

Addendum to the
Environmental Impact
Assessment Report

NISA
North Irish Sea Array

Volume 10 - Onshore Appendices

Appendix A22.2

Water Quality Sampling Lab Results

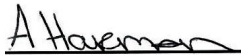


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/016/01
Customer PO	IE2524	Date of Receipt	05/09/2022
Customer Ref	Balrickard Stream	Sampled On	05/09/2022
Ref 2	05/09/2022 10:00	Date Testing Commenced	05/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	27/09/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	112	Electrometry	710	uscm -1@25C	
Dissolved oxygen (mg/l)	715	DO Meter	4.3	mg/L	
pH (on site)	110	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	17.8	degree C	
Turbidity (Surface Water)	109	Turbidimetry	2.9	NTU	INAB
Water Level	0	Depth Meter	0.25	m	

Signed:



Date: 27/09/2022

Aoife Harmon - Laboratory Supervisor

Acc. : Accredited Parameters by ISO/IEC 17025:2017

For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
Results shall not be reproduced, except in full, without the approval of Fitz Scientific
Results contained in this report relate only to the samples tested (P) : Presumptive Results



** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2018)

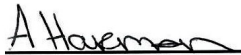
Final results will be issued without any estimated uncertainty of measurement being applied. This can be supplied on request.
Fitz Scientific maintain all customer information in the strictest confidence which is legally enforceable.

Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/016/02
Customer PO	IE2524	Date of Receipt	05/09/2022
Customer Ref	Oberstown Stream	Sampled On	05/09/2022
Ref 2	05/09/2022 10:30	Date Testing Commenced	05/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	27/09/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	112	Electrometry	710	uscm -1@25C	
Dissolved oxygen (mg/l)	715	DO Meter	7.1	mg/L	
pH (on site)	110	Electrometry	8.3	pH Units	
Temperature (On site)	120	Thermometer	17.6	degree C	
Turbidity (Surface Water)	109	Turbidimetry	3.9	NTU	INAB
Water Level	0	Depth Meter	0.22	m	

Signed:



Date: 27/09/2022

Aoife Harmon - Laboratory Supervisor

Acc. : Accredited Parameters by ISO/IEC 17025:2017

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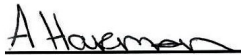


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/016/03
Customer PO	IE2524	Date of Receipt	05/09/2022
Customer Ref	Staffordstown Stream	Sampled On	05/09/2022
Ref 2	05/09/2022 11:15	Date Testing Commenced	05/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	27/09/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	112	Electrometry	540	uscm -1@25C	
Dissolved oxygen (mg/l)	715	DO Meter	6.7	mg/L	
pH (on site)	110	Electrometry	8.4	pH Units	
Temperature (On site)	120	Thermometer	17.6	degree C	
Turbidity (Surface Water)	109	Turbidimetry	2.8	NTU	INAB
Water Level	0	Depth Meter	0.18	m	

Signed:



Date: 27/09/2022

Aoife Harmon - Laboratory Supervisor

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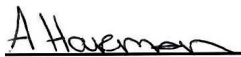
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Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/016/04
Customer PO	IE2524	Date of Receipt	05/09/2022
Customer Ref	Seapoint Stream	Sampled On	05/09/2022
Ref 2	05/09/2022 11:55	Date Testing Commenced	05/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	27/09/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	112	Electrometry	530	uscm -1@25C	
Dissolved oxygen (mg/l)	715	DO Meter	7.2	mg/L	
pH (on site)	110	Electrometry	8.6	pH Units	
Temperature (On site)	120	Thermometer	19.2	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.9	NTU	INAB
Water Level	0	Depth Meter	0.2	m	

Signed:



Date: 27/09/2022

Aoife Harmon - Laboratory Supervisor

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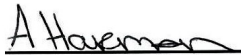


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/016/05
Customer PO	IE2524	Date of Receipt	05/09/2022
Customer Ref	Gaybrooks Stream	Sampled On	05/09/2022
Ref 2	05/09/2022 12:25	Date Testing Commenced	05/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	27/09/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	112	Electrometry	630	uscm -1@25C	
Dissolved oxygen (mg/l)	715	DO Meter	7.2	mg/L	
pH (on site)	110	Electrometry	8.8	pH Units	
Temperature (On site)	120	Thermometer	19.8	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.3	NTU	INAB
Water Level	0	Depth Meter	0.19	m	

