

19th March 2025

Mrs Sylvia Whittingham/Mr Lee Beveridge
Planning Advisor/Technical Specialist
Environment Agency



CC: Sally Shaw at Bury Council – Direct and via Planning

Dear Sylvia and Lee

PFAS TESTING IN CONCRETE AT FORMER MONDI/HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM, BURY, BLO OBS

1. Introduction

At the request of the Environment Agency (EA), Betts Geo undertook additional PFAS testing of the concrete across the main site area at the above-mentioned site. For the rationale behind this sampling please refer to Betts Geo letter report ref: 19ECH016/MJF/JS/EAResponse2/Rev1 dated 13th February 2025.

Betts Geo referred to sections 6.5, 6.6 & 6.7 of the CIRIA guidance for industry standards of how to undertake such testing (as referred to by the EA), however the guidance is sparse and there is currently no UK guidance/methodology provided within it for concrete testing.

As per Betts Geo letter report ref: 19ECH016/MJF/JS/EAResponse2/Rev1 dated 13th February 2025, based on the significant lines of evidence to date (desk study research, site processes and both groundwater and surface water PFAS sampling results), Betts Geo do not anticipate any substantial source of PFAS across the main site area and concrete across site. The only line of evidence suggesting a potential source of PFAS was the recycling of imported cardboard and paper which may have been impregnated or coated with PFAS. This could have resulted in PFAS being released in waste process waters and in sludge or other solid waste disposed of in the adjacent landfill – subject to a separate assessment. PFAS could only have entered the concrete hard standing by such waters, sludge or solid flowing over, being stored upon and draining on to the concrete.

2. Sampling Strategy

When testing concrete for per- and polyfluoroalkyl substances (PFAS), a well-structured sampling strategy is essential to obtain reliable and representative results.

Structured Approach

Objectives

Betts Geo's objectives were to establish whether or not PFAS is present in the concrete across the main site area and assess any PFAS in concrete for compliance with the guidance levels published in the CIRIA guidance documents.

As no known source of PFAS was anticipated across the main site area (and case put forward for no testing required), 52 determinants including the 48 individual substances listed by the Drinking Water Inspectorate and the TOP Assay were scheduled as per the CIRIA guidance.



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Welsh Road, Sealand
Flintshire CH5 2LY
Telephone: 01244 288179
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Select Sample Locations

Betts Geo undertook targeted sampling focusing on areas where the potential for PFAS contamination was higher.

Four different hardstanding surfaces were selected as shown by the red areas and sample points below. These areas were more likely to be affected by PFAS due to processes undertaken in these areas including raw material storage, waste store and pumping area, pulp preparation and filter beds. For the full rational behind this area selection please see Betts Geo letter report ref: 19ECH016/MJF/JS/EAResponse2/Rev1 dated 13th February 2025.



Determine Sample Types

Near surface samples of concrete were collected from the top layer of the concrete (e.g., 0-2 cm) to assess possible direct contamination (photographs shown in appendix).

Sampling Procedure

Samples were taken in the suspected order of least likely to more likely to be affected by PFAS contamination to avoid possible cross contamination.

PFAS-free sampling tools were used (Teflon, PTFE, and fluoropolymer-coated materials).

Gloves were worn to avoid bare hands touching sample equipment, as these may have PFAS containing conditioners makeup etc.

Wearing of Goretex jacket / waterproof, that may have shed PFAS, was not used during sampling.

Nitrile gloves were worn and changed frequently (different gloves were used for each sample - changed in between)

Duplicate samples were collected to ensure quality control.

Samples were stored in PFAS-free containers (HDPE) provided by the Laboratory.

Cross-contamination was avoided by using clean equipment for each sample.

Surface samples were collected by utilising a large excavator with toothed bucket to rip the upper surface of the concrete to allow collection of gravel and sand size fragments.

Excavator bucket was washed down between sampling using potable water as per the CIRIA Guidance.

Laboratory Analysis

Under the guidance of Envirolab and their specialist sub contractor Veritas Laboratory Services Ltd using method as described, with no sampling deviations noted.

The samples were analysed for 52 PFAS, including PFOA, PFOS, and short-chain PFAS and TOP Assay.

