



APPENDIX 9-2

**WATER QUALITY LABORATORY
REPORTS**



ALS Life Sciences Ltd
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Carrigeen Business Park, Clonmel, Co. Tipperary
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Report No: HYDR-311090317

Document No: EF0011

CERTIFICATE OF ANALYSIS

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

Date Received 09/03/2017

Date Reported 15/03/2017

Order Number N/A

For the Attention of: Hydro Environmental Services

Sample Reception 4 sample(s) received in good condition.

Comments N/A

Note: A # next to the result indicates that there was insufficient sample to carry out testing as per SOP.

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

Conditions:

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5. Results reported as CFU/cm² are calculated based on information supplied by customer regarding area swabbed
6. CFU indicates Colony Forming Units, MPN indicates Most Probable Number
7. SUBCON* indicates analysis subcontracted to approved subcontractors who do not hold accreditation for this test
8. SUBCON^ indicates analysis subcontracted to approved subcontractors who hold accreditation for this test



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CERTIFICATE OF ANALYSIS

Date Received 09/03/2017

Date Reported 15/03/2017

Order Number N/A

Sample Type Surface Water
Client ID P1320- SW01 Date sampled: 08.03.17 @ 3.30pm
Date Tested 10/03/2017
ALS ID 2623417

<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
pH	7.4	Units	P233
BOD 5 day Total	<5	mg/l O2	P280
Ammonia	0.12	mg/l NH3-N	P281
Chloride	13.5	mg/l CL	P281
Nitrate	9.81	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.02	mg/l P	P281
Nitrogen (Total)	2.8	mg/L N	P285

Sample Type Surface Water
Client ID P1320- SW02 Date sampled: 08.03.17 @ 3.45pm
Date Tested 10/03/2017
ALS ID 2623418

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	16	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
pH	7.8	Units	P233
BOD 5 day Total	<5	mg/l O2	P280
Ammonia	0.06	mg/l NH3-N	P281
Chloride	13.9	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
Nitrogen (Total)	1.2	mg/L N	P285

Report Authorised by:

Rosemary Thomas

Rosemary Thomas
 Environmental Chemistry Manager



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CERTIFICATE OF ANALYSIS

Date Received 09/03/2017
Date Reported 15/03/2017
Order Number N/A

Sample Type Surface Water
Client ID P1320- SW03 Date sampled: 08.03.17 @ 4.00pm
Date Tested 10/03/2017
ALS ID 2623419

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	7	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
pH	7.8	Units	P233
BOD 5 day Total	<5	mg/l O2	P280
Ammonia	0.07	mg/l NH3-N	P281
Chloride	13.4	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
Nitrogen (Total)	1.2	mg/L N	P285

Sample Type Surface Water
Client ID P1320- SW04 Date sampled: 08.03.17 @ 4.00pm
Date Tested 10/03/2017
ALS ID 2623420

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	8	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
pH	7.8	Units	P233
BOD 5 day Total	<5	mg/l O2	P280
Ammonia	0.16	mg/l NH3-N	P281
Chloride	9.8	mg/l CL	P281
Nitrate	5.7	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.03	mg/l P	P281
Nitrogen (Total)	1.3	mg/L N	P285

Report Authorised by:

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Report No: HYDR-653071119

Document No: EF0011

CERTIFICATE OF ANALYSIS

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

Date Received 07/11/2019

Date Reported 15/11/2019

Order Number P1320-1

For the Attention of: Hydro Environmental Services

Sample Reception 10 sample(s) received in good condition.

Comments N/A

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

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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 07/11/2019
Date Reported 15/11/2019
Order Number P1320-1

Sample Type Water
Client ID 06/11/19 SW1
Date Tested 08/11/2019
ALS ID 3748247

<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	14.8	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.08	mg/l NH3-N	P281
Nitrogen (Total)	2.3	mg/L N	P285

Sample Type Water
Client ID 06/11/19 SW2
Date Tested 08/11/2019
ALS ID 3748248

<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	14.7	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.08	mg/l NH3-N	P281
Nitrogen (Total)	4.2	mg/L N	P285

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Date Received 07/11/2019
Date Reported 15/11/2019
Order Number P1320-1

