OXFORDSHIRE
STRATEGIC RAIL FREIGHT INTERCHANGE

DCO Submission

Environmental Statement

Chapter 11: Ground Conditions
Appendix 11.11: PFAS Contamination Technical Note

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Revision 06

On behalf of
Oxfordshire Railfreight Limited

Prepared by BWB Consulting Ltd
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OxSRFI – Surface Water and Groundwater Sampling relating to potential 'PFAS' Contamination
September 2026

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1. Introduction, Context and Overall Summary

This technical note sets out details of additional surface and groundwater sampling and testing undertaken on the proposed OxSRFI Main Site to establish whether per- and poly-fluoroalkyl substances ('PFAS') are present on-site. The Applicant's intention is that the PFAS assessment, once complete, is ultimately incorporated into the application material (ES).

PFAS are a group of man-made chemicals often referred to as "forever chemicals" because they break down very slowly in the environment and can remain in water, soil, and living organisms for many years. They have been widely used in a variety of everyday products, including non-stick cookware, waterproof and stain-resistant materials, some cleaning products, and certain cosmetics and personal care items. PFAS have also been used in firefighting foams, particularly those designed to tackle fuel fires.

This Technical Note and the assessment work which has informed it is a direct response to the specific local context and information or data which has led to questions and some concerns about the potential for numerous local watercourses to potentially contain notable levels of PFAS. Even relatively recently, testing for PFAS was not routinely included (or expected) as part of the scope of ground or ground investigations for Geo-environmental Assessment and in many respects, it is a new and emerging environmental and regulatory issue. Typical of many recent Environmental Statements (ESs) it was not proposed or requested for inclusion in the ES for the OxSRFI by any consultees or in the Scoping Opinion from the Secretary of State. However, there is a growing general awareness of PFAS as an increasingly common source of contamination in many areas given their widespread use in many common household products, and because they can affect the water network (potentially surface water and groundwater) where they accumulate at significant levels. As a result, the availability of appropriate testing facilities or laboratories has increased, and it is now becoming increasingly common to test for PFAS as part of ground investigations as the uses or sources of PFAS and how it moves within the environment have become better understood.

In the local context there is an awareness, and some local concern, regarding PFAS understood to have derived from activities at the former RAF Upper Heyford, primarily the known use of fire-retardant foams containing PFAS when the airfield was operational and which remain in the environment. Much of this local interest is based on publicly available Environment Agency (EA) data obtained from the Gallos Brook, approximately 2.8km south of the OxSRFI site (~4km south of Upper Heyford Airfield), and from testing commissioned by Upper Heyford Community Action Group from a tributary of Gallos Brook approximately 200m west of the OxSRFI site, where high levels of PFAS have been recorded. That watercourse has a direct 'pathway' relationship with the former Upper Heyford site, lying south of the 'fire pit'

within the site which would have seen firefighting practice drills and use of products over many years. However, the high levels of PFAS seen in the Gallos Brook has led to questions - and some assumptions submitted through Relevant Representations to the OxSRFI proposals - regarding the likelihood that other watercourses or sites located close to the former RAF Upper Heyford site, including the OxSRFI site, might also contain elevated levels of PFAS. In practice, the specific nature of the relationship and 'pathway' between watercourses and any source of PFAS is a critical factor in the extent to which PFAS is conveyed within water networks and is more relevant than simply proximity alone. This is borne out by the results set out in this Note which show that the Gagle Brook to the east of former RAF Upper Heyford contains considerably lower levels of PFAS than the Gallos Brook directly south of the former Airfield. The Gagle Brook is the watercourse relevant to OxSRFI because tributaries of it are located within the Site – the Gallos Brook is located outside of the OxSRFI site (as are its tributaries).

In response to the above new issues and local context, BWB Consulting Ltd (BWB) was instructed by Oxfordshire Railfreight Ltd (the Applicant) to undertake a water sampling exercise of on-site surface water bodies and groundwater. Initial sampling took place on 11th and 12th June 2026 and was supplemented by additional groundwater sampling on 1st September 2026. This Note sets out the results of that sampling and also identifies at a high-level the range of actions or measures the Applicant will either implement or consider in due course in response to the results.

Summary of Local Testing Results

The results in headline terms show low levels of PFAS on the OxSRFI Main Site, and considerably lower than those seen in other nearby watercourse (notably the Gallos Brook). The detailed results of the testing undertaken on the OxSRFI Site are set out in Section 4 and includes comparison to testing or data from other sources at other locations. In summary the results and comparison in the maximum total PFAS concentrations recorded from the three results sources are as follows:

- **OxSRFI** Site – June and September 2026: 0.39 µg/l (micrograms per litre)[1]
- **EA** Data 4-4.5 km downstream of OxSRFI – 2025 testing: 2.296 µg/l
- **Gallos Brook Collective** Testing (west of OxSRFI)– April/May 2026: 42.0–43.0 µg/l

The appropriate mitigation responses to the presence of PFAS contamination are standard remediation measures used commonly for other forms of contamination when encountered on development sites. Such measures are already incorporated, where required, in the OxSRFI Construction Environmental Management Plan (CEMP) which is secured by draft DCO Requirement. However, for clarity, the Applicant will update the CEMP to ensure it makes any specific references required as a result of the presence of PFAS in parts of the Site. For the avoidance of doubt, this does not change the standard approach of risk-based assessment, evaluation and verification of contamination already included in the CEMP (and secured by DCO Requirement) which will apply equally to PFAS as any other form of contamination. More details are set out in Section 5 of this Note.

Summary of Conclusions

PFAS is now known to be present on parts of the OxSRFI site as a result of the flow of water containing PFAS from off-site sources, understood to have been introduced into the local environment primarily from activities associated with the former RAF Upper Heyford airbase.

[1] A microgram is one millionth of a gram.

The available data indicates the direct risk of PFAS in surface water and groundwater within the OxSRFI site on human health is considered to be negligible, with the end-use of the development site not a sensitive or high-risk use. The evidence and data shows that the OxSRFI site has a less direct 'pathway' from the source of PFAS (the former RAF Upper Heyford site) which results in considerably lower levels of PFAS on the site than those seen in other locations downstream of the former RAF base.

With appropriate, and standard contamination mitigation measures in place (already proposed via the submitted CEMP, and secured via proposed DCO Requirements), the presence of PFAS on-site has no implications for the OxSRFI proposed development in terms of construction or operation, nor for environmental or human 'receptors' on-site.

