



APPENDIX 9-2

Laboratory Certs



ALS Life Sciences Ltd trading as ALS
Carrigeen Business Park, Clonmel, Co. Tipperary
Telephone: +353 (0) 52 617 8100



Report No: HYDR-375130723

Document No: EF0011

CERTIFICATE OF ANALYSIS

Client	Hydro Environmental Services 22 Lower Main Street Dungarvan Co. Waterford	Date Submitted	13/07/2023
		Date Reported	26/07/2023
		Order Number	P1619
For the Attention of:	Hydro Environmental Services		
Sample Reception	6 sample(s) received in good condition.		
Comments	N/A		

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

Conditions:

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9. Dil next to a method reference indicates that a dilution of the water sample was undertaken during testing
10. Statement of conformity made against the result does not take into account the uncertainty of measurement associated with the method



Report No: HYDR-375130723

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Submitted 13/07/2023
Date Reported 26/07/2023
Order Number P1619

Sample Type Effluent
Client ID Borrisbeg SW1
Date Tested 13/07/2023
ALS ID 5659354

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	27	mg / l	P202
Phosphorus	0.11	mg/l P	P207
BOD 5 day Total	2	mg/l O2	P280
Ammonia	0.13	mg/l NH3-N	P281
Chloride	17.4	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.03	mg/l P	P281
Total Oxidised Nitrogen	0.75	mg/L N	P281
Nitrogen (Total)	2.0	mg/L N	P285

Sample Type Effluent
Client ID Borrisbeg SW2
Date Tested 13/07/2023
ALS ID 5659355

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	15	mg / l	P202
Phosphorus	0.18	mg/l P	P207
BOD 5 day Total	3	mg/l O2	P280
Ammonia	0.08	mg/l NH3-N	P281
Chloride	13.2	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.03	mg/l P	P281
Total Oxidised Nitrogen	0.94	mg/L N	P281
Nitrogen (Total)	2.1	mg/L N	P285

Report Authorised by:

Rosemary Thomas



Report No: HYDR-375130723

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CERTIFICATE OF ANALYSIS

Date Submitted 13/07/2023
Date Reported 26/07/2023
Order Number P1619

Sample Type Effluent
Client ID Borrisbeg SW3
Date Tested 13/07/2023
ALS ID 5659356

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	12	mg / l	P202
Phosphorus	0.10	mg/l P	P207
BOD 5 day Total	3	mg/l O2	P280
Ammonia	0.21	mg/l NH3-N	P281
Chloride	25.6	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	<0.02	mg/l P	P281
Total Oxidised Nitrogen	<0.25	mg/L N	P281
Nitrogen (Total)	1.6	mg/L N	P285

Sample Type Effluent
Client ID Borrisbeg SW4
Date Tested 13/07/2023
ALS ID 5659357

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	8	mg / l	P202
Phosphorus	0.12	mg/l P	P207
BOD 5 day Total	2	mg/l O2	P280
Ammonia	0.05	mg/l NH3-N	P281
Chloride	15.7	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.03	mg/l P	P281
Total Oxidised Nitrogen	0.94	mg/L N	P281
Nitrogen (Total)	1.6	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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CERTIFICATE OF ANALYSIS

Date Submitted 13/07/2023
Date Reported 26/07/2023
Order Number P1619

Sample Type Effluent
Client ID Borrisbeg SW5
Date Tested 13/07/2023
ALS ID 5659358

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	16	mg / l	P202
Phosphorus	0.11	mg/l P	P207
BOD 5 day Total	2	mg/l O2	P280
Ammonia	0.08	mg/l NH3-N	P281
Chloride	13.6	mg/l Cl	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.03	mg/l P	P281
Total Oxidised Nitrogen	0.86	mg/L N	P281
Nitrogen (Total)	1.9	mg/L N	P285

Sample Type Effluent
Client ID Borrisbeg SW6
Date Tested 13/07/2023
ALS ID 5659359

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	91	mg / l	P202
Phosphorus	0.18	mg/l P	P207
BOD 5 day Total	3	mg/l O2	P280
Ammonia	0.08	mg/l NH3-N	P281
Chloride	14.7	mg/l Cl	P281
Nitrate	5.1	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.04	mg/l P	P281
Total Oxidised Nitrogen	1.16	mg/L N	P281
Nitrogen (Total)	2.7	mg/L N	P285

Report Authorised by:

Rosemary Thomas



ALS Life Sciences Ltd trading as ALS
Carrigeen Business Park, Clonmel, Co. Tipperary
Telephone: +353 (0) 52 617 8100



Report No: HYDR-837280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Client	Hydro Environmental Services 22 Lower Main Street Dungarvan Co. Waterford	Date Submitted	28/09/2023
		Date Reported	16/10/2023
		Order Number	N/A
For the Attention of:	Hydro Environmental Services		
Sample Reception	1 sample(s) received in good condition.		
Comments	N/A		

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

Conditions:

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10. Statement of conformity made against the result does not take into account the uncertainty of measurement associated with the method



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Report No: HYDR-837280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Submitted 28/09/2023
Date Reported 16/10/2023
Order Number N/A

Sample Type Water
Client ID Borrisbeg SW1
Date Tested 29/09/2023
ALS ID 5778192

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	12	mg / l	P202
Phosphorus	0.15	mg/l P	P207
BOD 5 day Total	1	mg/l O ₂	P280
Orthophosphate	<0.02	mg/l P	P281
Ammonia	0.03	mg/l NH ₃ -N	P281
Nitrite	<0.01	mg/l NO ₂ N	P281
Nitrate	1.1	mg/l NO ₃ N	P281
Chloride	14.5	mg/l Cl	P281
Total Oxidised Nitrogen	1.12	mg/L N	P281
Nitrogen (Total)	1.5	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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Report No: HYDR-836280923

