

# Dewatering Discharge Risk Assessment

## AD6 Leiston Drain Crossing

Project	<b>SZC: Sizewell C</b>	Teamcenter ID	
Teamcenter Contract	Choose an item.		
Client	<b>NNB Generation Co.</b>	Contractor Reference	
Contractor	<b>Civil Works Alliance</b>	Contractor Rev	<b>P01.02</b>
Purpose of Issue	<b>P1 - Published for Implementation</b>		
Supplier	<b>AtkinsRéalis</b>	Originators Ref	<b>5213850-SNC-09-XX-TREP-X-900001</b>
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Approved by	<b>---</b>	Role	<b>Associate Director</b>

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## REVISION HISTORY

Revision	Purpose	Amendment	Prepared By	Date
P01.02	P1 - Published for Implementation	EA comments addressed	TW	---
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SZC-EW0921-ATK-XX-WSO-09XXXX-REP-CLE-900001SZC-EW0921-ATK-XX-WSO-09XXXX-REP-CLE-900001P01.02 | 101193394

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This document has **24** pages including the cover.

## Document History

Rev	Status	Purpose Description	Originated	Checked	Reviewed	Approved	Date
P01.02	S0	EA comments addressed	TW	JH	---	---	26/03/24
P01.01		First Revision - for comment	TW	JH	SF	---	---

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# 1. Introduction

## 1.1. Overall Project Scope

This Scope of Works is part of a suite of documents supporting Site Establishment and Enabling Works Design for the Sizewell C Nuclear Power Station.

The Site Establishment and Enabling Works are physically bounded by the DCO “Red Line” boundary encompassing the development site.

Site Establishment and Enabling Works will interface with other designs such as Associated Developments (AD's), Relocated Facilities (RF's) and Statutory Undertakers' Works at points within and around the red line boundary.

## 1.2. Package Description

This assessment related to the construction of the Leiston Drain Overbridge which forms part of Associated Development 6 (AD6) of the Enabling Works package with construction planned to start in September 2024. The proposed crossing is located at grid reference 645450E 263500N.

## 1.3. Scope of Assessment

The scope of this report is to carry out a surface water pollution risk assessment in accordance with Environment Agency permitting guidance [1] related to discharging groundwater dewatered from piled foundations which will be installed to facilitate the construction of the AD6 Leiston Drain Overbridge.

## 1.4. Supporting Documentation

Numerous phases of design, monitoring and assessment have been completed historically for Sizewell C, and data for this assessment comes from various of these sources as detailed below. Internet hyperlinks are included for documents that are published in the public realm (such as Environmental Statement appendices), and the section/page of the relevant document is included in this report. For any documents that are not published in the public realm, all relevant information for this assessment has been reproduced in this report. The following site specific sources were used for this assessment:

- “SIZC-EW0411-ATK-XX-000-XXXXXX-REP-CIV-000010: Groundwater Monitoring Report between 2020-2022,” [2];
- [Sizewell C Groundwater Modelling Report prepared for EDF NNB GenCo](#), January 2020 [3].
- Atkins. (2023). Technical Note: Water Quality and Flow Baseline. revision 1.0 Draft Issue. Ref. SIZC-EW0921-ATK-XX-000-XXXXXX-REP-CLE-9000001 (n.b. this Technical Note is included within the CWDA application) [4]; and
- Sizewell C. (2023). Associated Development 6 - Construction Methodology Overview [5].

Regulatory engagement with the Environment Agency to date is appended as Appendix A.1 with pertinent design drawings provided as Appendix A.2.

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## 2. Dewatering Requirements

### 2.1. Groundwater arisings

The AD6 crossing structure will comprise three 20 metre (m) spans formed from precast beams placed upon piled reinforced concrete piers. Specific details of the pile and pile cap designs are to be finalised, however, AD6 ECI Deliverable 18 – Construction Methodology Overview [6] indicates the foundations will consist of a bored and cast in situ solution utilising Continuous Flight Auger (CFA) methodology. It is currently anticipated that the design will comprise a total of 38 piles arranged in four groups, with two groups north and two groups south of the Leiston Drain.

Figure 1-1 below presents the location of The Leiston Drain Overbridge.

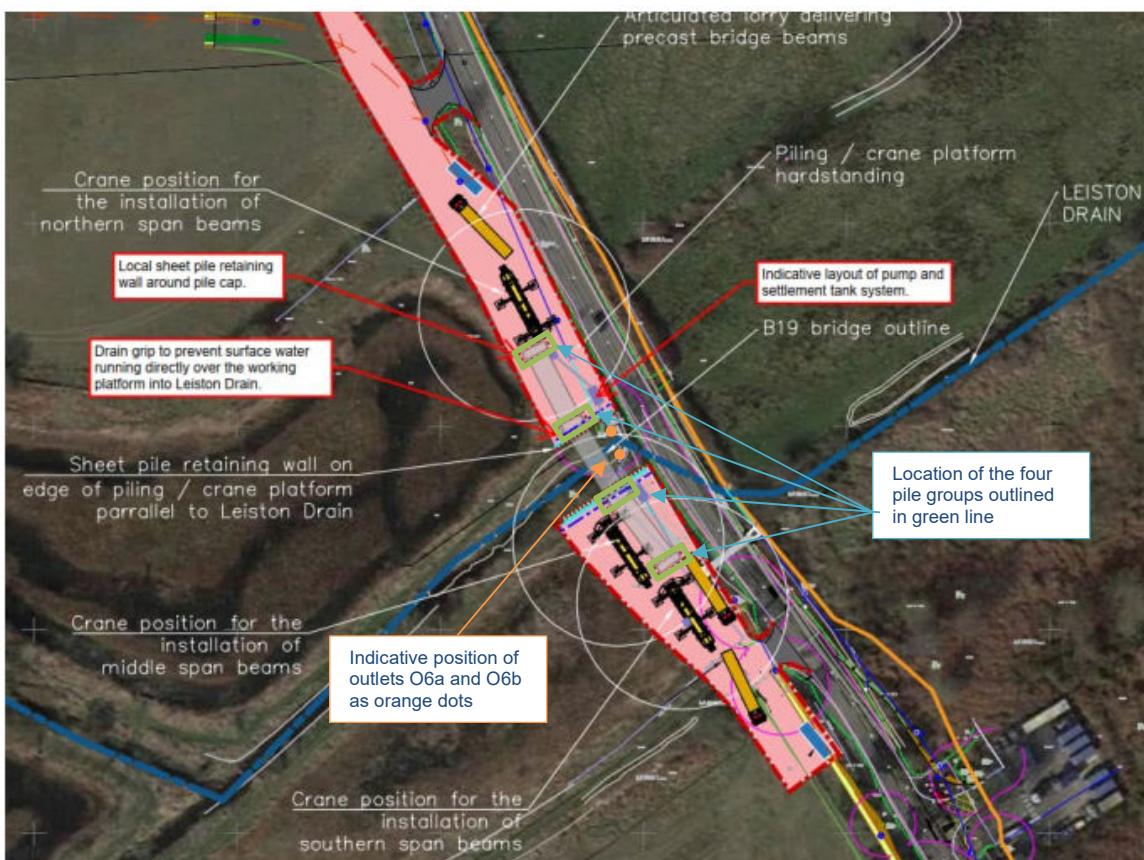


Figure 2-1 - Location of Leiston Drain Overbridge Crossing

It is anticipated that small amounts of groundwater in the vicinity of the proposed Leiston Overbridge will be forced to the surface during the advancement of the CFA piles. The groundwater that accumulates is proposed to be discharged to the Leiston Drain, an inland freshwater water body that flows through construction area.

Groundwater will be brought to the surface by the CFA auguring process so will be intermittent as the piles are installed one by one. This water will be brought to the surface of the piling platform by the rotating action of the auger and its removal as concrete is placed. The plan is to locally cut shallow channels to catch this water as it runs onto the surface, directing it to a sump within the engineered platform and pump the water away for treatment.

### 2.2. Discharge arrangements

Groundwater will be directed into the permanent filter drains and allowed to flow towards and discharge at outlets O6a and O6b on the north and south sides of the Leiston Drain respectively. The location of the outlets is shown on Figure 2-1 and Figure 3-1.

The discharged groundwater will be allowed to mix with rainfall dependent site drainage which is directed to the same outlets. The extent of any such mixing will be governed by the programme of

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construction works. There are no flow controls in place at the outfalls, flows will be controlled through pump capacity. No scour protection proposed specifically for the groundwater discharge. The Leiston Drain is classified as a Main River and a Water Framework Directive (WFD) designated waterbody (GB105035046271 - Leiston Beck) [7]. A Phase 1 (screening assessment) Surface Water Pollution Risk Assessment (formerly known as H1 annex D1) has been undertaken to determine whether the proposed dewatering activities could cause adverse impacts to the receiving surface water quality of the Leiston Drain and to help inform treatment methods if required. The H1 Assessment is required for the permitting of discharge containing priority hazardous substances, priority substances and “other pollutants” to surface waters [1]. The classification of substances and pollutants is covered by the Water Framework Directive [8].

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# 3. Environmental Setting

## 3.1. Site Location

The location of the proposed Leiston Overbridge is within the DCO Redline boundary encompassing the development site as illustrated in Figure 2-1. The site is located 1.5 kilometres west of the existing Sizewell B power station and the proposed Sizewell C location.

## 3.2. Geology

The regional geology of Sizewell C comprises Made Ground and Superficial Deposits containing Peat/ Alluvium over bedrock of Crag Group, Palaeogene deposits (of the Thames Group, Lambeth Group, Thanet Formation) and the Chalk Group([page 24, table 2.1](#) of [3]).

Local ground conditions in the area of the proposed Leiston Overbridge site indicate a sequence of topsoil to 0.50 m bgl (1.26 m AOD) Superficial peat to 1.30 m bgl (-0.14 m AOD) and Crag Group to the base of the borehole at 7.90 m bgl (-6.14 m AOD). Borehole logs for AD6 and AF6 which were used to understand local geological conditions have been included in Appendix B.

## 3.3. Hydrogeology

The Environment Agency classifies the Crag Group as a principal aquifer. The aquifer is hydraulically separated from Chalk by the presence of the Palaeogene deposits formation (unproductive stratum). The Peat is classified as unproductive stratum but has ecological importance associated with the Sizewell Marshes SSSI.

Across the wider site area, hydraulic head of Crag groundwater has been recorded slightly higher than those in the Peat, therefore it is considered that there is potential for groundwater within the Crag to migrate upwards into the Peat. No tidal variation is observed in the Peat unlike the Crag and therefore there is some hydraulic separation between these aquifers. This is considered to be due to the low vertical hydraulic conductivity of the Peat.

Water levels from boreholes screened within the Peat (Piez 1a, 1b, 2a, 3a and 3b) in the vicinity of Leiston Overbridge indicate that groundwater level ranges between 0.029 and 1.96 m AOD in this area [2]. Borehole AD6-312 located in the vicinity of the proposed Leiston Overbridge and screening the Crag aquifer had an average groundwater level of 1.37 m AOD.

Leiston Drain is the feature the proposed Leiston Overbridge will cross. Features such as Leiston Drain are reportedly [3] in hydraulic continuity with underlying groundwater, providing local recharge to the Sizewell Marshes SSSI and the Minsmere-Walberswick Heaths and Marshes SSSI during high water level conditions. It is assumed that Leiston Drain is in continuity with the underlying groundwater within Peat and Crag.

## 3.4. Groundwater Quality Baseline

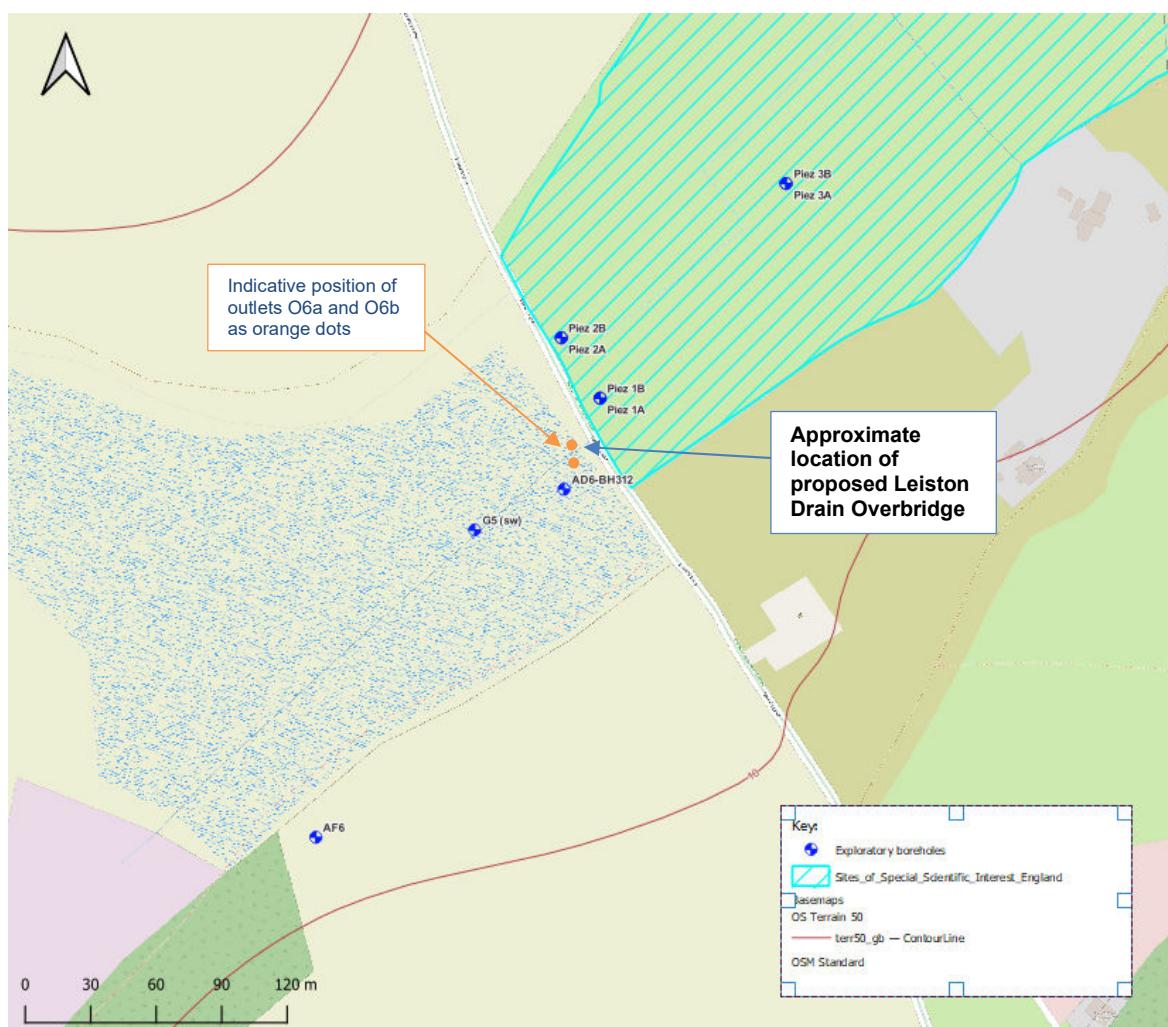
Between 2020 and 2022 Atkins collected groundwater samples from a series of monitoring wells installed at the Main Development Site (MDS) of Sizewell C, including 38 locations within the MCA and TCA areas [2]. The groundwater samples were scheduled for analysis at a UKAS accredited laboratory for a range of inorganic and organic determinands, including chloride, ammonium, nitrate, dissolved metals / metalloids, total petroleum hydrocarbons (TPH), phenol, benzene, toluene, ethylbenzene and xylene (BTEX), speciated polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs).

Groundwater quality data has been recovered at a number of locations in the vicinity of Leiston Overbridge, these include GW2, AD6-312 and AF6 screening the Crag Group and Piez 1a, 1b, 2a, 3a and 3b screening the peat. The wells have been monitored in total on four occasions during a period of 2020-2022 and the results have been utilised within this assessment as a proxy for the proposed discharge of groundwater to the Leiston Drain. Details of these monitoring points are shown in Table 3-1 and their location is shown in Figure 3-1.

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**Table 3-1 – Baseline Groundwater Monitoring Well Details.**

Well ID	Screened Stratum	Level	Easting	Northing	Response Zone (M AOD)	Samples Recovered
AD6-312	Crag Group	1.76	645440.9	263481.6	-0.24 to -1.24	3
AF6		6.04	645327.2	263322.1	-0.96 to -4.96	1
GW2		13.07	645269	263831	4.37 to -2.93	1
Piez 1a	Superficial deposits - Peat	1.98	645458	263523	0.38 to -0.62	3
Piez 1b		1.94	645459	263524	1.44 to 0.94	3
Piez 2a		2.12	645440	263551	0.12 to -0.88	1
Piez 3a		1.63	645543	263622	1.13 to -0.37	1
Piez 3b		1.65	645544	263623	-0.35 to -1.35	1



**Figure 3-1 Location of the AD6 crossing and nearby exploratory holes and monitoring locations**

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# 4. Surface Water Pollution (H1) Risk Assessment

## 4.1. Approach

Screening tests have been undertaken in accordance with the latest GOV.UK guidance for surface water pollution risk assessments [9] and more detailed supporting EA internal guidance, “Permitting of hazardous chemicals and elements in discharged to surface waters” (H1 Risk Assessment) [1]. The assessment has been undertaken to support the discharge of groundwater associated with the construction of the Leiston Overbridge to surface water, the Leiston Drain.

The Leiston Drain is classified as a Main River and a Water Framework Directive (WFD) designated waterbody (GB105035046271 - Leiston Beck) [7].

Specifically, the screening assessment has been carried out to:

- Assess the feasibility of discharging dewatered groundwater from piling operations for the Leiston Overbridge into the Leiston Drain;
- Assess the need for treatment of the groundwater prior to discharge;
- Identify whether further modelling is required to be undertaken in accordance with the GOV.UK requirements for completing a surface water pollution risk assessment (as the planned discharge is being made to freshwater).

The steps detailed in the guidance consist of:

- Phase 1: Screening, which follows three stages to screen out substances to identify if there are any pollutants at concentrations that could cause pollution; and
- Phase 2 Modelling, which is a more detailed assessment of those substances that may be significant. The Environment Agency will normally carry out this modelling for discharges to freshwater.

This report details the screening tests undertaken to ascertain whether more detailed modelling is required.

## 4.2. Discharge Criteria

WSP Limited are fulfilling the role of designer for the Leiston Overbridge project. WSP have provided AtkinsRéalis with design values to be adopted within the risk assessment to support an assessment of whether discharge of groundwater to the Leiston Drain will be liable to cause pollution.

The design values provided by WSP and adopted within the H1 Assessment have been summarised within Table 4-1.

**Table 4-1 – WSP Design Criteria / Input Values for H1 Assessment**

Design Parameter	Input	Source
IEFR: Effluent flow rate (maximum)	22.5 m <sup>3</sup> /hour	WSP
EFR: Effluent flow rate (mean)	20 m <sup>3</sup> /day	AD6 Construction Methodology Overview

\*Both values have been converted into m<sup>3</sup>/s by AtkinsRéalis for use within the H1 Assessment.

## 4.3. Flow data for the receiving watercourse

The surface water screening assessment requires Q95 (low flow) flow rate data for the receiving watercourse. If the screening assessment indicates a potentially significant impact in surface water quality, a surface water modelling assessment will be required. The modelling requires flow rate summary statistics such as mean and standard deviation or percentiles.

Flow rate summary statistics for Leiston Drain have been derived using data from five flow monitoring locations monitored between the period 2013 to 2022. The data is reported in full within the Surface Water Quality Flow and Baseline [4].

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A Q95 flow rate of 0.0168 m<sup>3</sup>/s derived at monitoring location G5 (~20 m west of proposed bridge), the closest monitoring location to the dewatering, has been deemed appropriate and utilised within the assessment. Flow and Stage Graphs associated with G5 have been provided as Appendix F.

## 4.4. Surface Water Screening

### 4.4.1. Methodology

The groundwater quality data from six wells screening the superficial deposits (Piez 1A, 1B, Piez 2a, and Piez 3A, 3B) and two wells screening the Crag Group (AF6 and AD6-312) situated in the vicinity of Leiston Overbridge have been used to represent the quality of the discharge in the screening assessment. This includes a total of 15 groundwater samples analysed for a range of inorganic and organic determinants. The laboratory results are included as Appendix B and the data is included within the screening test spreadsheets in Appendix E.

Upstream background surface water quality data has been measured using samples collected from upstream monitoring points G3, G4, G5, G6A and G7A between 2013 and 2022 [4]. Quality data from G5 has been utilised to characterise background chemical quality at the receptor as it is closest to the point of discharge, the full dataset is presented as Appendix C.

Substances that have been measured above the laboratory limit of detection (LOD) in groundwater were run through screening at face value. In addition, substances that were not detected in groundwater above the LOD, but where the LOD is less than 10% the EQS, were also included in the screening assessment. The likelihood of these substances being present in the discharge is discussed on completion of screening, and those substances not considered to be present in the discharge will be discounted.

Prior to screening, surface water data for the Leiston Drain has been processed through the Environment Agency WFD Metal Bioavailability Assessment tool (M-BAT) [10] to derive Predicted No Effect Concentrations (PNEC) for copper, lead, nickel, manganese and zinc. The average values from the baseline surface water dataset were used for pH and calcium with a median value adopted for dissolved organic carbon was used to give an assessment of the annual average bioavailable EQS to be used in the screening exercise, in line with the guidance [11]. the M-BAT assessment and PNECs are presented in Appendix B. The EQS value for cadmium has been adjusted based on average surface water hardness as per Water Framework Directive (Standards and Classification) Directions [8].

The surface water screening assessment was undertaken using the methodology for phase 1: screening for freshwaters given in EA guidance [1]. Part A of the screening comprises four tests to screen out substances that are not liable to cause pollution to the surface water body being discharged into.

A summary of the four Phase 1 Part A tests is provided below:

- Test 1 assesses if the concentration of a substance in discharge exceeds 10% of the EQS for the respective substance.
- Test 2 assesses whether the Process Contribution (PC) exceeds 4% of the respective EQS. PC is the concentration of a discharged substance in the receiving water after dilution.
- Test 3 calculates the Predicted Environmental Concentration (PEC), which is the combination of PC and the mean upstream background concentration (BC). The difference between BC and the PEC is screened against 10% of the respective EQS.
- Test 4 screens the PEC for each substance against EQS Annual Average (AA) and EQS Maximum Allowable Concentration (MAC), where available.

A substance that passes Test 1 or Test 2 is considered not liable to cause pollution and does not need to be considered for Tests 3 and 4. Any substance that fails either Test 3 or Test 4 is considered liable to cause pollution when discharged into the receiving surface water body.

EQS values used in the screening tests are the freshwater EQSs presented in the GOV.UK surface water pollution risk assessment guidance [12]. EQS values for nitrite and phosphorous, which do not have an EQS in the guidance, are derived from non statutory guideline value for Salmonid waters presented in the Surface Waters (Fishlife) Directions 2010, and from the Water Framework Directive (Standards and Classification) Directions [8], respectively.

The surface water screening assessment was undertaken using the methodology for phase 1: screening for freshwaters given in EA guidance [1]. Part A of the screening comprises four tests to

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screen out substances that are not liable to cause pollution to the discharged surface water body. Any substance that fails a test is not screened out and is therefore considered liable to cause pollution.

Following Part A, Part B of the Phase 1 screening comprises the significant load test, which applies to any Priority Hazardous Substances in the discharge.

#### 4.4.2. Results

The data input to the screening and the full screening assessment for all substances is presented in Appendix E.

Out of the 215 analysed substances, 156 did not have an EQS value. A further 27 substances were not detected in the discharge and had an LOD that was sufficiently low (<10% EQS).

Of the remaining 32 substances, 18 were screened out at Test 1 or 2, leaving 14 substances which were taken forward for Tests 3 and 4.