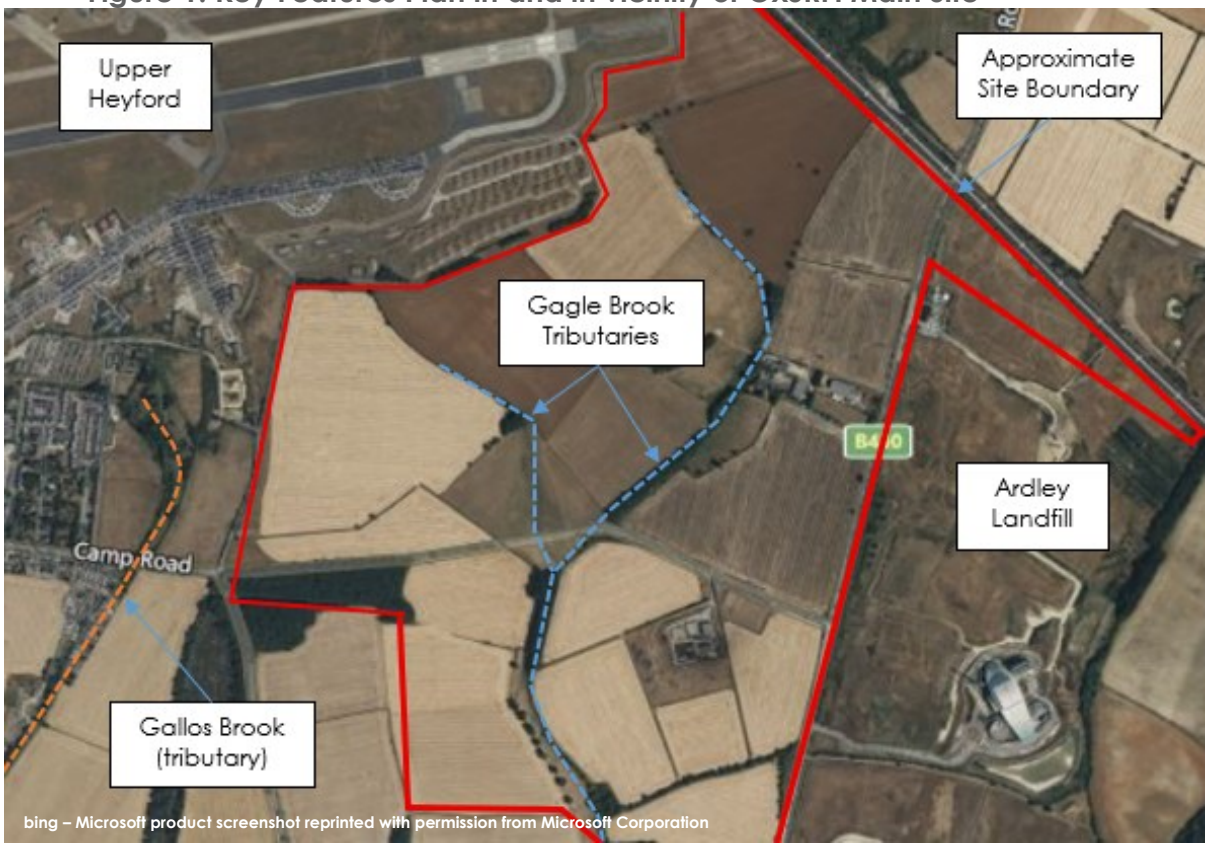
2. Site Context

On-site watercourses (receptors), geology, and submitted contamination evidence

The OxSRFI site is currently largely in agricultural use, where the primary contamination sources are those associated with farm machinery, pesticides, and herbicides.

Two watercourses emerge from the ground in the north west area of the OxSRFI Main Site and have a confluence centrally on site with surface water flow in a south easterly direction in a shallow valley. There is also a further watercourse that has a short section which flows eastwards through the northern portion of the site. These watercourses generally flow seasonally with flow often being very limited or non-existent for sometimes long dry periods during which the watercourse is formed of a chain of standing pools / puddles only or is completely dry. The watercourses in the site ultimately enter Gagle Brook near the south east boundary of the Main Site. Figure 1 below shows the key features associated with the assessment referred to in this document.

Figure 1: Key Features Plan in and in vicinity of OxSRFI Main Site



As referred to above, much of the local interest in PFAS is based on data obtained from Gallos Brook. It should be noted that Gallos Brook is not the receiving waterbody for the OxSRFI on-site streams, which instead feed into Gagle Brook, although both watercourses are part of the Cherwell and Ray catchment and so ultimately feed into the same wider system further downstream.

The valley features on the site are underline by Superficial Deposits of Alluvium classed as a Secondary (A) Aquifer and Head Deposit classed as a Secondary Undifferentiated Aquifer. Other than in these valley features, the site is absent of superficial deposits. The bedrock deposits comprise of White Limestone Formation which is a Principal Aquifer, which is underlain by the Rutland Formation classed as Secondary (B) Aquifer; the Rutland Formation is present at the surface in the northern valleys on site, where the White Limestone is absent.

The Main Site also contains part of the former Ardley Landfill, and historic landfill sites are acknowledged as common sources of PFAS due to a wide range of contaminants often contained within them. The ground investigation undertaken and submitted as part of the OxSRFI ES (ES Chapter 11, Document 6.11/APP-179) shows that the only contamination on-site which exceeds screening criteria is associated with the former landfill. The levels seen are very low and present a low risk due to the monitoring and management of the landfill under the ongoing Environmental Permitting regime.

EA Monitoring

EA monitoring (baseline evidence) results from a tributary circa 4–4.5 km downstream of the former Upper Heyford airbase from the Leys Farm Ditch / Gallos Brook system reported the following concentrations:

- 2023: approximately 2.021 µg/l total PFAS
- 2024: reported as "too high to be calculated" in one dataset
- 2025: approximately 2.249–2.296 µg/l total PFAS

Identified compounds included PFOA, PFOS, PFHxS and other PFAS typical of AFFF (firefighting foam).

Independent Community Commissioned Laboratory Testing

Independent testing undertaken in other locations close to former RAF Upper Heyford by the Gallos Brook Collective in April–May 2026 provides the highest reported PFAS concentrations within the Gallos Brook system and was carried out on samples collected approximately 300–500 m from Heyford Park. As explained earlier in this Note, this is a different watercourse to that which runs through the OxSRFI main site, albeit they form part of the same wider watercourse network further downstream. The analytical results indicate PFOS concentrations of 27.823 µg/l and total PFAS concentrations in the order of approximately 42.0–43.0 µg/l, with an additional nearby sample reporting total PFAS at 2.588 µg/l. Interpretation of the dataset by that same local campaigning group identified a chemical "fingerprint" consistent with AFFF contamination associated with historic military firefighting activity, and concluded that the concentrations observed are indicative of a significant historic source with the potential for ongoing release via groundwater pathways. The reported concentrations are approximately 40 times higher than EA measurements recorded further downstream, reflecting dilution effects within the catchment, and are on the order of tens of thousands of times greater than the UK/EU Environmental Quality Standard for PFOS in surface water (which is 0.65 ng/l (0.00065 µg/l).

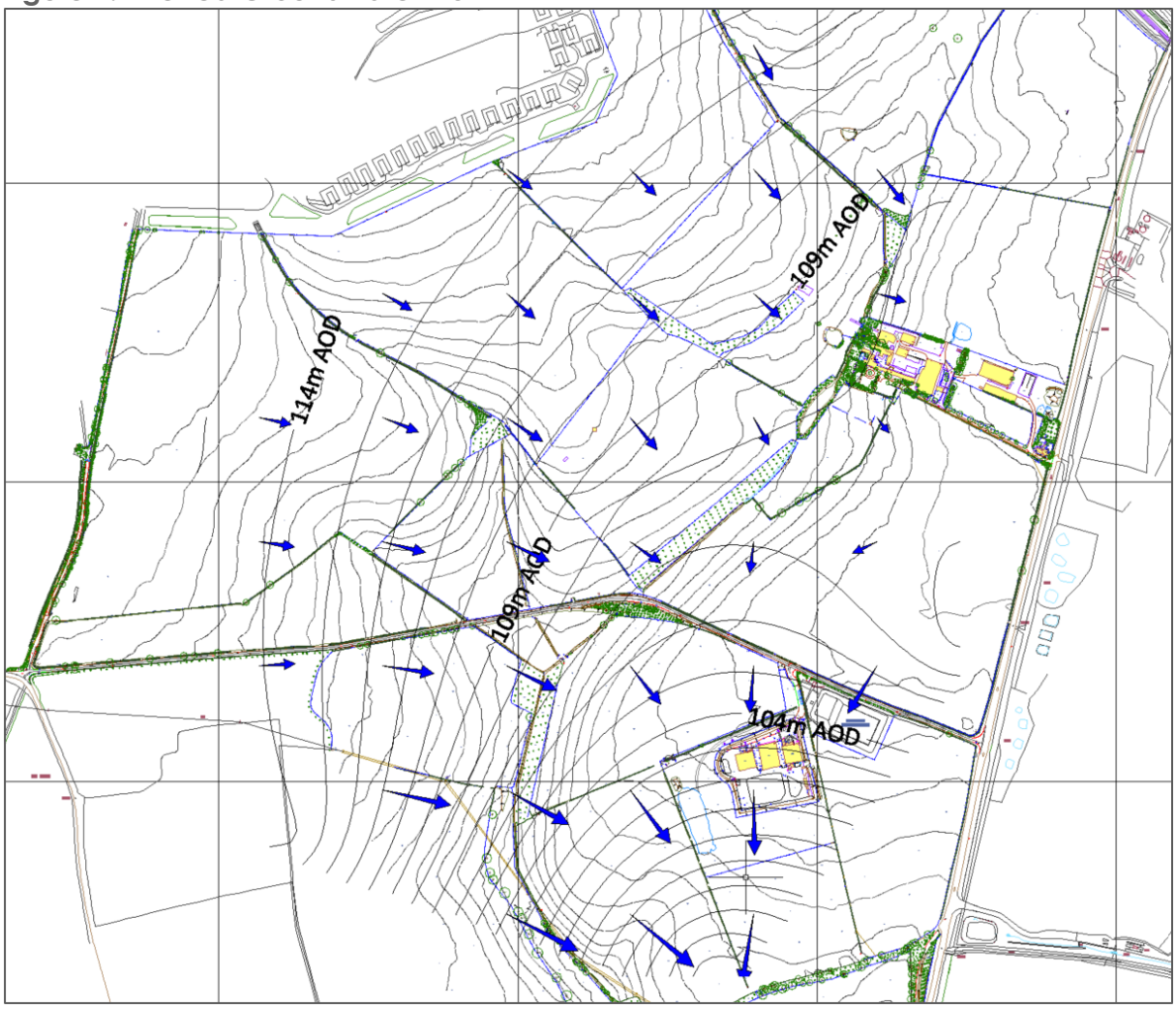
3. On-site Receptors (OxSRFI)