TOP Assay:

Pre-oxidation analysis by LCMS QQQ

1ml Sodium Hydroxide solution

1g Persulphate oxidizer

86 degrees C for 6-18hrs depending on conversion

Adjust pH 3-6

Cleanup via SPE

Recovery standards added.

Post oxidation analysis by LCMS QQQ.

PFAS 49:

pH adjusted with Formic acid or Ammonium Hydroxide.

Labelled standards are added.

Extraction via mixed mode SPE.

Eluted with methanol/NH₄ methanol.

Recovery standards added.

Analysed by LCMS QQQ.

In-house method based on US EPA 1633 Method.

Data Interpretation & Reporting

- Results will be compared against regulatory thresholds (if available).
- Contamination patterns and sources will be identified (if present)
- Mitigation strategies will be recommended if PFAS are detected.

3. Results and Discussion

A total of 8 samples were analysed – two from each of the four identified ‘higher’ priority areas.

The results for the samples analysed and for all determinants tested were below the method detection limits.

Testing of the concrete for PFAS found no detectable PFAS in the concrete matrix. We therefore reasonably conclude that:

PFAS Contamination is Absent or Below Detection Limits

- The tested concrete does not contain measurable PFAS at the time of sampling.
- Any PFAS, if present, is below the laboratory's detection and quantification limits.

Surface and Subsurface Contamination is Unlikely

- The absence in both surface and deeper layers suggests that neither historical deposition nor surface exposure has led to significant PFAS retention.

Migration into or Out of the Concrete is Unlikely

- If PFAS were introduced via external sources (e.g., firefighting foam, contaminated water, recycled papers), it likely has not been absorbed or has degraded/dissipated over time.

4. Conclusion

The results correlate and supports with the lines of evidence provided by Betts Geo previously.

No PFAS contamination was identified - and no further risk assessment for the reuse of concrete on site is therefore required in regards to PFAS and the concrete is suitable for reuse in regards to PFAS.

On this basis we request the EA remove their objections stated in letter report ref: ENVPAC/1/GMC/00601 dated 09 October 2024) which is as follows:

"Please be aware that we believe that the site has not been fully assessed for the presence of PFAS (only a limited area to the north of the site) and that the hardstanding which is also present will need assessment as we are aware that PFAS can contaminate floor materials such as concrete leading to them also being adversely impacted."

I trust you will find the above of assistance.

Yours sincerely



Marc Fawcett
Director
BETTS GEO ENVIRONMENTAL

Test Certificates
Photographs



TEST REPORT

Report Number: 2025-476

Customer Name : Envirolab Ltd

Customer Address : Housesteads
Off Stockport Road
Hattersley, SK14 3QU

Order Number : P0756283

Additional Reference: Site Ref: 19ECH016

Issue : 0

Date of Receipt : 06/03/25

Date of Analysis : 07/03/25

Date of Report : 11/03/25

Sample Type : Unknown Solid

Customer Sample Identifier : 25/02196/1 CONC A 04/03/25

Sample Condition : Conforming

Comments:

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Approved by : Karolina Pettit

Position : Director

Signature : *K. Pettit*

Results PFAS

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Test Report Number : 2025-476

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Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Conc.
3:3 FTCA	356-02-5	1	µg/kg	ND
4:2 FTSA; 4:2 FTS	757124-72-4	1	µg/kg	ND
PFecHS	335-24-0	1	µg/kg	ND
5:3 FTCA	914637-49-3	1	µg/kg	ND
6:2 FTSA; 6:2 FTS	27619-97-2	1	µg/kg	ND
7:3 FTCA	812-70-4	1	µg/kg	ND
8:2 FTSA; 8:2 FTS ^	39108-34-4	1	µg/kg	ND
6:2 Cl-PFESA; 9Cl-PF3ONS	756426-58-1	1	µg/kg	ND
10:2 FTS	108026-35-3	1	µg/kg	ND
8:2 Cl-PFESA; 11Cl-PF3OUdS	763051-92-9	1	µg/kg	ND
DONA; ADONA	919005-14-4	1	µg/kg	ND
EtFOSE	1691-99-2	1	µg/kg	ND
FBSA	30334-69-1	1	µg/kg	ND
FHxSA	41997-13-1	1	µg/kg	ND
FOSAA	2806-24-8	1	µg/kg	ND
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HFPO-TA	13252-14-7	1	µg/kg	ND
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NEtFOSAA; EtFOSAA	2991-50-6	1	µg/kg	ND
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PFDoA	307-55-1	1	µg/kg	ND
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PFHpS	375-92-8	1	µg/kg	ND
PFHxA	307-24-4	1	µg/kg	ND
PFHxDA	67905-19-5	1	µg/kg	ND
PFHxS Linear	355-46-4	1	µg/kg	ND
PFHxS Branched	-	1	µg/kg	ND
PFHxS Total	-	1	µg/kg	ND
PfMOBA	863090-89-5	1	µg/kg	ND
PfMOPrA	377-73-1	1	µg/kg	ND

