



APPENDIX 9-2

GROUNDWATER QUALITY REPORTS

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

Certificate Code: AR-25-M3-014158-01
Page Number: Page 1 of 15
PO reference:

Certificate of Analysis

Sample number	966-2025-00013810	Received on	11/04/2025
Your sample reference	25MW1	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	11/04/25 18:10	EW175	0.01		0.165	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	11/04/25 18:10	EW175	0.01		0.201	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	11/04/25 16:07	Ew001R	1		2.20	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	14/04/25 16:55	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	14/04/25 13:13	EW094	8		8.00	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	11/04/25 18:10	EW175	5		13.5	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	14/04/25 16:55	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	14/04/25 16:55	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	14/04/25 16:55	EW188	5		478	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	14/04/25 16:55	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							
Magnesium (Mg)	14/04/25 16:55	EW188	1.11		20.3	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	14/04/25 16:55	EW188			1240	µg/l	C6
Mercury - Dissolved [M3176]							
Mercury	14/04/25 16:55	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	14/04/25 16:55	EW188			<0.5	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	11/04/25 18:10	EW175	4.4		<4.4	mg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

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

Certificate Code: AR-25-M3-014158-01

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PO reference:

Certificate of Analysis

Sample number	966-2025-00013810	Received on	11/04/2025
Your sample reference	25MW1	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	11/04/25 18:10	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	11/04/25 18:10	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	11/04/25 18:10	EW175	0.01		0.0250	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	14/04/25 16:55	EW188	0.15		2.12	mg/l	C6
Sodium - Dissolved [M3184]							
Sodium (Na)	14/04/25 16:55	EW188	1.5		15.1	mg/l	C6
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	11/04/25 18:10	EW175	1		16.5	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	14/04/25 12:44	EW013	5		14.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	15/04/25 09:53	EW046	15		331	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	15/04/25 12:25	EW010	1		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	15/04/25 12:14	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C21-C40	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C6-C10	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 11/04/25 14:19		10		<10	µg/l	YA
Validation	* 11/04/25 14:19				0		
Validation	* 11/04/25 14:19				0		
Zinc - Dissolved [M3194]							
Zinc (Zn)	14/04/25 16:55	EW188	1		16.2	µg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

Client: Hydro-Environmental Services
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Certificate Code: AR-25-M3-014158-01
Page Number: Page 3 of 15
PO reference:

Certificate of Analysis

Sample number	966-2025-00013810	Received on	11/04/2025
Your sample reference	25MW1	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	10:00		

Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____



Aoife De Barra - Organics & Instrumentation Team Lead

30/04/2025

Client: Hydro-Environmental Services
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IRELAND

Certificate Code: AR-25-M3-014158-01
Page Number: Page 4 of 15
PO reference:

Certificate of Analysis

Sample number	966-2025-00013811	Received on	11/04/2025
Your sample reference	25MW2	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	11:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	11/04/25 18:10	EW175	0.01		0.164	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	11/04/25 18:10	EW175	0.01		0.200	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	11/04/25 16:07	Ew001R	1		1.90	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	14/04/25 16:56	EW188			0.110	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	14/04/25 13:13	EW094	8		10.0	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	11/04/25 18:10	EW175	5		15.9	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	14/04/25 16:56	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	14/04/25 16:56	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	14/04/25 16:56	EW188	5		5470	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	14/04/25 16:56	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							
Magnesium (Mg)	14/04/25 16:56	EW188	1.11		3.98	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	14/04/25 16:56	EW188			1010	µg/l	C6
Mercury - Dissolved [M3176]							
Mercury	14/04/25 16:56	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	14/04/25 16:56	EW188			0.572	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	11/04/25 18:10	EW175	4.4		<4.4	mg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

Client: Hydro-Environmental Services
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Certificate Code: AR-25-M3-014158-01
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Certificate of Analysis