Of those 14 substances which were taken forward for Tests 3 and 4, cadmium, nickel and hexachlorobutadiene passed both tests and so are not considered liable to cause pollution. A further nine substances comprising organics, low level cyanide and chromium (hexavalent) failed one of Test 3 or 4 but have not been detected above LOD in any of the groundwater samples. They were included in the screening tests because the LOD was not sufficiently lower than the EQS. These substances are not considered likely to be present in baseline groundwater with no nearby sources of contamination identified and are therefore not considered further.

Three remaining substances were determined as liable to cause pollution in the receiving surface water body, these are summarised in Table 4-2.

Part B of the phase 1 screening for freshwaters comprises the significant load test, which applies to any Priority Hazardous Substances in the discharge. The test was progressed for cadmium (dissolved), anthracene, hexachlorobenzene, hexachlorobutadiene, dissolved mercury low level, benzo[a]pyrene and the sum of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3cd)pyrene. The test completed indicated that none of the priority substances in the discharge would exceed the respective significant load thresholds.

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Table 4-2 – Substances which fail screening tests 3 or 4, and are therefore liable to cause pollution.

Constituents All units mg/l	Limit of Detection (LOD)	Freshwater EQS (Annual Average)	Freshwater EQS (Maximum Allowable Concentration)	detections above LOD in groundwater discharge	Discharge mean (values below LOD treated as LOD)	BC: Mean Upstream Concentration (values below LOD treated as LOD) mg/l	Predicted Environmental Concentration (AA-PEC) (mg/l)	Test 3 - Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed 10% of the EQS	Test 4 - Does the PEC exceed the EQS in the receiving water downstream of the discharge
Phosphorus (Dissolved)	0.02	0.008	N/A	12	0.18	0.220	0.221*	No	N/A
Nitrite	0.02	0.01	N/A	11	0.22	0.610	0.605*	No	N/A
Dissolved Chromium (Trivalent)	0.001	0.0047	0.032	8	0.007	0.0108	0.0108*	No	No

Notes: \* Average RC is lower than BC, showing that the discharge is not expected to impact surface water quality for these substances. N/A No maximum allowable concentration (MAC) EQS.

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## 4.5. Discussion and Conclusion

As shown in Table 4-2, a total of three substances failed the screening tests due to a high mean concentration identified in upstream water samples, with the average background concentration (BC) exceeding the EQS. For all four of these the average release concentration (RC) is lower than the BC showing that the discharge is not expected to impact surface water quality for these substances.

The surface water pollution risk assessment screening tests have been carried out to assess the impact of discharging the dewatered groundwater to the Leiston Drain.

The Phase 1 screening tests indicated that measured concentrations of tested substances within the discharge are not liable to cause pollution if discharged to Leiston Drain at the proposed flow rates.

As the assessment is based on groundwater sample data from boreholes used to represent expected water quality of dewatering groundwater, it is recommended to undertake quality analysis for the water dewatered to validate the concentration of substances prior to discharge.

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## 5. References

- [1] Environment Agency, "Permitting of hazardous chemicals and elements [LIT 13134]," December 2019.
- [2] Atkins, "SZC-EW0411-ATK-XX-000-XXXXXX-REP-CIV-000010: Groundwater Monitoring Report between 2020-2022," January 2023.
- [3] Atkins, "Sizewell C Groundwater Modelling Report prepared for EDF NNB GenCo , January 2020.," 2020b.
- [4] Atkins, "SZC-EW0921-ATK-XX-000-XXXXXX-REP-CLE-9000001: Technical Note: Water Quality and Flow Baseline. Revision 1.0 Draft Issue," 2023.
- [5] Sizewell C, "Sizewell C Adoptable Highways - AD6, Constuction Methodology Overview P02.," 14 October 2023.
- [6] Sizewell C, "Associated Development 6 - Construction Methodology Overview," 2023.
- [7] Environment Agency, "Catchment Data Explorer - Leiston Drain Water Body," 2021. [Online]. [Accessed 18 September 2023].
- [8] Secretary of State, "The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015," 2015. [Online]. Available: [https://www.legislation.gov.uk/uksi/2015/1623/pdfs/uksiod\\_20151623\\_en\\_auto.pdf](https://www.legislation.gov.uk/uksi/2015/1623/pdfs/uksiod_20151623_en_auto.pdf). [Accessed October 2023].
- [9] Environment Agency, "Surface water pollution risk assessment for your environmental permit," 25 February 2022. [Online]. Available: <https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit>.
- [10] Water Framework Directive - United Kingdom Technical Advisory Group (WFD-UKTAG), "Rivers & Lakes - Metal Bioavailability Assessment Tool (M-BAT)," WFD-UKTAG, 2014. [Online]. Available: <https://www.wfd-uk.org/sites/default/files/Media/Environmental%20standards/MBAT%20UKTAG%20Method%20Statement.pdf>. [Accessed 26 10 2022].
- [11] WFD-UKTAG, "UKTAG River & Lake Assessment Method Specific Pollutants (metals) - Metal Bioavailability Assessment Tool (M-BAT)," July 2014.
- [12] Environment Agency, "Surface water pollution risk assessment for your environmental permit (Freshwaters priority hazardous substances, priority substances and other pollutants environmental quality standards)," 22 02 2022. [Online]. Available: <https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit>. [Accessed 20 03 2023].
- [13] Environment Agency, "Environmental Quality Standards for Metal in The Aquatic Environment," April 2008.

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## Appendix A. Supporting Information

### A.1. Regulatory Engagement

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17	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	General comment	N/A	Has any pre-application engagement been conducted with Natural England and the local internal drainage board (IDB) regarding your proposed discharge under CWDIA18?	Potential for uncertainty regarding how S2C have approached the selection of protected/designated features for consideration in the CWDIA18 permit application's supporting information	Please confirm if any (or no) pre-application engagement has been conducted by S2C with Natural England and the local IDB regarding your proposals under the CWDIA18 permit application. For each of the protected/designated features or relevant designated/protected receptors (i.e. habitats and species) that NE have incorporated into their assessment, confirm whether your Habitats Regulations/CROW Act supporting information has been applied/referred to discharge based on the IDB's advice.	1	S2C to confirm (none from Atkins/Heals H1/2019). Regulatory engagement section to be added to report.
18	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix D- E	Row 9, Columns L to AA	There is no detail regarding the depths from which the groundwater samples were taken from each of the boreholes. The results BHZ12, Pez 3A, ADE, AFR, GIV2, Pez 3B and Pez 3C show borehole depths are located in relation to the proposed WQAs from outlets Oga and Odb.	Introduces uncertainty given we do not know the depth the groundwater data is taken from and how this relates to the proposed depths of the confounders. We need to know how the groundwater water quality from the sampled boreholes influences the proposed effluent quality of the discharge in the proposed risk assessment.	Please include the groundwater depth details with the borehole sample locations, and relate this to the proposed maximum depth of the discharge. Please take a site plan from the context of one of the two confounders/foundations. Additionally, please provide the location of the boreholes to allow their locations to be understood, and how these locations relate to the proposed WQAs via Oga and Odb.	2	Add table of monitoring locations / NGRs / Response zones / number of samples. Check update sheet.
19	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix D- E	Column C, row 4 to 221	There is no explanation regarding what the laboratory method (LOD) is (row 221) as reference to it is assumed these are the LOD of the laboratory method)	Unsure what the values within rows 4 to 221 of column C are in reference to	Please utilise rows 1 and 2 of column C to clarify what the values in the subsequent rows (rows 4 to 221) represent within column C.	2	Add column heading Added column headers
20	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 14	The freshwater EOS annual average (AA) value for Nickel (dissolved) is stated as 8.6ug/l	However, the freshwater annual average (AA) value for Nickel (dissolved) is 4.0ug/l (biavailable). Nickel (dissolved) also has a maximum allowable concentration (MAC) EOS of 34ug/l which has been applied/referenced.	Ensure the relevant biavailable/AA EOS has been applied and assessed for Nickel	2	Change heading to EOS / PNEC. Footnote to state that PNECs have been used for Nickel (dissolved) and biavailable EOSs. Quite audience
21	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 15 & 18	Benz(a)pyrene also has a fresh water maximum allowable concentration (MAC) EOS which is not reference in row 15 but is in row 18	Benz(a)pyrene also has a fresh water maximum allowable concentration (MAC) EOS of 0.27ug/l but this has not been applied/referenced.	Please ensure the relevant MAC EOS has been applied and assessed for Benz(a)pyrene in the final risk assessment	2	update sheet MAC EOS applied to assessment.
22	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 16	Fluoranthene also has a fresh water maximum allowable concentration (MAC) EOS that has not been referenced/assessed against	Fluoranthene also has a fresh water maximum allowable concentration (MAC) EOS of 0.12ug/l but this has not been applied/referenced.	Please ensure the relevant MAC EOS has been applied and assessed for Fluoranthene in the final risk assessment	2	update sheet MAC EOS for Fluoranthene applied.
23	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 17 and 22	Chromium (Hexavalent) has been assessed with a limit of detection (LoD) of 0.20ug/l (0.020mg/l) and has been taken through the conversion to mg/l (row 17) and the total dissolved concentration of Chromium (hexavalent) is 0.001mg/l (row 22). However, a more sensitive analysis method appears to have been utilised for Chromium (hexavalent) using an LoD of 0.001mg/l as shown on row 22. However, it does not state if the analysis method within rows 17 and 22 is for the total dissolved concentration of Chromium (hexavalent), or less than water result of a factor (value), and fails tests 1, 2, 3 and 4.	However, a more sensitive analysis method appears to have been utilised for Chromium (hexavalent) using an LoD of 0.001mg/l as shown on row 22. However, it does not state if the analysis method within rows 17 and 22 is for the total dissolved concentration of Chromium (hexavalent).	Complete the H1 risk assessment using the more sensitive analysis method for Chromium (hexavalent) and confirm the results in row 22. Please also ensure that clarifications are provided regarding if the analysis of Chromium (hexavalent) in rows 17 and 22 is for the total or dissolved concentration.	2	update sheet Low level hexavalent chromium brought through assessment. Dissolved added to substance name for clarification.
24	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 18	The maximum allowable concentration (MAC) EOS value for Benz(a)pyrene is stated as 0.0027mg/l (milligrams/litre) in column E	However, the MAC EOS value is 0.27ug/l and the conversion to mg/l in column E incorrectly states the EOS is 0.0027mg/l (or 2.7ug). Benz(a)pyrene may therefore have been screened out of the H1 risk assessment at an inappropriate stage and could be environmentally significant	Please ensure that the AA and MAC EOS values entered and applied for Benz(a)pyrene are correct (and have been correctly converted)	2	update sheet Corrected MAC EOS.
25	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 28	The annual average (AA) EOS value for Copper (dissolved) is stated as 13ug/l	However, the freshwater annual average (AA) EOS for Copper is 1.0ug/l (biavailable), which has not been applied and assessed within the H1 surface water risk assessment. The substance may therefore have been screened out of the H1 risk assessment at an inappropriate stage and could be environmentally significant	Please ensure the relevant AA EOS has been applied and assessed in the H1 risk assessment for Copper	2	update sheet MBAT PNEC included as AA EOS.
26	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 32	The generic assessment value for Zinc (dissolved) is stated as 33ug/l	Zinc has a freshwater annual average (AA) EOS value of 10.8ug/l (biavailable, plus the ambient background concentration).	Please ensure that the generic assessment value for Zinc has been applied and assessed in the surface water risk assessment	2	update sheet MBAT PNEC included as AA EOS.
27	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 33	The maximum allowable concentration (MAC) EOS value for Fluoranthene is stated as 0.0012mg/l (milligrams/litre) in column E	However, the MAC EOS value is 0.12ug/l and the conversion to mg/l in column E incorrectly states the EOS as 0.0012mg/l (or 1.2ug). Fluoranthene may therefore have been screened out of the H1 risk assessment at an inappropriate stage and could be environmentally significant	Please ensure that the AA and MAC EOS values entered and applied for Fluoranthene in the H1 risk screening assessment are correct (and have been correctly converted)	2	update sheet Corrected AA EOS.
28	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 46	Chromium III/Trivalent (dissolved) has fresh water annual average (AA) and maximum allowable concentration (MAC) EOSs	Chromium III/Trivalent (dissolved) has a fresh water annual average (AA) EOS of 4.7ug/l and a maximum allowable concentration (MAC) EOS of 32ug/l. However, the MAC EOS has not been applied and assessed. There are also relative results above the LoD for Chromium III/Trivalent. Appendix E also does not specify if the analysis method for Chromium III is for the total or dissolved concentration.	Please ensure the relevant AA and MAC EOSs have been applied and assessed in the H1 risk assessment, and confirm if the analysis method is for total or dissolved Chromium III (Trivalent)	2	update sheet Applied AA and MAC EOS for substance and brought through assessment.
29	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 47	It is stated there is no EOS value for Boron	However, Boron has a freshwater annual average (AA) EOS of 2,000 ug/l. This has not been applied and assessed within the H1 surface water risk assessment. The substance may therefore have been screened out of the H1 risk assessment at an inappropriate stage and could be environmentally significant	Please ensure the relevant AA EOS has been applied and assessed in the H1 risk assessment for Boron	2	update sheet Applied AA EOS and brought through assessment.
30	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 49	No EOS is specified for Mercury.	Mercury has a fresh water annual average (AA) EOS of 0.7ug/l but this has not been applied and assessed. Appendix E also does not specify if the analysis method for Mercury is for the total or dissolved concentration.	Ensure the relevant AA EOS has been applied and assessed for Mercury, and confirm if the "low level" analysis method is for the total or dissolved concentration	2	update sheet Added 'dissolved' to substance name for clarification. Applied AA EOS.
31	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 53	No EOS is stated for Chromium	Chromium III/Trivalent (dissolved) has a fresh water annual average (AA) EOS of 4.7ug/l and a maximum allowable concentration (MAC) EOS of 32ug/l. Chromium VI/Hexamethane (dissolved) has a fresh water annual average (AA) EOS of 3.4ug/l. The type of Chromium (dissolved) has not been specified, and neither of the EOSs referenced above have been applied/referenced	Ensure the relevant AA and MAC EOSs have been applied and assessed for Chromium (VI) and Hexamethane (dissolved), and confirm if the results are for Chromium III and (combined) Chromium VI.	2	update sheet AA EOS / MAC EOS (where applicable) applied for hexavalent and hexamethane chromium, No EOS applied to total dissolved chromium.
32	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 54 and 74	Benzene also has a fresh water maximum allowable concentration (MAC) EOS	Benzene also has a fresh water maximum allowable concentration (MAC) EOS of 50ug/l but this has not been applied and assessed	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for Benzene	2	update sheet MAC EOS included and brought through assessment.
33	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 55 and 77	Toluene also has a fresh water maximum allowable concentration (MAC) EOS	Toluene also has a fresh water maximum allowable concentration (MAC) EOS of 380ug/l but this has not been applied and assessed.	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for Toluene	2	update sheet MAC EOS included and brought through assessment.
34	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 57	2,4-Dichlorophenol also has a fresh water maximum allowable concentration (MAC) EOS	2,4-Dichlorophenol also has a fresh water maximum allowable concentration (MAC) EOS of 140ug/l but this has not been applied and assessed.	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for 2,4-Dichlorophenol	2	update sheet MAC EOS included and brought through assessment.
35	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 58, 59, 63, 64, 134, 143	There is also a maximum allowable concentration (MAC) EOS for Dichlorobenzenes (sum of all the dichlorobenzene isomers) and dichlorobenzenes (sum of all the dichlorobenzene isomers)	The fresh water annual average (AA) EOS for Dichlorobenzenes (sum of all the dichlorobenzene isomers) is 20ug/l. However, there is also a maximum allowable concentration (MAC) EOS of 200ug/l that has not been applied and assessed.	Please ensure the relevant AA and MAC EOSs have been applied and assessed in the H1 risk assessment for Dichlorobenzenes	2	update sheet AA and MAC EOS included in assessment.
36	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 60 and 66	Hexachlorobutadiene has a fresh water maximum allowable concentration (MAC) EOS but this has not been applied within column D as an annual average (AA) EOS.	Hexachlorobutadiene has a fresh water maximum allowable concentration (MAC) EOS of 0.8ug/l but this has been applied within column D as an annual average (AA) EOS.	Please ensure it is also included within your risk assessment for hexachlorobutadiene as a MAC EOS.	2	update sheet Removed reference to AA EOS and included as MAC EOS only.
37	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 61	Phenol also has a fresh water maximum allowable concentration (MAC) EOS	Phenol also has a fresh water maximum allowable concentration (MAC) EOS of 48ug/l but this has not been applied and assessed in the H1 risk assessment	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for Phenol	2	update sheet MAC EOS included and brought through assessment.
38	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 65 and 69	Naphthalene also has a fresh water maximum allowable concentration (MAC) EOS	Naphthalene also has a fresh water maximum allowable concentration (MAC) EOS of 130ug/l but this has not been applied and assessed.	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for Naphthalene	2	update sheet MAC EOS included and brought through assessment.
39	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 68	Dimethyl phthalate also has a fresh water maximum allowable concentration (MAC) EOS	Dimethyl phthalate also has a fresh water maximum allowable concentration (MAC) EOS of 500ug/l but this has not been applied and assessed in the H1 risk assessment	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for Dimethyl phthalate	2	update sheet MAC EOS included and brought through assessment.
40	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 71	Anthracene also has a fresh water maximum allowable concentration (MAC) EOS	Anthracene also has a fresh water maximum allowable concentration (MAC) EOS of 0.1ug/l but this has not been applied and assessed.	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for Anthracene	2	update sheet MAC EOS included and brought through assessment.
41	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 81	Styrene also has a fresh water maximum allowable concentration (MAC) EOS	Styrene also has a fresh water maximum allowable concentration (MAC) EOS of 500ug/l but this has not been applied and assessed.	Please ensure the relevant MAC EOS has been applied and assessed in the H1 risk assessment for Styrene	2	update sheet MAC EOS included and brought through assessment.
42	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 116 and 117	Xylene has a fresh water annual average (AA) EOS	The fresh water annual average (AA) EOS for Xylene is 30ug/l but this has not been applied/referenced within the H1 surface water risk assessment	Please ensure the relevant MAC EOS has been applied and assessed for Xylene in the final risk assessment	2	update sheet AA EOS for xylenes added and brought through assessment.
43	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 121	Statis - 'N/A' for EOSs applicable for Cyclohexane. However, Cyclohexane has a fresh water annual average (AA) EOS and a fresh water maximum allowable concentration (MAC) EOS that have not been applied and assessed	Cyclohexane has a fresh water annual average (AA) EOS of 0.8ug/l and a fresh water maximum allowable concentration (MAC) EOS of 1.0ug/l but this has not been applied/referenced within the H1 surface water risk assessment. Under the EOS table, however, the analysis method is listed as 'not applicable' to the AA EOS. Therefore any less than value results must be applied to the 'pre-screening' (via columns L and M) and the outcomes of the subsequent screening tests.	Please ensure the relevant AA and MAC EOSs have been applied and assessed in the H1 risk assessment for Cyclohexane	2	update sheet AA EOS and MAC EOS utilised and brought through assessment.
44	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Row 170	It is stated 'N/A' regarding the EOSs for Diethyl Phthalate	Diethyl Phthalate has a fresh water annual average (AA) EOS of 200ug/l and a fresh water maximum allowable concentration (MAC) EOS of 1,000ug/l but these have not been applied and assessed in the H1 risk assessment.	Please ensure the relevant freshwater AA and MAC EOSs have been applied and assessed in the H1 risk assessment for Diethyl Phthalate	2	update sheet AA EOS and MAC EOS utilised and brought through assessment.
45	Dewatering Discharge Risk Assessment ADD Leiston Drain Crossing	Appendix E	Rows 213 to 220, and 222 to 228	It is not clear why the generic assessment criteria value of 0.0001mg/l (0.1ug/l), as selected within column D was selected for the aliphatic (rows 213 to 220) and aromatic (rows 221 to 228) fractions	Unsure if the correct EOS/PNEC has been applied for the screening assessment	Please confirm how and why the generic assessment criteria value of 0.0001mg/l (0.1ug/l) was selected for the aliphatic (rows 213 to 219) and aromatic (rows 221 to 228) fractions?	2	update sheet Error no EOS for TPH fractions and reference to them has been removed from assessment.

## A.2. Design Drawings

(Not included in this revision)

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### A.3. Borehole Logs

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# Borehole Log

**Borehole No.**

AF6

Sheet 1 of 2

## Borehole Log

Borehole No.

AF6

Sheet 2 of 2

Project Name: Sizewell C Monitoring and Modelling			Project No. 5129919		Co-ords: 645327E - 263322N		Hole Type CP	
Location:			Level: 6.04		Scale 1:50			
Client: EDF NNB GenCo			Dates: 19/02/2014		Logged By SHaynes			
Well	Water Strikes	Sample and In Situ Testing		Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type					
		10.00 - 11.00	B				Buff to dark orange coarse SAND. C1	
				11.00	-4.96		End of Borehole at 11.00m	11
								12
								13
								14
								15
								16
								17
								18
								19
								20
Remarks								
1. Inspection pit hand dug to 1.20m. 2. Groundwater struck at 7.40m, rising to 6.50m after 20 minutes. 3. Water added to assist drilling.								

<b>FUGRO</b>	Contract Name	AD6 Road Schemes			<b>Location ID</b> <b>AD6-BH312</b>  Sheet 1 of 1						
	Client	NNB Generation Company (S2C) Limited									
	Fugro Reference	F181386									
	Coordinates (m)	E645440.91 N263481.62		Ground Elevation (m Datum)	1.76						
	Hole Type	Cable Percussion		Status	Draft						
Sampling and In Situ Testing			Strata Details			Groundwater					
Depth (m)	Type	No.	Test Results	Depth (m)	Strata Descriptions	Depth (Thickness) (m)	Level (m Datum)	Legend	Water Strike	Backfill / Installation	
0.20 - 0.30	D	3			TOPSOIL. Soft dark brown slightly sandy amorphous PEAT (H10/B1) with frequent roots and rootlets (<10mm x 60mm) and rare fine and medium gravel of flint. TS: As3 Ag+ Gmin1 Th(0)+ Ti(0)+ nigg3 str0 sicc4 elas1 lim sup not defined.	(0.50)					
0.20 - 0.30	ES	3			[TOPSOIL]	0.50	1.26				
0.20 - 0.40	B	2			Plastic dark brown pseudofibrous PEAT (H3/B2). TS: Ag2 Th(1)2 Ti(0)+ nigg3 str0 elas1 sicc2 lim sup not defined.						
0.20	PID	4	< 0.1 ppm		[SUPERFICIAL DEPOSITS - PEAT]						
0.50	D	5			At 0.50m; (locally H7/B1).						
0.50 - 0.60	ES	5			At 0.80m; (locally H6/B2) with frequent wood fragments (<10mm). 1.00m to 1.20m; (H8/B2) with occasional wood fragments (<100mm). TS: Ag3 Th(3)1 Ti(1) Nigg3 str0 sicc2 lim sup not defined.	(1.40)					
0.50 - 0.90	B	6			1.50m to 2.00m; recovered as slightly sandy, locally sandy, amorphous peat (H10/B3, locally H8/B2) with frequent pockets (<10mm) of dark grey clay and wood fragments (<10mm). TS: Ag2-3 Gmin1-2 As+ Th(4)+ Ti(3) + nigg3 str0 sicc2 elas0 lim sup not defined.						
0.50	PID	9	< 0.1 ppm								
0.80	D	9									
1.00 - 1.10	ES	7									
1.00 - 1.20	B	8									
1.00	PID	10	300								
1.20 - 1.50	B	12									
1.20 - 1.50	P	10	300								
1.50 - 1.95	D	11									
1.50 - 2.00	B	13									
1.50 - 1.95	SPT	N = 8 (S)									
1.80 - 1.90	D	14									
2.00 - 2.45	D	15									
2.00 - 2.50	B	17									
2.00 - 2.50	ES	16									
2.00 - 2.45	SPT	N = 19 (S)									
2.00	PID	18	< 0.1 ppm								
2.80	D	18									
3.00 - 3.45	D	18									
3.00 - 3.50	B	19									
3.00 - 3.45	SPT	N = 23 (S)									
3.50 - 4.00	B	21									
3.80	D	20									
4.00 - 4.45	D	22									
4.00 - 5.00	B	23									
4.00 - 4.45	SPT	N = 26 (S)									
5.00 - 5.45	D	24									
5.00 - 6.00	B	26									
5.00 - 5.45	SPT	N = 29 (S)									
5.50 - 6.00	B	25									
5.80	D	26									
6.00 - 6.50	B	27									
6.00 - 6.45	SPT	N = 7 (S)									
6.50 - 7.00	B	29									
6.80 - 6.90	D	28									
7.00 - 7.45	D	30									
7.00 - 7.50	B	31									
7.00 - 7.45	SPT	N = 17 (S)									
7.80 - 7.90	D	32									
					End of Borehole at 7.90 m						
					9						

#### Notes

- Abbreviations and results data defined on 'Notes on Exploratory Position Records'



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# Borehole Log

**Borehole No.**

## Piez 1A

Sheet 1 of 1

Project Name:		Sizewell C Monitoring and Modelling	Project No. 5129919		Co-ords: 645458E - 263523N		Hole Type BH		
Location:				Level: 1.98		Scale 1:50			
Client:			EDF NNB GenCo		Dates:		Logged By		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	100
		Depth (m)	Type	Results					
									100
									90
									80
									70
									60
									50
									40
									30
									20
									10
Remarks								AGS	

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# Borehole Log

Borehole No.

