13.2	14.8	8.48	8.33	6.85	9.43	12	10.6	10.6	11.2	14.9	11.7	7.61	8.46	15.5	14.1	15.5	11.4	12.4	14.8
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	28.2	30	28.2	22.7	24.1	41.4	46.3	43	41	47.6	33	32.3	20.6	19.3	21	25.7	37.6	35.9	33.4	31.7	28.4	30.1	13.1	16.4	61.3	53.2	47.7	37.2	41.8	48
PFHxDA (67905-19-5)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	1.32	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.85	1.84	1.87	1.56	1.47	1.72	1.53	1.74	1.78	1.99	1.24	1.35	<1	<1	<1	1.08	1.7	1.68	1.63	1.78	2.08	1.5	<1	<1	2.9	3.06	2.32	1.97	2.37	2.59
PFMOBA (863090-89-5)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.21	1.68	1.52	1.27	1.31	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.01	<1	<1	<1	<1	<1	1.47	1.06	<1	1.38	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.59	3.88	3.67	3.06	3.42	2.58	2.91	3.08	3.24	3.08	2.48	2.47	2.52	3.17	2.3	3.29	3.19	2.93	3.15	3.3	5.99	4.56	3.58	3.92	3.16	3.12	4.81	4.17	3.58	3.75
PFODA (16517-11-6)	ng/l													<1	<1	<1	<1	<1	<1	<1	1.24	1.28	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	32.5	51.4	43.9	36.9	49.3	59	70	63.6	58.6	86.5	42.6	49.9	55.7	49.9	47.6	63.5	72.9	75.5	75	77	77.5	66.2	32.2	43.1	115	98.1	105	79.5	88.4	100
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	1.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	1.45	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l											<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l											<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																											208	163	181	205
Total PFOS	ng/l	3.76	5.35	5.08	4.02	4.65	2.94	3.18	3.29	3.44	3.58	1.97	1.99	4.85	2.05	1.88	1.75	1.08	1.04	2.36	2.39	4.79	3.21	4.07	4.78	1.73	<0.65	2.8	3.43	3.54	4.28
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l											1.98		3.45		1.82		1.06		2.38		4.00		4.43		0.87		3.12		3.91	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.76	5.35	5.08	4.02	4.65	2.94	3.18	3.29	3.44	3.58	1.97	1.99	4.85	2.05	1.88	1.75	1.08	1.04	2.36	2.39	4.79	3.21	4.07	4.78	1.73	0.00	2.80	3.43	3.54	4.28

North Runway Monitoring Results (Surface Water)

Parameter	Unit	P2		
		02-09-25	02-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	23.3	23.9	17.9
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	1.05
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1
Branched PFOS	ng/l	<0.65	2.58	2.61
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.25	4.71	1.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	20.3	23.5	54.6
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	2.38
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	17.3	19.2	25.8
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	88.3
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	27.6	30.9	<1
PFHxDA (67905-19-5)	ng/l	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	1.15	3.08
PFMOBA (863090-89-5)	ng/l	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	2.15	2.14	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	7.45	7.51	6.1
PFODA (16517-11-6)	ng/l	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	77.3	78.5	172
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2
Total PFAS DWI 47	ng/l	154	170	358
Total PFOS	ng/l	2.25	7.29	4.26
SW Threshold (as per S.I No. 77 of 2019.)				
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	4.60		2.78
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.25	7.29	4.26

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P2																												
		26-01-21	05-02-21	12-02-21	18-02-21	28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	23-07-21	30-07-21	06-08-21	13-08-21	20-08-21	27-08-21	10-09-21	17-09-21
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																													
5:3 FTCA (914637-49-3)	ng/l																													
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	2.93	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	19.6	1.04	1.36	1.28	1.65	<1	<1	1.9	2.02
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																													
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	1.67	<1	<1	<1	1.87	2.51	1.39	2.26	2.67	2.01	1.83	1.64	1.95	1.66	1.06	1.14	1.6	1.47	1.85	2.3	2.27	<5	2.23	1.44	1.92	1.72	0.961	1.26	1.33	1.05
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	0.964	1.45	0.9	1.05	0.764	1.12	0.988	1.36	1.33	1.17	1.01	0.975	1.15	1.22	1.19	0.962	0.892	0.908	1.29	1.45	1.39	9.37	2.7	2	2.54	2.38	1.41	1.74	3.94	1.51
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	13.2	7.9	7.69	12	24.3	25	24.9	16.3	18	17	37.5	11.5	<25	<10.5	15.8	15.2	13.7	<14	14.9	14	13.3	30.2	14.4	11.3	10.8	12.7	8.59	12.2	<7.5	8.26
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3.5	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1.5	<2	<2	<1	<3.5	<1	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																													
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																											<1	<1	<1	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	12.7	7.98	8.69	7.63	11.3	17.2	13	11.2	13.4	9.53	9.39	9.26	9.11	11.9	4.87	6.2	12	8.35	8.06	8.66	5.59	14.3	9.59	6.21	7.07	9.15	5.23	5.39	7.89	6.09
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	15.7	6.9	7.37	8.52	14.7	23.3	16.4	15.5	17	14.8	15.7	13.8	16.8	12.8	5.99	8.44	15.5	13.1	12.6	14.7	13	16.4	12.4	9.07	9.03	12	9.05	10.2	10.1	9.67
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.73	<1	<1	1.06	3.06	4.36	2.37	3.26	3.42	2.79	2.99	2.5	3.01	2.25	<1	1.67	2.45	2.29	2.49	2.42	2.67	<5	2.34	1.39	1.41	1.62	1.08	1.13	<1	1.09
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l																													
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	1.28	<1
PFNS (68259-12-1)	ng/l																													
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.44	2.02	1.88	1.98	2.35	3.14	2.53	2.63	2.74	2.55	2.3	1.62	2.62	2.37	1.45	1.23	2.05	2.19	2.16	2.17	2.23	6.11	3.7	2.19	2.18	2.36	1.92	1.69	2.86	1.75
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	26.7	11	14.2	14.9	29.9	47.6	28.7	28	29.7	29.2	27.1	28.3	36.6	23.7	13.6	17.2	30.6	25.6	25.5	32.8	30.4	28.9	22.7	18.1	17.7	24.4	15.5	16.6	14.7	18.6
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																											<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																													
PFTrDA (72629-94-8)	ng/l																													
PFTrDS (174675-49-1)	ng/l																													
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																													
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	2.63	1.45	<1	1.05	2.63	3.63	2.38	3.62	4	3.17	2.84	2.61	3.1	2.87	2.24	2.1	2.5	2.38	3.14	3.75	3.67	9.37	4.93	3.44	4.46	4.11	2.37	3	5.27	2.56
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																														
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.63	1.45	0.00	1.05	2.63	3.63	2.38	3.62	4.00	3.17	2.84	2.61	3.10	2.87	2.24	2.10	2.50	2.38	3.14	3.75	3.67	9.37	4.93	3.44	4.46	4.11	2.37	3.00	5.27	2.56

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P3																													
		24-09-21	01-10-21	07-10-21	18-10-21	03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	21-03-23	21-03-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	20-05-25	20-05-25	04-09-25
11Cl-PF3OUdS (763051-92-9)	ng/l												<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l												<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5
4:2 FTS (757124-72-4)	ng/l										<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l										<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	1.4	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l												<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l										<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.56	1.45	0.938	0.932	1.56	1.73	1.63	1.82	1.76	1.16	1.13	0.809	0.905	1.67	1.6	0.956	1.22	1.8	1.56	1.26	1.57	1.41	1.25	<0.65	<0.65	1.27	1.8	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l												<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l												<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l												<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l												<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.17	1.88	1.64	1.73	0.665	<0.65	<0.65	0.691	0.656	<0.65	0.706	0.727	0.826	0.728	0.812	<0.65	<0.65	0.689	0.876	0.868	1.32	1.03	0.805	0.674	<0.65	<0.65	0.67	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l												<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l												<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l												<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<15	<4.5	13.6	12.8	17.6	17.4	16.7	17.3	17	15.5	13.5	11.5	9.38	10.4	10.4	19.1	18.3	19.2	17.4	15.9	13.4	7.06	6.01	14.2	12	15.2	15.3	12.3	12.5	9.84
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.06	1.06	1.03	1.01	1.14	1.24	<1	1.02	<1	<1	1.03	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l										<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l												<1	<1	<1	<1	<1	<1	<1	1.07	<1	1.23	1.23	1.15	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	4.97	3.93	4.52	4.7	18.3	15.2	17.2	16.2	16.6	6.35	6.06	3.35	3.01	4.15	4.43	7.19	7.08	6.56	6.25	5.2	5.3	2.98	2.33	9.88	8.32	7.57	7.62	4.86	5.09	6.61
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	7.27	7.83	7.54	7.6	24.2	23.1	22.5	22.7	23.4	12.7	11.5	9.11	7.83	9.58	11.5	17.7	17.4	16.7	15.2	12.4	11.3	7.49	5.9	21.5	20.7	16.9	16.3	10.2	11.5	10.1
PFHxDA (67905-19-5)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	1.94	1.99	1.84	1.88	1.84	1.9	1.76	1.54	2.1	2.17	3.53	2.5	2.01	2.75	2.86	2.03	2.43	1.17	<1	2.64	1.15	2.83	2.88	2.82	2.59	1.77
PFMOBA (863090-89-5)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.41	1.6	1.5	1.46	2.38	2.29	2.07	2.38	2.22	1.69	1.56	1.17	0.783	1.82	1.67	1.98	1.93	1.89	2.11	1.67	2.54	1.63	1.42	3.92	2.3	1.69	1.7	1.56	1.52	2.31
PFODA (16517-11-6)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	12	11.6	11.5	9.04	45.2	37.6	36.6	40	38.5	17.7	14.6	23.7	22	20.5	22.2	35.6	34.5	38.4	36.2	28.2	28.6	15.1	14.1	43.6	35.4	41.4	39.9	27.9	27.7	31.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l										<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l										<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																										<90	<90	<90	<90	<90
Total PFOS	ng/l	3.73	3.33	2.58	2.66	2.23	1.73	1.63	2.51	2.41	1.16	1.84	1.54	1.73	2.4	2.41	0.956	1.22	2.49	2.43	2.12	2.89	2.44	2.06	0.674	<0.65	1.27	2.47	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l										1.50		1.64		2.41		1.09		2.46		2.51		2.25		0.34		1.87		0.00		0.77
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.73	3.33	2.58	2.66	2.23	1.73	1.63	2.51	2.41	1.16	1.84	1.54	1.73	2.40	2.41	0.96	1.22	2.49	2.43	2.12	2.89	2.44	2.06	0.67	0.00	1.27	2.47	0.00	0.00	0.00

North Runway Monitoring Results (Surface Water)

Parameter	Unit	P3	
		04-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2
3:3 FTCA (356-02-5)	ng/l	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1
7:3 FTCA (812-70-4)	ng/l	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1
Branched PFOS	ng/l	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	2.3
MeFOSAA (2355-31-9)	ng/l	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	10.4	35.5
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	1.43
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	6.93	13
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	10.5	35.9
PFHxDA (67905-19-5)	ng/l	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.96	4.45
PFMOBA (863090-89-5)	ng/l	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.36	<1
PFNS (68259-12-1)	ng/l	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.45	3.71
PFODA (16517-11-6)	ng/l	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	31.1	90.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2
Total PFAS DWI 47	ng/l	<90	187
Total PFOS	ng/l	<0.65	2.3
SW Threshold (as per S.I No. 77 of 2019.)			
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	2.30

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P4																												
		28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	23-07-21	30-07-21	06-08-21	13-08-21	27-08-21	10-09-21	24-09-21	01-10-21	07-10-21	18-10-21	03-11-21	12-11-21	22-11-21
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																													
5:3 FTCA (914637-49-3)	ng/l																													
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	31.9	126	31.4	8.99	15.3	7.01	9.41	5.26	6.35	24.9	14.9	4	11.4	3.09	3.06	3.64	3.64	3.46	2.28	2.39	2.75	1.28	<1	1.99	<1	1.35	1.31	34.5	41.9	<1
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																													
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	7	11.8	4.7	4.51	5.7	4.77	4.92	4.67	2.94	10.7	7.63	2.31	5.95	1.69	2.27	1.54	1.56	1.92	1.92	2.68	1.94	1.48	1.5	1.55	1.52	1.72	1.48	7.08	7.85	1.58
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	7.17	16.4	6.16	4	4.45	4.18	4.06	3.43	2.48	9.86	8.46	3.62	6.87	3.2	4.01	2.45	3.16	3.76	2.85	2.57	2.81	1.7	1.65	1.86	1.98	1.24	1.18	4.75	5.24	1.59
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	25.6	40.3	25.1	25.8	45	29.7	46.8	18.3	<30	23.6	34.7	25.9	<20	14.2	14.6	14.9	17.3	10.8	16.6	14.1	16.9	12.1	11.9	9.23	8.9	11.9	14.8	24.8	25.3	11
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	1.26	1.03	1.06	1.37	1.54	1.27	1.44	<1	1.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																													
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																						<1	<1	<1	<1	<1	<1	<1	<1	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	18.9	47.6	14.8	14.5	23.4	15.7	19.3	13	14.6	23.3	14.7	17.2	13.6	10.5	10.2	8.78	15.1	6.99	9.07	9.74	9.16	5.89	5.36	4.23	4.1	7.13	6.98	20.6	19.9	10.9
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	29.7	68.7	28	35.3	48.8	49.2	42.5	35.1	43.7	39.2	44.3	21.8	33.6	19.2	21.9	15.4	15.7	15.5	18.7	17.3	17.6	15.7	15.9	9.63	9.18	14.7	14.2	42	44.3	20.2
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	4.7	9.55	4.91	4.81	6.2	5.3	5.35	4.2	4.2	5.85	6.31	2.85	5.64	1.73	1.82	1.54	1.19	1.53	1.63	1.6	1.64	1.31	1.43	<1	<1	<1	1.25	4.99	5.42	2.12
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l																													
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.39	2.52	1.38	1.2	1.55	1.47	1.34	1.44	1.39	2.95	1.76	1.43	1.72	1.26	1.21	1.2	1.22	1.24	1.22	1.03	1.17	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l																													
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.18	9.27	3.92	3.89	6.44	4.65	4.99	4.23	5.48	7.93	4.65	4.78	3.95	2.94	3.06	3.54	4.08	2.64	4.95	3.29	3.28	2.06	2.01	2.16	2.02	2.76	2.58	5.07	6.01	3.91
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	66.5	136	53.5	71.9	92.4	96.8	83.9	72.1	96.6	100	91.6	50	73.9	56.2	43.4	26	25.2	26.5	32.3	43.1	35.6	27.3	23.8	19.1	17.4	18.2	26.1	85.7	78.9	42.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																						<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																													
PFTrDA (72629-94-8)	ng/l																													
PFTrDS (174675-49-1)	ng/l																													
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																													
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	14.2	28.2	10.9	8.51	10.1	8.95	8.99	8.09	5.41	20.5	16.1	5.94	12.8	4.89	6.28	4	4.72	5.67	4.78	5.25	4.75	3.17	3.14	3.41	3.51	2.96	2.66	11.8	13.1	3.17
SW Threshold (as per S.I No. 77 of 2019.)																														
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																													
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	14.20	28.20	10.90	8.51	10.10	8.95	8.99	8.09	5.41	20.50	16.10	5.94	12.80	4.89	6.28	4.00	4.72	5.67	4.78	5.25	4.75	3.17	3.14	3.41	3.51	2.96	2.66	11.80	13.10	3.17

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P4																				
		03-12-21	10-12-21	16-08-23	16-08-23	22-11-23	22-11-23	02-04-24	02-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	05-03-25	05-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l					53	44.1	27.1	22.9	34.3	38.4	12.8	24.2	55.8	35.4	21.7	17	23.2	20.4	22.6	36.5	82
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	1.24	<10	1.39	1.34	5.5	4.24	7.91	8.03	1.12	<1	<1	<1	22.4	18.7	<1	<1	<1	<1	<1	<1	14.4
7:3 FTCA (812-70-4)	ng/l			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.06	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.78	<6.5	1.27	0.942	1.61	1.65	2.75	3.03	1.78	1.46	1.94	1.89	4.76	6.2	1.37	1.61	2.16	1.96	1.46	0.949	7.47
EtFOSAA (2991-50-6)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l			<1	<1	<1	<1	1.24	1.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.67	<6.5	1.45	1.31	1.27	0.951	3.81	3.57	1.54	1.34	1.57	1.84	2.57	2.78	1.41	1.68	1.85	1.48	1.8	1.01	7.2
MeFOSAA (2355-31-9)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	13	<20	12.3	15.5	14.7	15.3	14.1	15.5	14.6	12.7	9.25	9.66	18.1	21	10.1	11.2	8.07	8.32	13.1	10.9	24.6
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<10	1.17	1.11	1.06	1.08	1.36	<1	1.14	<1	<1	1.33	1.47	1.58	<1	<1	<1	<1	<1	<1	1.94
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l			<1	<1	<1	<1	1.62	1.55	1.36	1.18	3.07	3.18	1.77	2.52	<1	<1	<1	<1	3.49	6.22	1.59
PFEESA (113507-82-7)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	14.1	12.1	7.2	8.32	10.2	10.1	6.6	6.38	10.5	7.97	5.02	5.76	12.4	11.7	6.04	5.58	4.87	5.21	4.96	4.59	12.4
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.4	22.6	13.7	16	18.3	18.7	12.8	15.1	20.2	17.6	9	10.6	37.4	39.3	15.2	15	10.6	11	12.5	11.6	41.4
PFHxDA (67905-19-5)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.01	<10	5.52	2.76	2.33	2.57	2.51	2.42	2.25	1.92	1.75	2.42	5.98	5.72	2.6	2.89	2.37	2.39	<1	2.2	5.91
PFMOBA (863090-89-5)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<10	<1	<1	<1	<1	1.15	1.05	<1	1.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.17
PFNS (68259-12-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.99	<6.5	4.3	5.25	4.31	4.39	3.47	3.62	5.02	3.87	3.1	3.44	6.16	6.27	2.6	2.63	2.45	2.65	2.48	2.55	6.85
PFODA (16517-11-6)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	45.3	40.2	30.3	42.1	41.4	44.4	31.5	32.8	36.8	34	23.2	23.9	79.4	91	34.2	35.3	25.7	26.5	36.6	31.5	90.4
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.13	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l															<90	<90	<90	<90	<90	<90	215
Total PFOS	ng/l	3.44	<6.5	2.72	2.25	2.88	2.6	6.57	6.6	3.32	2.8	3.51	3.73	7.33	8.97	2.78	3.29	4.01	3.44	3.26	1.96	14.7
SW Threshold (as per S.I No. 77 of 2019.)																						
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l			2.49		2.74		6.59		3.06		3.62		8.15		3.04		3.73		2.61		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.44	0.00	2.72	2.25	2.88	2.60	6.57	6.60	3.32	2.80	3.51	3.73	7.33	8.97	2.78	3.29	4.01	3.44	3.26	1.96	14.70

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P4																												
		26-01-21	05-02-21	12-02-21	18-02-21	28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	23-07-21	30-07-21	06-08-21	13-08-21	20-08-21	27-08-21	10-09-21	17-09-21	24-09-21
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																													
5:3 FTCA (914637-49-3)	ng/l																													
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	9.6	2.84	<1	<1	1.65	<1	<1	<1	<1	<1	<1	<1	1.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																													
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	1.3	1.02	<1	1.03	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.27	1.42	1.41	1.48	1.55	5.31	6.53	8.07	2.12	1.81	1.59	1.86	1.37
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.4	1.17	1.22	1.53	0.833	0.819	0.734	1.02	0.764	1.38	1.12	1.18	1.37	0.816	1.9	1	0.931	0.873	0.957	0.941	1.84	2.09	1.42	1.55	2.19	3.37	3.02	2.76	3.03	1.85
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	9.73	22.4	<14	13.3	12.6	11.5	15.5	6.38	10.4	10.7	28.6	7.22	<23	<12.5	10.9	15.4	22.2	<17	22.3	22.1	16.5	11.5	143	131	214	24.7	25.7	18.9	19.6	<50
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.57	1.41	2.57	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5	<3.5	<3	<1	<1	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	1.58	<1	<1	<1	<1	<1	<1	1.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																													
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																										<1	<1	<1	<1	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	8.85	9.76	16.1	11.9	2.97	3.53	7.39	2.94	2.89	3.4	4.95	9.14	8.24	24	6.02	12.4	12.1	24.1	28.7	26.5	22.1	12.8	130	298	156	23.4	25	25.3	22.9	9.7
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	8.41	9.46	9.34	10.8	3.69	3.99	8.09	2.85	2.82	3.49	4.33	5.33	6.46	10.1	6.9	8.36	8.99	22	24.4	24.4	18.3	10.5	267	264	404	29.7	30.1	26.4	27.9	9.22
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.12	2.1	2.08	1.83	<1	13.7	13.4	21.4	1.93	1.49	1.53	1.59	<1
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l																													
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	1.17	1.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.14	1	<1	<1	1.17	2.3	2.25	1.9	2.25	1.43
PFNS (68259-12-1)	ng/l																													
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.42	2.22	3.59	4.18	1.07	0.829	1.27	1.17	1.04	1.47	1.65	1.61	2.12	2.59	2.62	2.62	1.6	1.94	2.2	2.09	2.92	3.15	8.82	9.24	12.9	5.38	4.78	4.93	4.91	2.75
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	13.1	16.5	16.5	18.3	8.72	10.5	13.4	6.15	9.65	7.38	7.64	9.38	15.2	21.6	13.4	18.5	20.2	41.5	38.1	33.7	28.2	29	341	384	797	45.2	51.7	43.8	46.3	14.9
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																										<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																													
PFTrDA (72629-94-8)	ng/l																													
PFTrDS (174675-49-1)	ng/l																													
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	1.32	<1	<1	<1	<1	<1	<1	1.49	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																													
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	2.7	2.19	1.22	2.57	<1	<1	<1	1.02	<1	1.38	1.12	1.18	1.37	<1	1.9	1	<1	2.14	2.37	2.35	3.32	3.64	6.73	8.08	10.3	5.5	4.83	4.35	4.89	3.22
SW Threshold (as per S.I No. 77 of 2019.)																														
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																													
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.70	2.19	1.22	2.57	0.00	0.00	0.00	1.02	0.00	1.38	1.12	1.18	1.37	0.00	1.90	1.00	0.00	2.14	2.37	2.35	3.32	3.64	6.73	8.08	10.30	5.50	4.83	4.35	4.89	3.22

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P7																													
		01-10-21	07-10-21	18-10-21	03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	21-03-23	21-03-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	04-09-25	04-09-25
11Cl-PF3OUdS (763051-92-9)	ng/l											<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
3:3 FTCA (356-02-5)	ng/l											<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<25	<25
4:2 FTS (757124-72-4)	ng/l									<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
5:3 FTCA (914637-49-3)	ng/l									<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25
6:2 FTAB (34455-29-3)	ng/l															<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	44.2	<5
7:3 FTCA (812-70-4)	ng/l											<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25
8:2 FTS (39108-34-4)	ng/l									<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	27.5	<10
9Cl-PF3ONS (756426-58-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
ADONA (919005-14-4)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
Branched PFOS	ng/l	1.4	4.23	5.09	1.6	1.54	1.5	1.42	1.45	0.767	0.777	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.714	0.689	1.85	1.83	0.918	<0.65	<0.65	<0.65	0.905	0.973	<0.65	1.12	8.67	<3.25
EtFOSAA (2991-50-6)	ng/l											<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
EtFOSE (1691-99-2)	ng/l											<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50
FBSA (30334-69-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
FHxSA (41997-13-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
HFPO-DA (13252-13-6)	ng/l											<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
HFPO-TA (13252-14-7)	ng/l											<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.05	1.65	1.45	0.681	0.721	0.768	<0.65	0.663	<0.65	<0.65	<0.65	<0.65	<0.65	0.787	<0.65	<0.65	0.681	<0.65	1.83	1.94	0.933	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.924	19.1	<3.25
MeFOSAA (2355-31-9)	ng/l											<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
MeFOSE (24448-09-7)	ng/l											<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50
N-EtFOSA (4151-50-2)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
NFDHA (151772-58-6)	ng/l											<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15
N-MeFOSA (31506-32-8)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<15	79.7	80.9	22.8	25.3	24.7	23.1	23.9	35.6	27.8	27.2	20.7	21	21.9	28.8	28.2	24.9	30.3	19.4	21.4	8.7	13.3	13.2	13.2	18.7	19	15	14.8	15.2	15.4
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.16	1.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
PFDoS (79780-39-5)	ng/l									<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
PFecHS (133201-07-7)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	1.63	1.71	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFEESA (113507-82-7)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	9.2	165	125	18.5	21	20.3	18.4	17	8.89	7.45	4.37	4.39	3.84	4.21	6.35	5.89	4.69	5.27	7.65	8.18	1.91	2.89	5.91	5.9	5.37	5.21	3.39	4.1	<5	<5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	9.04	161	142	22.6	25.8	24.6	23.7	25.3	16.4	14.2	8.44	8.22	7.37	6.56	15	16.8	10.7	11.6	14.6	15.7	5.38	7.37	12.9	12.8	11.9	11.3	6.92	7.07	10.4	11.7
PFHxDA (67905-19-5)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	8.7	8.17	1.49	1.63	1.54	1.59	1.47	1.09	1.08	<1	<1	1.21	1.06	<1	1.01	<1	<1	2.45	2.29	<1	<1	1.5	1.22	1.28	1.25	1.25	<1	<5	<5
PFMOBA (863090-89-5)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFMOPrA (377-73-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.39	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.23	1.33	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFNS (68259-12-1)	ng/l									<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.75	9.41	8.59	1.8	2.41	2.15	2.09	2.34	2.41	1.82	1.84	1.85	1.5	1.82	1.76	1.81	1.81	1.83	5.14	5.44	1.53	1.95	1.63	1.66	1.59	1.41	1.39	1.39	<3.25	<3.25
PFODA (16517-11-6)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	17.4	226	218	44.7	46.3	58.6	40.3	50.5	20.8	22.9	23.7	23.5	16.4	18.5	35.9	40.2	28.9	32	34.5	36.4	12.7	18.7	27.8	28.6	30.5	29.5	19.2	19.1	25.3	34.1
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFTeA (376-06-7)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFTrDA (72629-94-8)	ng/l									<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15
PFTrDS (174675-49-1)	ng/l									<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
PFUnDS (749786-16-1)	ng/l									<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10
Total PFAS DWI 47	ng/l																									<90	<90	<90	<90	<450	<450
Total PFOS	ng/l	3.45	5.89	6.54	2.28	2.26	2.26	1.42	2.11	0.767	0.777	<0.65	<0.65	<0.65	0.787	<0.65	<0.65	1.39	0.689	3.69	3.76	1.85	<0.65	<0.65	<0.65	0.905	0.973	<0.65	2.05	27.8	<3.25
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l									0.77		0.00		0.39		0.00		1.04		3.73		0.93		0.00		0.94		1.03		9.27	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.45	5.89	6.54	2.28	2.26	2.26	1.42	2.11	0.77	0.78	0.00	0.00	0.00	0.79	0.00	0.00	1.39	0.69	3.69	3.76	1.85	0.00	0.00	0.00	0.91	0.97	0.00	2.05	27.80	0.00

North Runway Monitoring Results (Surface Water)

Parameter	Unit	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2
3:3 FTCA (356-02-5)	ng/l	<5
4:2 FTS (757124-72-4)	ng/l	<1
5:3 FTCA (914637-49-3)	ng/l	<5
6:2 FTAB (34455-29-3)	ng/l	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1
7:3 FTCA (812-70-4)	ng/l	<5
8:2 FTS (39108-34-4)	ng/l	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1
ADONA (919005-14-4)	ng/l	<1
Branched PFOS	ng/l	<0.65
EtFOSAA (2991-50-6)	ng/l	<2
EtFOSE (1691-99-2)	ng/l	<10
FBSA (30334-69-1)	ng/l	<1
FHxSA (41997-13-1)	ng/l	<1
HFPO-DA (13252-13-6)	ng/l	<2
HFPO-TA (13252-14-7)	ng/l	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65
MeFOSAA (2355-31-9)	ng/l	<2
MeFOSE (24448-09-7)	ng/l	<10
N-EtFOSA (4151-50-2)	ng/l	<1
NFDHA (151772-58-6)	ng/l	<3
N-MeFOSA (31506-32-8)	ng/l	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	37.7
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.26
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2
PFDoS (79780-39-5)	ng/l	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2
PFecHS (133201-07-7)	ng/l	<1
PFEESA (113507-82-7)	ng/l	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	13.9
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	30
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<1
PFHxDA (67905-19-5)	ng/l	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.49
PFMOBA (863090-89-5)	ng/l	<1
PFMOPrA (377-73-1)	ng/l	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1
PFNS (68259-12-1)	ng/l	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.2
PFODA (16517-11-6)	ng/l	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	85.9
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1
PFTeA (376-06-7)	ng/l	<1
PFTrDA (72629-94-8)	ng/l	<3
PFTrDS (174675-49-1)	ng/l	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2
PFUnDS (749786-16-1)	ng/l	<2
Total PFAS DWI 47	ng/l	175
Total PFOS	ng/l	<0.65
SW Threshold (as per S.I No. 77 of 2019.)		
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.94
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P8																												
		26-01-21	05-02-21	12-02-21	18-02-21	28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	23-07-21	30-07-21	06-08-21	13-08-21	20-08-21	27-08-21	10-09-21	24-09-21	01-10-21
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																													
5:3 FTCA (914637-49-3)	ng/l																													
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	2.24	2.43	15	20.8	34.4	48.6	25.6	26.3	29.4	20.1	20.2	17.9	5.7	11.2	31.1	10.7	13.6	20.6	9.37	11.9	6.73	7.2	13.5	12.7	21	1.9	1.49	1.57	1.45	1.48
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																													
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	<1	<1	1.39	<5	2.12	2.85	1.1	1.53	1.71	1.71	1.91	1.76	<2	1.44	1.8	<1	<1	1.74	1.73	2.1	1.63	3.12	2.6	2.67	4.39	1.78	1.81	1.36	1.84	1.93
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.74	1.07	3.69	5.27	5.93	12.6	3.19	4.16	4.26	4.88	4.94	4.82	3.02	5.52	5.13	2.49	2.8	4.46	4.13	5.13	4.2	7.46	6.13	6.01	10.7	5.03	4.78	4.25	4.96	5.29
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	20.5	6.57	<13.5	<33	<24	<13.5	12.7	<10	<40.5	<10	<60	<33	<44	<11.5	21.8	13.7	24.5	<7	<10	10.4	6.23	12.4	11.5	9.75	17.8	<50	<20	<8	<21	<41
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1.5	<1.5	<2	<2.5	<3	<1.5	<1	<1	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																													
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																										<1	<1	<	<1	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	12.4	5.19	21.9	9.87	9.71	13.8	5.19	7.67	11.3	11.9	9.18	10.1	7.45	14.9	14	5.73	5.82	8.07	7.86	9.26	9.57	14.1	10.3	9.13	15	8.21	8.27	9.95	10.3	11.4
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	27.3	4.47	13.7	17.4	6.76	9.01	5.29	6.71	7.75	7.48	8.35	6.96	3.83	6.61	7.92	3.46	4.53	7.15	6.72	8.82	7.39	15	12.7	12.1	18.2	16.6	14.3	11.8	13.7	14.4
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.05	<1	2.18	<5	1.05	1.67	<1	1.02	1.13	1.03	<1	1.03	<2	<1	1.03	<1	<1	1.01	1.07	1.22	1.17	2.27	1.6	1.55	2.26	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l																													
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	1.41	<5	1.23	1.08	<1	1	<1	1.4	1.12	1.38	<2	1.59	1.05	<1	<1	1.03	1.24	1.44	1.67	2.01	1.29	1.39	2.81	1.62	1.45	1.31	1.33	1.24
PFNS (68259-12-1)	ng/l																													
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.24	0.97	3.49	5.12	3.7	4.12	1.99	2.86	3.02	3.47	3.02	3.01	2.43	3.3	3.07	1.44	1.37	2.88	2.95	3.2	3.43	4.32	3.78	3.55	5.41	3.83	4.11	3.55	3.94	4.18
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	49.2	6.2	25.8	27.9	13.4	17.9	8.59	9.82	12.1	15.4	10.4	10	7.69	10.4	11.9	5.99	8.13	19.8	10.2	11.7	7.39	37.1	24.4	23.4	36.6	24.1	23.6	21.5	27.9	28
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																										<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																														
PFTrDA (72629-94-8)	ng/l																														
PFTrDS (174675-49-1)	ng/l																														
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																														
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	1.74	1.07	5.08	5.27	8.05	15.4	4.29	5.69	5.97	6.58	6.85	6.59	3.02	6.96	6.94	2.49	2.8	6.19	5.86	7.22	5.83	10.6	8.73	8.68	15.1	6.82	6.59	5.61	6.8	7.21
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																														
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	1.74	1.07	5.08	5.27	8.05	15.40	4.29	5.69	5.97	6.58	6.85	6.59	3.02	6.96	6.94	2.49	2.80	6.19	5.86	7.22	5.83	10.60	8.73	8.68	15.10	6.82	6.59	5.61	6.80	7.21

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	P8																													
		07-10-21	18-10-21	03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	21-03-23	21-03-23	30-05-23	30-05-23	15-08-23	15-08-23	22-11-23	22-11-23	02-04-24	02-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	20-05-25	20-05-25	04-09-25	04-09-25	11-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l										<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
3:3 FTCA (356-02-5)	ng/l										<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<25	<25	<5
4:2 FTS (757124-72-4)	ng/l								<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
5:3 FTCA (914637-49-3)	ng/l								<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<25	<5
6:2 FTAB (34455-29-3)	ng/l														<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<50	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<10	13	11	<10	11.4	1.17	1.22	<1	<1	<1	<1	2.25	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
7:3 FTCA (812-70-4)	ng/l										<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<25	<5
8:2 FTS (39108-34-4)	ng/l								<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
9Cl-PF3ONS (756426-58-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
ADONA (919005-14-4)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<5	<1	<1	<1	<1	<1	<5	<5	<1
Branched PFOS	ng/l	0.972	0.949	<6.5	<6.5	0.87	<6.5	0.882	0.816	0.824	1.88	1.38	1.16	1.16	<0.65	<0.65	<0.65	<0.65	1.06	1.46	1.19	<3.25	1.04	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<3.25	<0.65
EtFOSAA (2991-50-6)	ng/l										<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
EtFOSE (1691-99-2)	ng/l										<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<50	<10
FBSA (30334-69-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
FHxSA (41997-13-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
HFPO-DA (13252-13-6)	ng/l										<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
HFPO-TA (13252-14-7)	ng/l										<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<25	<25	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.71	2.4	<6.5	<6.5	1.41	<6.5	1.37	1.18	1.01	1.84	1.35	1.2	1.06	<0.65	<0.65	<0.65	<0.65	1.25	1.27	1.09	<3.25	0.794	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<3.25	<0.65
MeFOSAA (2355-31-9)	ng/l										<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
MeFOSE (24448-09-7)	ng/l										<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<50	<10
N-EtFOSA (4151-50-2)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<5	<5	<1
NFDHA (151772-58-6)	ng/l										<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<15	<15	<3
N-MeFOSA (31506-32-8)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	14.9	12.8	<20	<20	5.71	<20	7.4	7.19	<4	5.2	3.24	7.29	6.76	6.51	6.52	3.2	5.35	4.61	5.68	2.73	<10	4.5	3.51	3.55	3.39	5.91	6.03	<10	<10	9
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	1.09	1.09	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
PFDoS (79780-39-5)	ng/l								<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
PFecHS (133201-07-7)	ng/l										<1	<1	<1	<1	<1	<1	1.71	1.68	3.03	2.78	1.48	<5	2.75	1.5	1.36	1.92	<1	<1	<5	<5	1.77
PFEESA (113507-82-7)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	4.39	4.3	<10	<10	3.47	<10	3.75	2.32	2.09	2.32	1.14	4.11	5.17	2.37	2.43	1.84	1.89	2.21	2.03	<1	<5	2.16	1.52	1.67	1.77	3.07	3.19	<5	<5	3.37
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	6.1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	6.97	6.91	<10	<10	6.06	<10	5.84	4.62	5.25	5.13	3.94	11.3	12.2	4.73	5.26	3.56	3.4	5.44	4.84	1.87	<5	3.13	3.91	2.74	2.85	5.78	5.7	<5	<5	<1
PFHxDA (67905-19-5)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	1.64	1.55	<1	<1	<1	<1	1.63	<1	<1	<5	<1	<1	1.32	<1	1.21	<1	<5	<5	1.52
PFMOBA (863090-89-5)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFMOPrA (377-73-1)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<15	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	1.06	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFNS (68259-12-1)	ng/l								<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.58	1.45	<6.5	<6.5	1.51	<6.5	1.56	1.43	1.16	0.826	0.818	2.24	2.65	1.22	1.01	1.12	1.18	1.06	1.6	1.09	<3.25	1.17	<0.65	<0.65	<0.65	1.45	1.37	<3.25	<3.25	1.51
PFODA (16517-11-6)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<20	<20	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	10.1	11.2	<10	<10	6.82	<10	7.5	6.71	5.01	10.8	8.95	23.6	24.4	7.31	9.3	6.16	6.77	8.99	10.3	4.04	<5	9.63	7.96	5.15	5.07	15	7.64	<5	<5	16.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFTeA (376-06-7)	ng/l										<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFTrDA (72629-94-8)	ng/l								<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<3	<3	<3	<15	<15	<3
PFTrDS (174675-49-1)	ng/l								<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<5	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<10	<10	<1	<10	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
PFUnDS (749786-16-1)	ng/l								<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<10	<2
Total PFAS DWI 47	ng/l																								<90	<90	<90	<90	<450	<450	<90
Total PFOS	ng/l	3.68	3.35	<6.5	<6.5	2.28	<6.5	2.25	1.99	1.83	3.72	2.73	2.36	2.22	<0.65	<0.65	<0.65	<0.65	2.32	2.73	2.27	<3.25	1.84	<0.65	<0.65	<0.65	<0.65	<0.65	<3.25	<3.25	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l								1.91		3.23		2.29		0.00		0.00		2.53		1.14		0.92		0.00		0.00		0.00		2.97
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.68	3.35	0.00	0.00	2.28	0.00	2.25	1.99	1.83	3.72	2.73	2.36	2.22	0.00	0.00	0.00	0.00	2.32	2.73	2.27	0.00	1.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	R1																												
		28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	23-07-21	30-07-21	06-08-21	13-08-21	27-08-21	10-09-21	07-10-21	18-10-21	03-11-21	12-11-21	22-11-21	03-12-21
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																													
5:3 FTCA (914637-49-3)	ng/l																													
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	8.79	14.7	27.4	7.5	21.7	11.2	8.93	6.67	<1	10.3	6.64	<1	<1	3.39	3.78	1.97	2.46	3.24	3.77	3.47	3.92	4.8	1.63	1.48	<1	<1	11.2	19.9	13.6	15.6
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																													
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	1.72	2.13	2.3	1.56	2.2	1.96	1.78	1.49	<1	1.87	1.91	<1	<1	2.28	<1	<1	<1	1.45	1.93	2.05	1.93	2.75	1.32	1.71	0.717	<0.65	3.68	5.27	3.53	4.13
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.33	2.74	4.35	1.9	2.47	2.98	3.17	2.94	<0.65	2.81	3.99	<0.65	<0.65	3.97	1.46	1.57	2.04	2.82	3.69	2.91	2.45	3.95	1.53	1.7	<0.65	<0.65	2.66	3.68	2.66	2.93
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	14.9	15.7	23	13.4	17.1	15.7	45.3	12.7	<10	9.2	11	29.2	<2	<9	14.5	13.1	14.2	16	11.9	17.4	16.7	22.9	11.2	12.6	6.16	<19	17.8	21.3	15.8	18
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5	<1	<2	<1	<3	<1	<1	<1	<1	<1	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																													
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																							<1	<1	<1	<1	<1	<1	<1	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	7.87	11.5	7.54	6.81	13.2	7.17	7.23	8.63	<5	10.3	7.91	<1	<1.5	5.53	5.26	5.08	4.22	15.4	5.79	9.37	11.6	14.7	5.64	5.68	3.07	3.19	13.6	19.1	15.2	16.5
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	14.1	25	12.2	16.5	23	11.5	10.1	7.49	<5	11.8	7.53	<1	<1	8.19	3.68	3.63	4.18	16	15.1	17.9	17.9	27.3	13.7	16.6	4.59	4.87	28	32.9	26.5	29.5
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.28	2.91	1.87	2.12	2.85	1.68	1.49	1.25	<1	1.67	1.09	<1	<1	1.22	<1	<1	<1	1.16	1.62	1.91	1.56	2.55	1.23	1.46	<1	<1	2.71	3.88	2.91	3.38
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l																													
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	1.04	<1	<1	1.06	1.43	<1	<1	1.57	<1	<1	1.16	<1	1.19	<1	1.28	1.19	1.11	1.17	1.95	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l																													
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.6	3.89	2.28	3.02	2.92	2.84	2.28	2.25	1.41	2.68	3.46	<0.65	<0.65	1.89	1.72	1.57	2.59	3.82	2.9	4.45	3.08	4.5	2.34	2.37	0.758	0.899	4.18	4.48	4.11	4.32
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	26.5	47.2	20.6	27.9	42.6	22.1	13.8	10.1	<5	28.2	11.8	<1	<1	21.3	2.83	3.3	3.63	24	25.7	36.5	46.3	54.3	27.7	27	10.4	11.4	57.1	64.8	59.7	70
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																							<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																													
PFTrDA (72629-94-8)	ng/l																													
PFTrDS (174675-49-1)	ng/l																													
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																													
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	4.05	4.87	6.65	3.46	4.67	4.94	4.95	4.43	<1	4.68	5.9	<1	<1	6.25	1.46	1.57	2.04	4.27	5.62	4.96	4.38	6.7	2.84	3.41	0.717	<0.65	6.35	8.95	6.19	7.06
SW Threshold (as per S.I No. 77 of 2019.)																														
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																													
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	4.05	4.87	6.65	3.46	4.67	4.94	4.95	4.43	0.00	4.68	5.90	0.00	0.00	6.25	1.46	1.57	2.04	4.27	5.62	4.96	4.38	6.70	2.84	3.41	0.72	0.00	6.35	8.95	6.19	7.06

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	10-12-21	22-03-23	22-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l				<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
3:3 FTCA (356-02-5)	ng/l				<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<5	<5
4:2 FTS (757124-72-4)	ng/l		<2	<2	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
5:3 FTCA (914637-49-3)	ng/l		<20	<20	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5
6:2 FTAB (34455-29-3)	ng/l								75.2	74.7	28.7	23	126	132	53.2	38.8	31.8	28.5	39.9	34.6	226	222	274	199	98.8
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	12.4	8.06	9.15	4.87	6.16	3.38	2.66	6.66	7.27	<2	1.47	21.6	23.5	1.8	2.24	5.73	6.86	7.03	7.02	87.9	79.1	36.8	42.8	41.1
7:3 FTCA (812-70-4)	ng/l				<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5
8:2 FTS (39108-34-4)	ng/l		<2	<2	<2	<2	2.13	<2	<2	<2	<4	<2	2.71	3.03	2.5	2.87	<2	<2	<2	<2	<2	<2	<4	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
ADONA (919005-14-4)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	8.09	<1	<5	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
Branched PFOS	ng/l	3.32	1.61	1.57	4.08	1.72	2.45	2.12	1.78	1.63	2.34	1.66	4.78	4.38	2.98	2.23	4.9	4.22	2.46	1.79	8.11	6.24	4.27	4.13	3.79
EtFOSAA (2991-50-6)	ng/l				<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
EtFOSE (1691-99-2)	ng/l				<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10
FBSA (30334-69-1)	ng/l				<1	<1	<1	<1	1.03	1.1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
FHxSA (41997-13-1)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2	<1	2.18	1.62	<1
HFPO-DA (13252-13-6)	ng/l				<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
HFPO-TA (13252-14-7)	ng/l				<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.55	2.83	2.92	4.05	1.7	2.28	2.15	1.48	1.3	3.03	2.73	9.65	9.66	4.73	6.15	4.1	2.89	1.82	1.62	9.24	6.56	8.38	7.91	6.01
MeFOSAA (2355-31-9)	ng/l				<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
MeFOSE (24448-09-7)	ng/l				<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10
N-EtFOSA (4151-50-2)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
NFDHA (151772-58-6)	ng/l				<3	<3	<3	<3	<3	<3	<6	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<6	<3	<3
N-MeFOSA (31506-32-8)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	16.1	7.67	10.7	13.5	12.8	13.3	12.9	13.8	14.1	14.4	12.3	17.5	17.3	9.15	10.4	20.2	15.7	8.47	9.38	21.9	21.9	26.9	26.4	15.6
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	1.11	<1	1.07	<2	1.04	<1	<1	<1	<1	1.62	1.3	<1	<1	<1	<1	<2	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
PFDoS (79780-39-5)	ng/l		<1	<1	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
PFecHS (133201-07-7)	ng/l				<1	<1	2.38	<1	3.35	3.77	3.06	2.33	3.52	3.35	3.61	4.17	2.61	3.33	<1	<1	3.48	<1	8.69	8.62	2.07
PFEESA (113507-82-7)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	15.7	3.81	4.37	10.3	7.68	7.27	6.88	7.08	6.76	5.93	4.53	13.1	12	5.63	5.7	10.4	10.3	5.43	5.33	19.6	19.1	22	20.9	8.77
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	26.2	8.92	10.7	19.1	18.3	19.6	17	21.3	20.8	9.47	8.1	31.2	28.5	10.7	11	29.1	27.6	14.8	14.5	47.6	44.3	51.9	50	29.9
PFHxDA (67905-19-5)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	3.05	1.42	1.4	2.16	2.77	3.18	5.6	2.88	2.83	2.87	1.52	3.44	3.46	1.51	1.67	5.08	4.5	3.24	3.39	6.9	6.32	5.41	7.06	4.2
PFMOBA (863090-89-5)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFMOPrA (377-73-1)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	13.9	<1	<15	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	1.1	<2	1.41	1.39	1.44	<1	1.28	<1	<1	<1	1.61	2.04	1.68	<1
PFNS (68259-12-1)	ng/l		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.14	2.3	2.59	5.37	4.14	4.67	3.78	4.11	4	3.42	2.55	8.47	8.23	3.65	4.12	5.14	5.09	2.66	2.54	12.9	11.6	12.3	10.5	5.29
PFODA (16517-11-6)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	59.8	14.1	13.2	49.5	45.7	42.5	40.3	46	46.4	23	18.3	65.4	58	22.8	26.9	70.4	68.4	32.8	34.1	116	112	126	119	62.7
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFTeA (376-06-7)	ng/l				<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFTrDA (72629-94-8)	ng/l		<1	<1	<3	<3	<3	<3	<3	<3	<6	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<6	<3	<3
PFTrDS (174675-49-1)	ng/l		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
PFUnDS (749786-16-1)	ng/l		<1	<1	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2
Total PFAS DWI 47	ng/l																		<90	<90	335	309	306	301	179
Total PFOS	ng/l	5.87	4.44	4.49	8.13	3.42	4.73	4.28	3.26	2.93	5.37	4.39	14.4	14	7.71	8.39	9.01	7.11	4.27	3.41	17.4	12.8	12.6	12	9.79
SW Threshold (as per S.I No. 77 of 2019.)																									
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		4.47		5.78		4.51		3.10		4.88		14.20		8.05		8.06		3.84		15.10		12.30		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	5.87	4.44	4.49	8.13	3.42	4.73	4.28	3.26	2.93	5.37	4.39	14.40	14.00	7.71	8.39	9.01	7.11	4.27	3.41	17.40	12.80	12.60	12.00	9.79