Signed:



Date: 27/09/2022

Aoife Harmon - Laboratory Supervisor

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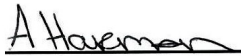


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/016/06
Customer PO	IE2524	Date of Receipt	05/09/2022
Customer Ref	Aldrumman	Sampled On	05/09/2022
Ref 2		Date Testing Commenced	05/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	27/09/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Observation	0	-	No access	None	

Signed:



Date: 27/09/2022

Aoife Harmon - Laboratory Supervisor

Acc.: Accredited Parameters by ISO/IEC 17025:2017

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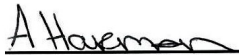
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Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/017/01
Customer PO		Date of Receipt	26/09/2022
Customer Ref		Sampled On	26/09/2022
Ref 2		Date Testing Commenced	26/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	11/10/2022
	Balrickard Stream	Sample Type	Surface Water
	26/09/22		

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	670	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.2	mg/L	
pH (on site)	175	Electrometry	7.15	pH Units	
Temperature (On site)	120	Thermometer	12.0	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.2	NTU	INAB
Water Level	0	Depth Meter	0.22	m	

Signed:



Date: 11/10/2022

Aoife Harmon - Laboratory Supervisor

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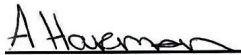
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Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/017/02
Customer PO		Date of Receipt	26/09/2022
Customer Ref		Sampled On	26/09/2022
Ref 2		Date Testing Commenced	26/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
	Oberstown Stream	Date of Report	11/10/2022
	26/09/22	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	690	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	7.1	mg/L	
pH (on site)	175	Electrometry	7.57	pH Units	
Temperature (On site)	120	Thermometer	11.0	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.6	NTU	INAB
Water Level	0	Depth Meter	0.23	m	

Signed:



Date: 11/10/2022

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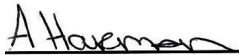


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/017/03
Customer PO		Date of Receipt	26/09/2022
Customer Ref		Sampled On	26/09/2022
Ref 2		Date Testing Commenced	26/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	11/10/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	710	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.0	mg/L	
pH (on site)	175	Electrometry	7.5	pH Units	
Temperature (On site)	120	Thermometer	12.1	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.9	NTU	INAB
Water Level	0	Depth Meter	0.17	m	

Signed:



Date: 11/10/2022

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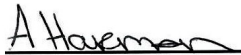


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/017/04
Customer PO		Date of Receipt	26/09/2022
Customer Ref		Sampled On	26/09/2022
Ref 2		Date Testing Commenced	26/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
	Staffordstown Stream	Date of Report	11/10/2022
	26/09/22	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	860	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.3	mg/L	
pH (on site)	175	Electrometry	7.45	pH Units	
Temperature (On site)	120	Thermometer	12.1	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.6	NTU	INAB
Water Level	0	Depth Meter	0.16	m	

Signed:



Date: 11/10/2022

Aoife Harmon - Laboratory Supervisor

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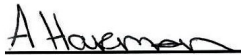


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/017/05
Customer PO		Date of Receipt	26/09/2022
Customer Ref	Seapoint Stream	Sampled On	26/09/2022
Ref 2	26/09/22	Date Testing Commenced	26/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	11/10/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	1470	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.2	mg/L	
pH (on site)	175	Electrometry	7.78	pH Units	
Temperature (On site)	120	Thermometer	14.7	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.5	NTU	INAB
Water Level	0	Depth Meter	0.21	m	

Signed:



Date: 11/10/2022

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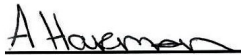
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Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/017/06
Customer PO		Date of Receipt	26/09/2022
Customer Ref		Sampled On	26/09/2022
Ref 2		Date Testing Commenced	26/09/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	11/10/2022
	Gaybrooks Stream	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	750	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	6.4	mg/L	
pH (on site)	175	Electrometry	7.42	pH Units	
Temperature (On site)	120	Thermometer	14.6	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.7	NTU	INAB
Water Level	0	Depth Meter	0.19	m	