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PFOA Branched	-	1	µg/kg	ND
PFOA Total	-	1	µg/kg	ND
PFODA	16517-11-6	1	µg/kg	ND
PFOS Linear	1763-23-1	1	µg/kg	ND
PFOS Branched	-	1	µg/kg	ND
PFOS Total	-	1	µg/kg	ND
FOSA (PFOSA)	754-91-6	1	µg/kg	ND
PFPeA	2706-90-3	1	µg/kg	ND
PFPeS	2706-91-4	1	µg/kg	ND
PFTeA	376-06-7	1	µg/kg	ND
PFTrDA (PFTriA)	72629-94-8	1	µg/kg	ND
PFUdA; PFUnA	2058-94-8	1	µg/kg	ND
PFUnDS	749786-16-1	1	µg/kg	ND

ND - not detected

^ The recovery of ES standard either <70% or >130%

NB - The above does not affect the results as recoveries % within EPA1633 method range.



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Order Number : P0756283

Additional Reference: Site Ref: 19ECH016

Issue : 0

Date of Receipt : 06/03/25

Date of Analysis : 07/03/25

Date of Report : 11/03/25

Sample Type : Unknown Solid

Customer Sample Identifier : 25/02196/2 CONC B 04/03/25

Sample Condition : Conforming

Comments:

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Approved by : Karolina Pettit

Position : Director

Signature : *K. Pettit*

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PFOS Branched	-	1	µg/kg	ND
PFOS Total	-	1	µg/kg	ND
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Off Stockport Road
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Order Number : P0756283

Additional Reference: Site Ref: 19ECH016

Issue : 0

Date of Receipt : 06/03/25

Date of Analysis : 07/03/25

Date of Report : 11/03/25

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Customer Sample Identifier : 25/02196/3 CONC C 04/03/25

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Approved by : Karolina Pettit

Position : Director

Signature : *K. Pettit*

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PFPeS	2706-91-4	1	µg/kg	ND
PFTeA	376-06-7	1	µg/kg	ND
PFTrDA (PFTriA)	72629-94-8	1	µg/kg	ND
PFUdA; PFUnA	2058-94-8	1	µg/kg	ND
PFUnDS	749786-16-1	1	µg/kg	ND