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	R2																													
		04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	23-07-21	30-07-21	06-08-21	13-08-21	20-08-21	27-08-21	10-09-21	17-09-21	18-10-21	03-11-21	12-11-21	22-11-21	03-12-21
11Cl-PF3OUdS (763051-92-9)	ng/l																														
3:3 FTCA (356-02-5)	ng/l																														
4:2 FTS (757124-72-4)	ng/l																														
5:3 FTCA (914637-49-3)	ng/l																														
6:2 FTAB (34455-29-3)	ng/l																														
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	130	53.9	78.5	142	153	155	140	3.84	87.6	156	51.7	87.7	128	147	182	151	137	207	204	189	280	249	307	294	337	161	49.8	52.5	51.4	50.7
7:3 FTCA (812-70-4)	ng/l																														
8:2 FTS (39108-34-4)	ng/l																														
9Cl-PF3ONS (756426-58-1)	ng/l																														
ADONA (919005-14-4)	ng/l																														
Branched PFOS	ng/l	9.66	3.42	5.06	7.88	7.32	7.6	6.38	<1	3.56	7.82	2.79	5.02	6.61	6.23	8.11	6.16	5.83	16	14.4	15.8	20.2	13.4	12.6	13.9	14.1	9.81	4.27	4.21	4.24	4.21
EtFOSAA (2991-50-6)	ng/l																														
EtFOSE (1691-99-2)	ng/l																														
FBSA (30334-69-1)	ng/l																														
FHxSA (41997-13-1)	ng/l																														
HFPO-DA (13252-13-6)	ng/l																														
HFPO-TA (13252-14-7)	ng/l																														
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	22.1	9.23	11.9	16.5	21.1	20.7	18.4	0.778	12.9	23.2	7.08	13.5	18.6	17.5	23	19.7	16.8	43.8	42.9	38.5	62.7	36.7	36	39.9	40.8	31	10.8	10.6	10.6	9.8
MeFOSAA (2355-31-9)	ng/l																														
MeFOSE (24448-09-7)	ng/l																														
N-EtFOSA (4151-50-2)	ng/l																														
NFDHA (151772-58-6)	ng/l																														
N-MeFOSA (31506-32-8)	ng/l																														
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	41.1	22.7	22.3	34.1	34.4	34.7	23	<10	<24.5	29.2	25.8	31.5	<24	<45	<50	22.1	25	38.1	37.8	31.4	54.8	53.5	49.5	43.3	54.4	17.4	19.9	28.5	28.4	19
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.02	1.17	<5	<5	<10	<5	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<2	2.15	<1	<1	<1	<1.2	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1.5	<1	<3	<2	<5	<5	<10	<5	<1	<1	<1	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<2	4.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<5	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																														
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																						<1	<5	<5	<10	<5	<1	<1	<1	<1
PFecHS (133201-07-7)	ng/l																														
PFEESA (113507-82-7)	ng/l																														
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	52.4	14	29.2	35.8	41.6	55.7	42.8	<5	40.8	41.9	14.8	24	32.1	43.4	55.6	30.3	26.6	44.9	36.4	38.4	61.3	33.8	27.8	24	25.5	15.3	14.8	12.1	12.4	15.1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<5	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	36.8	15.4	22	33	34.8	36.7	33.5	<5	20.7	36.6	14.6	20.1	27.4	30.7	40.7	26.4	29.1	57.1	48.1	48.3	70.7	69.9	63.5	58.1	64.1	36.1	19.9	22.7	21.7	19.3
PFHxDA (67905-19-5)	ng/l																														
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	12.3	4.65	7.12	9.74	8.49	8.18	6.72	<1	3.96	7	2.8	4.63	5.54	5.68	6.69	5.06	4.73	9.32	8.79	8.12	12.8	9.37	9.64	9.14	10.7	6.44	3.36	3.33	3.12	3.23
PFMOBA (863090-89-5)	ng/l																														
PFMOPrA (377-73-1)	ng/l																														
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	4.76	2.18	2.87	3.78	4.01	3.72	3.03	<1	2.56	3.53	1.58	2.24	3.04	2.6	2.98	3.03	2.57	11.4	4.47	3.55	6.4	3.73	<5	<5	<10	<5	1.27	1.38	1.33	1.14
PFNS (68259-12-1)	ng/l																														
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	14.5	6.25	9.21	13.2	11.6	13	10.9	1.44	7.77	11.7	4.43	7.51	10.4	11.4	15.8	8.43	8.55	16.6	16.7	12.7	22.7	16.1	15.7	12.9	18.4	9.96	6.02	5.4	5.24	5.56
PFODA (16517-11-6)	ng/l																														
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<20	<10	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	80	26.3	31.4	62.6	62.9	74.5	53	<5	33.2	78.4	27.2	38.5	66.1	31.4	37.6	40.7	49.1	109	103	139	166	99.3	123	103	81.6	51	43	66.6	68.8	34.2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																						<1	<5	<5	<10	<5	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																														
PFTrDA (72629-94-8)	ng/l																														
PFTrDS (174675-49-1)	ng/l																														
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<2	3.8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<5	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																														
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	31.8	12.7	17	24.4	28.4	28.3	24.8	<1	16.4	31	9.87	18.6	25.2	23.7	31.1	25.9	22.6	59.7	57.3	54.3	82.9	50.1	48.7	53.8	54.9	40.8	15.1	14.9	14.8	14
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																														
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	31.80	12.70	17.00	24.40	28.40	28.30	24.80	0.00	16.40	31.00	9.87	18.60	25.20	23.70	31.10	25.90	22.60	59.70	57.30	54.30	82.90	50.10	48.70	53.80	54.90	40.80	15.10	14.90	14.80	14.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	10-12-21	22-03-23	22-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
3:3 FTCA (356-02-5)	ng/l				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<25	<5	<5
4:2 FTS (757124-72-4)	ng/l		<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
5:3 FTCA (914637-49-3)	ng/l		<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
6:2 FTAB (34455-29-3)	ng/l								45.1	35.4	18	16.3	45.4	43.5	19.3	137	22.3	18.7	24	25	22.6	28	<50	10.9	25.4
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	50.2	1.68	1.8	<1	<1	1.89	2.45	2.17	1.59	1.28	1.09	1.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
7:3 FTCA (812-70-4)	ng/l				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
8:2 FTS (39108-34-4)	ng/l		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
ADONA (919005-14-4)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Branched PFOS	ng/l	4.02	1.44	1.57	1.13	1.29	1.45	1.97	0.825	0.677	1.3	1.5	1.78	1.6	2.46	0.914	3.79	3.28	1.84	2.68	2.4	2.59	3.5	3.15	1.14
EtFOSAA (2991-50-6)	ng/l				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
EtFOSE (1691-99-2)	ng/l				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
FBSA (30334-69-1)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
FHxSA (41997-13-1)	ng/l				<1	<1	<1	<1	<1	<1	1.05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
HFPO-DA (13252-13-6)	ng/l				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
HFPO-TA (13252-14-7)	ng/l				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	9.79	1.52	1.69	2.1	1.33	1.54	1.86	0.844	0.95	2.25	2.35	1.83	1.45	1.81	1.26	3.29	2.76	1.77	1.99	1.6	1.32	4.04	<0.65	1.25
MeFOSAA (2355-31-9)	ng/l				<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
MeFOSE (24448-09-7)	ng/l				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
N-EtFOSA (4151-50-2)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
NFDHA (151772-58-6)	ng/l				<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
N-MeFOSA (31506-32-8)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	23.5	13.7	12.7	8.41	9.21	13.2	12.3	12.5	11.6	12.9	11	13.5	12	5.47	9.1	8.92	10.2	5.19	4.54	8.18	8.11	12.8	9.35	14.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	1.08	1.15	<1	<1	1.04	<1	<1	<1	1.16	1.36	<1	1.15	<1	<1	<1	<1	<5	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDoS (79780-39-5)	ng/l		<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFecHS (133201-07-7)	ng/l				<1	<1	<1	<1	<1	<1	2.58	1.11	1.43	1.19	1.49	1.79	<1	1.32	<1	<1	<1	<1	5.93	3.74	<1
PFEESA (113507-82-7)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	15	10.6	10.7	7.45	7.89	10.6	11.2	9.89	7.37	6.54	6.95	9.69	8.25	3.96	4.83	6.31	7.27	3.9	4.13	5.2	5.19	8.07	6.33	8.94
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.5	14.6	15.7	14.1	12.8	18.8	22.2	12.5	11.3	9.5	11.5	17.3	17.4	6.77	8.52	15.9	15.4	8.86	8	10.3	10.1	13.6	11	16.1
PFHxDA (67905-19-5)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	3.36	2.04	2.02	<1	1.68	1.83	2.99	1.58	1.33	1.58	1.64	1.72	1.91	2.88	1.98	<1	3.28	2.75	2.76	1.47	2.17	<5	2.38	1.57
PFMOBA (863090-89-5)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFMOPrA (377-73-1)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFNS (68259-12-1)	ng/l		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	5.3	4.2	3.92	4.03	2.93	5.55	4.6	4.02	3.7	3.9	4.16	4.51	3.96	2.36	3.08	3.76	3.49	2.34	2.32	2.11	2.22	<3.25	2.93	3.32
PFODA (16517-11-6)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	42.8	19.4	23.7	36.6	33.4	46.2	44.8	29.9	27.9	25	24.9	33.8	35.8	13.8	20.7	28.1	34.3	19	16.1	25.5	27.6	<5	35.8	38.7
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFTeA (376-06-7)	ng/l				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFTrDA (72629-94-8)	ng/l		<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3
PFTrDS (174675-49-1)	ng/l		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
PFUnDS (749786-16-1)	ng/l		<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2
Total PFAS DWI 47	ng/l																		<90	<90	<90	<90	<450	<90	<90
Total PFOS	ng/l	13.8	2.95	3.26	3.23	2.62	2.99	3.83	1.67	1.63	3.54	3.85	3.61	3.05	4.27	2.17	7.08	6.04	3.61	4.67	4	3.92	7.54	3.15	2.4
SW Threshold (as per S.I No. 77 of 2019.)																									
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		3.11		2.93		3.41		1.65		3.70		3.33		3.22		6.56		4.14		3.96		5.35		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	13.80	2.95	3.26	3.23	2.62	2.99	3.83	1.67	1.63	3.54	3.85	3.61	3.05	4.27	2.17	7.08	6.04	3.61	4.67	4.00	3.92	7.54	3.15	2.40

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	SWML 3																												
		03-11-20	28-02-21	04-03-21	12-03-21	25-03-21	01-04-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	30-07-21	06-08-21	13-08-21	03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	22-03-23	22-03-23	30-05-23
11Cl-PF3OUdS (763051-92-9)	ng/l																													<2
3:3 FTCA (356-02-5)	ng/l																													<2
4:2 FTS (757124-72-4)	ng/l																											<2	<2	<1
5:3 FTCA (914637-49-3)	ng/l																											<20	<20	<5
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	3.86	5.63	20.9	24.1	17.5	14.1	12.8	11.9	5.32	16.5	18.4	11.5	13.2	13.1	36.6	25.9	21.6	13.8	26.2	21.8	30.1	<10	<10	<10	<10	<10	2.29	2.32	2.2
7:3 FTCA (812-70-4)	ng/l																													<5
8:2 FTS (39108-34-4)	ng/l																											<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																													<1
ADONA (919005-14-4)	ng/l																													<1
Branched PFOS	ng/l	1.17	<1	<5	1.76	2.88	2.49	<5	3.52	2.77	<2	2.51	3.41	1.1	1.32	3.18	<10	<10	<10	<5	7.21	7.68	7.25	<6.5	<6.5	<6.5	<6.5	<6.5	0.957	1.05	1.03
EtFOSAA (2991-50-6)	ng/l																													<2
EtFOSE (1691-99-2)	ng/l																													<10
FBSA (30334-69-1)	ng/l																													<1
FHxSA (41997-13-1)	ng/l																													<1
HFPO-DA (13252-13-6)	ng/l																													<2
HFPO-TA (13252-14-7)	ng/l																													<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.66	2.17	4.05	6.18	8.22	7.93	7.26	9.9	7.24	3.09	9.73	11.4	3.37	3.85	10.1	33.2	19.4	34.2	8.61	26	15.4	24.3	<6.5	<6.5	7.84	6.53	12.1	1.62	1.95	4.52
MeFOSAA (2355-31-9)	ng/l																													<2
MeFOSE (24448-09-7)	ng/l																													<10
N-EtFOSA (4151-50-2)	ng/l																													<1
NFDHA (151772-58-6)	ng/l																													<3
N-MeFOSA (31506-32-8)	ng/l																													<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	2.7	18.3	38.1	11.3	13.3	<13.5	28.6	17.2	10.1	<10	<12.5	20	17.5	26	<27	29.1	28.3	25.3	17.5	31.7	34.1	38.1	<20	<20	<20	<20	<20	<7	<7	7.07
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<5	<1	<2	<1	<5	<1	<1	<2	<2	<2	<1	<1	<2	<10	<10	<10	<5	<5	<5	<2	<10	<10	<10	<10	<10	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<5	<1	<2	2.22	<5	<1	<1	<2	<2	<2	<1	<1	<2	<10	<10	<10	<5	<6	<5	<4	<10	<10	<10	<10	<10	<1	<1	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<5	<1	<2	5.84	<5	<1	<1	<2	<2	<2	<1	<1	<2	<10	<10	<10	<5	<5	6.09	<2	<10	<10	<10	<10	<10	<1	<1	<2
PFDoS (79780-39-5)	ng/l																												<1	<1	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																							<10	<10	<10	<10	<10	<1	<1	<2
PFecHS (133201-07-7)	ng/l																													<1
PFEESA (113507-82-7)	ng/l																													<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.49	6.76	5.11	6.13	8.63	11.8	12	16.1	12.9	8.35	15.1	15.3	7.02	9.01	13.3	12.8	10.9	31.6	13.9	19.6	17.1	32.7	<10	<10	<10	<10	<10	2.8	3.95	3.26
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<5	<1	<2	<1	<5	<1	<1	<2	<2	<2	<1	<1	<2	<10	<10	<10	<5	<5	<5	<2	<10	<10	<10	<10	<10	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.74	8.35	10.9	5.81	8.61	9.88	20.3	12.7	11.1	4.1	9.14	15.6	4.26	6.18	15.1	17	14.8	33.4	15.3	30.7	29.9	40.8	10.2	<10	12.1	12.2	12.9	6.79	8.75	9.49
PFHxDA (67905-19-5)	ng/l																													<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<5	<1	<2	1.26	<5	1.8	1.6	<2	<2	<2	<1	<1	<2	<10	<10	<10	<5	<5	<5	4.99	<10	<10	<10	<10	<10	<1	<1	<1
PFMOBA (863090-89-5)	ng/l																													<1
PFMOPrA (377-73-1)	ng/l																													<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<5	<1	<2	1.76	<5	1.91	1.5	<2	2.07	<2	<1	<1	2.31	<10	<10	<10	<5	<5	<5	3.88	<10	<10	<10	<10	<10	<1	<1	<1
PFNS (68259-12-1)	ng/l																												<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.17	1.28	<3.25	1.97	3.69	3.48	5.77	4.71	3.25	2.64	3.82	4.97	1.82	2.03	4.48	7.28	<6.5	14.4	5.27	8.99	9.22	10.6	<6.5	<6.5	<6.5	6.52	9.15	1.45	1.69	2.29
PFODA (16517-11-6)	ng/l																													<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<10	<2	<4	<2	<10	<2	<2	<4	<4	<4	<2	<2	<4	<20	<20	<20	<10	<10	<10	<4	<20	<20	<20	<20	<20	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.7	20.8	21.4	9.23	14.2	18.6	32.6	26.8	21.9	7.42	15	30.8	7.35	13.9	29.7	28.3	27.9	54.1	27.4	49.6	60.4	90.1	11.6	<10	18	13.1	16.6	8.36	13.8	23.2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																							<10	<10	<10	<10	<10	<1	<1	<1
PFTeA (376-06-7)	ng/l																													<1
PFTrDA (72629-94-8)	ng/l																												<1	<1	<3
PFTrDS (174675-49-1)	ng/l																												<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<5	<1	<2	5.6	<5	<1	<1	<2	<2	<2	<1	<1	<2	<10	<10	<10	<5	<5	<5	<2	<10	<10	<10	<10	<10	<1	<1	<2
PFUnDS (749786-16-1)	ng/l																												<1	<1	<2
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	3.83	2.17	<5	7.94	11.1	10.4	7.26	13.4	10	3.09	12.2	14.8	4.47	5.17	13.2	33.2	19.4	34.2	8.61	33.2	23.1	31.6	<6.5	<6.5	7.84	6.53	12.1	2.58	3	5.55
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																												2.79		5.77
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.83	2.17	0.00	7.94	11.10	10.40	7.26	13.40	10.00	3.09	12.20	14.80	4.47	5.17	13.20	33.20	19.40	34.20	8.61	33.20	23.10	31.60	0.00	0.00	7.84	6.53	12.10	2.58	3.00	5.55

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	30-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<25	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<25	<5	<5
6:2 FTAB (34455-29-3)	ng/l				<10	<10	<10	<10	24.2	25.3	<10	<10	<10	<10	<50	17.7	37	28.9	<50	24.9	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	1.99	5.89	1.43	<1	<1	<1	<1	1.38	1.51	3.65	4.75	<1	<1	<5	<1	1.75	1.78	<5	3.17	1.5
7:3 FTCA (812-70-4)	ng/l	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<25	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
ADONA (919005-14-4)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
Branched PFOS	ng/l	1.59	<3.25	0.815	<0.65	<0.65	0.887	1.03	1.59	1.69	1.27	1.7	<0.65	<0.65	<3.25	0.977	1.28	1.53	<3.25	1.33	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<50	<10	<10
FBSA (30334-69-1)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<5	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<25	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	4.4	<3.25	2.14	<0.65	<0.65	0.919	0.881	2.5	2.9	2.19	2.45	<0.65	<0.65	<3.25	1.17	2.05	2.05	<3.25	2.97	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<50	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<15	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<15	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	10.3	<10	10.2	20.6	17.8	8.14	7.83	6.56	7.46	8.17	10	6.76	6.11	<10	3.9	6.38	6.21	10.4	9.18	6.87
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<5	<1	<1	<1	3.08	3.44	1.37	1.48	1.39	2	1.29	1.51	<5	1.26	<1	<1	<5	2.51	2.19
PFEESA (113507-82-7)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	3.24	8.04	3.97	3.68	3.14	2.78	2.64	3.59	3.59	3.16	3.5	2.45	2.64	5.94	1.77	3.56	3.09	<5	3.47	2.72
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	9.13	12.1	10	15.5	11.8	4.07	3.47	8.08	8.74	8.01	7.64	5.5	6.38	5.83	4.54	6.01	6.2	7.44	7.73	5.51
PFHxDA (67905-19-5)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	5.63	1.48	1.54	1.15	1.24	1.26	1.99	1.98	1.02	1.08	<1	<1	<5	<1	<1	<1	<5	<1	1.23
PFMOBA (863090-89-5)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFNS (68259-12-1)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	2.74	5.63	2.43	<0.65	<0.65	1.44	1.65	2.25	2.23	2.02	2.08	1.52	1.32	<3.25	1.24	2.67	2.3	<3.25	2.73	1.4
PFODA (16517-11-6)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	22.2	26.7	21.3	35.5	31.5	6.84	6.85	17.1	16.4	16.1	19.5	14.6	13.8	13.4	8.49	17.2	15.4	19.5	17.1	9.51
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFTeA (376-06-7)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<15	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<3	<3	<3	<15	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<5	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<10	<2	<2
Total PFAS DWI 47	ng/l														<450	<90	<90	<90	<450	<90	<90
Total PFOS	ng/l	5.98	<3.25	2.96	<0.65	<0.65	1.81	1.91	4.09	4.59	3.46	4.16	<0.65	<0.65	<3.25	2.14	3.32	3.59	<3.25	4.29	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																					
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		1.48		0.00		1.86		4.34		3.81		0.00		1.07		3.46		2.15		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	5.98	0.00	2.96	0.00	0.00	1.81	1.91	4.09	4.59	3.46	4.16	0.00	0.00	0.00	2.14	3.32	3.59	0.00	4.29	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	30-06-20	02-07-20	10-07-20	16-07-20	28-07-20	07-08-20	14/08/2020	18-08-20	01-09-20	11-09-20	23-09-20	30-09-20	08-10-20	15-10-20	22-10-20	03-12-20	11-01-21	21-01-21	26-01-21	05-02-21	12-02-21	18-02-21	28-02-21	04-03-21	12-03-21	25-03-21	09-04-21	16-04-21	24-04-21	29-04-21
11Cl-PF3OUdS (763051-92-9)	ng/l																														
3:3 FTCA (356-02-5)	ng/l																														
4:2 FTS (757124-72-4)	ng/l																														
5:3 FTCA (914637-49-3)	ng/l																														
6:2 FTAB (34455-29-3)	ng/l																														
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	16.9	16.9	32.9	37	506	126	236	103	55.2	8.27	195	119	31.5	159	47.7	9.54	23.2	17.5	14.9	399	78.4	39.9	9.13	17.6	13.6	3.87	3.56	3.65	2.91	<1
7:3 FTCA (812-70-4)	ng/l																														
8:2 FTS (39108-34-4)	ng/l																														
9Cl-PF3ONS (756426-58-1)	ng/l																														
ADONA (919005-14-4)	ng/l																														
Branched PFOS	ng/l	3.94	3.94	4.13	3.74	46	13.2	20.3	9.08	8.53	3.01	19.9	17.1	4.19	12.8	9.83	2.47	4.59	2.3	3.12	37.6	5.5	3.21	2.37	2.89	2	3.03	1.64	1.99	1.63	<1
EtFOSAA (2991-50-6)	ng/l																														
EtFOSE (1691-99-2)	ng/l																														
FBSA (30334-69-1)	ng/l																														
FHxSA (41997-13-1)	ng/l																														
HFPO-DA (13252-13-6)	ng/l																														
HFPO-TA (13252-14-7)	ng/l																														
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	7	7	4.48	4	88.9	49.2	52.9	21.3	26.2	6.57	47.2	48.1	8.27	36.2	19.4	3.05	4.13	4.36	4.07	100	14.4	6.55	3.39	4.18	3.23	4.56	2.48	2.57	3.01	0.678
MeFOSAA (2355-31-9)	ng/l																														
MeFOSE (24448-09-7)	ng/l																														
N-EtFOSA (4151-50-2)	ng/l																														
NFDHA (151772-58-6)	ng/l																														
N-MeFOSA (31506-32-8)	ng/l																														
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	142	142	30	24.1	<34	22.1	39	25	20.9	22.1	73.7	29.8	13.9	30.1	309	17	18.5	14.1	14.8	56.9	<18	<17.5	19.3	23	19.2	15.3	15.3	41	11.9	<12.5
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	1.25	1.16	<1	<2	1.28	<2	<1	<1	<1	<1	<1	<1	1.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	1.5	<2	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<2	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDoS (79780-39-5)	ng/l																														
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																														
PFecHS (133201-07-7)	ng/l																														
PFEESA (113507-82-7)	ng/l																														
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	11.1	11.1	24	19	51	15.8	39.4	25.1	21.2	19.3	24.7	21.7	8.24	52.1	17.2	21.1	21.3	15.6	19.3	88.3	26.4	16.2	13.2	19.6	10.5	12.9	14	11.3	13.1	3.79
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	2.82	<2	<1	<2	<1	<1	<1.5	<1.5	<1	<1	<1	<1	<1	<1	<1	2.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	26.9	26.9	49.2	42.1	78.9	35.6	66.8	44.5	41.4	36.5	62.9	52.9	18	54.3	40.6	28.8	28.2	14.6	22.2	66.7	22.2	20.2	17.5	25.5	16.2	16.8	20	18	17.3	2.15
PFHxDA (67905-19-5)	ng/l																														
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.21	2.21	5.8	5.21	18.3	4.78	9.89	5.08	5.75	4.27	8.35	6.3	2.97	8.03	5.41	3.26	3.81	1.62	8.7	16.1	3.32	2.94	2.28	3.12	2.42	2.49	2.24	2.22	1.99	<1
PFMOBA (863090-89-5)	ng/l																														
PFMOPrA (377-73-1)	ng/l																														
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.82	1.82	2.12	1.71	12.4	3.21	5.15	4.65	3.15	1.49	4.77	5.53	1.07	4.37	2.52	1.07	1.07	<1	<1	10.5	2.79	1.35	<1	1.16	1.07	1.24	1.33	1.1	1.45	1.01
PFNS (68259-12-1)	ng/l																														
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	6.86	6.86	7.86	6.7	40.5	14.1	17.9	13.6	8.23	7.11	16.3	13.8	2.67	16.4	8.37	3.96	5.13	3.83	4.24	25.3	7.49	5.39	3.8	4.88	3.52	4.29	3.92	4.38	3.64	1.49
PFODA (16517-11-6)	ng/l																														
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<4	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	39	39	73	65.3	70.4	57.2	77.5	62.7	55.6	60.5	106	99.1	23.9	77.3	73.6	63	59.6	33.4	46.1	126	48.8	42	35.6	52.1	31.1	31.4	42.2	29.8	34.6	2.46
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																														
PFTeA (376-06-7)	ng/l																														
PFTrDA (72629-94-8)	ng/l																														
PFTrDS (174675-49-1)	ng/l																														
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<2	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnDS (749786-16-1)	ng/l																														
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	10.9	10.9	8.61	7.74	135	62.4	73.2	30.3	34.7	9.58	67.1	65.2	12.5	49	29.2	5.52	8.73	6.66	7.19	138	19.9	9.76	5.76	7.06	5.23	7.59	4.12	4.56	4.64	<1
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																														
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	10.90	10.90	8.61	7.74	135.00	62.40	73.20	30.30	34.70	9.58	67.10	65.20	12.50	49.00	29.20	5.52	8.73	6.66	7.19	138.00	19.90	9.76	5.76	7.06	5.23	7.59	4.12	4.56	4.64	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	SWML 4																												
		07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	23-07-21	30-07-21	06-08-21	13-08-21	20-08-21	27-08-21	10-09-21	17-09-21	07-10-21	18-10-21	03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	22-03-23	22-03-23	30-05-23	30-05-23	16-08-23	16-08-23
11Cl-PF3OUdS (763051-92-9)	ng/l																										<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l																										<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l																								<2	<2	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l																								<20	<20	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	4.8	2.85	<1	2.46	<2	2.02	2.12	2.84	39.9	3.41	2.05	2.37	2.49	1.23	1.51	1.71	1.9	<1	<1	20.9	20	19.3	34.9	19.4	7.92	9.18	4.11	2.96	1.85	1.74
7:3 FTCA (812-70-4)	ng/l																										<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l																								<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l																										<1	<1	<1	<1
ADONA (919005-14-4)	ng/l																										<1	<1	<1	<1
Branched PFOS	ng/l	1.94	2.3	<1	2.47	<2	<2	1.42	1.26	3.21	2.06	2.36	2.15	2.23	1.38	1.26	1.09	1.55	<0.65	<0.65	4.94	5.28	6.33	7.35	4.76	2.41	3.14	1.33	1.29	1.94	1.54
EtFOSAA (2991-50-6)	ng/l																										<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l																										<10	<10	<10	<10
FBSA (30334-69-1)	ng/l																										<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l																										<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l																										<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l																										<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	2.49	2.67	<0.65	2.68	2.46	2.82	2.55	2.01	6.55	3.82	2.29	2.34	2.85	1.62	1.43	1.48	1.74	<0.65	<0.65	3.52	3.53	4.32	5.1	3.18	2.03	4.07	2.41	1.95	1.52	1.39
MeFOSAA (2355-31-9)	ng/l																										<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l																										<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l																										<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l																										<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l																										<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	11.2	23.2	5.9	20.8	<29	15.9	18	15.4	<17.5	13.1	16.8	16.1	15.6	10.8	13.1	11.8	12.3	10.6	8.49	18.1	19.4	16	27.5	15.8	14.7	<15	17.3	12.1	13.9	13.3
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	1.4	<1	<1	<1	<1	<1	<1	1.08
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l																								<1	<1	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l																										<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l																										<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	14.5	12.7	2.05	13.6	9.66	8.41	11.1	10.2	16.2	7.12	8.42	11.3	10.3	5.81	5.5	4.44	5.15	2.27	2.07	15.4	12.2	10.4	20.3	11.9	8.27	9.18	10.2	9.76	9.8	8.99
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	16.2	21.7	1.95	19.7	18.1	18.7	18.1	14.5	20.2	16.9	16	17.2	19.3	13.1	15.3	14.2	16.5	3.68	2.79	30.5	33	31.9	55.4	30.2	16.3	19	21	21.1	20.3	21.4
PFHxDA (67905-19-5)	ng/l																										<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2	2.33	<1	2.32	2.15	<2	1.64	1.41	2.94	1.75	1.54	1.63	1.82	1.35	1.45	1.22	1.42	<1	<1	3.64	3.2	<5	5.13	2.97	2.37	2.29	1.82	1.47	3.49	2.03
PFMOBA (863090-89-5)	ng/l																										<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l																										<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.21	1.13	<1	1.16	<2	<2	1.1	<1	1.35	1.28	1.12	<1	1.14	<1	<1	<1	<1	<1	<1	<1	<1	<5	1.18	<1	<1	<1	<1	<1	<1	1.18
PFNS (68259-12-1)	ng/l																									<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.67	3.73	0.788	3.28	3.8	2.33	3	2.89	5.39	2.59	2.78	3.14	3.27	2.19	2.21	1.83	2.56	<0.65	0.727	4.61	4.01	5.92	6.98	3.76	4.39	3.78	5.88	3.68	4.84	4.32
PFODA (16517-11-6)	ng/l																										<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<4	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	41.9	45.4	4.05	44.4	40.8	52	40.1	23.7	42	28.5	39.8	62.7	37.6	24.6	20.7	17.8	19.6	7.24	4.65	69.8	57.8	92.5	108	58.2	22.5	31.2	50.1	49.6	44.3	45.2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l														<1	<1	<1	<1	<1	<1	<1	<1	<5	1.13	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l																										<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l																									<1	<1	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l																									<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l																									<1	<1	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	4.43	4.97	<1	5.15	2.46	2.82	3.97	3.28	9.76	5.88	4.65	4.49	5.09	3	2.69	2.57	3.28	<0.65	<0.65	8.45	8.8	10.6	12.4	7.95	4.44	7.2	3.74	3.23	3.47	2.92
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																									5.82		3.49		3.20	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	4.43	4.97	0.00	5.15	2.46	2.82	3.97	3.28	9.76	5.88	4.65	4.49	5.09	3.00	2.69	2.57	3.28	0.00	0.00	8.45	8.80	10.60	12.40	7.95	4.44	7.20	3.74	3.23	3.47	2.92

North Runway Monitoring Results (Surface Water)

Parameter	Unit	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	50.1	48.7	42.6	28	97	148	43.1	31	34.3	30.2	29.4	144	167	175	123	168	29.9	53.5
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	4.65	3.8	12.3	12.5	20	20.6	1.21	1.43	5.4	4.09	2.58	28.1	62.2	70.2	22.6	21.1	5.51	4.77
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2	<2	<2	2.64	<2	<2	<2	<2	<2	4.16	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	1.21	1.33	2.99	3.03	3.7	5.34	2.32	2.18	3.52	4.36	2.16	4.17	5.4	7.05	5.89	2.8	2.05	2.62
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	1.23	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.11	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.24	1.07	4.08	4.35	6.88	9.25	3.6	3.42	2.28	2.15	1.81	7.49	4.47	5.52	8.01	4.05	2.27	2.8
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	16.2	14.1	13.7	13.7	19.3	17.2	8.7	9.19	15.4	13.7	8.22	16.6	19.9	19.4	20.7	20.2	15	18.2
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	1.24	<1	<1	<1	<1	<1	1.48	1.53	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	1.46	1.48	3.2	3.6	2.82	2.85	3.39	2.56	<1	5.06	<1	<1	4.41	5.11	<1	1.12
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	9.04	9.06	6.23	6.53	11.7	11.2	5.39	5.38	10.3	10.9	4.99	10.8	17.8	17.4	19	12.5	7.79	9.14
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	18.6	16.3	13.2	12.6	27.4	28.3	9.61	9.93	25.9	22.2	14.4	28.7	39.2	41.7	35.4	35	19.5	24.3
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.27	2.18	2.25	2.1	3.33	3.27	1.78	1.93	4.4	3.68	3.1	5.03	5.02	6.2	4.61	5.47	2.53	2.73
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	1.13	<1	1.41	1.53	<1	1.21	<1	<1	<1	1.62	1.25	<1	1.95	1.14	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4	3.91	4.09	3.84	8.18	8.4	3.4	3.5	4.86	5.94	2.66	10.9	10.1	10.9	10.3	6.76	3.46	4.2
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	37.4	37	31	32.1	60.9	60.1	20	24.1	62.6	53.3	32	65.7	98.6	101	100	82.2	47.8	52.8
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.32	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l											<90	190	264	279	233	197	106	123
Total PFOS	ng/l	2.45	2.4	7.08	7.38	10.6	14.6	5.93	5.6	5.8	6.51	3.98	11.7	9.86	12.6	13.9	6.86	4.31	5.42
SW Threshold (as per S.I No. 77 of 2019.)																			
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	2.43		7.23		12.60		5.77		6.16		7.84		11.23		10.38		4.87	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	2.45	2.40	7.08	7.38	10.60	14.60	5.93	5.60	5.80	6.51	3.98	11.70	9.86	12.60	13.90	6.86	4.31	5.42

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	SWML 5a																												
		30-06-20	10-07-20	16-07-20	14-08-20	18-08-20	17-09-20	03-11-20	03-12-20	11-01-21	21-01-21	26-01-21	05-02-21	12-02-21	18-02-21	28-02-21	25-03-21	09-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	22-03-23	22-03-23	16-08-23
11Cl-PF3OUdS (763051-92-9)	ng/l																													<2
3:3 FTCA (356-02-5)	ng/l																													<2
4:2 FTS (757124-72-4)	ng/l																											<2	<2	<1
5:3 FTCA (914637-49-3)	ng/l																											<20	<20	<5
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	13.8	38	35.7	92	86.6	18.6	42.6	50	52.6	35.4	35.2	32.9	48.3	47.8	39.7	37	55.7	3.78	52.8	60.3	5.68	49.9	60.2	58.1	61.1	60.9	29.1	28.9	24.7
7:3 FTCA (812-70-4)	ng/l																													<5
8:2 FTS (39108-34-4)	ng/l																											3.11	2.63	2.31
9Cl-PF3ONS (756426-58-1)	ng/l																													<1
ADONA (919005-14-4)	ng/l																													<1
Branched PFOS	ng/l	15.9	3.72	3.48	9.08	11.3	3.62	4.55	15.8	24.8	32.1	38.5	34	17.4	18.3	21.4	12.5	7.97	2.07	8.27	11.8	2.24	9.98	12	10.7	7.69	12.5	13.3	12.9	2.62
EtFOSAA (2991-50-6)	ng/l																													<2
EtFOSE (1691-99-2)	ng/l																													<10
FBSA (30334-69-1)	ng/l																													<1
FHxSA (41997-13-1)	ng/l																													<1
HFPO-DA (13252-13-6)	ng/l																													<2
HFPO-TA (13252-14-7)	ng/l																													<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	11.2	4.21	3.68	19.7	26.3	6.34	11.1	20.7	25.7	43.3	46.7	37.1	22.7	24.2	21.4	14.2	12.8	2.88	12.2	15.1	3.84	14.4	17.5	19.8	20	19.2	17.9	16.4	3.62
MeFOSAA (2355-31-9)	ng/l																													<2
MeFOSE (24448-09-7)	ng/l																													<10
N-EtFOSA (4151-50-2)	ng/l																													<1
NFDHA (151772-58-6)	ng/l																													<3
N-MeFOSA (31506-32-8)	ng/l																													<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	152	31.1	30.7	27.4	27	30.2	16.9	23.6	24.1	20.9	23.9	32	<19	<19.5	34.5	22.5	23.1	<14	18.6	43.1	22.8	19.1	<20	<39.5	<42	28.4	22	22.8	17
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	1.07	1.19	<2	<2	<1	<1	<1	1.04	1.14	1.27	<1	<1	<1	<1	<1	<1	<3	<1	1.2	<1	<1	<1	<1	<1	<5	2.15	1.59	1.53
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<2
PFDoS (79780-39-5)	ng/l																											<1	<1	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																											<1	<1	<2
PFecHS (133201-07-7)	ng/l																													2.83
PFEESA (113507-82-7)	ng/l																													<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	10.5	22.8	20.2	24.8	26	35.7	25.4	44.8	46.3	36.5	56.5	47	44.9	29.7	30.9	34.4	33.1	9.65	35.8	28.2	5.17	29	27.1	53	58.4	25.5	16.6	14.9	9.44
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<2	<2	<1	<1	1.53	2.22	3.3	3.52	3.11	1.19	1.31	1.79	1.31	1.12	<1	<1	1.01	<1	<1	<1	<1	<1	<5	1.19	1.07	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	25.3	45.3	38.3	40.1	38.9	41	24.1	34.8	32.3	25.7	35.2	31.2	24.5	23.2	27.1	26	25.3	4.29	23.3	32.6	5.45	25.1	26.9	29	31.8	28	24	22	20.7
PFHxDA (67905-19-5)	ng/l																													<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	2.95	5.76	5.08	5.08	4.92	5.59	4.5	17.9	28.3	27.8	43.3	33.6	17.1	17.1	23.3	16.6	14.1	1.43	12.3	18.4	2.5	13.7	18.7	17.6	18.3	17.6	17.6	16.3	7.04
PFMOBA (863090-89-5)	ng/l																													<1
PFMOPrA (377-73-1)	ng/l																													<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.68	2.23	1.8	3.78	4.39	1.76	1.5	5.07	7.91	12.6	15.9	13.1	5.01	4.98	6.64	4.8	3.87	1.87	2.94	4.4	<1	3.67	4.29	5.49	6.27	5.07	3.57	3.37	1.15
PFNS (68259-12-1)	ng/l																											<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	5.92	7.26	7.36	13.3	14.5	8.89	5.45	15.3	22.1	25.7	36.4	29.8	14	14.2	16.8	14.2	11.7	3.41	9.79	14	2.31	10.2	13.3	17.6	22.1	14.8	14	14.1	6.09
PFODA (16517-11-6)	ng/l																													<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<4	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	64	63.4	55.4	53	52.2	71.2	43.1	67.9	57.7	39.9	55.8	59.7	39.6	41	43.4	35.6	42.6	4.45	37.7	57.6	6.04	39.6	48.8	33.3	37	29.8	34	31.4	41.2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																											1.56	1.3	<1
PFTeA (376-06-7)	ng/l																													<1
PFTrDA (72629-94-8)	ng/l																											<1	<1	<3
PFTrDS (174675-49-1)	ng/l																											<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<2
PFUnDS (749786-16-1)	ng/l																											<1	<1	<2
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	15.9	7.93	7.15	28.8	37.6	9.97	15.6	36.5	50.5	75.4	85.2	71.1	40	42.5	42.8	26.7	20.8	4.95	20.5	26.8	6.07	24.4	29.5	30.4	27.7	31.7	31.2	29.4	6.24
SW Threshold (as per S.I No. 77 of 2019.)																														
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																											30.30		6.20
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	15.90	7.93	7.15	28.80	37.60	9.97	15.60	36.50	50.50	75.40	85.20	71.10	40.00	42.50	42.80	26.70	20.80	4.95	20.50	26.80	6.07	24.40	29.50	30.40	27.70	31.70	31.20	29.40	6.24

North Runway Monitoring Results (Surface Water)

Parameter	Unit	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	10-12-24	10-12-24	04-03-25	04-03-25	22-05-25	22-05-25	02-09-25	02-09-25	12-11-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l		53.2	60.3	39.7	44.8	48.6	57.1	38.4	39.4	103	69.9	144	147	120	117	78.2	73.2	94.5
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	24.3	6.56	7.47	13	13.3	12.9	14.1	6.56	5.5	54.8	57.8	28.1	28.2	40.8	31.8	10.5	10	22.2
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	2.26	2.03	<2	2.31	3.08	2.94	2.98	<2	2.08	3.17	4.36	4.16	4.08	<2	<2	2.25	<2	4.19
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	2.43	2.27	2.1	3.07	3.11	3.52	3.87	2.64	2.96	7.14	6.35	4.17	3.45	6.07	6.53	4.6	4.06	3.94
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1	1.37	1.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.3	1.35
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	3.72	3.25	3.56	5.37	5.79	7.45	7.58	5.79	4.47	8.92	9.61	7.49	8.42	6	7.11	6.49	5.8	9.12
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	14.8	20	17.5	20.9	21.1	12	13.8	8.51	7.81	25.8	23.6	16.6	14	44.2	39.3	57.1	57.2	31
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	1.22	<1	1.25	1.38	1.37	1.08	1.08	1.45	1.02	1.84	1.36	<1	1.31	<1	<1	<1	1.35	1.67
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	3.86	4.34	3.74	4.35	6.79	6.22	13.8	12.4	5.88	3.87	5.06	<1	27.5	24.8	19.2	16.1	3.47
PFEESA (113507-82-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	10.3	7.21	8.61	8.93	9.84	6.99	6.4	5.1	4.93	19.5	17.7	10.8	10.9	18.1	16.5	9.74	10.9	14
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	32.5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	19.9	15.7	18.5	16.4	16.2	17.3	20.3	14	12.7	49.4	50	28.7	27.4	42.7	36.2	24.8	25.9	<1
PFHxDA (67905-19-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	6.8	2.62	3.29	3.13	3.2	3.15	3.08	3.92	2.24	6.58	6	5.03	4.8	7.24	5.57	4.9	5.79	5.31
PFMOBA (863090-89-5)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<15	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	1.5	1.45	1.29	1.46	<1	<1	1.93	1.84	1.62	2.02	<1	1.11	1.62	1.25	1.53
PFNS (68259-12-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	7.45	3.72	4.27	5.48	5.18	5.44	5.22	3.74	3.26	11.5	10.6	10.9	7.89	10.8	9.42	5.55	5.59	8.99
PFODA (16517-11-6)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	39.5	34.3	36.6	44.1	43.9	32.4	35	21.7	18.4	121	107	65.7	58.8	107	88	60.2	61.6	94.5
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.17	<1	1.32	<1	<1	<1	<1	<1	1.35
PFTeA (376-06-7)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l												190	171	311	266	207	207	235
Total PFOS	ng/l	6.15	5.52	5.67	8.43	8.91	11	11.5	8.44	7.43	16.1	16	11.7	11.9	12.1	13.6	11.1	9.86	13.1
SW Threshold (as per S.I No. 77 of 2019.)																			
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		5.60		8.67		11.25		7.94		16.05		11.80		12.85		11.35		9.21
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	6.15	5.52	5.67	8.43	8.91	11.00	11.50	8.44	7.43	16.10	16.00	11.70	11.90	12.10	13.60	11.10	9.86	13.10

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	SWML 5b																												
		30-06-20	10-07-20	16-07-20	14-08-20	18-08-20	17-09-20	03-12-20	11-01-21	21-01-21	26-01-21	05-02-21	28-02-21	25-03-21	09-04-21	29-04-21	07-05-21	14-05-21	21-07-21	27-07-21	08-06-21	11-06-21	18-06-21	24-06-21	15-02-22	15-02-22	15-03-22	15-03-22	20-04-22	20-04-22	24-05-22
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																							<2	<2	<2	<2	<2	<2	
5:3 FTCA (914637-49-3)	ng/l																							<20	<20	<20	<20	<20	<20	
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	5.27	25.2	30.1	8.02	13.8	63	5.19	54.2	23.5	43.2	51.8	20.8	32.2	28.3	32.6	24.5	46.2	12.2	22.4	35	24.2	25	41	3.73	3.54	44.7	52.1	3.31	<10	45.2
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																							<2	<2	16.3	4.26	<2	<2	
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	3.23	2.21	2.81	7.4	8.44	144	19.2	697	5.4	299	361	111	135	50.4	21.4	36.8	43.4	12.9	41.9	52	27.9	29.4	29	7.46	5.94	737	742	13	16.6	83.3
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	5.85	3.25	3.25	11.4	11.9	135	32.8	702	12.5	318	337	95.7	97.7	44	25.2	33.8	42.8	17.6	36.8	70.7	26.6	26.9	30.9	10	8.46	544	687	37.4	41.2	84.2
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	360	33	40	40.3	43.6	48.6	<40	109	60.2	79.2	142	84.7	46.1	30.5	<29	23.1	59	39.4	46.9	74.6	28.5	27.7	58.7	<10	<5	70.4	85.7	71.7	<80	9.6
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	2.44	2.53	13.5	1.28	22.6	5.07	10.3	14.2	5.76	10.9	4.31	1.61	3.16	6.23	<1	4.74	6.78	3.74	3.67	4.55	1.45	1.2	15.2	24.4	1.12	<10	13
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<2	<2	1.11	1.29	3.67	<1	1.63	2.96	<1	<2	1.3	1.95	<1.5	1.05	<1	<1	<1	<1	<1	<1	<1	<1	2.77	3.27	<1	<10	1.58
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1
PFDoS (79780-39-5)	ng/l																												<1	<1	
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																							<1	<1	<1	<1	<1	<10	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	5.3	14.1	16.3	22.2	25.6	136	94.6	360	198	222	359	90	95	91.1	54.8	75.3	47.8	9.32	60.4	60.7	57.7	52.9	49.4	3.38	3.74	203	242	8.33	<10	49.8
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<2	<2	15.2	1.23	63.5	<1	32	46	9.52	14.5	5.96	2.83	3.83	4.03	<1	4.26	3.67	3.36	3.25	2.98	<1	<1	52.3	42.2	<1	<10	8.1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	11	19.7	23	29.5	32.2	112	53.1	246	105	154	222	56.4	80.9	51.4	57.9	48	57.1	10.2	57.3	56.6	41.1	39.9	59.7	4.05	3.92	185	211	4.53	<10	66.3
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	1.99	2.22	2.51	6.6	7.58	235	31.7	621	25.4	339	541	124	186	98.3	41.5	68.9	74.5	9.5	83.9	73.6	75.6	68	54.4	3.99	3.73	463	510	9.44	11.6	168
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l																													
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	1.52	1.67	1.9	2.26	2.64	41.6	8.34	180	5.39	136	203	30.2	43.2	21.6	9.27	13.8	13.7	2.45	13.8	20.8	10.1	11.6	9.51	<1	<1	122	160	4.13	<10	24.1
PFNS (68259-12-1)	ng/l																												<1	<1	
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	4.12	4.96	5.58	10.4	11.2	106	30.9	462	24.1	264	458	78.9	106	55.1	25.3	36	41.7	7.17	42	54.9	32.4	32.3	33.2	1.67	1.85	304	357	7.93	13.8	72.8
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<4	<4	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	2.35	<2	<2	<2	<2	<2	<2	<2	4.08	<20	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	262	28.3	31.4	34	36.7	116	116	266	202	176	303	48.6	64.7	45.9	25.4	36.8	42.3	6.59	43.2	56.4	32.2	35.2	28.1	6.05	4.48	172	135	6.19	<10	54.2
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																								<1	<1	25.7	42.1	<1	<10	15
PFTeA (376-06-7)	ng/l																													
PFTrDA (72629-94-8)	ng/l																												<1	<1	
PFTrDS (174675-49-1)	ng/l																								<1	<1			<1	<1	
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			<1	<1	<1	<10	<1
PFUnDS (749786-16-1)	ng/l																												<1	<1	
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	9.08	5.46	6.06	18.8	20.3	280	52	1400	17.9	617	698	207	233	94.4	46.6	70.6	86.3	30.5	78.7	123	54.5	56.3	59.9	17.5	14.4	1280	1430	50.5	57.8	167
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																								15.95		1355.00		54.15		174.00
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	9.08	5.46	6.06	18.80	20.30	280.00	52.00	1400.00	17.90	617.00	698.00	207.00	233.00	94.40	46.60	70.60	86.30	30.50	78.70	123.00	54.50	56.30	59.90	17.50	14.40	1280.00	1430.00	50.50	57.80	167.00

North Runway Monitoring Results (Surface Water)