**Piez 1B**

Sheet 1 of 1

Project Name: Sizewell C Monitoring and Modelling			Project No. 5129919		Co-ords: 645459E - 263524N		Hole Type BH	
Location:			Level: 1.94		Scale 1:50			
Client: EDF NNB GenCo			Dates:		Logged By			
Well	Water Strikes	Sample and In Situ Testing		Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type					
								1
								2
								3
								4
								5
								6
								7
								8
								9
								10
Remarks								

 AGS

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# Borehole Log

Borehole No.

**Piez 2A**

Sheet 1 of 1

Project Name: Sizewell C Monitoring and Modelling			Project No. 5129919		Co-ords: 645440E - 263551N		Hole Type BH	
Location:			Level: 2.12		Scale 1:50			
Client: EDF NNB GenCo			Dates:		Logged By			
Well	Water Strikes	Sample and In Situ Testing		Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type					
								1
								2
								3
								4
								5
								6
								7
								8
								9
								10
Remarks								

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# Borehole Log

Borehole No.

**Piez 2B**

Sheet 1 of 1

Project Name: Sizewell C Monitoring and Modelling			Project No. 5129919		Co-ords: 645441E - 263552N		Hole Type BH	
Location:			Level: 2.10		Scale 1:50			
Client: EDF NNB GenCo			Dates:		Logged By			
Well	Water Strikes	Sample and In Situ Testing		Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type					
								1
								2
								3
								4
								5
								6
								7
								8
								9
								10
Remarks								

AGS

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# Borehole Log

Borehole No.

**Piez 3A**

Sheet 1 of 1

Project Name: Sizewell C Monitoring and Modelling			Project No. 5129919		Co-ords: 645543E - 263622N		Hole Type BH	
Location:			Level: 1.63		Scale 1:50			
Client: EDF NNB GenCo			Dates:		Logged By			
Well	Water Strikes	Sample and In Situ Testing		Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type					
								1
								2
								3
								4
								5
								6
								7
								8
								9
								10
Remarks								

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# Borehole Log

Borehole No.

**Piez 3B**

Sheet 1 of 1

Project Name: Sizewell C Monitoring and Modelling			Project No. 5129919		Co-ords: 645544E - 263623N		Hole Type BH		
Location:			Level: 1.65		Scale 1:50				
Client: EDF NNB GenCo			Dates:		Logged By				
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
									1
									2
									3
									4
									5
									6
									7
									8
									9
									10
Remarks									

## Appendix B. Laboratory Sheets

UNCONTROLLED WHEN PRINTED



## Final Report

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**Report No.:** 20-30954-1  
**Initial Date of Issue:** 20-Nov-2020  
**Client** Atkins Ltd  
**Client Address:** The Axis  
10 Holliday Street  
Birmingham  
West Midlands  
B1 1TF  
**Contact(s):** Jenny Wilcox  
**Project** S185703 Sizewell C  
**Quotation No.:** Q20-21888      **Date Received:** 13-Nov-2020  
**Order No.:** 5185703.001.17112020      **Date Instructed:** 13-Nov-2020  
**No. of Samples:** 3  
**Turnaround (Wkdays):** 5      **Results Due:** 19-Nov-2020  
**Date Approved:** 19-Nov-2020

**Approved By:**

**Details:** Glynn Harvey, Technical Manager

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## Results - Water

**Project: S185703 Sizewell C**

Client: Atkins Ltd	Chemtest Job No.:			20-30954	20-30954	20-30954
Quotation No.: Q20-21888	Chemtest Sample ID.:			1096494	1096495	1096496
	Sample Location:			Piez 1A	Piez 1B	G5
	Sample Type:			WATER	WATER	WATER
	Top Depth (m):			2.00	0.70	0.00
	Bottom Depth (m):			2.00	0.70	0.00
	Date Sampled:			12-Nov-2020	12-Nov-2020	12-Nov-2020
Determinand	Accred.	SOP	Units	LOD		
pH	U	1010		N/A	8.3	8.4
Electrical Conductivity	U	1020	µS/cm	1.0	1300	2000
Suspended Solids At 105C	U	1030	mg/l	5.0	20	16
Alkalinity (Total)	U	1220	mg/l	10	240	320
Chloride	U	1220	mg/l	1.0	68	510
Ammonium	U	1220	mg/l	0.050	0.22	2.9
Ammoniacal Nitrogen	U	1220	mg/l	0.050	0.19	2.6
Nitrite	U	1220	mg/l	0.020	0.98	< 0.020
Nitrate	U	1220	mg/l	0.50	0.98	< 0.50
Phosphate	U	1220	mg/l	0.200	0.35	< 0.20
Phosphorus (Dissolved)	U	1220	mg/l	0.020	0.11	0.039
Sulphate	U	1220	mg/l	1.0	38	27
Total Oxidised Nitrogen	U	1220	mg/l	0.20	0.52	< 0.20
Cyanide (Free) Low-Level	N	1300	mg/l	0.0050	< 0.0050	< 0.0050
Calcium	U	1415	mg/l	5.0	69	150
Potassium	U	1415	mg/l	0.50	6.6	21
Magnesium	U	1415	mg/l	0.50	3.1	4.3
Sodium	U	1415	mg/l	0.50	90	460
Arsenic (Dissolved)	U	1450	µg/l	1.0	5.9	3.2
Boron (Dissolved)	U	1450	µg/l	20	< 20	< 20
Cadmium (Dissolved)	U	1450	µg/l	0.080	< 0.080	< 0.080
Chromium (Dissolved)	U	1450	µg/l	1.0	24	15
Copper (Dissolved)	U	1450	µg/l	1.0	5.5	1.0
Iron (Dissolved)	N	1450	µg/l	20	850	430
Manganese (Dissolved)	U	1450	µg/l	1.0	62	9.8
Nickel (Dissolved)	U	1450	µg/l	1.0	< 1.0	5.0
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0
Mercury Low Level	U	1460	µg/l	0.010	0.023	< 0.010
Low-Level Chromium (Hexavalent)	U	1495	µg/l	0.10	< 0.10	0.33
Chromium (Trivalent)	U	1450	µg/l	1	24	15
Dissolved Organic Carbon Low Level	N	1610	mg/l	N/A	34	81
Total TPH >C6-C40	U	1670	µg/l	10	< 10	< 10
Naphthalene	N	1700	µg/l	0.010	< 0.010	< 0.010
Acenaphthylene	N	1700	µg/l	0.010	< 0.010	< 0.010
Acenaphthene	N	1700	µg/l	0.010	< 0.010	< 0.010
Fluorene	N	1700	µg/l	0.010	< 0.010	< 0.010
Phenanthrene	N	1700	µg/l	0.010	< 0.010	< 0.010
Anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010

## Results - Water

**Project: S185703 Sizewell C**

Client: Atkins Ltd	Chemtest Job No.:			20-30954	20-30954	20-30954
Quotation No.: Q20-21888	Chemtest Sample ID.:			1096494	1096495	1096496
	Sample Location:			Piez 1A	Piez 1B	G5
	Sample Type:			WATER	WATER	WATER
	Top Depth (m):			2.00	0.70	0.00
	Bottom Depth (m):			2.00	0.70	0.00
	Date Sampled:			12-Nov-2020	12-Nov-2020	12-Nov-2020
Determinand	Accred.	SOP	Units	LOD		
Fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010
Pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010
Chrysene	N	1700	µg/l	0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1700	µg/l	0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1700	µg/l	0.20	< 0.20	< 0.20
Dichlorodifluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10
Chloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10
Vinyl Chloride	N	1760	µg/l	0.10	< 0.10	< 0.10
Bromomethane	N	1760	µg/l	2.0	< 2.0	< 2.0
Chloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20
Trichlorofluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10
1,1-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10
Trans 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,1-Dichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10
cis 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10
Bromochloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50
Trichloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10
1,1,1-Trichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10
Tetrachloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10
1,1-Dichloropropene	N	1760	µg/l	0.10	< 0.10	< 0.10
Benzene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,2-Dichloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20
Trichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,2-Dichloropropane	N	1760	µg/l	0.10	< 0.10	< 0.10
Dibromomethane	N	1760	µg/l	0.10	< 0.10	< 0.10
Bromodichloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50
cis-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0
Toluene	N	1760	µg/l	0.10	< 0.10	< 0.10
Trans-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	N	1760	µg/l	0.1	< 0.1	< 0.1
Tetrachloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,3-Dichloropropane	N	1760	µg/l	0.20	< 0.20	< 0.20
Dibromochloromethane	N	1760	µg/l	1.0	< 1.0	< 1.0

## Results - Water

**Project: S185703 Sizewell C**

Client: Atkins Ltd	Chemtest Job No.:			20-30954	20-30954	20-30954
Quotation No.: Q20-21888	Chemtest Sample ID.:			1096494	1096495	1096496
	Sample Location:			Piez 1A	Piez 1B	G5
	Sample Type:			WATER	WATER	WATER
	Top Depth (m):			2.00	0.70	0.00
	Bottom Depth (m):			2.00	0.70	0.00
	Date Sampled:			12-Nov-2020	12-Nov-2020	12-Nov-2020
Determinand	Accred.	SOP	Units	LOD		
1,2-Dibromoethane	N	1760	µg/l	0.50	< 0.50	< 0.50
Chlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,1,1,2-Tetrachloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20
Ethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
m & p-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10
o-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10
Styrene	N	1760	µg/l	0.10	< 0.10	< 0.10
Tribromomethane	N	1760	µg/l	1.0	< 1.0	< 1.0
Isopropylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
Bromobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,2,3-Trichloropropane	N	1760	µg/l	5.0	< 5.0	< 5.0
N-Propylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
2-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,3,5-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
4-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10
Tert-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,2,4-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
Sec-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,3-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
4-Isopropyltoluene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,4-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
N-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,2-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,2-Dibromo-3-Chloropropane	N	1760	µg/l	5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10
Hexachlorobutadiene	N	1760	µg/l	0.10	< 0.10	< 0.10
1,2,3-Trichlorobenzene	N	1760	µg/l	0.20	< 0.20	< 0.20
Methyl Tert-Butyl Ether	N	1760	µg/l	0.10	< 0.10	< 0.10
N-Nitrosodimethylamine	N	1790	µg/l	0.50	< 0.50	< 0.50
Phenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachloroethane	N	1790	µg/l	0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50	< 0.50	< 0.50

## Results - Water

**Project: S185703 Sizewell C**

Client: Atkins Ltd	Chemtest Job No.:			20-30954	20-30954	20-30954
Quotation No.: Q20-21888	Chemtest Sample ID.:			1096494	1096495	1096496
	Sample Location:			Piez 1A	Piez 1B	G5
	Sample Type:			WATER	WATER	WATER
	Top Depth (m):			2.00	0.70	0.00
	Bottom Depth (m):			2.00	0.70	0.00
	Date Sampled:			12-Nov-2020	12-Nov-2020	12-Nov-2020
Determinand	Accred.	SOP	Units	LOD		
4-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50
Nitrobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
Isophorone	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
Naphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylnaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthylene	N	1790	µg/l	0.50	< 0.50	< 0.50
Dimethylphthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthene	N	1790	µg/l	0.50	< 0.50	< 0.50
3-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenzofuran	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50
Fluorene	N	1790	µg/l	0.50	< 0.50	< 0.50
Diethyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
Azobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50
Pentachlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
Phenanthrene	N	1790	µg/l	0.50	< 0.50	< 0.50
Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50
Carbazole	N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50

## Results - Water

**Project: S185703 Sizewell C**

Client: Atkins Ltd	Chemtest Job No.:			20-30954	20-30954	20-30954
Quotation No.: Q20-21888	Chemtest Sample ID.:			1096494	1096495	1096496
	Sample Location:			Piez 1A	Piez 1B	G5
	Sample Type:			WATER	WATER	WATER
	Top Depth (m):			2.00	0.70	0.00
	Bottom Depth (m):			2.00	0.70	0.00
	Date Sampled:			12-Nov-2020	12-Nov-2020	12-Nov-2020
Determinand	Accred.	SOP	Units	LOD		
Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50
Chrysene	N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[k]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50
PCB 28	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 81	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 52	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 77	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 105	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 90+101	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 114	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 153	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 123	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 138	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 126	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 180	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 156	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 157	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 167	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 169	N	1815	µg/l	0.010	< 0.010	< 0.010
PCB 189	N	1815	µg/l	0.010	< 0.010	< 0.010
Total PCBs (12 Congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030

## Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.
1495	Low Level Hexavalent Chromium in Waters	Chromium [VI]	Colorimetric determination of hexavalent chromium expressed as Cr (VI) µg/l in water, using Ion Chromatography and UV-visible spectrophotometry.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1670	Total Petroleum Hydrocarbons (TPH) in Waters by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO	Pentane extraction / GC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection
1815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Waters by GC-MS	ICES7 PCB congeners	Solvent extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

## Report Information

### **Key**

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U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

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### **Sample Deviation Codes**

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

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### **Sample Retention and Disposal**

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)



## Final Report

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**Report No.:** 21-39931-1  
**Initial Date of Issue:** 01-Dec-2021  
**Client** Atkins Ltd  
**Client Address:** The Axis  
10 Holliday Street  
Birmingham  
West Midlands  
B1 1TF  
**Contact(s):** Alice Smith  
**Project** 5185703 Sizewell C  
**Quotation No.:** Q20-21888      **Date Received:** 15-Nov-2021  
**Order No.:** 12187631      **Date Instructed:** 15-Nov-2021  
**No. of Samples:** 19  
**Turnaround (Wkdays):** 6      **Results Due:** 22-Nov-2021  
**Date Approved:** 01-Dec-2021

**Approved By:**

**Details:** Glynn Harvey, Technical Manager

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## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:		21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	Chemtest Sample ID.:		1319376	1319377	1319378	1319379	1319380	1319381	1319382	1319383	1319384
	Sample Location:		NW-BH01-EW	NW-BH04-EW	NW-BH06-EW	WMZ-BH01-EW	WMZ-BH03-EW	DUP2-T3	TCA-BH09-EW	TCA-BH14-EW	TCA-BH02-EW
	Sample Type:		WATER	WATER	WATER						
	Top Depth (m):		5	6	9	9.5	10		12	14	10
	Date Sampled:		11-Nov-2021	11-Nov-2021	11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021	11-Nov-2021	11-Nov-2021
Determinand	Accred.	SOP	Units	LOD							
pH	U	1010		N/A	8.0	8.0	8.1	8.0	[D] 7.8	7.8	7.7
Electrical Conductivity	U	1020	µS/cm	1.0	780	720	860	400	[D] 710	800	1100
Suspended Solids At 105C	U	1030	mg/l	5.0	60	34	16	17	[D] 59	30	31
Aggressive Dissolved CO2	N	1160	mg/l	0.60							
Alkalinity (Total)	U	1220	mg/l	10	160	80	170	130	58	34	370
Chloride	U	1220	mg/l	1.0	59	58	69	16	42	42	79
Ammonium	U	1220	mg/l	0.050	0.69	0.53	0.33	0.19	0.13	0.37	0.52
Ammoniacal Nitrogen	U	1220	mg/l	0.050	0.57	0.44	0.27	0.16	0.11	0.30	0.41
Nitrite	U	1220	mg/l	0.020	0.37	0.036	0.029	0.028	0.032	0.034	0.029
Nitrate	U	1220	mg/l	0.50	140	150	140	23	40	45	140
Phosphate	U	1220	mg/l	0.200	0.30	< 0.20	< 0.20	0.53	0.52	0.55	< 0.20
Phosphorus (Dissolved)	U	1220	mg/l	0.020	0.098	0.039	< 0.020	0.17	0.17	0.18	< 0.020
Sulphate	U	1220	mg/l	1.0	49	43	75	26	69	73	57
Total Oxidised Nitrogen	U	1220	mg/l	0.20	32	34	32	5.2	9.0	10	32
Cyanide (Free) Low-Level	N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	[D] < 0.0050	< 0.0050	< 0.0050
Calcium	U	1455	mg/l	2.00	78	95	130	43	26	[D] 73	76
Potassium	U	1455	mg/l	0.50	5.2	8.3	3.4	5.5	3.6	[D] 4.0	5.5
Magnesium	U	1455	mg/l	0.20	28	5.4	7.2	4.4	9.9	[D] 20	27
Sodium	U	1455	mg/l	1.50	21	15	29	8.4	30	[D] 17	23
Arsenic (Dissolved)	U	1455	µg/l	0.20	0.61	0.44	< 0.20	0.39	0.23	[D] 0.32	0.29
Boron (Dissolved)	U	1455	µg/l	10.0	88	37	29	28	240	[D] 25	27
Cadmium (Dissolved)	U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	[D] < 0.11	< 0.11	< 0.11
Chromium (Dissolved)	U	1455	µg/l	0.50	8.1	8.0	8.2	8.1	[D] 5.5	7.3	6.7
Copper (Dissolved)	U	1455	µg/l	0.50	1.1	1.3	1.2	< 0.50	0.70	[D] 0.50	0.72
Iron (Dissolved)	N	1455	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	[D] < 5.0	< 5.0	< 5.0
Manganese (Dissolved)	U	1455	µg/l	0.50	0.72	0.84	1.6	2.1	74	[D] 1.8	1.5
Nickel (Dissolved)	U	1455	µg/l	0.50	0.58	< 0.50	< 0.50	< 0.50	5.9	[D] 0.60	< 0.50
Lead (Dissolved)	U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	[D] < 0.50	< 0.50	< 0.50
Zinc (Dissolved)	U	1455	µg/l	2.5	< 2.5	24	11	4.5	12	[D] 3.8	< 2.5
Mercury Low Level	U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Trivalent)	N	1490	µg/l	20							
Chromium (Hexavalent)	U	1490	µg/l	20							
Low-Level Chromium (Hexavalent)	U	1495	µg/l	0.10	[B] 3.8	[B] 3.7	[B] 3.8	[B] 4.3	[B] 3.6	[B] 3.3	[B] 3.0
Chromium (Trivalent) LL	U	1450	µg/l	1	4	4	4	4	4	4	3
Dissolved Organic Carbon Low Level	N	1610	mg/l	N/A	2.5	2.3	1.4	1.4	1.2	[D] 0.90	0.80
Total TPH >C6-C40	U	1670	µg/l	10	< 10	< 10	< 10	< 10	[C] < 10	< 10	< 10
Naphthalene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[C] < 0.010	< 0.010	< 0.010
Acenaphthylene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[C] < 0.010	< 0.010	< 0.010
Acenaphthene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[C] < 0.010	< 0.010	< 0.010
Fluorene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[C] < 0.010	< 0.010	< 0.010
Phenanthrene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[C] < 0.010	< 0.010	< 0.010
Anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[C] < 0.010	< 0.010	< 0.010

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	Chemtest Sample ID.:	1319376	1319377	1319378	1319379	1319380	1319381	1319382	1319383	1319384
	Sample Location:	NW-BH01-EW	NW-BH04-EW	NW-BH06-EW	WMZ-BH01-EW	WMZ-BH03-EW	DUP2-T3	TCA-BH09-EW	TCA-BH14-EW	TCA-BH02-EW
	Sample Type:	WATER								
	Top Depth (m):	5	6	9	9.5	10		12	14	10
	Date Sampled:	11-Nov-2021	11-Nov-2021	11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021	11-Nov-2021	11-Nov-2021
Determinand	Accred.	SOP	Units	LOD						
Fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1700	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Dichlorodifluoromethane	N	1760	µg/l	0.10	< 0.10					
Chloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
Vinyl Chloride	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
Bromomethane	N	1760	µg/l	2.0	< 2.0	< 2.0	[C] < 2.0	< 2.0	[C] < 2.0	< 2.0
Chloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	[C] < 0.20	< 0.20	[C] < 0.20	< 0.20
Trichlorofluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
1,1-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
Trans 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
1,1-Dichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
cis 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
Bromochloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	[C] < 0.50	< 0.50	[C] < 0.50	< 0.50
Trichloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
1,1,1-Trichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
Tetrachloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
1,1-Dichloropropene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
Benzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
1,2-Dichloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	[C] < 0.20	< 0.20	[C] < 0.20	< 0.20
Trichloroethene	N	1760	µg/l	0.10	< 0.10					
1,2-Dichloropropane	N	1760	µg/l	0.10	< 0.10					
Dibromomethane	N	1760	µg/l	0.10	< 0.10					
Bromodichloromethane	N	1760	µg/l	0.50	< 0.50					
cis-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0					
Toluene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
Trans-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0					
1,1,2-Trichloroethane	N	1760	µg/l	0.1	< 0.1					
Tetrachloroethene	N	1760	µg/l	0.10	< 0.10					
1,3-Dichloropropane	N	1760	µg/l	0.20	< 0.20					
Dibromochloromethane	N	1760	µg/l	1.0	< 1.0					
1,2-Dibromoethane	N	1760	µg/l	0.50	< 0.50	< 0.50	[C] < 0.50	< 0.50	[C] < 0.50	< 0.50
Chlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10
1,1,1,2-Tetrachloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	[C] < 0.20	< 0.20	[C] < 0.20	< 0.20