Sample number	966-2025-00013811	Received on	11/04/2025
Your sample reference	25MW2	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	11:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	11/04/25 18:10	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	11/04/25 18:10	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	11/04/25 18:10	EW175	0.01		0.0340	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	14/04/25 16:56	EW188	0.15		1.10	mg/l	C6
Sodium - Dissolved [M3184]							
Sodium (Na)	14/04/25 16:56	EW188	1.5		8.83	mg/l	C6
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	11/04/25 18:10	EW175	1		4.09	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	14/04/25 12:44	EW013	5		30.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	15/04/25 09:53	EW046	15		285	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	15/04/25 12:25	EW010	1		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	15/04/25 12:14	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C21-C40	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C6-C10	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 11/04/25 14:19		10		<10	µg/l	YA
Validation	* 11/04/25 14:19				0		
Validation	* 11/04/25 14:19				0		
Zinc - Dissolved [M3194]							
Zinc (Zn)	14/04/25 16:56	EW188	1		14.1	µg/l	C6

Signed:



Aoife De Barra - Organics & Instrumentation Team Lead

30/04/2025

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IRELAND

Certificate Code: AR-25-M3-014158-01
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PO reference:

Certificate of Analysis

Sample number	966-2025-00013811	Received on	11/04/2025
Your sample reference	25MW2	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	11:00		

Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____



Aoife De Barra - Organics & Instrumentation Team Lead

30/04/2025

Client: Hydro-Environmental Services
22
Lower Main Street
Dungarvan
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IRELAND

Certificate Code: AR-25-M3-014158-01
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PO reference:

Certificate of Analysis

Sample number	966-2025-00013812	Received on	11/04/2025
Your sample reference	25MW3	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	12:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	11/04/25 18:10	EW175	0.01		0.198	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	11/04/25 18:10	EW175	0.01		0.241	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	11/04/25 16:07	Ew001R	1		1.50	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	14/04/25 16:56	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	14/04/25 13:13	EW094	8		9.00	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	11/04/25 18:10	EW175	5		18.9	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	14/04/25 16:56	EW188			1.03	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	14/04/25 16:56	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	14/04/25 16:56	EW188	5		43.0	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	14/04/25 16:56	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							
Magnesium (Mg)	14/04/25 16:56	EW188	1.11		26.3	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	14/04/25 16:56	EW188			533	µg/l	C6
Mercury - Dissolved [M3176]							
Mercury	14/04/25 16:56	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	14/04/25 16:56	EW188			6.30	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	11/04/25 18:10	EW175	4.4		<4.4	mg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

Client: Hydro-Environmental Services
22
Lower Main Street
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Waterford
IRELAND

Certificate Code: AR-25-M3-014158-01
Page Number: Page 8 of 15
PO reference:

Certificate of Analysis

Sample number	966-2025-00013812	Received on	11/04/2025
Your sample reference	25MW3	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	12:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	11/04/25 18:10	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	11/04/25 18:10	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	11/04/25 18:10	EW175	0.01		0.0290	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	14/04/25 16:56	EW188	0.15		3.53	mg/l	C6
Sodium - Dissolved [M3184]							
Sodium (Na)	14/04/25 16:56	EW188	1.5		22.0	mg/l	C6
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	11/04/25 18:10	EW175	1		15.2	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	14/04/25 12:43	EW013	5		85.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	15/04/25 09:54	EW046	15		738	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	15/04/25 12:25	EW010	1		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	15/04/25 12:14	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C21-C40	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C6-C10	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 11/04/25 14:19		10		<10	µg/l	YA
Validation	* 11/04/25 14:19				0		
Validation	* 11/04/25 14:19				0		
Zinc - Dissolved [M3194]							
Zinc (Zn)	14/04/25 16:56	EW188	1		20.8	µg/l	C6

Signed:



Aoife De Barra - Organics & Instrumentation Team Lead

30/04/2025

Client: Hydro-Environmental Services
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Certificate Code: AR-25-M3-014158-01
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PO reference:

Certificate of Analysis

Sample number	966-2025-00013812	Received on	11/04/2025
Your sample reference	25MW3	Analysis started on	11/04/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	12:00		

Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____



Aoife De Barra - Organics & Instrumentation Team Lead

30/04/2025

Client: Hydro-Environmental Services
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Certificate Code: AR-25-M3-014158-01
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Certificate of Analysis

Sample number	966-2025-00013813	Received on	11/04/2025
Your sample reference	SWA	Analysis started on	11/04/2025
Sample Matrix	Surface water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	13:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	11/04/25 18:10	EW175	0.01		0.353	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	11/04/25 18:10	EW175	0.01		0.430	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	11/04/25 16:07	Ew001R	1		1.90	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	14/04/25 16:56	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	15/04/25 10:11	EW094	8		38.0	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	11/04/25 18:10	EW175	5		19.1	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	14/04/25 16:56	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	14/04/25 16:56	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	14/04/25 16:56	EW188	5		1000	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	14/04/25 16:56	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							
Magnesium (Mg)	14/04/25 16:56	EW188	1.11		1.46	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	14/04/25 16:56	EW188			6.76	µg/l	C6
Mercury - Dissolved [M3176]							
Mercury	14/04/25 16:56	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	14/04/25 16:56	EW188			<0.5	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	11/04/25 18:10	EW175	1		1.13	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	11/04/25 18:10	EW175	4.4		5.01	mg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

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

Certificate Code: AR-25-M3-014158-01

Page Number: Page 11 of 15

PO reference:

Certificate of Analysis

Sample number	966-2025-00013813	Received on	11/04/2025
Your sample reference	SWA	Analysis started on	11/04/2025
Sample Matrix	Surface water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	13:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	11/04/25 18:10	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	11/04/25 18:10	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	11/04/25 18:10	EW175	0.01		0.0250	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	14/04/25 16:56	EW188	0.15		0.307	mg/l	C6
Sodium - Dissolved [M3184]							
Sodium (Na)	14/04/25 16:56	EW188	1.5		9.80	mg/l	C6
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	14/04/25 12:44	EW013	5		<5	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	15/04/25 09:54	EW046	15		149	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	16/04/25 13:10	EW010	1		0.00	mg/l	
Total Nitrogen [M3007]							
Total Nitrogen	16/04/25 13:02	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	11/04/25 18:10	EW175	1		1.13	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C21-C40	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C6-C10	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 11/04/25 14:19		10		<10	µg/l	YA
Validation	* 11/04/25 14:19				0		
Validation	* 11/04/25 14:19				0		
Zinc - Dissolved [M3194]							
Zinc (Zn)	14/04/25 16:56	EW188	1		4.20	µg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

Client: Hydro-Environmental Services
22
Lower Main Street
Dungarvan
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Waterford
IRELAND

Certificate Code: AR-25-M3-014158-01
Page Number: Page 12 of 15
PO reference:

Certificate of Analysis

Sample number	966-2025-00013813	Received on	11/04/2025
Your sample reference	SWA	Analysis started on	11/04/2025
Sample Matrix	Surface water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	13:00		

Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____



Aoife De Barra - Organics & Instrumentation Team Lead

30/04/2025

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

Certificate Code: AR-25-M3-014158-01
Page Number: Page 13 of 15
PO reference:

Certificate of Analysis

Sample number	966-2025-00013814	Received on	11/04/2025
Your sample reference	SWB	Analysis started on	11/04/2025
Sample Matrix	Surface water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	13:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	11/04/25 18:10	EW175	0.01		0.0480	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	11/04/25 18:10	EW175	0.01		0.0590	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	11/04/25 16:07	Ew001R	1		<1	mg/l	
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	14/04/25 16:56	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	15/04/25 10:11	EW094	8		9.00	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	11/04/25 18:10	EW175	5		15.7	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	14/04/25 16:56	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	14/04/25 16:56	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	14/04/25 16:56	EW188	5		227	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	14/04/25 16:56	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							
Magnesium (Mg)	14/04/25 16:56	EW188	1.11		1.20	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	14/04/25 16:56	EW188			6.58	µg/l	C6
Mercury - Dissolved [M3176]							
Mercury	14/04/25 16:56	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	14/04/25 16:56	EW188			<0.5	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	11/04/25 18:10	EW175	4.4		<4.4	mg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