Parameter	Unit	24-05-22	21-06-22	21-06-22	20-09-22	20-09-22	15-11-22	15-11-22	22-03-23	22-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	22-11-23
11Cl-PF3OUdS (763051-92-9)	ng/l										<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l										<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l		<20	<20	<10	<10	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l		<200	<200	<100	<100	<20	<20	<20	<20	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l														<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	47.7	79.8	68.1	25.8	34.2	45.6	37.6	46.9	43.5	39.3	39.5	17.9	24.2	<1	<1
7:3 FTCA (812-70-4)	ng/l										<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l		40.8	35.6	<10	<10	10.9	11.2	8.19	6.23	3.81	4.51	4.82	5.96	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l										<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l										<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	90.8	106	95.4	93.3	113	147	113	160	173	116	141	10.1	14.6	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l										<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l										<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l										4.78	4.64	2.02	2.16	<1	<1
FHxSA (41997-13-1)	ng/l										4.46	4.58	2.77	3.1	<1	<1
HFPO-DA (13252-13-6)	ng/l										<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l										<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	89.8	103	95.9	87.4	108	138	113	168	153	116	139	18.9	22.2	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l										<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l										<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l										<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l										<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l										<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	7.61	386	313	161	107	60.4	<43	104	92.8	70.2	66.8	40.3	64.4	2.95	4.83
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	13.9	26.3	23	10.6	14.5	12.3	8.99	19.4	18.2	9.57	9.1	3.45	5.25	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	1.78	<10	<10	<5	<5	1.7	1.35	1.5	1.62	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<10	<10	<5	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l		<10	<10	<10	<10	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<10	<10	<5	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l										43.6	38.1	13.6	36.2	<1	<1
PFEESA (113507-82-7)	ng/l										<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	49.9	77.2	66.6	44.5	60.7	63.2	77.3	135	132	49.3	42.6	12.6	18.6	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	8.74	<10	<10	5.93	7.49	8.7	10.3	15.3	15.7	6.45	5.65	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	69	129	111	54.3	74.9	78.8	64.4	137	121	59.9	59.7	27.1	39	2.19	1.98
PFHxDA (67905-19-5)	ng/l										<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	178	260	224	114	149	171	139	297	266	140	126	27	27.4	<1	<1
PFMOBA (863090-89-5)	ng/l										<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l										<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	23.5	25.6	21.7	18	25.3	36.2	33.6	47	45	21	27.5	3.96	4.87	<1	<1
PFNS (68259-12-1)	ng/l		<10	<10	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	77	89.7	71.9	55.5	82.8	109	98.3	173	185	69.7	69.4	12.9	18.5	<0.65	<0.65
PFODA (16517-11-6)	ng/l										<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<20	<20	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	59.2	107	92.8	44	61.1	86.7	120	152	140	71.8	80.6	41.1	62.1	3.74	3.96
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	15.5	21.7	18.6	8.87	12.1	13.8	12.6	24.6	22.4	8.57	7.45	2.11	2.46	<1	<1
PFTeA (376-06-7)	ng/l										<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l		<10	<10	<10	<10	<1	<1	<1	<1	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l		<10	<10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<10	<10	<5	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l		<10	<10	<10	<10	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l															
Total PFOS	ng/l	181	210	191	181	221	285	227	327	326	231	280	29.1	36.8	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l		200.50		201.00		256.00		326.50		255.50		32.95		0.00	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	181.00	210.00	191.00	181.00	221.00	285.00	227.00	327.00	326.00	231.00	280.00	29.10	36.80	0.00	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	07-08-20	14-08-20	18-08-20	01-09-20	11-09-20	17-09-20	23-09-20	08-10-20	15-10-20	22-10-20	26-01-21	05-02-21	15-02-21	18-02-21	28-02-21	04-03-21	12-03-21	25-03-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21
11Cl-PF3OUdS (763051-92-9)	ng/l																														
3:3 FTCA (356-02-5)	ng/l																														
4:2 FTS (757124-72-4)	ng/l																														
5:3 FTCA (914637-49-3)	ng/l																														
6:2 FTAB (34455-29-3)	ng/l																														
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	12.3	<1	<1	3.39	<1	<1	3.39	<1	<1	<1	<1	<1	<1	<1	<1	1.08	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
7:3 FTCA (812-70-4)	ng/l																														
8:2 FTS (39108-34-4)	ng/l																														
9Cl-PF3ONS (756426-58-1)	ng/l																														
ADONA (919005-14-4)	ng/l																														
Branched PFOS	ng/l	<1	1.71	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.1	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
EtFOSAA (2991-50-6)	ng/l																														
EtFOSE (1691-99-2)	ng/l																														
FBSA (30334-69-1)	ng/l																														
FHxSA (41997-13-1)	ng/l																														
HFPO-DA (13252-13-6)	ng/l																														
HFPO-TA (13252-14-7)	ng/l																														
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	3.98	4.01	1.06	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.735	0.735	<0.65	0.957	0.971	<0.65	0.843	<1.3	0.726	<3.25	<1.3	1.29	1.02	1.17	<0.65	<1.3	<3.25	<3.25	6.84
MeFOSAA (2355-31-9)	ng/l																														
MeFOSE (24448-09-7)	ng/l																														
N-EtFOSA (4151-50-2)	ng/l																														
NFDHA (151772-58-6)	ng/l																														
N-MeFOSA (31506-32-8)	ng/l																														
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	5.15	6.48	3.33	5.7	4.05	4.17	5.7	7.34	3.81	157	3.63	10.9	10.9	8.27	<21	15.4	10.1	6.08	9.41	7.45	217	30	<13.5	<13	<12.5	15.5	60.3	23.1	29	<20
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
PFDoS (79780-39-5)	ng/l																														
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																														
PFecHS (133201-07-7)	ng/l																														
PFEESA (113507-82-7)	ng/l																														
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	2.45	1.34	<1	1.45	1.14	1.03	1.45	1.02	<1	<1	<1	1.36	1.36	<1	9.88	5.94	1.11	3.1	2.56	1.85	8.31	12.9	21	15.9	15.6	2.92	10.5	11.4	13	22
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	6.11	3.43	1.64	5.2	3	2.44	5.2	4.77	1.95	2.16	3.03	5.33	5.33	4.48	5.14	6.88	1.48	4.06	2.83	2.3	6.39	11	9.32	6.27	7.56	3.58	6.02	8.56	8.69	12.4
PFHxDA (67905-19-5)	ng/l																														
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
PFMOBA (863090-89-5)	ng/l																														
PFMOPrA (377-73-1)	ng/l																														
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<5	<2	1.06	<1	<1	<1	<2	<5	<5	<5
PFNS (68259-12-1)	ng/l																														
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.58	1.86	<0.65	0.976	<0.65	<0.65	0.976	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	2.46	1.45	0.848	1.39	<1.3	0.901	<3.25	4.6	3.14	3.56	3.21	0.831	3.66	4.16	3.92	9.21
PFODA (16517-11-6)	ng/l																														
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<10	<4	<2	<2	<2	<2	<4	<10	<10	<10
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	9.24	5.97	2.8	7.85	5.53	5.75	7.85	5.5	3.44	3.08	5.45	9.5	9.5	9	8.51	13.8	2.18	6.64	5.27	3.86	7.62	13	14.9	<7.5	<10.5	6.68	10.3	16.5	19.9	13.9
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																														
PFTeA (376-06-7)	ng/l																														
PFTrDA (72629-94-8)	ng/l																														
PFTrDS (174675-49-1)	ng/l																														
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<5	<2	<1	<1	<1	<1	<2	<5	<5	<5
PFUnDS (749786-16-1)	ng/l																														
Total PFAS DWI 47	ng/l																														
Total PFOS	ng/l	3.98	5.72	1.06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.07	<1	<1	<2	<1	<5	<2	1.29	1.02	1.17	<1	<2	<5	<5	6.84
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																														
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	3.98	5.72	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	1.29	1.02	1.17	0.00	0.00	0.00	0.00	6.84

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	SWML 7a																													
		05-07-21	30-07-21	06-08-21	13-08-21	10-09-21	03-11-21	12-11-21	22-11-21	03-12-21	10-12-21	22-03-23	22-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	05-03-25	05-03-25	22-05-25	22-05-25
11Cl-PF3OUdS (763051-92-9)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4:2 FTS (757124-72-4)	ng/l											<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l											<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l																	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	1.94	<5	2.97	29.4	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l													<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l											<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<1	1.11	<3.25	1.25	2.08	<3.25	0.781	<3.25	0.686	0.812	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.896	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l													<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l													<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	1.6	3.7	4.78	5.96	4.27	<3.25	<0.65	<3.25	1.05	0.717	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.817	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l													<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l													<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l													<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	20	15.5	14.3	19.7	<7.5	<10	6.88	<10	6.22	10.4	5.25	<5	<2	<2	2.71	3.31	2.95	4.83	4.13	5.63	3.03	2.56	<2	4.27	<2	<2	2.89	<2	2.25	2.67
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1.5	<5	<2	1.37	<5	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l											<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l					<1	<5	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	13.4	21.9	16.8	30	5.39	<5	4.84	<5	4.8	4.46	<1	<1	<1	<1	<1	<1	<1	<1	1.36	1.45	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	7.43	18.7	19.8	27.3	6.3	8.04	7.55	8.45	7.1	8.02	2.13	2.5	<1	<1	2.14	2.31	2.19	1.98	3.75	4.38	2.1	2.13	<1	<1	<1	<1	1.84	1.9	1.18	1.41
PFHxDA (67905-19-5)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	1	<5	1.35	1.85	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	8.57	9.76	11.8	1.14	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	3.56	9.68	9.92	11.4	2.61	<3.25	0.861	<3.25	0.927	1.09	1.04	<0.65	<0.65	<0.65	0.727	0.854	<0.65	<0.65	1.04	1.17	<0.65	1.42	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
PFODA (16517-11-6)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<10	<2	<2	<10	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	10.2	36.3	37.1	59.7	<3.5	16.5	12.5	20.5	11	13.5	2.56	3.64	2.62	2.8	3.76	3.88	3.74	3.96	8.9	10.1	4.83	4.93	<1	1.5	<1	<1	3.56	3.84	3.48	3.87
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l					1.13	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l													<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l											<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l											<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<5	<1	<1	<5	<1	<5	<1	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l											<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																											<90	<90	<90	<90
Total PFOS	ng/l	1.6	4.81	4.78	7.22	6.35	<3.25	0.781	<3.25	1.73	1.53	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	1.71	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																															
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l											0.00		0.00		0.00		0.00		0.86		0.00		0.00		0.00		0.00		0.00	
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	1.60	4.81	4.78	7.22	6.35	0.00	0.78	0.00	1.73	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

North Runway Monitoring Results (Surface Water)

Parameter	Unit			
		02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	<1
7:3 FTCA (812-70-4)	ng/l	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l	<1	<1	<1
ADONA (919005-14-4)	ng/l	<1	<1	<1
Branched PFOS	ng/l	<0.65	<0.65	<0.65
EtFOSAA (2991-50-6)	ng/l	<2	<2	<2
EtFOSE (1691-99-2)	ng/l	<10	<10	<10
FBSA (30334-69-1)	ng/l	<1	<1	<1
FHxSA (41997-13-1)	ng/l	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l	<2	<2	<2
MeFOSE (24448-09-7)	ng/l	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l	<1	<1	<1
NFDHA (151772-58-6)	ng/l	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	<2	<2	3.68
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<2	<2	<2
PFDoS (79780-39-5)	ng/l	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<2	<2	<2
PFecHS (133201-07-7)	ng/l	<1	<1	<1
PFEESA (113507-82-7)	ng/l	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	<1	<1	2.11
PFHxDA (67905-19-5)	ng/l	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	<1
PFMOBA (863090-89-5)	ng/l	<1	<1	<1
PFMOPrA (377-73-1)	ng/l	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	<1
PFNS (68259-12-1)	ng/l	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	<0.65	<0.65	<0.65
PFODA (16517-11-6)	ng/l	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	2.08	<1	4.17
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<1	<1
PFTeA (376-06-7)	ng/l	<1	<1	<1
PFTrDA (72629-94-8)	ng/l	<3	<3	<3
PFTrDS (174675-49-1)	ng/l	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<2	<2	<2
PFUnDS (749786-16-1)	ng/l	<2	<2	<2
Total PFAS DWI 47	ng/l	<90	<90	<90
Total PFOS	ng/l	<0.65	<0.65	<0.65
SW Threshold (as per S.I No. 77 of 2019.)				
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l	0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	SWML 7b																												
		15-10-20	22-10-22	03-11-20	26-01-21	12-02-21	18-02-21	28-02-21	04-03-21	25-03-21	09-04-21	16-04-21	24-04-21	29-04-21	07-05-21	14-05-21	21-05-21	27-05-21	08-06-21	11-06-21	18-06-21	24-06-21	05-07-21	30-07-21	06-08-21	13-08-21	20-08-21	27-08-21	10-09-21	17-09-21	03-11-21
11Cl-PF3OUdS (763051-92-9)	ng/l																													
3:3 FTCA (356-02-5)	ng/l																													
4:2 FTS (757124-72-4)	ng/l																													
5:3 FTCA (914637-49-3)	ng/l																													
6:2 FTAB (34455-29-3)	ng/l																													
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<1	44	<1	<1	<1	1.28	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	1.25	<1	<5	<2	<1	<1	<10	<10	<10	<1
7:3 FTCA (812-70-4)	ng/l																													
8:2 FTS (39108-34-4)	ng/l																													
9Cl-PF3ONS (756426-58-1)	ng/l																													
ADONA (919005-14-4)	ng/l																													
Branched PFOS	ng/l	<1	<1	5.31	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	2.21	<2	<2	1.65	1.17	<3.25	<1.3	1.51	<0.65	<6.5	<6.5	<6.5	<0.65
EtFOSAA (2991-50-6)	ng/l																													
EtFOSE (1691-99-2)	ng/l																													
FBSA (30334-69-1)	ng/l																													
FHxSA (41997-13-1)	ng/l																													
HFPO-DA (13252-13-6)	ng/l																													
HFPO-TA (13252-14-7)	ng/l																													
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	0.682	12.7	<0.65	<0.65	0.797	<0.65	<0.65	0.924	1.05	0.901	1.01	0.926	<0.65	1.42	4.51	0.871	<1.3	<1.3	1.57	3.35	1.3	<3.25	1.38	2.21	1.47	<6.5	<6.5	<6.5	<0.65
MeFOSAA (2355-31-9)	ng/l																													
MeFOSE (24448-09-7)	ng/l																													
N-EtFOSA (4151-50-2)	ng/l																													
NFDHA (151772-58-6)	ng/l																													
N-MeFOSA (31506-32-8)	ng/l																													
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	6.56	168	17.2	3.37	4.4	4.4	14	5.47	4	9.04	7.52	3.95	<15	<8.5	<9.5	<11.5	19.3	<24	44.1	10.4	<11.5	5.11	10.2	6.13	10.1	13.8	<20	<38	<20	4.21
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<1	<1	<5	<2	<1	<1	<10	<10	<10	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<1	<1	<7	<2	<2.5	<2	<10	<10	<10	<1
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<1	<1	<5	<2	<1	<1	<10	<10	<10	<1
PFDoS (79780-39-5)	ng/l																													
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l																										<1	<10	<10	<10	<1
PFecHS (133201-07-7)	ng/l																													
PFEESA (113507-82-7)	ng/l																													
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.62	<1	26.4	1.01	1.11	1.1	1.02	<1	1.28	1.81	1.73	1.68	1.63	3.06	2.79	4.12	3.52	3.08	<2	2.41	5.13	3.75	<5	<2	2.92	1.12	<10	<10	<10	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<1	<1	<5	<2	<1	<1	<10	<10	<10	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.15	<2	24.5	1.34	1.54	2.36	1.48	2.22	1.71	2.18	2.25	1.59	1.93	1.91	1.98	<2	2.48	2.3	<2	<2	4.51	2.96	<5	<2	3.73	1.37	<10	<10	<10	1.32
PFHxDA (67905-19-5)	ng/l																													
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<1	4.37	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<1	<1	<5	<2	<1	<1	<10	<10	<10	<1
PFMOBA (863090-89-5)	ng/l																													
PFMOPrA (377-73-1)	ng/l																													
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<1	1.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<1	<1	<5	<2	<1	<1	<10	<10	<10	<1
PFNS (68259-12-1)	ng/l																													
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.05	1.03	5.33	0.781	0.724	3.69	0.861	1.11	1.57	1.56	1.03	0.996	1.65	1.39	1.76	3.11	1.26	1.86	1.6	2.04	3.16	2.15	<3.25	2.42	2.94	0.968	<6.5	<6.5	<6.5	0.981
PFODA (16517-11-6)	ng/l																													
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<4	<4	<4	<2	<2	<10	<4	<2	<2	<20	<20	<20	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	1.64	<1.5	17.2	2.42	2.79	3.44	2.69	3.31	2.45	2.6	2.53	1.63	2.05	3.25	<2	<19	3.54	4.18	<2	<2.5	6.55	5.76	<5	3.39	4.1	1.5	<10	<10	<10	1.92
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l																										<1	<10	<10	<10	<1
PFTeA (376-06-7)	ng/l																													
PFTrDA (72629-94-8)	ng/l																													
PFTrDS (174675-49-1)	ng/l																													
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<2	<2	<1	<1	<5	<2	<1	<1	<10	<10	<10	<1
PFUnDS (749786-16-1)	ng/l																													
Total PFAS DWI 47	ng/l																													
Total PFOS	ng/l	<1	<1	18	<1	<1	<1	<1	<1	<1	1.05	<1	1.01	<1	<1	1.42	4.51	<1	2.21	<2	<2	5.01	2.46	<3.25	1.38	3.72	1.47	<6.5	<6.5	<6.5	<0.65
SW Threshold (as per S.I No. 77 of 2019.)																														
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l																													
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	1.01	0.00	0.00	1.42	4.51	0.00	2.21	0.00	0.00	5.01	2.46	0.00	1.38	3.72	1.47	0.00	0.00	0.00	0.00

North Runway Monitoring
Results (Surface Water)

Parameter	Unit	12-11-21	22-11-21	03-12-21	10-12-21	22-03-23	22-03-23	30-05-23	30-05-23	16-08-23	16-08-23	22-11-23	22-11-23	03-04-24	03-04-24	16-07-24	16-07-24	02-10-24	02-10-24	11-12-24	11-12-24	05-03-25	05-03-25	22-05-25	22-05-25	02-09-25	02-09-25	15-12-25
11Cl-PF3OUdS (763051-92-9)	ng/l							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
3:3 FTCA (356-02-5)	ng/l							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<5	<5	<5
4:2 FTS (757124-72-4)	ng/l					<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
5:3 FTCA (914637-49-3)	ng/l					<20	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5
6:2 FTAB (34455-29-3)	ng/l											<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10
6:2FTS (27619-97-2) Perfluoro-octane sulfonate 6:2	ng/l	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	1.02	1.17	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	1.46
7:3 FTCA (812-70-4)	ng/l							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5
8:2 FTS (39108-34-4)	ng/l					<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
9Cl-PF3ONS (756426-58-1)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
ADONA (919005-14-4)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Branched PFOS	ng/l	<0.65	<3.25	<3.25	0.897	<0.65	<0.65	0.709	2.59	1.1	<0.65	<0.65	<0.65	1.12	1.09	0.66	0.687	<5	<4	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.706
EtFOSAA (2991-50-6)	ng/l							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
EtFOSE (1691-99-2)	ng/l							<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10
FBSA (30334-69-1)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
FHxSA (41997-13-1)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
HFPO-DA (13252-13-6)	ng/l							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
HFPO-TA (13252-14-7)	ng/l							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5
Linear PFOS(1763-23-1) Perfluoro-1-octanesulfonate	ng/l	<0.65	<3.25	<3.25	1.14	<0.65	<0.65	<0.65	4.91	0.872	<0.65	<0.65	<0.65	1.26	1.04	0.783	<0.65	<4	<4	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
MeFOSAA (2355-31-9)	ng/l							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
MeFOSE (24448-09-7)	ng/l							<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-EtFOSA (4151-50-2)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
NFDHA (151772-58-6)	ng/l							<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15	<3	<3	<3	<3	<3	<3	<3	<3	<3
N-MeFOSA (31506-32-8)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFBA (375-22-4) Perfluoro-n-butanoic acid	ng/l	3.53	<10	<10	3.39	3.88	<3.5	<2	<2	6.32	2.76	4.29	3.06	<2	6.23	<2	<2	<10	<10	<2	3.15	<2	<2	3.53	4.6	<2	<2	4.74
PFBS (375-73-5) Perfluoro-1-butanesulfonate	ng/l	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.23	1.09	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFDA (335-76-2) Perfluoro-n-decanoic acid	ng/l	<1	<5	<5	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoA (307-55-1) Perfluoro-n-dodecanoic acid	ng/l	<1	<5	<5	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDoS (79780-39-5)	ng/l					<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFDS (335-73-3) Perfluoro-1-decanesulfonate	ng/l	<1	<5	<5	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFecHS (133201-07-7)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFEESA (113507-82-7)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHpA (375-85-9) Perfluoro-n-heptanoic acid	ng/l	1.08	<5	<5	1.12	<1	<1	<1	<1	1.6	<1	1.22	1.01	1.71	1.5	<1	<1	<5	<5	<1	<1	<1	<1	1.87	1.74	<1	<1	<1
PFHpS (375-92-8) Perfluoro-1-heptanesulfonate	ng/l	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxA (307-24-4) Perfluoro-n-hexanoic acid	ng/l	1.16	<5	<5	1.26	1.41	1.39	1.06	1.56	3.03	<1	1.96	1.41	2.35	1.89	1.58	1.32	5.95	6.35	1.83	1.69	2.32	2.08	2.92	3.25	<1	<1	2.05
PFHxDA (67905-19-5)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFHxS (355-46-4) Perfluoro-1-hexanesulfonate	ng/l	<1	<5	<5	<1	<1	<1	<1	4.35	<1	<1	<1	<1	<1	1.18	1.18	1.06	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOBA (863090-89-5)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFMOPrA (377-73-1)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNA (375-95-1) Perfluoro-n-nonanoic acid	ng/l	<1	<5	<5	<1	<1	<1	<1	<1	1.09	<1	<1	<1	1.19	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFNS (68259-12-1)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOA (335-67-1) Perfluoro-n-octanoic acid	ng/l	1.04	<3.25	<3.25	1.1	1.08	1.38	0.69	0.793	1.95	1.05	1.19	1.05	2.33	2.09	0.871	0.762	<4	<4	0.845	<0.65	0.999	0.987	1.64	1.65	<0.65	<0.65	1.35
PFODA (16517-11-6)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFOSA (754-91-6) Perfluoro-octanesulfonamide	ng/l	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFPA (2706-90-3) Perfluoro-n-pentanoic acid	ng/l	1.91	<5	<5	2.36	1.92	1.44	<1	<1	4.73	1.86	2.62	2.26	3.37	2.87	<1	<1	8	8.16	2.63	3.63	3.34	3.16	3.89	6.95	<1	<1	4.09
PFPeS (2706-91-4) Perfluoro-1-pentanesulfonate	ng/l	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTeA (376-06-7)	ng/l							<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFTrDA (72629-94-8)	ng/l					<1	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<15	<15	<3	<3	<3	<3	<3	<3	<3	<3	<3
PFTrDS (174675-49-1)	ng/l					<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFUnA (2058-94-8) Perfluoro-n-undecanoic acid	ng/l	<1	<5	<5	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
PFUnDS (749786-16-1)	ng/l					<1	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total PFAS DWI 47	ng/l																					<90	<90	<90	<90	<90	<90	<90
Total PFOS	ng/l	<0.65	<3.25	<3.25	2.03	<0.65	<0.65	0.709	7.49	1.97	<0.65	<0.65	<0.65	2.38	2.13	1.44	0.687	<5	<4	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.706
SW Threshold (as per S.I No. 77 of 2019.)																												
AA EQS (PFOS) (average duplicates total PFOS)	0.65 ng/l					0.00		4.10		0.99		0.00		2.26		1.06		0.00		0.00		0.00		0.00		0.00		
MAC EQS (PFOS) (total PFOS)	36,000 ng/l	0.00	0.00	0.00	2.03	0.00	0.00	0.71	7.49	1.97	0.00	0.00	0.00	2.38	2.13	1.44	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.706

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 8

Surface Water Laboratory Certificates

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	27 March 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250306-88
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	760345
Order Number:	Z4708

We received 30 samples on Thursday March 06, 2025 and 30 of these samples were scheduled for analysis which was completed on Thursday March 27, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31172319	SL1-A		0.00 - 0.00	03/03/2025
31172377	SL2-A		0.00 - 0.00	03/03/2025
31172443	SL3-A		0.00 - 0.00	03/03/2025
31172453	SL4-A		0.00 - 0.00	03/03/2025
31172457	SL5-A		0.00 - 0.00	03/03/2025
31172463	SL6-A		0.00 - 0.00	03/03/2025
31172472	SL7-A		0.00 - 0.00	03/03/2025
31172479	SL8-A		0.00 - 0.00	03/03/2025
31172484	SL9-A		0.00 - 0.00	03/03/2025
31172324	SL10-A		0.00 - 0.00	03/03/2025
31172328	SL11-A		0.00 - 0.00	03/03/2025
31172332	SL12-A		0.00 - 0.00	03/03/2025
31172341	SL13-A		0.00 - 0.00	03/03/2025
31172347	SL14-A		0.00 - 0.00	03/03/2025
31172353	SL15-A		0.00 - 0.00	03/03/2025
31172357	SL1-B		0.00 - 0.00	03/03/2025
31172362	SL2-B		0.00 - 0.00	03/03/2025
31172366	SL3-B		0.00 - 0.00	03/03/2025
31172372	SL4-B		0.00 - 0.00	03/03/2025
31172388	SL5-B		0.00 - 0.00	03/03/2025
31172396	SL6-B		0.00 - 0.00	03/03/2025
31172400	SL7-B		0.00 - 0.00	03/03/2025
31172404	SL8-B		0.00 - 0.00	03/03/2025
31172408	SL9-B		0.00 - 0.00	03/03/2025
31172412	SL10-B		0.00 - 0.00	03/03/2025
31172416	SL11-B		0.00 - 0.00	03/03/2025
31172420	SL12-B		0.00 - 0.00	03/03/2025
31172425	SL13-B		0.00 - 0.00	03/03/2025
31172432	SL14-B		0.00 - 0.00	03/03/2025
31172448	SL15-B		0.00 - 0.00	03/03/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			31172319	SL1-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172377	SL2-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172443	SL3-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172453	SL4-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172457	SL5-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172463	SL6-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172472	SL7-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172479	SL8-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172484	SL9-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172324	SL10-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172328	SL11-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172332	SL12-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172341	SL13-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172347	SL14-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172353	SL15-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172357	SL1-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172362	SL2-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172366	SL3-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31172372	SL4-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

31172448	SL15-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X
31172432	SL14-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31172425	SL13-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31172420	SL12-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X
31172416	SL11-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31172412	SL10-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31172408	SL9-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31172404	SL8-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X
31172400	SL7-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31172396	SL6-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X
31172388	SL5-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172319	31172377	31172443	31172453	31172457	31172463
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		4.8 #	8.26 #	15.6 #	14.1 #	3.84 #	5.81 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		8.72 #	26.3 #	62.3 #	36.2 #	7.17 #	17.3 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		4.21 #	11.9 #	25.4 #	15.6 #	3.2 #	11.4 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		2.04 #	5.36 #	11.7 #	6.57 #	1.87 #	3.91 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	1.08 #	<1 #	1.09 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	3.49 #	14.4 #	<1 #	<1 #	2.81 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	3.47 #	9.29 #	1.73 #	<0.65 #	1.64 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.1 #	3.19 #	2.34 #	2.77 #	1.02 #	2.29 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	2.03 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	1.41 #	43.2 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		0.759 #	2.76 #	2.92 #	0.85 #	0.807 #	2.1 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	2.1 #	2.99 #	1.7 #	<0.65 #	2.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172319	31172377	31172443	31172453	31172457	31172463
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	32.4	54.9	<10	<10	16.5
Total PFOS	<0.65 ng/l	TM434		0.759 #	4.86 #	5.91 #	2.55 #	0.807 #	4.6 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	192	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL7-A	SL8-A	SL9-A	SL10-A	SL11-A	SL12-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172472	31172479	31172484	31172324	31172328	31172332
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		7.05 #	2.33 #	<2 #	3.71 #	5.23 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		23.3 #	2.53 #	2.5 #	6.94 #	22.5 #	2.28 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		9.88 #	1.33 #	1.35 #	3.1 #	10.7 #	1.33 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		4.9 #	1.19 #	1.22 #	1.76 #	3.38 #	1.17 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		3.7 #	<1 #	<1 #	<1 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		4.3 #	<0.65 #	<0.65 #	<0.65 #	1.08 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.61 #	<1 #	<1 #	<1 #	1.46 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		9.25 #	<1 #	<1 #	<1 #	4.27 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.69 #	<0.65 #	<0.65 #	<0.65 #	0.803 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		1.45 #	<0.65 #	<0.65 #	<0.65 #	0.968 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL7-A	SL8-A	SL9-A	SL10-A	SL11-A	SL12-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172472	31172479	31172484	31172324	31172328	31172332
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		10.2	<10	<10	<10	<10	<10
Total PFOS	<0.65 ng/l	TM434		3.14 #	<0.65 #	<0.65 #	<0.65 #	1.77 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<90	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
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Results Legend
- # ISO17025 accredited.
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- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172341	31172347	31172353	31172357	31172362	31172366
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		4.94 #	3.18 #	4.02 #	5.15 #	9.69 #	16.7 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		18.9 #	3.83 #	12.5 #	9.65 #	28.9 #	59.5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		9.28 #	1.76 #	5.72 #	4.15 #	12.5 #	25.7 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		4.03 #	1.28 #	2.27 #	2.11 #	6.02 #	11.4 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		2.14 #	<1 #	<1 #	<1 #	3.75 #	13.6 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		2.45 #	<0.65 #	1.14 #	<0.65 #	3.93 #	9.02 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.21 #	<1 #	1.23 #	<1 #	3.22 #	2.25 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	1.89 #
PFecHS (133201-07-7)	<1 ng/l	TM434		6.56 #	<1 #	<1 #	<1 #	1.74 #	41.2 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.61 #	0.816 #	0.997 #	<0.65 #	3.2 #	2.86 #
Branched PFOS	<0.65 ng/l	TM434		1.26 #	1.02 #	1.03 #	0.929 #	3.01 #	3.29 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	Customer Sample Ref.	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B
# ISO17025 accredited.							
M mCERTS accredited.							
aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample.							
tot.unfilt Total / unfiltered sample.							
* Subcontracted - refer to subcontractor report for accreditation status.							
** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
*** 6:2 FTAB (see appendix)							
1-4+§@ Sample deviation (see appendix)							
	Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
	Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
	Sample Time	.	.	.	.	.	.
	Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
	SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
	Lab Sample No.(s)	31172341	31172347	31172353	31172357	31172362	31172366
	AGS Reference						

Component	LOD/Units	Method						
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	19.1	<10	<10	<10	41.2	62.7
Total PFOS	<0.65 ng/l	TM434	2.86 #	1.84 #	2.03 #	0.929 #	6.2 #	6.14 #
Total PFAS DWI 47	<90 ng/l	TM434	<90	<90	<90	<90	<90	187

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL4-B	SL5-B	SL6-B	SL7-B	SL8-B	SL9-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172372	31172388	31172396	31172400	31172404	31172408
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		13.9 #	2.92 #	6.07 #	6.86 #	2.39 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		34.2 #	6.29 #	17.9 #	22.5 #	2.23 #	2.62 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		16.2 #	3.18 #	10.5 #	10.3 #	1.2 #	1.3 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		6.11 #	<1 #	3.83 #	4.78 #	<1 #	1.11 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	2.66 #	1.41 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		1.54 #	0.729 #	1.83 #	4.17 #	<0.65 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		2.98 #	<1 #	2.17 #	1.6 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	13.9 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	0.672 #	2.4 #	1.46 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		1.33 #	0.937 #	2.28 #	1.39 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	Customer Sample Ref.	SL4-B	SL5-B	SL6-B	SL7-B	SL8-B	SL9-B
# ISO17025 accredited.							
M mCERTS accredited.							
aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample.							
tot.unfilt Total / unfiltered sample.							
* Subcontracted - refer to subcontractor report for accreditation status.							
** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
*** 6:2 FTAB (see appendix)							
1-4+§@ Sample deviation (see appendix)							
	Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
	Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
	Sample Time	.	.	.	.	.	.
	Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
	SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
	Lab Sample No.(s)	31172372	31172388	31172396	31172400	31172404	31172408
	AGS Reference						

Component	LOD/Units	Method						
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10	<10	11.1	11.4	<10	<10
Total PFOS	<0.65 ng/l	TM434	1.33 #	1.61 #	4.68 #	2.85 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434	<90	<90	<90	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172412	31172416	31172420	31172425	31172432	31172448
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		3.53 #	5.61 #	<2 #	4.61 #	3.56 #	2.91 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		7.3 #	23.4 #	2.7 #	17.2 #	4.25 #	12.3 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		2.77 #	11.1 #	1.21 #	8.71 #	2 #	6.19 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		1.74 #	3.31 #	<1 #	4.02 #	1.28 #	1.88 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	2 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	1.3 #	<0.65 #	2.34 #	0.84 #	1.96 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	1.25 #	<1 #	<1 #	<1 #	1.02 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	4.56 #	<1 #	6.52 #	<1 #	1.01 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<0.65 #	1.29 #	<0.65 #	0.912 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<0.65 #	1.13 #	0.713 #	0.783 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025	03/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025	06/03/2025
			SDG Ref	250306-88	250306-88	250306-88	250306-88	250306-88	250306-88
			Lab Sample No.(s)	31172412	31172416	31172420	31172425	31172432	31172448
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	18	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<0.65 #	2.42 #	0.713 #	1.69 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<90	<90	<90	<90

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250306-88 **Report Number:** 760345 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	31172319	31172377	31172443	31172453	31172457	31172463	31172472	31172479	31172484	31172324
Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A	SL7-A	SL8-A	SL9-A	SL10-A
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	26-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025	23-Mar-2025	23-Mar-2025	23-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025

Lab Sample No(s)	31172328	31172332	31172341	31172347	31172353	31172357	31172362	31172366	31172372	31172388
Customer Sample Ref.	SL11-A	SL12-A	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B	SL4-B	SL5-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	26-Mar-2025	26-Mar-2025	27-Mar-2025	24-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025	27-Mar-2025	27-Mar-2025

Lab Sample No(s)	31172396	31172400	31172404	31172408	31172412	31172416	31172420	31172425	31172432	31172448
Customer Sample Ref.	SL6-B	SL7-B	SL8-B	SL9-B	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	23-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025	26-Mar-2025	27-Mar-2025	25-Mar-2025	27-Mar-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	28 March 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250307-101
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	760556
Order Number:	Z4708

We received 44 samples on Friday March 07, 2025 and 44 of these samples were scheduled for analysis which was completed on Friday March 28, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31180886	C1 A		0.00 - 0.00	04/03/2025
31181052	C2-A (A)		0.00 - 0.00	04/03/2025
31181063	C2-A (B)		0.00 - 0.00	04/03/2025
31180878	C1 B		0.00 - 0.00	04/03/2025
31181043	C2-B (A)		0.00 - 0.00	04/03/2025
31181047	C2-B (B)		0.00 - 0.00	04/03/2025
31181034	GWMP5 A		0.00 - 0.00	05/03/2025
31181039	GWMP5 B		0.00 - 0.00	05/03/2025
31180963	K Stream A		0.00 - 0.00	04/03/2025
31180958	K Stream B		0.00 - 0.00	04/03/2025
31181069	M1 A		0.00 - 0.00	04/03/2025
31180945	M5 A		0.00 - 0.00	04/03/2025
31181074	M1 B		0.00 - 0.00	04/03/2025
31181004	M5 B		0.00 - 0.00	04/03/2025
31181088	P2 A		0.00 - 0.00	04/03/2025
31181029	P3 A		0.00 - 0.00	04/03/2025
31180896	P4 A		0.00 - 0.00	05/03/2025
31181019	P7 A		0.00 - 0.00	04/03/2025
31181008	P8 A		0.00 - 0.00	04/03/2025
31181092	P2 B		0.00 - 0.00	04/03/2025
31181025	P3 B		0.00 - 0.00	04/03/2025
31180890	P4 B		0.00 - 0.00	05/03/2025
31181013	P7 B		0.00 - 0.00	04/03/2025
31180997	P8 B		0.00 - 0.00	04/03/2025
31180933	R1 A		0.00 - 0.00	04/03/2025
31180923	R2 A		0.00 - 0.00	04/03/2025
31180927	R1 B		0.00 - 0.00	04/03/2025
31180916	R2 B		0.00 - 0.00	04/03/2025
31181079	S1 A		0.00 - 0.00	04/03/2025
31180974	S3 A		0.00 - 0.00	04/03/2025
31181084	S1 B		0.00 - 0.00	04/03/2025
31180968	S3 B		0.00 - 0.00	04/03/2025
31180980	SWML3 A		0.00 - 0.00	04/03/2025
31180991	SWML4 A		0.00 - 0.00	04/03/2025
31180909	SWML5(A) A		0.00 - 0.00	04/03/2025
31181101	SWML7(A) A		0.00 - 0.00	05/03/2025
31180903	SWML5(A) B		0.00 - 0.00	04/03/2025
31181097	SWML7(A) B		0.00 - 0.00	05/03/2025
31181105	SWML3 B		0.00 - 0.00	04/03/2025
31180985	SWML4 B		0.00 - 0.00	04/03/2025
31181057	SWML7(B) A		0.00 - 0.00	05/03/2025
31180939	SWML7(B) B		0.00 - 0.00	04/03/2025
31180953	WAD Stream A		0.00 - 0.00	04/03/2025
31180949	WAD Stream B		0.00 - 0.00	04/03/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)	31180886	31181052	31181063	31180878	31181043	31181047	31181034	31181039	31180963	31180958	31181069	31180945	31181074	31181004	31181088	31181029	31180896	31181019	31181008
Customer Sample Reference	C1 A	C2-A (A)	C2-A (B)	C1 B	C2-B (A)	C2-B (B)	GWMP5 A	GWMP5 B	K Stream A	K Stream B	M1 A	M5 A	M1 B	M5 B	P2 A	P3 A	P4 A	P7 A	P8 A
AGS Reference																			
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Container	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.
Sample Type	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
PFAS Liquids (Full Suite) — All — NDPs: 0 Tests: 44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

31180985	SWML4 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181105	SWML3 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181097	SWML7(A) B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180903	SWML5(A) B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181101	SWML7(A) A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180909	SWML5(A) A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180991	SWML4 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180980	SWML3 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180968	S3 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181084	S1 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180974	S3 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181079	S1 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180916	R2 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180927	R1 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180923	R2 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180933	R1 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180997	P8 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181013	P7 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31180890	P4 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181025	P3 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x
31181092	P2 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		x

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			31181057	SWML7(B) A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31180939	SWML7(B) B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31180953	WAD Stream A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			31180949	WAD Stream B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 44	X	X	X	X		

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	C1 A	C2-A (A)	C2-A (B)	C1 B	C2-B (A)	C2-B (B)
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31180886	31181052	31181063	31180878	31181043	31181047
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	4.7 #	5.25 #	<10 #	11.1 #	11.8 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		1.96 #	10.8 #	12.1 #	<5 #	36.3 #	37 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<15 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		1.13 #	5.05 #	5.18 #	<5 #	12.9 #	12.3 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	2.77 #	2.8 #	<5 #	4.64 #	5.02 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<25 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		4.98 #	<1 #	<1 #	<5 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<0.65 #	<3.25 #	1.1 #	0.976 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.03 #	1.71 #	1.86 #	<5 #	1.07 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<25 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<10 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<25 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	0.68 #	<3.25 #	0.837 #	0.749 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	1.52 #	<3.25 #	0.921 #	0.918 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<10 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	C1 A	C2-A (A)	C2-A (B)	C1 B	C2-B (A)	C2-B (B)
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31180886	31181052	31181063	31180878	31181043	31181047
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<15 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<50 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<50 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	<50	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	2.2 #	<3.25 #	1.76 #	1.67 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<90	<450	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GWMP5 A	GWMP5 B	K Stream A	K Stream B	M1 A	M5 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	05/03/2025	05/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181034	31181039	31180963	31180958	31181069	31180945
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	2.26 #	<10 #	<10 #	2.8 #	4.64 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		1.95 #	2.27 #	14.8 #	13.6 #	7.93 #	15.4 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<15 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	<1 #	5.71 #	6.75 #	3.87 #	7.01 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #	<5 #	5.15 #	1.78 #	3.64 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<25 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		0.676 #	0.773 #	<3.25 #	<3.25 #	0.974 #	2.06 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	5.52 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	7.67 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<25 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 ♦ #	<2 ♦ #	<10 @ #	<10 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<25 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<3.25 #	3.28 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	3.9 #	3.87 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 ♦ #	<2 ♦ #	<10 @ #	<10 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	GWMP5 A	GWMP5 B	K Stream A	K Stream B	M1 A	M5 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	05/03/2025	05/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181034	31181039	31180963	31180958	31181069	31180945
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<15 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 ♦ #	<10 ♦ #	<50 @ #	<50 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 ♦ #	<10 ♦ #	<50 @ #	<50 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<50	<50	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	3.9 #	7.15 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<450	<450	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	M1 B	M5 B	P2 A	P3 A	P4 A	P7 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	05/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181074	31181004	31181088	31181029	31180896	31181019
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		4.24 #	4.59 #	30.1 #	15.2 #	10.1 #	18.7 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		10.7 #	15.8 #	105 #	41.4 #	34.2 #	30.5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		4.62 #	7.27 #	47.7 #	16.9 #	15.2 #	11.9 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		2.45 #	3.46 #	15.5 #	7.57 #	6.04 #	5.37 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		0.823 #	1.92 #	4.81 #	1.69 #	2.6 #	1.59 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.32 #	<1 #	2.32 #	2.83 #	2.6 #	1.28 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	8 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 ♦ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	0.889 #	<0.65 #	1.41 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		1.06 #	<0.65 #	1.91 #	1.27 #	1.37 #	0.905 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 ♦ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	M1 B	M5 B	P2 A	P3 A	P4 A	P7 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	05/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181074	31181004	31181088	31181029	31180896	31181019
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 ♦ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 ♦ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	<10	21.7	<10
Total PFOS	<0.65 ng/l	TM434		1.06 #	<0.65 #	2.8 #	1.27 #	2.78 #	0.905 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	208	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P8 A	P2 B	P3 B	P4 B	P7 B	P8 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	05/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181008	31181092	31181025	31180890	31181013	31180997
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		3.55 #	25 #	15.3 #	11.2 #	19 #	3.39 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		5.15 #	79.5 #	39.9 #	35.3 #	29.5 #	5.07 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		2.74 #	37.2 #	16.3 #	15 #	11.3 #	2.85 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		1.67 #	11.4 #	7.62 #	5.58 #	5.21 #	1.77 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	4.17 #	1.7 #	2.63 #	1.41 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.32 #	1.97 #	2.88 #	2.89 #	1.25 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		1.36 #	<1 #	<1 #	<1 #	<1 #	1.92 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 ♦ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	1.4 #	0.67 #	1.68 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	2.03 #	1.8 #	1.61 #	0.973 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 ♦ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P8 A	P2 B	P3 B	P4 B	P7 B	P8 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	05/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181008	31181092	31181025	31180890	31181013	31180997
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 ♦ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 ♦ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	17	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	3.43 #	2.47 #	3.29 #	0.973 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	163	<90	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	R1 A	R2 A	R1 B	R2 B	S1 A	S3 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31180933	31180923	31180927	31180916	31181079	31180974
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		8.47 #	5.19 #	9.38 #	4.54 #	<2 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		32.8 #	19 #	34.1 #	16.1 #	<1 #	2.76 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		14.8 #	8.86 #	14.5 #	8 #	<1 #	1.29 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		5.43 #	3.9 #	5.33 #	4.13 #	<1 #	1.19 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		7.03 #	<1 #	7.02 #	<1 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		2.66 #	2.34 #	2.54 #	2.32 #	<0.65 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		3.24 #	2.75 #	3.39 #	2.76 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.82 #	1.77 #	1.62 #	1.99 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		2.46 #	1.84 #	1.79 #	2.68 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	R1 A	R2 A	R1 B	R2 B	S1 A	S3 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31180933	31180923	31180927	31180916	31181079	31180974
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		39.9	24	34.6	25	<10	<10
Total PFOS	<0.65 ng/l	TM434		4.27 #	3.61 #	3.41 #	4.67 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<90	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
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- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	S1 B	S3 B	SWML3 A	SWML4 A	SWML5(A) A	SWML7(A) A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181084	31180968	31180980	31180991	31180909	31181101
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	2.16 #	<10 #	9.86 #	16.6 #	2.89 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	2.89 #	13.4 #	34.8 #	65.7 #	3.56 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	1.24 #	5.83 #	14.9 #	28.7 #	1.84 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #	5.94 #	5.65 #	10.8 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	1.14 #	1.32 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<5 #	1.44 #	28.1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<3.25 #	3.42 #	10.9 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	3.38 #	5.03 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	1.62 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	5.06 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	4.16 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<10 @ #	<2 @ #	<2 @ #	<2 ♦ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<3.25 #	1.86 #	7.49 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<3.25 #	2.73 #	4.17 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<10 @ #	<2 @ #	<2 @ #	<2 ♦ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	S1 B	S3 B	SWML3 A	SWML4 A	SWML5(A) A	SWML7(A) A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025	05/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31181084	31180968	31180980	31180991	31180909	31181101
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<50 @ #	<10 @ #	<10 @ #	<10 ♦ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<50 @ #	<10 @ #	<10 @ #	<10 ♦ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<50	26.7	144	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	<3.25 #	4.58 #	11.7 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<450	<90	190	<90

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML5(A) B	SWML7(A) B	SWML3 B	SWML4 B	SWML7(B) A	SWML7(B) B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	05/03/2025	04/03/2025	04/03/2025	05/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31180903	31181097	31181105	31180985	31181057	31180939
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		14 #	<2 #	3.9 #	8.22 #	<2 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		58.8 #	3.84 #	8.49 #	32 #	3.34 #	3.16 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		1.31 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		27.4 #	1.9 #	4.54 #	14.4 #	2.32 #	2.08 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		10.9 #	<1 #	1.77 #	4.99 #	<1 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		28.2 #	<1 #	<1 #	2.58 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		7.89 #	<0.65 #	1.24 #	2.66 #	0.999 #	0.987 #
PFHxS (355-46-4)	<1 ng/l	TM434		4.8 #	<1 #	<1 #	3.1 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		2.02 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	1.26 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		4.08 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 ♦ #	<2 @ #	<2 @ #	<2 ♦ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		8.42 #	<0.65 #	1.17 #	1.81 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		3.45 #	<0.65 #	0.977 #	2.16 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 ♦ #	<2 @ #	<2 @ #	<2 ♦ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML5(A) B	SWML7(A) B	SWML3 B	SWML4 B	SWML7(B) A	SWML7(B) B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/03/2025	05/03/2025	04/03/2025	04/03/2025	05/03/2025	04/03/2025
			Sample Time	.	.	.	.	.	.
			Date Received	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025	07/03/2025
			SDG Ref	250307-101	250307-101	250307-101	250307-101	250307-101	250307-101
			Lab Sample No.(s)	31180903	31181097	31181105	31180985	31181057	31180939
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 ♦ #	<10 @ #	<10 @ #	<10 ♦ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 ♦ #	<10 @ #	<10 @ #	<10 ♦ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		147	<10	17.7	29.4	<10	<10
Total PFOS	<0.65 ng/l	TM434		11.9 #	<0.65 #	2.14 #	3.98 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		171	<90	<90	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WAD Stream A	WAD Stream B				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Surface Water (SW)	Surface Water (SW)				
			Date Sampled	04/03/2025	04/03/2025				
			Sample Time	.	.				
			Date Received	07/03/2025	07/03/2025				
			SDG Ref	250307-101	250307-101				
			Lab Sample No.(s)	31180953	31180949				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		6.76 #	6.44 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #				
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #				
PFPA (2706-90-3)	<1 ng/l	TM434		14.1 #	14.3 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #				
PFBS (375-73-5)	<1 ng/l	TM434		1.61 #	1.44 #				
PFHxA (307-24-4)	<1 ng/l	TM434		5.94 #	5.42 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpA (375-85-9)	<1 ng/l	TM434		2.93 #	2.84 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		1.6 #	1.42 #				
PFHxS (355-46-4)	<1 ng/l	TM434		2.23 #	2.19 #				
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #				
PFecHS (133201-07-7)	<1 ng/l	TM434		2.07 #	2.24 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #				
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.29 #	0.948 #				
Branched PFOS	<0.65 ng/l	TM434		1.62 #	1.66 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #				