ND - not detected



**VERITAS
LABORATORY
SERVICES**

TEST REPORT

Report Number: 2025-460

Customer Name : Envirolab Ltd

Customer Address : Housesteads
Off Stockport Road
Hattersley, SK14 3QU

Order Number : P0756284

Additional Reference: Site Ref: 19ECH016

Issue : 0

Date of Receipt : 06/03/25

Date of Analysis : 07/03/25

Date of Report : 11/03/25

Sample Type : Unknown Solid

Customer Sample Identifier : 25/02197/1 CONC 1 05/03/25

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit

Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-460

Customer Sample Identifier : 25/02197/1 CONC 1 05/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Conc.
3:3 FTCA	356-02-5	1	µg/kg	ND
4:2 FTSA; 4:2 FTS	757124-72-4	1	µg/kg	ND
PFechS	335-24-0	1	µg/kg	ND
5:3 FTCA	914637-49-3	1	µg/kg	ND
6:2 FTSA; 6:2 FTS	27619-97-2	1	µg/kg	ND
7:3 FTCA	812-70-4	1	µg/kg	ND
8:2 FTSA; 8:2 FTS	39108-34-4	1	µg/kg	ND
6:2 Cl-PFESA; 9Cl-PF3ONS	756426-58-1	1	µg/kg	ND
10:2 FTS	108026-35-3	1	µg/kg	ND
8:2 Cl-PFESA; 11Cl-PF3OUdS	763051-92-9	1	µg/kg	ND
DONA; ADONA	919005-14-4	1	µg/kg	ND
EtFOSE	1691-99-2	1	µg/kg	ND
FBSA	30334-69-1	1	µg/kg	ND
FHxSA	41997-13-1	1	µg/kg	ND
FOSAA	2806-24-8	1	µg/kg	ND
HFPO-DA (Gen X)	13252-13-6	1	µg/kg	ND
HFPO-TA	13252-14-7	1	µg/kg	ND
EtFOSA; N-EtFOSA	4151-50-2	1	µg/kg	ND
NEtFOSAA; EtFOSAA	2991-50-6	1	µg/kg	ND
NFDHA	151772-58-6	1	µg/kg	ND
MeFOSA; N-MeFOSA	31506-32-8	1	µg/kg	ND
NMeFOSAA; MeFOSAA	2355-31-9	1	µg/kg	ND
MeFOSE	24448-09-7	1	µg/kg	ND
PFBA	375-22-4	1	µg/kg	ND
PFBS	375-73-5	1	µg/kg	ND
PFDA	335-76-2	1	µg/kg	ND
PFDoA	307-55-1	1	µg/kg	ND
PFDoS	79780-39-5	1	µg/kg	ND
PFDS	335-77-3	1	µg/kg	ND
PFEESA	113507-82-7	1	µg/kg	ND
PFHpA	375-85-9	1	µg/kg	ND
PFHpS	375-92-8	1	µg/kg	ND
PFHxA	307-24-4	1	µg/kg	ND
PFHxDA	67905-19-5	1	µg/kg	ND
PFHxS Linear	355-46-4	1	µg/kg	ND
PFHxS Branched	-	1	µg/kg	ND
PFHxS Total	-	1	µg/kg	ND
PFMOBA	863090-89-5	1	µg/kg	ND
PFMOPrA	377-73-1	1	µg/kg	ND

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-460

Customer Sample Identifier : 25/02197/1 CONC 1 05/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Conc.
PFNA	375-95-1	1	µg/kg	ND
PFNS	68259-12-1	1	µg/kg	ND
PFOA Linear	335-67-1	1	µg/kg	ND
PFOA Branched	-	1	µg/kg	ND
PFOA Total	-	1	µg/kg	ND
PFODA	16517-11-6	1	µg/kg	ND
PFOS Linear	1763-23-1	1	µg/kg	ND
PFOS Branched	-	1	µg/kg	ND
PFOS Total	-	1	µg/kg	ND
FOSA (PFOSA)	754-91-6	1	µg/kg	ND
PFPeA	2706-90-3	1	µg/kg	ND
PFPeS	2706-91-4	1	µg/kg	ND
PFTeA	376-06-7	1	µg/kg	ND
PFTTrDA (PFTTriA)	72629-94-8	1	µg/kg	ND
PFUdA; PFUnA	2058-94-8	1	µg/kg	ND
PFUnDS	749786-16-1	1	µg/kg	ND