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

Certificate Code: AR-25-M3-014158-01

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PO reference:

Certificate of Analysis

Sample number	966-2025-00013814	Received on	11/04/2025
Your sample reference	SWB	Analysis started on	11/04/2025
Sample Matrix	Surface water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	13:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	11/04/25 18:10	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	11/04/25 18:10	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	11/04/25 18:10	EW175	0.01		0.0300	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	14/04/25 16:56	EW188	0.15		0.275	mg/l	C6
Sodium - Dissolved [M3184]							
Sodium (Na)	14/04/25 16:56	EW188	1.5		8.32	mg/l	C6
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	11/04/25 18:10	EW175	1		1.59	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	14/04/25 12:43	EW013	5		<5	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	15/04/25 09:54	EW046	15		91.0	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	15/04/25 12:25	EW010	1		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	15/04/25 12:14	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	11/04/25 18:10	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C21-C40	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH >C6-C10	* 11/04/25 14:19		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 11/04/25 14:19		10		<10	µg/l	YA
Validation	* 11/04/25 14:19				0		
Validation	* 11/04/25 14:19				0		
Zinc - Dissolved [M3194]							
Zinc (Zn)	14/04/25 16:56	EW188	1		8.16	µg/l	C6

Signed:



30/04/2025

Aoife De Barra - Organics & Instrumentation Team Lead

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

Certificate Code: AR-25-M3-014158-01
Page Number: Page 15 of 15
PO reference:

Certificate of Analysis

Sample number	966-2025-00013814	Received on	11/04/2025
Your sample reference	SWB	Analysis started on	11/04/2025
Sample Matrix	Surface water		
Sample Condition on Arrival	Satisfactory	Sample Date	10/04/2025
Time Sampled	13:00		

Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

NOTES

- This Report shall not be reproduced, except in full, without the permission of the Laboratory and only relates to the items tested.
- SPEC = Allowable limit or parametric value.
- LOQ = Limit of Quantification or lowest value that can be reported.
- ACCRED = Indicates accreditation for the test, a blank field indicates not accredited.
- * indicates the test was sub-contracted, "D" indicates the analysis was performed in Dublin and "C" indicates the analysis performed in Cork.
- The sampling date was not communicated; this may impact the validity of the results unless provided.
- 7A. This test was conducted outside of recommended best practice holding time; this may impact the accreditation status/validity of the result. The result will still be technically sound in terms of the method and associated quality controls
- 7B. No time of sampling was supplied, a default time of 00:00:00 will be assumed for holding time calculations unless provided. This may impact the validity of the results.
- 7C. Your sample arrived into the laboratory already outside of the recommended holding time, and outside the holding time window for which we have validated the test(s) identified. As such the test conducted doesn't meet the criteria to provide an accredited result. The result will still be technically sound and conducted using an accredited method.
- 7D. The sample was received close to or outside of the recommended best practice holding time; this may impact the accreditation status of the result.
- This notification is based on the numerical result for the test without consideration of the uncertainty of measurement of the result, unless otherwise agreed in writing. Uncertainty of measurement has been calculated for all INAB accredited tests and is available upon request.
- Report is issued as per our standard T&C of sale.

Signed: _____



Aoife De Barra - Organics & Instrumentation Team Lead

30/04/2025

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

Certificate Code: AR-26-M3-003654-01
Page Number: Page 1 of 16
PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003424	Received on	06/02/2026
Your sample reference	25MW1	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	09:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	06/02/26 15:26	EW175	0.01		0.0350	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	06/02/26 15:26	EW175	0.01		0.0420	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	06/02/26 12:15	Ew001R	1		1.80	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	06/02/26 16:39	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
COD	09/02/26 10:40	EW094	8		<8	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	06/02/26 15:26	EW175	5		14.4	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	06/02/26 16:39	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	06/02/26 16:39	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	06/02/26 16:39	EW188	5		1120	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	06/02/26 16:39	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