In considering potential receptors associated with PFAS contamination, the principal receptors in the context of the OxSRFI proposals are construction workers during the earthworks phase in areas if PFAS were to be present and, in the longer term, employees, visitors and other site users during operation.

Aquatic ecosystems also represent a potential receptor where a viable source-pathway-receptor linkage exists. However, as discussed above, the local watercourses are relatively small and convey low water flow volumes. The available evidence indicates that any PFAS detected on the OxSRFI site is likely to be associated with historical migration or conveyance of PFAS from the Upper Heyford site via surface water 'pathways' (i.e. via routes found by water through surface water flows or drainage into watercourses or other environmental features).

The site is also directly underlain by bedrock of the White Limestone Formation which is classified by the EA as a Principal Aquifer. The site is not within, or near, a Groundwater Source Protection Zone. Groundwater level monitoring has previously been undertaken at the site which has been used to infer likely groundwater flow directions. The data generally indicates the groundwater flows towards the central watercourse valley from western areas, with a southward flow in eastern parts of the site, generally consistent with the topography at the site and wider area, as indicated on **Figure 2** below. Based on the inferred groundwater flow, it is considered likely that groundwater is flowing through the site from the Former Upper Heyford Airfield located to the north west.

Figure 2: Inferred Groundwater Flow

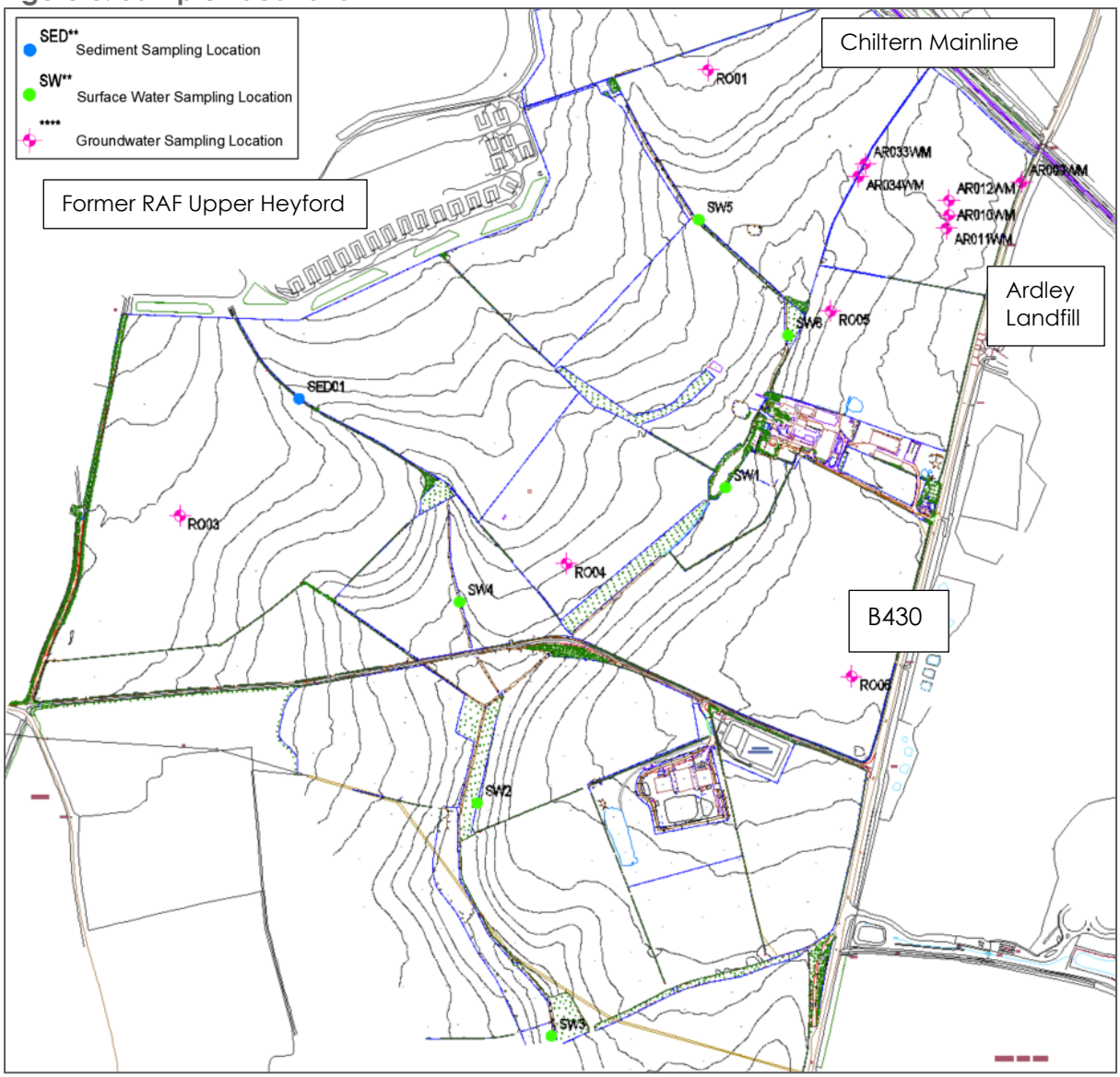


Details of the sampling undertaken by BWB for the Applicant, and associated risk-assessment, is provided below.

4. OxSRFI Main Site PFAS Sampling

A site location plan showing sediment, surface water and groundwater sampling locations is presented below as **Figure 3**.

Figure 3: Sample Locations



Surface water and sediment sampling (where surface water was not available – only one in this instance) locations were selected to provide a representative snapshot of the watercourse along the Gagle Brook tributaries. Locations SED01 and SW5 were positioned in proximity to the former airfield, with SED01 located on the western branch of the watercourse and SW5 on the eastern branch. Downstream of these points, SW4 follows the western branch in a southerly direction, while SW6 and SW1 follow the eastern branch. Locations SW2 and SW3 were positioned further downstream, beyond the confluence of the two branches of the watercourse. It should be noted that several long dry sections of the watercourses were present during the sampling (in June 2026).

Groundwater samples were collected from available landfill groundwater monitoring wells currently present within site boundary (AR010WM, AR011WM, AR012WM, AR033WM, AR034WM and AR009WM). Surface water and groundwater sampling was completed on 11th and 12th June 2026.

Further groundwater samples were obtained on 1st September 2026. Samples were taken from monitoring wells present within the site boundary (RO01, RO03, RO04, RO05, RO06).
Groundwater samples were all taken from wells installed into the limestone bedrock beneath the site which is generally present from near-surface to depths of circa 8 to 12m bgl.

All samples taken were sent to Normec i2 Analytical (UKAS and MCERTS accredited) for the chemical testing of PFAS extended suite.