## Results - Water

**Project: 5185703 Sizewell C**

Client: Atkins Ltd	Chemtest Job No.:		21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	Chemtest Sample ID.:		1319376	1319377	1319378	1319379	1319380	1319381	1319382	1319383	1319384
	Sample Location:		NW-BH01-EW	NW-BH04-EW	NW-BH06-EW	WMZ-BH01-EW	WMZ-BH03-EW	DUP2-T3	TCA-BH09-EW	TCA-BH14-EW	TCA-BH02-EW
	Sample Type:		WATER								
	Top Depth (m):		5	6	9	9.5	10		12	14	10
	Date Sampled:		11-Nov-2021	11-Nov-2021	11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021	11-Nov-2021	11-Nov-2021
Determinand	Accred.	SOP	Units	LOD							
Ethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
m & p-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
o-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
Styrene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
Tribromomethane	N	1760	µg/l	1.0	< 1.0	< 1.0	[C] < 1.0	< 1.0	[C] < 1.0	< 1.0	< 1.0
Isopropylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
Bromobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,2,3-Trichloropropane	N	1760	µg/l	5	< 5	< 5	[C] < 5	< 5	[C] < 5	< 5	< 5
N-Propylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
2-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,3,5-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
4-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
Tert-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,2,4-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
Sec-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,3-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
4-Isopropyltoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,4-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
N-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,2-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,2-Dibromo-3-Chloropropane	N	1760	µg/l	5	< 5	< 5	[C] < 5	< 5	[C] < 5	< 5	< 5
1,2,4-Trichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
Hexachlorobutadiene	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
1,2,3-Trichlorobenzene	N	1760	µg/l	0.20	< 0.20	< 0.20	[C] < 0.20	< 0.20	[C] < 0.20	< 0.20	< 0.20
Methyl Tert-Butyl Ether	N	1760	µg/l	0.10	< 0.10	< 0.10	[C] < 0.10	< 0.10	[C] < 0.10	< 0.10	< 0.10
PCB 28	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 81	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 52	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 77	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 105	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 90+101	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 114	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 153	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 123	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 138	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 126	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 180	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 156	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 157	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 167	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010

## Results - Water

Project: 5185703 Sizewell C

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b>		21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	<b>Chemtest Sample ID.:</b>		1319376	1319377	1319378	1319379	1319380	1319381	1319382	1319383	1319384
	Sample Location:		NW-BH01-EW	NW-BH04-EW	NW-BH06-EW	WMZ-BH01-EW	WMZ-BH03-EW	DUP2-T3	TCA-BH09-EW	TCA-BH14-EW	TCA-BH02-EW
	Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):		5	6	9	9.5	10		12	14	10
	Date Sampled:		11-Nov-2021	11-Nov-2021	11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021	11-Nov-2021	11-Nov-2021
<b>Determinand</b>	<b>Accred.</b>	<b>SOP</b>	<b>Units</b>	<b>LOD</b>							
PCB 169	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
PCB 189	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
Total PCBs (12 Congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[D] < 0.010	< 0.010	< 0.010
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	[C] < 0.030	< 0.030	< 0.030

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:		21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	Chemtest Sample ID.:		1319385	1319386	1319387	1319388	1319389	1319391	1319392	1319393	1319394	1319395
	Sample Location:		TCA-BH03-EW	DUP2-T2	AD6-BH312	Sp-BH03-EW	SP-BH02-EW	DUP1-T3	DUP3-T3	BP BH01-EW	GRR BH16-EW	GRR BH14
	Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):		12		1.5	15	15			14.15	9	8.5
	Date Sampled:		11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021					
Determinand	Accred.	SOP	Units	LOD								
pH	U	1010	N/A	7.8	7.6	7.5	7.6	7.6	[A] 7.8	[A] 7.8	[A] 7.6	[A] 7.4
Electrical Conductivity	U	1020	µS/cm	1.0	610	1100	1000	910	870	[A] 810	[A] 390	[A] 720
Suspended Solids At 105C	U	1030	mg/l	5.0	42	< 5.0	180	< 5.0	< 5.0	[A] 100	[A] < 5.0	[A] < 5.0
Aggressive Dissolved CO2	N	1160	mg/l	0.60						2.0	3.6	< 0.60
Alkalinity (Total)	U	1220	mg/l	10	60	370	410	290	330	[A] 130	[A] 21	[A] 110
Chloride	U	1220	mg/l	1.0	67	79	73	52	47	[A] 74	[A] 42	[A] 74
Ammonium	U	1220	mg/l	0.050	0.075	< 0.050	< 0.050	< 0.050	< 0.050	[A] < 0.050	[A] 0.38	[A] 0.41
Ammoniacal Nitrogen	U	1220	mg/l	0.050	0.060	< 0.050	< 0.050	< 0.050	< 0.050	[A] < 0.050	[A] 0.30	[A] 0.33
Nitrite	U	1220	mg/l	0.020	0.029	0.028	0.029	0.030	0.032	[A] 0.071	[A] 0.035	[A] 0.075
Nitrate	U	1220	mg/l	0.50	110	140	21	130	53	[A] 49	[A] 42	[A] 110
Phosphate	U	1220	mg/l	0.200	0.84	< 0.20	< 0.20	< 0.20	< 0.20	[A] 0.42	[A] 0.56	[A] 0.43
Phosphorus (Dissolved)	U	1220	mg/l	0.020	0.27	< 0.020	0.042	< 0.020	< 0.020	[A] 0.14	[A] 0.18	[A] 0.14
Sulphate	U	1220	mg/l	1.0	50	52	96	42	35	[A] 72	[A] 69	[A] 74
Total Oxidised Nitrogen	U	1220	mg/l	0.20	25	32	4.8	29	12	11	9.5	26
Cyanide (Free) Low-Level	N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium	U	1455	mg/l	2.00	63	170	140	140	140	[A] 100	[A] 27	[A] 100
Potassium	U	1455	mg/l	0.50	6.8	0.87	6.3	0.68	0.50	[A] 4.0	[A] 3.5	[A] 3.6
Magnesium	U	1455	mg/l	0.20	7.0	6.8	11	6.7	5.2	[A] 12	[A] 10	[A] 13
Sodium	U	1455	mg/l	1.50	31	35	57	19	17	[A] 26	[A] 30	[A] 27
Arsenic (Dissolved)	U	1455	µg/l	0.20	0.48	< 0.20	1.4	0.35	< 0.20	[A] 0.68	[A] 0.34	[A] 0.66
Boron (Dissolved)	U	1455	µg/l	10.0	18	49	44	33	28	[A] 38	[A] 250	[A] 40
Cadmium (Dissolved)	U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	[A] < 0.11	[A] < 0.11	[A] 0.30
Chromium (Dissolved)	U	1455	µg/l	0.50	7.2	6.6	2.8	7.5	5.3	[A] < 0.50	[A] < 0.50	[A] 2.3
Copper (Dissolved)	U	1455	µg/l	0.50	< 0.50	1.9	0.75	0.69	1.6	[A] 0.64	[A] < 0.50	[A] < 0.50
Iron (Dissolved)	N	1455	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	[A] < 5.0	[A] < 5.0	[A] 38
Manganese (Dissolved)	U	1455	µg/l	0.50	< 0.50	2.3	40	4.7	3.0	[A] 84	[A] 72	[A] 140
Nickel (Dissolved)	U	1455	µg/l	0.50	< 0.50	< 0.50	0.84	0.72	< 0.50	[A] 1.8	[A] 5.4	[A] 1.7
Lead (Dissolved)	U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Zinc (Dissolved)	U	1455	µg/l	2.5	< 2.5	5.7	8.4	3.3	5.5	[A] < 2.5	[A] 6.0	[A] 3.0
Mercury Low Level	U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Chromium (Trivalent)	N	1490	µg/l	20								[A] < 20
Chromium (Hexavalent)	U	1490	µg/l	20								[A] < 20
Low-Level Chromium (Hexavalent)	U	1495	µg/l	0.10	[B] 3.4	[B] 2.9	[B] 1.4	[B] 3.4	[B] 2.3	[A] < 0.10	[A] 0.19	[A] < 0.10
Chromium (Trivalent) LL	U	1450	µg/l	1	4	4	1	4	3	< 1	< 1	< 1
Dissolved Organic Carbon Low Level	N	1610	mg/l	N/A	1.4	1.7	2.7	1.6	1.5	2.3	1.1	1.8
Total TPH >C6-C40	U	1670	µg/l	10	< 10	< 10	< 10	< 10	< 10	[A] < 10	[A] < 10	[A] < 10
Naphthalene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluorene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Phenanthrene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	Chemtest Sample ID.:	1319385	1319386	1319387	1319388	1319389	1319391	1319392	1319393	1319394	1319395
	Sample Location:	TCA-BH03-EW	DUP2-T2	AD6-BH312	Sp-BH03-EW	SP-BH02-EW	DUP1-T3	DUP3-T3	BP BH01-EW	GRR BH16-EW	GRR BH14
	Sample Type:	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):	12		1.5	15	15			14.15	9	8.5
	Date Sampled:	11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021					
Determinand	Accred.	SOP	Units	LOD							
Fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010	0.13	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] 0.59
Pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010	0.26	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] 0.69
Benzo[a]anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Chrysene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Benzo[b]fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Benzo[k]fluoranthene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Benzo[a]pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Dibenz(a,h)Anthracene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Benzo[g,h,i]perylene	N	1700	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010 [AC] < 0.010
Total Of 16 PAH's	N	1700	µg/l	0.20	< 0.20	< 0.20	< 0.20	0.39	< 0.20	[A] < 0.20	[A] < 0.20 [AC] 1.3
Dichlorodifluoromethane	N	1760	µg/l	0.10							
Chloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Vinyl Chloride	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Bromomethane	N	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0		
Chloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20		
Trichlorofluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
1,1-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Trans 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
1,1-Dichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
cis 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Bromochloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		
Trichloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
1,1,1-Trichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Tetrachloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
1,1-Dichloropropene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Benzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
1,2-Dichloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20			
Trichloroethene	N	1760	µg/l	0.10							
1,2-Dichloropropane	N	1760	µg/l	0.10							
Dibromomethane	N	1760	µg/l	0.10							
Bromodichloromethane	N	1760	µg/l	0.50							
cis-1,3-Dichloropropene	N	1760	µg/l	1.0							
Toluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Trans-1,3-Dichloropropene	N	1760	µg/l	1.0							
1,1,2-Trichloroethane	N	1760	µg/l	0.1							
Tetrachloroethene	N	1760	µg/l	0.10							
1,3-Dichloropropane	N	1760	µg/l	0.20							
Dibromochloromethane	N	1760	µg/l	1.0							
1,2-Dibromoethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		
Chlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
1,1,1,2-Tetrachloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20		

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:		21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	Chemtest Sample ID.:		1319385	1319386	1319387	1319388	1319389	1319391	1319392	1319393	1319394	1319395
	Sample Location:		TCA-BH03-EW	DUP2-T2	AD6-BH312	Sp-BH03-EW	SP-BH02-EW	DUP1-T3	DUP3-T3	BP BH01-EW	GRR BH16-EW	GRR BH14
	Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):		12		1.5	15	15			14.15	9	8.5
	Date Sampled:		11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021					
Determinand	Accred.	SOP	Units	LOD								
Ethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10				
m & p-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
o-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Styrene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Tribromomethane	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
Isopropylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Bromobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,2,3-Trichloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5			
N-Propylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
2-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,3,5-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
4-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Tert-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,2,4-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Sec-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,3-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
4-Isopropyltoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,4-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
N-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,2-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,2-Dibromo-3-Chloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5			
1,2,4-Trichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Hexachlorobutadiene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
1,2,3-Trichlorobenzene	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20			
Methyl Tert-Butyl Ether	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
PCB 28	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			
PCB 81	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			
PCB 77	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 105	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			
PCB 114	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			
PCB 123	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			
PCB 126	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			
PCB 156	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 157	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 167	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

## Results - Water

**Project: 5185703 Sizewell C**

<b>Client: Atkins Ltd</b>	<b>Chemtest Job No.:</b>		21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931	21-39931
Quotation No.: Q20-21888	<b>Chemtest Sample ID.:</b>		1319385	1319386	1319387	1319388	1319389	1319391	1319392	1319393	1319394	1319395
	Sample Location:	TCA-BH03-EW	DUP2-T2	AD6-BH312	Sp-BH03-EW	SP-BH02-EW	DUP1-T3	DUP3-T3	BP BH01-EW	GRR BH16-EW		GRR BH14
	Sample Type:	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):	12		1.5	15	15			14.15	9	8.5	
	Date Sampled:	11-Nov-2021	#####	#####	11-Nov-2021	11-Nov-2021						
<b>Determinand</b>	<b>Accred.</b>	<b>SOP</b>	<b>Units</b>	<b>LOD</b>								
PCB 169	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 189	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (12 Congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	[A] < 0.030	[A] < 0.030	[A] < 0.030	[AC] < 0.030

## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

<b>Sample:</b>	<b>Sample Ref:</b>	<b>Sample ID:</b>	<b>Sample Location:</b>	<b>Sampled Date:</b>	<b>Deviation Code(s):</b>	<b>Containers Received:</b>
1319376			NW-BH01-EW	11-Nov-2021	B	Coloured Winchester 1000ml
1319376			NW-BH01-EW	11-Nov-2021	B	EPA Vial 40ml
1319376			NW-BH01-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319377			NW-BH04-EW	11-Nov-2021	B	Coloured Winchester 1000ml
1319377			NW-BH04-EW	11-Nov-2021	B	EPA Vial 40ml
1319377			NW-BH04-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319378			NW-BH06-EW	11-Nov-2021	B	Coloured Winchester 1000ml
1319378			NW-BH06-EW	11-Nov-2021	B	EPA Vial 40ml
1319378			NW-BH06-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319379			WMZ-BH01-EW	11-Nov-2021	BC	Coloured Winchester 1000ml
1319379			WMZ-BH01-EW	11-Nov-2021	BC	Plastic Bottle 1000ml
1319380			WMZ-BH03-EW	11-Nov-2021	B	Coloured Winchester 1000ml
1319380			WMZ-BH03-EW	11-Nov-2021	B	EPA Vial 40ml
1319380			WMZ-BH03-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319382			TCA-BH09-EW	11-Nov-2021	B	Coloured Winchester 500ml
1319382			TCA-BH09-EW	11-Nov-2021	B	EPA Vial 40ml
1319382			TCA-BH09-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319383			TCA-BH14-EW	11-Nov-2021	B	Coloured Winchester 500ml
1319383			TCA-BH14-EW	11-Nov-2021	B	EPA Vial 40ml
1319383			TCA-BH14-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319384			TCA-BH02-EW	11-Nov-2021	B	Coloured Winchester 500ml
1319384			TCA-BH02-EW	11-Nov-2021	B	EPA Vial 40ml
1319384			TCA-BH02-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319385			TCA-BH03-EW	11-Nov-2021	B	Coloured Winchester 500ml

## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

<b>Sample:</b>	<b>Sample Ref:</b>	<b>Sample ID:</b>	<b>Sample Location:</b>	<b>Sampled Date:</b>	<b>Deviation Code(s):</b>	<b>Containers Received:</b>
1319385			TCA-BH03-EW	11-Nov-2021	B	EPA Vial 40ml
1319385			TCA-BH03-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319386			DUP2-T2	11-Nov-2021	B	Coloured Winchester 500ml
1319386			DUP2-T2	11-Nov-2021	B	EPA Vial 40ml
1319386			DUP2-T2	11-Nov-2021	B	Plastic Bottle 1000ml
1319387			AD6-BH312	11-Nov-2021	B	Coloured Winchester 1000ml
1319387			AD6-BH312	11-Nov-2021	B	EPA Vial 40ml
1319387			AD6-BH312	11-Nov-2021	B	Plastic Bottle 1000ml
1319388			Sp-BH03-EW	11-Nov-2021	B	Coloured Winchester 1000ml
1319388			Sp-BH03-EW	11-Nov-2021	B	EPA Vial 40ml
1319388			Sp-BH03-EW	11-Nov-2021	B	Plastic Bottle 1000ml
1319389			SP-BH02-EW	11-Nov-2021	B	Coloured Winchester 1000ml
1319389			SP-BH02-EW	11-Nov-2021	B	EPA Vial 40ml
1319389			DUP1-T3		A	Plastic Bottle 1000ml
1319391			DUP1-T3		A	Coloured Winchester 1000ml
1319391			DUP1-T3		A	EPA Vial 40ml
1319391			DUP1-T3		A	Plastic Bottle 1000ml
1319392			DUP3-T3		A	Coloured Winchester 1000ml
1319392			DUP3-T3		A	EPA Vial 40ml
1319392			DUP3-T3		A	Plastic Bottle 1000ml
1319393			BP BH01-EW		A	Coloured Winchester 1000ml
1319393			BP BH01-EW		A	EPA Vial 40ml
1319393			BP BH01-EW		A	Plastic Bottle 1000ml
1319394			GRR BH16-EW		A	Coloured Winchester 1000ml
1319394			GRR BH16-EW		A	EPA Vial 40ml

## Deviations

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Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1319394			GRR BH16-EW		A	Plastic Bottle 1000ml
1319395			GRR BH14		AC	EPA Vial 40ml
1319395			GRR BH14		AC	Plastic Bottle 1000ml

## Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.
1160	Aggressive Dissolved CO <sub>2</sub>	Aggressive Dissolved CO <sub>2</sub>	Titration
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
1495	Low Level Hexavalent Chromium in Waters	Chromium [VI]	Colorimetric determination of hexavalent chromium expressed as Cr (VI) µg/l in water, using Ion Chromatography and UV-visible spectrophotometry.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1670	Total Petroleum Hydrocarbons (TPH) in Waters by GC-FID	TPH (C <sub>6</sub> –C <sub>40</sub> ); optional carbon banding, e.g. 3-band – GRO, DRO & LRO	Pentane extraction / GC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection
1815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Waters by GC-MS	ICES7 PCB congeners	Solvent extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.

## Report Information

### **Key**

---

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

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- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

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All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)



2183

# Final Report

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Eurofins Chemtest Ltd  
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CB8 0AL  
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Email: [info@chemtest.com](mailto:info@chemtest.com)

<b>Report No.:</b>	21-44066-1
<b>Initial Date of Issue:</b>	20-Dec-2021
<b>Client</b>	Atkins Ltd
<b>Client Address:</b>	The Axis 10 Holliday Street Birmingham West Midlands B1 1TF
<b>Contact(s):</b>	Natasha Glynn
<b>Project</b>	SCZ
<b>Quotation No.:</b>	<b>Date Received:</b> 13-Dec-2021
<b>Order No.:</b>	<b>Date Instructed:</b> 14-Dec-2021
<b>No. of Samples:</b>	3
<b>Turnaround (Wkdays):</b>	<b>Results Due:</b> 20-Dec-2021
<b>Date Approved:</b>	20-Dec-2021

**Approved By:**

**Details:** Glynn Harvey, Technical Manager

## Results - Water

**Project: SCZ**

Client: Atkins Ltd	Chemtest Job No.:		21-44066	21-44066	21-44066
Quotation No.:	Chemtest Sample ID.:		1339465	1339466	1339467
Order No.: S185703	Client Sample Ref.:		EW1	EW1	EW1
	Sample Location:		PIEZ 1B	GR 9	PZ 21
	Sample Type:		WATER	WATER	WATER
	Top Depth (m):		1.5	14.0	7.0
	Date Sampled:		09-Dec-2021	09-Dec-2021	09-Dec-2021
Determinand	Accred.	SOP	Units	LOD	
pH	U	1010		N/A	8.2
Electrical Conductivity	U	1020	µS/cm	1.0	2300
Suspended Solids At 105C	U	1030	mg/l	5.0	34
Alkalinity (Total)	U	1220	mg/l	10	360
Chloride	U	1220	mg/l	1.0	550
Ammonium	U	1220	mg/l	0.050	2.3
Ammoniacal Nitrogen	U	1220	mg/l	0.050	1.9
Nitrite	U	1220	mg/l	0.020	< 0.020
Nitrate	U	1220	mg/l	0.50	8.8
Phosphate	U	1220	mg/l	0.200	2.1
Phosphorus (Dissolved)	U	1220	mg/l	0.020	0.69
Sulphate	U	1220	mg/l	1.0	61
Total Oxidised Nitrogen	U	1220	mg/l	0.20	2.0
Cyanide (Free) Low-Level	N	1300	mg/l	0.0050	< 0.0050
Calcium	U	1455	mg/l	2.00	100
Potassium	U	1455	mg/l	0.50	13
Magnesium	U	1455	mg/l	0.20	3.6
Sodium	U	1455	mg/l	1.50	360
Arsenic (Dissolved)	U	1455	µg/l	0.20	1.5
Boron (Dissolved)	U	1455	µg/l	10.0	51
Cadmium (Dissolved)	U	1455	µg/l	0.11	< 0.11
Chromium (Dissolved)	U	1455	µg/l	0.50	1.4
Copper (Dissolved)	U	1455	µg/l	0.50	< 0.50
Iron (Dissolved)	N	1455	µg/l	5.0	380
Manganese (Dissolved)	U	1455	µg/l	0.50	140
Nickel (Dissolved)	U	1455	µg/l	0.50	2.8
Lead (Dissolved)	U	1455	µg/l	0.50	< 0.50
Selenium (Dissolved)	U	1455	µg/l	0.50	0.85
Zinc (Dissolved)	U	1455	µg/l	2.5	< 2.5
Mercury Low Level	U	1460	µg/l	0.010	< 0.010
Chromium (Hexavalent)	U	1490	µg/l	20	[B] < 20
Chromium (Trivalent) LL	U	1450	µg/l	1	< 1
Dissolved Organic Carbon	U	1610	mg/l	2.0	36
Total Organic Carbon	U	1610	mg/l	2.0	36
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10

## Results - Water

**Project: SCZ**

Client: Atkins Ltd	Chemtest Job No.:		21-44066	21-44066	21-44066
Quotation No.:	Chemtest Sample ID.:		1339465	1339466	1339467
Order No.: S185703	Client Sample Ref.:		EW1	EW1	EW1
	Sample Location:		PIEZ 1B	GR 9	PZ 21
	Sample Type:		WATER	WATER	WATER
	Top Depth (m):		1.5	14.0	7.0
	Date Sampled:		09-Dec-2021	09-Dec-2021	09-Dec-2021
Determinand	Accred.	SOP	Units	LOD	
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10
Benzene	N	1760	µg/l	0.10	< 0.10
Toluene	N	1760	µg/l	0.10	< 0.10
Ethylbenzene	N	1760	µg/l	0.10	< 0.10
m & p-Xylene	N	1760	µg/l	0.10	< 0.10
o-Xylene	N	1760	µg/l	0.10	< 0.10
Naphthalene	N	1800	µg/l	0.010	< 0.010
Acenaphthylene	N	1800	µg/l	0.010	< 0.010
Acenaphthene	N	1800	µg/l	0.010	< 0.010
Fluorene	N	1800	µg/l	0.010	< 0.010
Phenanthrrene	N	1800	µg/l	0.010	< 0.010
Anthracene	N	1800	µg/l	0.010	< 0.010
Fluoranthene	N	1800	µg/l	0.010	< 0.010
Pyrene	N	1800	µg/l	0.010	< 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010	< 0.010
Chrysene	N	1800	µg/l	0.010	< 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010	< 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010	< 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010	< 0.010
Total Of 16 PAH's	N	1800	µg/l	0.20	< 0.20
Total Phenols	U	1920	mg/l	0.030	< 0.030

## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1339465	EW1		PIEZ 1B	09-Dec-2021	B	Coloured Winchester 1000ml
1339465	EW1		PIEZ 1B	09-Dec-2021	B	EPA Vial 40ml
1339465	EW1		PIEZ 1B	09-Dec-2021	B	Plastic Bottle 1000ml
1339466	EW1		GR 9	09-Dec-2021	B	Coloured Winchester 1000ml
1339466	EW1		GR 9	09-Dec-2021	B	EPA Vial 40ml
1339466	EW1		GR 9	09-Dec-2021	B	Plastic Bottle 1000ml
1339467	EW1		PZ 21	09-Dec-2021	B	Coloured Winchester 1000ml
1339467	EW1		PZ 21	09-Dec-2021	B	EPA Vial 40ml
1339467	EW1		PZ 21	09-Dec-2021	B	Plastic Bottle 1000ml

## Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
1495	Low Level Hexavalent Chromium in Waters	Chromium [VI]	Colorimetric determination of hexavalent chromium expressed as Cr (VI) µg/l in water, using Ion Chromatography and UV-visible spectrophotometry.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

## Report Information

### **Key**

---

U	UKAS accredited
M	MCERTS and UKAS accredited
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S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
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None of the results in this report have been recovery corrected

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The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

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### **Sample Deviation Codes**

---

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

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All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)