CERTIFICATE OF ANALYSIS

SDG: 250307-101 **Report Number:** 760556 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WAD Stream A	WAD Stream B				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Surface Water (SW)	Surface Water (SW)				
			Date Sampled	04/03/2025	04/03/2025				
			Sample Time	.	.				
			Date Received	07/03/2025	07/03/2025				
			SDG Ref	250307-101	250307-101				
			Lab Sample No.(s)	31180953	31180949				
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #				
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #				
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #				
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #				
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #				
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #				
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #				
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10				
Total PFOS	<0.65 ng/l	TM434		2.91 #	2.6 #				
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

Test Completion Dates

Lab Sample No(s)	31180886	31180878	31181052	31181063	31181043	31181047	31181034	31181039	31180963	31180958
Customer Sample Ref.	C1 A	C1 B	C2-A (A)	C2-A (B)	C2-B (A)	C2-B (B)	GWMP5 A	GWMP5 B	K Stream A	K Stream B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	23-Mar-2025	27-Mar-2025	26-Mar-2025	27-Mar-2025	27-Mar-2025	26-Mar-2025	28-Mar-2025	28-Mar-2025	25-Mar-2025	25-Mar-2025

Lab Sample No(s)	31181069	31180945	31181074	31181004	31181088	31181029	31180896	31181019	31181008	31181092
Customer Sample Ref.	M1 A	M5 A	M1 B	M5 B	P2 A	P3 A	P4 A	P7 A	P8 A	P2 B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	27-Mar-2025	26-Mar-2025	27-Mar-2025	26-Mar-2025	25-Mar-2025	25-Mar-2025	28-Mar-2025	25-Mar-2025	23-Mar-2025	24-Mar-2025

Lab Sample No(s)	31181025	31180890	31181013	31180997	31180933	31180923	31180927	31180916	31181079	31180974
Customer Sample Ref.	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A	R1 B	R2 B	S1 A	S3 A
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	25-Mar-2025	28-Mar-2025	25-Mar-2025	24-Mar-2025	28-Mar-2025	28-Mar-2025	28-Mar-2025	28-Mar-2025	27-Mar-2025	26-Mar-2025

Lab Sample No(s)	31181084	31180968	31180980	31180991	31181105	31180985	31180909	31181101	31180903	31181097
Customer Sample Ref.	S1 B	S3 B	SWML3 A	SWML4 A	SWML3 B	SWML4 B	SWML5(A) A	SWML7(A) A	SWML5(A) B	SWML7(A) B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	27-Mar-2025	26-Mar-2025	26-Mar-2025	28-Mar-2025	27-Mar-2025	28-Mar-2025	26-Mar-2025	28-Mar-2025	27-Mar-2025	28-Mar-2025

Lab Sample No(s)	31181057	31180939	31180953	31180949
Customer Sample Ref.	SWML7(B) A	SWML7(B) B	WAD Stream A	WAD Stream B
AGS Ref.				
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	28-Mar-2025	28-Mar-2025	26-Mar-2025	26-Mar-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests.
We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	04 June 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250523-94
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	766761
Order Number:	Z4794

We received 32 samples on Friday May 23, 2025 and 32 of these samples were scheduled for analysis which was completed on Wednesday June 04, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31562622	SL1-A		0.00 - 0.00	19/05/2025
31562669	SL2-A		0.00 - 0.00	19/05/2025
31562721	SL3-A		0.00 - 0.00	19/05/2025
31562743	SL4-A		0.00 - 0.00	19/05/2025
31562749	SL5-A		0.00 - 0.00	19/05/2025
31562754	SL6-A		0.00 - 0.00	19/05/2025
31562758	SL7-A		0.00 - 0.00	19/05/2025
31562762	SL8-A		0.00 - 0.00	19/05/2025
31562766	SL9-A		0.00 - 0.00	19/05/2025
31562626	SL10-A		0.00 - 0.00	19/05/2025
31562630	SL11-A		0.00 - 0.00	19/05/2025
31562634	SL12-A		0.00 - 0.00	19/05/2025
31562640	SL13-A		0.00 - 0.00	19/05/2025
31562644	SL14-A		0.00 - 0.00	19/05/2025
31562648	SL15-A		0.00 - 0.00	19/05/2025
31562652	SL1-B		0.00 - 0.00	19/05/2025
31562656	SL2-B		0.00 - 0.00	19/05/2025
31562660	SL3-B		0.00 - 0.00	19/05/2025
31562664	SL4-B		0.00 - 0.00	19/05/2025
31562675	SL5-B		0.00 - 0.00	19/05/2025
31562679	SL6-B		0.00 - 0.00	19/05/2025
31562685	SL7-B		0.00 - 0.00	19/05/2025
31562689	SL8-B		0.00 - 0.00	19/05/2025
31562693	SL9-B		0.00 - 0.00	19/05/2025
31562698	SL10-B		0.00 - 0.00	19/05/2025
31562702	SL11-B		0.00 - 0.00	19/05/2025
31562706	SL12-B		0.00 - 0.00	19/05/2025
31562710	SL13-B		0.00 - 0.00	19/05/2025
31562716	SL14-B		0.00 - 0.00	19/05/2025
31562729	SL15-B		0.00 - 0.00	19/05/2025
31562734	SWFB		0.00 - 0.00	19/05/2025
31562738	SWTB		0.00 - 0.00	19/05/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			31562622	31562669	31562721	31562743	31562749	31562754	31562758	31562762	31562766	31562626	31562630	31562634	31562640	31562644	31562648	31562652	31562656	31562660	31562664
Customer Sample Reference			SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A	SL7-A	SL8-A	SL9-A	SL10-A	SL11-A	SL12-A	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B	SL4-B
AGS Reference																					
Depth (m)			0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Container			Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.
Sample Type			SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

31562738	SWTB		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X
31562734	SWFB		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562729	SL15-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562716	SL14-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562710	SL13-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562706	SL12-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562702	SL11-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562698	SL10-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562693	SL9-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562689	SL8-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562685	SL7-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562679	SL6-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
31562675	SL5-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562622	31562669	31562721	31562743	31562749	31562754
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		3.14 #	10.7 #	11.4 #	12.9 #	3.44 4 #	6.04 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		4 #	19.4 #	34.8 #	29.1 #	3.17 4 #	11.2 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 4 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	1.29 #	<1 4 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		1.59 #	9.12 #	18.6 #	11.7 #	1.6 4 #	7.4 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	4.82 #	7.91 #	5.99 #	1.53 4 #	2.79 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 4 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	1.51 #	67.6 #	<1 #	<1 4 #	<2 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		0.949 #	2.43 #	5.31 #	1.86 #	<0.65 4 #	2.07 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	2.25 #	10.4 #	3.31 #	<1 4 #	1.6 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	1.68 #	64 #	<1 #	<1 4 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	3 #	<2 #	<2 4 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 4 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 4 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	2.1 #	3.89 #	1.06 #	0.853 4 #	3.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	1.93 #	7.48 #	2.76 #	0.942 4 #	1.66 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562622	31562669	31562721	31562743	31562749	31562754
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 4 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 4 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 #	<10 @ #	<10 @ #	<10 4 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 #	<10 @ #	<10 @ #	<10 4 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 4 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	15.2	29.3	<10	<10 4	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	4.03 #	11.4 #	3.82 #	1.8 4 #	5.31 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	234	<90	<90 4	<90

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL7-A	SL8-A	SL9-A	SL10-A	SL11-A	SL12-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562758	31562762	31562766	31562626	31562630	31562634
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		8.78 #	2.56 #	<2 #	2.85 #	10.5 #	2.32 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		30.9 #	3.48 #	2.66 #	3.06 #	39.5 #	2.69 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		13.3 #	1.62 #	1.3 #	1.37 #	15.6 #	1.39 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		5.48 #	<1 #	<1 #	<1 #	5.53 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		21.7 #	<1 #	<1 #	<1 #	<2 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		4.25 #	0.929 #	0.892 #	0.855 #	2.59 #	0.979 #
PFHxS (355-46-4)	<1 ng/l	TM434		4.46 #	<1 #	<1 #	<1 #	3.22 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		20.4 #	<1 #	<1 #	<1 #	27.3 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.72 #	<0.65 #	<0.65 #	<0.65 #	1.93 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		3.11 #	<0.65 #	<0.65 #	<0.65 #	2.08 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL7-A	SL8-A	SL9-A	SL10-A	SL11-A	SL12-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562758	31562762	31562766	31562626	31562630	31562634
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		23.2	<10	<10	<10	<10	<10
Total PFOS	<0.65 ng/l	TM434		4.84 #	<0.65 #	<0.65 #	<0.65 #	4.02 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		114	<90	<90	<90	108	<90

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562640	31562644	31562648	31562652	31562656	31562660
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		9.51 #	3.04 #	3.91 #	3.54 #	12.7 #	12.6 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		32.1 #	4.79 #	12 #	4.38 #	20.5 #	43.9 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	1.18 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		16.1 #	2.29 #	5.23 #	2.1 #	9.24 #	20.1 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		7.57 #	1.3 #	2.41 #	1.66 #	4.53 #	7.82 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		8.75 #	<1 #	<4 #	<1 #	<4 #	73.5 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		4.78 #	<0.65 #	1.84 #	1.02 #	2.82 #	5.2 #
PFHxS (355-46-4)	<1 ng/l	TM434		2.55 #	<1 #	<1 #	<1 #	2.81 #	10.6 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		12 #	1.03 #	2.63 #	<1 #	<1 #	51 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	3.01 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.59 #	<0.65 #	1.03 #	1.1 #	2.61 #	5.26 #
Branched PFOS	<0.65 ng/l	TM434		2.59 #	<0.65 #	1.21 #	0.817 #	2.55 #	7.86 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	Customer Sample Ref.	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B
# ISO17025 accredited.							
M mCERTS accredited.							
aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample.							
tot.unfilt Total / unfiltered sample.							
* Subcontracted - refer to subcontractor report for accreditation status.							
** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
*** 6:2 FTAB (see appendix)							
1-4+§@ Sample deviation (see appendix)							
	Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
	Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
	Sample Time	.	.	.	.	.	.
	Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
	SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
	Lab Sample No.(s)	31562640	31562644	31562648	31562652	31562656	31562660
	AGS Reference						

Component	LOD/Units	Method						
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	34.4	<10	14.7	<10	<10	36.5
Total PFOS	<0.65 ng/l	TM434	4.18 #	<0.65 #	2.24 #	1.92 #	5.15 #	13.1 #
Total PFAS DWI 47	<90 ng/l	TM434	97.5	<90	<90	<90	<90	241

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL4-B	SL5-B	SL6-B	SL7-B	SL8-B	SL9-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562664	31562675	31562679	31562685	31562689	31562693
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		11 #	2.39 #	5.6 #	8.86 #	2.91 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		24.6 #	2.52 #	11 #	28.9 #	2.62 #	2.54 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		1.22 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		10 #	1.35 #	7.39 #	13.1 #	2.21 #	1.34 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		4.99 #	<1 #	2.76 #	5.5 #	<1 #	1.06 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<2 #	23.7 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	0.96 #	2.24 #	4.59 #	<0.65 #	0.968 #
PFHxS (355-46-4)	<1 ng/l	TM434		2.88 #	<1 #	1.43 #	4.54 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	20.2 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.13 #	<0.65 #	4.84 #	2.28 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		2.55 #	<0.65 #	2.82 #	3.75 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL4-B	SL5-B	SL6-B	SL7-B	SL8-B	SL9-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562664	31562675	31562679	31562685	31562689	31562693
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	21.6	<10	<10
Total PFOS	<0.65 ng/l	TM434		3.68 #	<0.65 #	7.66 #	6.03 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<90	115	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
			Lab Sample No.(s)	31562698	31562702	31562706	31562710	31562716	31562729
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		2.59 #	8.58 #	<2 #	9.5 #	3.44 #	4.08 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		2.99 #	33.6 #	2.04 #	31 #	5.49 #	11 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		1.21 #	17.6 #	1.66 #	16.6 #	2.02 #	4.98 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		1.17 #	5.8 #	<1 #	7.48 #	1.07 #	2.05 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<3 #	<1 #	7.64 #	<1 #	1.34 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		0.927 #	2.66 #	<0.65 #	4.95 #	1.18 #	1.62 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	3.39 #	<1 #	2.61 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	31.2 #	<1 #	12.2 #	1.09 #	1.7 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 #	<2 @ #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	1.53 #	<0.65 #	1.72 #	<0.65 #	0.851 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	2.96 #	<0.65 #	2.39 #	<0.65 #	1.19 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 #	<2 @ #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend		Customer Sample Ref.	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
#	ISO17025 accredited.							
M	mCERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
***	6:2 FTAB (see appendix)							
1-4+§@	Sample deviation (see appendix)							
		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
		Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
		Date Sampled	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025	19/05/2025
		Sample Time	.	.	.	.	.	.
		Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
		SDG Ref	250523-94	250523-94	250523-94	250523-94	250523-94	250523-94
		Lab Sample No.(s)	31562698	31562702	31562706	31562710	31562716	31562729
		AGS Reference						

Component	LOD/Units	Method						
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 @ #	<10 @ #	<10 @ #	<10 #	<10 @ #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 @ #	<10 @ #	<10 @ #	<10 #	<10 @ #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10	<10	<10	30.6	<10	19.3
Total PFOS	<0.65 ng/l	TM434	<0.65 #	4.49 #	<0.65 #	4.11 #	<0.65 #	2.04 #
Total PFAS DWI 47	<90 ng/l	TM434	<90	107	<90	96	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWFB	SWTB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Surface Water (SW)	Surface Water (SW)				
			Date Sampled	19/05/2025	19/05/2025				
			Sample Time	.	.				
			Date Received	23/05/2025	23/05/2025				
			SDG Ref	250523-94	250523-94				
			Lab Sample No.(s)	31562734	31562738				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	<2 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #				
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #				
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	<1 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #				
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #				
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	<1 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #				
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #				
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #				
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #				

CERTIFICATE OF ANALYSIS

SDG: 250523-94 **Report Number:** 766761 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWFB	SWTB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Surface Water (SW)	Surface Water (SW)				
			Date Sampled	19/05/2025	19/05/2025				
			Sample Time	.	.				
			Date Received	23/05/2025	23/05/2025				
			SDG Ref	250523-94	250523-94				
			Lab Sample No.(s)	31562734	31562738				
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #				
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #				
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #				
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #				
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #				
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #				
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #				
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10				
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250523-94 Report Number: 766761 Superseded Report:
Client Ref.: P21-195 Location: Dublin Airport

Test Completion Dates

Lab Sample No(s)	31562622	31562669	31562721	31562743	31562749	31562754	31562758	31562762	31562766	31562626
Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A	SL7-A	SL8-A	SL9-A	SL10-A
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	02-Jun-2025	29-May-2025	30-May-2025	04-Jun-2025	04-Jun-2025	30-May-2025	30-May-2025	28-May-2025	02-Jun-2025	02-Jun-2025

Lab Sample No(s)	31562630	31562634	31562640	31562644	31562648	31562652	31562656	31562660	31562664	31562675
Customer Sample Ref.	SL11-A	SL12-A	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B	SL4-B	SL5-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	30-May-2025	02-Jun-2025	29-May-2025	30-May-2025	30-May-2025	04-Jun-2025	30-May-2025	30-May-2025	04-Jun-2025	02-Jun-2025

Lab Sample No(s)	31562679	31562685	31562689	31562693	31562698	31562702	31562706	31562710	31562716	31562729
Customer Sample Ref.	SL6-B	SL7-B	SL8-B	SL9-B	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	30-May-2025	30-May-2025	30-May-2025	02-Jun-2025	02-Jun-2025	30-May-2025	30-May-2025	29-May-2025	02-Jun-2025	29-May-2025

Lab Sample No(s)	31562734	31562738
Customer Sample Ref.	SWFB	SWTB
AGS Ref.		
Depth	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water
PFAS Liquids (Full Suite)	04-Jun-2025	02-Jun-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests.
We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	04 June 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250523-91
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	766758
Order Number:	Z4794

We received 36 samples on Friday May 23, 2025 and 36 of these samples were scheduled for analysis which was completed on Wednesday June 04, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
31562256	C1 A		0.00 - 0.00	22/05/2025
31562251	C1 B		0.00 - 0.00	22/05/2025
31562330	K Stream A		0.00 - 0.00	22/05/2025
31562325	K Stream B		0.00 - 0.00	22/05/2025
31562310	M5 A		0.00 - 0.00	22/05/2025
31562373	M5 B		0.00 - 0.00	22/05/2025
31562411	P2 A		0.00 - 0.00	20/05/2025
31562394	P3 A		0.00 - 0.00	20/05/2025
31562267	P4 A		0.00 - 0.00	22/05/2025
31562386	P7 A		0.00 - 0.00	22/05/2025
31562377	P8 A		0.00 - 0.00	20/05/2025
31562423	P2 B		0.00 - 0.00	20/05/2025
31562390	P3 B		0.00 - 0.00	20/05/2025
31562262	P4 B		0.00 - 0.00	22/05/2025
31562381	P7 B		0.00 - 0.00	22/05/2025
31562368	P8 B		0.00 - 0.00	20/05/2025
31562298	R1 A		0.00 - 0.00	22/05/2025
31562289	R2 A		0.00 - 0.00	22/05/2025
31562294	R1 B		0.00 - 0.00	22/05/2025
31562285	R2 B		0.00 - 0.00	22/05/2025
31562398	S1 A		0.00 - 0.00	22/05/2025
31562343	S3 A		0.00 - 0.00	22/05/2025
31562402	S1 B		0.00 - 0.00	22/05/2025
31562335	S3 B		0.00 - 0.00	22/05/2025
31562349	SWML3 A		0.00 - 0.00	22/05/2025
31562363	SWML4 A		0.00 - 0.00	22/05/2025
31562281	SWML5(A) A		0.00 - 0.00	22/05/2025
31562437	SWML7(A) A		0.00 - 0.00	22/05/2025
31562274	SWML5(A) B		0.00 - 0.00	22/05/2025
31562431	SWML7(A) B		0.00 - 0.00	22/05/2025
31562445	SWML3 B		0.00 - 0.00	22/05/2025
31562356	SWML4 B		0.00 - 0.00	22/05/2025
31562406	SWML7(B) A		0.00 - 0.00	22/05/2025
31562305	SWML7(B) B		0.00 - 0.00	22/05/2025
31562320	WAD Stream A		0.00 - 0.00	22/05/2025
31562314	WAD Stream B		0.00 - 0.00	22/05/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)	31562256	31562251	31562330	31562325	31562310	31562373	31562411	31562394	31562267	31562386	31562377	31562423	31562390	31562262	31562381	31562368	31562298	31562289	31562294
Customer Sample Reference	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B	P2 A	P3 A	P4 A	P7 A	P8 A	P2 B	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A	R1 B
AGS Reference																			
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Container	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.
Sample Type	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
PFAS Liquids (Full Suite) — All — NDPs: 0 Tests: 36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

31562314	WAD Stream B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	
31562320	WAD Stream A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562305	SWML7(B) B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562406	SWML7(B) A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562356	SWML4 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562445	SWML3 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562431	SWML7(A) B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562274	SWML5(A) B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562437	SWML7(A) A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562281	SWML5(A) A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562363	SWML4 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562349	SWML3 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562335	S3 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562402	S1 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562343	S3 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562398	S1 A		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X
31562285	R2 B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562256	31562251	31562330	31562325	31562310	31562373
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	<2 #	12.9 #	13 #	12.4 #	15.6 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	<1 #	31.9 #	34.7 #	20.3 #	18.8 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	1.58 #	1.89 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	<1 #	13.4 #	15 #	11 #	13.3 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #	7.27 #	9.07 #	6.09 #	5.61 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	1.18 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	3.27 #	2.73 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	4.41 #	5.16 #	2.63 #	2.54 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #	7.1 #	8.34 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	1.19 #	1.25 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	45.1 #	51.3 #	71.4 #	93.7 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	6.03 #	7.89 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	6.98 #	8.02 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562256	31562251	31562330	31562325	31562310	31562373
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	23.3	25	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	13 #	15.9 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	142	158	124	150

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P2 A	P3 A	P4 A	P7 A	P8 A	P2 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	20/05/2025	20/05/2025	22/05/2025	22/05/2025	20/05/2025	20/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562411	31562394	31562267	31562386	31562377	31562423
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		27.2 #	12.3 #	8.07 #	15 #	5.91 #	30 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		88.4 #	27.9 #	25.7 #	19.2 #	15 #	100 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		1.59 #	<1 #	<1 #	<1 #	<1 #	1.58 #
PFHxA (307-24-4)	<1 ng/l	TM434		41.8 #	10.2 #	10.6 #	6.92 #	5.78 #	48 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		12.4 #	4.86 #	4.87 #	3.39 #	3.07 #	14.8 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		3.58 #	1.56 #	2.45 #	1.39 #	1.45 #	3.75 #
PFHxS (355-46-4)	<1 ng/l	TM434		2.37 #	2.82 #	2.37 #	1.25 #	1.21 #	2.59 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 #	<2 ♦ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.29 #	<0.65 #	1.85 #	<0.65 #	<0.65 #	1.91 #
Branched PFOS	<0.65 ng/l	TM434		2.25 #	<0.65 #	2.16 #	<0.65 #	<0.65 #	2.38 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 #	<2 ♦ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P2 A	P3 A	P4 A	P7 A	P8 A	P2 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	20/05/2025	20/05/2025	22/05/2025	22/05/2025	20/05/2025	20/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562411	31562394	31562267	31562386	31562377	31562423
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 #	<10 ♦ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 #	<10 ♦ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		10	<10	23.2	<10	<10	11.5
Total PFOS	<0.65 ng/l	TM434		3.54 #	<0.65 #	4.01 #	<0.65 #	<0.65 #	4.28 #
Total PFAS DWI 47	<90 ng/l	TM434		181	<90	<90	<90	<90	205

12:33:11 04/06/2025

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	20/05/2025	22/05/2025	22/05/2025	20/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562390	31562262	31562381	31562368	31562298	31562289
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		12.5 #	8.32 #	14.8 #	6.03 #	21.9 #	8.18 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		27.7 #	26.5 #	19.1 #	7.64 #	116 #	25.5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		11.5 #	11 #	7.07 #	5.7 #	47.6 #	10.3 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		5.09 #	5.21 #	4.1 #	3.19 #	19.6 #	5.2 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	87.9 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		1.52 #	2.65 #	1.39 #	1.37 #	12.9 #	2.11 #
PFHxS (355-46-4)	<1 ng/l	TM434		2.59 #	2.39 #	<1 #	<1 #	6.9 #	1.47 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	3.48 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 #	<2 ♦ #	<2 @ #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	1.48 #	0.924 #	<0.65 #	9.24 #	1.6 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	1.96 #	1.12 #	<0.65 #	8.11 #	2.4 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 #	<2 ♦ #	<2 @ #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	20/05/2025	22/05/2025	22/05/2025	20/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562390	31562262	31562381	31562368	31562298	31562289
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	1.2 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 #	<10 ♦ #	<10 @ #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 #	<10 ♦ #	<10 @ #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	20.4	<10	<10	226	22.6
Total PFOS	<0.65 ng/l	TM434		<0.65 #	3.44 #	2.05 #	<0.65 #	17.4 #	4 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<90	<90	335	<90

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	R1 B	R2 B	S1 A	S3 A	S1 B	S3 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562294	31562285	31562398	31562343	31562402	31562335
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		21.9 #	8.11 #	3.3 #	<2 #	3.31 #	<2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		112 #	27.6 #	1.35 #	2.14 #	1.39 #	2.49 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		44.3 #	10.1 #	<1 #	1.19 #	<1 #	<1 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		19.1 #	5.19 #	<1 #	<1 #	<1 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		79.1 #	<1 #	<1 #	<3 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		11.6 #	2.22 #	<0.65 #	<0.65 #	<0.65 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		6.32 #	2.17 #	<1 #	<1 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		1.61 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	4.34 #	<1 #	3.02 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		6.56 #	1.32 #	<0.65 #	<0.65 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		6.24 #	2.59 #	<0.65 #	<0.65 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	R1 B	R2 B	S1 A	S3 A	S1 B	S3 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562294	31562285	31562398	31562343	31562402	31562335
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		222	28	<10	<10	<10	<10
Total PFOS	<0.65 ng/l	TM434		12.8 #	3.92 #	<0.65 #	<0.65 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		309	<90	<90	<90	<90	<90

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML3 A	SWML4 A	SWML5(A) A	SWML7(A) A	SWML5(A) B	SWML7(A) B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562349	31562363	31562281	31562437	31562274	31562431
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		6.38 #	19.9 #	44.2 #	2.25 #	39.3 #	2.67 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		17.2 #	98.6 #	107 #	3.48 #	88 #	3.87 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		6.01 #	39.2 #	42.7 #	1.18 #	36.2 #	1.41 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		3.56 #	17.8 #	18.1 #	<1 #	16.5 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		1.75 #	62.2 #	40.8 #	<1 #	31.8 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		2.67 #	10.1 #	10.8 #	<0.65 #	9.42 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	5.02 #	7.24 #	<1 #	5.57 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	1.25 #	<1 #	<1 #	1.11 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	27.5 #	<1 #	24.8 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		2.05 #	4.47 #	6 #	<0.65 #	7.11 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		1.28 #	5.4 #	6.07 #	<0.65 #	6.53 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML3 A	SWML4 A	SWML5(A) A	SWML7(A) A	SWML5(A) B	SWML7(A) B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562349	31562363	31562281	31562437	31562274	31562431
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		37	167	120	<10	117	<10
Total PFOS	<0.65 ng/l	TM434		3.32 #	9.86 #	12.1 #	<0.65 #	13.6 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	264	311	<90	266	<90

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML3 B	SWML4 B	SWML7(B) A	SWML7(B) B	WAD Stream A	WAD Stream B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562445	31562356	31562406	31562305	31562320	31562314
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		6.21 #	19.4 #	3.53 #	4.6 #	7.8 #	7.58 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFPA (2706-90-3)	<1 ng/l	TM434		15.4 #	101 #	3.89 #	6.95 #	16.6 #	15 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	1.59 #	2.29 #
PFHxA (307-24-4)	<1 ng/l	TM434		6.2 #	41.7 #	2.92 #	3.25 #	6.25 #	6.09 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		3.09 #	17.4 #	1.87 #	1.74 #	2.98 #	3.07 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		1.78 #	70.2 #	<1 #	<1 #	<3 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		2.3 #	10.9 #	1.64 #	1.65 #	1.6 #	1.7 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	6.2 #	<1 #	<1 #	2.75 #	2.67 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFecHS (133201-07-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		2.05 #	5.52 #	<0.65 #	<0.65 #	0.873 #	1.2 #
Branched PFOS	<0.65 ng/l	TM434		1.53 #	7.05 #	<0.65 #	<0.65 #	2.03 #	2.32 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250523-91 **Report Number:** 766758 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML3 B	SWML4 B	SWML7(B) A	SWML7(B) B	WAD Stream A	WAD Stream B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025	22/05/2025
			Sample Time	.	.	.	.	.	.
			Date Received	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025	23/05/2025
			SDG Ref	250523-91	250523-91	250523-91	250523-91	250523-91	250523-91
			Lab Sample No.(s)	31562445	31562356	31562406	31562305	31562320	31562314
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDS (174675-49-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		28.9	175	<10	<10	<10	<10
Total PFOS	<0.65 ng/l	TM434		3.59 #	12.6 #	<0.65 #	<0.65 #	2.9 #	3.52 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	279	<90	<90	<90	<90

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250523-91 Report Number: 766758 Superseded Report:
Client Ref.: P21-195 Location: Dublin Airport

Test Completion Dates

Lab Sample No(s)	31562256	31562251	31562330	31562325	31562310	31562373	31562411	31562394	31562267	31562386
Customer Sample Ref.	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B	P2 A	P3 A	P4 A	P7 A
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	29-May-2025	28-May-2025	28-May-2025	28-May-2025	29-May-2025	29-May-2025	04-Jun-2025	29-May-2025	29-May-2025	04-Jun-2025

Lab Sample No(s)	31562377	31562423	31562390	31562262	31562381	31562368	31562298	31562289	31562294	31562285
Customer Sample Ref.	P8 A	P2 B	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A	R1 B	R2 B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	29-May-2025	04-Jun-2025	29-May-2025	29-May-2025	04-Jun-2025	29-May-2025	30-May-2025	29-May-2025	29-May-2025	29-May-2025

Lab Sample No(s)	31562398	31562343	31562402	31562335	31562349	31562363	31562281	31562437	31562274	31562431
Customer Sample Ref.	S1 A	S3 A	S1 B	S3 B	SWML3 A	SWML4 A	SWML5(A) A	SWML7(A) A	SWML5(A) B	SWML7(A) B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	29-May-2025	30-May-2025	30-May-2025	28-May-2025	29-May-2025	29-May-2025	30-May-2025	29-May-2025	29-May-2025	29-May-2025

Lab Sample No(s)	31562445	31562356	31562406	31562305	31562320	31562314
Customer Sample Ref.	SWML3 B	SWML4 B	SWML7(B) A	SWML7(B) B	WAD Stream A	WAD Stream B
AGS Ref.						
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	29-May-2025	30-May-2025	29-May-2025	29-May-2025	30-May-2025	29-May-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	22 September 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250905-136
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	777937
Order Number:	

We received 32 samples on Friday September 05, 2025 and 32 of these samples were scheduled for analysis which was completed on Monday September 22, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32097344	SL1-A		0.00 - 0.00	02/09/2025
32097401	SL2-A		0.00 - 0.00	02/09/2025
32097449	SL3-A		0.00 - 0.00	02/09/2025
32097466	SL4-A		0.00 - 0.00	02/09/2025
32097470	SL5-A		0.00 - 0.00	02/09/2025
32097474	SL6-A		0.00 - 0.00	02/09/2025
32097479	SL7-A		0.00 - 0.00	02/09/2025
32097483	SL8-A		0.00 - 0.00	02/09/2025
32097488	SL9-A		0.00 - 0.00	02/09/2025
32097351	SL10-A		0.00 - 0.00	02/09/2025
32097358	SL11-A		0.00 - 0.00	02/09/2025
32097366	SL12-A		0.00 - 0.00	02/09/2025
32097370	SL13-A		0.00 - 0.00	02/09/2025
32097374	SL14-A		0.00 - 0.00	02/09/2025
32097379	SL15-A		0.00 - 0.00	02/09/2025
32097383	SL1-B		0.00 - 0.00	02/09/2025
32097387	SL2-B		0.00 - 0.00	02/09/2025
32097391	SL3-B		0.00 - 0.00	02/09/2025
32097396	SL4-B		0.00 - 0.00	02/09/2025
32097406	SL5-B		0.00 - 0.00	02/09/2025
32097411	SL6-B		0.00 - 0.00	02/09/2025
32097416	SL7-B		0.00 - 0.00	02/09/2025
32097420	SL8-B		0.00 - 0.00	02/09/2025
32097424	SL9-B		0.00 - 0.00	02/09/2025
32097428	SL10-B		0.00 - 0.00	02/09/2025
32097432	SL11-B		0.00 - 0.00	02/09/2025
32097437	SL12-B		0.00 - 0.00	02/09/2025
32097441	SL13-B		0.00 - 0.00	02/09/2025
32097445	SL14-B		0.00 - 0.00	02/09/2025
32097454	SL15-B		0.00 - 0.00	02/09/2025
32097458	SWFB		0.00 - 0.00	02/09/2025
32097462	SWTB		0.00 - 0.00	02/09/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			32097344	SL1-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097401	SL2-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097449	SL3-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097466	SL4-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097470	SL5-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097474	SL6-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097479	SL7-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097483	SL8-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097488	SL9-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097351	SL10-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097358	SL11-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097366	SL12-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097370	SL13-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097374	SL14-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097379	SL15-A		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097383	SL1-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097387	SL2-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097391	SL3-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
			32097396	SL4-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

32097462	SWTB		0.00 - 0.00	Digitube fo PFAS analysis.	SW		X
32097458	SWFB		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097454	SL15-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097445	SL14-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097441	SL13-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097437	SL12-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097432	SL11-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097428	SL10-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097424	SL9-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097420	SL8-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097416	SL7-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097411	SL6-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X
32097406	SL5-B		0.00 - 0.00	Digitube fo PFAS analysis.	SW	X	X

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097344	32097401	32097449	32097466	32097470	32097474
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		2.57 #	8.34 4 #	9.74 #	11 #	2.64 #	4.45 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 4 #	<5 #	<25 #	<5 #	<10 #
PFPA (2706-90-3)	<1 ng/l	TM434		1.95 #	12.8 4 #	35 #	26.3 #	2.49 #	7.84 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 4 #	<3 #	<15 #	<3 #	<6 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
PFHxA (307-24-4)	<1 ng/l	TM434		1.09 #	5.3 4 #	14 #	8.21 #	1.17 #	4.81 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	2.99 4 #	7.54 #	<5 #	<1 #	2.25 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 4 #	<5 #	<25 #	<5 #	<10 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 4 #	44.3 #	<5 #	<1 #	<2 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	1.96 4 #	4.7 #	<3.25 #	<0.65 #	2.92 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	1.66 4 #	<1 #	<5 #	<1 #	<2 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 4 #	3.42 #	<10 #	<2 #	<4 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 4 #	<5 #	<25 #	<5 #	<10 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 4 @ #	<2 @ #	<10 @ #	<2 @ #	<4 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 4 #	<5 #	<25 #	<5 #	<10 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	4.52 4 #	2.16 #	<3.25 #	<0.65 #	<1.3 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	4.63 4 #	1.58 #	<3.25 #	<0.65 #	<1.3 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 4 @ #	<2 @ #	<10 @ #	<2 @ #	<4 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097344	32097401	32097449	32097466	32097470	32097474
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 4 #	<3 #	<15 #	<3 #	<6 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 4 @ #	<2 @ #	<10 @ #	<2 @ #	<4 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 4 #	<2 #	<10 #	<2 #	<4 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 4 @ #	<10 @ #	<50 @ #	<10 @ #	<20 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 4 @ #	<10 @ #	<50 @ #	<10 @ #	<20 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 4 #	<1 #	<5 #	<1 #	<2 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10 4	19.9	<50	<10	<20
Total PFOS	<0.65 ng/l	TM434		<0.65 #	9.15 4 #	3.74 #	<3.25 #	<0.65 #	<1.3 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90 4	186	<450	<90	<180
PFecHS (646-83-3)	<1 ng/l	TM434		<1 @ #	18.2 4 @ #	63.4 @ #	<5 @ #	<1 #	<2 @ #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 4 @ #	<1 @ #	<5 @ #	<1 @ #	<2 @ #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL7-A	SL8-A	SL9-A	SL10-A	SL11-A	SL12-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097479	32097483	32097488	32097351	32097358	32097366
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		10.1 #	2.88 4 #	<4 #	<2 #	7.88 #	4.11 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 4 #	<10 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		36.8 #	2.75 4 #	4.18 #	<1 #	17.7 #	5.44 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 4 #	<6 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		17.9 #	1.41 4 #	2.68 #	<1 #	9.7 #	2.14 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		7.62 #	<1 4 #	<2 #	<1 #	7.25 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 4 #	<10 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		60.6 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		5.16 #	<0.65 4 #	2.32 #	<0.65 #	2.44 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	1.69 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		2.14 #	<2 4 #	<4 #	<2 #	2.15 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 4 #	<10 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 4 @ #	<4 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 4 #	<10 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.61 #	<0.65 4 #	<1.3 #	<0.65 #	3.96 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		1.44 #	<0.65 4 #	<1.3 #	<0.65 #	2.66 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 4 @ #	<4 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL7-A	SL8-A	SL9-A	SL10-A	SL11-A	SL12-A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097479	32097483	32097488	32097351	32097358	32097366
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 4 #	<6 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 4 @ #	<4 @ #	<2 @ #	<2 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 4 #	<4 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 4 @ #	<20 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 4 @ #	<20 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 4 #	<2 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		26.3	<10 4	<20	<10	<10	<10
Total PFOS	<0.65 ng/l	TM434		3.05 #	<0.65 4 #	<1.3 #	<0.65 #	6.62 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		218	<90 4	<180	<90	90.9	<90
PFecHS (646-83-3)	<1 ng/l	TM434		74.7 @ #	2.05 4 @ #	<2 @ #	<1 @ #	35.5 @ #	<1 @ #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 4 @ #	<2 @ #	<1 @ #	<1 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097370	32097374	32097379	32097383	32097387	32097391
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		12.7 #	4.25 #	3.59 #	2.31 #	10.7 #	9.98 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		53.2 #	6.44 #	8.52 #	2.18 #	12.6 #	36.5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		17.5 #	2.9 #	4.85 #	<1 #	5.48 #	13.9 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		10.4 #	1.26 #	2.35 #	<1 #	3.23 #	6.68 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		33.4 #	<1 #	<1 #	<1 #	<1 #	44.7 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		7.02 #	1.06 #	1.5 #	<0.65 #	2.47 #	4.4 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.41 #	<1 #	<1 #	<1 #	1.83 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		1.5 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	3.71 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		1.37 #	<0.65 #	0.84 #	<0.65 #	3.55 #	1.87 #
Branched PFOS	<0.65 ng/l	TM434		1.54 #	<0.65 #	0.751 #	<0.65 #	1.69 #	1.59 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097370	32097374	32097379	32097383	32097387	32097391
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	<10	<10	22.7
Total PFOS	<0.65 ng/l	TM434		2.91 #	<0.65 #	1.59 #	<0.65 #	5.24 #	3.47 #
Total PFAS DWI 47	<90 ng/l	TM434		216	<90	<90	<90	<90	178
PFecHS (646-83-3)	<1 ng/l	TM434		76.2 #	1.36 @ #	3.93 @ #	<1 @ #	10.3 #	54.8 @ #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #	<1 @ #	<1 @ #	<1 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL4-B	SL5-B	SL6-B	SL7-B	SL8-B	SL9-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097396	32097406	32097411	32097416	32097420	32097424
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<20 #	2.15 #	5.02 #	12.3 #	3.31 #	3.88 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<50 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		16.5 #	1.7 #	7.86 #	41.5 #	3.23 #	6.42 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<30 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		<10 #	1.04 #	4.19 #	17.7 #	1.36 #	2.95 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<10 #	<1 #	1.27 #	7.57 #	<1 #	1.04 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<50 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<10 #	<1 #	<1 #	63.9 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<6.5 #	<0.65 #	0.819 #	5.12 #	<0.65 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<20 #	<2 #	<2 #	2.79 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<50 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<20 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<50 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<6.5 #	<0.65 #	1.13 #	1.92 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<6.5 #	<0.65 #	<0.65 #	1.57 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<20 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL4-B	SL5-B	SL6-B	SL7-B	SL8-B	SL9-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097396	32097406	32097411	32097416	32097420	32097424
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<30 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<20 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<20 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<100 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<100 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<10 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<100	<10	<10	24	<10	<10
Total PFOS	<0.65 ng/l	TM434		<6.5 #	<0.65 #	1.13 #	3.48 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<900	<90	<90	208	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434		<10 @ #	<1 @ #	7.84 @ #	53.5 @ #	1.1 @ #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<10 @ #	<1 @ #	<1 @ #	<1 @ #	<1 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097428	32097432	32097437	32097441	32097445	32097454
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		2.74 #	8.03 #	3.75 #	14.1 4 #	3.46 #	3.81 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	16.7 #	5.05 #	49.5 4 #	5.05 #	7.88 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 4 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		1.25 #	8.32 #	1.94 #	17.4 4 #	2.93 #	4.1 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	5.38 #	<1 #	11.7 4 #	<1 #	2.38 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	37 4 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	1.71 #	<0.65 #	6.97 4 #	1.22 #	1.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	1.92 #	<1 #	1.9 4 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	1.05 4 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	1.56 #	<0.65 #	3.24 4 #	<0.65 #	1.07 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	1.97 #	<0.65 #	3.92 4 #	<0.65 #	0.834 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025	05/09/2025
			SDG Ref	250905-136	250905-136	250905-136	250905-136	250905-136	250905-136
			Lab Sample No.(s)	32097428	32097432	32097437	32097441	32097445	32097454
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 4 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 4 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 4 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	<10	18.2 4	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	3.53 #	<0.65 #	7.16 4 #	<0.65 #	1.9 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<90	267 4	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434		<1 #	29.3 @ #	<1 #	120 4 @ #	<1 @ #	3.72 @ #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #	<1 @ #	<1 4 @ #	<1 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWFB	SWTB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Surface Water (SW)	Surface Water (SW)				
			Date Sampled	02/09/2025	02/09/2025				
			Sample Time	.	.				
			Date Received	05/09/2025	05/09/2025				
			SDG Ref	250905-136	250905-136				
			Lab Sample No.(s)	32097458	32097462				
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	<2 #				
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #				
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #				
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	<1 #				
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #				
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #				
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #				
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #				
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	<1 #				
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #				
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #				
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #				
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #				
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #				
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #				
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #				
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #				
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #				
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #				
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #				
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #				
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #				
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #				
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #				
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #				
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #				
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #				
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #				
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #				

CERTIFICATE OF ANALYSIS

SDG: 250905-136 **Report Number:** 777937 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWFB	SWTB				
			Depth (m)	0.00 - 0.00	0.00 - 0.00				
			Sample Type	Surface Water (SW)	Surface Water (SW)				
			Date Sampled	02/09/2025	02/09/2025				
			Sample Time	.	.				
			Date Received	05/09/2025	05/09/2025				
			SDG Ref	250905-136	250905-136				
			Lab Sample No.(s)	32097458	32097462				
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #				
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #				
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #				
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #				
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #				
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #				
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #				
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #				
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #				
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #				
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #				
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #				
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #				
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #				
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10				
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #				
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90				
PFecHS (646-83-3)	<1 ng/l	TM434		<1 @ #	<1 @ #				
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #				

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250905-136 Report Number: 777937 Superseded Report:
Client Ref.: P21-195 Location: Dublin Airport

Test Completion Dates

Lab Sample No(s)	32097344	32097401	32097449	32097466	32097470	32097474	32097479	32097483	32097488	32097351
Customer Sample Ref.	SL1-A	SL2-A	SL3-A	SL4-A	SL5-A	SL6-A	SL7-A	SL8-A	SL9-A	SL10-A
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	18-Sep-2025	18-Sep-2025	22-Sep-2025	18-Sep-2025	15-Sep-2025	22-Sep-2025	22-Sep-2025	18-Sep-2025	22-Sep-2025	18-Sep-2025

Lab Sample No(s)	32097358	32097366	32097370	32097374	32097379	32097383	32097387	32097391	32097396	32097406
Customer Sample Ref.	SL11-A	SL12-A	SL13-A	SL14-A	SL15-A	SL1-B	SL2-B	SL3-B	SL4-B	SL5-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	22-Sep-2025	18-Sep-2025	15-Sep-2025	22-Sep-2025	22-Sep-2025	18-Sep-2025	15-Sep-2025	22-Sep-2025	18-Sep-2025	18-Sep-2025

Lab Sample No(s)	32097411	32097416	32097420	32097424	32097428	32097432	32097437	32097441	32097445	32097454
Customer Sample Ref.	SL6-B	SL7-B	SL8-B	SL9-B	SL10-B	SL11-B	SL12-B	SL13-B	SL14-B	SL15-B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	18-Sep-2025	22-Sep-2025	18-Sep-2025	15-Sep-2025	15-Sep-2025	22-Sep-2025	15-Sep-2025	18-Sep-2025	22-Sep-2025	22-Sep-2025

Lab Sample No(s)	32097458	32097462
Customer Sample Ref.	SWFB	SWTB
AGS Ref.		
Depth	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water
PFAS Liquids (Full Suite)	22-Sep-2025	22-Sep-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	24 September 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	250908-30
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	778180
Order Number:	Z4892

We received 34 samples on Monday September 08, 2025 and 34 of these samples were scheduled for analysis which was completed on Wednesday September 24, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32105180	C1 A		0.00 - 0.00	02/09/2025
32105176	C1 B		0.00 - 0.00	02/09/2025
32105244	K Stream A		0.00 - 0.00	04/09/2025
32105240	K Stream B		0.00 - 0.00	04/09/2025
32105224	M5 A		0.00 - 0.00	02/09/2025
32105276	M5 B		0.00 - 0.00	02/09/2025
32105309	P2 A		0.00 - 0.00	02/09/2025
32105299	P3 A		0.00 - 0.00	04/09/2025
32105190	P4 A		0.00 - 0.00	02/09/2025
32105288	P7 A		0.00 - 0.00	04/09/2025
32105280	P8 A		0.00 - 0.00	04/09/2025
32105315	P2 B		0.00 - 0.00	02/09/2025
32105292	P3 B		0.00 - 0.00	04/09/2025
32105185	P4 B		0.00 - 0.00	02/09/2025
32105284	P7 B		0.00 - 0.00	04/09/2025
32105269	P8 B		0.00 - 0.00	04/09/2025
32105216	R1 A		0.00 - 0.00	02/09/2025
32105207	R2 A		0.00 - 0.00	02/09/2025
32105211	R1 B		0.00 - 0.00	02/09/2025
32105203	R2 B		0.00 - 0.00	02/09/2025
32105252	S3 A		0.00 - 0.00	02/09/2025
32105248	S3 B		0.00 - 0.00	02/09/2025
32105257	SWML3 A		0.00 - 0.00	02/09/2025
32105265	SWML4 A		0.00 - 0.00	02/09/2025
32105199	SWML5(A) A		0.00 - 0.00	02/09/2025
32105326	SWML7(A) A		0.00 - 0.00	02/09/2025
32105195	SWML5(A) B		0.00 - 0.00	02/09/2025
32105321	SWML7(A) B		0.00 - 0.00	02/09/2025
32105332	SWML3 B		0.00 - 0.00	02/09/2025
32105261	SWML4 B		0.00 - 0.00	02/09/2025
32105304	SWML7(B) A		0.00 - 0.00	02/09/2025
32105220	SWML7(B) B		0.00 - 0.00	02/09/2025
32105235	WAD Stream A		0.00 - 0.00	02/09/2025
32105230	WAD Stream B		0.00 - 0.00	02/09/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)	32105180	32105176	32105244	32105240	32105224	32105276	32105309	32105299	32105190	32105288	32105280	32105315	32105292	32105185	32105284	32105269	32105216	32105207	32105211
Customer Sample Reference	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B	P2 A	P3 A	P4 A	P7 A	P8 A	P2 B	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A	R1 B
AGS Reference																			
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Container	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.	Digitube fo PFAS analysis.
Sample Type	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
PFAS Liquids (Full Suite) / All / NDPs: 0 Tests: 34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		WAD Stream B	32105230
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		WAD Stream A	32105235
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML7(B) B	32105220
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML7(B) A	32105304
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML4 B	32105261
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML3 B	32105332
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML7(A) B	32105321
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML5(A) B	32105195
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML7(A) A	32105326
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML5(A) A	32105199
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML4 A	32105265
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		SWML3 A	32105257
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		S3 B	32105248
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		S3 A	32105252
X		SW	Digitube fo PFAS analysis.	0.00 - 0.00		R2 B	32105203