5. Results and Assessment

Surface Water

The surface water laboratory reports are presented as **Appendix 1**, which indicates that PFAS were recorded in all six surface water samples collected, and from 35 PFAS compounds tested 33 were reported as below the limit of detection. Those identified on the site are listed in **Table 1** below.

Table 1: Summary of Above Laboratory Detection Limit PFAS Recorded – Surface Water

PFAS Contaminant	SW1 (µg/l)	SW2 (µg/l)	SW3 (µg/l)	SW4 (µg/l)	SW5 (µg/l)	SW6 (µg/l)	Guidance Criteria (µg/l)[2]
PFHxS - CAS No 355-46-4	0.06	0.07	BDL	0.07	BDL	BDL	N/A
PFOS - CAS No 1763-23-1	0.08	0.16	0.13	0.32	0.07	0.08	0.00065*
BDL – No levels above laboratory detection limits recorded N/A – Guidance levels are not available *Guidance Criteria from EU Priority Substances Directive (2013/39/EU).							

Concentrations recorded in watercourses to the east of the OxSRFI site were approximately an order of magnitude lower than those measured in the western watercourse of the OxSRFI site (closest to Heyford Park). Given the outflow from the airfield, this strongly supports the view that the airfield is the primary source of PFAS contamination to surface waters.

The results show PFAS detected within the watercourses on the OxSRFI Main Site in the form of PFHxS and PFOS in the surface water samples, and as PFHxS, PFNA, PFOA and PFOS in one sediment sample where a water sample could not be collected (as the watercourse was dry in June 2026). All above substances are commonly associated with airfields, military installations, fire training areas, as well as some industrial and wastewater discharges.

Sediment

The sediment testing laboratory reports are presented as **Appendix 1**, which indicates that 31 of 35 PFAS compounds were reported as below the limit of detection, the remainder are listed in **Table 2** below.

Table 2: Summary of Above Laboratory Detection Limit PFAS recorded - Sediments

PFAS Contaminant	Concentrations Recorded (µg/kg)[3]
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	0.2
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	0.1
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	0.2
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	5.7

[2] Micrograms per litre. A microgram is one millionth of a gram.
[3] Micrograms per kilogram.

PFHxS, PFNA and PFOA are highly mobile in the aquatic environment and can therefore travel further distances compared to PFOS. In contrast, PFOS has a stronger tendency to adsorb to sediments. The strong affinity of PFOS for sediment is supported by the analytical results, with PFOS concentrations in sediment samples being an order of magnitude higher than those of PFHxS, PFOA and PFNA.

While some forms of PFAS, including PFHxS, PFOA and PFNA can pose potentially significant long-term risks at high levels, the relatively low levels of these types of contaminants on the OxSRFI site reduces the risk posed both on-site and to downstream receptors.

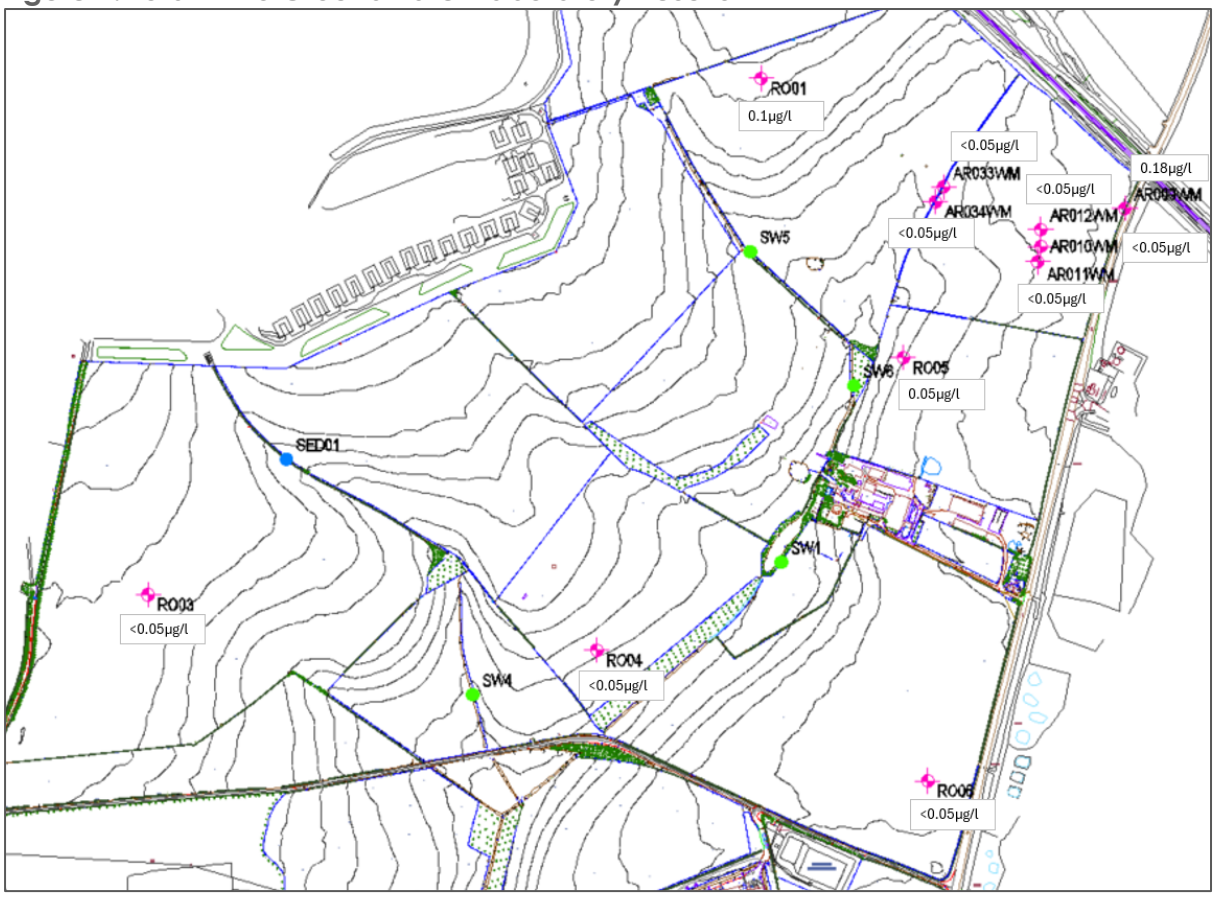
Groundwater

The laboratory reports presented as **Appendix 1** also include six groundwater samples collected from landfill monitoring wells located within the site boundary, in the north eastern part of the site, and five groundwater monitoring wells installed across the rest of the site. PFASs were recorded in three samples from eleven tested. From 35 PFAS compounds 32 were reported as below the limit of detection, the remainder are listed in **Table 3** below. **Figure 4** presents the total PFAS concentration for each well sampled at the site.

Table 3: Summary of Above Laboratory Detection Limit PFAS Recorded – Groundwater

PFAS Contaminant	AR009WM (µg/l)	RO01 (µg/l)	RO05 (µg/l)	Guidance Criteria* (µg/l)[1]
PFHxS - CAS No 355-46-4	0.1	<0.05	<0.05	0.01
PFOA - CAS No 335-67-1	0.08	<0.05	<0.05	0.01
PFOS - CAS No 1763-23-1	<0.05	0.1	0.05	0.01
*Groundwater Guidance Criteria is a UK non-statutory guidance level originating from the Drinking Water Inspectorate.				

Figure 4: Total PFAS Groundwater Laboratory Results



Only one of the six groundwater monitoring wells sampled in the northeastern area of the site recorded PFAS concentrations above laboratory detection limits. This sample, collected from AR009WM, is located at the northeastern corner of the site, immediately adjacent to the historical Ardley landfill.

The PFAS detected in this sample comprised PFHxS and PFOA, both present at similarly low concentrations, with a slight dominance of PFHxS. The comparable magnitude of these compounds suggests that the contaminant plume is likely well mixed and relatively aged, rather than representing a fresh or highly concentrated source. The data suggests that this localised impact is likely associated with Ardley landfill and not linked to the airfield. Notwithstanding the monitoring and management undertaken under the permitting regime which governs such sites, historic waste sites are a known and common source of PFAS.