## Final Report

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<b>Report No.:</b>	22-11085-1		
<b>Initial Date of Issue:</b>	30-Mar-2022		
<b>Client</b>	Atkins Ltd		
<b>Client Address:</b>	The Axis 10 Holliday Street Birmingham West Midlands B1 1TF		
<b>Contact(s):</b>	Alice Smith Natasha Glynn Ruth Flower		
<b>Project</b>	5185703 Sizewell C		
<b>Quotation No.:</b>	Q21-25865	<b>Date Received:</b>	24-Mar-2022
<b>Order No.:</b>	IFS10554	<b>Date Instructed:</b>	24-Mar-2022
<b>No. of Samples:</b>	1	<b>Results Due:</b>	30-Mar-2022
<b>Turnaround (Wkdays):</b>	5	<b>Date Approved:</b>	30-Mar-2022
<b>Approved By:</b>	 Stuart Henderson		
<b>Details:</b>	Stuart Henderson, Technical Manager		

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## Results - Water

**Project: 5185703 Sizewell C**

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b> 22-11085			
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b> 1397690			
	Sample Location: AD6			
	Sample Type: WATER			
	Top Depth (m): 2.0			
	Date Sampled: 21-Mar-2022			
Determinand	Accred.	SOP	Units	LOD
pH	U	1010	N/A	7.3
Electrical Conductivity	U	1020	µS/cm	1.0
Suspended Solids At 105C	U	1030	mg/l	5.0
Aggressive Dissolved CO2	N	1160	mg/l	0.60
Alkalinity (Total)	U	1220	mg/l	10
Chloride	U	1220	mg/l	1.0
Ammonium	U	1220	mg/l	0.050
Ammoniacal Nitrogen	U	1220	mg/l	0.050
Nitrite	U	1220	mg/l	0.020
Nitrate	U	1220	mg/l	0.50
Phosphate	U	1220	mg/l	0.200
Phosphorus (Dissolved)	U	1220	mg/l	0.020
Sulphate	U	1220	mg/l	1.0
Total Oxidised Nitrogen	U	1220	mg/l	0.20
Cyanide (Free) Low-Level	N	1300	mg/l	< 0.0050
Calcium	U	1455	mg/l	2.00
Potassium	U	1455	mg/l	0.50
Magnesium	U	1455	mg/l	0.20
Sodium	U	1455	mg/l	1.50
Arsenic (Dissolved)	U	1455	µg/l	0.20
Boron (Dissolved)	U	1455	µg/l	10.0
Cadmium (Dissolved)	U	1455	µg/l	0.11
Chromium (Dissolved)	U	1455	µg/l	0.50
Copper (Dissolved)	U	1455	µg/l	0.50
Iron (Dissolved)	N	1455	µg/l	5.0
Manganese (Dissolved)	U	1455	µg/l	0.50
Nickel (Dissolved)	U	1455	µg/l	0.50
Lead (Dissolved)	U	1455	µg/l	< 0.50
Selenium (Dissolved)	U	1455	µg/l	< 0.50
Zinc (Dissolved)	U	1455	µg/l	2.5
Mercury Low Level	U	1460	µg/l	< 0.010
Chromium (Hexavalent)	U	1490	µg/l	20
Chromium (Trivalent) LL	U	1450	µg/l	1
Dissolved Organic Carbon	U	1610	mg/l	2.0
Total Organic Carbon	U	1610	mg/l	2.0
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10

## Results - Water

**Project: 5185703 Sizewell C**

<b>Client: Atkins Ltd</b>	<b>Chemtest Job No.:</b> 22-11085			
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b> 1397690			
	Sample Location: AD6			
	Sample Type: WATER			
	Top Depth (m): 2.0			
	Date Sampled: 21-Mar-2022			
Determinand	Accred.	SOP	Units	LOD
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10 < 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10 < 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10 < 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0 < 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10 < 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10 < 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10 < 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10 < 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10 < 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10 < 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10 < 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10 < 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0 < 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10 < 10
Benzene	N	1760	µg/l	0.10 < 0.10
Toluene	N	1760	µg/l	0.10 < 0.10
Ethylbenzene	N	1760	µg/l	0.10 < 0.10
m & p-Xylene	N	1760	µg/l	0.10 < 0.10
o-Xylene	N	1760	µg/l	0.10 < 0.10
Naphthalene	N	1800	µg/l	0.010 < 0.010
Acenaphthylene	N	1800	µg/l	0.010 < 0.010
Acenaphthene	N	1800	µg/l	0.010 < 0.010
Fluorene	N	1800	µg/l	0.010 < 0.010
Phenanthrrene	N	1800	µg/l	0.010 < 0.010
Anthracene	N	1800	µg/l	0.010 < 0.010
Fluoranthene	N	1800	µg/l	0.010 < 0.010
Pyrene	N	1800	µg/l	0.010 < 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010 < 0.010
Chrysene	N	1800	µg/l	0.010 < 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010 < 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010 < 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010 < 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010 < 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010 < 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010 < 0.010
Total Of 16 PAH's	N	1800	µg/l	0.20 < 0.20
Total Phenols	U	1920	mg/l	0.030 < 0.030

## Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.
1160	Aggressive Dissolved CO <sub>2</sub>	Aggressive Dissolved CO <sub>2</sub>	Titration
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
1495	Low Level Hexavalent Chromium in Waters	Chromium [VI]	Colorimetric determination of hexavalent chromium expressed as Cr (VI) µg/l in water, using Ion Chromatography and UV-visible spectrophotometry.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44Aromatics: >C5–C7, >C7–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44	Pentane extraction / GCxGC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

## Report Information

### **Key**

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U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

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- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

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All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)



## Final Report

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<b>Report No.:</b>	22-22842-1		
<b>Initial Date of Issue:</b>	25-Jun-2022		
<b>Client</b>	Atkins Ltd		
<b>Client Address:</b>	The Axis 10 Holliday Street Birmingham West Midlands B1 1TF		
<b>Contact(s):</b>	Alice Smith Natasha Glynn		
<b>Project</b>	5185703 Sizewell C		
<b>Quotation No.:</b>	Q21-25865	<b>Date Received:</b>	20-Jun-2022
<b>Order No.:</b>	IFS10554	<b>Date Instructed:</b>	20-Jun-2022
<b>No. of Samples:</b>	17	<b>Results Due:</b>	24-Jun-2022
<b>Turnaround (Wkdays):</b>	5	<b>Date Approved:</b>	24-Jun-2022
<b>Approved By:</b>			
<b>Details:</b>	Stuart Henderson, TECHINCAL MANAGER		

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## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451253	1451254	1451255	1451256	1451257	1451258	1451259	1451260	1451261
Order No.: IFS10554	Client Sample Ref.:			SW	GW	GW	GW	GW	GW	GW	GW	GW
	Sample Location:			G5	AF6	DCBH2009_6	DCBH2009_10_06	P4	PZ20	GW3	P219	P21019
	Sample Type:			WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):			6	8	8	1.5	1.0	12	8	8	8
	Date Sampled:			16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
Determinand	Accred.	SOP	Units	LOD								
pH	U	1010		N/A	9.2	9.1	7.6	7.4	7.4	7.9	7.9	7.6
Electrical Conductivity	U	1020	µS/cm	1.0	770	800	3300	3700	3300	1000	950	850
Suspended Solids At 105C	U	1030	mg/l	5.0	30	60	220	120	81	31	150	44
Alkalinity (Total)	U	1220	mg/l	10	730	640	680	660	770	150	160	< 10
Chloride	U	1220	mg/l	1.0	180	67	890	830	980	88	74	250
Ammonium	U	1220	mg/l	0.050	0.36	1.1	17	16	1.9	1.8	1.7	1.1
Ammoniacal Nitrogen	U	1220	mg/l	0.050	0.51	1.5	13	12	1.5	1.5	1.4	0.93
Nitrite	U	1220	mg/l	0.020	1.1	1.3	0.049	0.026	0.034	0.037	0.044	0.034
Nitrate	U	1220	mg/l	0.50	66	100	3.2	< 0.50	2.0	240	170	50
Phosphate	U	1220	mg/l	0.200	1.2	< 0.20	< 0.20	< 0.20	< 0.20	0.74	< 0.20	< 0.20
Phosphorus (Dissolved)	U	1220	mg/l	0.020	0.39	0.059	< 0.020	< 0.020	< 0.020	0.24	0.046	0.062
Sulphate	U	1220	mg/l	1.0	130	180	4.8	< 1.0	21	26	62	10
Total Oxidised Nitrogen	U	1220	mg/l	0.20	15	23	0.75	< 0.20	0.45	54	38	11
Cyanide (Free) Low-Level	N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium	U	1455	mg/l	2.00	150	130	220	230	400	67	120	25
Potassium	U	1455	mg/l	0.50	17	13	33	31	8.9	4.7	4.7	3.3
Magnesium	U	1455	mg/l	0.20	13	12	52	49	25	23	10	17
Sodium	U	1455	mg/l	1.50	97	42	440	420	180	22	22	96
Arsenic (Dissolved)	U	1455	µg/l	0.20	1.9	3.2	1.9	1.6	0.49	0.65	0.37	0.40
Boron (Dissolved)	U	1455	µg/l	10.0	66	110	280	250	40	23	26	22
Cadmium (Dissolved)	U	1455	µg/l	0.11	< 0.11	0.19	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.35
Chromium (Dissolved)	U	1455	µg/l	0.50	0.75	8.0	< 0.50	< 0.50	< 0.50	7.3	8.2	3.0
Copper (Dissolved)	U	1455	µg/l	0.50	3.0	1.0	< 0.50	< 0.50	< 0.50	0.52	0.52	1.5
Iron (Dissolved)	N	1455	µg/l	5.0	16	< 5.0	7000	5300	280	< 5.0	< 5.0	5.5
Manganese (Dissolved)	U	1455	µg/l	0.50	11	14	930	900	2100	9.0	1.7	100
Nickel (Dissolved)	U	1455	µg/l	0.50	0.83	0.70	1.7	< 0.50	< 0.50	< 0.50	2.2	37
Lead (Dissolved)	U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Zinc (Dissolved)	U	1455	µg/l	2.5	13	7.3	< 2.5	< 2.5	3.4	6.0	5.8	19
Mercury Low Level	U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)	U	1490	µg/l	20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20
Chromium (Trivalent) LL	U	1450	µg/l	1	< 1	8	< 1	< 1	< 1	7	8	3
Total Organic Carbon	U	1610	mg/l	2.0	7.7	3.1	47	38	4.9	< 2.0	2.4	< 2.0
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451253	1451254	1451255	1451256	1451257	1451258	1451259	1451260	1451261
Order No.: IFS10554	Client Sample Ref.:			SW	GW	GW	GW	GW	GW	GW	GW	GW
	Sample Location:			G5	AF6	DCBH2009_6	DCBH2009_10_06	P4	PZ20	GW3	P219	P21019
	Sample Type:			WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):			6	8	8	1.5	1.0	12	8	8	8
	Date Sampled:			16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
Determinand	Accred.	SOP	Units	LOD								
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Vinyl Chloride	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromomethane	N	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Trichlorofluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trans 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
cis 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromochloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1,1-Trichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tetrachloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloropropene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Trichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichloropropane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibromomethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromodichloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trans-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	N	1760	µg/l	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451253	1451254	1451255	1451256	1451257	1451258	1451259	1451260	1451261
Order No.: IFS10554	Client Sample Ref.:			SW	GW	GW	GW	GW	GW	GW	GW	GW
	Sample Location:			G5	AF6	DCBH2009_6	DCBH2009_10 06	P4	PZ20	GW3	P219	P21019
	Sample Type:			WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):			6	8	8	1.5	1.0	12	8	8	8
	Date Sampled:			16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
Determinand	Accred.	SOP	Units	LOD								
Tetrachloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3-Dichloropropane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Dibromochloromethane	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1,2-Tetrachloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Ethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
m & p-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
o-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Styrene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tribromomethane	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,3-Trichloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
N-Propylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3,5-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
4-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tert-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,4-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sec-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
4-Isopropyltoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,4-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
N-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dibromo-3-Chloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Hexachlorobutadiene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,3-Trichlorobenzene	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Methyl Tert-Butyl Ether	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
N-Nitrosodimethylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451253	1451254	1451255	1451256	1451257	1451258	1451259	1451260	1451261
Order No.: IFS10554	Client Sample Ref.:			SW	GW	GW	GW	GW	GW	GW	GW	GW
	Sample Location:			G5	AF6	DCBH2009_6	DCBH2009_10 06	P4	PZ20	GW3	P219	P21019
	Sample Type:			WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):			6	8	8	1.5	1.0	12	8	8	8
	Date Sampled:			16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
Determinand	Accred.	SOP	Units	LOD								
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451253	1451254	1451255	1451256	1451257	1451258	1451259	1451260	1451261
Order No.: IFS10554	Client Sample Ref.:			SW	GW	GW	GW	GW	GW	GW	GW	GW
	Sample Location:			G5	AF6	DCBH2009_6	DCBH2009_10 06	P4	PZ20	GW3	P219	P21019
	Sample Type:			WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):			6	8	8	1.5	1.0	12	8	8	8
	Date Sampled:			16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
Determinand	Accred.	SOP	Units	LOD								
Phenanthrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthylene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluorene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1800	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
PCB 28	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 81	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451253	1451254	1451255	1451256	1451257	1451258	1451259	1451260	1451261
Order No.: IFS10554	Client Sample Ref.:			SW	GW	GW	GW	GW	GW	GW	GW	GW
	Sample Location:			G5	AF6	DCBH2009_6	DCBH2009_10 06	P4	PZ20	GW3	P219	P21019
	Sample Type:			WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Top Depth (m):			6	8	8	1.5	1.0	12	8	8	8
	Date Sampled:			16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
Determinand	Accred.	SOP	Units	LOD								
PCB 77	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 105	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 114	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 123	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 126	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 156	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 157	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 167	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 169	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 189	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (12 Congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451262	1451263	1451264	1451265	1451266	1451267	1451268	1451269
Order No.: IFS10554	Client Sample Ref.:			GW	GW	GW	GW				
	Sample Location:			P221	DCBH2019_3	BP23	BP12	GW2	C1S	C1D	P15
	Sample Type:			WATER							
	Top Depth (m):			8	6.5	10	19	1.60	5.0	18.0	
	Date Sampled:			16-Jun-2022							
Determinand	Accred.	SOP	Units	LOD							
pH	U	1010		N/A	7.7	7.8	8.0	7.9	8.1	8.0	7.8
Electrical Conductivity	U	1020	µS/cm	1.0	1600	1700	1100	830	640	570	900
Suspended Solids At 105C	U	1030	mg/l	5.0	34	210	45	150	470	48	190
Alkalinity (Total)	U	1220	mg/l	10	300	420	26	240	26	85	310
Chloride	U	1220	mg/l	1.0	420	400	100	57	47	74	48
Ammonium	U	1220	mg/l	0.050	0.73	3.4	0.57	0.81	1.2	0.46	1.1
Ammoniacal Nitrogen	U	1220	mg/l	0.050	0.58	2.7	0.47	0.67	1.0	0.38	0.93
Nitrite	U	1220	mg/l	0.020	0.057	0.031	0.095	0.049	0.034	0.041	0.035
Nitrate	U	1220	mg/l	0.50	30	0.77	310	77	150	95	2.1
Phosphate	U	1220	mg/l	0.200	< 0.20	< 0.20	0.21	0.24	< 0.20	0.20	< 0.20
Phosphorus (Dissolved)	U	1220	mg/l	0.020	< 0.020	< 0.020	0.069	0.078	0.049	0.065	< 0.020
Sulphate	U	1220	mg/l	1.0	28	< 1.0	59	54	95	12	55
Total Oxidised Nitrogen	U	1220	mg/l	0.20	6.8	< 0.20	70	17	34	21	0.47
Cyanide (Free) Low-Level	N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium	U	1455	mg/l	2.00	150	120	100	120	62	52	150
Potassium	U	1455	mg/l	0.50	6.2	12	6.8	11	3.1	1.6	5.8
Magnesium	U	1455	mg/l	0.20	8.7	39	28	5.8	19	4.8	9.1
Sodium	U	1455	mg/l	1.50	170	210	23	23	20	45	32
Arsenic (Dissolved)	U	1455	µg/l	0.20	0.46	3.7	0.50	0.56	0.49	1.2	0.72
Boron (Dissolved)	U	1455	µg/l	10.0	29	140	50	53	29	18	35
Cadmium (Dissolved)	U	1455	µg/l	0.11	0.13	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)	U	1455	µg/l	0.50	< 0.50	< 0.50	7.8	9.0	16	12	< 0.50
Copper (Dissolved)	U	1455	µg/l	0.50	3.3	< 0.50	0.74	0.59	0.83	< 0.50	< 0.50
Iron (Dissolved)	N	1455	µg/l	5.0	11	13	< 5.0	< 5.0	25	< 5.0	< 5.0
Manganese (Dissolved)	U	1455	µg/l	0.50	12	2600	21	0.79	11	1.8	300
Nickel (Dissolved)	U	1455	µg/l	0.50	4.0	0.53	2.1	< 0.50	18	< 0.50	3.9
Lead (Dissolved)	U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Zinc (Dissolved)	U	1455	µg/l	2.5	110	4.0	8.8	3.9	13	< 2.5	19
Mercury Low Level	U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)	U	1490	µg/l	20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] 23	[B] < 20	[B] < 20
Chromium (Trivalent) LL	U	1450	µg/l	1	< 1	< 1	8	9	16	12	< 1
Total Organic Carbon	U	1610	mg/l	2.0	4.6	9.2	< 2.0	2.5	< 2.0	< 2.0	< 2.0
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451262	1451263	1451264	1451265	1451266	1451267	1451268	1451269
Order No.: IFS10554	Client Sample Ref.:			GW	GW	GW	GW				
	Sample Location:			P221	DCBH2019_3	BP23	BP12	GW2	C1S	C1D	P15
	Sample Type:			WATER							
	Top Depth (m):			8	6.5	10	19	1.60	5.0	18.0	
	Date Sampled:			16-Jun-2022							
Determinand	Accred.	SOP	Units	LOD							
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Vinyl Chloride	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromomethane	N	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Trichlorofluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trans 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
cis 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromochloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1,1-Trichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tetrachloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloropropene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Trichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichloropropane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibromomethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromodichloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trans-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	N	1760	µg/l	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451262	1451263	1451264	1451265	1451266	1451267	1451268	1451269
Order No.: IFS10554	Client Sample Ref.:			GW	GW	GW	GW				
	Sample Location:			P221	DCBH2019_3	BP23	BP12	GW2	C1S	C1D	P15
	Sample Type:			WATER							
	Top Depth (m):			8	6.5	10	19	1.60	5.0	18.0	
	Date Sampled:			16-Jun-2022							
Determinand	Accred.	SOP	Units	LOD							
Tetrachloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3-Dichloropropane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Dibromochloromethane	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1,1,2-Tetrachloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Ethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
m & p-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
o-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Styrene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tribromomethane	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,3-Trichloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
N-Propylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3,5-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
4-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tert-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,4-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sec-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
4-Isopropyltoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,4-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
N-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dibromo-3-Chloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Hexachlorobutadiene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,3-Trichlorobenzene	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Methyl Tert-Butyl Ether	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
N-Nitrosodimethylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451262	1451263	1451264	1451265	1451266	1451267	1451268	1451269
Order No.: IFS10554	Client Sample Ref.:			GW	GW	GW	GW				
	Sample Location:			P221	DCBH2019_3	BP23	BP12	GW2	C1S	C1D	P15
	Sample Type:			WATER							
	Top Depth (m):			8	6.5	10	19	1.60	5.0	18.0	
	Date Sampled:			16-Jun-2022							
Determinand	Accred.	SOP	Units	LOD							
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451262	1451263	1451264	1451265	1451266	1451267	1451268	1451269
Order No.: IFS10554	Client Sample Ref.:			GW	GW	GW	GW				
	Sample Location:			P221	DCBH2019_3	BP23	BP12	GW2	C1S	C1D	P15
	Sample Type:			WATER							
	Top Depth (m):			8	6.5	10	19	1.60	5.0	18.0	
	Date Sampled:			16-Jun-2022							
Determinand	Accred.	SOP	Units	LOD							
Phenanthrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthylene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluorene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1800	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
PCB 28	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 81	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842	22-22842
Quotation No.: Q21-25865	Chemtest Sample ID.:			1451262	1451263	1451264	1451265	1451266	1451267	1451268	1451269
Order No.: IFS10554	Client Sample Ref.:			GW	GW	GW	GW				
	Sample Location:			P221	DCBH2019_3	BP23	BP12	GW2	C1S	C1D	P15
	Sample Type:			WATER							
	Top Depth (m):			8	6.5	10	19	1.60	5.0	18.0	
	Date Sampled:			16-Jun-2022							
Determinand	Accred.	SOP	Units	LOD							
PCB 77	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 105	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 114	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 123	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 126	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 156	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 157	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 167	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 169	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 189	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (12 Congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

<b>Sample:</b>	<b>Sample Ref:</b>	<b>Sample ID:</b>	<b>Sample Location:</b>	<b>Sampled Date:</b>	<b>Deviation Code(s):</b>	<b>Containers Received:</b>
1451253	SW		G5	16-Jun-2022	B	Coloured Winchester 1000ml
1451253	SW		G5	16-Jun-2022	B	EPA Vial 40ml
1451253	SW		G5	16-Jun-2022	B	Plastic Bottle 1000ml
1451254	GW		AF6	16-Jun-2022	B	Coloured Winchester 1000ml
1451254	GW		AF6	16-Jun-2022	B	EPA Vial 40ml
1451254	GW		AF6	16-Jun-2022	B	Plastic Bottle 1000ml
1451255	GW		DCBH2009_6	16-Jun-2022	B	Coloured Winchester 1000ml
1451255	GW		DCBH2009_6	16-Jun-2022	B	EPA Vial 40ml
1451255	GW		DCBH2009_6	16-Jun-2022	B	Plastic Bottle 1000ml
1451256	GW		DCBH2009_100_6	16-Jun-2022	B	Coloured Winchester 1000ml
1451256	GW		DCBH2009_100_6	16-Jun-2022	B	EPA Vial 40ml
1451256	GW		DCBH2009_100_6	16-Jun-2022	B	Plastic Bottle 1000ml
1451257	GW		P4	16-Jun-2022	B	Coloured Winchester 1000ml
1451257	GW		P4	16-Jun-2022	B	EPA Vial 40ml
1451257	GW		P4	16-Jun-2022	B	Plastic Bottle 1000ml
1451258	GW		PZ20	16-Jun-2022	B	Coloured Winchester 1000ml
1451258	GW		PZ20	16-Jun-2022	B	EPA Vial 40ml
1451258	GW		PZ20	16-Jun-2022	B	Plastic Bottle 1000ml
1451259	GW		GW3	16-Jun-2022	B	Coloured Winchester 1000ml
1451259	GW		GW3	16-Jun-2022	B	EPA Vial 40ml
1451259	GW		GW3	16-Jun-2022	B	Plastic Bottle 1000ml

## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

<b>Sample:</b>	<b>Sample Ref:</b>	<b>Sample ID:</b>	<b>Sample Location:</b>	<b>Sampled Date:</b>	<b>Deviation Code(s):</b>	<b>Containers Received:</b>
1451260	GW		P219	16-Jun-2022	B	Coloured Winchester 1000ml
1451260	GW		P219	16-Jun-2022	B	EPA Vial 40ml
1451260	GW		P219	16-Jun-2022	B	Plastic Bottle 1000ml
1451261	GW		P21019	16-Jun-2022	B	Coloured Winchester 1000ml
1451261	GW		P21019	16-Jun-2022	B	EPA Vial 40ml
1451261	GW		P21019	16-Jun-2022	B	Plastic Bottle 1000ml
1451262	GW		P221	16-Jun-2022	B	Coloured Winchester 1000ml
1451262	GW		P221	16-Jun-2022	B	EPA Vial 40ml
1451262	GW		P221	16-Jun-2022	B	Plastic Bottle 1000ml
1451263	GW		DCBH2019_3	16-Jun-2022	B	Coloured Winchester 1000ml
1451263	GW		DCBH2019_3	16-Jun-2022	B	EPA Vial 40ml
1451263	GW		DCBH2019_3	16-Jun-2022	B	Plastic Bottle 1000ml
1451264	GW		BP23	16-Jun-2022	B	Coloured Winchester 1000ml
1451264	GW		BP23	16-Jun-2022	B	EPA Vial 40ml
1451264	GW		BP23	16-Jun-2022	B	Plastic Bottle 1000ml
1451265	GW		BP12	16-Jun-2022	B	Coloured Winchester 1000ml
1451265	GW		BP12	16-Jun-2022	B	EPA Vial 40ml
1451265	GW		BP12	16-Jun-2022	B	Plastic Bottle 1000ml
1451266			GW2	16-Jun-2022	B	Coloured Winchester 1000ml
1451266			GW2	16-Jun-2022	B	EPA Vial 40ml
1451266			GW2	16-Jun-2022	B	Plastic Bottle 1000ml

## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

<b>Sample:</b>	<b>Sample Ref:</b>	<b>Sample ID:</b>	<b>Sample Location:</b>	<b>Sampled Date:</b>	<b>Deviation Code(s):</b>	<b>Containers Received:</b>
1451267			C1S	16-Jun-2022	B	Coloured Winchester 1000ml
1451267			C1S	16-Jun-2022	B	EPA Vial 40ml
1451267			C1S	16-Jun-2022	B	Plastic Bottle 1000ml
1451268			C1D	16-Jun-2022	B	Coloured Winchester 1000ml
1451268			C1D	16-Jun-2022	B	EPA Vial 40ml
1451268			C1D	16-Jun-2022	B	Plastic Bottle 1000ml
1451269			P15	16-Jun-2022	B	Coloured Winchester 1000ml
1451269			P15	16-Jun-2022	B	EPA Vial 40ml

## Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
1495	Low Level Hexavalent Chromium in Waters	Chromium [VI]	Colorimetric determination of hexavalent chromium expressed as Cr (VI) µg/l in water, using Ion Chromatography and UV-visible spectrophotometry.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Waters by GC-MS	ICES7 PCB congeners	Solvent extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

## Report Information

### **Key**

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U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

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- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

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All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)



## Final Report

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**Report No.:** 22-23813-1  
**Initial Date of Issue:** 01-Jul-2022  
**Client** Atkins Ltd  
**Client Address:** The Axis  
10 Holliday Street  
Birmingham  
West Midlands  
B1 1TF  
**Contact(s):** Alice Smith  
Natasha Glynn  
**Project** 5185703 Sizewell C  
**Quotation No.:** Q21-25865      **Date Received:** 24-Jun-2022  
**Order No.:** IFS10554      **Date Instructed:** 24-Jun-2022  
**No. of Samples:** 10  
**Turnaround (Wkdays):** 5      **Results Due:** 30-Jun-2022  
**Date Approved:** 01-Jul-2022  
**Approved By:**  
  
**Details:** Stuart Henderson, Technical Manager

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## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813
Quotation No.: Q21-25865	Chemtest Sample ID.:			1455391	1455392	1455393	1455394	1455395	1455396	1455397	1455398	1455399
	Sample Location:			PIE2-3B	PIE2-3A	PIE2-1B	PIE2-1A	C3S	C3D	PIE2-2A	K2S	P9
	Sample Type:			WATER								
	Date Sampled:			23-Jun-2022								
Determinand	Accred.	SOP	Units	LOD								
pH	U	1010		N/A	8.1	8.3	8.4	8.4	8.1	8.6	8.4	8.4
Electrical Conductivity	U	1020	µS/cm	1.0	1400	1500	1500	1600	1400	1500	1700	1600
Suspended Solids At 105C	U	1030	mg/l	5.0	850	17	12	62	35	73	11	190
Alkalinity (Total)	U	1220	mg/l	10	410	450	470	510	55	96	410	71
Chloride	U	1220	mg/l	1.0	53	53	680	350	140	71	620	120
Ammonium	U	1220	mg/l	0.050	0.34	0.42	1.1	0.56	0.41	0.23	0.24	0.44
Ammoniacal Nitrogen	U	1220	mg/l	0.050	0.29	0.36	0.93	0.50	0.34	0.22	0.21	0.39
Nitrite	U	1220	mg/l	0.020	0.068	0.069	0.063	0.063	0.097	0.065	0.32	0.061
Nitrate	U	1220	mg/l	0.50	< 0.50	< 0.50	< 0.50	0.92	3.1	< 0.50	8.9	81
Phosphate	U	1220	mg/l	0.200	< 0.20	< 0.20	2.3	0.90	< 0.20	0.32	< 0.20	< 0.20
Phosphorus (Dissolved)	U	1220	mg/l	0.020	0.052	< 0.020	0.75	0.29	< 0.020	0.10	< 0.020	< 0.020
Sulphate	U	1220	mg/l	1.0	24	65	37	25	32	43	160	85
Total Oxidised Nitrogen	U	1220	mg/l	0.20	< 0.20	< 0.20	< 0.20	0.23	0.72	< 0.20	2.1	18
Cyanide (Free) Low-Level	N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium	U	1455	mg/l	2.00	130	130	88	65	5.3	39	170	38
Potassium	U	1455	mg/l	0.50	3.2	3.7	12	7.3	3.5	2.2	16	2.9
Magnesium	U	1455	mg/l	0.20	7.6	9.1	2.8	3.2	9.1	2.2	13	4.5
Sodium	U	1455	mg/l	1.50	34	30	380	240	60	26	270	65
Arsenic (Dissolved)	U	1455	µg/l	0.20	2.5	0.75	3.4	7.8	0.88	2.7	1.7	0.99
Boron (Dissolved)	U	1455	µg/l	10.0	47	37	40	130	29	< 10	55	31
Cadmium (Dissolved)	U	1455	µg/l	0.11	0.49	0.44	0.58	0.62	0.65	0.84	0.57	0.60
Chromium (Dissolved)	U	1455	µg/l	0.50	< 0.50	2.0	6.9	8.1	5.8	< 0.50	1.3	< 0.50
Copper (Dissolved)	U	1455	µg/l	0.50	< 0.50	1.4	1.0	3.6	1.2	< 0.50	6.4	< 0.50
Iron (Dissolved)	N	1455	µg/l	5.0	100	6.2	580	340	< 5.0	< 5.0	< 5.0	25
Manganese (Dissolved)	U	1455	µg/l	0.50	1100	820	120	74	870	210	260	16
Nickel (Dissolved)	U	1455	µg/l	0.50	0.95	< 0.50	3.6	3.0	2.0	< 0.50	8.6	< 0.50
Lead (Dissolved)	U	1455	µg/l	0.50	< 0.50	< 0.50	0.65	1.4	< 0.50	1.2	0.50	< 0.50
Zinc (Dissolved)	U	1455	µg/l	2.5	5.3	5.0	6.6	4.9	9.3	3.8	6.4	9.4
Mercury Low Level	U	1460	µg/l	0.010	0.091	0.39	0.91	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Chromium (Trivalent) LL	U	1450	µg/l	1	< 1	2	7	8	6	< 1	1	< 1
Total Organic Carbon	U	1610	mg/l	2.0	18	5.4	47	36	2.9	< 2.0	15	2.4
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:				22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813
Quotation No.: Q21-25865	Chemtest Sample ID.:				1455391	1455392	1455393	1455394	1455395	1455396	1455397	1455398	1455399
	Sample Location:				PIE2-3B	PIE2-3A	PIE2-1B	PIE2-1A	C3S	C3D	PIE2-2A	K2S	P9
	Sample Type:				WATER								
	Date Sampled:				23-Jun-2022								
Determinand	Accred.	SOP	Units	LOD									
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Vinyl Chloride	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromomethane	N	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Trichlorofluoromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trans 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
cis 1,2-Dichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromochloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1,1-Trichloroethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tetrachloromethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1-Dichloropropene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Trichloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichloropropane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibromomethane	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromodichloromethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trans-1,3-Dichloropropene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	N	1760	µg/l	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tetrachloroethene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3-Dichloropropane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Dibromochloromethane	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	N	1760	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,1,1,2-Tetrachloroethane	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:			22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813
Quotation No.: Q21-25865	Chemtest Sample ID.:			1455391	1455392	1455393	1455394	1455395	1455396	1455397	1455398	1455399
	Sample Location:			PIE2-3B	PIE2-3A	PIE2-1B	PIE2-1A	C3S	C3D	PIE2-2A	K2S	P9
	Sample Type:			WATER								
	Date Sampled:			23-Jun-2022								
Determinand	Accred.	SOP	Units	LOD								
Ethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
m & p-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
o-Xylene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Styrene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tribromomethane	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Bromobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,3-Trichloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
N-Propylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3,5-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
4-Chlorotoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Tert-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,4-Trimethylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sec-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,3-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
4-Isopropyltoluene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,4-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
N-Butylbenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2-Dibromo-3-Chloropropane	N	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Hexachlorobutadiene	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1,2,3-Trichlorobenzene	N	1760	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Methyl Tert-Butyl Ether	N	1760	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
N-Nitrosodimethylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:				22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813
Quotation No.: Q21-25865	Chemtest Sample ID.:				1455391	1455392	1455393	1455394	1455395	1455396	1455397	1455398	1455399
	Sample Location:				PIE2-3B	PIE2-3A	PIE2-1B	PIE2-1A	C3S	C3D	PIE2-2A	K2S	P9
	Sample Type:				WATER								
	Date Sampled:				23-Jun-2022								
Determinand	Accred.	SOP	Units	LOD									
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:				22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813
Quotation No.: Q21-25865	Chemtest Sample ID.:				1455391	1455392	1455393	1455394	1455395	1455396	1455397	1455398	1455399
	Sample Location:				PIE2-3B	PIE2-3A	PIE2-1B	PIE2-1A	C3S	C3D	PIE2-2A	K2S	P9
	Sample Type:				WATER								
	Date Sampled:				23-Jun-2022								
Determinand	Accred.	SOP	Units	LOD									
Benzo[k]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthylene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluorene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1800	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
PCB 28	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 81	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 77	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 105	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 114	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 123	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 126	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 156	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 157	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 167	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 169	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

## Results - Water

Project: 5185703 Sizewell C

Client: Atkins Ltd	Chemtest Job No.:				22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813	22-23813
Quotation No.: Q21-25865	Chemtest Sample ID.:				1455391	1455392	1455393	1455394	1455395	1455396	1455397	1455398	1455399
	Sample Location:				PIE2-3B	PIE2-3A	PIE2-1B	PIE2-1A	C3S	C3D	PIE2-2A	K2S	P9
	Sample Type:				WATER								
	Date Sampled:				23-Jun-2022								
Determinand	Accred.	SOP	Units	LOD									
PCB 189	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (12 Congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

## Results - Water

Project: 5185703 Sizewell C

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b> 22-23813			
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b> 1455400			
	Sample Location: P10			
	Sample Type: WATER			
	Date Sampled: 23-Jun-2022			
Determinand	Accred.	SOP	Units	LOD
pH	U	1010		N/A
Electrical Conductivity	U	1020	µS/cm	1.0
Suspended Solids At 105C	U	1030	mg/l	5.0
Alkalinity (Total)	U	1220	mg/l	10
Chloride	U	1220	mg/l	1.0
Ammonium	U	1220	mg/l	0.050
Ammoniacal Nitrogen	U	1220	mg/l	0.050
Nitrite	U	1220	mg/l	0.020
Nitrate	U	1220	mg/l	0.50
Phosphate	U	1220	mg/l	< 0.20
Phosphorus (Dissolved)	U	1220	mg/l	0.020
Sulphate	U	1220	mg/l	1.0
Total Oxidised Nitrogen	U	1220	mg/l	0.20
Cyanide (Free) Low-Level	N	1300	mg/l	< 0.0050
Calcium	U	1455	mg/l	2.00
Potassium	U	1455	mg/l	0.50
Magnesium	U	1455	mg/l	0.20
Sodium	U	1455	mg/l	1.50
Arsenic (Dissolved)	U	1455	µg/l	0.20
Boron (Dissolved)	U	1455	µg/l	10.0
Cadmium (Dissolved)	U	1455	µg/l	0.11
Chromium (Dissolved)	U	1455	µg/l	0.50
Copper (Dissolved)	U	1455	µg/l	< 0.50
Iron (Dissolved)	N	1455	µg/l	5.0
Manganese (Dissolved)	U	1455	µg/l	0.50
Nickel (Dissolved)	U	1455	µg/l	0.50
Lead (Dissolved)	U	1455	µg/l	0.50
Zinc (Dissolved)	U	1455	µg/l	2.5
Mercury Low Level	U	1460	µg/l	< 0.010
Chromium (Hexavalent)	U	1490	µg/l	20
Chromium (Trivalent) LL	U	1450	µg/l	1
Total Organic Carbon	U	1610	mg/l	< 2.0
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	< 5.0

## Results - Water

**Project: 5185703 Sizewell C**

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b> 22-23813			
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b> 1455400			
	Sample Location: P10			
	Sample Type: WATER			
	Date Sampled: 23-Jun-2022			
Determinand	Accred.	SOP	Units	LOD
Aromatic TPH >C5-C7	N	1675	µg/l	0.10
Aromatic TPH >C7-C8	N	1675	µg/l	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	< 10
Dichlorodifluoromethane	N	1760	µg/l	0.10
Chloromethane	N	1760	µg/l	< 0.10
Vinyl Chloride	N	1760	µg/l	< 0.10
Bromomethane	N	1760	µg/l	2.0
Chloroethane	N	1760	µg/l	< 0.20
Trichlorofluoromethane	N	1760	µg/l	< 0.10
1,1-Dichloroethene	N	1760	µg/l	< 0.10
Trans 1,2-Dichloroethene	N	1760	µg/l	< 0.10
1,1-Dichloroethane	N	1760	µg/l	< 0.10
cis 1,2-Dichloroethene	N	1760	µg/l	< 0.10
Bromochloromethane	N	1760	µg/l	0.50
Trichloromethane	N	1760	µg/l	< 0.10
1,1,1-Trichloroethane	N	1760	µg/l	< 0.10
Tetrachloromethane	N	1760	µg/l	< 0.10
1,1-Dichloropropene	N	1760	µg/l	< 0.10
Benzene	N	1760	µg/l	< 0.10
1,2-Dichloroethane	N	1760	µg/l	< 0.20
Trichloroethene	N	1760	µg/l	< 0.10
1,2-Dichloropropane	N	1760	µg/l	< 0.10
Dibromomethane	N	1760	µg/l	< 0.10
Bromodichloromethane	N	1760	µg/l	0.50
cis-1,3-Dichloropropene	N	1760	µg/l	< 1.0
Toluene	N	1760	µg/l	< 0.10
Trans-1,3-Dichloropropene	N	1760	µg/l	< 1.0
1,1,2-Trichloroethane	N	1760	µg/l	< 0.1
Tetrachloroethene	N	1760	µg/l	< 0.10
1,3-Dichloropropane	N	1760	µg/l	< 0.20
Dibromochloromethane	N	1760	µg/l	< 1.0
1,2-Dibromoethane	N	1760	µg/l	< 0.50
Chlorobenzene	N	1760	µg/l	< 0.10
1,1,1,2-Tetrachloroethane	N	1760	µg/l	< 0.20

## Results - Water

Project: 5185703 Sizewell C

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b> 22-23813			
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b> 1455400			
	Sample Location: P10			
	Sample Type: WATER			
	Date Sampled: 23-Jun-2022			
Determinand	Accred.	SOP	Units	LOD
Ethylbenzene	N	1760	µg/l	0.10 < 0.10
m & p-Xylene	N	1760	µg/l	0.10 < 0.10
o-Xylene	N	1760	µg/l	0.10 < 0.10
Styrene	N	1760	µg/l	0.10 < 0.10
Tribromomethane	N	1760	µg/l	1.0 < 1.0
Isopropylbenzene	N	1760	µg/l	0.10 < 0.10
Bromobenzene	N	1760	µg/l	0.10 < 0.10
1,2,3-Trichloropropane	N	1760	µg/l	5 < 5
N-Propylbenzene	N	1760	µg/l	0.10 < 0.10
2-Chlorotoluene	N	1760	µg/l	0.10 < 0.10
1,3,5-Trimethylbenzene	N	1760	µg/l	0.10 < 0.10
4-Chlorotoluene	N	1760	µg/l	0.10 < 0.10
Tert-Butylbenzene	N	1760	µg/l	0.10 < 0.10
1,2,4-Trimethylbenzene	N	1760	µg/l	0.10 < 0.10
Sec-Butylbenzene	N	1760	µg/l	0.10 < 0.10
1,3-Dichlorobenzene	N	1760	µg/l	0.10 < 0.10
4-Isopropyltoluene	N	1760	µg/l	0.10 < 0.10
1,4-Dichlorobenzene	N	1760	µg/l	0.10 < 0.10
N-Butylbenzene	N	1760	µg/l	0.10 < 0.10
1,2-Dichlorobenzene	N	1760	µg/l	0.10 < 0.10
1,2-Dibromo-3-Chloropropane	N	1760	µg/l	5 < 5
1,2,4-Trichlorobenzene	N	1760	µg/l	0.10 < 0.10
Hexachlorobutadiene	N	1760	µg/l	0.10 < 0.10
1,2,3-Trichlorobenzene	N	1760	µg/l	0.20 < 0.20
Methyl Tert-Butyl Ether	N	1760	µg/l	0.10 < 0.10
N-Nitrosodimethylamine	N	1790	µg/l	0.50 < 0.50
Phenol	N	1790	µg/l	0.50 < 0.50
2-Chlorophenol	N	1790	µg/l	0.50 < 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50 < 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50 < 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50 < 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50 < 0.50
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50 < 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50 < 0.50
Hexachloroethane	N	1790	µg/l	0.50 < 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50 < 0.50
4-Methylphenol	N	1790	µg/l	0.50 < 0.50
Nitrobenzene	N	1790	µg/l	0.50 < 0.50
Isophorone	N	1790	µg/l	0.50 < 0.50
2-Nitrophenol	N	1790	µg/l	0.50 < 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50 < 0.50

## Results - Water

Project: 5185703 Sizewell C

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b> 22-23813			
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b> 1455400			
	Sample Location: P10			
	Sample Type: WATER			
	Date Sampled: 23-Jun-2022			
Determinand	Accred.	SOP	Units	LOD
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50 < 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50 < 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50 < 0.50
Naphthalene	N	1790	µg/l	0.50 < 0.50
4-Chloroaniline	N	1790	µg/l	0.50 < 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50 < 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50 < 0.50
2-Methylnaphthalene	N	1790	µg/l	0.50 < 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50 < 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50 < 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50 < 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50 < 0.50
2-Nitroaniline	N	1790	µg/l	0.50 < 0.50
Acenaphthylene	N	1790	µg/l	0.50 < 0.50
Dimethylphthalate	N	1790	µg/l	0.50 < 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50 < 0.50
Acenaphthene	N	1790	µg/l	0.50 < 0.50
3-Nitroaniline	N	1790	µg/l	0.50 < 0.50
Dibenzofuran	N	1790	µg/l	0.50 < 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50 < 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50 < 0.50
Fluorene	N	1790	µg/l	0.50 < 0.50
Diethyl Phthalate	N	1790	µg/l	0.50 < 0.50
4-Nitroaniline	N	1790	µg/l	0.50 < 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50 < 0.50
Azobenzene	N	1790	µg/l	0.50 < 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50 < 0.50
Hexachlorobenzene	N	1790	µg/l	0.50 < 0.50
Pentachlorophenol	N	1790	µg/l	0.50 < 0.50
Phenanthrene	N	1790	µg/l	0.50 < 0.50
Anthracene	N	1790	µg/l	0.50 < 0.50
Carbazole	N	1790	µg/l	0.50 < 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50 < 0.50
Fluoranthene	N	1790	µg/l	0.50 < 0.50
Pyrene	N	1790	µg/l	0.50 < 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50 < 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50 < 0.50
Chrysene	N	1790	µg/l	0.50 < 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50 < 0.50
Di-N-Octyl Phthalate	N	1790	µg/l	0.50 < 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50 < 0.50

## Results - Water

**Project: 5185703 Sizewell C**

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b> 22-23813			
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b> 1455400			
	Sample Location: P10			
	Sample Type: WATER			
	Date Sampled: 23-Jun-2022			
Determinand	Accred.	SOP	Units	LOD
Benzo[k]fluoranthene	N	1790	µg/l	0.50 < 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50 < 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50 < 0.50
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50 < 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50 < 0.50
4-Nitrophenol	N	1790	µg/l	0.50 < 0.50
Naphthalene	N	1800	µg/l	0.010 < 0.010
Acenaphthylene	N	1800	µg/l	0.010 < 0.010
Acenaphthene	N	1800	µg/l	0.010 < 0.010
Fluorene	N	1800	µg/l	0.010 < 0.010
Phenanthrene	N	1800	µg/l	0.010 < 0.010
Anthracene	N	1800	µg/l	0.010 < 0.010
Fluoranthene	N	1800	µg/l	0.010 < 0.010
Pyrene	N	1800	µg/l	0.010 < 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010 < 0.010
Chrysene	N	1800	µg/l	0.010 < 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010 < 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010 < 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010 < 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010 < 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010 < 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010 < 0.010
Total Of 16 PAH's	N	1800	µg/l	0.20 < 0.20
PCB 28	N	1815	µg/l	0.010 < 0.010
PCB 81	N	1815	µg/l	0.010 < 0.010
PCB 52	N	1815	µg/l	0.010 < 0.010
PCB 77	N	1815	µg/l	0.010 < 0.010
PCB 105	N	1815	µg/l	0.010 < 0.010
PCB 90+101	N	1815	µg/l	0.010 < 0.010
PCB 114	N	1815	µg/l	0.010 < 0.010
PCB 118	N	1815	µg/l	0.010 < 0.010
PCB 118	N	1815	µg/l	0.010 < 0.010
PCB 153	N	1815	µg/l	0.010 < 0.010
PCB 123	N	1815	µg/l	0.010 < 0.010
PCB 138	N	1815	µg/l	0.010 < 0.010
PCB 126	N	1815	µg/l	0.010 < 0.010
PCB 180	N	1815	µg/l	0.010 < 0.010
PCB 156	N	1815	µg/l	0.010 < 0.010
PCB 157	N	1815	µg/l	0.010 < 0.010
PCB 167	N	1815	µg/l	0.010 < 0.010
PCB 169	N	1815	µg/l	0.010 < 0.010

## Results - Water

Project: 5185703 Sizewell C

<b>Client:</b> Atkins Ltd	<b>Chemtest Job No.:</b>			22-23813
Quotation No.: Q21-25865	<b>Chemtest Sample ID.:</b>			1455400
	Sample Location:			P10
	Sample Type:			WATER
	Date Sampled:			23-Jun-2022
Determinand	Accred.	SOP	Units	LOD
PCB 189	N	1815	µg/l	0.010
Total PCBs (12 Congeners)	N	1815	µg/l	0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010
Total Phenols	U	1920	mg/l	0.030
				< 0.010

## Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
1495	Low Level Hexavalent Chromium in Waters	Chromium [VI]	Colorimetric determination of hexavalent chromium expressed as Cr (VI) µg/l in water, using Ion Chromatography and UV-visible spectrophotometry.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Waters by GC-MS	ICES7 PCB congeners	Solvent extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

## Report Information

### **Key**

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U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

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- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

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All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)