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	04/09/2025	04/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105180	32105176	32105244	32105240	32105224	32105276
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	<2 #	12 #	9.83 4 #	7.86 #	10.2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		1.96 #	1.72 #	41.4 #	43.1 4 #	20.7 #	22.6 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 4 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	<1 #	15.4 #	10.7 4 #	11.4 #	10.6 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	<1 #	8.95 #	9.13 4 #	6.64 #	8.22 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	7.52 #	4.24 4 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	4.93 #	5.94 4 #	2.42 #	2.09 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	<1 #	5.78 #	3.31 4 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	1.42 4 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	3.4 #	3.87 4 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 4 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	5.74 #	7.34 4 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	2.79 #	3.64 4 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	04/09/2025	04/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105180	32105176	32105244	32105240	32105224	32105276
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 4 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 4 @ #	<2 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 4 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 4 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 4 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 4 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	39.5	<10 4	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	8.52 #	11 4 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	173	176 4	125	121
PFecHS (646-83-3)	<1 ng/l	TM434		2.47 @ #	2.24 @ #	65 #	73.9 4 #	75.9 #	67.5 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #	<1 @ #	<1 4 @ #	<1 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P2 A	P3 A	P4 A	P7 A	P8 A	P2 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	04/09/2025	02/09/2025	04/09/2025	04/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105309	32105299	32105190	32105288	32105280	32105315
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		20.3 #	9.84 #	13.1 #	15.2 #	<10 4 #	23.5 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<25 #	<25 4 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		77.3 #	31.5 #	36.6 #	25.3 #	<5 4 #	78.5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<15 #	<15 4 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		27.6 #	10.1 #	12.5 #	10.4 #	<5 4 #	30.9 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		17.3 #	6.61 #	4.96 #	<5 #	<5 4 #	19.2 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<25 #	<25 4 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	44.2 #	<5 4 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		7.45 #	2.31 #	2.48 #	<3.25 #	<3.25 4 #	7.51 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	1.77 #	<1 #	<5 #	<5 4 #	1.15 #
PFNA (375-95-1)	<1 ng/l	TM434		2.15 #	<1 #	<1 #	<5 #	<5 4 #	2.14 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	27.5 #	<10 4 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<25 #	<25 4 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<10 @ #	<10 4 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<25 #	<25 4 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		2.25 #	<0.65 #	1.8 #	19.1 #	<3.25 4 #	4.71 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	1.46 #	8.67 #	<3.25 4 #	2.58 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<10 @ #	<10 4 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P2 A	P3 A	P4 A	P7 A	P8 A	P2 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	04/09/2025	02/09/2025	04/09/2025	04/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105309	32105299	32105190	32105288	32105280	32105315
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<15 #	<15 4 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<10 @ #	<10 4 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<10 #	<10 4 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<50 @ #	<50 4 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<50 @ #	<50 4 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<5 #	<5 4 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		23.3	<10	22.6	<50	<50 4	23.9
Total PFOS	<0.65 ng/l	TM434		2.25 #	<0.65 #	3.26 #	27.8 #	<3.25 4 #	7.29 #
Total PFAS DWI 47	<90 ng/l	TM434		154	<90	<90	<450	<450 4	170
PFecHS (646-83-3)	<1 ng/l	TM434		<1 #	<1 #	3.49 #	<5 #	<5 4 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #	<1 @ #	<5 @ #	<5 4 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/09/2025	02/09/2025	04/09/2025	04/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105292	32105185	32105284	32105269	32105216	32105207
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		10.4 #	10.9 #	15.4 #	<10 4 #	26.9 #	12.8 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<25 4 #	<10 #	<25 #
PFPA (2706-90-3)	<1 ng/l	TM434		31.1 #	31.5 #	34.1 #	<5 4 #	126 #	<5 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<15 4 #	<6 #	<15 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
PFHxA (307-24-4)	<1 ng/l	TM434		10.5 #	11.6 #	11.7 #	<5 4 #	51.9 #	13.6 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
PFHpA (375-85-9)	<1 ng/l	TM434		6.93 #	4.59 #	<5 #	<5 4 #	22 #	8.07 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<25 4 #	<10 #	<25 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	36.8 #	<5 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
PFOA (335-67-1)	<0.65 ng/l	TM434		2.45 #	2.55 #	<3.25 #	<3.25 4 #	12.3 #	<3.25 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.96 #	2.2 #	<5 #	<5 4 #	5.41 #	<5 #
PFNA (375-95-1)	<1 ng/l	TM434		1.36 #	<1 #	<5 #	<5 4 #	2.04 #	<5 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<25 4 #	<10 #	<25 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<10 @ #	<10 4 @ #	<4 @ #	<10 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<25 #	<25 4 #	<10 #	<25 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	1.01 #	<3.25 #	<3.25 4 #	8.38 #	4.04 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	0.949 #	<3.25 #	<3.25 4 #	4.27 #	3.5 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<10 @ #	<10 4 @ #	<4 @ #	<10 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	2.18 #	<5 #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	04/09/2025	02/09/2025	04/09/2025	04/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105292	32105185	32105284	32105269	32105216	32105207
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<15 #	<15 4 #	<6 #	<15 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #	<10 @ #	<10 4 @ #	<4 @ #	<10 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<10 #	<10 4 #	<4 #	<10 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<50 @ #	<50 4 @ #	<20 @ #	<50 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<50 @ #	<50 4 @ #	<20 @ #	<50 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<5 #	<5 4 #	<2 #	<5 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	36.5	<50	<50 4	274	<50
Total PFOS	<0.65 ng/l	TM434		<0.65 #	1.96 #	<3.25 #	<3.25 4 #	12.6 #	7.54 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	<450	<450 4	306	<450
PFecHS (646-83-3)	<1 ng/l	TM434		<1 #	6.22 #	<5 #	<5 4 #	8.69 #	5.93 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #	<5 @ #	<5 4 @ #	<2 @ #	<5 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	R1 B	R2 B	S3 A	S3 B	SWML3 A	SWML4 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105211	32105203	32105252	32105248	32105257	32105265
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		26.4 #	9.35 #	<2 #	<2 #	10.4 #	20.7 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<25 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		119 #	35.8 #	<1 #	<1 #	19.5 #	100 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<15 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		50 #	11 #	<1 #	<1 #	7.44 #	35.4 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		20.9 #	6.33 #	<1 #	<1 #	<5 #	19 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<25 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		42.8 #	<1 #	<1 #	<1 #	<5 #	22.6 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		10.5 #	2.93 #	<0.65 #	<0.65 #	<3.25 #	10.3 #
PFHxS (355-46-4)	<1 ng/l	TM434		7.06 #	2.38 #	<1 #	<1 #	<5 #	4.61 #
PFNA (375-95-1)	<1 ng/l	TM434		1.68 #	<1 #	<1 #	<1 #	<5 #	1.95 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<25 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<10 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<25 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		7.91 #	<0.65 #	<0.65 #	<0.65 #	<3.25 #	8.01 #
Branched PFOS	<0.65 ng/l	TM434		4.13 #	3.15 #	<0.65 #	<0.65 #	<3.25 #	5.89 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<10 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		1.62 #	<1 #	<1 #	<1 #	<5 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	R1 B	R2 B	S3 A	S3 B	SWML3 A	SWML4 A
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105211	32105203	32105252	32105248	32105257	32105265
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<15 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<10 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<10 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<50 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<50 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<5 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		199	10.9	<10	<10	<50	123
Total PFOS	<0.65 ng/l	TM434		12 #	3.15 #	<0.65 #	<0.65 #	<3.25 #	13.9 #
Total PFAS DWI 47	<90 ng/l	TM434		301	<90	<90	<90	<450	233
PFecHS (646-83-3)	<1 ng/l	TM434		8.62 #	3.74 @ #	2.96 @ #	2.48 @ #	<5 @ #	4.41 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #	<1 @ #	<1 @ #	<5 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML5(A) A	SWML7(A) A	SWML5(A) B	SWML7(A) B	SWML3 B	SWML4 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105199	32105326	32105195	32105321	32105332	32105261
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		57.1 #	<2 #	57.2 #	<2 #	9.18 #	20.2 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		60.2 #	2.08 #	61.6 #	<1 #	17.1 #	82.2 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	1.35 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		24.8 #	<1 #	25.9 #	<1 #	7.73 #	35 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		9.74 #	<1 #	10.9 #	<1 #	3.47 #	12.5 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		10.5 #	<1 #	10 #	<1 #	3.17 #	21.1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		5.55 #	<0.65 #	5.59 #	<0.65 #	2.73 #	6.76 #
PFHxS (355-46-4)	<1 ng/l	TM434		4.9 #	<1 #	5.79 #	<1 #	<1 #	5.47 #
PFNA (375-95-1)	<1 ng/l	TM434		1.62 #	<1 #	1.25 #	<1 #	<1 #	1.14 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		2.25 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		6.49 #	<0.65 #	5.8 #	<0.65 #	2.97 #	4.05 #
Branched PFOS	<0.65 ng/l	TM434		4.6 #	<0.65 #	4.06 #	<0.65 #	1.33 #	2.8 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	1.3 #	<1 #	<1 #	1.11 #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWML5(A) A	SWML7(A) A	SWML5(A) B	SWML7(A) B	SWML3 B	SWML4 B
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025	02/09/2025
			Sample Time	.	.	.	.	.	.
			Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025	08/09/2025
			SDG Ref	250908-30	250908-30	250908-30	250908-30	250908-30	250908-30
			Lab Sample No.(s)	32105199	32105326	32105195	32105321	32105332	32105261
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #	<2 @ #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		78.2	<10	73.2	<10	24.9	168
Total PFOS	<0.65 ng/l	TM434		11.1 #	<0.65 #	9.86 #	<0.65 #	4.29 #	6.86 #
Total PFAS DWI 47	<90 ng/l	TM434		207	<90	207	<90	<90	197
PFecHS (646-83-3)	<1 ng/l	TM434		19.2 #	<1 @ #	16.1 #	<1 @ #	2.51 #	5.11 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 @ #	<1 @ #	<1 @ #	<1 @ #	<1 @ #	<1 @ #

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Customer Sample Ref.	SWML7(B) A	SWML7(B) B	WAD Stream A	WAD Stream B		
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)		
Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025		
Sample Time	.	.	.	.		
Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025		
SDG Ref	250908-30	250908-30	250908-30	250908-30		
Lab Sample No.(s)	32105304	32105220	32105235	32105230		
AGS Reference						

Component	LOD/Units	Method						
PFBA (375-22-4)	<2 ng/l	TM434	<2 4 #	<2 #	6.48 #	5.92 #		
PFMOPrA (377-73-1)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
3:3 FTCA (356-02-5)	<5 ng/l	TM434	<5 4 #	<5 #	<5 #	<5 #		
PFPA (2706-90-3)	<1 ng/l	TM434	<1 4 #	<1 #	17.5 #	11.4 #		
PFMOBA (863090-89-5)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
4:2 FTS (757124-72-4)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
NFDHA (151772-58-6)	<3 ng/l	TM434	<3 4 #	<3 #	<3 #	<3 #		
PFBS (375-73-5)	<1 ng/l	TM434	<1 4 #	<1 #	2.3 #	1.99 #		
PFHxA (307-24-4)	<1 ng/l	TM434	<1 4 #	<1 #	6.63 #	5.15 #		
HFPO-DA (13252-13-6)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
PFEESA (113507-82-7)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
PFHpA (375-85-9)	<1 ng/l	TM434	<1 4 #	<1 #	3.26 #	2.74 #		
PFPeS (2706-91-4)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
5:3 FTCA (914637-49-3)	<5 ng/l	TM434	<5 4 #	<5 #	<5 #	<5 #		
ADONA (919005-14-4)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
6:2 FTS (27619-97-2)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
FBSA (30334-69-1)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
PFOA (335-67-1)	<0.65 ng/l	TM434	<0.65 4 #	<0.65 #	2.31 #	1.72 #		
PFHxS (355-46-4)	<1 ng/l	TM434	<1 4 #	<1 #	1.9 #	1.36 #		
PFNA (375-95-1)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
PFHpS (375-92-8)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
8:2 FTS (39108-34-4)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
HFPO-TA (13252-14-7)	<5 ng/l	TM434	<5 4 #	<5 #	<5 #	<5 #		
PFDA (335-76-2)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
MeFOSAA (2355-31-9)	<2 ng/l	TM434	<2 4 @ #	<2 @ #	<2 @ #	<2 @ #		
7:3 FTCA (812-70-4)	<5 ng/l	TM434	<5 4 #	<5 #	<5 #	<5 #		
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434	<0.65 4 #	<0.65 #	2.03 #	1.97 #		
Branched PFOS	<0.65 ng/l	TM434	<0.65 4 #	<0.65 #	1.32 #	1.63 #		
EtFOSAA (2991-50-6)	<2 ng/l	TM434	<2 4 @ #	<2 @ #	<2 @ #	<2 @ #		
PFUnA (2058-94-8)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
PFNS (68259-12-1)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
FHxSA (41997-13-1)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Customer Sample Ref.	SWML7(B) A	SWML7(B) B	WAD Stream A	WAD Stream B		
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)		
Date Sampled	02/09/2025	02/09/2025	02/09/2025	02/09/2025		
Sample Time	.	.	.	.		
Date Received	08/09/2025	08/09/2025	08/09/2025	08/09/2025		
SDG Ref	250908-30	250908-30	250908-30	250908-30		
Lab Sample No.(s)	32105304	32105220	32105235	32105230		
AGS Reference						

Component	LOD/Units	Method						
PFDoA (307-55-1)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
PFDS (335-77-3)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 4 #	<3 #	<3 #	<3 #		
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 4 @ #	<2 @ #	<2 @ #	<2 @ #		
PFTeA (376-06-7)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
PFOSA (754-91-6)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 4 #	<2 #	<2 #	<2 #		
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 4 @ #	<10 @ #	<10 @ #	<10 @ #		
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 4 @ #	<10 @ #	<10 @ #	<10 @ #		
PFODA (16517-11-6)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 4 #	<1 #	<1 #	<1 #		
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10 4	<10	<10	<10		
Total PFOS	<0.65 ng/l	TM434	<0.65 4 #	<0.65 #	3.35 #	3.6 #		
Total PFAS DWI 47	<90 ng/l	TM434	<90 4	<90	<90	<90		
PFecHS (646-83-3)	<1 ng/l	TM434	<1 4 #	<1 @ #	3.61 #	2.69 @ #		
PFTrDS (791563-89-8)	<1 ng/l	TM434	<1 4 @ #	<1 @ #	<1 @ #	<1 @ #		

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 250908-30 **Report Number:** 778180 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32105180	32105176	32105244	32105240	32105224	32105276	32105309	32105299	32105190	32105288
Customer Sample Ref.	C1 A	C1 B	K Stream A	K Stream B	M5 A	M5 B	P2 A	P3 A	P4 A	P7 A
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	22-Sep-2025	22-Sep-2025	24-Sep-2025	15-Sep-2025	24-Sep-2025	24-Sep-2025	16-Sep-2025	16-Sep-2025	22-Sep-2025	18-Sep-2025

Lab Sample No(s)	32105280	32105315	32105292	32105185	32105284	32105269	32105216	32105207	32105211	32105203
Customer Sample Ref.	P8 A	P2 B	P3 B	P4 B	P7 B	P8 B	R1 A	R2 A	R1 B	R2 B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	18-Sep-2025	16-Sep-2025	16-Sep-2025	24-Sep-2025	18-Sep-2025	18-Sep-2025	24-Sep-2025	24-Sep-2025	24-Sep-2025	24-Sep-2025

Lab Sample No(s)	32105252	32105248	32105257	32105265	32105332	32105261	32105199	32105326	32105195	32105321
Customer Sample Ref.	S3 A	S3 B	SWML3 A	SWML4 A	SWML3 B	SWML4 B	SWML5(A) A	SWML7(A) A	SWML5(A) B	SWML7(A) B
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	22-Sep-2025	22-Sep-2025	18-Sep-2025	16-Sep-2025	24-Sep-2025	24-Sep-2025	24-Sep-2025	22-Sep-2025	24-Sep-2025	22-Sep-2025

Lab Sample No(s)	32105304	32105220	32105235	32105230
Customer Sample Ref.	SWML7(B) A	SWML7(B) B	WAD Stream A	WAD Stream B
AGS Ref.				
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	15-Sep-2025	24-Sep-2025	15-Sep-2025	22-Sep-2025

Appendix General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Units 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date:	07 January 2026
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	251216-43
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	787912

This report has been revised and directly supersedes 787876 in its entirety.

We received 16 samples on Monday December 15, 2025 and 16 of these samples were scheduled for analysis which was completed on Tuesday January 06, 2026. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32637637	DUP1		0.00 - 0.00	09/12/2025
32637598	SL1		0.00 - 0.00	09/12/2025
32637649	SL2		0.00 - 0.00	09/12/2025
32637658	SL3		0.00 - 0.00	09/12/2025
32637663	SL4		0.00 - 0.00	09/12/2025
32637667	SL5		0.00 - 0.00	09/12/2025
32637670	SL6		0.00 - 0.00	09/12/2025
32637674	SL7		0.00 - 0.00	09/12/2025
32637678	SL8		0.00 - 0.00	09/12/2025
32637602	SL10		0.00 - 0.00	09/12/2025
32637607	SL11		0.00 - 0.00	09/12/2025
32637612	SL12		0.00 - 0.00	09/12/2025
32637618	SL13		0.00 - 0.00	09/12/2025
32637625	SL14		0.00 - 0.00	09/12/2025
32637630	SL15		0.00 - 0.00	09/12/2025
32637643	SWTB		0.00 - 0.00	09/12/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

Validated

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			32637637	DUP1		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637598	SL1		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637649	SL2		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637658	SL3		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637663	SL4		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637667	SL5		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637670	SL6		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637674	SL7		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637678	SL8		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637602	SL10		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637607	SL11		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637612	SL12		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637618	SL13		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637625	SL14		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637630	SL15		0.00 - 0.00	50ml digitube (ALE001)	SW
			32637643	SWTB		0.00 - 0.00	50ml digitube (ALE001)	SW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4+§@	Sample deviation (see appendix)
d'	Dilution Applied

Customer Sample Ref.	DUP1	SL1	SL2	SL3	SL4	SL5
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
Date Sampled	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
Sampled Time	.	.	.	.	.	.
Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
SDG Ref	251216-43	251216-43	251216-43	251216-43	251216-43	251216-43
Lab Sample No.(s)	32637637	32637598	32637649	32637658	32637663	32637667
AGS Reference						

Component	LOD/Units	Method	DUP1	SL1	SL2	SL3	SL4	SL5
PFBA (375-22-4)	<2 ng/l	TM434	7.35 #	7.49 #	14.2 #	10.8 #	26.8 #	8.46 #
PFMOPrA (377-73-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434	20.8 #	16.8 #	45.4 #	39.3 #	80.8 #	15.1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434	1.39 #	<1 #	1.97 #	1.43 #	1.51 #	1.53 #
PFHxA (307-24-4)	<1 ng/l	TM434	7.49 #	8.66 #	17.7 #	18.4 #	34 #	5.96 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434	3.21 #	2.98 #	7.72 #	7.1 #	15.9 #	2.4 #
PFPeS (2706-91-4)	<1 ng/l	TM434	<1 #	<1 #	<1 #	1.38 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434	<6 #	<2 #	<10 #	68.4 #	<3 #	<6 #
FBSA (30334-69-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434	2.21 #	1.65 #	4.5 #	4.59 #	3.64 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434	<1 #	<1 #	2.47 #	12 #	3.36 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434	<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434	0.932 #	<0.65 #	3.5 #	7.73 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434	<0.65 #	0.91 #	1.35 #	7.9 #	1.3 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4♦§@	Sample deviation (see appendix)
d'	Dilution Applied

Component	LOD/Units	Method	Customer Sample Ref.	DUP1	SL1	SL2	SL3	SL4	SL5
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
			Sampled Time	-	-	-	-	-	-
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251216-43	251216-43	251216-43	251216-43	251216-43	251216-43
			Lab Sample No.(s)	32637637	32637598	32637649	32637658	32637663	32637667
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	1.2 #	1.43 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	40.3	39.4	<10	<10
Total PFOS	<0.65 ng/l	TM434		0.932 #	0.91 #	4.85 #	15.6 #	1.3 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	102	200	167	<90
PFecHS (646-83-3)	<1 ng/l	TM434		1.64 #	<1 #	2.1 #	19.9 #	<1 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4+§@	Sample deviation (see appendix)
d'	Dilution Applied

Component	LOD/Units	Method	Customer Sample Ref.	SL6	SL7	SL8	SL10	SL11	SL12
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
			Sampled Time	.	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251216-43	251216-43	251216-43	251216-43	251216-43	251216-43
			Lab Sample No.(s)	32637670	32637674	32637678	32637602	32637607	32637612
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		7.31 #	8.87 #	3.46 #	3.19 #	4.61 #	2.28 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		15.4 #	24.8 #	<1 #	4.68 #	18.8 #	<1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	1.44 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		7.72 #	14.2 #	1.81 #	1.9 #	9.95 #	1.86 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		2.95 #	5.32 #	<1 #	1.43 #	2.57 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<5 #	29.2 #	<3 #	<4 #	<5 #	<3 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		2.03 #	4.45 #	1.95 #	1.28 #	1.5 #	0.981 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.35 #	6.46 #	<1 #	<1 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	2.58 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	5.37 #	5.49 #	<5 #	5.33 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		2 #	5.71 #	<0.65 #	<0.65 #	0.729 #	0.691 #
Branched PFOS	<0.65 ng/l	TM434		1.96 #	6.31 #	<0.65 #	<0.65 #	0.782 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4♦§@	Sample deviation (see appendix)
d'	Dilution Applied

Component	LOD/Units	Method	Customer Sample Ref.	SL6	SL7	SL8	SL10	SL11	SL12
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
			Sampled Time	-	-	-	-	-	-
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251216-43	251216-43	251216-43	251216-43	251216-43	251216-43
			Lab Sample No.(s)	32637670	32637674	32637678	32637602	32637607	32637612
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		19.1	20.6	<10	<10	<10	<10
Total PFOS	<0.65 ng/l	TM434		3.96 #	12 #	<0.65 #	<0.65 #	1.51 #	0.691 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	128	<90	<90	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434		1.97 #	14.9 #	<1 #	<1 #	3.26 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4+§@	Sample deviation (see appendix)
d'	Dilution Applied

Customer Sample Ref.	SL13	SL14	SL15	SWTB		
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)		
Date Sampled	09/12/2025	09/12/2025	09/12/2025	09/12/2025		
Sampled Time	.	.	.	.		
Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025		
SDG Ref	251216-43	251216-43	251216-43	251216-43		
Lab Sample No.(s)	32637618	32637625	32637630	32637643		
AGS Reference						

Component	LOD/Units	Method									
PFBA (375-22-4)	<2 ng/l	TM434	7.41	#	3.48	#	8.19	#	<2	#	
PFMOPrA (377-73-1)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
3:3 FTCA (356-02-5)	<5 ng/l	TM434	<5	#	<5	#	<5	#	<5	#	
PFPA (2706-90-3)	<1 ng/l	TM434	21.5	#	5.34	#	20.5	#	<1	#	
PFMOBA (863090-89-5)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
4:2 FTS (757124-72-4)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
NFDHA (151772-58-6)	<3 ng/l	TM434	<3	#	<3	#	<3	#	<3	#	
PFBS (375-73-5)	<1 ng/l	TM434	<1	#	1.2	#	1.44	#	<1	#	
PFHxA (307-24-4)	<1 ng/l	TM434	11.1	#	1.96	#	7.49	#	<1	#	
HFPO-DA (13252-13-6)	<2 ng/l	TM434	<2	#	<2	#	<2	#	<2	#	
PFEESA (113507-82-7)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
PFHpA (375-85-9)	<1 ng/l	TM434	4.66	#	<1	#	2.6	#	<1	#	
PFPeS (2706-91-4)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
5:3 FTCA (914637-49-3)	<5 ng/l	TM434	<5	#	<5	#	<5	#	<5	#	
ADONA (919005-14-4)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
6:2 FTS (27619-97-2)	<1 ng/l	TM434	13	#	<3	#	<4	#	<3	#	
FBSA (30334-69-1)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
PFOA (335-67-1)	<0.65 ng/l	TM434	3.33	#	1.48	#	1.92	#	<0.65	#	
PFHxS (355-46-4)	<1 ng/l	TM434	4.39	#	<1	#	<1	#	<1	#	
PFNA (375-95-1)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
PFHpS (375-92-8)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
8:2 FTS (39108-34-4)	<2 ng/l	TM434	2.15	#	<2	#	<2	#	<2	#	
HFPO-TA (13252-14-7)	<5 ng/l	TM434	5.69	#	<5	#	<5	#	<5	#	
PFDA (335-76-2)	<2 ng/l	TM434	<2	#	<2	#	<2	#	<2	#	
MeFOSAA (2355-31-9)	<2 ng/l	TM434	<2	#	<2	#	<2	#	<2	#	
7:3 FTCA (812-70-4)	<5 ng/l	TM434	<5	#	<5	#	<5	#	<5	#	
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434	4.36	#	<0.65	#	<0.65	#	<0.65	#	
Branched PFOS	<0.65 ng/l	TM434	3.95	#	<0.65	#	<0.65	#	<0.65	#	
EtFOSAA (2991-50-6)	<2 ng/l	TM434	<2	#	<2	#	<2	#	<2	#	
PFUnA (2058-94-8)	<2 ng/l	TM434	<2	#	<2	#	<2	#	<2	#	
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	
PFNS (68259-12-1)	<1 ng/l	TM434	<1	#	<1	#	<1	#	<1	#	

CERTIFICATE OF ANALYSIS

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4♦§@	Sample deviation (see appendix)
d'	Dilution Applied

Component	LOD/Units	Method	Customer Sample Ref.	SL13	SL14	SL15	SWTB		
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)		
			Date Sampled	09/12/2025	09/12/2025	09/12/2025	09/12/2025		
			Sampled Time	-	-	-	-		
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025		
			SDG Ref	251216-43	251216-43	251216-43	251216-43		
			Lab Sample No.(s)	32637618	32637625	32637630	32637643		
			AGS Reference						
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #		
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #		
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #		
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #		
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #		
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #		
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #		
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #		
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #		
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #		
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #		
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #		
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #		
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #		
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #		
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		24.1	<10	<10	<10		
Total PFOS	<0.65 ng/l	TM434		8.32 #	<0.65 #	<0.65 #	<0.65 #		
Total PFAS DWI 47	<90 ng/l	TM434		96.7	<90	<90	<90		
PFecHS (646-83-3)	<1 ng/l	TM434		15.1 #	1.58 #	2.92 #	<1 #		
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #		

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS in Liquid matrices

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 251216-43 **Report Number:** 787912 **Superseded Report:** 787876
Client Ref: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32637637	32637598	32637649	32637658	32637663	32637667	32637670	32637674	32637678	32637602
Customer Sample Ref.	DUP1	SL1	SL2	SL3	SL4	SL5	SL6	SL7	SL8	SL10
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	29-Dec-2025	29-Dec-2025	29-Dec-2025	29-Dec-2025	29-Dec-2025	29-Dec-2025	29-Dec-2025	06-Jan-2026	29-Dec-2025	29-Dec-2025

Lab Sample No(s)	32637607	32637612	32637618	32637625	32637630	32637643
Customer Sample Ref.	SL11	SL12	SL13	SL14	SL15	SWTB
AGS Ref.						
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	29-Dec-2025	29-Dec-2025	06-Jan-2026	29-Dec-2025	29-Dec-2025	29-Dec-2025

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

General

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Declan Morrisey

CERTIFICATE OF ANALYSIS

Date of report Generation:	02 January 2026
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	251217-98
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	787716
Order Number:	Z5021

We received 17 samples on Wednesday December 17, 2025 and 17 of these samples were scheduled for analysis which was completed on Friday January 02, 2026. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

1291

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32646924	C1		0.00 - 0.00	15/12/2025
32646934	C-2A		0.00 - 0.00	15/12/2025
32646939	C-2B		0.00 - 0.00	15/12/2025
32646947	DUP4		0.00 - 0.00	15/12/2025
32646952	DUP5		0.00 - 0.00	15/12/2025
32646943	GWMP5		0.00 - 0.00	15/12/2025
32646960	M1		0.00 - 0.00	15/12/2025
32646965	M5		0.00 - 0.00	15/12/2025
32646969	P4		0.00 - 0.00	15/12/2025
32646973	R1		0.00 - 0.00	15/12/2025
32646977	R2		0.00 - 0.00	15/12/2025
32646981	S1		0.00 - 0.00	15/12/2025
32646956	SL9		0.00 - 0.00	15/12/2025
32646986	SWML3		0.00 - 0.00	15/12/2025
32646993	SWML4		0.00 - 0.00	15/12/2025
32646997	SWML7(A)		0.00 - 0.00	15/12/2025
32646929	SWML7(B)		0.00 - 0.00	15/12/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			32646924	32646934	32646939	32646947	32646952	32646943	32646960	32646965	32646969	32646973	32646977	32646981	32646956	32646986	32646993	32646997	32646929
Customer Sample Reference			C1	C-2A	C-2B	DUP4	DUP5	GWMP5	M1	M5	P4	R1	R2	S1	SL9	SWML3	SWML4	SWML7(A)	SWML7(B)
AGS Reference																			
Depth (m)			0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Container			50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)	50ml digitube (ALE001)
Sample Type			SW	SW	SW	SW	GW	GW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Validated

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
***	6:2 FTAB (see appendix)
1-4+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	C1	C-2A	C-2B	DUP4	DUP5	GWMP5
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Ground Water (GW)	Ground Water (GW)
			Date Sampled	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025
			SDG Ref	251217-98	251217-98	251217-98	251217-98	251217-98	251217-98
			Lab Sample No.(s)	32646924	32646934	32646939	32646947	32646952	32646943
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		3.61 #	11.1 #	12 #	18.2 #	10.3 #	9.97 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		2.32 #	16.8 #	23.3 #	52.8 #	6.07 #	9.17 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	1.13 #	1.21 #
PFHxA (307-24-4)	<1 ng/l	TM434		1.33 #	7.91 #	9.37 #	24.3 #	2.22 #	2.44 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	3.66 #	4.29 #	9.14 #	1.31 #	1.17 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		1.42 #	1.44 #	2.42 #	4.77 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	1.87 #	2.55 #	4.2 #	0.831 #	1.13 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	1.32 #	<1 #	2.73 #	<1 #	1.2 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	0.748 #	0.802 #	2.8 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	0.745 #	2.62 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Customer Sample Ref.	C1	C-2A	C-2B	DUP4	DUP5	GWMP5
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Ground Water (GW)	Ground Water (GW)
Date Sampled	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
Sample Time	.	.	.	.	.	.
Date Received	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025
SDG Ref	251217-98	251217-98	251217-98	251217-98	251217-98	251217-98
Lab Sample No.(s)	32646924	32646934	32646939	32646947	32646952	32646943
AGS Reference						

Component	LOD/Units	Method						
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	<10	<10	<10	53.5	<10	<10
Total PFOS	<0.65 ng/l	TM434	<0.65 #	0.748 #	1.55 #	5.42 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434	<90	<90	<90	123	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434	<1 #	<1 #	<1 #	1.12 #	<1 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	M1	M5	P4	R1	R2	S1
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025
			SDG Ref	251217-98	251217-98	251217-98	251217-98	251217-98	251217-98
			Lab Sample No.(s)	32646960	32646965	32646969	32646973	32646977	32646981
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		9.62 #	8.02 #	24.6 #	15.6 #	14.2 #	3.59 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		11.3 #	15.8 #	90.4 #	62.7 #	38.7 #	<1 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	1.94 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		5.03 #	6.97 #	41.4 #	29.9 #	16.1 #	<1 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		2.43 #	2.71 #	12.4 #	8.77 #	8.94 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<1 #	<1 #	14.4 #	41.1 #	<1 #	<1 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		1.41 #	1.9 #	6.85 #	5.29 #	3.32 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		1.09 #	1.18 #	5.91 #	4.2 #	1.57 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	1.17 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	7.2 #	6.01 #	1.25 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	7.47 #	3.79 #	1.14 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	M1	M5	P4	R1	R2	S1
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025
			SDG Ref	251217-98	251217-98	251217-98	251217-98	251217-98	251217-98
			Lab Sample No.(s)	32646960	32646965	32646969	32646973	32646977	32646981
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	82	98.8	25.4	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	14.7 #	9.79 #	2.4 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	215	179	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434		2.4 #	17.5 #	1.59 #	2.07 #	<1 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL9	SWML3	SWML4	SWML7(A)	SWML7(B)
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			Sample Time	.	.	.	.	.
			Date Received	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025
			SDG Ref	251217-98	251217-98	251217-98	251217-98	251217-98
			Lab Sample No.(s)	32646956	32646986	32646993	32646997	32646929
			AGS Reference					
PFBA (375-22-4)	<2 ng/l	TM434		3.2 #	6.87 #	15 #	3.68 #	4.74 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		2.51 #	9.51 #	47.8 #	4.17 #	4.09 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		1.55 #	5.51 #	19.5 #	2.11 #	2.05 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	2.72 #	7.79 #	<1 #	<1 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		1.65 #	1.5 #	5.51 #	<1 #	1.46 #
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	1.4 #	3.46 #	<0.65 #	1.35 #
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	1.23 #	2.53 #	<1 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	<0.65 #	2.27 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	2.05 #	<0.65 #	0.706 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SL9	SWML3	SWML4	SWML7(A)	SWML7(B)
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			Sample Time	.	.	.	.	.
			Date Received	17/12/2025	17/12/2025	17/12/2025	17/12/2025	17/12/2025
			SDG Ref	251217-98	251217-98	251217-98	251217-98	251217-98
			Lab Sample No.(s)	32646956	32646986	32646993	32646997	32646929
			AGS Reference					
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	<10	29.9	<10	<10
Total PFOS	<0.65 ng/l	TM434		<0.65 #	<0.65 #	4.31 #	<0.65 #	0.706 #
Total PFAS DWI 47	<90 ng/l	TM434		<90	<90	106	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434		<1 #	2.19 #	<1 #	<1 #	<1 #
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS in Liquid matrices

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 251217-98 **Report Number:** 787716 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32646924	32646934	32646939	32646947	32646952	32646943	32646960	32646965	32646969	32646973
Customer Sample Ref.	C1	C-2A	C-2B	DUP4	DUP5	GWMP5	M1	M5	P4	R1
AGS Ref.										
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Ground Water	Ground Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	30-Dec-2025	30-Dec-2025	31-Dec-2025	31-Dec-2025	02-Jan-2026	31-Dec-2025	31-Dec-2025	31-Dec-2025	31-Dec-2025	31-Dec-2025

Lab Sample No(s)	32646977	32646981	32646956	32646986	32646993	32646997	32646929
Customer Sample Ref.	R2	S1	SL9	SWML3	SWML4	SWML7(A)	SWML7(B)
AGS Ref.							
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	31-Dec-2025	31-Dec-2025	31-Dec-2025	31-Dec-2025	31-Dec-2025	30-Dec-2025	31-Dec-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests.
We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

Fehily Timoney
Unit 3/4
Northwood House
Northwood Crescent
Northwood
Dublin
Dublin
DO9 X899

Attention: Sean Foley

CERTIFICATE OF ANALYSIS

Date of report Generation:	30 December 2025
Customer:	Fehily Timoney
Sample Delivery Group (SDG):	251215-12
Your Reference:	P21-195
Location:	Dublin Airport
Report No:	787563
Order Number:	Z5021

We received 9 samples on Monday December 15, 2025 and 9 of these samples were scheduled for analysis which was completed on Tuesday December 30, 2025. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Justin Keeton
Business Unit Leader - Land

CERTIFICATE OF ANALYSIS

SDG: 251215-12 **Report Number:** 787563 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
32630616	K Stream		0.00 - 0.00	11/12/2025
32630611	P2		0.00 - 0.00	11/12/2025
32630592	P3		0.00 - 0.00	11/12/2025
32630604	P7		0.00 - 0.00	11/12/2025
32630598	P8		0.00 - 0.00	11/12/2025
32630582	S3		0.00 - 0.00	11/12/2025
32630629	SWFB		0.00 - 0.00	12/12/2025
32630624	SWML5(A)		0.00 - 0.00	11/12/2025
32630620	WAD Stream		0.00 - 0.00	11/12/2025

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-12 **Report Number:** 787563 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			32630616	K Stream		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630611	P2		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630592	P3		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630604	P7		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630598	P8		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630582	S3		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630629	SWFB		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630624	SWML5(A)		0.00 - 0.00	50ml digitube (ALE001)	SW
			32630620	WAD Stream		0.00 - 0.00	50ml digitube (ALE001)	SW
PFAS Liquids (Full Suite)	All	NDPs: 0 Tests: 9	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG: 251215-12 **Report Number:** 787563 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	K Stream	P2	P3	P7	P8	S3
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
			Date Sampled	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025
			Sample Time	.	.	.	.	.	.
			Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
			SDG Ref	251215-12	251215-12	251215-12	251215-12	251215-12	251215-12
			Lab Sample No.(s)	32630616	32630611	32630592	32630604	32630598	32630582
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		25.4 #	54.6 #	35.5 #	37.7 #	9 #	2.38 #
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFPA (2706-90-3)	<1 ng/l	TM434		57 #	172 #	90.5 #	85.9 #	16.8 #	4.78 #
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
PFBS (375-73-5)	<1 ng/l	TM434		2.43 #	2.38 #	1.43 #	1.26 #	<1 #	<1 #
PFHxA (307-24-4)	<1 ng/l	TM434		25.6 #	88.3 #	35.9 #	30 #	6.1 #	2.28 #
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpA (375-85-9)	<1 ng/l	TM434		11.3 #	25.8 #	13 #	13.9 #	3.37 #	1.43 #
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTS (27619-97-2)	<1 ng/l	TM434		3.13 #	1.05 #	<1 #	<1 #	<1 #	<2 #
FBSA (30334-69-1)	<1 ng/l	TM434		1.38 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOA (335-67-1)	<0.65 ng/l	TM434		6.65 #	6.1 #	3.71 #	4.2 #	1.51 #	<0.65 #
PFHxS (355-46-4)	<1 ng/l	TM434		17.2 #	3.08 #	4.45 #	2.49 #	1.52 #	<1 #
PFNA (375-95-1)	<1 ng/l	TM434		1.39 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		17.9 #	1.65 #	2.3 #	<0.65 #	<0.65 #	<0.65 #
Branched PFOS	<0.65 ng/l	TM434		18.5 #	2.61 #	<0.65 #	<0.65 #	<0.65 #	<0.65 #
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-12 **Report Number:** 787563 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Customer Sample Ref.	K Stream	P2	P3	P7	P8	S3
Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)
Date Sampled	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025
Sample Time	.	.	.	.	.	.
Date Received	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025	15/12/2025
SDG Ref	251215-12	251215-12	251215-12	251215-12	251215-12	251215-12
Lab Sample No.(s)	32630616	32630611	32630592	32630604	32630598	32630582
AGS Reference						

Component	LOD/Units	Method						
PFDoA (307-55-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDS (335-77-3)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTrDA (72629-94-8)	<3 ng/l	TM434	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFUnDS (749786-16-1)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFTeA (376-06-7)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
PFOSA (754-91-6)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFDoS (79780-39-5)	<2 ng/l	TM434	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #
PFHxDA (67905-19-5)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
MeFOSE (24448-09-7)	<10 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
N-MeFOSA (31506-32-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
EtFOSE (1691-99-2)	<10 ng/l	TM434	<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
PFODA (16517-11-6)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
N-EtFOSA (4151-50-2)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
6:2 FTAB (34455-29-3)	<10 ng/l	TM434	17	17.9	<10	<10	<10	<10
Total PFOS	<0.65 ng/l	TM434	36.4 #	4.26 #	2.3 #	<0.65 #	<0.65 #	<0.65 #
Total PFAS DWI 47	<90 ng/l	TM434	222	358	187	175	<90	<90
PFecHS (646-83-3)	<1 ng/l	TM434	34.2 #	<1 #	<1 #	<1 #	1.77 #	1.55 #
PFTrDS (791563-89-8)	<1 ng/l	TM434	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG: 251215-12 **Report Number:** 787563 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4♦§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWFB	SWML5(A)	WAD Stream			
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00			
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)			
			Date Sampled	12/12/2025	11/12/2025	11/12/2025			
			Sample Time	.	.	.			
			Date Received	15/12/2025	15/12/2025	15/12/2025			
			SDG Ref	251215-12	251215-12	251215-12			
			Lab Sample No.(s)	32630629	32630624	32630620			
			AGS Reference						
PFBA (375-22-4)	<2 ng/l	TM434		<2 #	31 #	6.76 #			
PFMOPrA (377-73-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
3:3 FTCA (356-02-5)	<5 ng/l	TM434		<5 #	<5 #	<5 #			
PFPA (2706-90-3)	<1 ng/l	TM434		<1 #	94.5 #	18.3 #			
PFMOBA (863090-89-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
4:2 FTS (757124-72-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
NFDHA (151772-58-6)	<3 ng/l	TM434		<3 #	<3 #	<3 #			
PFBS (375-73-5)	<1 ng/l	TM434		<1 #	1.67 #	2.11 #			
PFHxA (307-24-4)	<1 ng/l	TM434		<1 #	32.5 #	6.71 #			
HFPO-DA (13252-13-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFEESA (113507-82-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
PFHpA (375-85-9)	<1 ng/l	TM434		<1 #	14 #	2.62 #			
PFPeS (2706-91-4)	<1 ng/l	TM434		<1 #	1.35 #	<1 #			
5:3 FTCA (914637-49-3)	<5 ng/l	TM434		<5 #	<5 #	<5 #			
ADONA (919005-14-4)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
6:2 FTS (27619-97-2)	<1 ng/l	TM434		<3 #	22.2 #	<4 #			
FBSA (30334-69-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
PFOA (335-67-1)	<0.65 ng/l	TM434		<0.65 #	8.99 #	2.17 #			
PFHxS (355-46-4)	<1 ng/l	TM434		<1 #	5.31 #	<1 #			
PFNA (375-95-1)	<1 ng/l	TM434		<1 #	1.53 #	<1 #			
PFHpS (375-92-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
8:2 FTS (39108-34-4)	<2 ng/l	TM434		<2 #	4.19 #	<2 #			
HFPO-TA (13252-14-7)	<5 ng/l	TM434		<5 #	<5 #	<5 #			
PFDA (335-76-2)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
MeFOSAA (2355-31-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
7:3 FTCA (812-70-4)	<5 ng/l	TM434		<5 #	<5 #	<5 #			
Linear PFOS (1763-23-1)	<0.65 ng/l	TM434		<0.65 #	9.12 #	1.32 #			
Branched PFOS	<0.65 ng/l	TM434		<0.65 #	3.94 #	<0.65 #			
EtFOSAA (2991-50-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFUnA (2058-94-8)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
9Cl-PF3ONS (756426-58-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
PFNS (68259-12-1)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
FHxSA (41997-13-1)	<1 ng/l	TM434		<1 #	1.35 #	<1 #			

Validated

CERTIFICATE OF ANALYSIS

SDG: 251215-12 **Report Number:** 787563 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Results Legend
- # ISO17025 accredited.
- M mCERTS accredited.
- aq Aqueous / settled sample.
- diss.filt Dissolved / filtered sample.
- tot.unfilt Total / unfiltered sample.
- * Subcontracted - refer to subcontractor report for accreditation status.
- ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
- *** 6:2 FTAB (see appendix)
- 1-4+§@ Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	SWFB	SWML5(A)	WAD Stream			
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00			
			Sample Type	Surface Water (SW)	Surface Water (SW)	Surface Water (SW)			
			Date Sampled	12/12/2025	11/12/2025	11/12/2025			
			Sample Time	.	.	.			
			Date Received	15/12/2025	15/12/2025	15/12/2025			
			SDG Ref	251215-12	251215-12	251215-12			
			Lab Sample No.(s)	32630629	32630624	32630620			
			AGS Reference						
PFDoA (307-55-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFDS (335-77-3)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFTrDA (72629-94-8)	<3 ng/l	TM434		<3 #	<3 #	<3 #			
11Cl-PF3OUdS (763051-92-9)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFUnDS (749786-16-1)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFTeA (376-06-7)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
PFOSA (754-91-6)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFDoS (79780-39-5)	<2 ng/l	TM434		<2 #	<2 #	<2 #			
PFHxDA (67905-19-5)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
MeFOSE (24448-09-7)	<10 ng/l	TM434		<10 #	<10 #	<10 #			
N-MeFOSA (31506-32-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
EtFOSE (1691-99-2)	<10 ng/l	TM434		<10 #	<10 #	<10 #			
PFODA (16517-11-6)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
N-EtFOSA (4151-50-2)	<1 ng/l	TM434		<1 #	<1 #	<1 #			
6:2 FTAB (34455-29-3)	<10 ng/l	TM434		<10	94.5	<10			
Total PFOS	<0.65 ng/l	TM434		<0.65 #	13.1 #	1.32 #			
Total PFAS DWI 47	<90 ng/l	TM434		<90	235	<90			
PFecHS (646-83-3)	<1 ng/l	TM434		<1 #	3.47 #	2.96 #			
PFTrDS (791563-89-8)	<1 ng/l	TM434		<1 #	<1 #	<1 #			

Table of Results - Appendix

Method No	Description
TM434	Analysis of PFAS in Liquid matrices

NA = not applicable.
Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

CERTIFICATE OF ANALYSIS

SDG: 251215-12 **Report Number:** 787563 **Superseded Report:**
Client Ref.: P21-195 **Location:** Dublin Airport

Test Completion Dates

Lab Sample No(s)	32630616	32630611	32630592	32630604	32630598	32630582	32630629	32630624	32630620
Customer Sample Ref.	K Stream	P2	P3	P7	P8	S3	SWFB	SWML5(A)	WAD Stream
AGS Ref.									
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids (Full Suite)	30-Dec-2025	24-Dec-2025	29-Dec-2025	24-Dec-2025	24-Dec-2025	29-Dec-2025	29-Dec-2025	29-Dec-2025	29-Dec-2025

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised.
This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur -
e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis.
The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l.
Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only.
It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. **Sample Deviations**

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Matrix interference**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**
§	**Sampled on date not provided**

20. **Asbestos**

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

If during the search of the two ‘pinch’ samples by PLM only 1 or 2 fibres or fibre bundles are seen and identified as asbestos, the term ‘trace asbestos identified’ is reported.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.
Potentially respirable fibres are identified by using a Phase Contrast Microscope.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.
The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

21. 6:2 FTAB

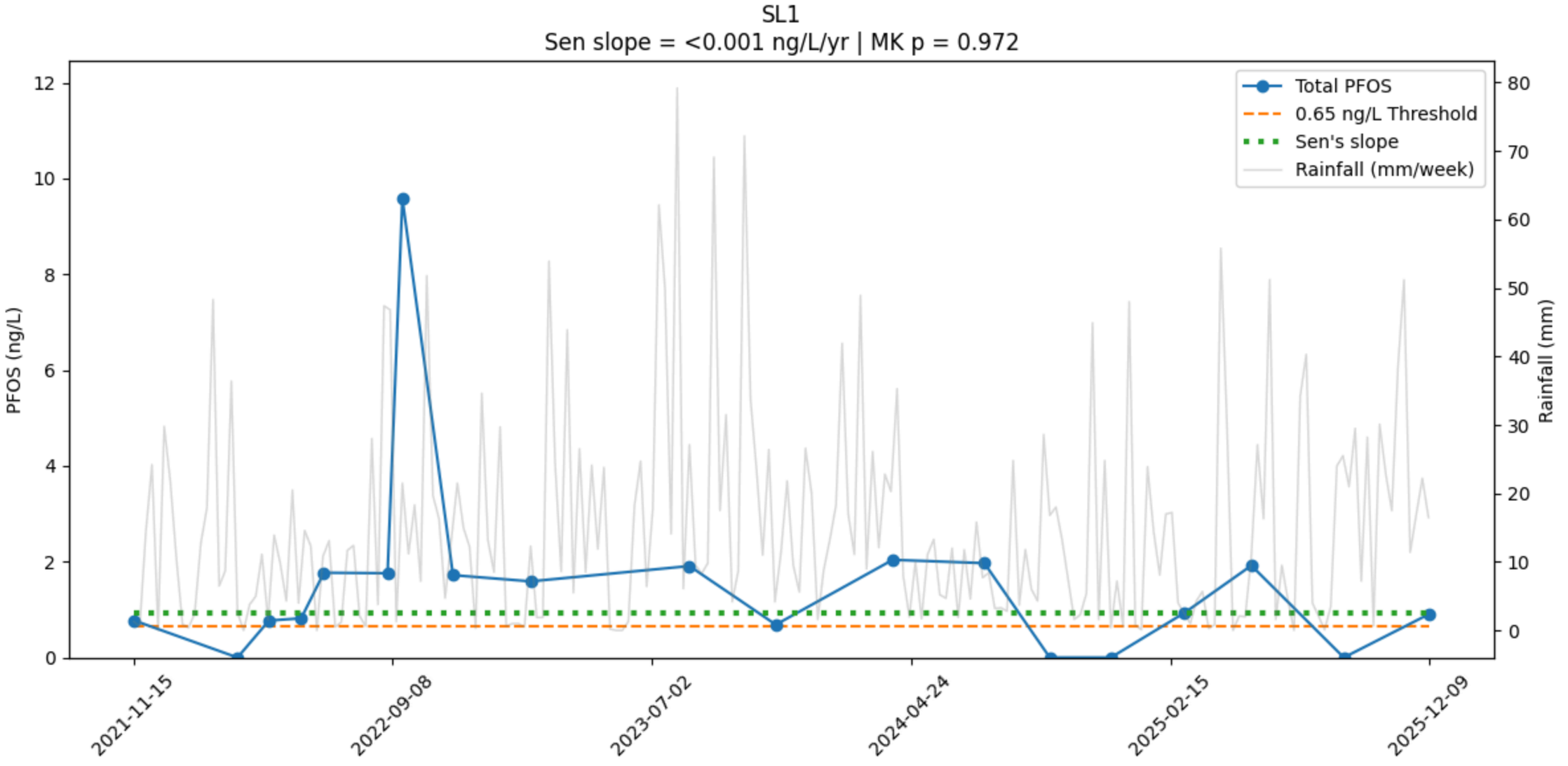
Recovery of 6:2 FTAB in the quality control samples has been observed to be <50% of the target value. Please note the 6:2 FTAB result is supplied as indicative only.