Of the results from samples obtained from across the rest of the site, two of the five samples recorded PFAS concentrations above the laboratory detection limits. Both RO01 and RO05, recorded PFOS concentrations of 0.1 µg/l and 0.05 µg/l respectively. These locations are both located in northernly areas of the site, with RO01 nearest the Former Upper Heyford Airfield, and RO05 near the stream in the central valley. These results suggest trace levels of PFOS are present in the groundwater on site but concentrations of PFAS, and particularly PFOS, in the central and western parts of the site indicate that there is no PFAS contamination mass moving across the site from the former airfield.

Comparison of OxSRFI Main Site Surface Water Results to Results from off-site locations

The maximum total PFAS concentrations recorded from the three results sources are as follows:

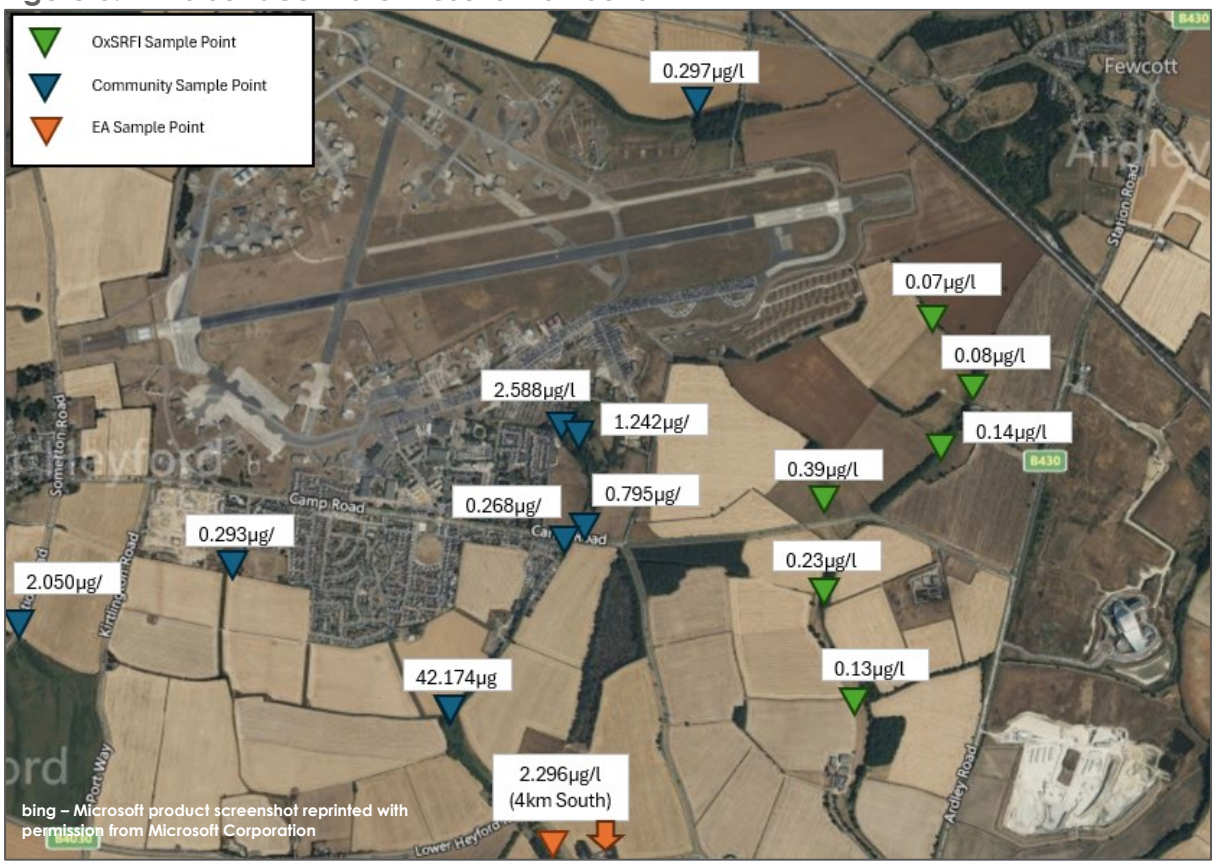
- **OxSRFI** Site – June 2026: 0.39 µg/l

- **EA** Data 4-4.5 km downstream – 2025 testing: 2.296 µg/l
- **Gallos Brook Collective** Testing – April/May 2026: 42.0–43.0 µg/l

While PFAS impact, notably PFOS, has been recorded in the stream on site, the concentrations are vastly lower than those recorded off-site in the Gallos Brook and its tributaries. The compounds recorded are very similar and so the common source of this contamination is considered to be the Airfield which has outfalls into the streams on the OxSRFI site.

Figure 5 below presents the sample locations and PFAS results obtained for the OxSRFI site, the EA results and Community Testing data.

Figure 5: PFAS Surface Water Results Distribution



Results Summary

The surface water pathway appears to be the most important contaminant conveyance mechanism identified. PFAS were detected in all six surface water samples on the OxSRFI Main Site, with concentrations generally decreasing eastwards across the site. Watercourses to the east recorded concentrations approximately one order of magnitude lower than those measured within the western watercourse. The results strongly indicate that PFAS are entering the site from an upgradient source, with the former Upper Heyford airfield drainage network attributed as the primary contributor or source.

As water flows through the site, dilution and dispersion reduce concentrations. The results therefore strongly support the view that the OxSRFI site is acting primarily as a receptor and conveyance pathway for PFAS-contaminated surface water rather than a principal source of contamination.

The concentrations seen are relatively low in absolute terms, and considerably lower than those seen off-site in other nearby watercourses, notably the Gallos Brook.

6. Risk Assessment

Human Health

In the UK there is currently no single unified statutory PFOA limit. Instead, health-based guidance is derived and applied through a mix of drinking-water regulatory practice (DWI/UKHSA/WHO) and land-contamination risk-assessment frameworks (EA/CLEA). For UK Drinking Water the Drinking Water Inspectorate (DWI) does not set criteria for PFOA alone but instead regulates PFAS as a group using a risk-based framework. Current operational guidance includes the following thresholds or levels:

- 0.1 µg/l[4] for the sum of 48 PFAS (screening / compliance benchmark).
- 0.01 µg/l used as a tier/trigger level for individual PFAS, prompting investigation and mitigation:
    - Tier 1: <0.01 µg/l - PFAS either not detected or present at trace concentrations. Generally considered low concern and typically requires no immediate action.
    - Tier 2: 0.01–0.1 µg/l - PFAS present at concentrations that trigger further investigation, monitoring and consideration of source-pathway-receptor linkages. Not necessarily indicative of unacceptable risk.
    - Tier 3: ≥0.1 µg/l = PFAS detected at elevated concentrations. These results should be prioritised for further investigation, identification of potential sources, and consideration of measures to reduce or manage PFAS contamination where appropriate.

This means PFOA and PFOS are effectively controlled within the 'sum of PFAS' and tier thresholds, rather than via a standalone UK drinking water standard. UK regulators explicitly draw on World Health Organization (WHO) drinking-water guideline values and toxicological advice when assessing risks:

- PFOA: 0.1 µg/l[3] (health-based GW)
- PFOS: 0.1 µg/l[3]

The groundwater result from AR009WM (closest to the former Landfill), RO01 (in the north of the site), and RO05 (next to the central stream) all fall into the Tier 2 criteria with all others considered to be Tier 1, which is the lowest, least contaminated category in the context of drinking water as a proxy for understanding the perceptions of risk to human health associated with PFAS. The former Landfill is already controlled and monitored through the Environmental Permitting regime.

While the White Limestone on-site is a Principal Aquifer, water quantities are limited and this on-site water does not form part of a (potable) drinking water supply, which mean it is unlikely to support a potable abstraction at any time in the future. However, for the purposes of providing a context for these results, were the water considered as if it were part of a potable supply, the levels of PFAS seen mean much of it would not be excluded from forming a supply of drinking water, subject to further investigations or monitoring.

On the basis of the results and the above initial assessment, the risk to human health from the current ground and surface water conditions on the OxSRFI Main Site is considered to be **negligible**.