## Appendix C. Upstream surface water quality data

UNCONTROLLED WHEN PRINTED

Surface Water Quality Data G5

Client Sample ID.:	Sample Type:	Date Sampled:	pH	Electrical Conductivity	Biochemical Oxygen Demand Low Level	Chemical Oxygen Demand Low Level	Suspended Solids At 105C	Alkalinity (Total)	Chloride	Ammoniacal Nitrogen	Ammonium	Nitrite	Nitrate	Phosphate	Phosphorus (Total)	Sulphate	Total Oxidised Nitrogen	Low-Level Chromium (Hexavalent)
			-	µS/cm	mg O2/l	mg O2/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l
G5	WATER	11/11/2014	8	920	< 1.0		13	110	250	84		0.6		53			78	
G5	WATER	09/06/2015	8.2	1100	< 1.0		12	34	330	130	0.27	0.35	0.8	72	0.54	0.18	110	16
G5	WATER	17/07/2018	7.7	1200			< 5.0		350	150	0.16	0.2	0.58	51	0.31		110	12
G5A	WATER	17/07/2018	7.7	1200			< 5.0		350	150	0.15	0.19	0.58	50	0.31		110	12
G5	WATER	11/06/2019	8.1	950				10	360	120	0.36	0.46	0.33	52	0.59	0.2	98	12 < 0.10
G5	WATER	12/11/2020	8.4	1200				23	310	150	0.42	0.48	0.32	54	1.6		99	12 < 0.10
G5	WATER	19/05/2021	8	940				130	540	73	0.65	0.79	0.86	31	0.49		81	7.2 2.2
G5	WATER	18/11/2021	7.5	1100				18	400	83	0.22	0.28	0.31	38	< 0.20		90	8.6 1.1
G5	WATER	16/06/2022	9.2	770				30	730	180	0.51	0.36	1.1	66	1.2		130	15
Summary	<b>Max</b>		9.2	1200	0	13	130	730	180	0.65	0.79	1.1	72	1.6	0.2	130	16	2.2
Summary	<b>Min</b>		7.5	770	0	12	10	250	73	0.15	0.19	0.31	31	0.31	0.18	78	7.2	1.1
Summary	<b>Average</b>		8.09	1042	#DIV/0!	12.5	51	402	124	0.34	0.41	0.61	51.9	0.72	0.19	100.7	11.85	1.65
Summary	<b>Count of detection</b>		9	9	0	2	7	9	9	8	9	8	9	7	2	9	8	2
Summary	<b>Count of tests</b>		9	9	2	2	9	9	9	9	9	9	9	9	3	9	9	4
Summary	<b>Max (values below LOD treated as LOD)</b>		9.2	1300	16	88	1400	730	240	67	82	1.1	72	1.6	0.26	130	16	5.3
Summary	<b>Average (values below LOD treated as LOD)</b>		8.038	920.2	3.01	19.72	78.4	353.4	108.14	2.9598182	3.29386	0.3276591	26.1856	0.4615227	0.1312778	89.18	5.8768182	1.13125

## Surface Water Quality Data G5

Client Sample ID.:	Sample Type:	Date Sampled:	Chromium (Trivalent)	Chromium (Hexavalent)	Cyanide (Free) Low-Level	Calcium	Potassium	Magnesium	Sodium	Arsenic (Dissolved)	Boron (Dissolved)	Cadmium (Dissolved)	Chromium (Dissolved)	Copper (Dissolved)	Manganese (Dissolved)	Nickel (Dissolved)	Lead (Dissolved)	Zinc (Dissolved)
			µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
G5	WATER	11/11/2014			< 0.005	140	7.8	7.9	43	< 1.0	20	< 0.080	< 1.0	2.2		1.6	< 1.0	17
G5	WATER	09/06/2015			< 0.005	160	12	11	79	1.3	230	0.087	3.1	3.1		5.1	< 1.0	18
G5	WATER	17/07/2018	< 20	< 20	< 0.0050	130	10	9.2	68	2	41	< 0.080	2.1	< 1.0	< 1.0	1.2	< 1.0	3.8
G5A	WATER	17/07/2018	< 20	< 20	< 0.0050	150	10	10	70	1.8	38	< 0.080	2	< 1.0	< 1.0	1.1	< 1.0	3.8
G5	WATER	11/06/2019	1		< 0.0050	150	12	12	68	1.8	54	< 0.080	1.4	< 1.0	640	1.7	< 1.0	17
G5	WATER	12/11/2020	2		< 0.0050	170	16	11	98	1.3	29	< 0.080	2.5	1.4	110	< 1.0	< 1.0	5.8
G5	WATER	19/05/2021	11		< 0.0050	130	7.1	9	48	0.69	32	< 0.11	13	1.9	11	7	< 0.50	19
G5	WATER	18/11/2021			< 0.0050	150	8.1	10	54	0.82	490	< 0.11	< 0.50	0.99	230	1	< 0.50	5.3
G5	WATER	16/06/2022	[B] < 20		< 0.0050	150	17	13	97	1.9	66	< 0.11	0.75	3	11	0.83	< 0.50	13
Summary	<b>Max</b>		11	0	0	170	17	13	98	2	490	0.087	13	3.1	640	7	0	19
Summary	<b>Min</b>		1	0	0	130	7.1	7.9	43	0.69	20	0.087	0.75	0.99	11	0.83	0	3.8
Summary	<b>Average</b>		4.67	#DIV/0!	#DIV/0!	147.8	11.11	10.3	69.4	1.45125	111	0.087	3.55	2.10	200	2.44	#DIV/0!	11.411111
Summary	<b>Count of detection</b>		3	0	0	9	9	9	9	8	9	1	7	6	5	8	0	9
Summary	<b>Count of tests</b>		5	3	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Summary	<b>Max (values below LOD treated as LOD)</b>		45	20	0.006	200	17	14	98	5.4	820	0.56	68	4.2	2900	21	1	26
Summary	<b>Average (values below LOD treated as LOD)</b>		15.3	20	0.00502	143.1	8.922	11.206	54.14	1.6864	158.12	0.1059	7.783	1.625	185.96	2.596	0.859	8.818

## Surface Water Quality Data G5

Client Sample ID.:	Sample Type:	Date Sampled:	Mercury Low Level	Iron (Dissolved)	Phosphorus (Dissolved)	Arsenic (Total)	Boron (Total)	Cadmium (Total)	Chromium (Total)	Copper (Total)	Iron (Total)	Manganese (Total)	Nickel (Total)	Lead (Total)	Zinc (Total)	Dissolved Organic Carbon	Total Organic Carbon	Dissolved Organic Carbon Low Level
			µg/l	µg/l	mg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l
G5	WATER	11/11/2014	< 0.010	30														
G5	WATER	09/06/2015	< 0.010	430														9.6
G5	WATER	17/07/2018	< 0.010	400	0.1	1.9	42	< 0.080	2.2	< 1.0	420	< 1.0	1.2	< 1.0	3.7	10	10	
G5A	WATER	17/07/2018	< 0.010	380	0.1	1.8	38	< 0.080	2	< 1.0	390	< 1.0	1.2	< 1.0	4.1	11	12	
G5	WATER	11/06/2019	< 0.010	310													11	10
G5	WATER	12/11/2020	< 0.010	440	0.52													11
G5	WATER	19/05/2021	< 0.010	140	0.16													5.9
G5	WATER	18/11/2021	< 0.010	27	0.055													4.7
G5	WATER	16/06/2022	< 0.010	16	0.39													7.7
Summary	<b>Max</b>		0	440	0.52	1.9	42	0	2.2	0	420	0	1.2	0	4.1	11	12	11
Summary	<b>Min</b>		0	16	0.055	1.8	38	0	2	0	390	0	1.2	0	3.7	10	7.7	4.7
Summary	<b>Average</b>		#DIV/0!	241	0.22	1.85	40	#DIV/0!	2.1	#DIV/0!	405	#DIV/0!	1.2	#DIV/0!	3.9	10.5	10.06	7.9
Summary	<b>Count of detection</b>		0	9	6	2	2	0	2	0	2	0	2	0	2	2	5	4
Summary	<b>Count of tests</b>		9	9	6	2	2	2	2	2	2	2	2	2	2	4	6	4
Summary	<b>Max (values below LOD treated as LOD)</b>		0.29	650	0.52	4.4	59	0.08	11	3.3	560	60	1.2	1	7.1	11	13	92
Summary	<b>Average (values below LOD treated as LOD)</b>		0.01922	210.914	0.1542308	2.2142857	39.857143	0.08	3.3571429	1.7	424.28571	19.8	1.0857143	1	3.5857143	8.5714286	7.383871	12.311111

Surface Water Quality Data G5

## Surface Water Quality Data G5

Client Sample ID.:	Sample Type:	Date Sampled:	Benzo[g,h,i]perylene	Total Of 16 PAH's	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	1,1-Dichloroethene	Trans 1,2-Dichloroethene	1,1-Dichloroethane	cis 1,2-Dichloroethene	Bromochloromethane	Trichloromethane	1,1,1-Trichloroethane	Tetrachloromethane
			µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
G5	WATER	11/11/2014	< 0.010	< 0.20	< 1.0	< 1.0	< 5	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	
G5	WATER	09/06/2015	< 0.010	< 0.20	< 1.0	< 1.0	< 5	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	
G5	WATER	17/07/2018	< 0.10	< 2.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	
G5A	WATER	17/07/2018	< 0.10	< 2.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	
G5	WATER	11/06/2019	< 0.010	< 0.20	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	
G5	WATER	12/11/2020	< 0.010	< 0.20	< 0.10	< 0.10	< 2.0	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.50	< 0.10	< 0.10	
G5	WATER	19/05/2021	< 0.010	< 0.20	< 0.10	< 0.10	< 0.10	< 2.0	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.50	< 0.10	< 0.10	
G5	WATER	18/11/2021	< 0.010	< 0.20	< 0.10	< 0.10	< 0.10	< 2.0	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.50	< 0.10	< 0.10	
G5	WATER	16/06/2022	< 0.50	< 0.20	< 0.10	< 0.10	< 0.10	< 2.0	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.50	< 0.10	< 0.10	
Summary	<b>Max</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Min</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Average</b>		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Summary	<b>Count of detection</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Count of tests</b>		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
Summary	<b>Max (values below LOD treated as LOD)</b>		0.5	2	1	1	1	5	2	1	1	1	1	5	1	1	1	
Summary	<b>Average (values below LOD treated as LOD)</b>		0.0716	0.452	0.658	0.658	0.658	3.86	1.316	0.658	0.658	0.658	0.658	0.658	3.29	0.658	0.658	

## Surface Water Quality Data G5

Client Sample ID.:	Sample Type:	Date Sampled:	1,1-Dichloropropene	Benzene	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	Dibromomethane	Bromodichloromethane	cis-1,3-Dichloropropene	Toluene	Trans-1,3-Dichloropropene	1,1,2-Trichloroethane	Tetrachloroethene	1,3-Dichloropropene	Dibromochloromethane	1,2-Dibromoethane	Chlorobenzene
			µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
G5	WATER	11/11/2014	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 10	< 5.0	< 10	< 1.0	< 10	< 1.0	< 2.0	< 10	< 5.0	< 1.0	
G5	WATER	09/06/2015	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 10	< 5.0	< 10	< 1.0	< 10	< 1.0	< 2.0	< 10	< 5.0	< 1.0	
G5	WATER	17/07/2018	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 10	< 5.0	< 10	< 1.0	< 10	< 1.0	< 2.0	< 10	< 5.0	< 1.0	
G5A	WATER	17/07/2018	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 10	< 5.0	< 10	< 1.0	< 10	< 1.0	< 2.0	< 10	< 5.0	< 1.0	
G5	WATER	11/06/2019	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 10	< 5.0	< 10	< 1.0	< 10	< 1.0	< 2.0	< 10	< 5.0	< 1.0	
G5	WATER	12/11/2020	< 0.10	< 0.10	< 0.20	< 0.10	< 0.10	< 0.10	< 0.50	< 1.0	< 0.10	< 1.0	< 0.1	< 0.10	< 0.20	< 1.0	< 0.50	< 0.10
G5	WATER	19/05/2021	< 0.10	< 0.10	< 0.20	< 0.10	< 0.10	< 0.10	< 0.50	< 1.0	< 0.10	< 1.0	< 0.1	< 0.10	< 0.20	< 1.0	< 0.50	< 0.10
G5	WATER	18/11/2021	< 0.10	< 0.10	< 0.20	0.77	< 0.10	< 0.10	< 0.50	< 1.0	< 0.10	< 1.0	< 0.1	< 0.10	< 0.20	< 1.0	< 0.50	< 0.10
G5	WATER	16/06/2022	< 0.10	< 0.10	< 0.20	< 0.10	< 0.10	< 0.10	< 0.50	< 1.0	< 0.10	< 1.0	< 0.1	< 0.10	< 0.20	< 1.0	< 0.50	< 0.10
Summary	<b>Max</b>		0	0	0	0.77	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Min</b>		0	0	0	0.77	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Average</b>		#DIV/0!	#DIV/0!	#DIV/0!	0.77	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Summary	<b>Count of detection</b>		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Count of tests</b>		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
Summary	<b>Max (values below LOD treated as LOD)</b>		1	1	2	1	1	10	5	10	1	10	10	1	2	10	5	
Summary	<b>Average (values below LOD treated as LOD)</b>		0.658	0.658	1.316	0.6812	0.658	6.238	3.29	6.58	0.658	6.58	6.238	0.658	1.316	6.58	3.29	0.658

## Surface Water Quality Data G5

Client Sample ID.:	Sample Type:	Date Sampled:	1,1,1,2-Tetrachloroethane	Ethylbenzene	m & p-Xylene	o-Xylene	Styrene	Tribromomethane	Isopropylbenzene	Bromobenzene	1,2,3-Trichloropropane	N-Propylbenzene	2-Chlorotoluene	1,3,5-Trimethylbenzene	4-Chlorotoluene	Tert-Butylbenzene	1,2,4-Trimethylbenzene	Sec-Butylbenzene
			µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
G5	WATER	11/11/2014	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
G5	WATER	09/06/2015	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
G5	WATER	17/07/2018	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
G5A	WATER	17/07/2018	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
G5	WATER	11/06/2019	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
G5	WATER	12/11/2020	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 5.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
G5	WATER	19/05/2021	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 5	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
G5	WATER	18/11/2021	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 5	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
G5	WATER	16/06/2022	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 5	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Summary	<b>Max</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Min</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Average</b>		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Summary	<b>Count of detection</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Summary	<b>Count of tests</b>		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
Summary	<b>Max (values below LOD treated as LOD)</b>		2	1	1	1	1	1	1	1	50	1	1	1	1	1	1	
Summary	<b>Average (values below LOD treated as LOD)</b>		1.316	0.658	0.658	0.658	0.658	1	0.658	0.658	32.9	0.658	0.658	0.658	0.658	0.658	0.658	

## Surface Water Quality Data G5

Client Sample ID.:	Sample Type:	Date Sampled:	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	N-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-Chloropropane	1,2,4-Trichlorobenzene	Hexachlorobutadiene	1,2,3-Trichlorobenzene	Methyl Tert-Butyl Ether	PCB 28	PCB 52	PCB 101	PCB 118	PCB 153	PCB 138
			µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
G5	WATER	11/11/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 2.0	< 1.0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5	WATER	09/06/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 2.0	< 1.0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5	WATER	17/07/2018	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 2.0	< 1.0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5A	WATER	17/07/2018	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 2.0	< 1.0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5	WATER	11/06/2019	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 1.0	< 2.0	< 1.0	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5	WATER	12/11/2020	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 5.0	< 0.10	< 0.20	< 0.10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5	WATER	19/05/2021	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 5	< 0.10	< 0.20	< 0.10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5	WATER	18/11/2021	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 5	< 0.10	< 0.20	< 0.10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
G5	WATER	16/06/2022	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 5	< 0.10	< 0.20	< 0.10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Summary	<b>Max</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Summary	<b>Min</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Summary	<b>Average</b>		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Summary	<b>Count of detection</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Summary	<b>Count of tests</b>		9	9	9	9	9	9	9	9	9	9	9	9	2	9	9	9
Summary	<b>Max (values below LOD treated as LOD)</b>		1	1	1	1	1	50	1	1	2	1	0.01	0.01	0.01	0.01	0.01	0.01
Summary	<b>Average (values below LOD treated as LOD)</b>		0.658	0.658	0.658	0.658	0.658	32.9	0.658	0.658	1.316	0.658	0.01	0.01	0.01	0.01	0.01	0.01

Surface Water Quality Data G5

## Appendix D. Groundwater Data

UNCONTROLLED WHEN PRINTED

## AD6 Groundwater Data









## Appendix E. H1 Surface water screening tests

UNCONTROLLED WHEN PRINTED

Surface Water H1 Risk Assessment Phase 1, Part A Screening Tests																		
Cells highlighted amber are not an operational EQS given in the Surface Water Pollution Risk Assessment gov.uk webpage.																		
	RFR: Watercourse Q95 flow m <sup>3</sup> /s	EFR: Effluent flow rate (maximum) m <sup>3</sup> /s	EFR: Effluent flow rate (mean) m <sup>3</sup> /s	Pre-SCREENING Is the substance present in the discharge?	SCREENING TEST 1 Does mean release concentration (RC) exceed 10% EQS?			SCREENING TEST 2 Does the process contribution (PC) exceed 4 percent of the EQS?			SCREENING TEST 3 Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed 10% of the EQS			SCREENING TEST 4 Does the PEC exceed the EQS in the receiving water downstream of the discharge				
	0.0168	0.00616	0.000231															
Constituents	Unit	Limit of Detection	Freshwater EQS (Annual Average)	Freshwater EQS - Maximum Allowable Concentration (MAC)	Number of Samples	Minimum Value in discharge	Maximum Value in discharge	discharge mean measured below LOD threshold at 0.00231	count of tests	count of detections	Is the substance measured above LOD in the discharge?	Is the LOD sufficiently low (LOD<10% of EQS)?	Test failed? (AA)	Test failed? (AA)	Test failed? (AA)	Test failed? (AA)	Test failed? (AA)	Test failed? (AA)
Phosphorus (Dissolved)	mg/l	0.02	0.008	N/A	15	0.02	0.75	0.184	15	12	Yes	No	0.0008	Yes	N/A	N/A	0.0025	Yes
Nitrite	mg/l	0.02	0.001	N/A	15	0.02	1.3	0.226	11	11	Yes	No	0.0010	Yes	N/A	N/A	0.0031	Yes
Dissolved Chromium (Trivalent)	mg/l	0.001	0.0047	0.032	11	0.001	0.0240	0.00764	11	8	Yes	No	0.0008	Yes	N/A	N/A	0.0024	Yes
Benzylphenylene	mg/l	0.00001	0.0000001	0.00027	12	0.0005	0.00050	0.0050	12	8	No	No	0.0000002	Yes	2.7E-05	Yes	6.8E-06	Yes
Cyanide (Free) Low Level	mg/l	0.00001	0.00001	0.001	15	0.005	0.0005	0.0005	15	8	No	No	0.0005	Yes	6.8E-06	Yes	0.0005	Yes
Alkalinity (Dissolved)	mg/l	0.00005	0.00005	0.0005	15	0.0005	0.00050	0.0005	15	8	No	No	0.000010	Yes	3.0E-05	Yes	0.000010	Yes
Benzylphenylene	mg/l	0.00001	0.000001	0.00027	15	0.0001	0.00010	0.00010	15	8	No	No	0.000000000	Yes	2.7E-05	No	1.4E-07	Yes
Fluoranthene	mg/l	0.00001	0.000003	0.00012	12	0.005	0.00050	0.0050	12	8	No	No	0.000001	Yes	1.2E-05	Yes	6.8E-06	Yes
Hexachlorobutadiene	mg/l	0.0005	0.0005	0.0005	12	0.005	0.00050	0.0050	12	8	No	No	0.000005	Yes	SE-06	Yes	6.8E-06	Yes
Dissolved Chromium (Hexavalent)	mg/l	0.02	0.034	0.01	10	0.02	0.20	0.028	10	8	No	No	0.000340	Yes	N/A	N/A	0.22034	Yes
Pentachlorophenol	mg/l	0.0005	0.004	0.001	12	0.005	0.0005	0.0005	12	8	No	No	0.000040	Yes	N/A	N/A	0.000481	Yes
Urea	mg/l	0.001	0.001	0.001	15	0.005	0.0005	0.0005	15	8	No	No	0.000010	Yes	6.8E-06	Yes	0.000010	Yes
Cadmium (Dissolved)	mg/l	0.00008	0.00025	0.015	15	0.0008	0.00025	0.00025	15	8	Yes	No	0.000000	Yes	0.00015	Yes	3.5E-06	Yes
Hexachlorobutadiene	mg/l	0.00001	No AA-EQS	0.00006	13	0.0001	0.0001	0.0001	13	9	No	No	0.000001	Yes	N/A	N/A	0.000003	Yes
Fluoranthene	mg/l	0.00001	0.000003	0.00012	15	0.00001	0.000001	0.000001	15	8	No	No	0.000001	Yes	1.2E-05	Yes	6.8E-06	Yes
Low Level Dissolved Chromium (Hexavalent)	mg/l	0.0001	0.0034	N/A	6	0.0001	0.0034	0.0087	5	3	Yes	Yes	0.00008	Yes	1.2E-05	Yes	0.000005	Yes
Ammonium	mg/l	0.05	0.06	N/A	15	0.075	2.9	0.782	15	15	Yes	Yes	0.0050	Yes	N/A	N/A	0.52000	Yes
Sulphate	mg/l	1	400	N/A	15	180	180	70.4	15	14	Yes	Yes	40.000	Yes	N/A	N/A	0.00162	Yes
Chloride	mg/l	1	400	N/A	15	17	17	17	15	14	Yes	Yes	1.00000	Yes	N/A	N/A	0.000000000	Yes
Iron (Dissolved)	mg/l	0.02	1	N/A	15	0.005	0.85	0.2114	15	9	Yes	Yes	10.000	Yes	N/A	N/A	0.00287	Yes
Manganese (Dissolved)	mg/l	0.001	0.123	N/A	15	0.005	1.1	0.186	15	14	Yes	Yes	0.123	Yes	N/A	N/A	0.000249	Yes
Ammonium Nitrogen	mg/l	0.01	0.1	N/A	15	0.008	0.045	0.045	15	15	Yes	Yes	0.0450	Yes	N/A	N/A	0.000055	Yes
Lead Mercury Low Level	mg/l	0.00001	0.00007	N/A	15	0.00001	0.00001	0.00001	15	12	No	No	0.00000102	Yes	N/A	N/A	0.000000000	Yes
Naphthalene	mg/l	0.0005	0.002	N/A	12	0.0005	0.0005	0.0005	12	8	No	No	0.00002	Yes	N/A	N/A	6.8E-06	Yes
Hexachlorobutadiene	mg/l	0.0005	0.0006	N/A	12	0.0005	0.0005	0.0005	12	8	No	No	0.000001	Yes	N/A	N/A	6.8E-06	Yes
Zn (Dissolved)	mg/l	0.001	0.012	0.014	15	0.0005	0.0015	0.0005	15	6	Yes	Yes	0.0012	No	0.00114	Yes	9.8E-06	Yes
Anthracene	mg/l	0.00001	0.0001	0.0001	15	0.00001	0.00001	0.00000	15	6	No	No	0.000001	Yes	N/A	N/A	0.00004	Yes
Copper (Dissolved)	mg/l	0.001	0.029	N/A	15	0.0005	0.0004	0.0020	15	10	Yes	Yes	0.0029	Yes	N/A	N/A	0.000000000	Yes
Fluoranthene	mg/l	0.002	2	N/A	15	0.018	0.67	0.131	15	13	Yes	Yes	0.2000	No	N/A	N/A	0.000000000	Yes
Boron (Dissolved)	mg/l	0.02	2	N/A	15	0.018	0.67	0.131	15	13	Yes	Yes	0.2000	No	N/A	N/A	0.000000000	Yes
Arsenic (Dissolved)	mg/l	0.001	0.05	N/A	15	0.00048	0.0078	0.0026	15	15	Yes	Yes	0.0050	Yes	N/A	N/A	0.000000000	Yes
m & p-Xylene	mg/l	0.001	0.03	N/A	13	0.0001	0.0001	0.0001	13	8	No	No	0.000001	Yes	N/A	N/A	0.000000000	Yes
2-Chlorophenol	mg/l	0.0005	0.0005	0.0005	12	0.0005	0.0005	0.0005	12	8	No	No	0.000005	Yes	N/A	N/A	0.000000000	Yes
1,4-Dichlorobutene	mg/l	0.0005	0.02	0.02	15	0.0005	0.0005	0.0005	15	12	No	No	0.000005	Yes	N/A	N/A	0.000000000	Yes
1,2-Dichlorobenzene	mg/l	0.0005	0.02	0.02	12	0.0005	0.0005	0.0005	12	8	No	No	0.000005	Yes	N/A	N/A	0.000000000	Yes
4-Chloro-3-Methylphenol	mg/l	0.0005	0.04	0.04	12	0.0005	0.0005	0.0005	12	8	No	No	0.000005	Yes	N/A	N/A	0.000000000	Yes
Phenol	mg/l	0.0005	0.0005	0.0005	12	0.0005	0.0005	0.0005	12	8	No	No	0.000005	Yes	N/A	N/A	0.000000000	Yes
Naphthalene	mg/l	0.00001	0.0001	0.0001	15	0.000001	0.000001	0.000000	15	8	No	No	0.000001	Yes	N/A	N/A	0.000000000	Yes
Trichloromethane	mg/l	0.00001	0.0025	N/A	13	0.00001	0.0001	0.0001	13	9	No	No	0.000001	Yes	N/A	N/A	0.000000000	Yes
1,1,1-Trichloroethane	mg/l	0.0001	0.1	N/A	13	0.0001	0.0001	0.0001	13	8	No	No	0.000001	Yes	N/A	N/A	6.8E-06	Yes
1,1,2-Trichloroethane	mg/l	0.0001	0.12	N/A	12	0.0001	0.0001	0.0001	12	8	No	No	0.000001	Yes	N/A	N/A	0.000000000	Yes
Tetrachloroethene	mg/l	0.0001	0.01	N/A	12	0.0001	0.0001	0.0001	12	8	No	No	0.000001	Yes	N/A	N/A	0.000000000	Yes
Bithybenzene	mg/l	0.00001	0.002	N/A	13	0.00001	0.00001	0.00001	13	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
Benzene	mg/l	0.001	0.01	0.005	13	0.00001	0.00001	0.00001	13	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,2-Dichlorobenzene	mg/l	0.0002	0.01	N/A	13	0.0002	0.0002	0.0002	13	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,2-Dichloroethene	mg/l	0.0001	0.001	N/A	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
Trichloroethene	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,2-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,3-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,4-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,5-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,6-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,7-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,8-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,9-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,10-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes	N/A	N/A	0.000000000	Yes
1,1,2,11-Tetrachloroethane	mg/l	0.0001	0.0001	0.0001	12	0.000001	0.000001	0.000001	12	8	No	No	0.000000000	Yes</				