Signed:



Date: 11/10/2022

Aoife Harmon - Laboratory Supervisor

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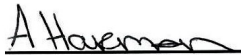


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/018/01
Customer PO		Date of Receipt	17/10/2022
Customer Ref		Sampled On	17/10/2022
Ref 2		Date Testing Commenced	17/10/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
	Balrickard Stream	Date of Report	01/11/2022
	17/10/22	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	450	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.76	mg/L	
pH (on site)	175	Electrometry	6.79	pH Units	
Temperature (On site)	120	Thermometer	10.5	degree C	
Turbidity (Surface Water)	109	Turbidimetry	8.9	NTU	INAB
Water Level	0	Depth Meter	0.22	m	

Signed:



Date: 01/11/2022

Aoife Harmon - Laboratory Supervisor

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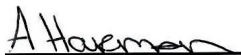


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/018/02
Customer PO		Date of Receipt	17/10/2022
Customer Ref		Sampled On	17/10/2022
Ref 2		Date Testing Commenced	17/10/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
	Oberstown Stream	Date of Report	01/11/2022
	17/10/22	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	510	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.39	mg/L	
pH (on site)	175	Electrometry	7.52	pH Units	
Temperature (On site)	120	Thermometer	10.3	degree C	
Turbidity (Surface Water)	109	Turbidimetry	47.5	NTU	INAB
Water Level	0	Depth Meter	0.2	m	

Signed:



Date: 01/11/2022

Aoife Harmon - Laboratory Supervisor

Acc. : Accredited Parameters by ISO/IEC 17025:2017

For bacterial analysis a result of 0 means none detected in volume examined

All organic results are analysed as received and all results are corrected for dry weight at 104 C

Results shall not be reproduced, except in full, without the approval of Fitz Scientific

Results contained in this report relate only to the samples tested (P) : Presumptive Results

** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2018)

Final results will be issued without any estimated uncertainty of measurement being applied. This can be supplied on request.

Fitz Scientific maintain all customer information in the strictest confidence which is legally enforceable.

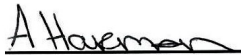


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/018/03
Customer PO		Date of Receipt	17/10/2022
Customer Ref		Sampled On	17/10/2022
Ref 2		Date Testing Commenced	17/10/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
	Aldrumman	Date of Report	01/11/2022
	17/10/22	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	450	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	4.97	mg/L	
pH (on site)	175	Electrometry	7.62	pH Units	
Temperature (On site)	120	Thermometer	10.6	degree C	
Turbidity (Surface Water)	109	Turbidimetry	24.1	NTU	INAB
Water Level	0	Depth Meter	0.24	m	

Signed:



Date: 01/11/2022

Aoife Harmon - Laboratory Supervisor

Acc. : Accredited Parameters by ISO/IEC 17025:2017

For bacterial analysis a result of 0 means none detected in volume examined

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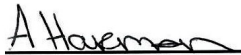


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/018/04
Customer PO		Date of Receipt	17/10/2022
Customer Ref		Sampled On	17/10/2022
Ref 2		Date Testing Commenced	17/10/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
	Staffordstown Stream	Date of Report	01/11/2022
	17/10/22	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	420	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.59	mg/L	
pH (on site)	175	Electrometry	7.54	pH Units	
Temperature (On site)	120	Thermometer	11.2	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.3	NTU	INAB
Water Level	0	Depth Meter	0.21	m	

Signed:



Date: 01/11/2022

Aoife Harmon - Laboratory Supervisor

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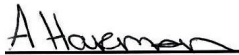


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/018/05
Customer PO		Date of Receipt	17/10/2022
Customer Ref	Seapoint Stream	Sampled On	17/10/2022
Ref 2	17/10/22	Date Testing Commenced	17/10/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
		Date of Report	01/11/2022
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	500	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	6.57	mg/L	
pH (on site)	175	Electrometry	7.78	pH Units	
Temperature (On site)	120	Thermometer	13.6	degree C	
Turbidity (Surface Water)	109	Turbidimetry	4.8	NTU	INAB
Water Level	0	Depth Meter	0.13	m	

