



ALS Life Sciences Ltd  
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Report No: HYDR-151151118

Document No: EF0011

## CERTIFICATE OF ANALYSIS

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

**Date Received** 15/11/2018

**Date Reported** 27/11/2018

**Order Number** P1459

**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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6. CFU indicates Colony Forming Units, MPN indicates Most Probable Number
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Report No: HYDR-151151118

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### CERTIFICATE OF ANALYSIS

**Date Received** 15/11/2018  
**Date Reported** 27/11/2018  
**Order Number** P1459

**Sample Type** Water  
**Client ID** P1459-SW1  
**Date Tested** 15/11/2018  
**ALS ID** 3302604

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	17	mg / l	P202
Phosphorus	0.14	mg/l P	P207
BOD 5 day Total with ATU	<2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	11.0	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** Water  
**Client ID** P1459-SW3  
**Date Tested** 15/11/2018  
**ALS ID** 3302605

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	17	mg / l	P202
Phosphorus	0.10	mg/l P	P207
BOD 5 day Total with ATU	5	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	0.04	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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### CERTIFICATE OF ANALYSIS

**Date Received** 15/11/2018

**Date Reported** 27/11/2018

**Order Number** P1459

**Sample Type** Water  
**Client ID** P1459-SW6  
**Date Tested** 15/11/2018  
**ALS ID** 3302606

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	27	mg / l	P202
Phosphorus	0.10	mg/l P	P207
BOD 5 day Total with ATU	<2	mg/l O2	P280
Orthophosphate	0.04	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)	1.0	mg/L N	P285

**Sample Type** Water  
**Client ID** P1459-SW8  
**Date Tested** 15/11/2018  
**ALS ID** 3302607

<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	9.0	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)	<1.0	mg/L N	P285

Report Authorised by:

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### CERTIFICATE OF ANALYSIS

Date Received 15/11/2018

Date Reported 27/11/2018

Order Number P1459

Sample Type Water  
Client ID P1459-SW10  
Date Tested 15/11/2018  
ALS ID 3302608

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	9.6	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)	<1.0	mg/L N	P285

Sample Type Water  
Client ID P1459-SW12  
Date Tested 15/11/2018  
ALS ID 3302609

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	10.4	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)	<1.0	mg/L N	P285

Report Authorised by:

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Report No: HYDR-388211118

Document No: EF0011

## CERTIFICATE OF ANALYSIS

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

**Date Received** 21/11/2018

**Date Reported** 29/11/2018

**Order Number** P1459

**For the Attention of:** Hydro Environmental Services

**Sample Reception** 6 sample(s) received in good condition.

**Comments** N/A

Report Authorised by:

A handwritten signature in blue ink that reads 'Rosemary Thomas'.

Rosemary Thomas  
Environmental Chemistry Manager

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Report No: HYDR-388211118

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### CERTIFICATE OF ANALYSIS

**Date Received** 21/11/2018  
**Date Reported** 29/11/2018  
**Order Number** P1459

**Sample Type** Water  
**Client ID** P1459-SW1  
**Date Tested** 22/11/2018  
**ALS ID** 3309858

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.1	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Ammonia	0.03	mg/l NH3-N	P281
Nitrate	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Orthophosphate	0.03	mg/l P	P281
Chloride	9.8	mg/l CL	P281
Nitrogen (Total)	5.7	mg/L N	P285

**Sample Type** Water  
**Client ID** P1459-SW3  
**Date Tested** 22/11/2018  
**ALS ID** 3309859

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.1	mg/l P	P207
BOD 5 day Total with ATU	<2	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	12.1	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)	7.6	mg/L N	P285

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**Date Received** 21/11/2018  
**Date Reported** 29/11/2018  
**Order Number** P1459

**Sample Type** Water  
**Client ID** P1459-SW6  
**Date Tested** 22/11/2018  
**ALS ID** 3309860

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	0.11	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	0.04	mg/l P	P281
Chloride	12.9	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)	5.5	mg/L N	P285

**Sample Type** Water  
**Client ID** P1459-SW8  
**Date Tested** 22/11/2018  
**ALS ID** 3309861

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.1	mg/l P	P207
BOD 5 day Total with ATU	<2	mg/l O2	P280
Orthophosphate	0.02	mg/l P	P281
Chloride	9.9	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)	7.2	mg/L N	P285

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**Date Received** 21/11/2018  
**Date Reported** 29/11/2018  
**Order Number** P1459

**Sample Type** Water  
**Client ID** P1459-SW10  
**Date Tested** 22/11/2018  
**ALS ID** 3309862

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	<0.1	mg/l P	P207
BOD 5 day Total with ATU	3	mg/l O2	P280
Orthophosphate	0.03	mg/l P	P281
Chloride	9.7	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)	2.2	mg/L N	P285