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

Certificate Code: AR-26-M3-003654-01
Page Number: Page 2 of 16
PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003424	Received on	06/02/2026
Your sample reference	25MW1	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	09:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Magnesium (Mg)	06/02/26 16:39	EW188	1.11		20.1	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	06/02/26 16:39	EW188			1580	µg/l	C6
Mercury - Dissolved [M3176]							
Mercury	06/02/26 16:39	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	06/02/26 16:39	EW188			0.500	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	06/02/26 15:26	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	06/02/26 15:26	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	06/02/26 15:26	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	06/02/26 15:26	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	06/02/26 15:26	EW175	0.01		0.0120	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	06/02/26 16:39	EW188	0.15		2.15	mg/l	C6
Sodium - Dissolved [M3184]							
Sodium (Na)	06/02/26 16:39	EW188	1.5		15.3	mg/l	C6

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

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

Certificate Code: AR-26-M3-003654-01
Page Number: Page 3 of 16
PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003424	Received on	06/02/2026
Your sample reference	25MW1	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	09:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	06/02/26 15:26	EW175	1		13.5	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	06/02/26 15:28	EW013	5		27.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	06/02/26 15:21	EW046	15		305	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	13/02/26 16:27	EW010	2		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	13/02/26 16:21	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	06/02/26 15:26	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C21-C40	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C6-C10	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 06/02/26 11:31		10		<10	µg/l	YA
Validation	* 06/02/26 11:31				Done		
Validation	* 06/02/26 11:31				Done		
Zinc - Dissolved [M3194]							
Zinc (Zn)	06/02/26 16:39	EW188	1		143	µg/l	C6

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

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

Certificate Code: AR-26-M3-003654-01
Page Number: Page 4 of 16
PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003425	Received on	06/02/2026
Your sample reference	25MW2	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	10:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	06/02/26 15:26	EW175	0.01		0.123	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	06/02/26 15:26	EW175	0.01		0.149	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	06/02/26 12:15	Ew001R	1		1.80	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	06/02/26 16:39	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
COD	09/02/26 10:40	EW094	8		10.0	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	06/02/26 15:26	EW175	5		10.9	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	06/02/26 16:39	EW188			1.01	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	06/02/26 16:39	EW188	0.003		0.00400	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	06/02/26 16:39	EW188	5		4090	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	06/02/26 16:39	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

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

Certificate Code: AR-26-M3-003654-01
Page Number: Page 5 of 16
PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003425		Received on		06/02/2026			
Your sample reference	25MW2		Analysis started on		06/02/2026			
Sample Matrix	Ground water							
Sample Date	05/02/2026		Time Sampled		10:00			
Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								
Magnesium (Mg)	06/02/26	16:39	EW188	1.11		3.76	mg/l	C6
Manganese - Dissolved [M3175]								
Manganese (Mn)	06/02/26	16:39	EW188			912	µg/l	C6
Mercury - Dissolved [M3176]								
Mercury	06/02/26	16:39	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]								
Nickel (Ni)	06/02/26	16:39	EW188			1.43	µg/l	C6
Nitrate (as N) - Gallery [M301A]								
Nitrate (as N) - Gallery	06/02/26	15:26	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]								
Nitrate as NO3 (Calc) - Gallery	06/02/26	15:26	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]								
Nitrite (as N) - Gallery	06/02/26	15:26	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]								
Nitrite as NO2 (Calc) - Gallery	06/02/26	15:26	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]								
Phosphate (Ortho/MRP) as P - Gallery	06/02/26	15:26	EW175	0.01		0.0140	mg/l	C6
Potassium - Dissolved [M3180]								
Potassium (K)	06/02/26	16:39	EW188	0.15		1.18	mg/l	C6
Sodium - Dissolved [M3184]								
Sodium (Na)	06/02/26	16:39	EW188	1.5		7.54	mg/l	C6