[4] Micrograms per litre – a microgram is one millionth of a gram.

Beyond water based PFAS, it is clear that sediment along watercourses also contains small amounts of PFAS. In implementing the proposed development, construction workers may well come into contact with such sediment, either as part of the construction process, or as part of remediation (removal or treatment) of sediment to manage the PFAS contamination. The Construction Environmental Management Plan (CEMP) already includes standard methods and measures to deal with contamination and to protect environmental and human health. These controls are also to be secured by proposed DCO Requirements (also see **Section 5** below). The nature of the proposed use of the site also means that any residual risks to people working on, or visiting, the site once operational will be minimised or avoided. Therefore, the risk to Human Health is low and any potential risks to human receptors would be managed through the mitigation measures proposed as part of the development, including appropriate earthworks controls and materials management procedures.

Aquatic Systems

In the UK, regulatory guidance for PFAS in surface water aquatic systems is primarily governed by Environmental Quality Standards (EQS) under the Water Framework Directive (WFD). While specific limits for PFOA as a standalone substance in surface water are currently less prescriptive than those for PFOS, the UK generally aligns with evolving EU standards and internal EA datasets. The EA published new science-based freshwater thresholds in January 2026 for PFOA, PFHxS, and PFNA (non-statutory but risk-based thresholds) to support controlled-waters risk assessments, derived from protection of human health via fish consumption. The recent publication of these thresholds helps underline the relative newness of PFAS contamination as an issue, and the emerging nature of the controls and regulations associated with it. While they are not yet formal EQS values, they are already being considered by regulators in England to assess significance. A summary of the screening criteria are presented in **Table 4**.

Table 4: Assessment Criteria

Substance	Standard Type	Concentration Limit (micrograms per litre)	Note
PFOS	Annual Average (AA)	0.00065 µg/l	For inland surface waters EU Directive 2013/39/EU (amending Directive 2008/105/EC under the Water Framework Directive)
PFOS	Maximum Allowable Conc. (MAC)	36 µg/l	For a single event - EU Directive 2013/39/EU
PFOA	Proposed EQS	0.0004-0.005 µg/l	EA; Developing thresholds for managing PFAS in the water environment Chief Scientist's Group report January 2026
PFHxS	Proposed EQS	0.0002-0.005 µg/l	
PFNA	Proposed EQS	0.0003-0.0008 µg/l	
PFOS	Proposed EQS	0.000015 - 0.00006 µg/l	
PFOA	Proposed EU Group EQS	0.0044 µg/l	Proposed as "PFOA-equivalents" for a sum of 24 PFAS.

Surface water sampling undertaken at the OxSRFI Main Site indicates that concentrations of PFOS are significantly above the stringent guidance value attributed to PFOS, and PFHxS exceeds the proposed EQS value, as presented in **Table 4**. Exceedance is not unusual for PFOS investigations because the EQS is exceptionally stringent and set to protect sensitive aquatic

ecosystems. While PFAS impact, notably PFOS, has been recorded in the stream on site, the concentrations are considerably lower than those recorded in Gallos Brook and its tributaries.

The compounds recorded are very similar and so the common source of this contamination is considered to be the former Upper Heyford Airfield which has outfalls into the streams on the OxSRFI site. The former Airfield is therefore concluded as the source of PFAS recorded. This has been considered below in the context of managing the risk during construction of the OxSRFI site but cannot influence the source of PFAS or prevent further potential migration on to (or through) the OxSRFI site, or future downstream migration from the Airfield site.

7. Development Implications and Mitigation

The low levels of PFAS identified on the OxSRFI Main Site are **not considered to present greater than negligible risks to human health** associated with the Proposed Development. The submitted OxSRFI Application already makes provision for remediation of any contamination encountered on-site which would rely on a range of standard assessment, risk-assessment, management and remediation or mitigation methods to either treat or remove contaminated material. The OxSRFI Construction Environmental Management Plan (CEMP) provides the context for dealing with any contamination, where relevant, supported by proposed (draft) DCO Requirements 10, 28, and 29. In light of the evidence that PFAS will be encountered in some parts of the site, the CEMP will be amended to acknowledge the presence of PFAS on-site and provide a context for phase specific CEMPs (P-CEMPs) to address the specific risks and mitigate potential impacts.

Operational phase management of PFAS impact is not required because no significant risk to end users has been identified, even if upstream remediation (i.e. at source of the PFAS) isn't undertaken to reduce PFAS concentrations flowing through the site.

The proposed earthworks and drainage strategy for the OxSRFI development will leave the central water channel unaltered although the two tributary outfalls from the airfield will be partially realigned and culverted. This will include removing pen sieves from each. Excavation of the features will generate silt soil which are likely to be impacted with PFAS. Estimates based on the excavation work required suggest that the amount (volume) of silt material likely to be generated is small (conservatively a worst-case of no more than 200m^3). This material will be risk assessed at a later date with a view to considering if it could be appropriately and safely managed or stored on site. For example, there may be suitable opportunities for this material to be placed in landscaped areas beneath a clean soil cover system. Informed by appropriate risk assessment, this may require stabilisation with lime or similar to prevent any significant risk of contaminant leaching. Any such approach would be undertaken in dialogue and with approval of relevant consultees and stakeholders. As a contingency should retention on site not be environmentally feasible, this contaminated material will be disposed of at a suitable off-site waste facility.

To facilitate this as part of the construction process for the development, this will be incorporated into the Remediation Strategy to allow for potential reuse under a Material Management Plan (MMP) to be prepared within the context of the existing CEMP, declared and undertaken in accordance with the Definition of Waste: Code of Practice (DoW:CoP). Proposed DCO Requirements 28 and 29 cover contamination issues and require risk assessments and remediation strategies to be prepared and submitted for approval. Therefore, the PFAS now recorded does not require any significant change to the mitigation and management solutions already considered and identified in the submitted ES and CEMP, referred to above.

As referred to above, the remediation strategies and construction phase details required via relevant P-CEMPs, will be secured by the DCO including via proposed DCO Requirements.

8. Conclusions

Low levels of PFAS were detected in all six surface water samples collected, as well as in one sediment sample obtained from an area where surface water sampling was not possible. However, all levels identified on the OxSRFI Main Site are considerably lower than those identified in other locations close by associated with the Gallos Brook (directly south of Heyford Park). The results are consistent with an upstream source which is attributable to the former airfield and its associated historical activities. Three of the eleven groundwater sample within the OxSRFI site contained detectable PFAS. The sample from AR009WM, indicates a localised area of contamination, likely to be associated with the landfill source. The rest of the results indicate some trace levels of PFAS (particularly PFOS) likely to be migrating in groundwater west to east across western areas of the site from Upper Heyford Airfield. However, with some wells recording PFAS concentrations below the laboratory limits of detection, this indicates that no mass plume or concentration of PFAS is present on site.

With appropriate, and standard contamination mitigation measures in place, the presence of PFAS on-site has no material implications for the proposed development in terms of construction or operation, nor for environmental or human 'receptors' which may be affected by the proposed development more generally.

The available data indicates the direct risk of PFAS in surface water and groundwater on human health is considered to be **negligible**, with the end-use of the development site not a sensitive or high-risk use. The appropriate detail and evidence, including of risk assessments and any remediation required, is already secured by draft DCO Requirements 28 and 29 which address issues of contamination and secure the appropriate processes which would apply to PFAS as well as other material or substances. However, it is proposed that the OxSRFI ES will be updated to specifically reflect the presence of this source of contamination on-site, with amendments to be made to the CEMP to ensure relevant phase specific P-CEMPs address the potential presence of PFAS appropriately during construction, including in terms of how it may he handled and moved off-site or how it may be safely kept and managed on-site.

