

White Hill Wind Farm

Environmental Impact Assessment Report

Annex 7.1: Water Sampling Results

White Hill Wind Limited

Galetech Energy Services

Clondargan, Stradone, Co. Cavan Ireland

Telephone +353 49 555 5050

www.galetechenergy.com





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www.alsglobal.ie



08/10/2021

15/10/2021

N/A

Report No: HYDR-281081021

Date Received

Date Reported

Order Number

Document No: EF0011

CERTIFICATE OF ANALYSIS

Client Hydro Environmental Services

22 Lower Main Street

Dungarvan
Co. Waterford

Hydro Environmental Services

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

Comments N/A

For the Attention of:

Report Authorised by:

Rosemary Thomas
Environmental Chemistry Manager

Roseman

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
 08/10/2021

 Date Reported
 15/10/2021

Order Number N/A

Sample Type Surface Water

Client ID SW1 Whitehill SW1 07.10.2021

 Date Tested
 08/10/2021

 ALS ID
 4704508

| <u>Test</u> | Result | <u>Unit</u> | Method |
|--------------------------|--------|-------------|--------|
| Suspended Solids | <5 | mg / I | P202 |
| Phosphorus | <0.1 | mg/l P | P207 |
| BOD 5 day Total with ATU | <2 | mg/I O2 | P280 |
| Orthophosphate | < 0.02 | mg/l P | P281 |
| Chloride | 12.9 | mg/l Cl | P281 |
| Nitrate | 10.8 | mg/l NO3 | P281 |
| Nitrite | < 0.05 | mg/l NO2 | P281 |
| Ammonia | < 0.02 | mg/l NH3-N | P281 |
| Nitrogen (Total) | 2.5 | mg/L N | P285 |

Sample Type Surface Water

Client ID SW2 Whitehill SW1 07.10.2021

 Date Tested
 08/10/2021

 ALS ID
 4704509

| <u>Test</u> | Result | <u>Unit</u> | <u>Method</u> |
|--------------------------|--------|-------------|---------------|
| Suspended Solids | <5 | mg / I | 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 | 11.3 | 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) | 1.1 | mg/L N | P285 |

Report Authorised by:

Rosemany Thomas



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CERTIFICATE OF ANALYSIS

 Date Received
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 Date Reported
 15/10/2021

 Order Number
 N/A

Sample Type Surface Water

Client ID SW3 Whitehill SW1 07.10.2021

 Date Tested
 08/10/2021

 ALS ID
 4704510

| <u>Test</u> | Result | <u>Unit</u> | Method |
|--------------------------|--------|-------------|--------|
| Suspended Solids | <5 | mg / I | 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 | 11.5 | mg/l Cl | P281 |
| Nitrate | 5.7 | 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 SW4 Whitehill SW1 07.10.2021

 Date Tested
 08/10/2021

 ALS ID
 4704511

| <u>Test</u> | <u>Result</u> | <u>Unit</u> | Method |
|--------------------------|---------------|-------------|--------|
| Suspended Solids | <5 | mg / I | 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 | 11.9 | 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) | 1.3 | mg/L N | P285 |

Report Authorised by:

Rosemany Thomas



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27/05/2022

09/06/2022

P1547

Report No: HYDR-666270522

Date Submitted

Date Reported

Order Number

Document No: EF0011

CERTIFICATE OF ANALYSIS

Client Hydro Environmental Services

22 Lower Main Street

Dungarvan Co. Waterford

For the Attention of: Hydro Environmental Services

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

Comments N/A

Report Authorised by:

Rosemary Thomas

Environmental Chemistry Manager

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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-666270522

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CERTIFICATE OF ANALYSIS

 Date Submitted
 27/05/2022

 Date Reported
 09/06/2022

 Order Number
 P1547

Sample Type Water

 Client ID
 White Hill SW1

 Date Tested
 27/05/2022

 ALS ID
 5042260

| <u>Test</u> | Result | <u>Unit</u> | <u>Method</u> |
|-------------------------|--------|-------------|---------------|
| Suspended Solids | <5 | mg / I | P202 |
| Phosphorus | 0.10 | mg/I P | P207 |
| pH | 7.5 | pH units | P233 |
| BOD 5 day Total | 1 | mg/l O2 | P280 |
| Orthophosphate | < 0.02 | mg/I P | P281 |
| Ammonia | 0.05 | mg/l NH3-N | P281 |
| Nitrite | <0.01 | mg/l NO2N | P281 |
| Nitrate | <1.0 | mg/l NO3N | P281 |
| Total Oxidised Nitrogen | 0.49 | mg/I TON | P281 |
| Conductivity @ 20°C | 113 | μs/cm | P284 |
| Nitrogen (Total) | <1.0 | mg/L N | P285 |

Sample Type Water

Client ID White Hill SW2
Date Tested 27/05/2022
ALS ID 5042261

| Test Suspended Solids Phosphorus pH BOD 5 day Total Orthophosphate Ammonia Nitrite Nitrate Total Oxidised Nitrogen Conductivity @ 20°C | Result <5 <0.10 7.2 <1 <0.02 0.03 <0.01 <1.0 <0.25 101 | Unit mg / I mg / I mg/I P pH units mg/I O2 mg/I P mg/I NH3-N mg/I NO2N mg/I NO3N mg/I TON µs/cm | Method P202 P207 P233 P280 P281 P281 P281 P281 P281 P281 P284 |
|--|--|---|--|
| Conductivity @ 20°C Nitrogen (Total) | 101 <1.0 | μs/cm mg/L N | P284 P285 |
| | | | |

Report Authorised by:

Crosemany Thomas



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Report No: HYDR-666270522

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CERTIFICATE OF ANALYSIS

| Order Number | P1547 |
|----------------|------------|
| Date Reported | 09/06/2022 |
| Date Submitted | 27/05/2022 |

Sample Type Water
Client ID White Hill SW3
Date Tested 27/05/2022
ALS ID 5042262

| <u>Test</u> | <u>Result</u> | <u>Unit</u> | Method |
|-------------------------|---------------|-------------|--------|
| Suspended Solids | <5 | mg / I | P202 |
| Phosphorus | <0.10 | mg/l P | P207 |
| pH | 7.1 | pH units | P233 |
| BOD 5 day Total | 1 | mg/I O2 | P280 |
| Orthophosphate | 0.02 | mg/l P | P281 |
| Ammonia | 0.02 | mg/l NH3-N | P281 |
| Nitrite | <0.01 | mg/l NO2N | P281 |
| Nitrate | <1.0 | mg/l NO3N | P281 |
| Total Oxidised Nitrogen | <0.25 | mg/I TON | P281 |
| Conductivity @ 20°C | 95 | μs/cm | P284 |
| Nitrogen (Total) | <1.0 | mg/L N | P285 |

Sample TypeWaterClient IDWhite Hill SW4Date Tested27/05/2022ALS ID5042263

| Test Suspended Solids Phosphorus pH BOD 5 day Total Orthophosphate Ammonia Nitrite Nitrate Total Oxidised Nitrogen Conductivity @ 20°C | Result | Unit mg / I mg/I P pH units mg/I O2 mg/I P mg/I NH3-N mg/I NO2N mg/I NO3N | Method P202 P207 P233 P280 P281 P281 P281 P281 P281 P281 |
|--|------------|---|--|
| Conductivity @ 20°C Nitrogen (Total) | 95 <1.0 | μs/cm mg/L N | P284 P285 |
| | | | |

Report Authorised by:

- Thomas