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

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

Certificate Code: AR-26-M3-003654-01
Page Number: Page 6 of 16
PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003425	Received on	06/02/2026
Your sample reference	25MW2	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	10:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	06/02/26 15:26	EW175	1		6.50	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	06/02/26 15:28	EW013	5		14.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	06/02/26 15:22	EW046	15		131	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	16/02/26 12:47	EW010	2		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	16/02/26 12:32	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	06/02/26 15:26	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C21-C40	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C6-C10	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 06/02/26 11:31		10		<10	µg/l	YA
Validation	* 06/02/26 11:31				Done		
Validation	* 06/02/26 11:31				Done		
Zinc - Dissolved [M3194]							
Zinc (Zn)	06/02/26 16:39	EW188	1		135	µg/l	C6

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

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Anitta Shaji - Shift Coordinator CIE016

26/02/2026

Client: Hydro-Environmental Services
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Certificate of Analysis

Sample number	966-2026-00003426	Received on	06/02/2026
Your sample reference	25MW3	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	11:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	06/02/26 15:26	EW175	0.01		0.0410	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	06/02/26 15:26	EW175	0.01		0.0490	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	06/02/26 12:15	Ew001R	1		2.90	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	06/02/26 16:39	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
COD	09/02/26 10:40	EW094	8		9.00	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	06/02/26 15:26	EW175	5		19.4	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	06/02/26 16:39	EW188			1.65	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	06/02/26 16:39	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	06/02/26 16:39	EW188	5		21.1	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	06/02/26 16:39	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							

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Anitta Shaji - Shift Coordinator CIE016

26/02/2026

Client: Hydro-Environmental Services
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Certificate Code: AR-26-M3-003654-01
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PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003426	Received on	06/02/2026
Your sample reference	25MW3	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	11:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Magnesium (Mg)	06/02/26 16:39	EW188	1.11		21.4	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	06/02/26 16:39	EW188			953	µg/l	C6
Mercury - Dissolved [M3176]							
Mercury	06/02/26 16:39	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	06/02/26 16:39	EW188			4.98	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	06/02/26 15:26	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	06/02/26 15:26	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	06/02/26 15:26	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	06/02/26 15:26	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	06/02/26 15:26	EW175	0.01		<0.01	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	06/02/26 16:39	EW188	0.15		3.36	mg/l	C6
Sodium - Dissolved [M3184]							
Sodium (Na)	06/02/26 16:39	EW188	1.5		12.8	mg/l	C6

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Certificate Code: AR-26-M3-003654-01
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PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003426	Received on	06/02/2026
Your sample reference	25MW3	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	11:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	06/02/26 15:26	EW175	1		7.56	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	06/02/26 15:28	EW013	5		23.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	06/02/26 15:21	EW046	15		306	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	13/02/26 16:27	EW010	2		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	13/02/26 16:21	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	06/02/26 15:26	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C21-C40	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C6-C10	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 06/02/26 11:31		10		<10	µg/l	YA
Validation	* 06/02/26 11:31				Done		
Validation	* 06/02/26 11:31				Done		
Zinc - Dissolved [M3194]							
Zinc (Zn)	06/02/26 16:39	EW188	1		44.3	µg/l	C6

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

Client: Hydro-Environmental Services
22
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Certificate Code: AR-26-M3-003654-01
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Certificate of Analysis

Sample number	966-2026-00003427	Received on	06/02/2026
Your sample reference	25MW4	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	12:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	06/02/26 15:26	EW175	0.01		0.159	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	06/02/26 15:26	EW175	0.01		0.194	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	06/02/26 12:15	Ew001R	1		2.60	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	06/02/26 16:39	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
COD	09/02/26 10:40	EW094	8		10.0	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	06/02/26 15:26	EW175	5		21.5	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	06/02/26 16:39	EW188			1.57	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	06/02/26 16:39	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	06/02/26 16:39	EW188	5		800	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	06/02/26 16:39	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							

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Anitta Shaji - Shift Coordinator CIE016

