



APPENDIX 8-2

ORIGINAL LABORATORY REPORTS



ALS Life Sciences Ltd
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Carrigeen Business Park, Clonmel, Co. Tipperary
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Report No: HYDR-728160421

Document No: EF0011

CERTIFICATE OF ANALYSIS

Client **Hydro Environmental Services**
22 Lower Main Street
Dungarvan
Co. Waterford

Date Received 16/04/2021

Date Reported 27/04/2021

Order Number N/A

For the Attention of: Hydro Environmental Services

Sample Reception 15 sample(s) received in good condition.

Comments N/A

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

Conditions:

1. Results in this report relate only to the items tested
2. Reports may not be reproduced except in full without the approval of ALS Life Sciences Ltd
3. All queries regarding this report should be addressed to the Technical Manager at the above address
4. A * next to a method reference signifies that ALS Life Sciences Ltd is NOT INAB accredited for this method
5. Results reported as CFU/cm² are calculated based on information supplied by customer regarding area swabbed
6. SUBCON* indicates analysis subcontracted to approved subcontractors who do not hold accreditation for this test
7. SUBCON^ indicates analysis subcontracted to approved subcontractors who hold accreditation for this test
8. Where sampling is undertaken by ALS personnel, sampling activities are outside the scope of INAB accreditation
9. Dil next to a method reference indicates that a dilution of the water sample was undertaken during testing



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CERTIFICATE OF ANALYSIS

Date Received 16/04/2021
Date Reported 27/04/2021
Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW1
Date Tested 16/04/2021
ALS ID 4440223

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	3	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	15.2	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	<0.02	mg/l NH3-N	P281
Nitrogen (Total)	1.1	mg/L N	P285

Sample Type Surface Water
Client ID Ballydermot SW2
Date Tested 16/04/2021
ALS ID 4440224

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	21.3	mg/l Cl	P281
Nitrate	14.3	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	<0.02	mg/l NH3-N	P281
Nitrogen (Total)	3.4	mg/L N	P285

Report Authorised by:

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Environmental Chemistry Manager



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Date Received 16/04/2021

Date Reported 27/04/2021

Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW3
Date Tested 16/04/2021
ALS ID 4440225

Test	Result	Unit	Method
Suspended Solids	8	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	13.2	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.53	mg/l NH3-N	P281
Nitrogen (Total)	2.7	mg/L N	P285

Sample Type Surface Water
Client ID Ballydermot SW4
Date Tested 16/04/2021
ALS ID 4440226

Test	Result	Unit	Method
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	26.8	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.07	mg/l NH3-N	P281
Nitrogen (Total)	1.6	mg/L N	P285

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Date Received 16/04/2021

Date Reported 27/04/2021

Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW5
Date Tested 16/04/2021
ALS ID 4440227

Test	Result	Unit	Method
Suspended Solids	6	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	12.6	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.05	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

Sample Type Surface Water
Client ID Ballydermot SW6
Date Tested 16/04/2021
ALS ID 4440228

Test	Result	Unit	Method
Suspended Solids	46	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	4	mg/l O2	P280
Orthophosphate	0.02	mg/l P	P281
Chloride	14.4	mg/l Cl	P281
Nitrate	5.8	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.13	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

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Date Received 16/04/2021

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Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW7
Date Tested 16/04/2021
ALS ID 4440229

Test	Result	Unit	Method
Suspended Solids	5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	16.8	mg/l Cl	P281
Nitrate	12.1	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

Sample Type Surface Water
Client ID Ballydermot SW8
Date Tested 16/04/2021
ALS ID 4440230

Test	Result	Unit	Method
Suspended Solids	8	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	20.2	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.12	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

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Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW9
Date Tested 16/04/2021
ALS ID 4440231

Test	Result	Unit	Method
Suspended Solids	62	mg / l	P202
Phosphorus	0.22	mg/l P	P207
BOD 5 day Total with ATU	12	mg/l O2	P280
Orthophosphate	0.18	mg/l P	P281
Chloride	29.8	mg/l Cl	P281
Nitrate	26.4	mg/l NO3	P281
Nitrite	0.43	mg/l NO2	P281
Ammonia	1.59	mg/l NH3-N	P281
Nitrogen (Total)	6.6	mg/L N	P285

Sample Type Surface Water
Client ID Ballydermot SW10
Date Tested 16/04/2021
ALS ID 4440232

Test	Result	Unit	Method
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	14.2	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.03	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