Surface Water H1 Risk Assessment Phase 1, Part A Screening Tests														
Constituents	Unit	Limit of Detection		Freshwater EQS (Annual Average)	Freshwater EQS - Maximum allowable concentration (MAC)	Number of Samples	RFR: Watercourse Q95 flow m <sup>3</sup> /s	EFR: Effluent flow rate (maximum) m <sup>3</sup> /s	EFR: Effluent flow rate (mean) m <sup>3</sup> /s	Pre-SCREENING Is the substance present in the discharge?	SCREENING TEST 1 Does mean release concentration (RC) exceed 10% EQS?		SCREENING TEST 3 Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed 10% of the EQS	SCREENING TEST 4 Does the PEC exceed the EQS in the receiving water downstream of the discharge
		count of detections	count of tests							Is the substance measured above LOD at the discharge?	Is the LOD sufficiently low (LOD<10% of EQS)?			
Benzog[ <i>h</i> ]-perylene	mg/l	0.00001	No EQS	N/A	15	0.00001	0.00001	15	0	No	N/A No EQS			
Total Of 16 PAH's	mg/l	0.0002	No EQS	N/A	15	0.0002	0.0002	15	0	No	N/A No EQS			
Dichlorodifluoromethane	mg/l	0.0001	No EQS	N/A	12	0.0001	0.0001	12	0	No	N/A No EQS			
Chloromethane	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
Vinyl Chloride	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
Bromomethane	mg/l	0.002	No EQS	N/A	13	0.002	0.0020	13	0	No	N/A No EQS			
Chloroethane	mg/l	0.0002	No EQS	N/A	13	0.0002	0.0002	13	0	No	N/A No EQS			
Trichlorofluoromethane	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,1-Dichloroethene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
Trans 1,2-Dichloroethene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,1-Dichloroethane	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
cis 1,2-Dichloroethene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
Bromochloromethane	mg/l	0.0005	No EQS	N/A	13	0.0005	0.0005	13	0	No	N/A No EQS			
1,2-Dichloropropane	mg/l	0.0001	No EQS	N/A	12	0.0001	0.0001	12	0	No	N/A No EQS			
Dibromomethane	mg/l	0.0001	No EQS	N/A	12	0.0001	0.0001	12	0	No	N/A No EQS			
Bromodichloromethane	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
cis-1,3-Dichloropropene	mg/l	0.001	No EQS	N/A	12	0.001	0.0010	12	0	No	N/A No EQS			
Trans-1,3-Dichloropropene	mg/l	0.001	No EQS	N/A	12	0.001	0.0010	12	0	No	N/A No EQS			
1,3-Dichloropropane	mg/l	0.0002	No EQS	N/A	12	0.0002	0.0002	12	0	No	N/A No EQS			
Dibromochloromethane	mg/l	0.001	No EQS	N/A	12	0.001	0.0010	12	0	No	N/A No EQS			
1,2-Dibromoethane	mg/l	0.0005	No EQS	N/A	13	0.0005	0.0005	13	0	No	N/A No EQS			
Chlorobenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,1,1,2-Tetrachloroethane	mg/l	0.0002	No EQS	N/A	13	0.0002	0.0002	13	0	No	N/A No EQS			
Phenanthrene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Carbazole	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Di-N-Butyl Phthalate	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Total TPH >C6-C40	mg/l	0.01	No EQS	N/A	5	0.01	0.0100	5	0	No	N/A No EQS			
Tribromomethane	mg/l	0.001	No EQS	N/A	13	0.001	0.0010	13	0	No	N/A No EQS			
Isopropylbenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
Bromobenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,2,3-Trichloropropane	mg/l	0.005	No EQS	N/A	13	0.005	0.005	13	0	No	N/A No EQS			
N-Propylbenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
2-Chlorotoluene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,3,5-Trimethylbenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
4-Chlorotoluene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
Tert-Butylbenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,2,4-Trimethylbenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
Sec-Butylbenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
4-Isopropyltoluene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
N-Butylbenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,2-Dibromo-3-Chloropropane	mg/l	0.005	No EQS	N/A	13	0.005	0.0050	13	0	No	N/A No EQS			
1,2,4-Trichlorobenzene	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
1,2,3-Trichlorobenzene	mg/l	0.0002	No EQS	N/A	13	0.0002	0.0002	13	0	No	N/A No EQS			
Methyl Tert-Butyl Ether	mg/l	0.0001	No EQS	N/A	13	0.0001	0.0001	13	0	No	N/A No EQS			
N-Nitrosodimethylamine	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Bis(2-Chloroethyl)Ether	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
2-Methylphenol ( <i>o</i> -Cresol)	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Bis(2-Chloroisopropyl)Ether	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Hexachloroethane	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
N-Nitrosodi-n-propylamine	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
4-Methylphenol	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Nitrobenzene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
Isophorone	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			
2-Nitrophenol	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS			

Surface Water H1 Risk Assessment Phase 1, Part A Screening Tests																				
Cells highlighted amber are not an operational EQS given in the Surface Water Pollution Risk Assessment gov.uk webpage.																				
Constituents	Unit	Limit of Detection		Freshwater EQS (Annual Average)		Freshwater EQS - Maximum allowable concentration (MAC)		Pre-Screening		Screening Test 1		Screening Test 2		Screening Test 3		Screening Test 4				
		RFR: Watercourse Q95 flow m <sup>3</sup> /s	EFR: Effluent flow rate (maximum) m <sup>3</sup> /s	EFR: Effluent flow rate (mean) m <sup>3</sup> /s	count of tests	Maximum Value in discharge	discharge mean values below LOD treated as (OD)	Is the substance present in the discharge?	Is the substance measured above LOD at the discharge?	Does mean release concentration (RC) exceed 10% EQS?	Does the process contribution (PC) exceed 4 percent of the EQS?	Test failed? (AA)	10% EQS (MAC) where available	Test failed? (MAC)	Process Contribution PC (mean)	Predicted Environmental Concentration (PEC) (mean) (mg/l)	Test failed? (AA)	Test failed? (AA)	Test failed? (AA)	Does the PEC exceed the EQS in the receiving water downstream of the discharge
2,4-Dimethylphenol	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS									
Bis(2-Chloroethoxy)Methane	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS									
1,2,4-Trichlorobenzene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS									
4-Chloronaniline	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	12	0	No	N/A No EQS									
2-Methylnaphthalene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Hexachlorocyclopentadiene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
2,4,6-Trichlorophenol	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
2,4,5-Trichlorophenol	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
2-Chloronaphthalene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
2-Nitroaniline	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Acenaphthylene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
2,6-Dinitrotoluene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Acenaphthene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
9-Nitroanthrone	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Dibenzofuran	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
4-Chlorophenylphenylether	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
2,4-Dinitrofluorene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Fluorene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Diethyl Phthalate	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
4-Nitroaniline	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
2-Methyl-4,6-Dinitrophenol	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Azobenzene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
4-Bromophenylphenyl Ether	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Phenanthrene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Carbazole	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Di-N-Butyl Phthalate	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Pyrene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Butylbenzyl Phthalate	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Benz[a]anthracene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Chrysene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Bis(2-Ethyhexyl)Phthalate	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Di-N-Octyl Phthalate	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Benzofluoranthene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Benz[ghi]fluoranthene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Indeno[1,2,3-c,d]Pyrene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Dibenz(a,h)Anthracene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
Benzol(g,h,i)perylene	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
4-Nitrophenol	mg/l	0.0005	No EQS	N/A	12	0.0005	0.0005	0.0005	12	0	No	N/A No EQS								
PCB 28	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 81	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 52	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 77	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 105	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 90-101	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 114	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 118	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 118	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 153	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 123	mg/l	0.00001	No EQS	N/A	13	0.00001	0.0000	0.0000	13	0	No	N/A No EQS								
PCB 138	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 126	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 180	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 156	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								
PCB 157	mg/l	0.00001	No EQS	N/A	13	0.00001	0.00001	0.0000	13	0	No	N/A No EQS								

Surface Water H1 Risk Assessment Phase 1, Part A Screening Tests																																	
Cells highlighted amber are not an operational EQS given in the Surface Water Pollution Risk Assessment gov.uk webpage.																																	
Constituents	Unit	Limit of Detection	Freshwater EQS (Annual Average)			Freshwater EQS - Maximum allowable concentration (MAC)			Pre-SCREENING Is the substance present in the discharge?			SCREENING TEST 1 Does mean release concentration (RC) exceed 10% EQS?		SCREENING TEST 2 Does the process contribution (PC) exceed 4 percent of the EQS?		SCREENING TEST 3 Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed 10% of the EQS		SCREENING TEST 4 Does the PEC exceed the EQS in the receiving water downstream of the discharge															
			RFR: Watercourse Q95 flow m <sup>3</sup> /s	EFR: Effluent flow rate (maximum) m <sup>3</sup> /s	EFR: Effluent flow rate (mean) m <sup>3</sup> /s	Maximum flow rate (mean) m <sup>3</sup> /s	Maximum allowable concentration (MAC)	count of tests	count of detections	Is the substance measured above LOD at the discharge?	Is the LOD sufficiently low (LOD<10% of EQS)?	10% EQS (AA)	Test failed? (AA)	10% EQS (MAC) where available	Test failed? (AA)	Process Contribution PC (mean)	25% EQS (AA)	Test failed? (AA)	Process Contribution PC (max)	Test failed? (AA)	BC (MAC) Maximum upstream value below LOD treated as Processed	Upstream value below LOD treated as Processed	Predicted Environmental Concentration (PEC) (mg/l)	Test 3 failed? (AA)	N/A	Test failed? (AA)	PEC > 10% above MAC	MAC test failed? (AA)	PEC > 10% above MAC	PEC > 10% above MAC			
PCB 167	mg/l	0.00001	No EQS	N/A	0.00001	0.00001	0.0000	13	0	No	N/A No EQS																						
PCB 169	mg/l	0.00001	No EQS	N/A	0.00001	0.00001	0.0000	13	0	No	N/A No EQS																						
PCB 189	mg/l	0.00001	No EQS	N/A	0.00001	0.00001	0.0000	13	0	No	N/A No EQS																						
Total PCBs (12 Congeners)	mg/l	0.00001	No EQS	N/A	0.00001	0.00001	0.0000	13	0	No	N/A No EQS																						
Total PCBs (7 congeners)	mg/l	0.00001	No EQS	N/A	0.00001	0.00001	0.0000	13	0	No	N/A No EQS																						
Total Phenols	mg/l	0.03	No EQS	N/A	0.03	0.03	0.0300	14	0	No	N/A No EQS																						
Aliphatic TPH >C5-C8	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aliphatic TPH >C6-C8	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aliphatic TPH >C8-C10	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aliphatic TPH >C10-C12	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aliphatic TPH >C12-C16	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aliphatic TPH >C16-C21	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aliphatic TPH >C21-C35	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aliphatic TPH >C35-C44	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Total Aliphatic Hydrocarbons	mg/l	0.005	No EQS	N/A	0.005	0.005	0.0050	10	0	No	N/A No EQS																						
Aromatic TPH >C5-C7	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aromatic TPH >C7-C8	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aromatic TPH >C8-C10	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aromatic TPH >C10-C12	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aromatic TPH >C12-C16	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aromatic TPH >C16-C21	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aromatic TPH >C21-C35	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Aromatic TPH >C35-C44	mg/l	0.0001	No EQS	N/A	0.0001	0.0001	0.0001	10	0	No	N/A No EQS																						
Total Aromatic Hydrocarbons	mg/l	0.005	No EQS	N/A	0.005	0.005	0.0050	10	0	No	N/A No EQS																						
Total Petroleum Hydrocarbons	mg/l	0.01	No EQS	N/A	0.01	0.01	0.0100	10	0	No	N/A No EQS																						

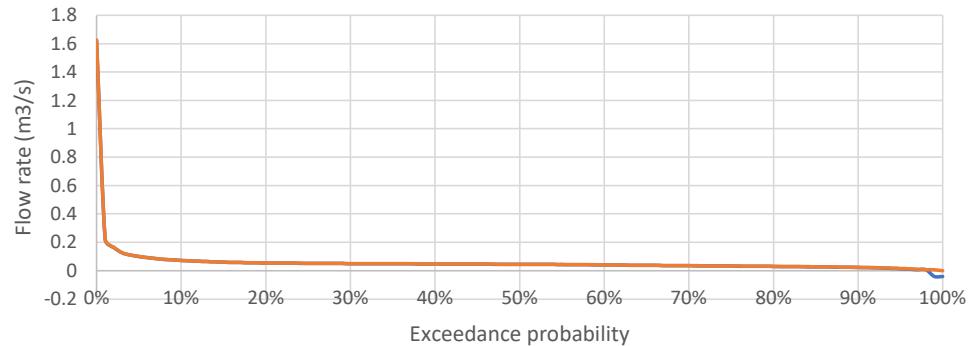
## Appendix F. G5 Flow and Stage Data

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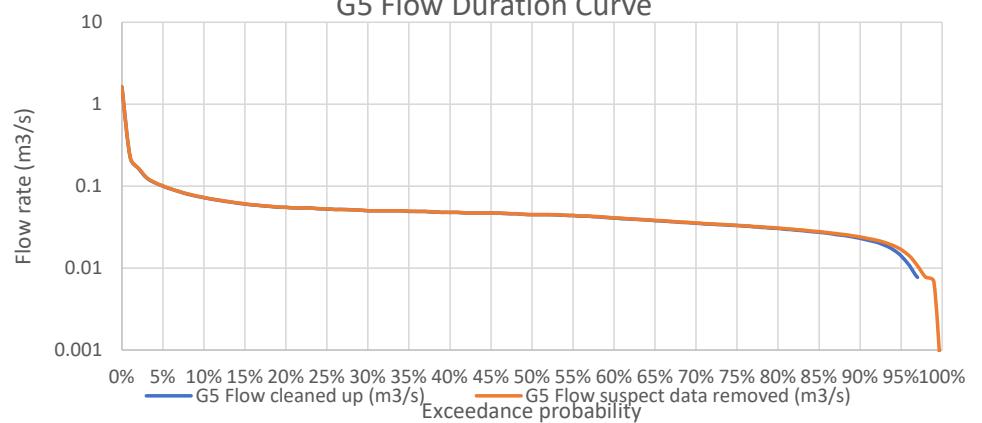
## G5 – Leiston Drain Upstream

summary table			
	G5 Flow (m3/s)	G5 Flow cleaned up (m3/s)	G5 Flow suspect data removed (m3/s)
Date Range	01/09/2010 00:00 to	22/04/2021 08:15	
Count of data points	165104	165101	162195
Count of numeric	165104	165101	162195
Count of Zero	3	0	0
Count of Blank Cells	7298	7301	10207
Min	-0.04	-0.040000	0.000300
Max	1.63	1.625	1.625
Mean	0.05	0.0498	0.0508
<b>Q95</b>	0.014132544	0.0141	<b>0.0168</b>
Q75	0.033	0.0330	0.0332
Q50	0.045	0.0450	0.0450
Q25	0.0525	0.0525	0.0528
Q05	0.0997	0.100	0.101
filtered average	0.049815367	0.0498	0.0508

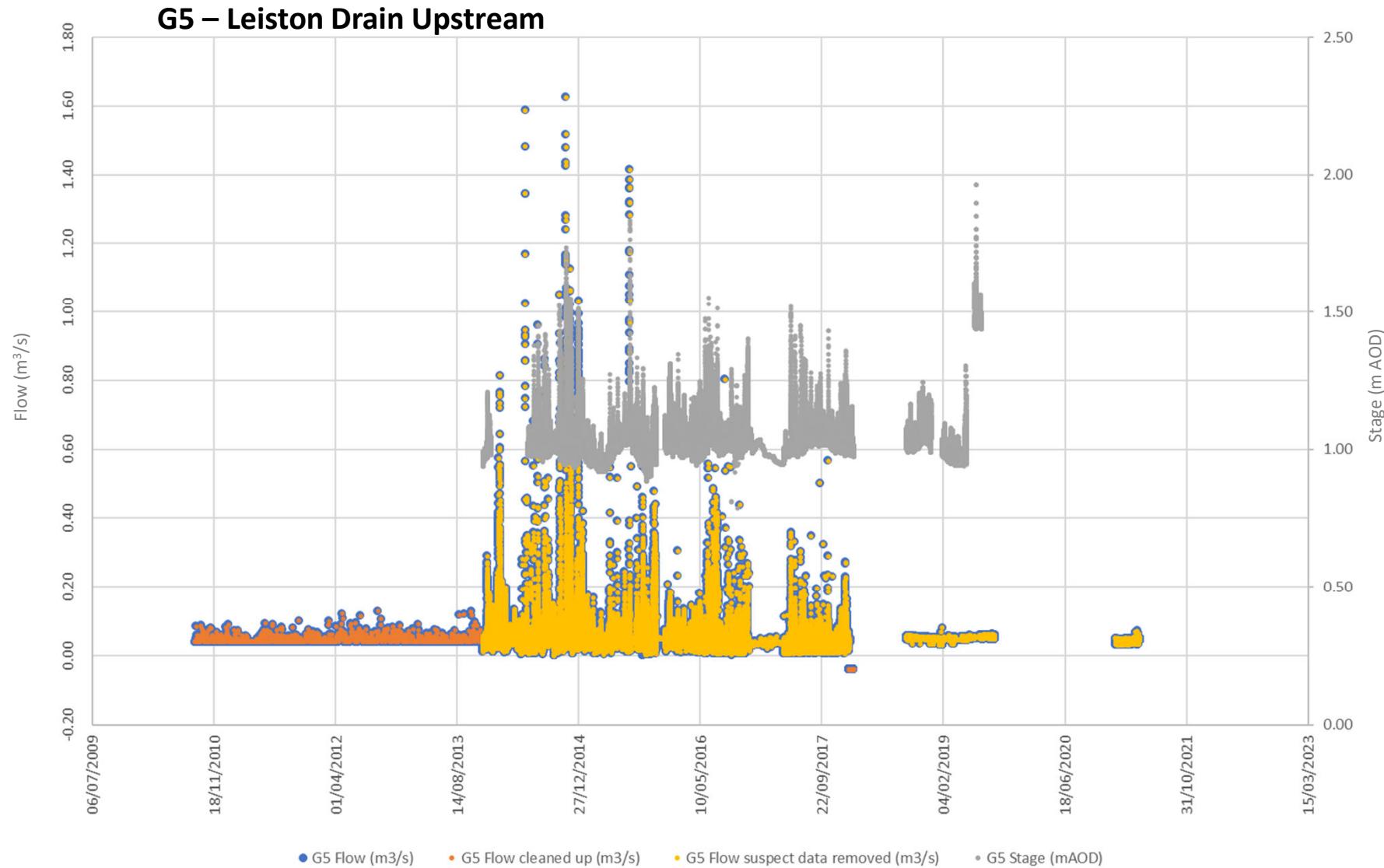
G5 Flow Duration Curve



G5 Flow Duration Curve



## Q95 derivation



## Appendix G. MBAT and PNEC Sheets

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## Notes

Median value from Sizewell baseline surface water monitoring (G3-G7) used for DOC value.

INPUT DATA												RESULTS (Copper)				RESULTS (Zinc)				RESULTS (Mn)				RESULTS (Ni)			
ID	Location	Waterbody	Date	Measured Cu Concentration (dissolved) ( $\mu\text{g l}^{-1}$ )	Measured Zn Concentration (dissolved) ( $\mu\text{g l}^{-1}$ )	Measured Mn Concentration (dissolved) ( $\mu\text{g l}^{-1}$ )	Measured Ni Concentration (dissolved) ( $\mu\text{g l}^{-1}$ )	pH	DOC	Ca	Site-specific PNEC Dissolved Copper ( $\mu\text{g l}^{-1}$ )	BioF	Bioavailable Copper Concentration ( $\mu\text{g l}^{-1}$ )	Risk Characterisation Ratio	Site-specific PNEC Dissolved Zinc ( $\mu\text{g l}^{-1}$ )	BioF	Bioavailable Zinc Concentration ( $\mu\text{g l}^{-1}$ )	Risk Characterisation Ratio	Site-specific PNEC Dissolved Manganese ( $\mu\text{g l}^{-1}$ )	BioF	Bioavailable Manganese Concentration ( $\mu\text{g l}^{-1}$ )	Risk Characterisation Ratio	Site-specific PNEC Dissolved Nickel ( $\mu\text{g l}^{-1}$ )	BioF	Bioavailable Nickel Concentration ( $\mu\text{g l}^{-1}$ )	Risk Characterisation Ratio	
1	Sizewell - Average values from baseline surface water data (G3-G7) used for pH and calcium with a median value adopted for DOC.		27/02/2024					8.02	10.36	144.3	28.63	0.03			48.08	0.23			211.21	0.58			16.86	0.24			