Sample Type Water
Client ID 06/11/19 SW3
Date Tested 08/11/2019
ALS ID 3748249

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	13	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	19.1	mg/l CL	P281
Nitrate	17.0	mg/l NO3	P281
Nitrite	0.10	mg/l NO2	P281
Ammonia	0.08	mg/l NH3-N	P281
Nitrogen (Total)	3.8	mg/L N	P285

Sample Type Water
Client ID 06/11/19 SW4
Date Tested 08/11/2019
ALS ID 3748250

<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	15.4	mg/l CL	P281
Nitrate	18.2	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.05	mg/l NH3-N	P281
Nitrogen (Total)	6.4	mg/L N	P285

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Date Received 07/11/2019
Date Reported 15/11/2019
Order Number P1320-1

Sample Type Water
Client ID 06/11/19 SW6
Date Tested 08/11/2019
ALS ID 3748251

<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	20.3	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)	<1.0	mg/L N	P285

Sample Type Water
Client ID 06/11/19 SW7
Date Tested 08/11/2019
ALS ID 3748252

<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	14.4	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)	<1.0	mg/L N	P285

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Date Received 07/11/2019
Date Reported 15/11/2019
Order Number P1320-1

Sample Type Water
Client ID 06/11/19 SW9
Date Tested 08/11/2019
ALS ID 3748253

<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	14.6	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.06	mg/l NH3-N	P281
Nitrogen (Total)	1.9	mg/L N	P285

Sample Type Water
Client ID 06/11/19 SW10
Date Tested 08/11/2019
ALS ID 3748254

<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	14.3	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.06	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Report Authorised by:

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CERTIFICATE OF ANALYSIS

Date Received 07/11/2019
Date Reported 15/11/2019
Order Number P1320-1

Sample Type Water
Client ID 06/11/19 SW14
Date Tested 08/11/2019
ALS ID 3748255

<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	27.5	mg/l CL	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.03	mg/l NH3-N	P281
Nitrate	<5.0	mg/l NO3N	P281*
Nitrogen (Total)	<1.0	mg/L N	P285

Sample Type Water
Client ID 06/11/19 SW15
Date Tested 08/11/2019
ALS ID 3748256

<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	0.03	mg/l P	P281
Chloride	21.9	mg/l CL	P281
Nitrate	23.8	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	7.2	mg/L N	P285

Report Authorised by:

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Report No: HYDR-654071119

Document No: EF0011

CERTIFICATE OF ANALYSIS

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

Date Received 07/11/2019

Date Reported 14/11/2019

Order Number P1320-1

For the Attention of: Hydro Environmental Services

Sample Reception 10 sample(s) received in good condition.

Comments N/A

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

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Date Received 07/11/2019

Date Reported 14/11/2019

Order Number P1320-1

Sample Type Surface Water
Client ID 07/11/19 SW1
Date Tested 08/11/2019
ALS ID 3748257

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	11	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	0.07	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Sample Type Surface Water
Client ID 07/11/19 SW2
Date Tested 08/11/2019
ALS ID 3748258

<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	14.6	mg/l CL	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.08	mg/l NH3-N	P281
Nitrate	<5.0	mg/l NO3N	P281*
Nitrogen (Total)	2.5	mg/L N	P285

Report Authorised by:

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CERTIFICATE OF ANALYSIS

Date Received 07/11/2019

Date Reported 14/11/2019

Order Number P1320-1

Sample Type Surface Water
Client ID 07/11/19 SW3
Date Tested 08/11/2019
ALS ID 3748259

Test	Result	Unit	Method
Suspended Solids	16	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	18.7	mg/l CL	P281
Nitrate	6.2	mg/l NO3	P281
Nitrite	0.09	mg/l NO2	P281
Ammonia	0.07	mg/l NH3-N	P281
Nitrogen (Total)	2.5	mg/L N	P285

Sample Type Surface Water
Client ID 07/11/19 SW4
Date Tested 08/11/2019
ALS ID 3748260

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	0.03	mg/l P	P281
Chloride	15.1	mg/l CL	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.06	mg/l NH3-N	P281
Nitrate	15.5	mg/l NO3N	P281*
Nitrogen (Total)	3.7	mg/L N	P285