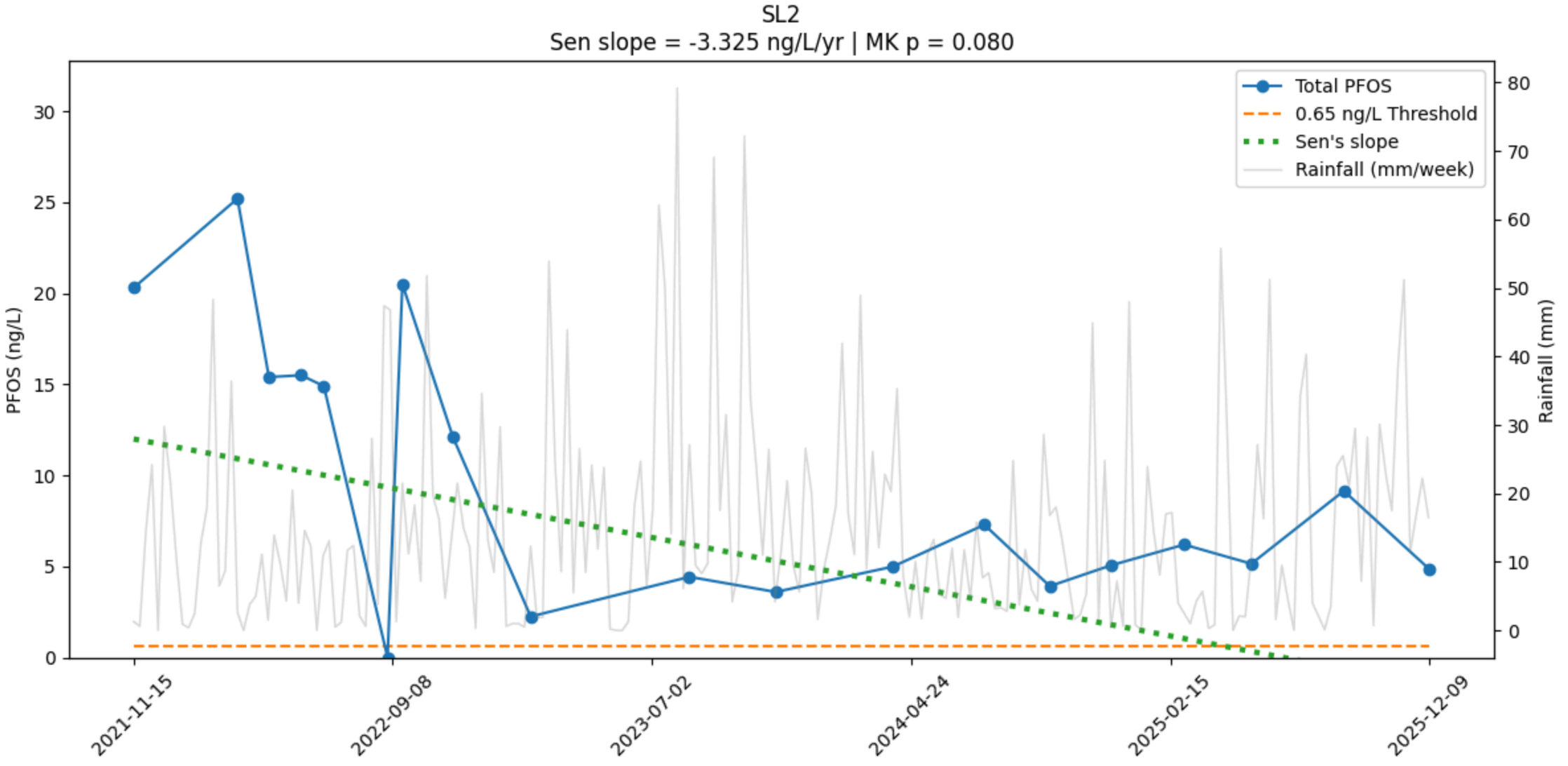
FEHILY TIMONEY

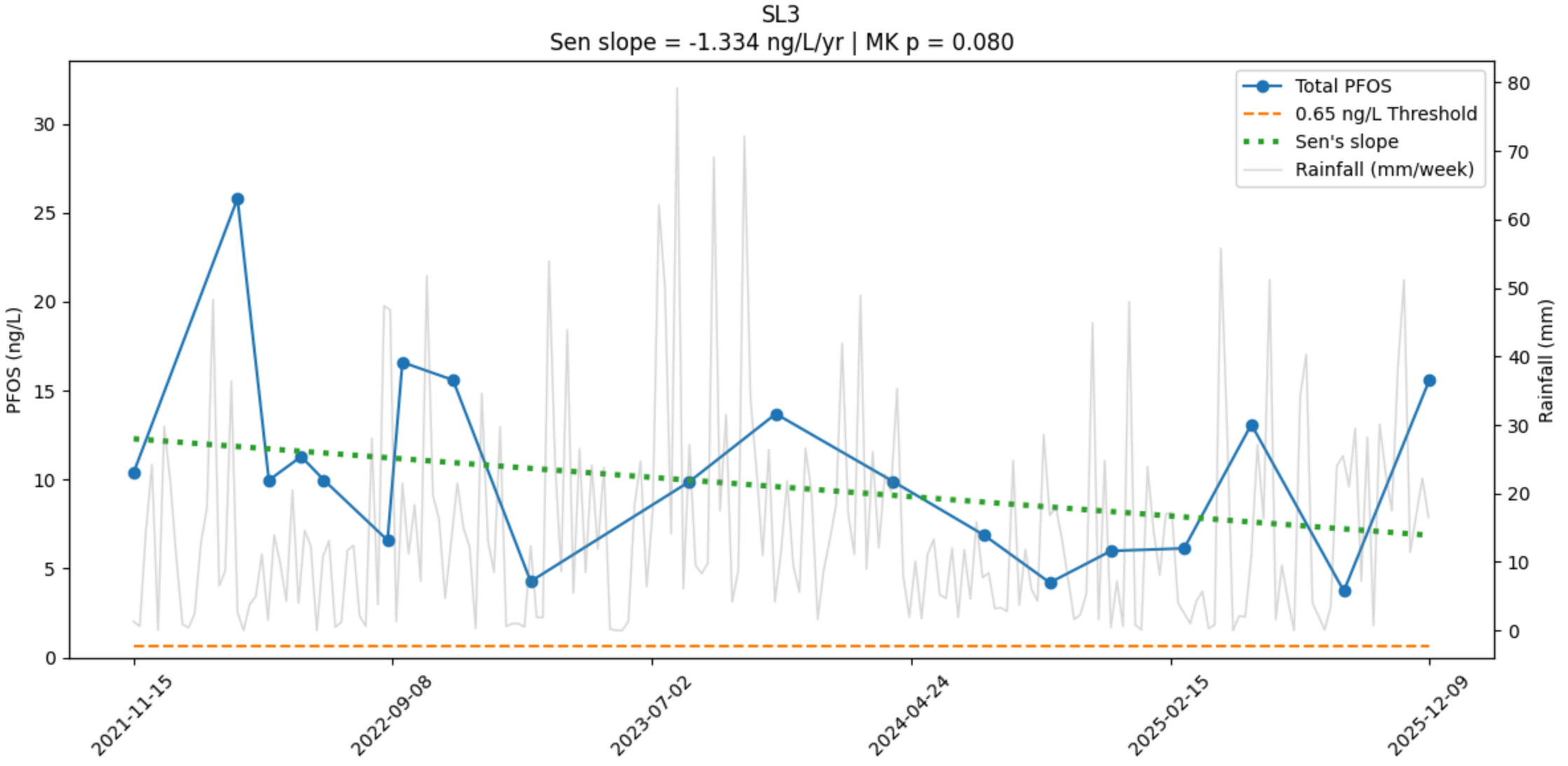
DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

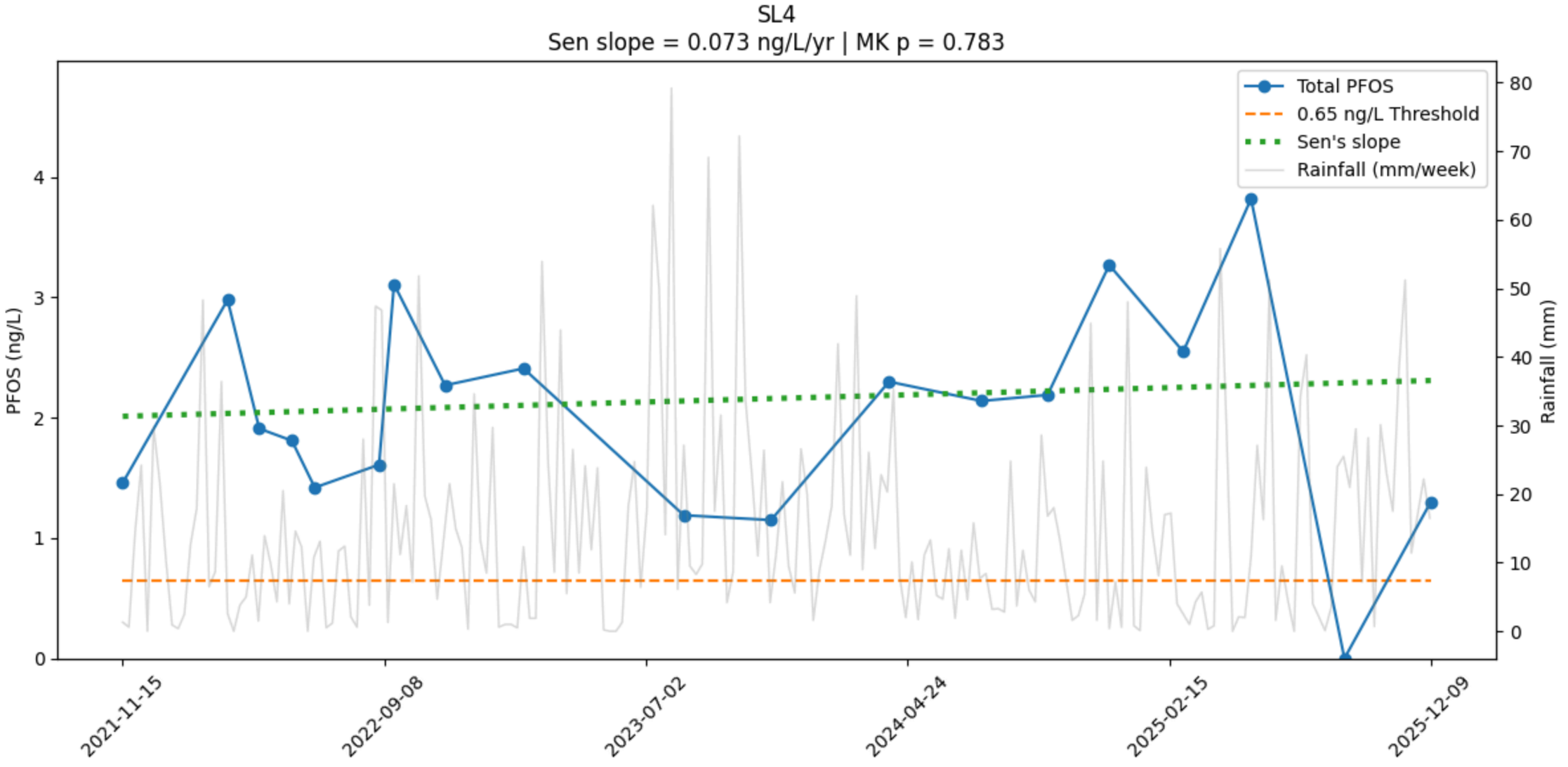
APPENDIX 9

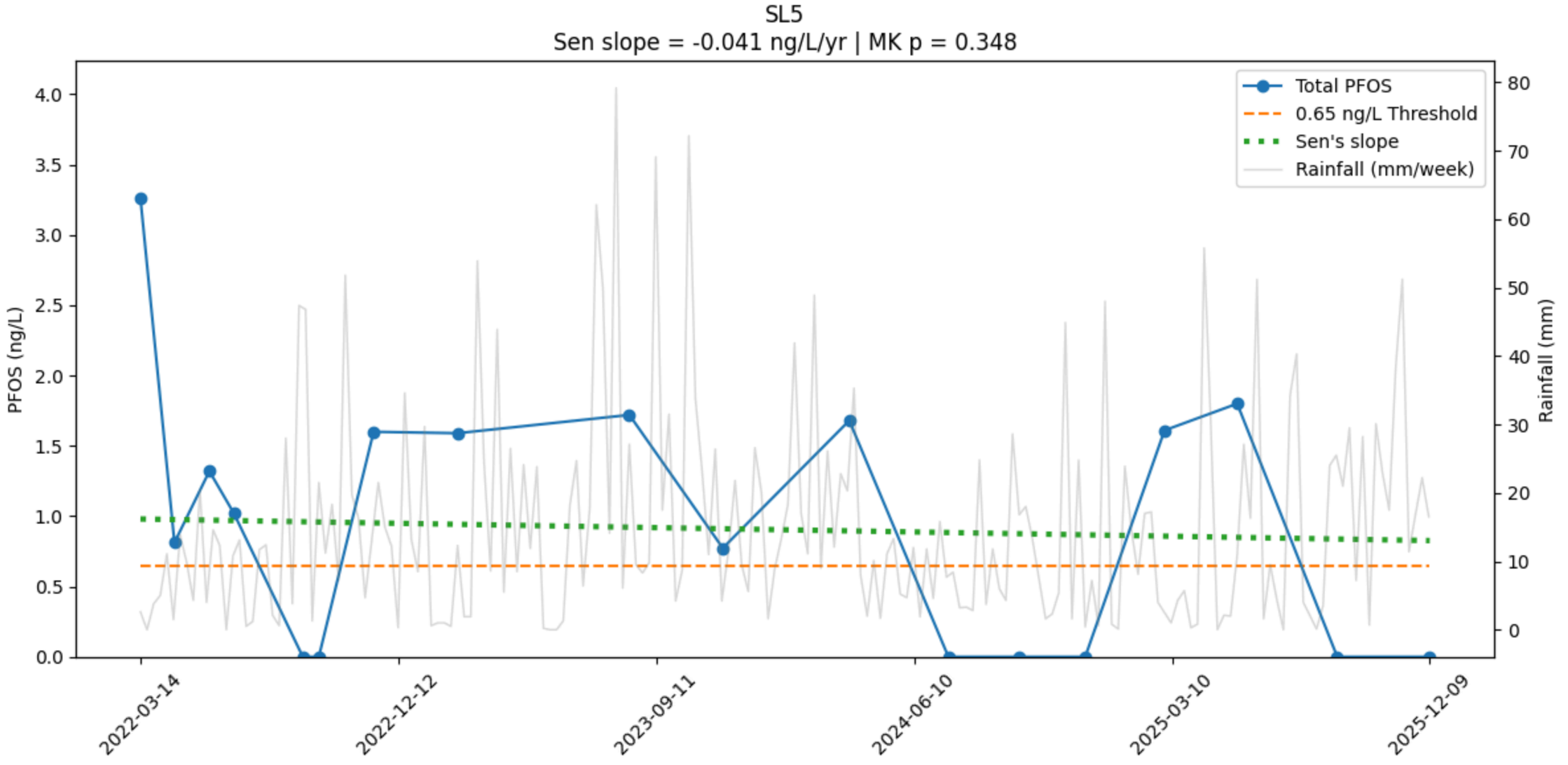
Surface Water Trends

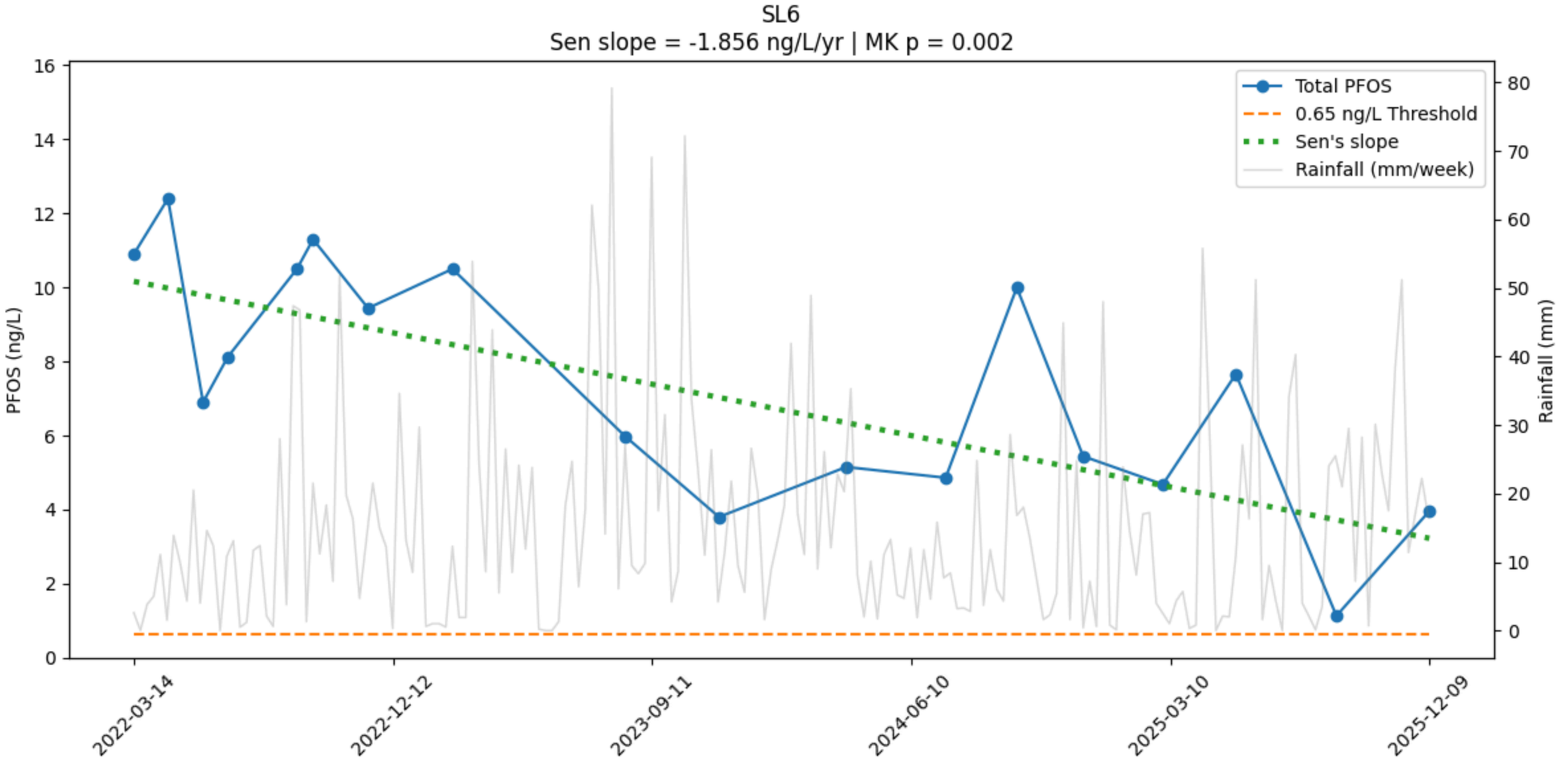

SL1
Sen slope = <0.001 ng/L/yr | MK p = 0.972
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
2
4
6
8
10
12
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-09

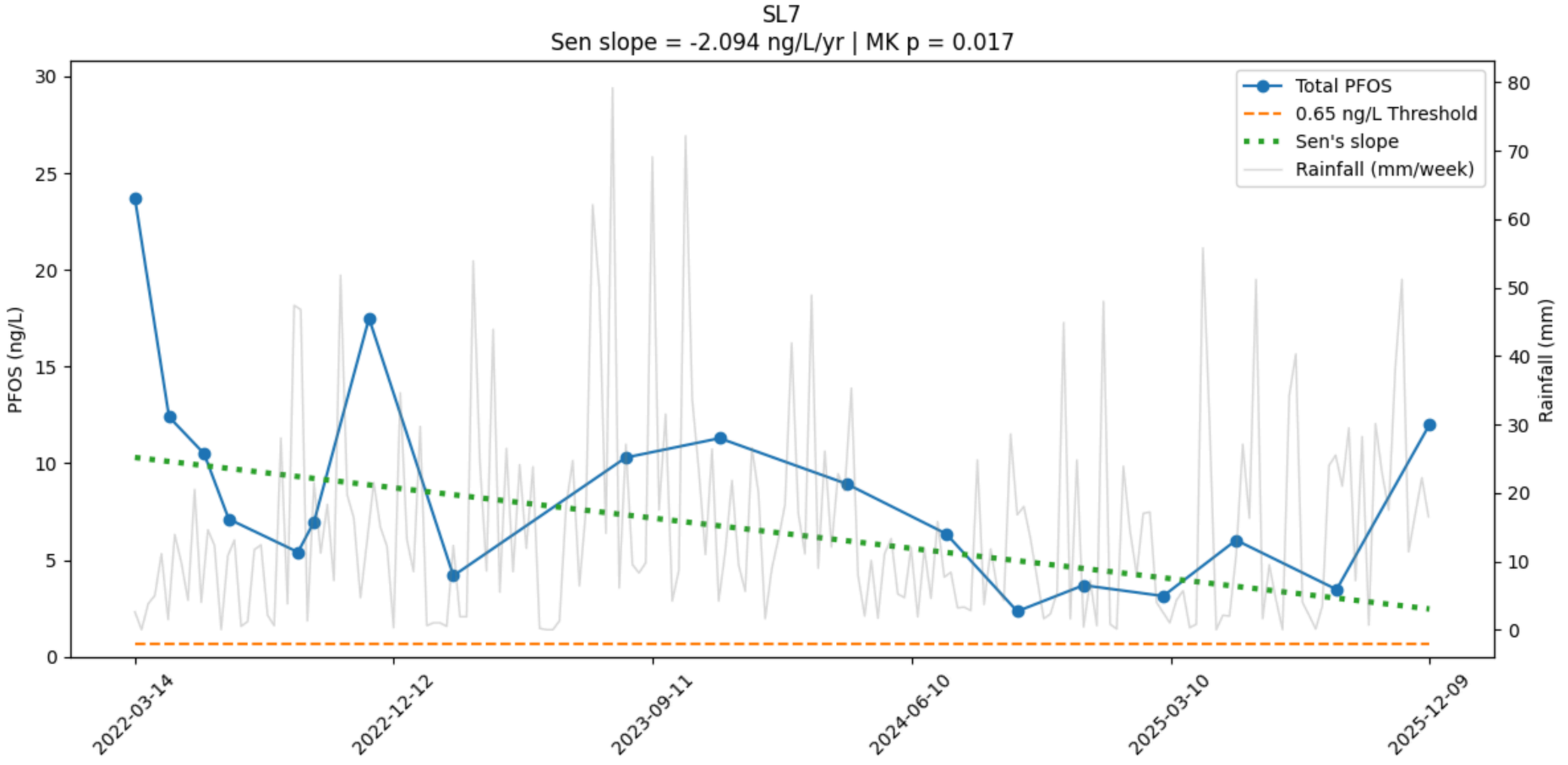

SL2
Sen slope = -3.325 ng/L/yr | MK p = 0.080
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-09

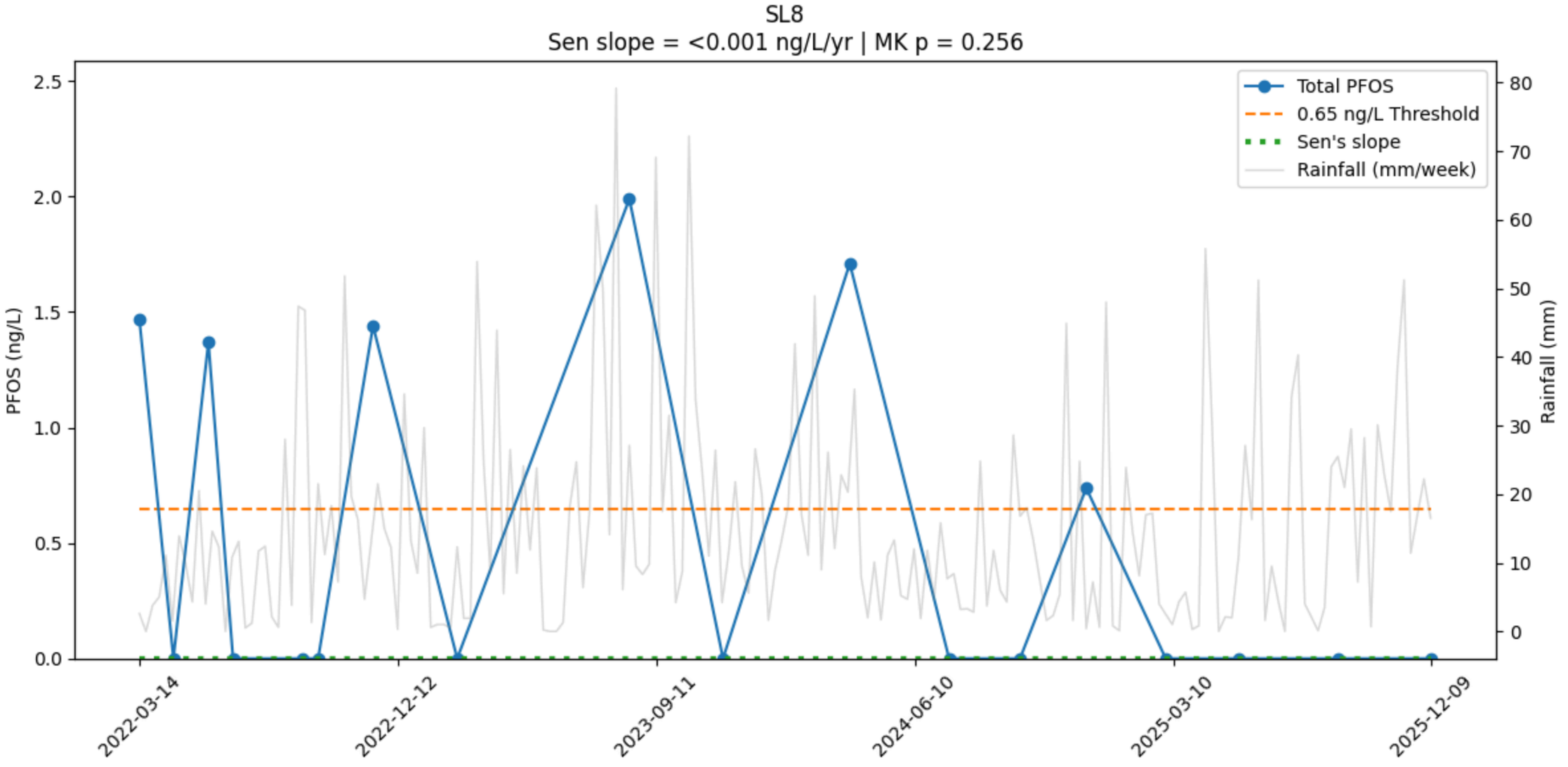

SL3
Sen slope = -1.334 ng/L/yr | MK p = 0.080
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-09

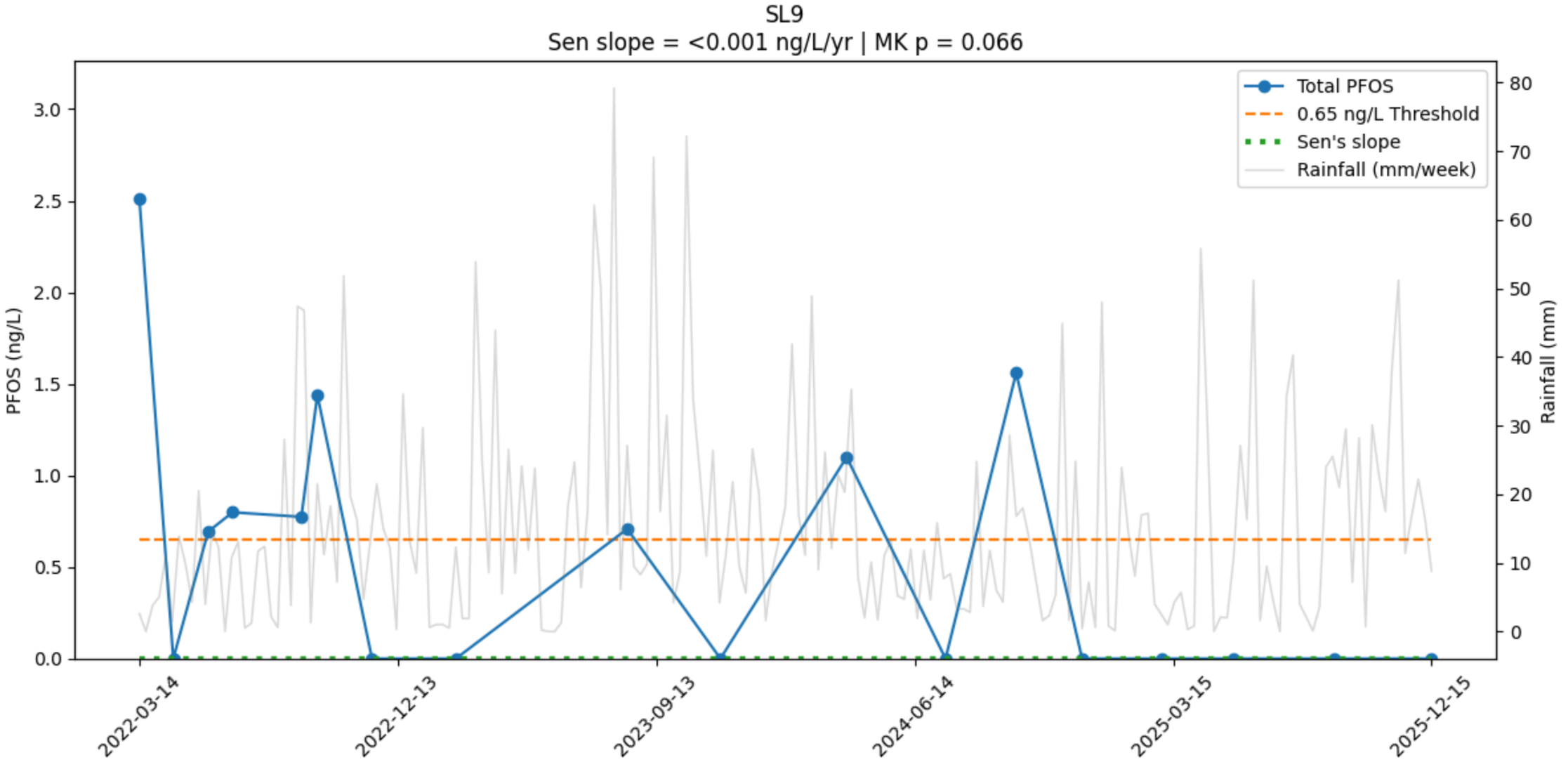

SL4
Sen slope = 0.073 ng/L/yr | MK p = 0.783
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
1
2
3
4
0
10
20
30
40
50
60
70
80
2021-11-15
2022-09-08
2023-07-02
2024-04-24
2025-02-15
2025-12-09

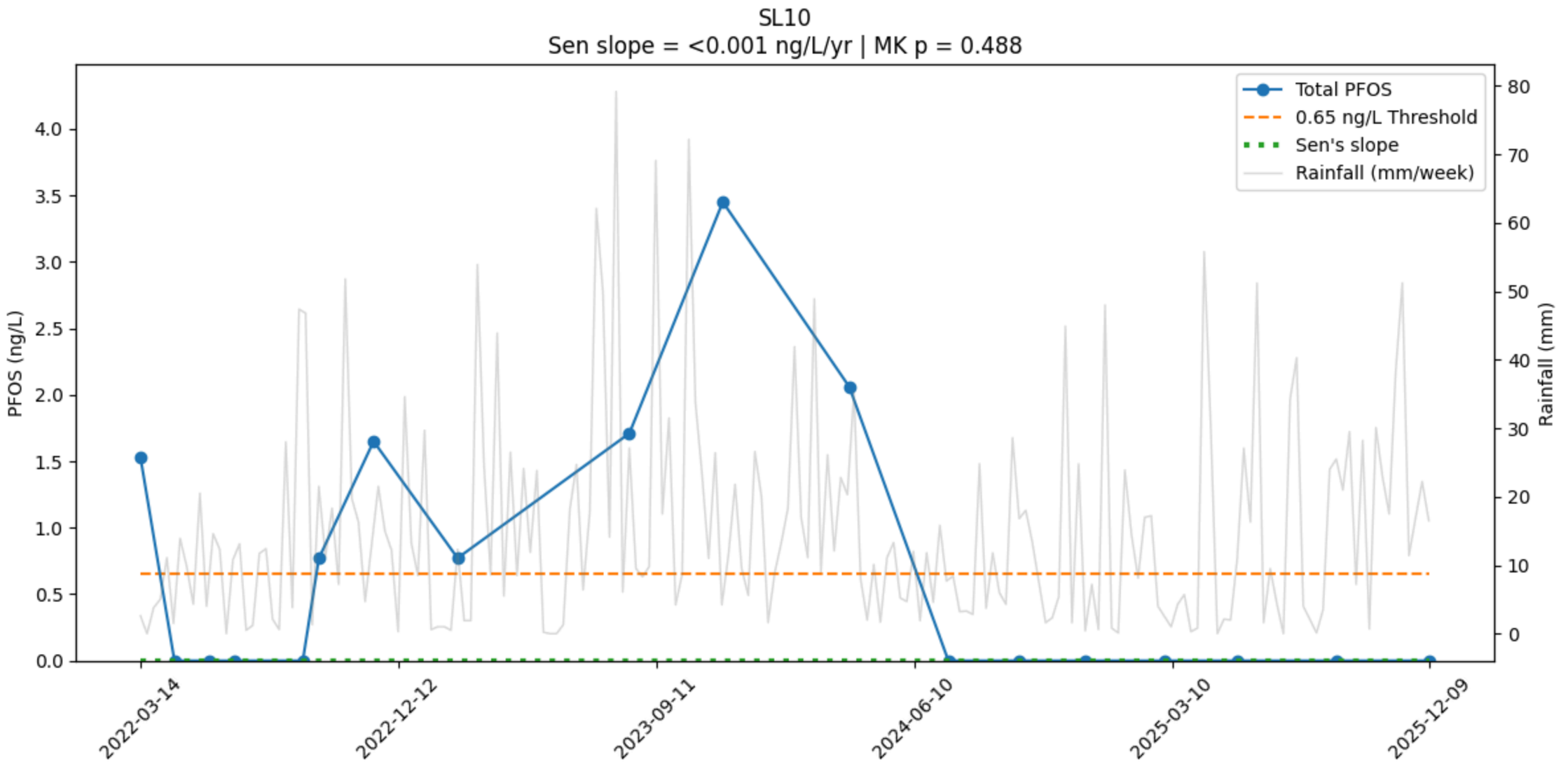

SL5
Sen slope = -0.041 ng/L/yr | MK p = 0.348
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

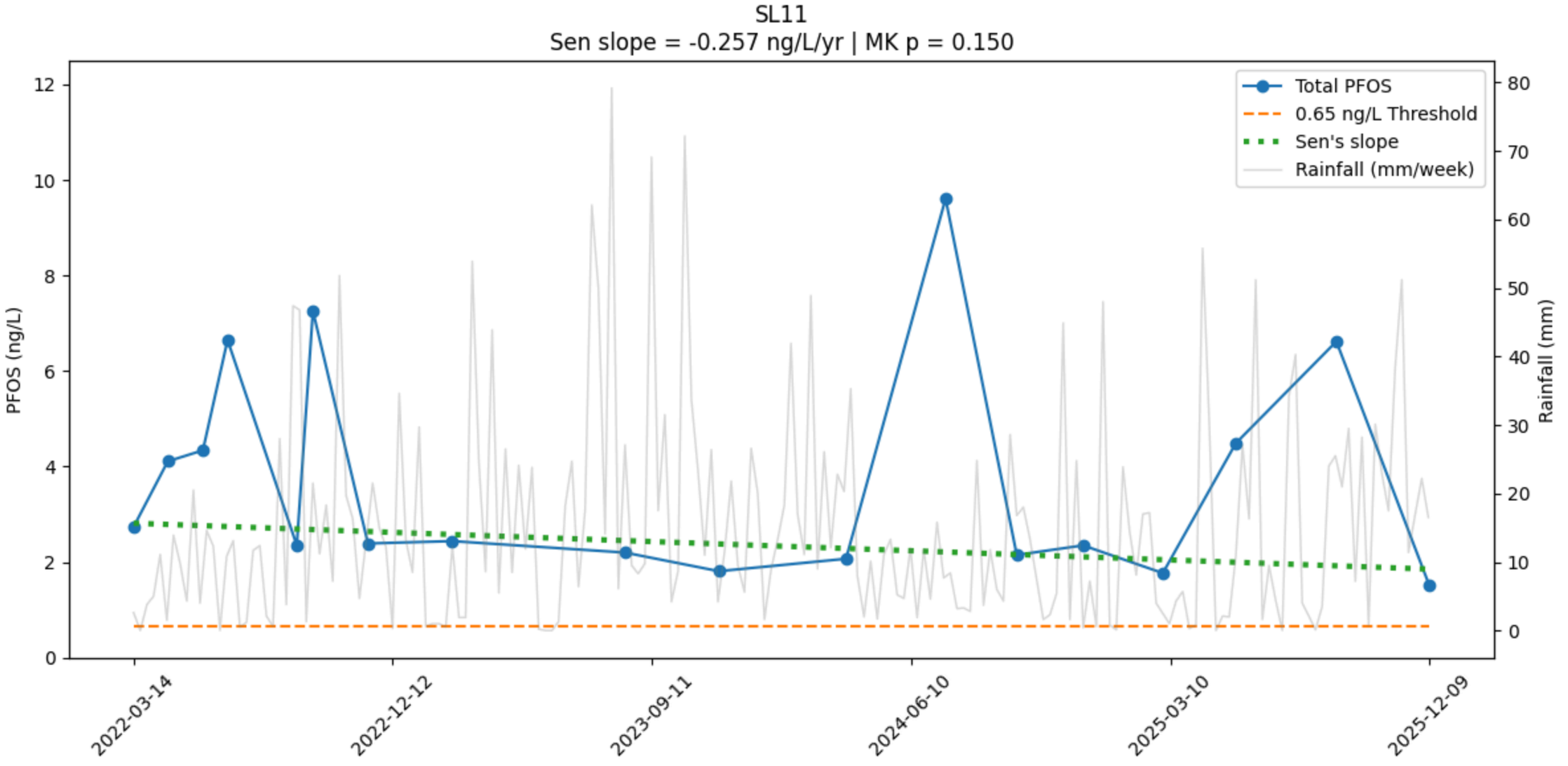

SL6
Sen slope = -1.856 ng/L/yr | MK p = 0.002
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
2
4
6
8
10
12
14
16
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

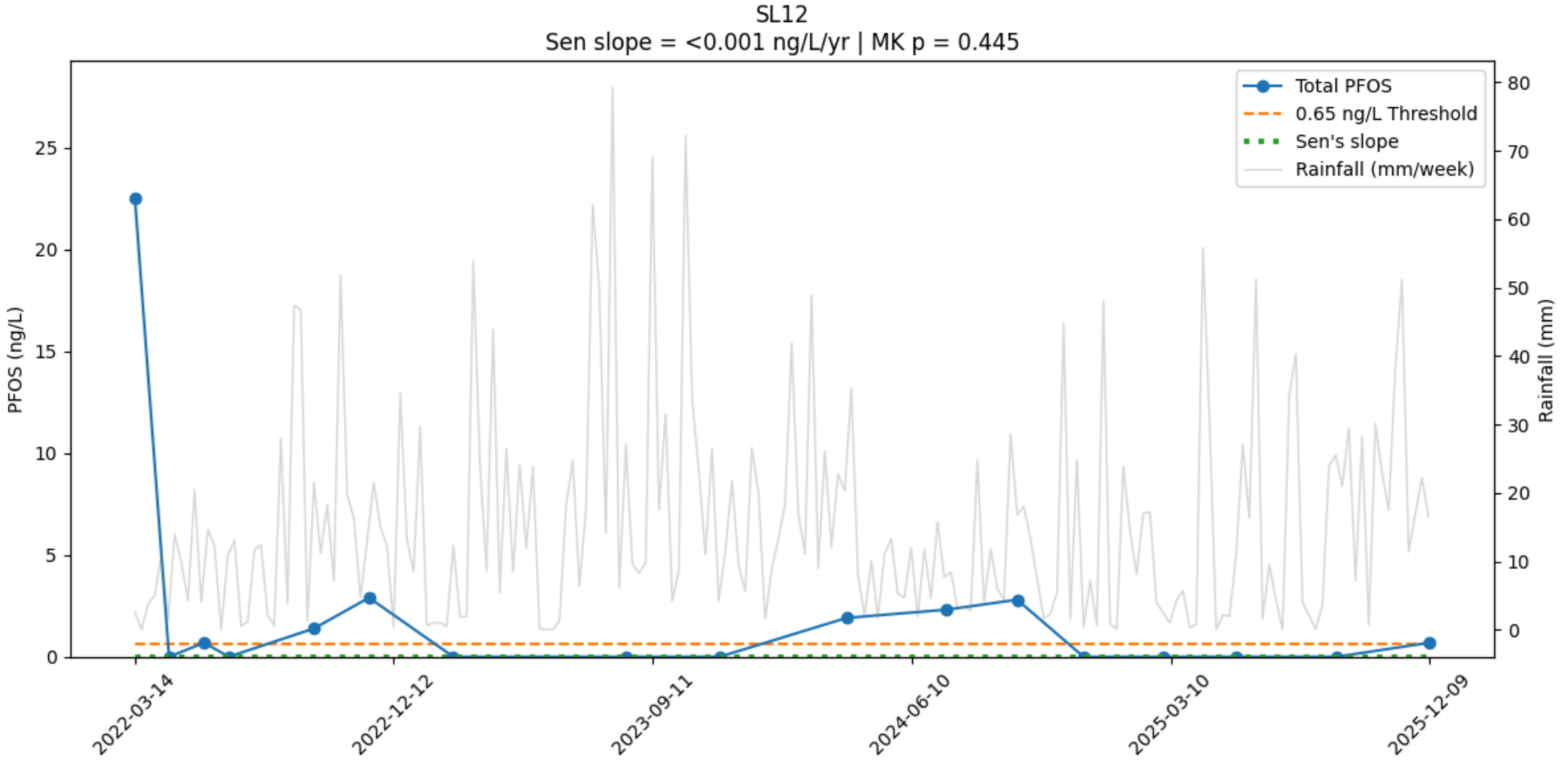

SL7
Sen slope = -2.094 ng/L/yr | MK p = 0.017
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

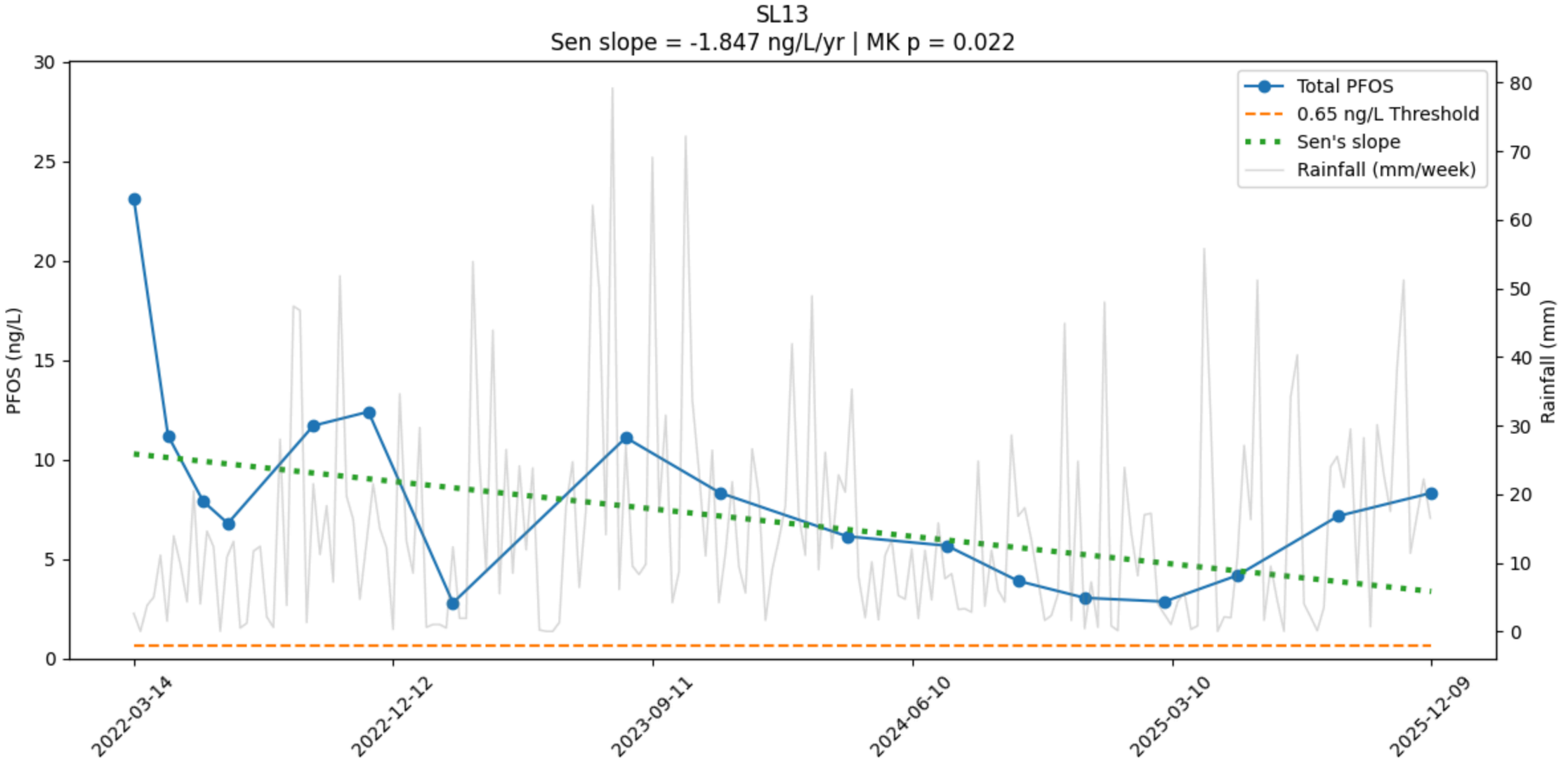

SL8
Sen slope = <0.001 ng/L/yr | MK p = 0.256
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