ND - not detected



**VERITAS
LABORATORY
SERVICES**

TEST REPORT

Report Number: 2025-477

Customer Name : Envirolab Ltd

Customer Address : Housesteads
Off Stockport Road
Hattersley, SK14 3QU

Order Number : P0756283

Additional Reference: Site Ref: 19ECH016

Issue : 0

Date of Receipt : 06/03/25

Date of Analysis : 07/03/25

Date of Report : 11/03/25

Sample Type : Unknown Solid

Customer Sample Identifier : 25/02196/2 CONC B 04/03/25

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit

Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-477

Customer Sample Identifier : 25/02196/2 CONC B 04/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Post TOPA Conc.
3:3 FTCA	356-02-5	1	µg/kg	ND
4:2 FTSA; 4:2 FTS	757124-72-4	1	µg/kg	ND
PFechS	335-24-0	1	µg/kg	ND
5:3 FTCA	914637-49-3	1	µg/kg	ND
6:2 FTSA; 6:2 FTS	27619-97-2	1	µg/kg	ND
7:3 FTCA	812-70-4	1	µg/kg	ND
8:2 FTSA; 8:2 FTS	39108-34-4	1	µg/kg	ND
6:2 Cl-PFESA; 9Cl-PF3ONS	756426-58-1	1	µg/kg	ND
10:2 FTS	108026-35-3	1	µg/kg	ND
8:2 Cl-PFESA; 11Cl-PF3OUdS	763051-92-9	1	µg/kg	ND
DONA; ADONA	919005-14-4	1	µg/kg	ND
EtFOSE	1691-99-2	1	µg/kg	ND
FBSA	30334-69-1	1	µg/kg	ND
FHxSA	41997-13-1	1	µg/kg	ND
FOSAA	2806-24-8	1	µg/kg	ND
HFPO-DA (Gen X)	13252-13-6	1	µg/kg	ND
HFPO-TA	13252-14-7	1	µg/kg	ND
EtFOSA; N-EtFOSA	4151-50-2	1	µg/kg	ND
NEtFOSAA; EtFOSAA	2991-50-6	1	µg/kg	ND
NFDHA	151772-58-6	1	µg/kg	ND
MeFOSA; N-MeFOSA	31506-32-8	1	µg/kg	ND
NMeFOSAA; MeFOSAA	2355-31-9	1	µg/kg	ND
MeFOSE	24448-09-7	1	µg/kg	ND
PFBA	375-22-4	1	µg/kg	ND
PFBS	375-73-5	1	µg/kg	ND
PFDA	335-76-2	1	µg/kg	ND
PFDoA	307-55-1	1	µg/kg	ND
PFDoS	79780-39-5	1	µg/kg	ND
PFDS	335-77-3	1	µg/kg	ND
PFEESA	113507-82-7	1	µg/kg	ND
PFHpA	375-85-9	1	µg/kg	ND
PFHpS	375-92-8	1	µg/kg	ND
PFHxA	307-24-4	1	µg/kg	ND
PFHxDA	67905-19-5	1	µg/kg	ND
PFHxS Linear	355-46-4	1	µg/kg	ND
PFHxS Branched	-	1	µg/kg	ND
PFHxS Total	-	1	µg/kg	ND
PfMOBA	863090-89-5	1	µg/kg	ND
PfMOPrA	377-73-1	1	µg/kg	ND

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-477

Customer Sample Identifier : 25/02196/2 CONC B 04/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Post TOPA Conc.
PFNA	375-95-1	1	µg/kg	ND
PFNS	68259-12-1	1	µg/kg	ND
PFOA Linear	335-67-1	1	µg/kg	ND
PFOA Branched	-	1	µg/kg	ND
PFOA Total	-	1	µg/kg	ND
PFODA	16517-11-6	1	µg/kg	ND
PFOS Linear	1763-23-1	1	µg/kg	ND
PFOS Branched	-	1	µg/kg	ND
PFOS Total	-	1	µg/kg	ND
FOSA (PFOSA)	754-91-6	1	µg/kg	ND
PFPeA	2706-90-3	1	µg/kg	ND
PFPeS	2706-91-4	1	µg/kg	ND
PFTeA	376-06-7	1	µg/kg	ND
PFTTrDA (PFTTriA)	72629-94-8	1	µg/kg	ND
PFUdA; PFUnA	2058-94-8	1	µg/kg	ND
PFUnDS	749786-16-1	1	µg/kg	ND

ND - not detected



**VERITAS
LABORATORY
SERVICES**

TEST REPORT

Report Number: 2025-478

Customer Name : Envirolab Ltd

Customer Address : Housesteads
Off Stockport Road
Hattersley, SK14 3QU

Order Number : P0756283

Additional Reference: Site Ref: 19ECH016

Issue : 0

Date of Receipt : 06/03/25

Date of Analysis : 07/03/25

Date of Report : 11/03/25

Sample Type : Unknown Solid

Customer Sample Identifier : 25/02196/3 CONC C 04/03/25

Sample Condition : Conforming

Comments:

Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS.