Appendix 1: Laboratory Chemical Results

BWB Consulting Limited
11 Borough High Street
London
SE1 9SE

[redacted]

e: [redacted]

i2 Analytical Ltd.
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Croxley Green
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Analytical Report Number : 26-031766

Project / Site name:	Oxfordshire RFI	**Samples received on:**	12/06/2026
Your job number:	267011	**Samples instructed on/ Analysis started on:**	12/06/2026
Your order number:		**Analysis completed by:**	19/06/2026
Report Issue Number:	1	**Report issued on:**	24/06/2026
Samples Analysed:	1 soil sample - 12 water samples		

[redacted]

Signed:

[redacted]
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 26-031766
Project / Site name: Oxfordshire RFI

Lab Sample Number				950141
Sample Reference				SED01
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				12/06/2026
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
Mass of stone >10mm	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	16
Total mass of sample received	kg	0.1	NONE	0.6

PFAS

NEtFOSA (ethyl perfluorooctanesulfonamide) - Semiquantita	µg/kg	0.1	NONE	< 0.1
FOSA (Perfluorooctanesulfonamide) - Semiquantitative - CA	µg/kg	0.1	NONE	< 0.1
FOSAA (Perfluorooctanesulfonamidoacetic acid) - CAS No 2	µg/kg	0.1	NONE	< 0.1
8:2FTCA (8:2 Fluorotelomer acid) - Semiquantitative - CAS	µg/kg	0.1	NONE	< 0.1
10:2FTCA (10:2 Fluorotelomer carboxylic acid) - Semiquant	µg/kg	0.1	NONE	< 0.1
6:2FTCA (6:2 Fluorotelomer carboxylic acid) - Semiquantita	µg/kg	0.1	NONE	< 0.1
8:2FTS (8:2 Fluorotelomer sulfonic acid) - CAS No 39108-34	µg/kg	0.1	NONE	< 0.1
4:2FTS (4:2 Fluorotelomer sulfonic acid) - CAS No 757124-7	µg/kg	0.1	NONE	< 0.1
6:2FTS (6:2 Fluorotelomer sulfonic acid) - CAS No 27619-97	µg/kg	0.1	NONE	< 0.1
8:2FTUCA (8:2 Fluorotelomer unsaturated carboxylic acid) -	µg/kg	0.1	NONE	< 0.1
10:2FTUCA (10:2 Fluorotelomer unsaturated carboxylic acid	µg/kg	0.1	NONE	< 0.1
6:2FTUCA (6:2 Fluorotelomer unsaturated carboxylic acid) -	µg/kg	0.1	NONE	< 0.1
NEtFOSAA (ethyl perfluorooctanesulfonamidoacetic acid) - (	µg/kg	0.1	NONE	< 0.1
NEtFOSE (ethyl perfluorooctanesulfonamido ethanol) - CAS	µg/kg	0.1	NONE	< 0.1
NMeFOSAA (methyl perfluorooctanesulfonamidoacetic acid)	µg/kg	0.1	NONE	< 0.1
NMeFOSA (methyl perfluorooctanesulfonamide) - CAS No 3	µg/kg	0.1	NONE	< 0.1
NMeFOSE (methyl perfluorooctanesulfonamido ethanol) - C	µg/kg	0.1	NONE	< 0.1
PFBA (Perfluorobutanoic acid) - CAS No 375-22-4	µg/kg	0.1	NONE	< 0.1
PFBS (Perfluorobutanesulfonic acid) - CAS No 375-73-5	µg/kg	0.1	NONE	< 0.1
PFDA (Perfluorodecanoic acid) - CAS No 335-76-2	µg/kg	0.1	NONE	< 0.1
PFDoA (Perfluorododecanoic acid) - CAS No 307-55-1	µg/kg	0.1	NONE	< 0.1
PFDoS (Perfluorododecanesulfonic acid) - CAS No 79780-39	µg/kg	0.1	NONE	< 0.1
PFDS (Perfluorodecanesulfonic acid) - CAS No 335-77-3	µg/kg	0.1	NONE	< 0.1
PFHpA (Perfluoroheptanoic acid) - CAS No 375-85-9	µg/kg	0.1	NONE	< 0.1
PFHpS (Perfluoroheptanesulphonic acid) - CAS No 375-92-8	µg/kg	0.1	NONE	< 0.1
PFHxA (Perfluorohexanoic acid) - CAS No 307-24-4	µg/kg	0.1	NONE	< 0.1
PFHxS (Perfluorohexanesulfonic acid) - CAS No 355-46-4	µg/kg	0.1	NONE	0.2
PFNA (Perfluorononanoic acid) - CAS No 375-95-1	µg/kg	0.1	NONE	0.1
PFNS (Perfluorononanesulfonic acid) - CAS No 68259-12-1	µg/kg	0.1	NONE	< 0.1
PFOA (Perfluorooctanoic acid) - CAS No 335-67-1	µg/kg	0.1	NONE	0.2
PFOS (Perfluorooctanesulfonic acid) - CAS No 1763-23-1	µg/kg	0.1	NONE	5.7
PFPeA (Perfluoropentonic acid) - CAS No 2706-90-3	µg/kg	0.1	NONE	< 0.1
PFUdA (Perfluoroundecanoic acid) - CAS No 2058-94-8	µg/kg	0.1	NONE	< 0.1
PFUdS (Perfluoroundecanesulfonic acid) - CAS No 749786-1	µg/kg	0.1	NONE	< 0.1
PFPeS (Perfluoropentanesulfonic acid) - CAS No 2706-91-4	µg/kg	0.1	NONE	< 0.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 26-031766
Project / Site name: Oxfordshire RFI

Lab Sample Number				950142	950143	950144	950145	950146
Sample Reference				SW1	SW2	SW3	SW4	SW5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Surface water	Surface water	Surface water	Surface water	Surface water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/06/2026	11/06/2026	11/06/2026	11/06/2026	11/06/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
PFAS								
NEtFOSA (Semiquantitative) - CAS No 4151-50-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Semiquantitative) - CAS No 754-91-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA - CAS No 2806-24-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (Semiquantitative) - CAS No 27854-31-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (Semiquantitative) - CAS No 53826-13-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (Semiquantitative) - CAS No 53826-12-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS - CAS No 39108-34-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS - CAS No 757124-72-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS - CAS No 27619-97-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (Semiquantitative) - CAS No 70887-84-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (Semiquantitative) - CAS No 70887-94-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (Semiquantitative) - CAS No 70887-88-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA - CAS No 2991-50-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE - CAS No 1691-99-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA - CAS No 2355-31-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA - CAS No 31506-32-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE - CAS No 24448-09-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDA - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS - CAS No 79780-39-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS - CAS No 355-46-4	µg/l	0.05	NONE	0.06	0.07	< 0.05	0.07	< 0.05
PFNA - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS - CAS No 1763-23-1	µg/l	0.05	NONE	0.08	0.16	0.13	0.32	0.07
PFPeA - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS - CAS No 749786-16-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 26-031766
Project / Site name: Oxfordshire RFI

Lab Sample Number				950153
Sample Reference				SW6
Sample Number				None Supplied
Water Matrix				Surface water
Depth (m)				None Supplied
Date Sampled				12/06/2026
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
PFAS				
NEtFOSA (Semiquantitative) - CAS No 4151-50-2	µg/l	0.05	NONE	< 0.05
FOSA (Semiquantitative) - CAS No 754-91-6	µg/l	0.05	NONE	< 0.05
FOSAA - CAS No 2806-24-8	µg/l	0.05	NONE	< 0.05
8:2FTCA (Semiquantitative) - CAS No 27854-31-5	µg/l	0.05	NONE	< 0.05
10:2FTCA (Semiquantitative) - CAS No 53826-13-4	µg/l	0.05	NONE	< 0.05
6:2FTCA (Semiquantitative) - CAS No 53826-12-3	µg/l	0.05	NONE	< 0.05
8:2FTS - CAS No 39108-34-4	µg/l	0.05	NONE	< 0.05
4:2FTS - CAS No 757124-72-4	µg/l	0.05	NONE	< 0.05
6:2FTS - CAS No 27619-97-2	µg/l	0.05	NONE	< 0.05
8:2FTUCA (Semiquantitative) - CAS No 70887-84-2	µg/l	0.05	NONE	< 0.05
10:2FTUCA (Semiquantitative) - CAS No 70887-94-4	µg/l	0.05	NONE	< 0.05
6:2FTUCA (Semiquantitative) - CAS No 70887-88-6	µg/l	0.05	NONE	< 0.05
NEtFOSAA - CAS No 2991-50-6	µg/l	0.05	NONE	< 0.05
NEtFOSE - CAS No 1691-99-2	µg/l	0.05	NONE	< 0.05
NMeFOSAA - CAS No 2355-31-9	µg/l	0.05	NONE	< 0.05
NMeFOSA - CAS No 31506-32-8	µg/l	0.05	NONE	< 0.05
NMeFOSE - CAS No 24448-09-7	µg/l	0.05	NONE	< 0.05
PFBA - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
PFBS - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05
PFDA - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05
PFDoS - CAS No 79780-39-5	µg/l	0.05	NONE	< 0.05
PFDoA - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05
PFDS - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05
PFHpA - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05
PFHpS - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05
PFHxA - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05
PFHxS - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05
PFNA - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05
PFNS - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05
PFOA - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05
PFOS - CAS No 1763-23-1	µg/l	0.05	NONE	0.08
PFPeA - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05
PFUdA - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05
PFUdS - CAS No 749786-16-1	µg/l	0.05	NONE	< 0.05
PFPeS - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05