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Rosemary Thomas
Environmental Chemistry Manager



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Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW11
Date Tested 16/04/2021
ALS ID 4440233

Test	Result	Unit	Method
Suspended Solids	13	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	0.02	mg/l P	P281
Chloride	33.8	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	5.33	mg/l NH3-N	P281
Nitrogen (Total)	4.7	mg/L N	P285

Sample Type Surface Water
Client ID Ballydermot SW12
Date Tested 16/04/2021
ALS ID 4440234

Test	Result	Unit	Method
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	0.02	mg/l P	P281
Chloride	17.0	mg/l Cl	P281
Nitrate	7.2	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.05	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

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Date Received 16/04/2021
Date Reported 27/04/2021
Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW13
Date Tested 16/04/2021
ALS ID 4440235

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	30.5	mg/l Cl	P281
Nitrate	6.4	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	<0.02	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

Sample Type Surface Water
Client ID Ballydermot SW14
Date Tested 16/04/2021
ALS ID 4440236

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	12.0	mg/l Cl	P281
Nitrate	7.8	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.13	mg/l NH3-N	P281
Nitrogen (Total)	1.1	mg/L N	P285

Report Authorised by:

Rosemary Thomas

Rosemary Thomas
Environmental Chemistry Manager



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Date Received 16/04/2021
Date Reported 27/04/2021
Order Number N/A

Sample Type Surface Water
Client ID Ballydermot SW15
Date Tested 16/04/2021
ALS ID 4440237

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	11.7	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.03	mg/l NH3-N	P281
Nitrogen (Total)	<1	mg/L N	P285

Report Authorised by:

Rosemary Thomas

Rosemary Thomas
Environmental Chemistry Manager

CERTIFICATE OF ANALYSIS



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Hydro Environmental Services
Hydro Environmental Services
22 Lower Main Street
Dungarvan, Co. Waterford
Ireland

Certificate Number: CLN161090-1 Final
Date Reported: 24/12/2025
Date Analysis Started: 12/12/2025

Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN527579	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW1 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	12.9	mg/L Cl	
		P285	Total Nitrogen	2.9	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	1.30	mg/L N	
		P281	Ammonia	0.05	mg/L NH ₃ -N	
		P281	Nitrate	5.8	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.02	mg/L P	
CLN527580	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW2 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	3	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	17.3	mg/L Cl	
		P285	Total Nitrogen	1.2	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	<0.25	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN527581	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW3 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	11.1	mg/L Cl	
		P285	Total Nitrogen	3.7	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	1.41	mg/L N	
		P281	Ammonia	0.07	mg/L NH ₃ -N	
		P281	Nitrate	12.8	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	



Certificate Number: CLN161090-1 Final

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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN527582	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW4 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	<5	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	10.8	mg/L Cl	
		P285	Total Nitrogen	2.6	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	1.49	mg/L N	
		P281	Ammonia	0.07	mg/L NH ₃ -N	
		P281	Nitrate	6.6	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN527583	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW5 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	18.6	mg/L Cl	
		P285	Total Nitrogen	2.7	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.19	mg/L N	
		P281	Ammonia	0.04	mg/L NH ₃ -N	
		P281	Nitrate	9.7	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN527584	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW6 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	9	mg/L O ₂	
		P202	Suspended Solids	21	mg/L	
		P281	Chloride	18.6	mg/L Cl	
		P285	Total Nitrogen	3.6	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.19	mg/L N	
		P281	Ammonia	0.02	mg/L NH ₃ -N	
		P281	Nitrate	11.5	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	0.15	mg/L P	
		P293	Orthophosphate	0.03	mg/L P	



Certificate Number: CLN161090-1 Final

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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN527585	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW7 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	5	mg/L O ₂	
		P202	Suspended Solids	6	mg/L	
		P281	Chloride	16.1	mg/L Cl	
		P285	Total Nitrogen	4.1	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.56	mg/L N	
		P281	Ammonia	0.02	mg/L NH ₃ -N	
		P281	Nitrate	11.5	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.02	mg/L P	
CLN527586	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW8 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	3	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	13.2	mg/L Cl	
		P285	Total Nitrogen	2.4	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	0.70	mg/L N	
		P281	Ammonia	0.12	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN527587	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW9 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	9	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	27.6	mg/L Cl	
		P285	Total Nitrogen	13.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	13.49	mg/L N	
		P281	Ammonia	0.16	mg/L NH ₃ -N	
		P281	Nitrate	59.3	mg/L NO ₃	
		P281	Nitrite	0.30	mg/L NO ₂	
		P207	Total Phosphorus	0.13	mg/L P	
		P293	Orthophosphate	0.05	mg/L P	