Approved by : Karolina Pettit

Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-478

Customer Sample Identifier : 25/02196/3 CONC C 04/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Post TOPA Conc.
3:3 FTCA	356-02-5	1	µg/kg	ND
4:2 FTSA; 4:2 FTS	757124-72-4	1	µg/kg	ND
PFecHS	335-24-0	1	µg/kg	ND
5:3 FTCA	914637-49-3	1	µg/kg	ND
6:2 FTSA; 6:2 FTS	27619-97-2	1	µg/kg	ND
7:3 FTCA	812-70-4	1	µg/kg	ND
8:2 FTSA; 8:2 FTS	39108-34-4	1	µg/kg	ND
6:2 Cl-PFESA; 9Cl-PF3ONS	756426-58-1	1	µg/kg	ND
10:2 FTS	108026-35-3	1	µg/kg	ND
8:2 Cl-PFESA; 11Cl-PF3OUdS	763051-92-9	1	µg/kg	ND
DONA; ADONA	919005-14-4	1	µg/kg	ND
EtFOSE	1691-99-2	1	µg/kg	ND
FBSA	30334-69-1	1	µg/kg	ND
FHxSA	41997-13-1	1	µg/kg	ND
FOSAA	2806-24-8	1	µg/kg	ND
HFPO-DA (Gen X)	13252-13-6	1	µg/kg	ND
HFPO-TA	13252-14-7	1	µg/kg	ND
EtFOSA; N-EtFOSA	4151-50-2	1	µg/kg	ND
NEtFOSAA; EtFOSAA	2991-50-6	1	µg/kg	ND
NFDHA	151772-58-6	1	µg/kg	ND
MeFOSA; N-MeFOSA	31506-32-8	1	µg/kg	ND
NMeFOSAA; MeFOSAA	2355-31-9	1	µg/kg	ND
MeFOSE	24448-09-7	1	µg/kg	ND
PFBA	375-22-4	1	µg/kg	ND
PFBS	375-73-5	1	µg/kg	ND
PFDA	335-76-2	1	µg/kg	ND
PFDoA	307-55-1	1	µg/kg	ND
PFDoS	79780-39-5	1	µg/kg	ND
PFDS	335-77-3	1	µg/kg	ND
PFEESA	113507-82-7	1	µg/kg	ND
PFHpA	375-85-9	1	µg/kg	ND
PFHpS	375-92-8	1	µg/kg	ND
PFHxA	307-24-4	1	µg/kg	ND
PFHxDA	67905-19-5	1	µg/kg	ND
PFHxS Linear	355-46-4	1	µg/kg	ND
PFHxS Branched	-	1	µg/kg	ND
PFHxS Total	-	1	µg/kg	ND
PFMOBA	863090-89-5	1	µg/kg	ND
PFMOPrA	377-73-1	1	µg/kg	ND

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-478

Customer Sample Identifier : 25/02196/3 CONC C 04/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Post TOPA Conc.
PFNA	375-95-1	1	µg/kg	ND
PFNS	68259-12-1	1	µg/kg	ND
PFOA Linear	335-67-1	1	µg/kg	ND
PFOA Branched	-	1	µg/kg	ND
PFOA Total	-	1	µg/kg	ND
PFODA	16517-11-6	1	µg/kg	ND
PFOS Linear	1763-23-1	1	µg/kg	ND
PFOS Branched	-	1	µg/kg	ND
PFOS Total	-	1	µg/kg	ND
FOSA (PFOSA)	754-91-6	1	µg/kg	ND
PFPeA	2706-90-3	1	µg/kg	ND
PFPeS	2706-91-4	1	µg/kg	ND
PFTeA	376-06-7	1	µg/kg	ND
PFTTrDA (PFTTriA)	72629-94-8	1	µg/kg	ND
PFUdA; PFUnA	2058-94-8	1	µg/kg	ND
PFUnDS	749786-16-1	1	µg/kg	ND

ND - not detected



**VERITAS
LABORATORY
SERVICES**

TEST REPORT

Report Number: 2025-479

Customer Name : Envirolab Ltd

Customer Address : Housesteads
Off Stockport Road
Hattersley, SK14 3QU

Order Number : P0756283

Additional Reference: Site Ref: 19ECH016

Issue : 0

Date of Receipt : 06/03/25

Date of Analysis : 07/03/25

Date of Report : 11/03/25

Sample Type : Unknown Solid

Customer Sample Identifier : 25/02196/4 CONC D 04/03/25

Sample Condition : Conforming

Comments:

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Approved by : Karolina Pettit