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Client: Hydro-Environmental Services
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Certificate Code: AR-26-M3-003654-01
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PO reference: P1249-9

Certificate of Analysis

Sample number	966-2026-00003427		Received on		06/02/2026			
Your sample reference	25MW4		Analysis started on		06/02/2026			
Sample Matrix	Ground water							
Sample Date	05/02/2026		Time Sampled		12:00			
Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								
Magnesium (Mg)	06/02/26	16:39	EW188	1.11		20.3	mg/l	C6
Manganese - Dissolved [M3175]								
Manganese (Mn)	06/02/26	16:39	EW188			509	µg/l	C6
Mercury - Dissolved [M3176]								
Mercury	06/02/26	16:39	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]								
Nickel (Ni)	06/02/26	16:39	EW188			4.05	µg/l	C6
Nitrate (as N) - Gallery [M301A]								
Nitrate (as N) - Gallery	06/02/26	15:26	EW175	1		1.24	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]								
Nitrate as NO3 (Calc) - Gallery	06/02/26	15:26	EW175	4.4		5.50	mg/l	C6
Nitrite (as N) - Gallery [M3016]								
Nitrite (as N) - Gallery	06/02/26	15:26	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]								
Nitrite as NO2 (Calc) - Gallery	06/02/26	15:26	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]								
Phosphate (Ortho/MRP) as P - Gallery	06/02/26	15:26	EW175	0.01		<0.01	mg/l	C6
Potassium - Dissolved [M3180]								
Potassium (K)	06/02/26	16:39	EW188	0.15		8.34	mg/l	C6
Sodium - Dissolved [M3184]								
Sodium (Na)	06/02/26	16:39	EW188	1.5		20.2	mg/l	C6

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Anitta Shaji - Shift Coordinator CIE016

26/02/2026

Client: Hydro-Environmental Services
22
Lower Main Street
Dungarvan
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IRELAND

Certificate Code: AR-26-M3-003654-01

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Certificate of Analysis

Sample number	966-2026-00003427	Received on	06/02/2026
Your sample reference	25MW4	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	12:00

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	06/02/26 15:26	EW175	1		7.44	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	06/02/26 15:28	EW013	5		85.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	06/02/26 15:21	EW046	15		409	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	16/02/26 12:47	EW010	2		0.343	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	16/02/26 12:32	EW140	1		1.59	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	06/02/26 15:26	EW175	1		1.24	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C21-C40	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C6-C10	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 06/02/26 11:31		10		<10	µg/l	YA
Validation	* 06/02/26 11:31				DONE		
Validation	* 06/02/26 11:31				DONE		
Zinc - Dissolved [M3194]							
Zinc (Zn)	06/02/26 16:39	EW188	1		36.8	µg/l	C6

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

Client: Hydro-Environmental Services
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Certificate Code: AR-26-M3-003654-01
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Certificate of Analysis

Sample number	966-2026-00003428	Received on	06/02/2026
Your sample reference	25MW5	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	13:30

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Ammonia as N - Gallery [M300Z]							
Ammonia as N - Gallery	06/02/26 15:26	EW175	0.01		0.210	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	06/02/26 15:26	EW175	0.01		0.255	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	06/02/26 12:15	Ew001R	1		5.30	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	06/02/26 16:39	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
COD	09/02/26 10:40	EW094	8		516	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	06/02/26 15:26	EW175	5		38.8	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	06/02/26 16:39	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	06/02/26 16:39	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	06/02/26 16:39	EW188	5		4030	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	06/02/26 16:39	EW188	0.51		<0.51	µg/l	C6
Magnesium - Dissolved [M3174]							

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Anitta Shaji - Shift Coordinator CIE016

26/02/2026

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Certificate Code: AR-26-M3-003654-01
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Certificate of Analysis