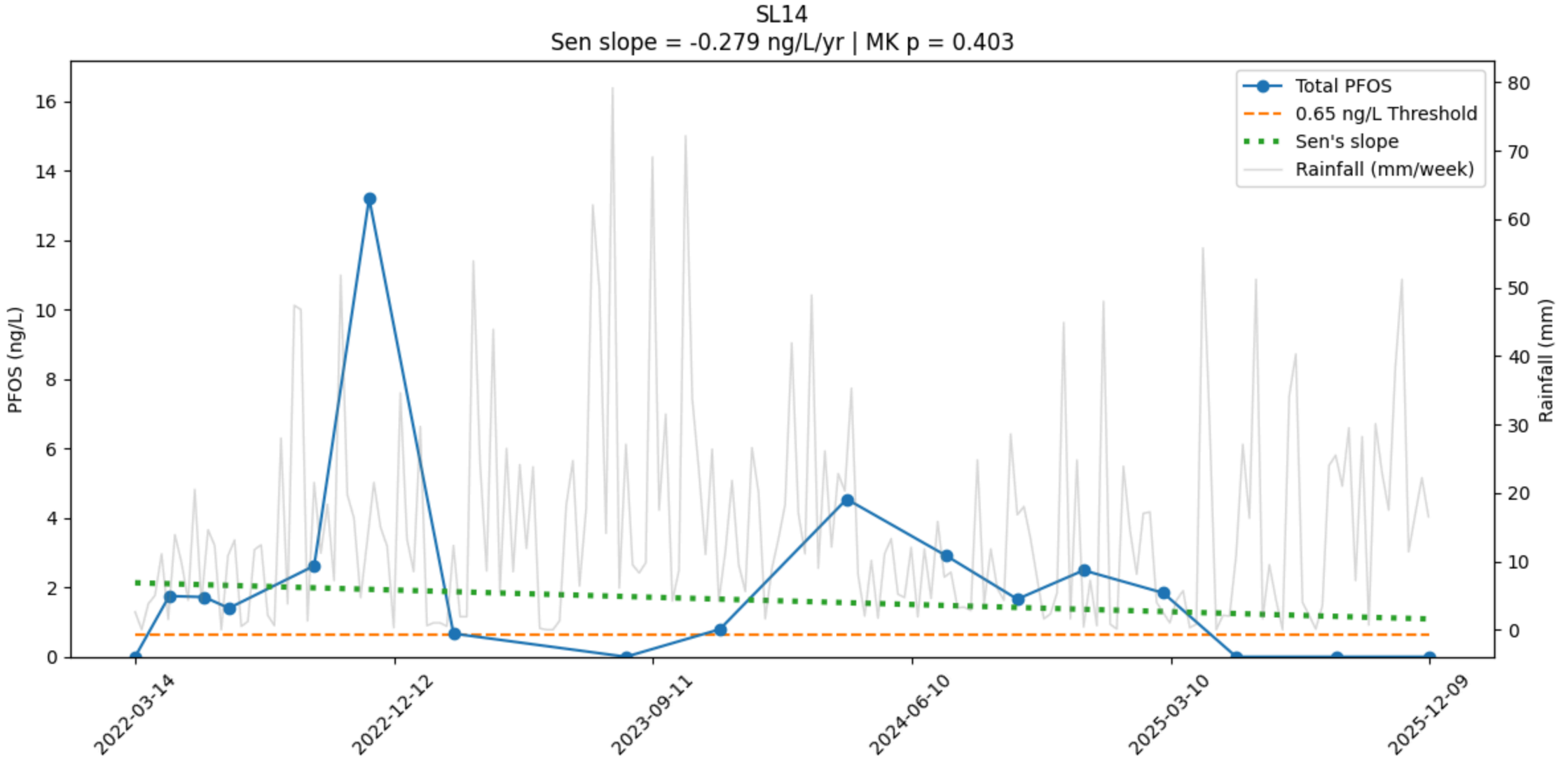

SL9
Sen slope = <0.001 ng/L/yr | MK p = 0.066
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-13
2023-09-13
2024-06-14
2025-03-15
2025-12-15

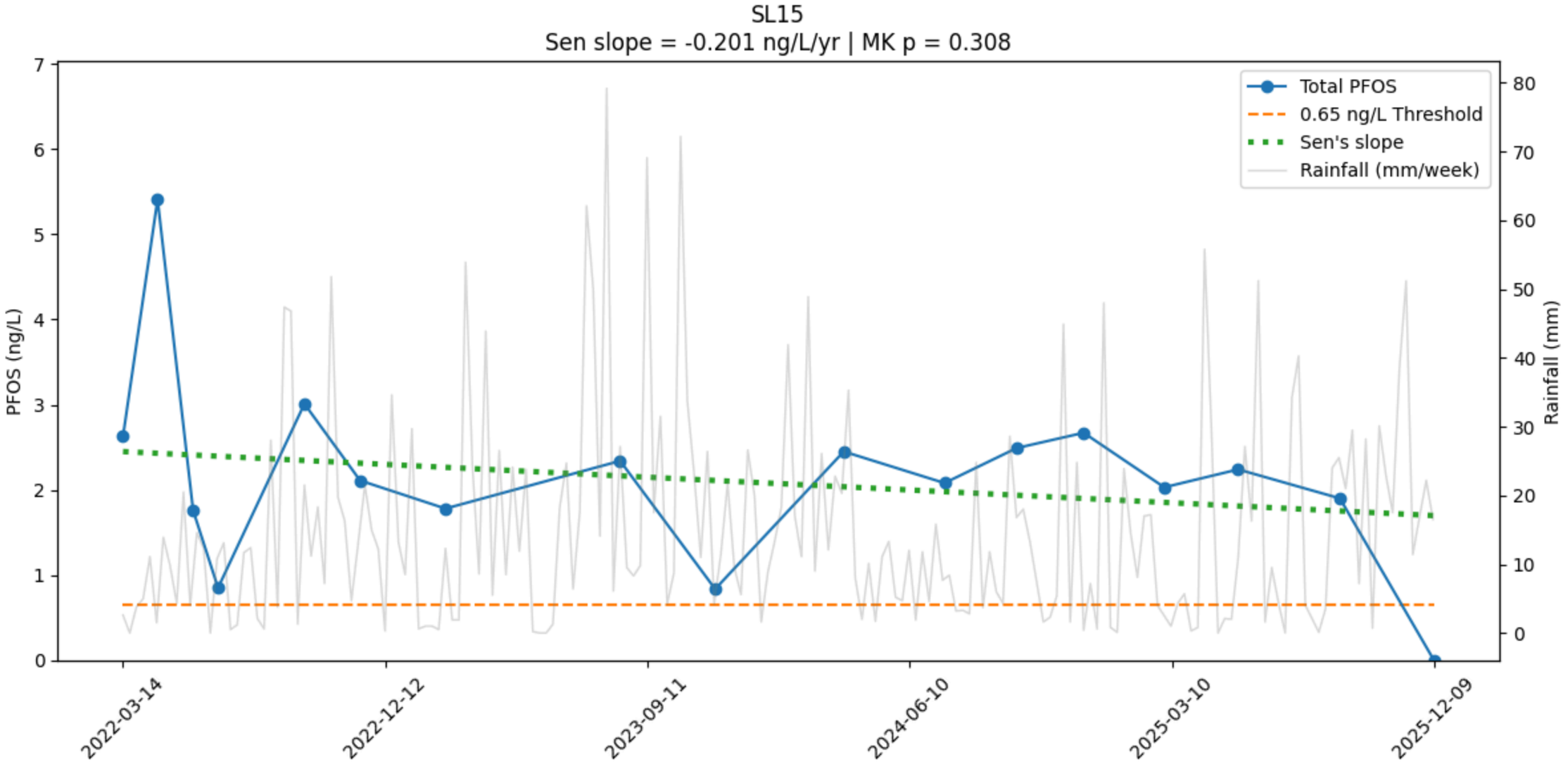

SL10
Sen slope = <0.001 ng/L/yr | MK p = 0.488
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

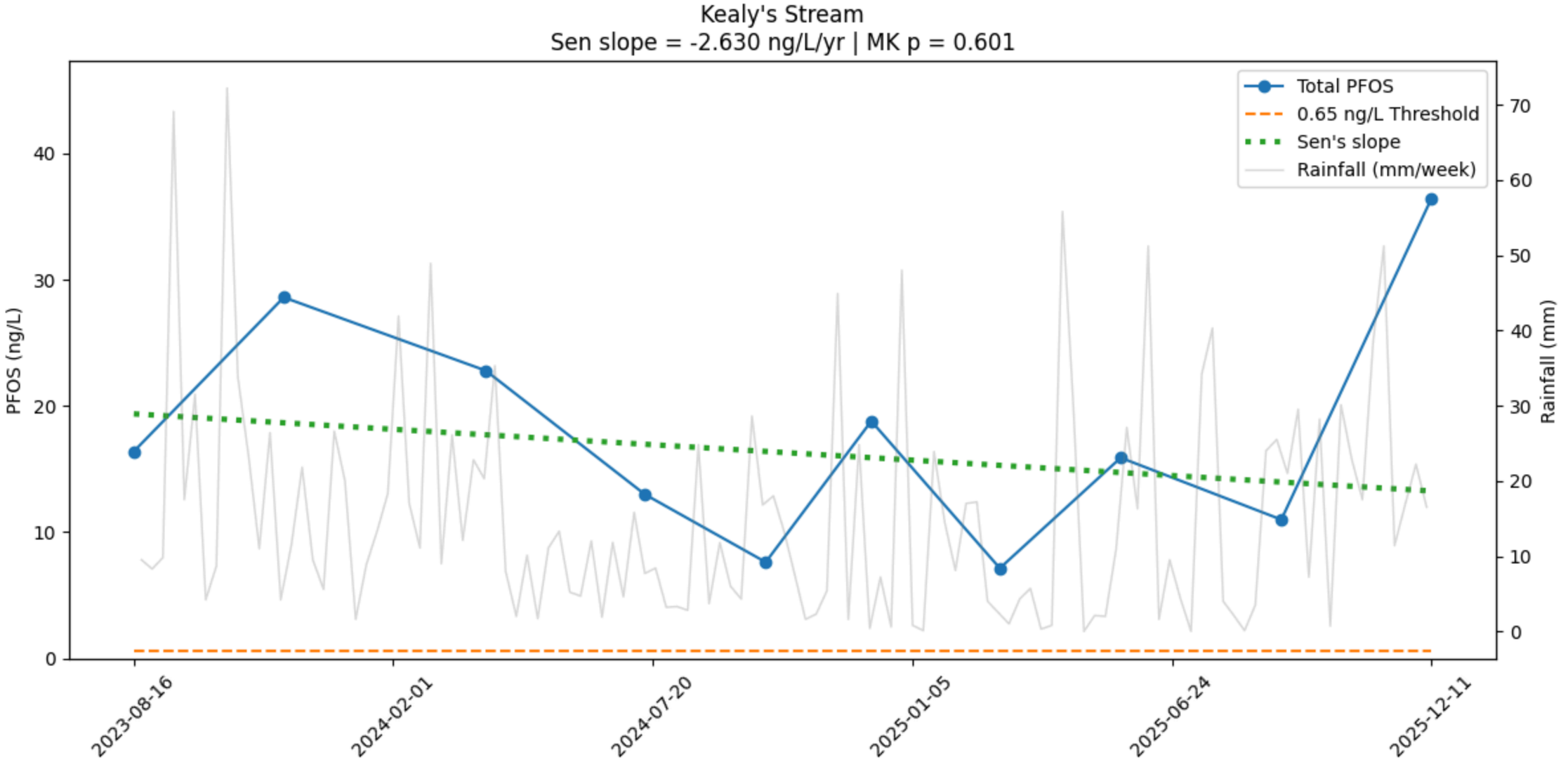

SL11
Sen slope = -0.257 ng/L/yr | MK p = 0.150
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
2
4
6
8
10
12
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

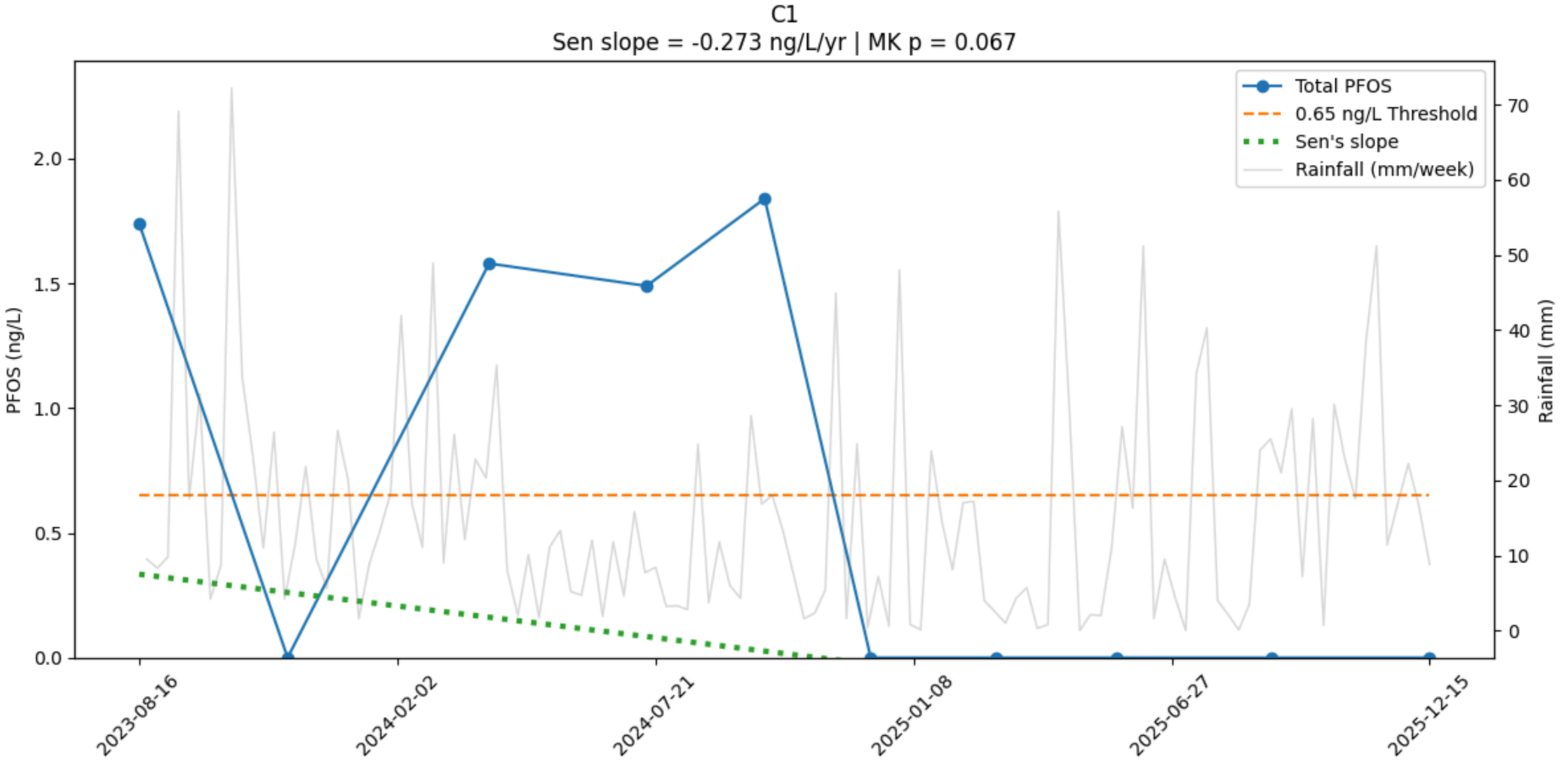

SL12
Sen slope = <0.001 ng/L/yr | MK p = 0.445
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

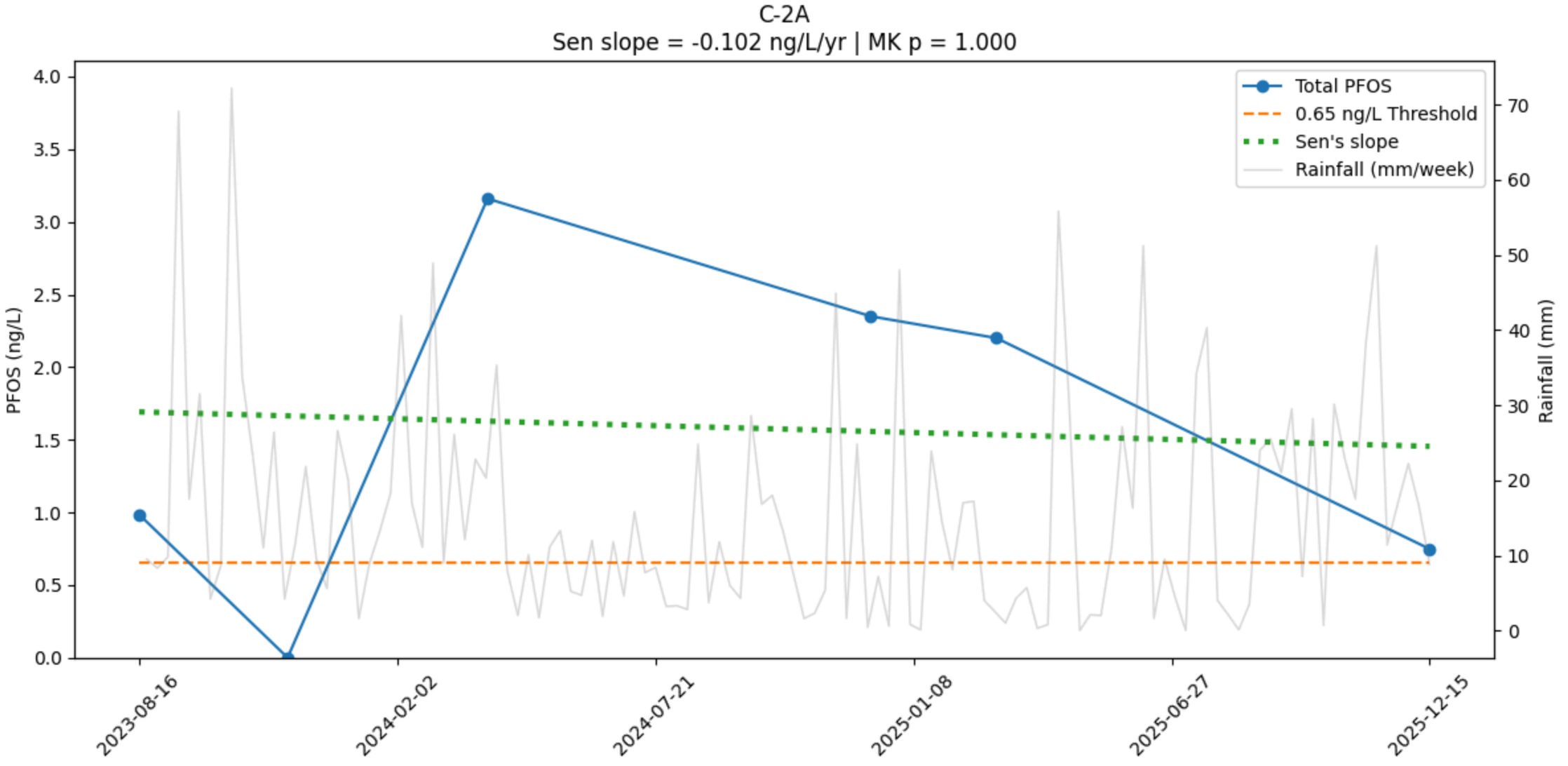

SL13
Sen slope = -1.847 ng/L/yr | MK p = 0.022
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

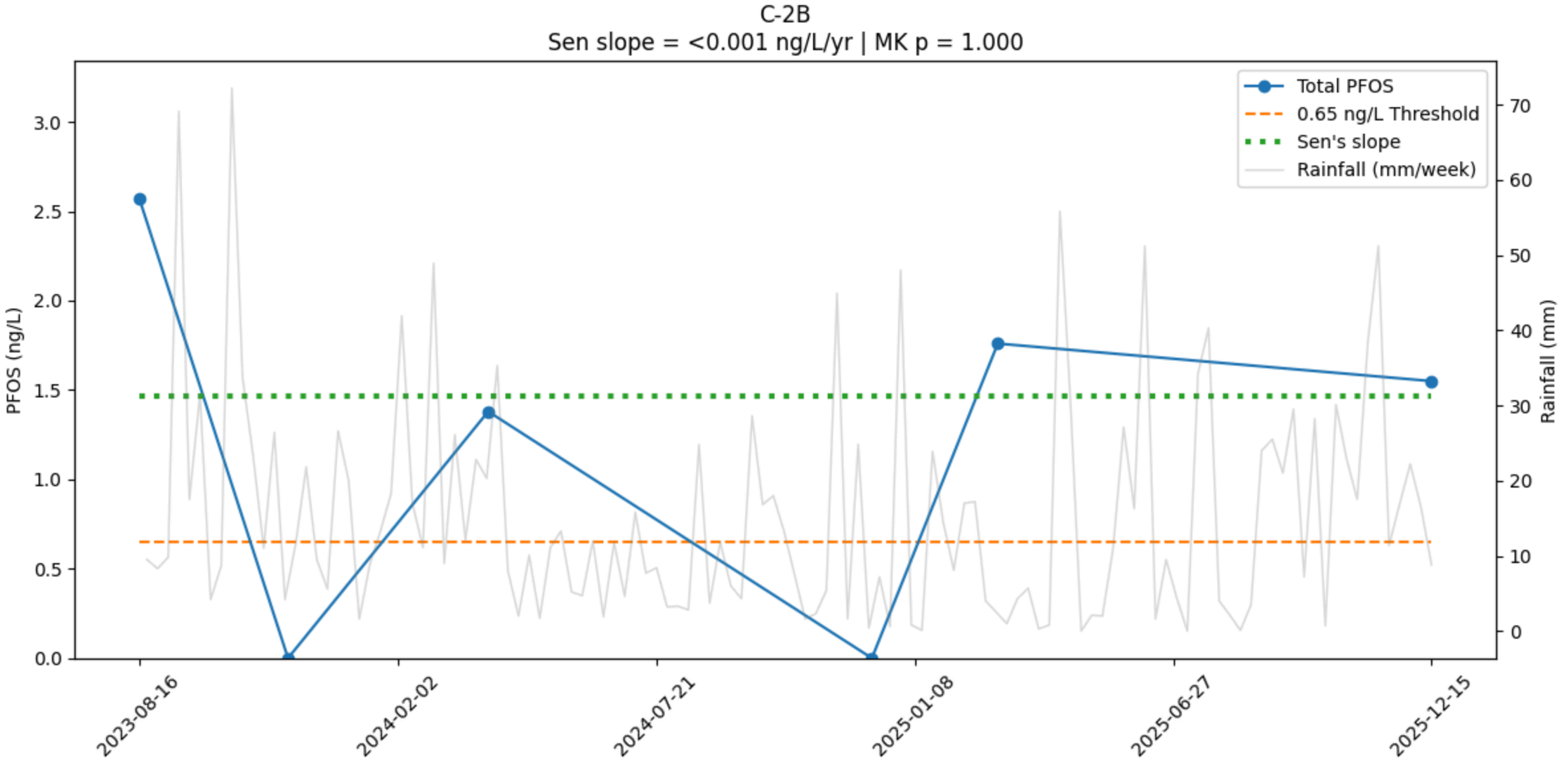

SL14
Sen slope = -0.279 ng/L/yr | MK p = 0.403
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
2
4
6
8
10
12
14
16
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

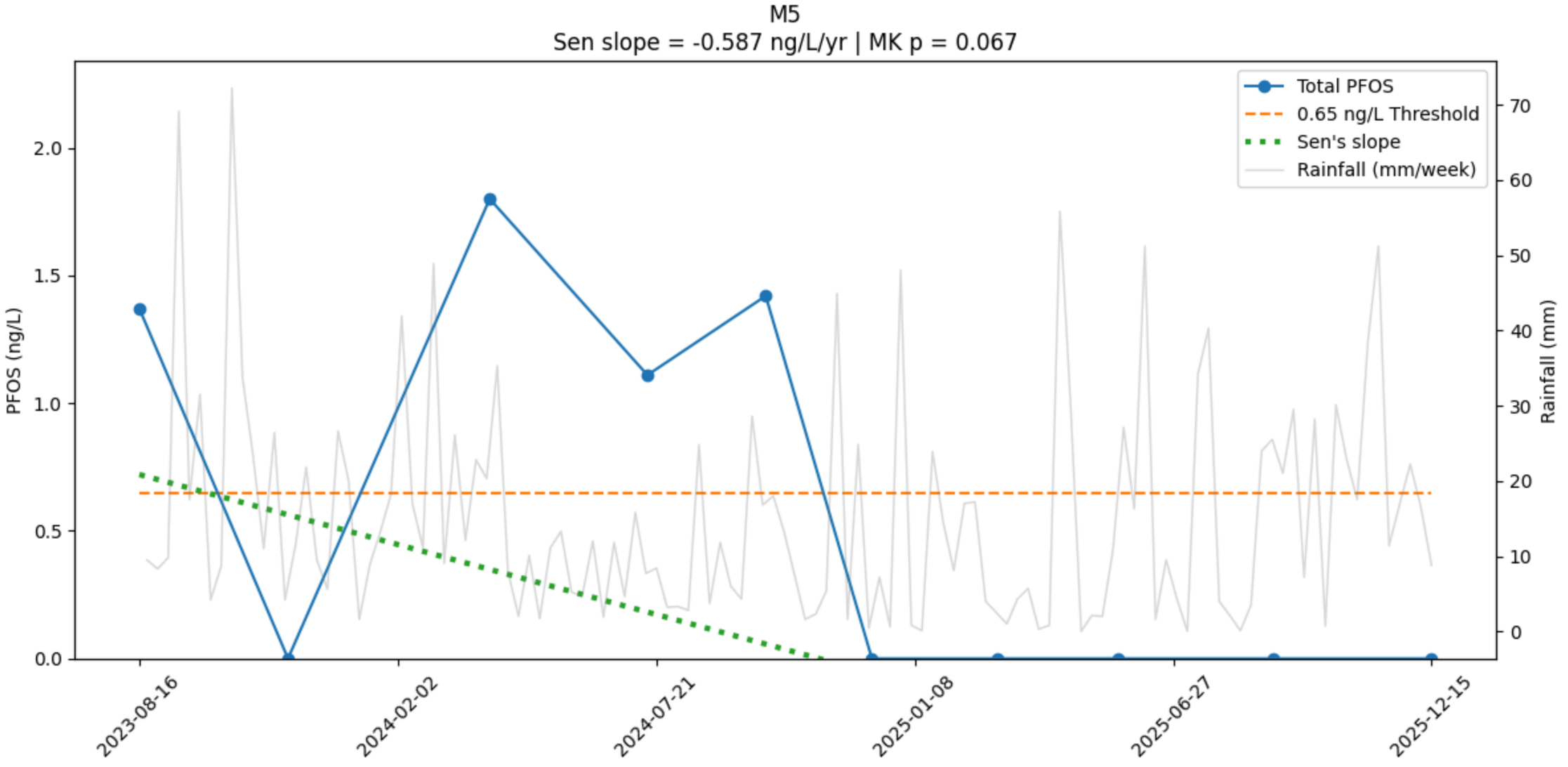

SL15
Sen slope = -0.201 ng/L/yr | MK p = 0.308
PFOS (ng/L)
Rainfall (mm)
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
0
1
2
3
4
5
6
7
0
10
20
30
40
50
60
70
80
2022-03-14
2022-12-12
2023-09-11
2024-06-10
2025-03-10
2025-12-09

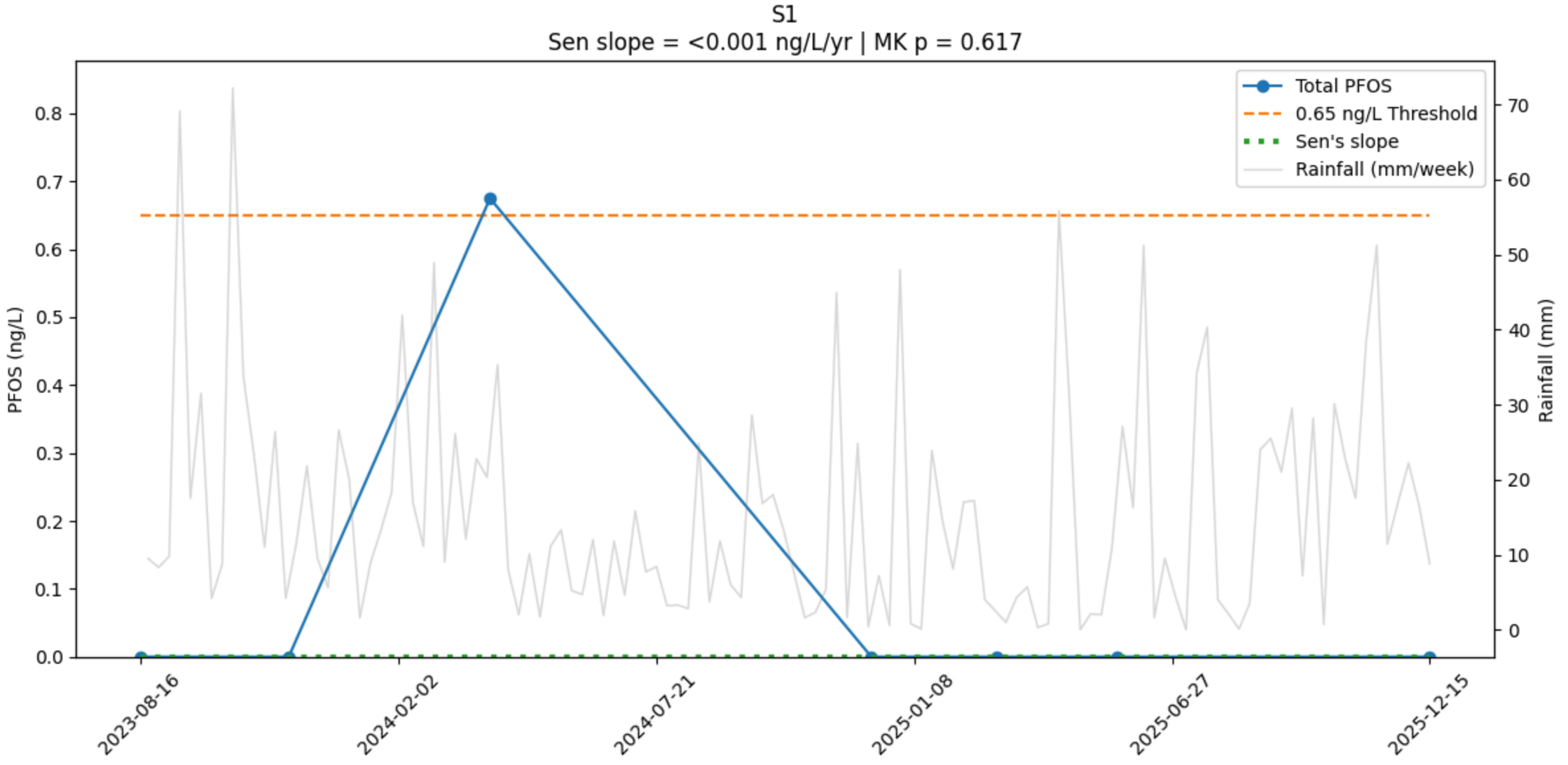

Kealy's Stream
Sen slope = -2.630 ng/L/yr | MK p = 0.601
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
10
20
30
40
0
10
20
30
40
50
60
70
2023-08-16
2024-02-01
2024-07-20
2025-01-05
2025-06-24
2025-12-11

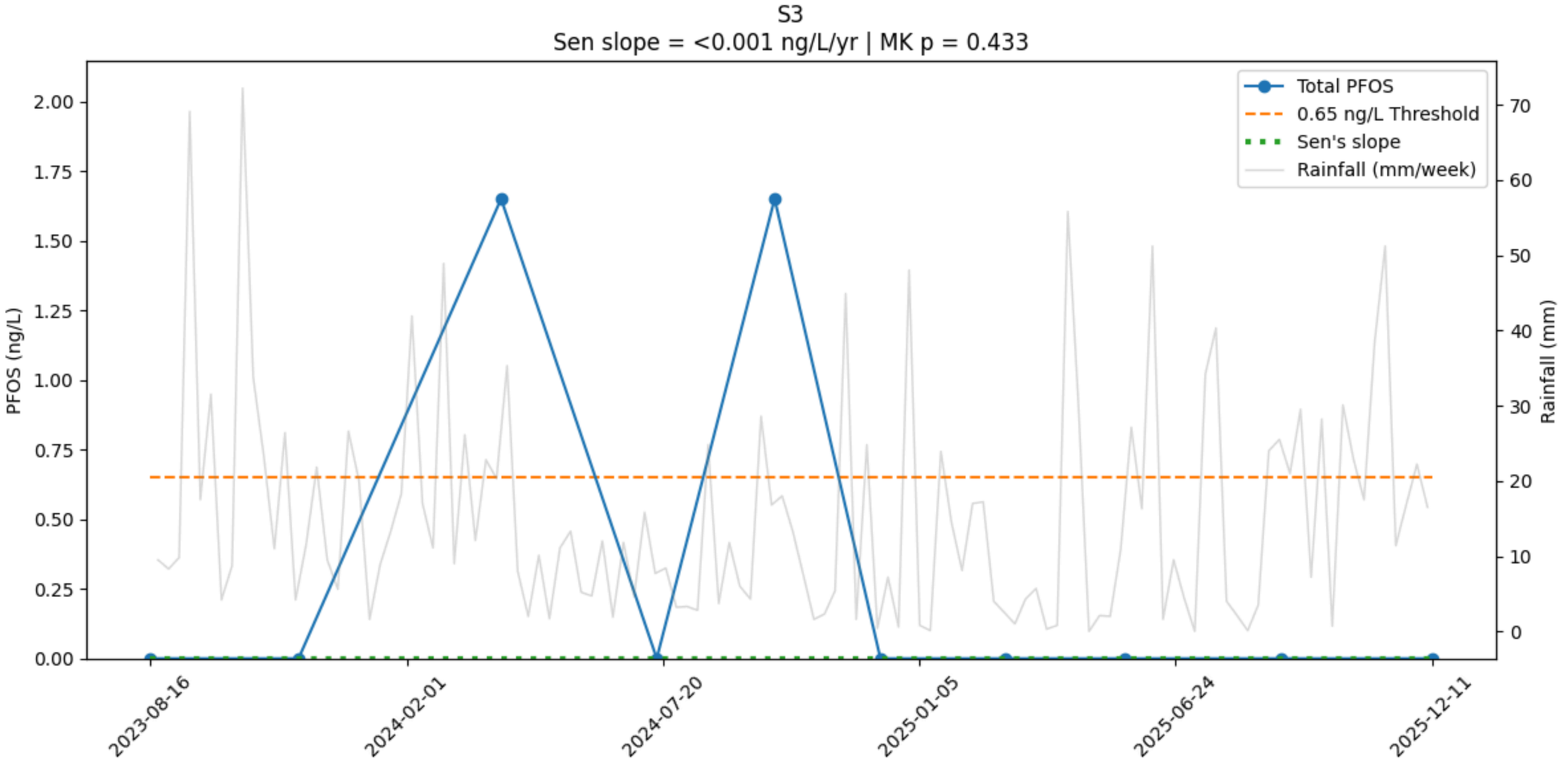

C1
Sen slope = -0.273 ng/L/yr | MK p = 0.067
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
0
10
20
30
40
50
60
70
2023-08-16
2024-02-02
2024-07-21
2025-01-08
2025-06-27
2025-12-15

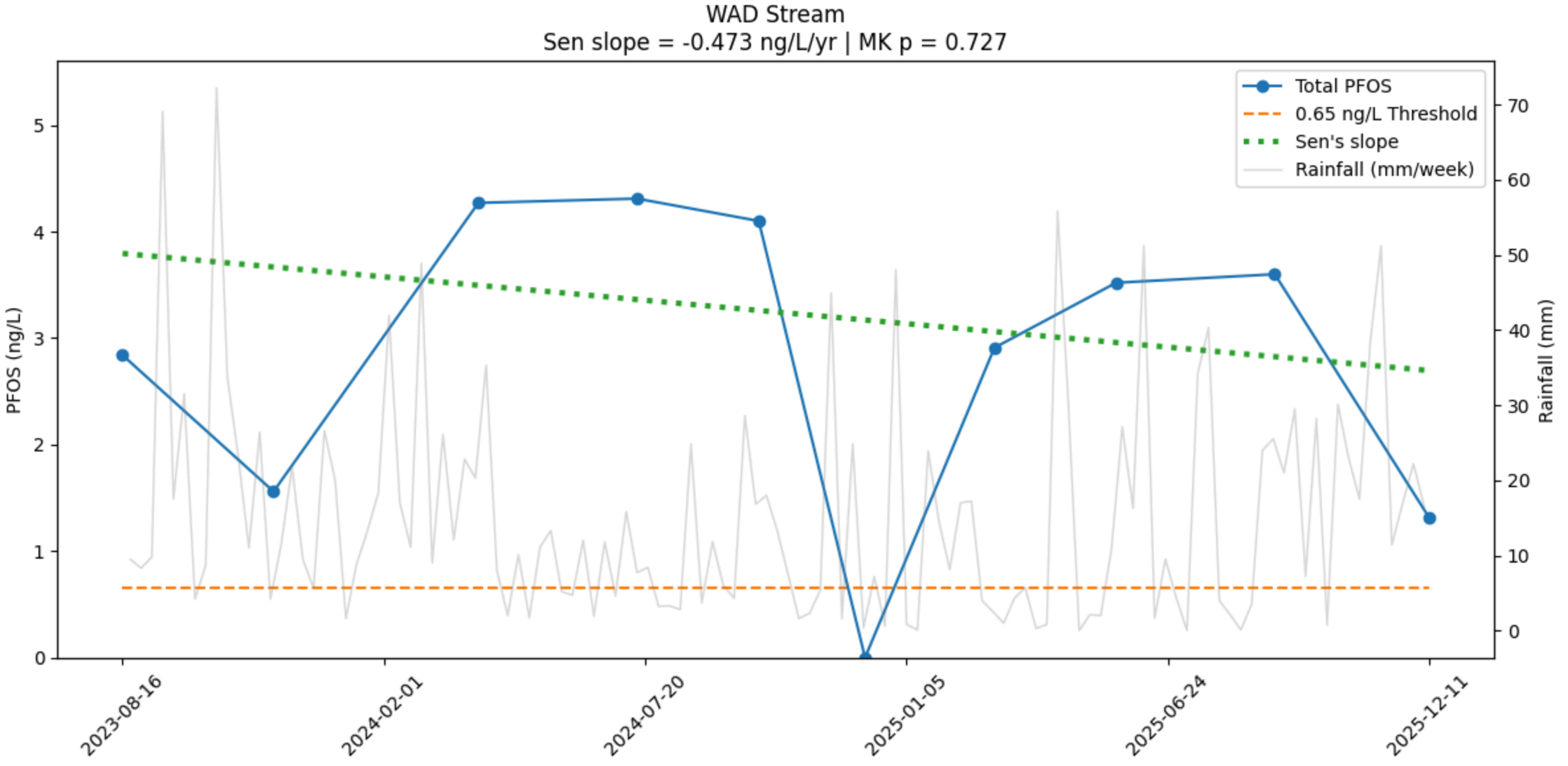

C-2A
Sen slope = -0.102 ng/L/yr | MK p = 1.000
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0
10
20
30
40
50
60
70
2023-08-16
2024-02-02
2024-07-21
2025-01-08
2025-06-27
2025-12-15

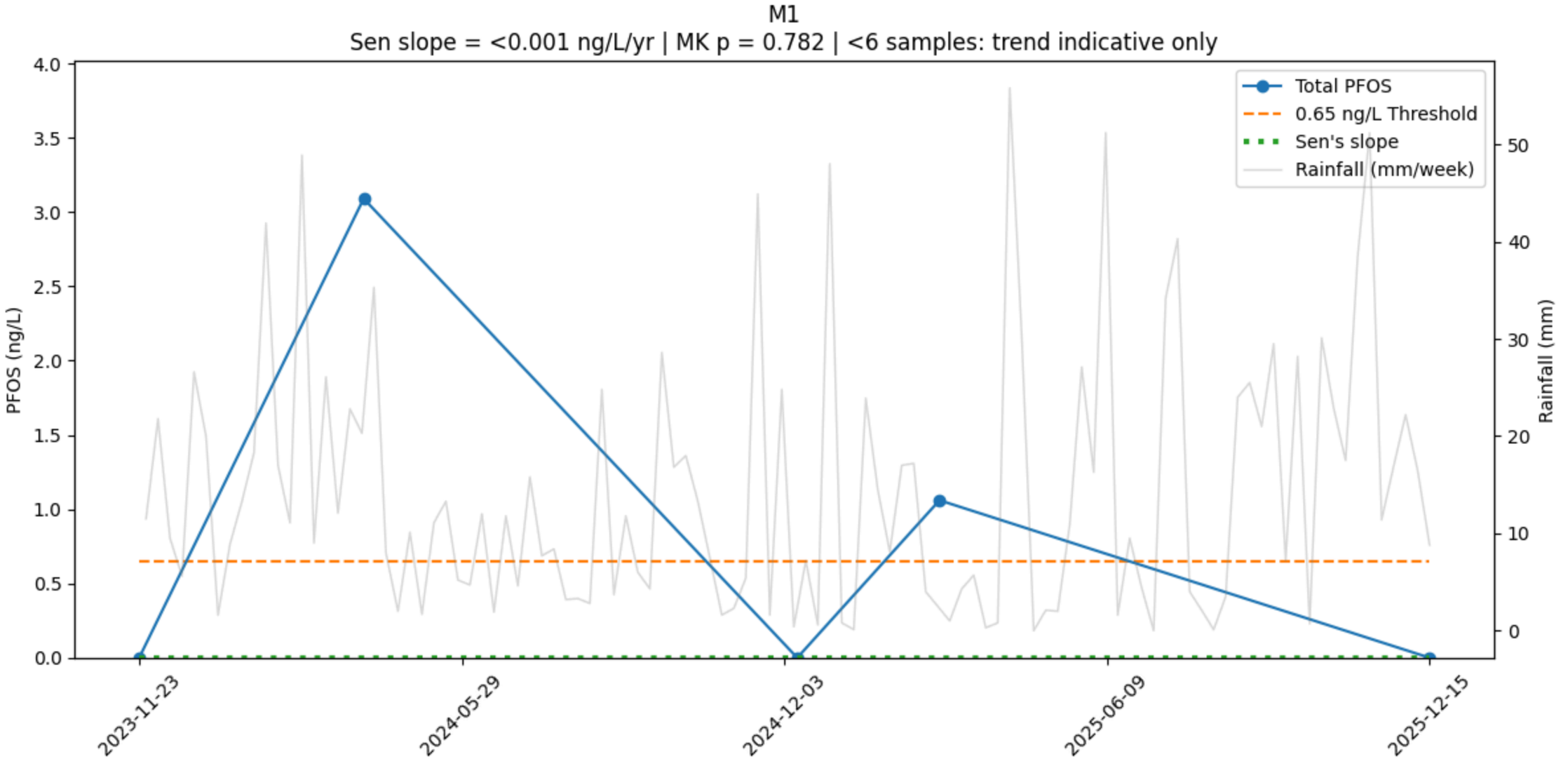

C-2B
Sen slope = <0.001 ng/L/yr | MK p = 1.000
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
10
20
30
40
50
60
70
2023-08-16
2024-02-02
2024-07-21
2025-01-08
2025-06-27
2025-12-15

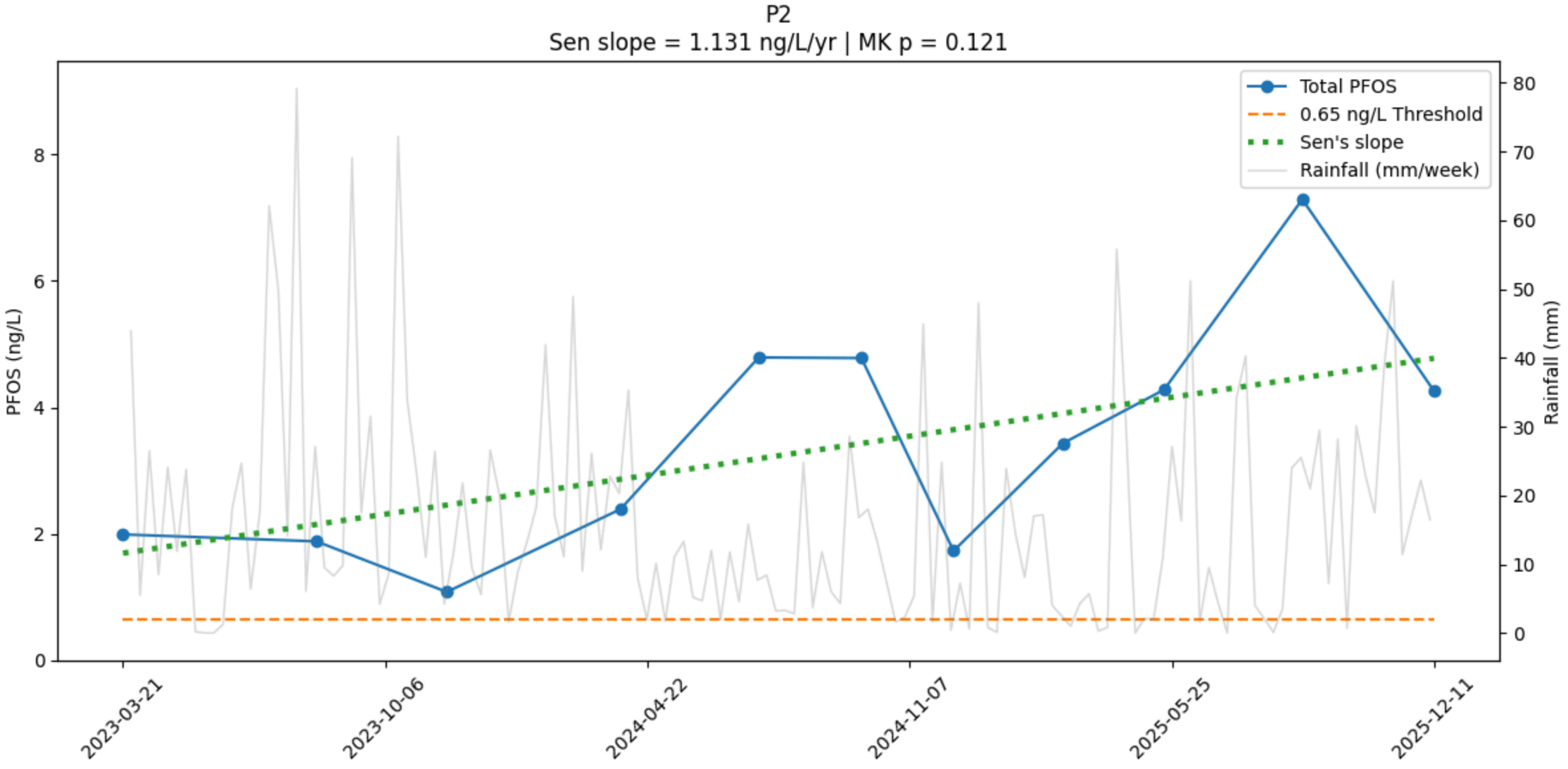

M5
Sen slope = -0.587 ng/L/yr | MK p = 0.067
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
0
10
20
30
40
50
60
70
2023-08-16
2024-02-02
2024-07-21
2025-01-08
2025-06-27
2025-12-15

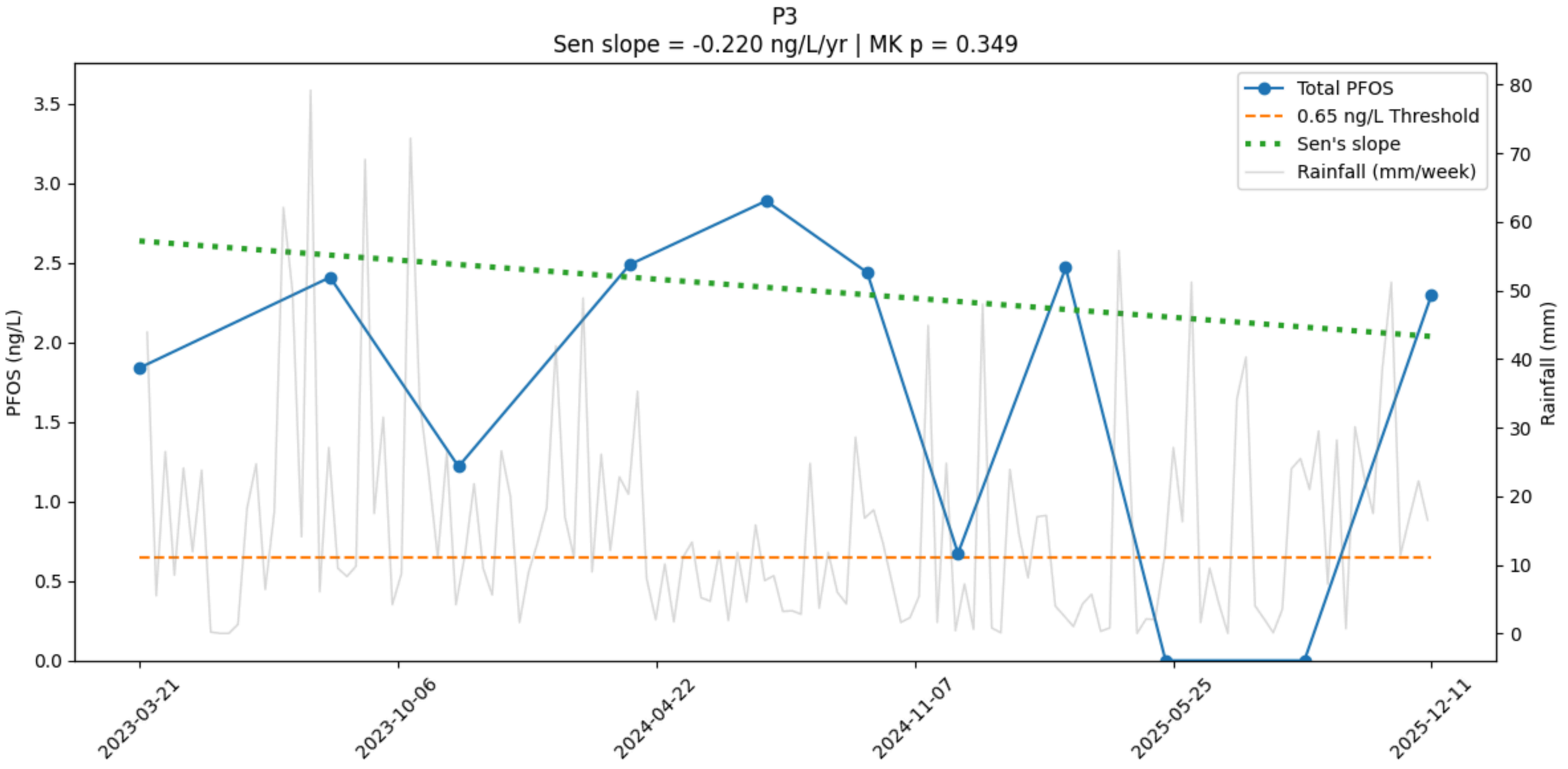

S1
Sen slope = <0.001 ng/L/yr | MK p = 0.617
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0
10
20
30
40
50
60
70
2023-08-16
2024-02-02
2024-07-21
2025-01-08
2025-06-27
2025-12-15