Position : Director

Signature : *K. Pettit*

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-479

Customer Sample Identifier : 25/02196/4 CONC D 04/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Post TOPA Conc.
3:3 FTCA	356-02-5	1	µg/kg	ND
4:2 FTSA; 4:2 FTS	757124-72-4	1	µg/kg	ND
PFecHS	335-24-0	1	µg/kg	ND
5:3 FTCA	914637-49-3	1	µg/kg	ND
6:2 FTSA; 6:2 FTS	27619-97-2	1	µg/kg	ND
7:3 FTCA	812-70-4	1	µg/kg	ND
8:2 FTSA; 8:2 FTS	39108-34-4	1	µg/kg	ND
6:2 Cl-PFESA; 9Cl-PF3ONS	756426-58-1	1	µg/kg	ND
10:2 FTS	108026-35-3	1	µg/kg	ND
8:2 Cl-PFESA; 11Cl-PF3OUdS	763051-92-9	1	µg/kg	ND
DONA; ADONA	919005-14-4	1	µg/kg	ND
EtFOSE	1691-99-2	1	µg/kg	ND
FBSA	30334-69-1	1	µg/kg	ND
FHxSA	41997-13-1	1	µg/kg	ND
FOSAA	2806-24-8	1	µg/kg	ND
HFPO-DA (Gen X)	13252-13-6	1	µg/kg	ND
HFPO-TA	13252-14-7	1	µg/kg	ND
EtFOSA; N-EtFOSA	4151-50-2	1	µg/kg	ND
NEtFOSAA; EtFOSAA	2991-50-6	1	µg/kg	ND
NFDHA	151772-58-6	1	µg/kg	ND
MeFOSA; N-MeFOSA	31506-32-8	1	µg/kg	ND
NMeFOSAA; MeFOSAA	2355-31-9	1	µg/kg	ND
MeFOSE	24448-09-7	1	µg/kg	ND
PFBA	375-22-4	1	µg/kg	ND
PFBS	375-73-5	1	µg/kg	ND
PFDA	335-76-2	1	µg/kg	ND
PFDoA	307-55-1	1	µg/kg	ND
PFDoS	79780-39-5	1	µg/kg	ND
PFDS	335-77-3	1	µg/kg	ND
PFEESA	113507-82-7	1	µg/kg	ND
PFHpA	375-85-9	1	µg/kg	ND
PFHpS	375-92-8	1	µg/kg	ND
PFHxA	307-24-4	1	µg/kg	ND
PFHxDA	67905-19-5	1	µg/kg	ND
PFHxS Linear	355-46-4	1	µg/kg	ND
PFHxS Branched	-	1	µg/kg	ND
PFHxS Total	-	1	µg/kg	ND
PfMOBA	863090-89-5	1	µg/kg	ND
PfMOPrA	377-73-1	1	µg/kg	ND

Results PFAS

Sample Type : Unknown Solid

Test Report Number : 2025-479

Customer Sample Identifier : 25/02196/4 CONC D 04/03/25

Sample Condition : Conforming

Test Method : VLS SOP 021

PFAS Compound	CAS Reg No	MDLs	Units	Post TOPA Conc.
PFNA	375-95-1	1	µg/kg	ND
PFNS	68259-12-1	1	µg/kg	ND
PFOA Linear	335-67-1	1	µg/kg	ND
PFOA Branched	-	1	µg/kg	ND
PFOA Total	-	1	µg/kg	ND
PFODA	16517-11-6	1	µg/kg	ND
PFOS Linear	1763-23-1	1	µg/kg	ND
PFOS Branched	-	1	µg/kg	ND
PFOS Total	-	1	µg/kg	ND
FOSA (PFOSA)	754-91-6	1	µg/kg	ND
PFPeA	2706-90-3	1	µg/kg	ND
PFPeS	2706-91-4	1	µg/kg	ND
PFTeA	376-06-7	1	µg/kg	ND
PFTrDA (PFTriA)	72629-94-8	1	µg/kg	ND
PFUdA; PFUnA	2058-94-8	1	µg/kg	ND
PFUnDS	749786-16-1	1	µg/kg	ND

ND - not detected



Area B – Concrete at surface



Area A



Area C



Area D



Area B



Area D