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Client	Hydro Environmental Services 22 Lower Main Street Dungarvan Co. Waterford	Date Submitted	28/09/2023
		Date Reported	16/10/2023
		Order Number	N/A
For the Attention of:	Hydro Environmental Services		
Sample Reception	1 sample(s) received in good condition.		
Comments	N/A		

Report Authorised by:

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Report No: HYDR-836280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Submitted 28/09/2023
Date Reported 16/10/2023
Order Number N/A

Sample Type Water
Client ID Ballyquin SW2
Date Tested 29/09/2023
ALS ID 5778191

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	6	mg / l	P202
Phosphorus	0.10	mg/l P	P207
BOD 5 day Total	1	mg/l O ₂	P280
Orthophosphate	<0.02	mg/l P	P281
Ammonia	0.03	mg/l NH ₃ -N	P281
Nitrite	<0.01	mg/l NO ₂ N	P281
Nitrate	<1.0	mg/l NO ₃ N	P281
Chloride	11.2	mg/l Cl	P281
Total Oxidised Nitrogen	<0.25	mg/L N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Report Authorised by:

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Report No: HYDR-839280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Client	Hydro Environmental Services 22 Lower Main Street Dungarvan Co. Waterford	Date Submitted	28/09/2023
		Date Reported	16/10/2023
		Order Number	N/A
For the Attention of:	Hydro Environmental Services		
Sample Reception	1 sample(s) received in good condition.		
Comments	N/A		

Report Authorised by:

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Environmental Chemistry Manager

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Report No: HYDR-839280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Submitted 28/09/2023
Date Reported 16/10/2023
Order Number N/A

Sample Type Water
Client ID Borrisbeg SW3
Date Tested 29/09/2023
ALS ID 5778194

<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	<1	mg/l O ₂	P280
Orthophosphate	<0.02	mg/l P	P281
Ammonia	0.04	mg/l NH ₃ -N	P281
Nitrite	0.01	mg/l NO ₂ N	P281
Nitrate	2.5	mg/l NO ₃ N	P281
Chloride	15.4	mg/l Cl	P281
Total Oxidised Nitrogen	2.56	mg/L N	P281
Nitrogen (Total)	2.6	mg/L N	P285

Report Authorised by:

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Report No: HYDR-840280923

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		Date Reported	16/10/2023
		Order Number	N/A
For the Attention of:	Hydro Environmental Services		
Sample Reception	1 sample(s) received in good condition.		
Comments	N/A		

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Report No: HYDR-840280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Submitted 28/09/2023
Date Reported 16/10/2023
Order Number N/A

Sample Type Water
Client ID Borrisbeg SW4
Date Tested 29/09/2023
ALS ID 5778195

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	11	mg / l	P202
Phosphorus	0.15	mg/l P	P207
BOD 5 day Total	2	mg/l O ₂	P280
Orthophosphate	<0.02	mg/l P	P281
Ammonia	<0.02	mg/l NH ₃ -N	P281
Nitrite	<0.01	mg/l NO ₂ N	P281
Nitrate	1.2	mg/l NO ₃ N	P281
Chloride	11.6	mg/l Cl	P281
Total Oxidised Nitrogen	1.25	mg/L N	P281
Nitrogen (Total)	1.3	mg/L N	P285

Report Authorised by:

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Report No: HYDR-841280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Client	Hydro Environmental Services 22 Lower Main Street Dungarvan Co. Waterford	Date Submitted	28/09/2023
		Date Reported	16/10/2023
		Order Number	N/A
For the Attention of:	Hydro Environmental Services		
Sample Reception	1 sample(s) received in good condition.		
Comments	N/A		

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Report No: HYDR-841280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Submitted 28/09/2023
Date Reported 16/10/2023
Order Number N/A

Sample Type Water
Client ID Borrisbeg SW5
Date Tested 29/09/2023
ALS ID 5778196

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	5	mg / l	P202
Phosphorus	0.19	mg/l P	P207
BOD 5 day Total	2	mg/l O ₂	P280
Orthophosphate	0.04	mg/l P	P281
Ammonia	0.03	mg/l NH ₃ -N	P281
Nitrite	0.01	mg/l NO ₂ N	P281
Nitrate	1.1	mg/l NO ₃ N	P281
Chloride	12.1	mg/l Cl	P281
Total Oxidised Nitrogen	1.19	mg/L N	P281
Nitrogen (Total)	1.7	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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Report No: HYDR-842280923

Document No: EF0011

CERTIFICATE OF ANALYSIS

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		Order Number	N/A
For the Attention of:	Hydro Environmental Services		
Sample Reception	1 sample(s) received in good condition.		
Comments	N/A		

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CERTIFICATE OF ANALYSIS

Date Submitted 28/09/2023
Date Reported 16/10/2023
Order Number N/A

Sample Type Water
Client ID Borrisbeg SW6
Date Tested 29/09/2023
ALS ID 5778197

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	9	mg / l	P202
Phosphorus	0.14	mg/l P	P207
BOD 5 day Total	2	mg/l O ₂	P280
Orthophosphate	0.02	mg/l P	P281
Ammonia	0.03	mg/l NH ₃ -N	P281
Nitrite	0.01	mg/l NO ₂ N	P281
Nitrate	1.3	mg/l NO ₃ N	P281
Chloride	12.3	mg/l Cl	P281
Total Oxidised Nitrogen	1.27	mg/L N	P281
Nitrogen (Total)	1.9	mg/L N	P285

Report Authorised by:

Rosemary Thomas