**Sample Type** Water  
**Client ID** P1459-SW12  
**Date Tested** 22/11/2018  
**ALS ID** 3309863

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	<5	mg / l	P202
Phosphorus	0.11	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	0.03	mg/l P	P281
Chloride	9.8	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)	4.1	mg/L N	P285

Report Authorised by:





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Report No: HYDR-530060919

Document No: EF0011

## CERTIFICATE OF ANALYSIS

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

**Date Received** 06/09/2019

**Date Reported** 12/09/2019

**Order Number** P1459

**For the Attention of:** Hydro Environmental Services

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

**Comments** Carrane hill

Report Authorised by:

Rosemary Thomas  
Environmental Chemistry Manager

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Report No: HYDR-530060919

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### CERTIFICATE OF ANALYSIS

Date Received 06/09/2019

Date Reported 12/09/2019

Order Number P1459

Sample Type Surface Water  
Client ID SW1  
Date Tested 07/09/2019  
ALS ID 3664639

Test	Result	Unit	Method
Suspended Solids	8	mg / l	P202
Phosphorus	0.11	mg/l P	P207
BOD 5 day Total with ATU	2	mg/l O2	P280
Orthophosphate	0.02	mg/l P	P281
Chloride	8.8	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)	1.3	mg/L N	P285

Sample Type Surface Water  
Client ID SW7  
Date Tested 07/09/2019  
ALS ID 3664640

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	8.8	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)	1.4	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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### CERTIFICATE OF ANALYSIS

**Date Received** 06/09/2019  
**Date Reported** 12/09/2019  
**Order Number** P1459

**Sample Type** Surface Water  
**Client ID** SW5  
**Date Tested** 07/09/2019  
**ALS ID** 3664641

<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	5.1	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** SW6  
**Date Tested** 07/09/2019  
**ALS ID** 3664642

<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	0.04	mg/l P	P281
Chloride	10.0	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)	1.7	mg/L N	P285

Report Authorised by:

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### CERTIFICATE OF ANALYSIS

**Date Received** 06/09/2019  
**Date Reported** 12/09/2019  
**Order Number** P1459

**Sample Type** Surface Water  
**Client ID** SW8  
**Date Tested** 07/09/2019  
**ALS ID** 3664643

<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	8.5	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)	2.7	mg/L N	P285

**Sample Type** Surface Water  
**Client ID** SW9  
**Date Tested** 07/09/2019  
**ALS ID** 3664644

<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	8.2	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

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### CERTIFICATE OF ANALYSIS

**Date Received** 06/09/2019

**Date Reported** 12/09/2019

**Order Number** P1459

**Sample Type** Surface Water  
**Client ID** SW11  
**Date Tested** 07/09/2019  
**ALS ID** 3664645

<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	5.8	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)	1.0	mg/L N	P285

**Sample Type** Surface Water  
**Client ID** SW12  
**Date Tested** 07/09/2019  
**ALS ID** 3664646

<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 with ATU	2	mg/l O2	P280
Orthophosphate	0.03	mg/l P	P281
Chloride	7.9	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)	1.5	mg/L N	P285

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*Rosemary Thomas*



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### CERTIFICATE OF ANALYSIS

**Date Received** 06/09/2019  
**Date Reported** 12/09/2019  
**Order Number** P1459

**Sample Type** Surface Water  
**Client ID** SW16  
**Date Tested** 07/09/2019  
**ALS ID** 3664647

<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	9.3	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)	1.5	mg/L N	P285

**Sample Type** Surface Water  
**Client ID** SW17  
**Date Tested** 07/09/2019  
**ALS ID** 3664648

<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 with ATU	2	mg/l O2	P280
Orthophosphate	0.03	mg/l P	P281
Chloride	12.3	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)	2.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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Report No: HYDR-568050419

Document No: EF0011

## CERTIFICATE OF ANALYSIS

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

**Date Received** 05/04/2019

**Date Reported** 15/04/2019

**Order Number** P1459

**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

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7. SUBCON^ indicates analysis subcontracted to approved subcontractors who hold accreditation for this test
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9. Dil next to a method reference indicates that a dilution of the water sample was undertaken during testing



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Report No: HYDR-568050419

Document No: EF0011

### CERTIFICATE OF ANALYSIS

**Date Received** 05/04/2019  
**Date Reported** 15/04/2019  
**Order Number** P1459

**Sample Type** Water  
**Client ID** 3/4 Croagh SW14  
**Date Tested** 06/04/2019  
**ALS ID** 3465051

<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	<5	mg/l O2	P280
Ammonia	<0.02	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	<0.02	mg/l P	P281
Nitrogen (Total)	<1.0	mg/L N	P285

**Sample Type** Water  
**Client ID** 3/4 Croagh SW15  
**Date Tested** 06/04/2019  
**ALS ID** 3465052

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	12.9	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)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*