Signed:



Date: 01/11/2022

Aoife Harmon - Laboratory Supervisor

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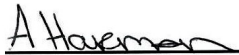


Customer	Mesfin Desta ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/018/06
Customer PO		Date of Receipt	17/10/2022
Customer Ref		Sampled On	17/10/2022
Ref 2		Date Testing Commenced	17/10/2022
Ref 3		Received or Collected	By Fitz: Rory
		Condition on Receipt	Acceptable
	Gaybrooks Stream	Date of Report	01/11/2022
	17/10/22	Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	470	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	7.04	mg/L	
pH (on site)	175	Electrometry	8	pH Units	
Temperature (On site)	120	Thermometer	12.6	degree C	
Turbidity (Surface Water)	109	Turbidimetry	2.8	NTU	INAB
Water Level	0	Depth Meter	0.25	m	

Signed:



Date: 01/11/2022

Aoife Harmon - Laboratory Supervisor

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510025/01
Customer PO	PO 1836	Date of Receipt	06/10/2025 16:56
Customer Ref Ref 2 Ref 3	Gaybrooks Stream	Sampled On	06/10/2025 11:05
		Date Testing Commenced	06/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	16/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS [Supplementary]

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	810.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	6.69	mg/L	
pH (on site)	175	Electrometry	7.6	pH Units	
Temperature (On site)	120	Thermometer	17.3	degree C	
Turbidity (Surface Water)	109	Turbidimetry	<0.1	NTU	INAB
Water Level	0	Depth Meter	0.2	m	



Signed:

A Harmon

Aoife Harmon - Laboratory Supervisor

Date: 16/12/2025

Acc.: Accredited Parameters by ISO/IEC 17025:2017



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Results contained in this report relate only to the samples tested (P) : Presumptive Results (C) : Confirmed Results

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Report reissued to amend water level result to meters. This report replaces the original 9600/251025/01 in full

A copy of this certificate is available on www.fitzsci.ie.

Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510025/02
		Date of Receipt	06/10/2025 16:56
		Sampled On	06/10/2025 11:30
		Date Testing Commenced	06/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
Customer PO	PO 1836	Date of Report	16/12/2025
Customer Ref	Seapoint Stream	Sample Type	Surface Water
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS [Supplementary]

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	780.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	6.94	mg/L	
pH (on site)	175	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	17.0	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.4	NTU	INAB
Water Level	0	Depth Meter	0.6	m	



Signed:

Aoife Harmon - Laboratory Supervisor

Date: 16/12/2025

Acc.: Accredited Parameters by ISO/IEC 17025:2017



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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510025/03
		Date of Receipt	06/10/2025 16:56
		Sampled On	06/10/2025 12:00
		Date Testing Commenced	06/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
Customer PO	PO 1836	Date of Report	16/12/2025
Customer Ref	Staffordstown Stream	Sample Type	Surface Water
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS [Supplementary]

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	690.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.01	mg/L	
pH (on site)	175	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	15.7	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.2	NTU	INAB
Water Level	0	Depth Meter	0.2	m	



Signed:

Aoife Harmon - Laboratory Supervisor

Date: 16/12/2025

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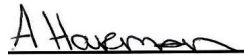
Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510025/04
Customer PO	PO 1836	Date of Receipt	06/10/2025 16:56
Customer Ref Ref 2 Ref 3	Aldrumman Stream	Sampled On	06/10/2025 12:35
		Date Testing Commenced	06/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	16/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS [Supplementary]

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	630.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	5.81	mg/L	
pH (on site)	175	Electrometry	7.7	pH Units	
Temperature (On site)	120	Thermometer	16.9	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.5	NTU	INAB
Water Level	0	Depth Meter	0.2	m	



Signed:



Aoife Harmon - Laboratory Supervisor

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510025/05
Customer PO	PO 1836	Date of Receipt	06/10/2025 16:56
Customer Ref Ref 2 Ref 3	Oberstown Stream	Sampled On	06/10/2025 12:50
		Date Testing Commenced	06/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	16/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS [Supplementary]