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Date Received 07/11/2019
Date Reported 14/11/2019
Order Number P1320-1

Sample Type Surface Water
Client ID 07/11/19 SW6
Date Tested 08/11/2019
ALS ID 3748261

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	15	mg / l	P202
Phosphorus	0.16	mg/l P	P207
BOD 5 day Total with ATU	3	mg/l O2	P280
Orthophosphate	0.08	mg/l P	P281
Chloride	<4.0	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Sample Type Surface Water
Client ID 07/11/19 SW7
Date Tested 08/11/2019
ALS ID 3748262

<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	15.7	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Report Authorised by:

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Date Received 07/11/2019
Date Reported 14/11/2019
Order Number P1320-1

Sample Type Surface Water
Client ID 07/11/19 SW9
Date Tested 08/11/2019
ALS ID 3748263

<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	14.5	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)	1.1	mg/L N	P285

Sample Type Surface Water
Client ID 07/11/19 SW10
Date Tested 08/11/2019
ALS ID 3748264

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	7	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	14.5	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Report Authorised by:

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Date Received 07/11/2019
Date Reported 14/11/2019
Order Number P1320-1

Sample Type Surface Water
Client ID 07/11/19 SW14
Date Tested 08/11/2019
ALS ID 3748265

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	6	mg / l	P202
Phosphorus	0.20	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	20.2	mg/l CL	P281
Nitrate	10.7	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Sample Type Surface Water
Client ID 07/11/19 SW15
Date Tested 08/11/2019
ALS ID 3748266

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	16	mg / l	P202
Phosphorus	0.10	mg/l P	P207
BOD 5 day Total with ATU	3	mg/l O2	P280
Orthophosphate	0.12	mg/l P	P281
Chloride	16.7	mg/l CL	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.05	mg/l NH3-N	P281
Nitrate	12.3	mg/l NO3N	P281*
Nitrogen (Total)	4.3	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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Report No: HYDR-697230920

Document No: EF0011

CERTIFICATE OF ANALYSIS

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

Date Received 23/09/2020

Date Reported 02/10/2020

Order Number P1320-2

For the Attention of: Hydro Environmental Services

Sample Reception 5 sample(s) received in good condition.

Comments N/A

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

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CERTIFICATE OF ANALYSIS

Date Received 23/09/2020
Date Reported 02/10/2020
Order Number P1320-2

Sample Type Water
Client ID 10:00 SW01
Date Tested 24/09/2020
23-Sep-2020
ALS ID 4163034

<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
Turbidity	1.80	NTU	P239
BOD 5 day Total with ATU	<1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	13.3	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.09	mg/l NH3-N	P281
Nitrogen (Total)	1.2	mg/L N	P285

Sample Type Water
Client ID 10:30 SW02
Date Tested 24/09/2020
23-Sep-2020
ALS ID 4163035

<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
Turbidity	1.39	NTU	P239
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	14.7	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	1.7	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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CERTIFICATE OF ANALYSIS

Date Received 23/09/2020
Date Reported 02/10/2020
Order Number P1320-2

Sample Type Water
Client ID 11:00 SW03
Date Tested 24/09/2020
23-Sep-2020
ALS ID 4163036

<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
Turbidity	1.54	NTU	P239
BOD 5 day Total with ATU	1	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	15.3	mg/l CL	P281
Nitrate	7.5	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

Sample Type Water
Client ID 12:00 SW04
Date Tested 24/09/2020
23-Sep-2020
ALS ID 4163037

<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
Turbidity	1.45	NTU	P239
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	13.0	mg/l CL	P281
Nitrate	<5.0	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

Report Authorised by:

Rosemary Thomas



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CERTIFICATE OF ANALYSIS

Date Received 23/09/2020
Date Reported 02/10/2020
Order Number P1320-2

Sample Type Water
Client ID 13:00 SW05
Date Tested 24/09/2020
23-Sep-2020
ALS ID 4163038

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	28	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
Turbidity	7.61	NTU	P239
BOD 5 day Total with ATU	3	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	13.1	mg/l CL	P281
Nitrate	12.6	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.03	mg/l NH3-N	P281
Nitrogen (Total)	1.3	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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Report No: HYDR-480161020

Document No: EF0011

CERTIFICATE OF ANALYSIS

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

Date Received 16/10/2020

Date Reported 22/10/2020

Order Number N/A

For the Attention of: Hydro Environmental Services

Sample Reception 5 sample(s) received in good condition.