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Report No: HYDR-568050419

Document No: EF0011

### CERTIFICATE OF ANALYSIS

**Date Received** 05/04/2019  
**Date Reported** 15/04/2019  
**Order Number** P1459

**Sample Type** Water  
**Client ID** 3/4 Croagh SW16  
**Date Tested** 06/04/2019  
**ALS ID** 3465053

<u>Test</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>
Suspended Solids	9	mg / l	P202
Phosphorus	<0.10	mg/l P	P207
BOD 5 day Total with ATU	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	17.1	mg/l CL	P281
Nitrate	8.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.03	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

**Sample Type** Water  
**Client ID** 3/4 Croagh SW17  
**Date Tested** 06/04/2019  
**ALS ID** 3465054

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	17.9	mg/l CL	P281
Nitrate	8.8	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.02	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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Report No: HYDR-568050419

Document No: EF0011

### CERTIFICATE OF ANALYSIS

**Date Received** 05/04/2019  
**Date Reported** 15/04/2019  
**Order Number** P1459

**Sample Type** Water  
**Client ID** 3/4 Croagh SW18  
**Date Tested** 06/04/2019  
**ALS ID** 3465055

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	17.5	mg/l CL	P281
Nitrate	5.1	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.03	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

**Sample Type** Water  
**Client ID** 3/4 Croagh SW19  
**Date Tested** 06/04/2019  
**ALS ID** 3465056

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	16.6	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)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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Report No: HYDR-569050419

Document No: EF0011

## CERTIFICATE OF ANALYSIS

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

**Date Received** 05/04/2019

**Date Reported** 15/04/2019

**Order Number** P1459

**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

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Report No: HYDR-569050419

Document No: EF0011

### CERTIFICATE OF ANALYSIS

**Date Received** 05/04/2019  
**Date Reported** 15/04/2019  
**Order Number** P1459

**Sample Type** Water  
**Client ID** 4/4 Croagh SW14  
**Date Tested** 06/04/2019  
**ALS ID** 3465057

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	13.4	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)	<1.0	mg/L N	P285

**Sample Type** Water  
**Client ID** 4/4 Croagh SW15  
**Date Tested** 06/04/2019  
**ALS ID** 3465058

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	12.7	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)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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Report No: HYDR-569050419

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### CERTIFICATE OF ANALYSIS

**Date Received** 05/04/2019  
**Date Reported** 15/04/2019  
**Order Number** P1459

**Sample Type** Water  
**Client ID** 4/4 Croagh SW16  
**Date Tested** 06/04/2019  
**ALS ID** 3465059

<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	8	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	16.7	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)	<1.0	mg/L N	P285

**Sample Type** Water  
**Client ID** 4/4 Croagh SW17  
**Date Tested** 06/04/2019  
**ALS ID** 3465060

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	18.0	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)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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Report No: HYDR-569050419

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### CERTIFICATE OF ANALYSIS

**Date Received** 05/04/2019  
**Date Reported** 15/04/2019  
**Order Number** P1459

**Sample Type** Water  
**Client ID** 4/4 Croagh SW18  
**Date Tested** 06/04/2019  
**ALS ID** 3465061

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	17.9	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** 4/4 Croagh SW19  
**Date Tested** 06/04/2019  
**ALS ID** 3465062

<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	<5	mg/l O2	P280
Orthophosphate	<0.02	mg/l P	P281
Chloride	16.8	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)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*



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Report No: HYDR-412200320

Document No: EF0011

## SUPPLEMENTARY CERTIFICATE OF ANALYSIS

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

**Date Received** 20/03/2020

**Date Reported** 01/04/2020

**Order Number** N/A

**For the Attention of:** Hydro Environmental Services

**Sample Reception** 3 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
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10. This supplementary certificate replaces the previous certificate which must be destroyed



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Report No: HYDR-412200320

Document No: EF0011

### SUPPLEMENTARY CERTIFICATE OF ANALYSIS

**Date Received** 20/03/2020  
**Date Reported** 01/04/2020  
**Order Number** N/A

**Sample Type** Water  
**Client ID** Access Rd Sw1  
**Date Tested** 20/03/2020  
**ALS ID** 3931124

<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	14.9	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)	<1.0	mg/L N	P285

**Sample Type** Water  
**Client ID** Access Rd Sw2  
**Date Tested** 20/03/2020  
**ALS ID** 3931125

<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	13.2	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)	<1.0	mg/L N	P285

Report Authorised by:

*Rosemary Thomas*





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Report No: HYDR-412200320

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### SUPPLEMENTARY CERTIFICATE OF ANALYSIS

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**Date Received** 20/03/2020  
**Date Reported** 01/04/2020  
**Order Number** N/A

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**Sample Type** Water  
**Client ID** Access Rd Sw3  
**Date Tested** 20/03/2020  
**ALS ID** 3931126

<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	<5.0	mg/l NO3	P281
Nitrite	<0.05	mg/l NO2	P281
Ammonia	0.02	mg/l NH3-N	P281
Nitrogen (Total)	<1.0	mg/L N	P285

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Report Authorised by:

*Rosemary Thomas*