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	560.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	6.32	mg/L	
pH (on site)	175	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	15.9	degree C	
Turbidity (Surface Water)	109	Turbidimetry	2.4	NTU	INAB
Water Level	0	Depth Meter	0.1	m	



Signed:

A Harmon

Aoife Harmon - Laboratory Supervisor

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510025/06
Customer PO	PO 1836	Date of Receipt	06/10/2025 16:56
Customer Ref Ref 2 Ref 3	Ballyrickard Stream	Sampled On	06/10/2025 13:15
		Date Testing Commenced	06/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	16/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS [Supplementary]

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	480.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	6.74	mg/L	
pH (on site)	175	Electrometry	7.9	pH Units	
Temperature (On site)	120	Thermometer	16.7	degree C	
Turbidity (Surface Water)	109	Turbidimetry	5.1	NTU	INAB
Water Level	0	Depth Meter	0.3	m	



Signed:

A Harmon

Aoife Harmon - Laboratory Supervisor

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A copy of this certificate is available on www.fitzsci.ie.

Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510026/01
Customer PO	PO 1836	Date of Receipt	29/10/2025 16:43
Customer Ref Ref 2 Ref 3	Gaybrooks Stream	Sampled On	29/10/2025 11:30
		Date Testing Commenced	29/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	24/11/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	830.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.64	mg/L	
pH (on site)	175	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	11.5	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.2	NTU	INAB
Water Level	0	Depth Meter	20.0	m	



Signed:

Aoife Harmon - Laboratory Supervisor

Date: 24/11/2025

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510026/02
		Date of Receipt	29/10/2025 16:43
		Sampled On	29/10/2025 11:50
		Date Testing Commenced	29/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
Customer PO	PO 1836	Date of Report	24/11/2025
Customer Ref	Seapoint Stream	Sample Type	Surface Water
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	870.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.29	mg/L	
pH (on site)	175	Electrometry	7.9	pH Units	
Temperature (On site)	120	Thermometer	12.8	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.7	NTU	INAB
Water Level	0	Depth Meter	10.0	m	



Signed:

A Harmon

Date: 24/11/2025

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510026/03
Customer PO	PO 1836	Date of Receipt	29/10/2025 16:43
Customer Ref Ref 2 Ref 3	Staffordstown Stream	Sampled On	29/10/2025 12:10
		Date Testing Commenced	29/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	24/11/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	830.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	7.58	mg/L	
pH (on site)	175	Electrometry	7.7	pH Units	
Temperature (On site)	120	Thermometer	12.3	degree C	
Turbidity (Surface Water)	109	Turbidimetry	<0.1	NTU	INAB
Water Level	0	Depth Meter	40.0	m	



Signed:

Aoife Harmon - Laboratory Supervisor

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510026/05
		Date of Receipt	29/10/2025 16:43
		Sampled On	29/10/2025 12:40
		Date Testing Commenced	29/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
Customer PO	PO 1836	Date of Report	24/11/2025
Customer Ref	Oberstown Stream	Sample Type	Surface Water
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	630.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.73	mg/L	
pH (on site)	175	Electrometry	7.7	pH Units	
Temperature (On site)	120	Thermometer	13.2	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.0	NTU	INAB
Water Level	0	Depth Meter	10.0	m	



Signed:

A Harmon

Date: 24/11/2025

Aoife Harmon - Laboratory Supervisor

Acc.: Accredited Parameters by ISO/IEC 17025:2017



For bacterial analysis a result of 0 means none detected in volume examined

All organic results are analysed as received and all results are corrected for dry weight at 104 C

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Results contained in this report relate only to the samples tested (P) : Presumptive Results (C) : Confirmed Results

** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2024)

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A copy of this certificate is available on www.fitzsci.ie.

Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2510026/06
Customer PO	PO 1836	Date of Receipt	29/10/2025 16:43
Customer Ref Ref 2 Ref 3	Ballyrickard Stream	Sampled On	29/10/2025 12:55
		Date Testing Commenced	29/10/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	24/11/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	550.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.43	mg/L	
pH (on site)	175	Electrometry	7.7	pH Units	
Temperature (On site)	120	Thermometer	13.2	degree C	
Turbidity (Surface Water)	109	Turbidimetry	4.0	NTU	INAB
Water Level	0	Depth Meter	65.0	m	



Signed:

Aoife Harmon - Laboratory Supervisor

Date: 24/11/2025

Acc.: Accredited Parameters by ISO/IEC 17025:2017



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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2511027/01
Customer PO	PO 1836	Date of Receipt	21/11/2025 16:04
Customer Ref Ref 2 Ref 3	Gaybrooks Stream	Sampled On	21/11/2025 11:00
		Date Testing Commenced	21/11/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	22/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	940.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	9.42	mg/L	
pH (on site)	175	Electrometry	7.9	pH Units	
Temperature (On site)	120	Thermometer	8.7	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.8	NTU	INAB
Water Level	0	Depth Meter	0.2	m	



Signed:

A Harmon

Aoife Harmon - Laboratory Supervisor

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2511027/02
Customer PO	PO 1836	Date of Receipt	21/11/2025 16:04
Customer Ref Ref 2 Ref 3	Seapoint Stream	Sampled On	21/11/2025 11:20
		Date Testing Commenced	21/11/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	22/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	1140.0	uscm -1@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.77	mg/L	
pH (on site)	175	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	10.5	degree C	
Turbidity (Surface Water)	109	Turbidimetry	0.8	NTU	INAB
Water Level	0	Depth Meter	0.2	m	



Signed:

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2511027/03
Customer PO	PO 1836	Date of Receipt	21/11/2025 16:04
Customer Ref Ref 2 Ref 3	Staffordstown Stream	Sampled On	21/11/2025 11:50
		Date Testing Commenced	21/11/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	22/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	910.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.09	mg/L	
pH (on site)	175	Electrometry	7.7	pH Units	
Temperature (On site)	120	Thermometer	8.4	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.4	NTU	INAB
Water Level	0	Depth Meter	0.4	m	



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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2511027/04
Customer PO	PO 1836	Date of Receipt	21/11/2025 16:04
Customer Ref Ref 2 Ref 3	Oberstown Stream	Sampled On	21/11/2025 12:25
		Date Testing Commenced	21/11/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	22/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	710.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	10.47	mg/L	
pH (on site)	175	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	9.1	degree C	
Turbidity (Surface Water)	109	Turbidimetry	2.1	NTU	INAB
Water Level	0	Depth Meter	0.2	m	



Signed:

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2511027/05
Customer PO	PO 1836	Date of Receipt	21/11/2025 16:04
Customer Ref Ref 2 Ref 3	Aldrumman Stream	Sampled On	21/11/2025 12:10
		Date Testing Commenced	21/11/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	22/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	790.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	8.38	mg/L	
pH (on site)	175	Electrometry	7.7	pH Units	
Temperature (On site)	120	Thermometer	10.8	degree C	
Turbidity (Surface Water)	109	Turbidimetry	1.1	NTU	INAB
Water Level	0	Depth Meter	0.2	m	



Signed:

A Harmon

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Customer	Louise Lodenkemper ARUP Consulting Engineers 50 Ringsend Road Dublin 4	Lab Report Ref. No.	9600/2511027/06
Customer PO	PO 1836	Date of Receipt	21/11/2025 16:04
Customer Ref Ref 2 Ref 3	Ballyrickard Stream	Sampled On	21/11/2025 12:40
		Date Testing Commenced	21/11/2025
		Received or Collected	By Fitz: Derek Somerville
		Condition on Receipt	Acceptable
		Date of Report	22/12/2025
		Sample Type	Surface Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Conductivity (On Site)	175	Electrometry	480.0	uscm -l@25C	
Dissolved oxygen (mg/l on site)	118	DO Meter	9.85	mg/L	
pH (on site)	175	Electrometry	7.8	pH Units	
Temperature (On site)	120	Thermometer	7.9	degree C	
Turbidity (Surface Water)	109	Turbidimetry	3.2	NTU	INAB
Water Level	0	Depth Meter	0.6	m	



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