Comments N/A

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

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Report No: HYDR-480161020

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Received 16/10/2020
Date Reported 22/10/2020
Order Number N/A

Sample Type Water
Client ID 15/10/2020 14:00 SW1
Date Tested 16/10/2020
ALS ID 4196966

<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	11.8	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Ammonia	0.11	mg/l NH3-N	P281
Nitrogen (Total)	1.6	mg/L N	P285

Sample Type Water
Client ID 15/10/2020 14:00 SW2
Date Tested 16/10/2020
ALS ID 4196967

<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	14.2	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	1.6	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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Report No: HYDR-480161020

Document No: EF0011

CERTIFICATE OF ANALYSIS

Date Received 16/10/2020
Date Reported 22/10/2020
Order Number N/A

Sample Type Water
Client ID 15/10/2020 14:00 SW3
Date Tested 16/10/2020
ALS ID 4196968

<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	14.4	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Ammonia	0.04	mg/l NH3-N	P281
Nitrogen (Total)	1.2	mg/L N	P285

Sample Type Water
Client ID 15/10/2020 14:00 SW4
Date Tested 16/10/2020
ALS ID 4196969

<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	7.0	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Ammonia	0.75	mg/l NH3-N	P281
Nitrogen (Total)	2.3	mg/L N	P285

Report Authorised by:

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CERTIFICATE OF ANALYSIS

Date Received 16/10/2020
Date Reported 22/10/2020
Order Number N/A

Sample Type Water
Client ID 15/10/2020 14:00 SW5
Date Tested 16/10/2020
ALS ID 4196970

<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	12.2	mg/l CL	P281
Nitrate	5.3	mg/l NO3	P281
Ammonia	0.02	mg/l NH3-N	P281
Nitrogen (Total)	1.8	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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Report No: HYDR-317231020

Document No: EF0011

CERTIFICATE OF ANALYSIS

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

Date Received 23/10/2020

Date Reported 02/11/2020

Order Number P1320-2

For the Attention of: Hydro Environmental Services

Sample Reception 5 sample(s) received in good condition.

Comments N/A

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

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CERTIFICATE OF ANALYSIS

Date Received 23/10/2020
Date Reported 02/11/2020
Order Number P1320-2

Sample Type Surface Water
Client ID SW1 Date sampled: 22.10.20
Date Tested 23/10/2020
ALS ID 4205802

<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	11.5	mg/l CL	P281
Nitrate	5.5	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.08	mg/l NH3-N	P281
Nitrogen (Total)	1.9	mg/L N	P285

Sample Type Surface Water
Client ID SW2 Date sampled: 22.10.20
Date Tested 23/10/2020
ALS ID 4205803

<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	13.2	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)	1.5	mg/L N	P285

Report Authorised by:

Rosemary Thomas



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CERTIFICATE OF ANALYSIS

Date Received 23/10/2020
Date Reported 02/11/2020
Order Number P1320-2

Sample Type Surface Water
Client ID SW3 Date sampled: 22.10.20
Date Tested 23/10/2020
ALS ID 4205804

<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	14.3	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.06	mg/l NH3-N	P281
Nitrogen (Total)	2.4	mg/L N	P285

Sample Type Surface Water
Client ID SW4 Date sampled: 22.10.20
Date Tested 23/10/2020
ALS ID 4205805

<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	5.8	mg/l CL	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.57	mg/l NH3-N	P281
Nitrogen (Total)	3.0	mg/L N	P285

Report Authorised by:

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CERTIFICATE OF ANALYSIS

Date Received 23/10/2020
Date Reported 02/11/2020
Order Number P1320-2

Sample Type Surface Water
Client ID SW5 Date sampled: 22.10.20
Date Tested 23/10/2020
ALS ID 4205806

<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	12.5	mg/l CL	P281
Nitrate	14.7	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.03	mg/l NH3-N	P281
Nitrogen (Total)	2.5	mg/L N	P285

Report Authorised by:

Rosemary Thomas