Certificate Number: CLN161090-1 Final

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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN527588	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW10 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	22.5	mg/L Cl	
		P285	Total Nitrogen	3.8	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.66	mg/L N	
		P281	Ammonia	0.04	mg/L NH ₃ -N	
		P281	Nitrate	12.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.03	mg/L P	
CLN527589	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW11 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	15.8	mg/L Cl	
		P285	Total Nitrogen	4.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.81	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	12.4	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN527590	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW12 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	17.4	mg/L Cl	
		P285	Total Nitrogen	2.6	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	1.68	mg/L N	
		P281	Ammonia	0.04	mg/L NH ₃ -N	
		P281	Nitrate	7.5	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.03	mg/L P	



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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN527591	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW13 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	18.5	mg/L Cl	
		P285	Total Nitrogen	4.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	3.21	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	14.2	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN527592	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW14 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	16.6	mg/L Cl	
		P285	Total Nitrogen	4.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	3.74	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	16.4	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN527593	Prod: Order No: P1511-0 Rcvd Dt: 11/12/2025 Start Testing: 12/12/2025 Description: P1511 Ballydermot_SW15 Spt: Water Sample Type: Surface Waters	P280	BOD 5 day Total	5	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	16.5	mg/L Cl	
		P285	Total Nitrogen	4.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.98	mg/L N	
		P281	Ammonia	<0.02	mg/L NH ₃ -N	
		P281	Nitrate	13.3	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.02	mg/L P	

Certificate approved and electronically signed on 24/12/25 10:59

By Ciara Gildea, Senior Environmental Chemistry Analyst

For and on Behalf of ALS Life Sciences Ltd

Disclaimers:

The testing results in this certificate relate only to the samples described above.

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Hydro Environmental Services
Hydro Environmental Services
22 Lower Main Street
Dungarvan, Co. Waterford
Ireland

Certificate Number: CLN237468-1 Final
Date Reported: 08/06/2026
Date Analysis Started: 15/05/2026

Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN786152	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW1 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 10:00	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	12.0	mg/L Cl	
		P285	Total Nitrogen	1.4	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	0.41	mg/L N	
		P281	Ammonia	<0.02	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN786153	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW2 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 10:15	P280	BOD 5 day Total	8	mg/L O ₂	
		P202	Suspended Solids	12	mg/L	
		P281	Chloride	66.2	mg/L Cl	
		P285	Total Nitrogen	2.2	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	<0.25	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.02	mg/L P	
CLN786154	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW3 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 10:30	P280	BOD 5 day Total	3	mg/L O ₂	
		P202	Suspended Solids	18	mg/L	
		P281	Chloride	13.5	mg/L Cl	
		P285	Total Nitrogen	1.8	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	<0.25	mg/L N	
		P281	Ammonia	0.08	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	0.12	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	



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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN786155	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW4 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 10:45	P280	BOD 5 day Total	10	mg/L O ₂	
		P202	Suspended Solids	420	mg/L	
		P281	Chloride	11.7	mg/L Cl	
		P285	Total Nitrogen	2.4	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	<0.25	mg/L N	
		P281	Ammonia	0.04	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	0.13	mg/L P	
		P293	Orthophosphate	0.11	mg/L P	
CLN786156	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW5 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 11:00	P280	BOD 5 day Total	9	mg/L O ₂	
		P202	Suspended Solids	15	mg/L	
		P281	Chloride	9.1	mg/L Cl	
		P285	Total Nitrogen	5.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	<0.25	mg/L N	
		P281	Ammonia	<0.02	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN786157	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW6 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 11:15	P280	BOD 5 day Total	3	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	11.5	mg/L Cl	
		P285	Total Nitrogen	1.2	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	0.83	mg/L N	
		P281	Ammonia	0.02	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.03	mg/L P	