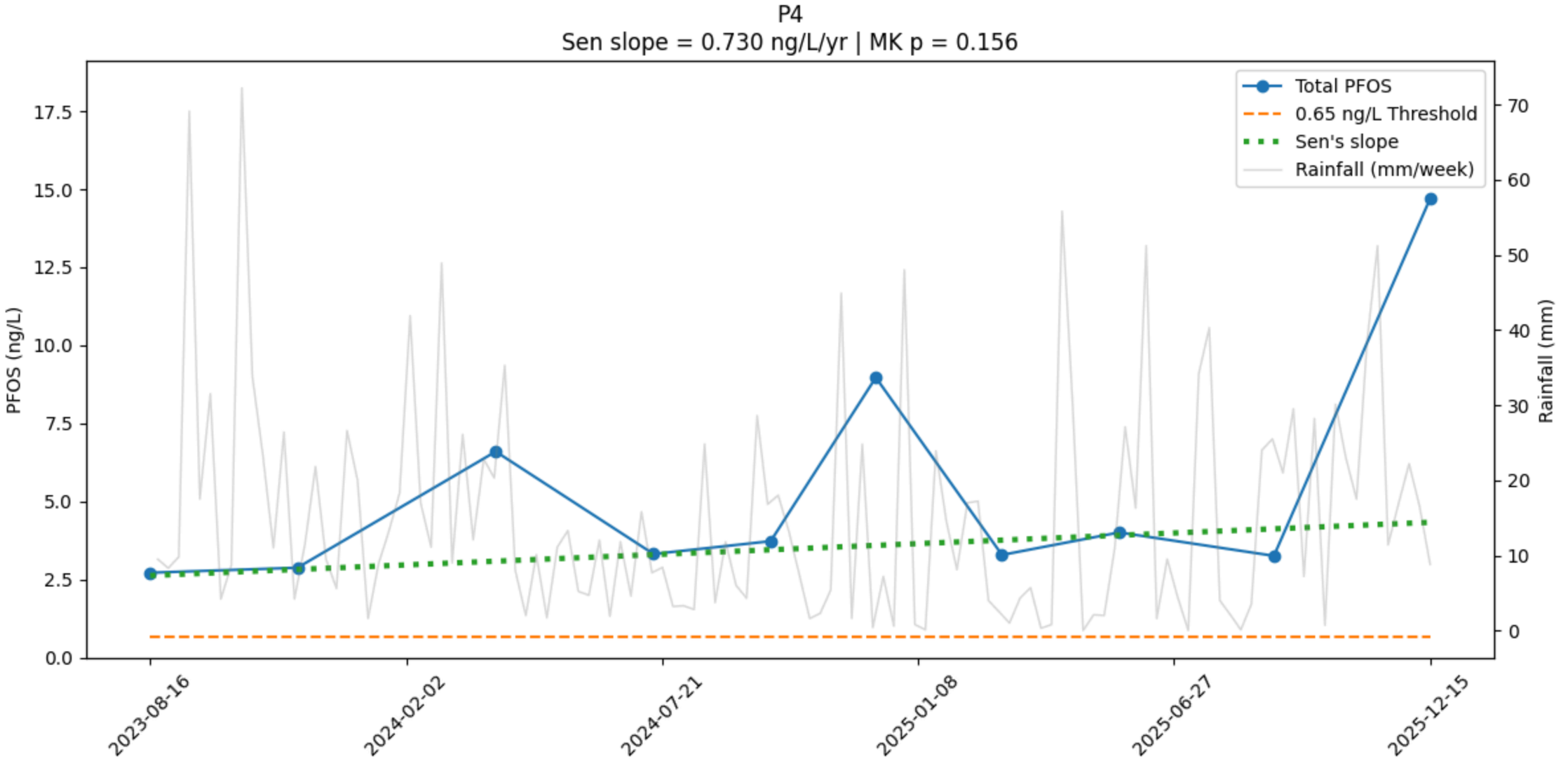

S3
Sen slope = <0.001 ng/L/yr | MK p = 0.433
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
0
10
20
30
40
50
60
70
2023-08-16
2024-02-01
2024-07-20
2025-01-05
2025-06-24
2025-12-11

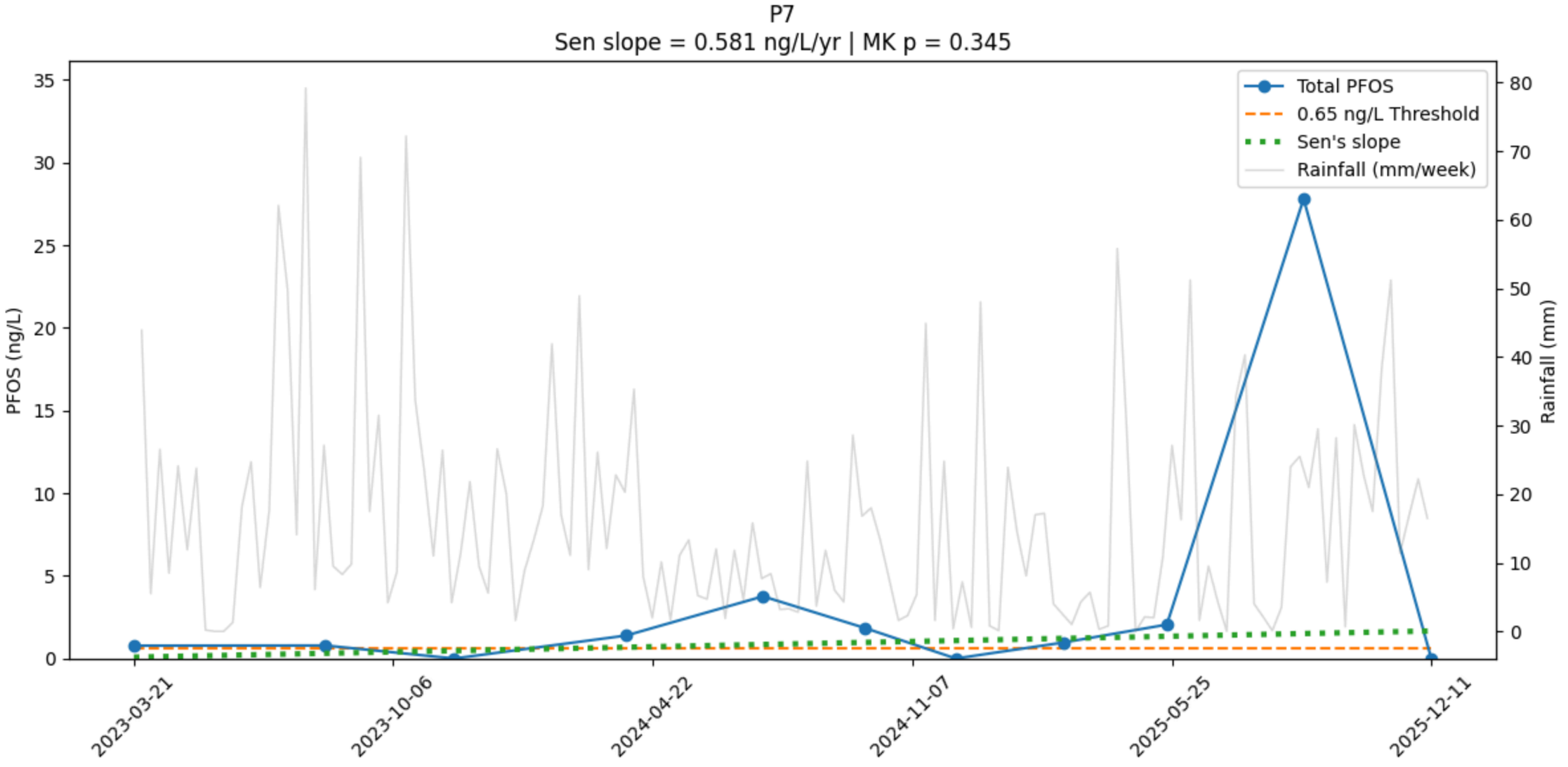

WAD Stream
Sen slope = -0.473 ng/L/yr | MK p = 0.727
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
1
2
3
4
5
0
10
20
30
40
50
60
70
2023-08-16
2024-02-01
2024-07-20
2025-01-05
2025-06-24
2025-12-11

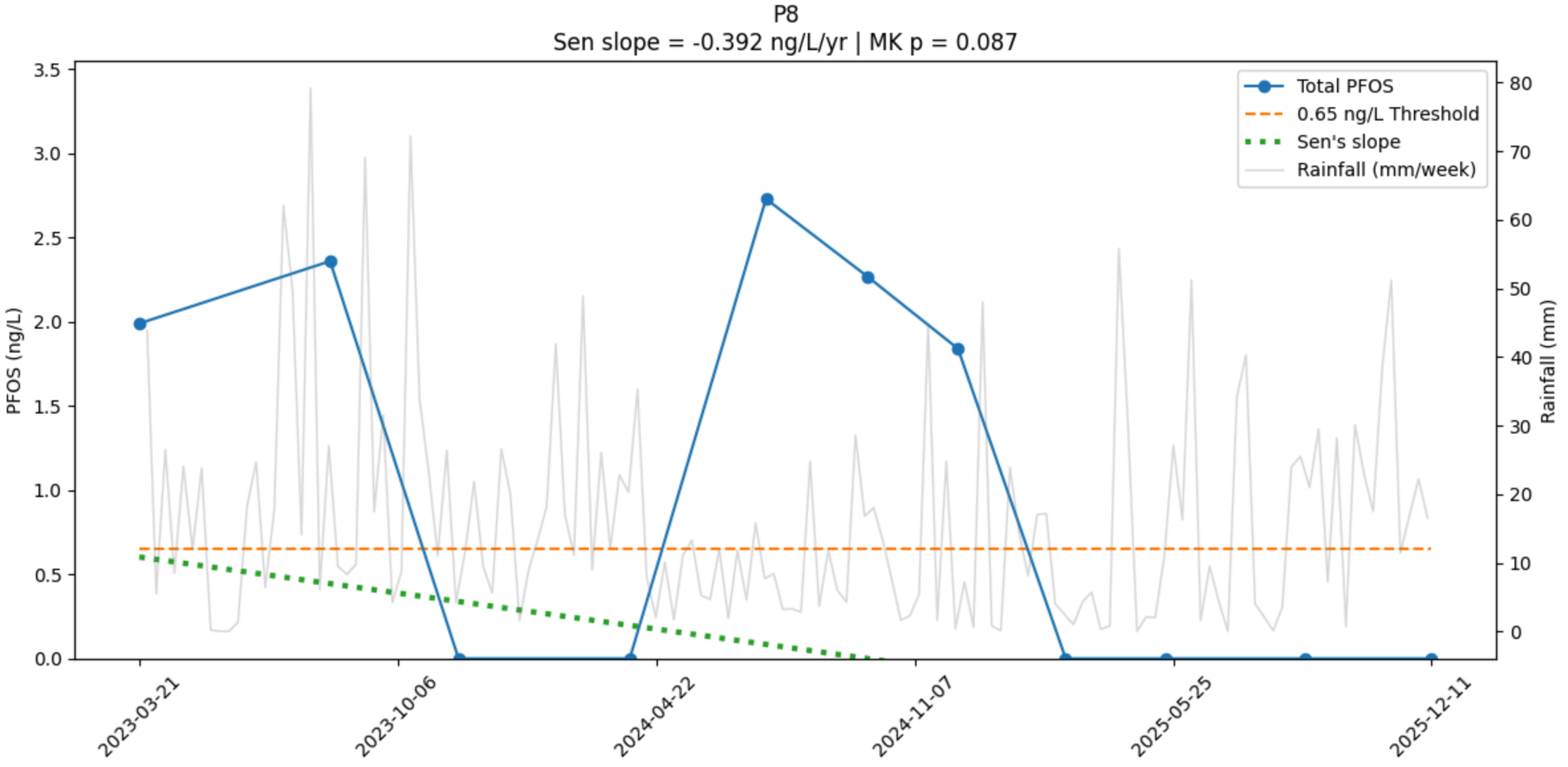

M1
Sen slope = <0.001 ng/L/yr | MK p = 0.782 | <6 samples: trend indicative only
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0
10
20
30
40
50
2023-11-23
2024-05-29
2024-12-03
2025-06-09
2025-12-15

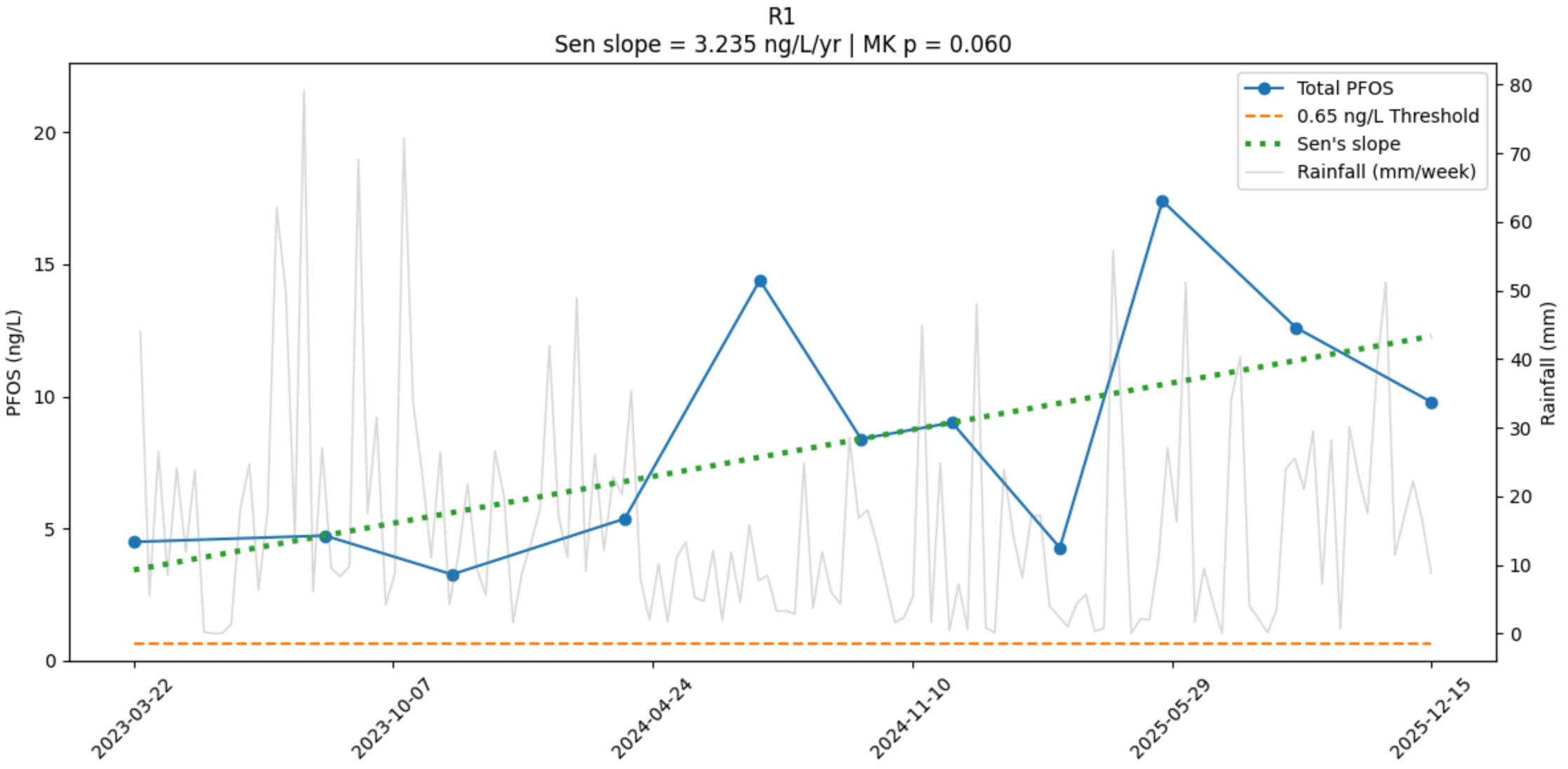

P2
Sen slope = 1.131 ng/L/yr | MK p = 0.121
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
2
4
6
8
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-11

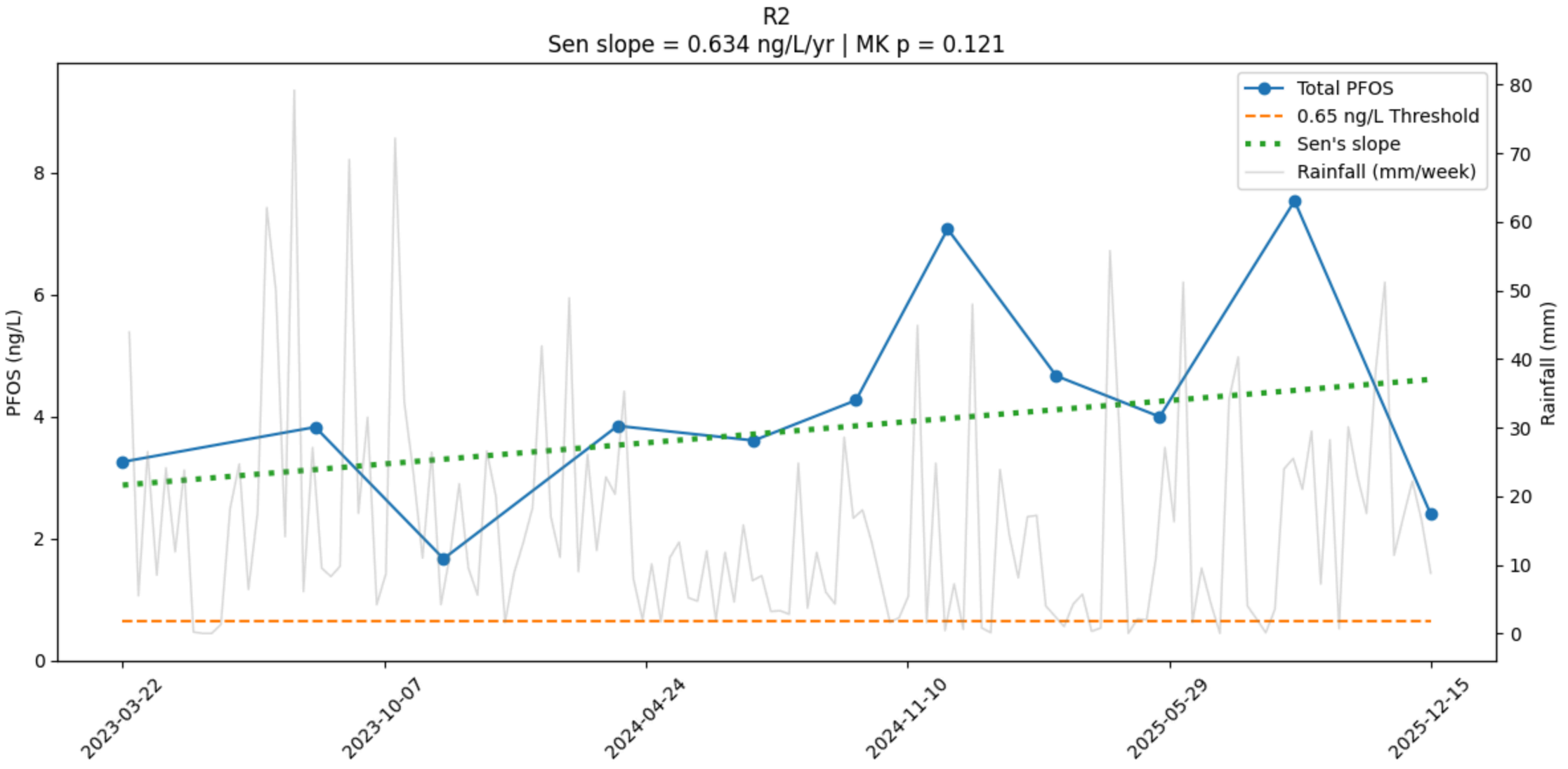

P3
Sen slope = -0.220 ng/L/yr | MK p = 0.349
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-11

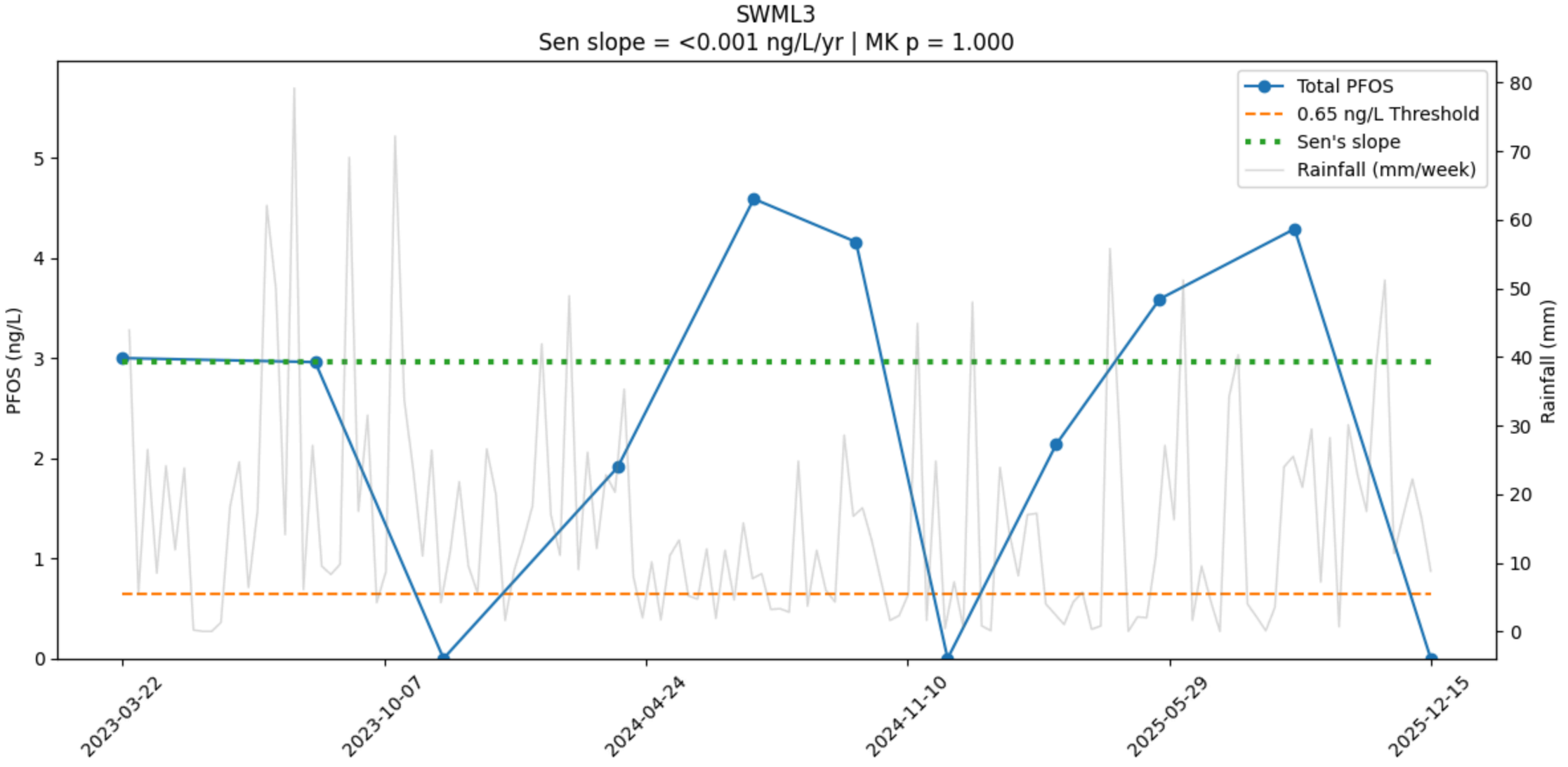

P4
Sen slope = 0.730 ng/L/yr | MK p = 0.156
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
0
10
20
30
40
50
60
70
2023-08-16
2024-02-02
2024-07-21
2025-01-08
2025-06-27
2025-12-15

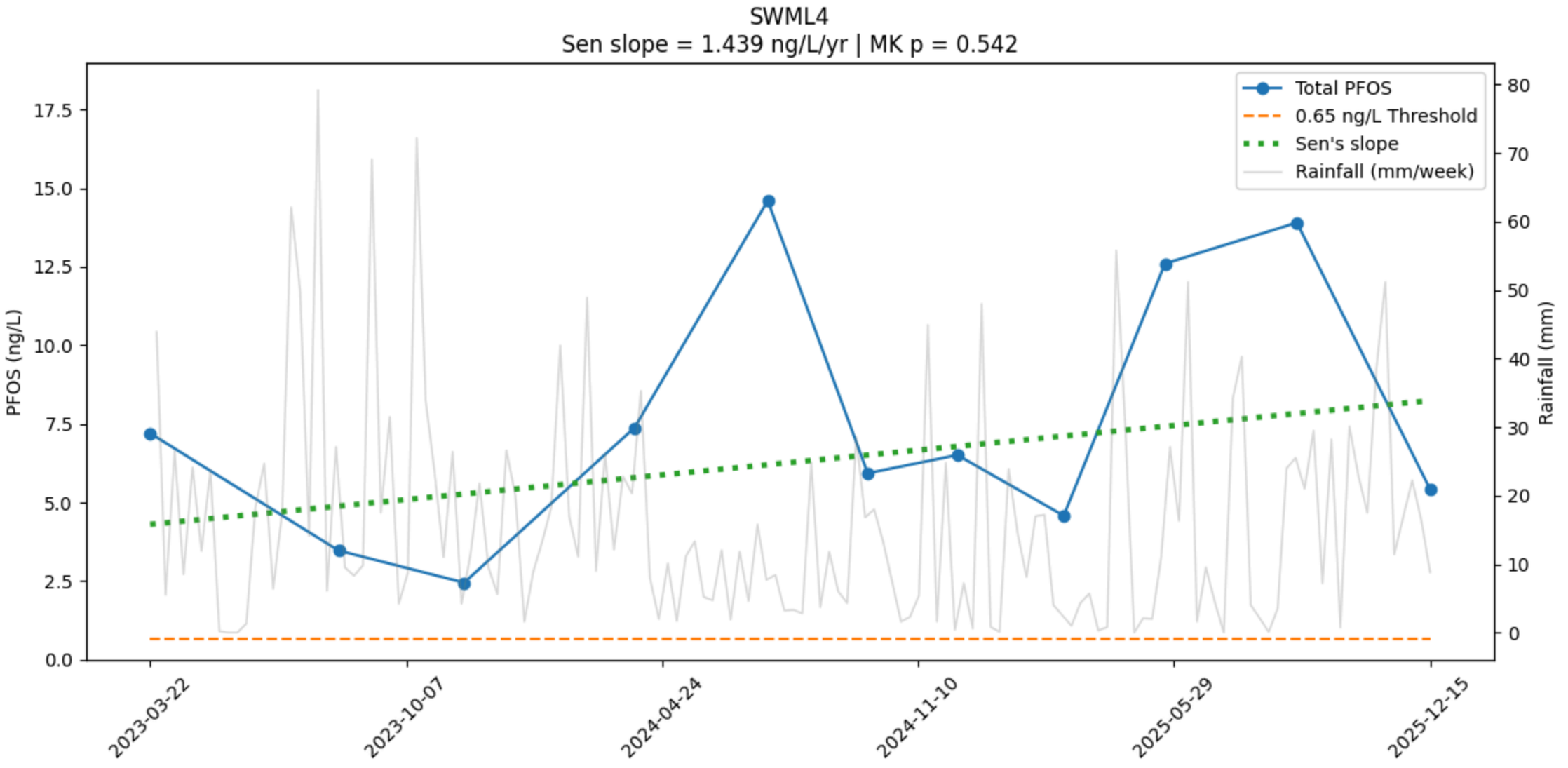

P7
Sen slope = 0.581 ng/L/yr | MK p = 0.345
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-11

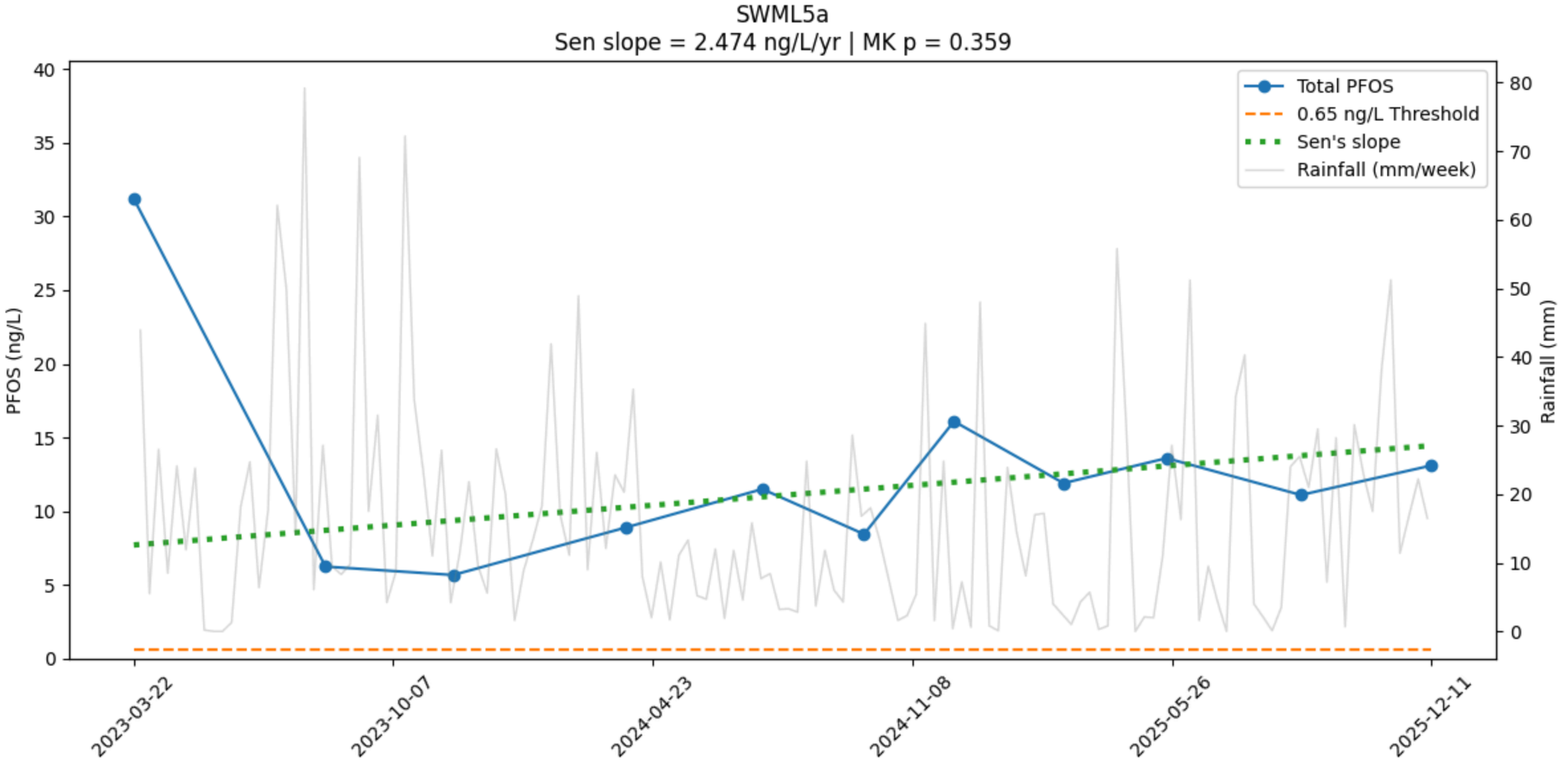

P8
Sen slope = -0.392 ng/L/yr | MK p = 0.087
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
0
10
20
30
40
50
60
70
80
2023-03-21
2023-10-06
2024-04-22
2024-11-07
2025-05-25
2025-12-11

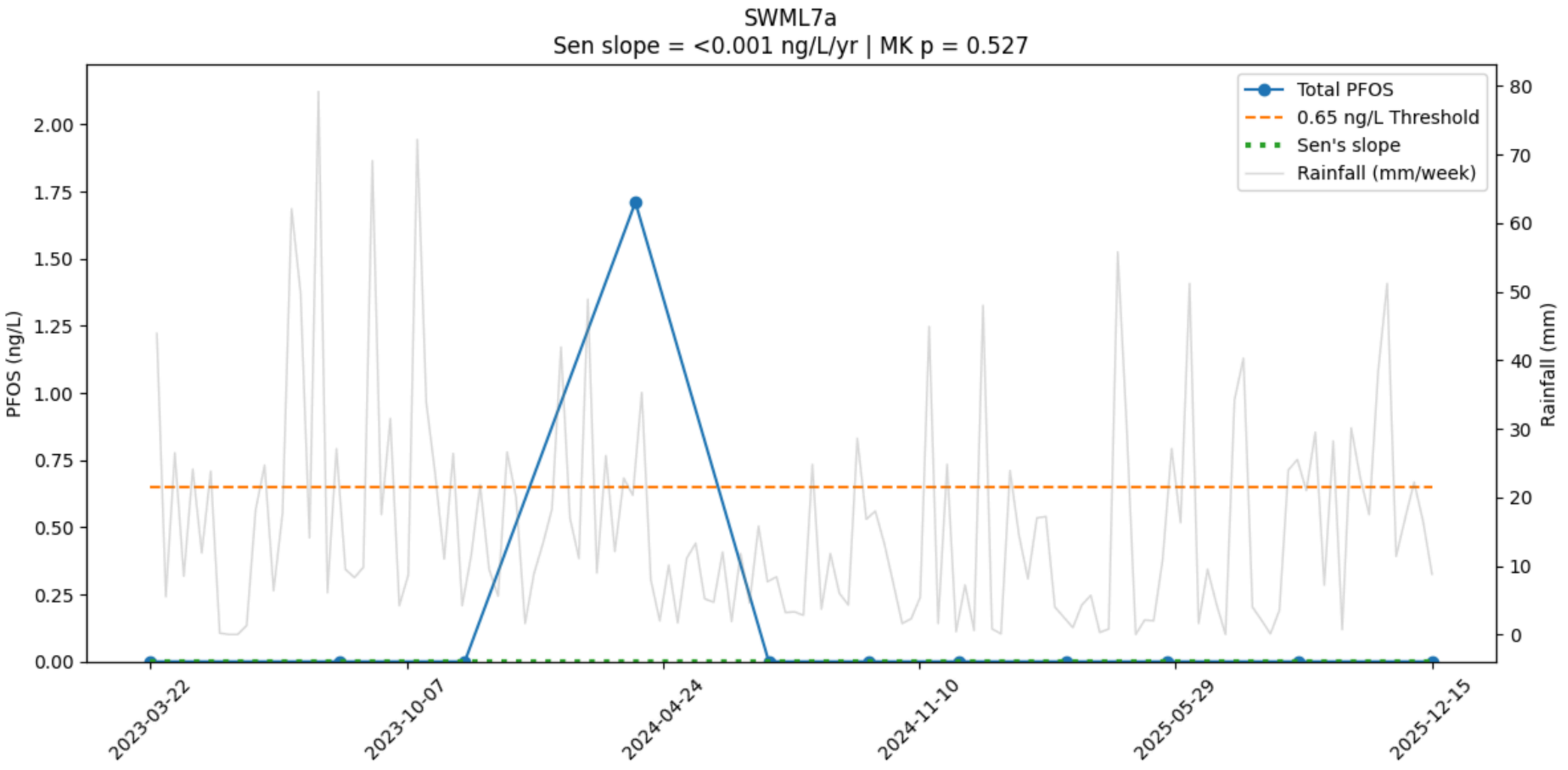

R1
Sen slope = 3.235 ng/L/yr | MK p = 0.060
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-24
2024-11-10
2025-05-29
2025-12-15

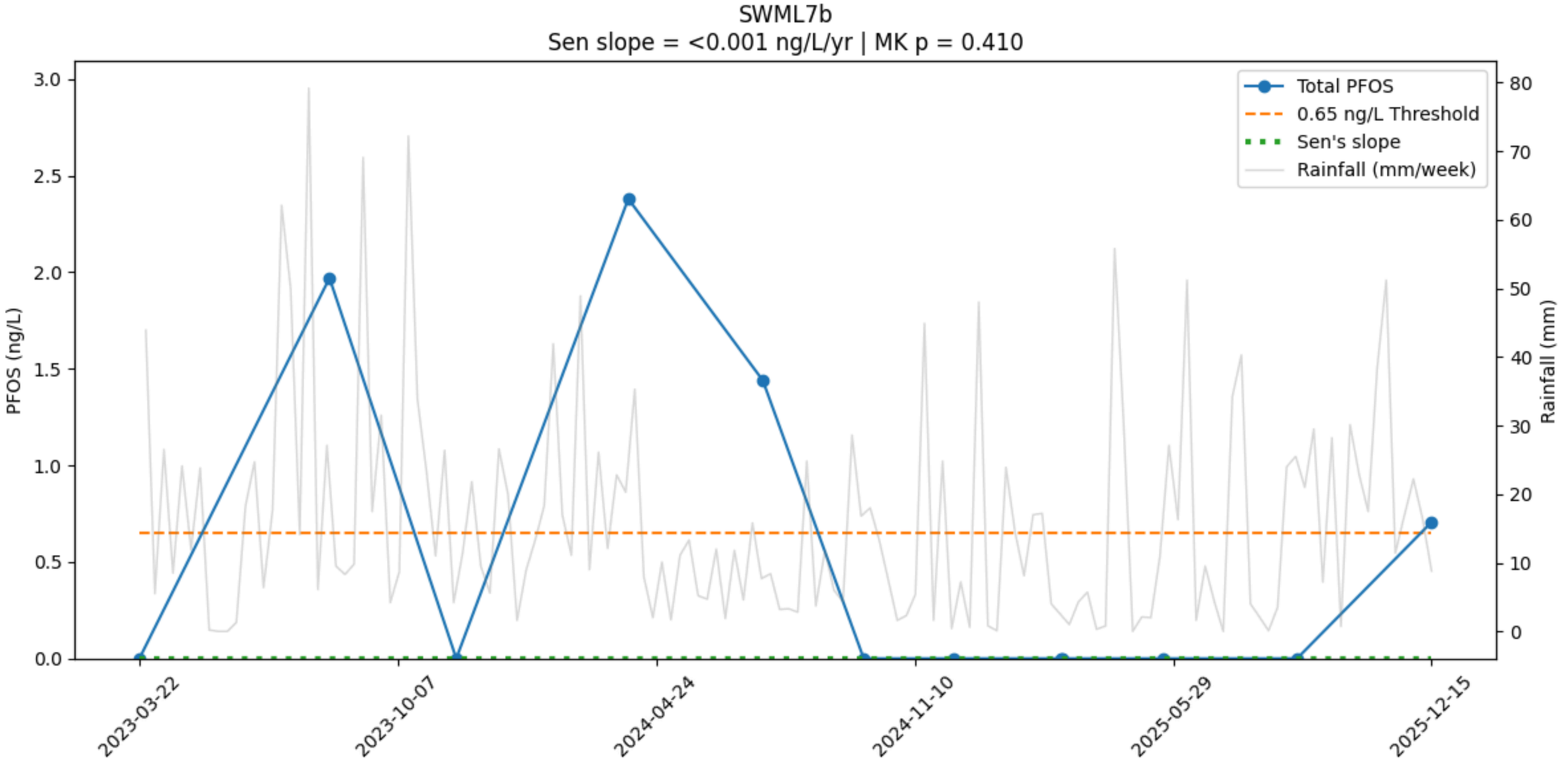

R2
Sen slope = 0.634 ng/L/yr | MK p = 0.121
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
2
4
6
8
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-24
2024-11-10
2025-05-29
2025-12-15


SWML3
Sen slope = <0.001 ng/L/yr | MK p = 1.000
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
1
2
3
4
5
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-24
2024-11-10
2025-05-29
2025-12-15


SWML4
Sen slope = 1.439 ng/L/yr | MK p = 0.542
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-24
2024-11-10
2025-05-29
2025-12-15


SWML5a
Sen slope = 2.474 ng/L/yr | MK p = 0.359
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-23
2024-11-08
2025-05-26
2025-12-11


SWML7a
Sen slope = <0.001 ng/L/yr | MK p = 0.527
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-24
2024-11-10
2025-05-29
2025-12-15


SWML7b
Sen slope = <0.001 ng/L/yr | MK p = 0.410
Total PFOS
0.65 ng/L Threshold
Sen's slope
Rainfall (mm/week)
PFOS (ng/L)
Rainfall (mm)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
10
20
30
40
50
60
70
80
2023-03-22
2023-10-07
2024-04-24
2024-11-10
2025-05-29
2025-12-15

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APPENDIX 10

Surface Water Spearman's Rank Correlation Analysis Results

Location	Monitoring Location ID	No. of Samples	Antecedent Rainfall Period (days)	Spearman Correlation Coefficient	p-value
Landside	SL1	19	1	-0.248	0.306
			3	-0.466	0.044
			7	-0.688	0.001
			14	-0.127	0.605
			30	-0.004	0.989
	SL2	19	1	0.080	0.745
			3	-0.077	0.755
			7	-0.065	0.791
			14	0.039	0.875
			30	0.098	0.689
	SL3	19	1	0.216	0.375
			3	0.129	0.600
			7	-0.078	0.750
			14	0.219	0.369
			30	0.575	0.010
	SL4	19	1	0.123	0.616
			3	-0.048	0.847
			7	-0.144	0.556
			14	-0.154	0.528
			30	0.051	0.836
	SL5	18	1	0.067	0.793
			3	0.094	0.711
			7	-0.080	0.753
			14	-0.092	0.715
			30	0.207	0.409
	SL6	18	1	-0.029	0.908
			3	0.029	0.909
			7	-0.294	0.237
			14	-0.249	0.319
			30	-0.110	0.663
	SL7	18	1	0.250	0.317
			3	0.408	0.093
			7	0.140	0.581
			14	0.220	0.381
			30	0.465	0.052
	SL8	18	1	0.506	0.032
			3	0.573	0.013
			7	0.430	0.075
			14	0.385	0.115
			30	0.600	0.008
	SL9	18	1	0.436	0.071
			3	0.257	0.303
			7	0.118	0.641
			14	0.505	0.032
			30	0.347	0.159
	SL10	18	1	0.151	0.550
			3	0.320	0.196
			7	0.185	0.463
			14	0.342	0.165
			30	0.518	0.028
	SL11	18	1	-0.424	0.080
			3	-0.473	0.047
			7	-0.436	0.071
			14	-0.345	0.161
			30	-0.409	0.092
	SL12	17	1	0.685	0.002
			3	0.538	0.026
			7	0.377	0.136
			14	0.340	0.182
			30	0.442	0.076
	SL13	17	1	0.100	0.702
			3	0.291	0.257
			7	0.165	0.528
			14	0.414	0.098
			30	0.551	0.022

Location	Monitoring Location ID	No. of Samples	Antecedent Rainfall Period (days)	Spearman Correlation Coefficient	p-value
Landside	SL14	17	1	0.208	0.422
			3	-0.049	0.853
			7	-0.147	0.574
			14	-0.184	0.480
			30	-0.047	0.857
	SL15	17	1	0.106	0.687
			3	0.229	0.376
			7	0.143	0.585
			14	0.167	0.523
			30	0.145	0.580
	C1	10	1	0.093	0.799
			3	0.533	0.113
			7	0.259	0.469
			14	0.635	0.049
			30	0.266	0.457
	C-2A	6	1	-0.169	0.749
			3	-0.143	0.787
			7	-0.086	0.872
			14	-0.371	0.468
			30	-0.257	0.623
	C-2B	6	1	-0.566	0.242
			3	0.116	0.827
			7	-0.725	0.103
			14	0.116	0.827
			30	-0.116	0.827
	Kealy's Stream	10	1	0.420	0.227
			3	0.018	0.960
			7	0.018	0.960
			14	0.200	0.580
			30	0.661	0.038
	M5	10	1	0.307	0.388
			3	0.560	0.092
			7	0.259	0.469
			14	0.594	0.070
			30	0.253	0.481
	S1	7	1	0.764	0.046
			3	0.612	0.144
			7	0.408	0.363
			14	0.408	0.363
			30	0.000	1.000
	S3	10	1	0.321	0.365
			3	0.696	0.025
			7	0.522	0.122
			14	0.348	0.324
			30	0.087	0.811
	WAD Stream	10	1	0.109	0.764
			3	0.200	0.580
			7	-0.042	0.907
			14	-0.236	0.511
			30	-0.600	0.067
	M1	5	1	0.500	0.391
			3	-0.112	0.858
			7	-0.783	0.118
			14	-0.112	0.858
			30	-0.447	0.450

Location	Monitoring Location ID	No. of Samples	Antecedent Rainfall Period (days)	Spearman Correlation Coefficient	p-value
Airside	P2	11	1	-0.267	0.427
			3	0.073	0.832
			7	0.100	0.770
			14	-0.373	0.259
			30	-0.764	0.006
	P3	11	1	-0.611	0.046
			3	-0.305	0.361
			7	-0.360	0.277
			14	-0.155	0.649
			30	-0.137	0.689
	P4	10	1	-0.138	0.703
			3	0.297	0.405
			7	0.188	0.603
			14	-0.309	0.385
			30	-0.152	0.676
	P7	11	1	-0.173	0.611
			3	0.248	0.463
			7	-0.110	0.747
			14	-0.266	0.429
			30	-0.771	0.006
	P8	11	1	-0.429	0.188
			3	0.010	0.977
			7	-0.020	0.954
			14	0.169	0.620
			30	0.020	0.954
	R1	11	1	-0.526	0.096
			3	-0.009	0.979
			7	0.091	0.790
			14	-0.582	0.060
			30	-0.718	0.013
	R2	11	1	-0.451	0.164
			3	-0.327	0.326
			7	0.273	0.417
			14	-0.336	0.312
			30	-0.482	0.133
	SWML3	11	1	-0.298	0.374
			3	0.055	0.872
			7	-0.073	0.830
			14	-0.156	0.647
			30	-0.596	0.053
	SWML4	11	1	-0.046	0.893
			3	0.018	0.958
			7	0.073	0.832
			14	-0.409	0.212
			30	-0.673	0.023
	SWML5a	11	1	0.032	0.927
			3	-0.127	0.709
			7	-0.100	0.770
			14	-0.164	0.631
			30	-0.209	0.537
	SWML7a	11	1	0.636	0.035
			3	0.400	0.223
			7	0.200	0.555
			14	0.200	0.555
			30	0.100	0.770
	SWML7b	12	1	0.180	0.575
			3	0.288	0.365
			7	0.017	0.959
			14	0.258	0.418
			30	0.250	0.433

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