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Analytical Report Number: 26-031766
Project / Site name: Oxfordshire RFI

Lab Sample Number				950147	950148	950149	950150	950151
Sample Reference				AR010WM	AR011WM	AR012WM	AR033WM	AR034WM
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/06/2026	12/06/2026	12/06/2026	12/06/2026	12/06/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
PFAS								
NEtFOSA (Semiquantitative) - CAS No 4151-50-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSA (Semiquantitative) - CAS No 754-91-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
FOSAA - CAS No 2806-24-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTCA (Semiquantitative) - CAS No 27854-31-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTCA (Semiquantitative) - CAS No 53826-13-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTCA (Semiquantitative) - CAS No 53826-12-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTS - CAS No 39108-34-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2FTS - CAS No 757124-72-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTS - CAS No 27619-97-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2FTUCA (Semiquantitative) - CAS No 70887-84-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
10:2FTUCA (Semiquantitative) - CAS No 70887-94-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
6:2FTUCA (Semiquantitative) - CAS No 70887-88-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSAA - CAS No 2991-50-6	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NEtFOSE - CAS No 1691-99-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSAA - CAS No 2355-31-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSA - CAS No 31506-32-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NMeFOSE - CAS No 24448-09-7	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBA - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDA - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS - CAS No 79780-39-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNA - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeA - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS - CAS No 749786-16-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 26-031766
Project / Site name: Oxfordshire RFI

Lab Sample Number				950152
Sample Reference				AR009WM
Sample Number				None Supplied
Water Matrix				Ground water
Depth (m)				None Supplied
Date Sampled				12/06/2026
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
PFAS				
NEtFOSA (Semiquantitative) - CAS No 4151-50-2	µg/l	0.05	NONE	< 0.05
FOSA (Semiquantitative) - CAS No 754-91-6	µg/l	0.05	NONE	< 0.05
FOSAA - CAS No 2806-24-8	µg/l	0.05	NONE	< 0.05
8:2FTCA (Semiquantitative) - CAS No 27854-31-5	µg/l	0.05	NONE	< 0.05
10:2FTCA (Semiquantitative) - CAS No 53826-13-4	µg/l	0.05	NONE	< 0.05
6:2FTCA (Semiquantitative) - CAS No 53826-12-3	µg/l	0.05	NONE	< 0.05
8:2FTS - CAS No 39108-34-4	µg/l	0.05	NONE	< 0.05
4:2FTS - CAS No 757124-72-4	µg/l	0.05	NONE	< 0.05
6:2FTS - CAS No 27619-97-2	µg/l	0.05	NONE	< 0.05
8:2FTUCA (Semiquantitative) - CAS No 70887-84-2	µg/l	0.05	NONE	< 0.05
10:2FTUCA (Semiquantitative) - CAS No 70887-94-4	µg/l	0.05	NONE	< 0.05
6:2FTUCA (Semiquantitative) - CAS No 70887-88-6	µg/l	0.05	NONE	< 0.05
NEtFOSAA - CAS No 2991-50-6	µg/l	0.05	NONE	< 0.05
NEtFOSE - CAS No 1691-99-2	µg/l	0.05	NONE	< 0.05
NMeFOSAA - CAS No 2355-31-9	µg/l	0.05	NONE	< 0.05
NMeFOSA - CAS No 31506-32-8	µg/l	0.05	NONE	< 0.05
NMeFOSE - CAS No 24448-09-7	µg/l	0.05	NONE	< 0.05
PFBA - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05
PFBS - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05
PFDA - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05
PFDoS - CAS No 79780-39-5	µg/l	0.05	NONE	< 0.05
PFDoA - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05
PFDS - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05
PFHpA - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05
PFHpS - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05
PFHxA - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05
PFHxS - CAS No 355-46-4	µg/l	0.05	NONE	0.1
PFNA - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05
PFNS - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05
PFOA - CAS No 335-67-1	µg/l	0.05	NONE	0.08
PFOS - CAS No 1763-23-1	µg/l	0.05	NONE	< 0.05
PFPeA - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05
PFUdA - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05
PFUdS - CAS No 749786-16-1	µg/l	0.05	NONE	< 0.05
PFPeS - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05

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Analytical Report Number : 26-031766
Project / Site name: Oxfordshire RFI

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
950141	SED01	None Supplied	None Supplied	Brown sand

Analytical Report Number : 26-031766
Project / Site name: Oxfordshire RFI

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content (Wet Weight)	Moisture content (% wet weight), determined gravimetrically (up to 30°C)	In-house-procedure based on BS EN 12880:2000	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
PFAS in soil by LC-MS/MS	Determination of PFAS in soil by LC-MS/MS	In-house method	L117B	W	NONE
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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Analytical Report Number : 26-048212

Project / Site name:	Ox SRFI	**Samples received on:**	02/09/2026
Your job number:	267011	**Samples instructed on/ Analysis started on:**	02/09/2026
Your order number:	15356	**Analysis completed by:**	09/09/2026
Report Issue Number:	1	**Report issued on:**	09/09/2026
Samples Analysed:	5 water samples		

[redacted]

Signed: _____

[redacted]
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 26-048212
Project / Site name: Ox SRFI

Your Order No: 15356

Lab Sample Number				1035069	1035070	1035071	1035072	1035073
Sample Reference				RO 01	RO 03	RO 04	RO 05	RO 06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water	Ground water
Depth (m)				5.74	4.19	1.94	3.06	5.83
Date Sampled				01/09/2026	01/09/2026	01/09/2026	01/09/2026	01/09/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status					
PFAS								
PFBA - CAS No 375-22-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFBS - CAS No 375-73-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDA - CAS No 335-76-2	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoS - CAS No 79780-39-5	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDoA - CAS No 307-55-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFDS - CAS No 335-77-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpA - CAS No 375-85-9	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHpS - CAS No 375-92-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxA - CAS No 307-24-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFHxS - CAS No 355-46-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNA - CAS No 375-95-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFNS - CAS No 68259-12-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOA - CAS No 335-67-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFOS - CAS No 1763-23-1	µg/l	0.05	NONE	0.1	< 0.05	< 0.05	0.05	< 0.05
PFPeA - CAS No 2706-90-3	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdA - CAS No 2058-94-8	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFUdS - CAS No 749786-16-1	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PFPeS - CAS No 2706-91-4	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number : 26-048212
Project / Site name: Ox SRFI

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
PFAS in water	Determination of PFAS in water by LC-MS/MS	In-house method	L117B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Where coal tar is reported as "indicative/not indicative", PAH source attribution has been assessed using the ratio of parent PAHs to alkylated PAHs to indicate a likely pyrogenic (coal tar–related) or petrogenic (bitumen-related) origin. This assessment is independent of total residue and/or benzo(a)pyrene concentrations and is provided for indicative purposes only; it represents a single line of evidence and does not, in isolation, constitute confirmation or classification as hazardous under WM3 guidance.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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