Sample number	966-2026-00003428		Received on		06/02/2026			
Your sample reference	25MW5		Analysis started on		06/02/2026			
Sample Matrix	Ground water							
Sample Date	05/02/2026		Time Sampled		13:30			
Test Code	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Analyte								
Magnesium (Mg)	06/02/26	16:39	EW188	1.11		19.4	mg/l	C6
Manganese - Dissolved [M3175]								
Manganese (Mn)	06/02/26	16:39	EW188			1320	µg/l	C6
Mercury - Dissolved [M3176]								
Mercury	06/02/26	16:39	EW188	0.03		<0.03	µg/l	C6
Nickel - Dissolved [M3178]								
Nickel (Ni)	06/02/26	16:39	EW188			14.6	µg/l	C6
Nitrate (as N) - Gallery [M301A]								
Nitrate (as N) - Gallery	06/02/26	15:26	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]								
Nitrate as NO3 (Calc) - Gallery	06/02/26	15:26	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]								
Nitrite (as N) - Gallery	06/02/26	15:26	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]								
Nitrite as NO2 (Calc) - Gallery	06/02/26	15:26	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]								
Phosphate (Ortho/MRP) as P - Gallery	06/02/26	15:26	EW175	0.01		0.0170	mg/l	C6
Potassium - Dissolved [M3180]								
Potassium (K)	06/02/26	16:39	EW188	0.15		7.23	mg/l	C6
Sodium - Dissolved [M3184]								
Sodium (Na)	06/02/26	16:39	EW188	1.5		46.6	mg/l	C6

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Anitta Shaji - Shift Coordinator CIE016

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Certificate Code: AR-26-M3-003654-01
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Certificate of Analysis

Sample number	966-2026-00003428	Received on	06/02/2026
Your sample reference	25MW5	Analysis started on	06/02/2026
Sample Matrix	Ground water		
Sample Date	05/02/2026	Time Sampled	13:30

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	06/02/26 15:26	EW175	1		27.5	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	06/02/26 15:28	EW013	5		4460	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	06/02/26 15:21	EW046	15		495	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	19/02/26 09:35	EW010	2		2.39	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	19/02/26 09:26	EW140	1		2.39	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	06/02/26 15:26	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C21-C40	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH >C6-C10	* 06/02/26 11:31		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 06/02/26 11:31		10		<10	µg/l	YA
Validation	* 06/02/26 11:31				Done		
Validation	* 06/02/26 11:31				Done		
Zinc - Dissolved [M3194]							
Zinc (Zn)	06/02/26 16:39	EW188	1		105	µg/l	C6

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
YA: Accredited (External Subcontractor)

Signed: _____

Anitta Shaji - Shift Coordinator CIE016

26/02/2026

Client: Hydro-Environmental Services
22
Lower Main Street
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Certificate Code: AR-26-M3-003654-01

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NOTES

1. This Report shall not be reproduced, except in full, without the permission of the Laboratory and only relates to the items tested.
2. SPEC = Allowable limit or parametric value.
3. LOQ = Limit of Quantification or lowest value that can be reported.
4. ACCRED = Indicates accreditation for the test, a blank field indicates not accredited.
5. * indicates the test was sub-contracted, "D" indicates the analysis was performed in Dublin and "C" indicates the analysis performed in Cork.
6. The sampling date was not communicated; this may impact the validity of the results unless provided.
- 7A. This test was conducted outside of recommended best practice holding time; this may impact the validity of the result while the accreditation status of the test result will stay unaffected.
- 7B. No time of sampling was supplied, a default time of 00:00:00 will be assumed for holding time calculations unless provided. This may impact the validity of the results.
- 7C. Your sample arrived at the laboratory already outside of the recommended best practice holding time; this may impact the validity of the result while the accreditation status of the test result will stay unaffected.
- 7D. The sample was received close to the recommended best practice holding time; this may impact the validity of the result while the accreditation status of the test result will stay unaffected.
8. This notification is based on the numerical result for the test without consideration of the uncertainty of measurement of the result, unless otherwise agreed in writing. Uncertainty of measurement has been calculated for all INAB accredited tests and is available upon request.
9. Report is issued as per our standard T&C of sale.
10. \$ = Retest result reported.