Certificate Number: CLN237468-1 Final

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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN786158	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW7 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 11:30	P280	BOD 5 day Total	3	mg/L O ₂	
		P202	Suspended Solids	5	mg/L	
		P281	Chloride	17.6	mg/L Cl	
		P285	Total Nitrogen	2.7	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	1.97	mg/L N	
		P281	Ammonia	0.04	mg/L NH ₃ -N	
		P281	Nitrate	8.9	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.02	mg/L P	
CLN786159	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW8 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 11:45	P280	BOD 5 day Total	24	mg/L O ₂	
		P202	Suspended Solids	347	mg/L	
		P281	Chloride	9.1	mg/L Cl	
		P285	Total Nitrogen	5.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	<0.25	mg/L N	
		P281	Ammonia	0.58	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	0.31	mg/L P	
		P293	Orthophosphate	0.04	mg/L P	
CLN786160	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW9 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 12:00	P280	BOD 5 day Total	8	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	22.7	mg/L Cl	
		P285	Total Nitrogen	3.6	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	1.24	mg/L N	
		P281	Ammonia	1.16	mg/L NH ₃ -N	
		P281	Nitrate	5.3	mg/L NO ₃	
		P281	Nitrite	0.13	mg/L NO ₂	
		P207	Total Phosphorus	0.28	mg/L P	
		P293	Orthophosphate	0.24	mg/L P	



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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN786161	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW10 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 12:15	P280	BOD 5 day Total	<2	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	22.0	mg/L Cl	
		P285	Total Nitrogen	6.6	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	3.14	mg/L N	
		P281	Ammonia	<0.02	mg/L NH ₃ -N	
		P281	Nitrate	14.2	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	0.13	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN786162	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW11 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 12:30	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	6	mg/L	
		P281	Chloride	16.6	mg/L Cl	
		P285	Total Nitrogen	3.0	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.42	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	10.6	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.03	mg/L P	
CLN786163	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW12 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 12:45	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	12	mg/L	
		P281	Chloride	16.9	mg/L Cl	
		P285	Total Nitrogen	2.7	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	0.38	mg/L N	
		P281	Ammonia	0.11	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.03	mg/L P	



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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN786164	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW13 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 13:00	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	34.2	mg/L Cl	
		P285	Total Nitrogen	2.7	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.11	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	9.3	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN786165	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW14 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 13:15	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	27	mg/L	
		P281	Chloride	7.5	mg/L Cl	
		P285	Total Nitrogen	1.5	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	<0.25	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	0.21	mg/L P	
		P293	Orthophosphate	<0.02	mg/L P	
CLN786166	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW15 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 13:30	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	16.6	mg/L Cl	
		P285	Total Nitrogen	3.6	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.32	mg/L N	
		P281	Ammonia	0.04	mg/L NH ₃ -N	
		P281	Nitrate	10.2	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.02	mg/L P	



Certificate Number: CLN237468-1 Final

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Lab Ref.	Sample Details	Method Number	Test	Result	Units	Flag
CLN786167	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW16 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 13:45	P280	BOD 5 day Total	4	mg/L O ₂	
		P202	Suspended Solids	<5	mg/L	
		P281	Chloride	14.7	mg/L Cl	
		P285	Total Nitrogen	3.0	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	0.58	mg/L N	
		P281	Ammonia	0.06	mg/L NH ₃ -N	
		P281	Nitrate	<5.0	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.04	mg/L P	
CLN786168	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW17 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 14:00	P280	BOD 5 day Total	2	mg/L O ₂	
		P202	Suspended Solids	5	mg/L	
		P281	Chloride	32.4	mg/L Cl	
		P285	Total Nitrogen	3.3	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	2.58	mg/L N	
		P281	Ammonia	0.03	mg/L NH ₃ -N	
		P281	Nitrate	11.5	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.02	mg/L P	
CLN786169	Prod: Rcvd Dt: 15/05/2026 Start Testing: 15/05/2026 Description: P1511 Ballydermot SW18 Spt: Water Sample Type: Surface Waters Sample Date: 15/05/2026 14:15	P280	BOD 5 day Total	7	mg/L O ₂	
		P202	Suspended Solids	21	mg/L	
		P281	Chloride	18.3	mg/L Cl	
		P285	Total Nitrogen	1.6	mg/L N	
		P281	Total Oxidised Nitrogen (TON)	1.49	mg/L N	
		P281	Ammonia	0.02	mg/L NH ₃ -N	
		P281	Nitrate	6.6	mg/L NO ₃	
		P281	Nitrite	<0.05	mg/L NO ₂	
		P207	Total Phosphorus	<0.10	mg/L P	
		P293	Orthophosphate	0.03	mg/L P	

Certificate approved and electronically signed on 08/06/26 16:52

By David Kinsella, Environmental Chemistry Manager

For and on Behalf of ALS Life Sciences Ltd

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