

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

Certificate Code: AR-25-M3-025676-01
Page Number: Page 1 of 8
PO reference: P1687

Certificate of Analysis

Sample number	966-2025-00028285	Received on	24/07/2025
Your sample reference	P1687 MW1	Analysis started on	24/07/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
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	25/07/25 08:07 ^{7C}	EW175	0.01		0.0540	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	25/07/25 08:07	EW175	0.01		0.0660	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	24/07/25 17:29 ^{7C}	Ew001R	1		1.20	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	30/07/25 10:26	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	25/07/25 11:51 ^{7C}	EW094	8		<8	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	25/07/25 08:07 ^{7C}	EW175	5		8.69	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	30/07/25 10:26	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	30/07/25 10:26	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	30/07/25 10:26	EW188	5		1650	µg/l	
Lead - Dissolved [M3173]							
Lead (Pb)	30/07/25 10:26	EW188	0.51		<0.51	µg/l	C6

Signed:



15/08/2025

Aoife De Barra - Organics & Instrumentation Team Lead CIE016

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Sample number	966-2025-00028285	Received on	24/07/2025
Your sample reference	P1687 MW1	Analysis started on	24/07/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Magnesium - Dissolved [M3174]							
Magnesium (Mg)	30/07/25 10:26	EW188	1.11		29.2	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	30/07/25 10:26	EW188			545	µg/l	
Mercury - Dissolved [M3176]							
Mercury	30/07/25 10:26 ^{7C}	EW188	0.03		0.0430	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	30/07/25 10:26	EW188			2.09	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	25/07/25 08:07 ^{7C}	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	25/07/25 08:07 ^{7C}	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	25/07/25 08:07 ^{7C}	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	25/07/25 08:07 ^{7C}	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	25/07/25 08:07 ^{7C}	EW175	0.01		0.0100	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	30/07/25 10:26	EW188	0.15		2.65	mg/l	C6

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Your sample reference	P1687 MW1	Analysis started on	24/07/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sodium - Dissolved [M3184]							
Sodium (Na)	30/07/25 10:26	EW188	1.5		28.2	mg/l	C6
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	25/07/25 08:07 ^{7C}	EW175	1		5.58	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	25/07/25 10:40 ^{7C}	EW013	5		5.00	mg/l	C6
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	25/07/25 08:54 ^{7C}	EW046	15		311	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	28/07/25 14:03	EW010	2		0.00	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	28/07/25 09:17 ^{7C}	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	25/07/25 08:07 ^{7C}	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 25/07/25 13:30		0.1		<0.1	µg/l	
TPH >C21-C40	* 25/07/25 13:30		0.1		<0.1	µg/l	
TPH >C6-C10	* 25/07/25 13:30		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 25/07/25 13:30		10		<10	µg/l	YA
Validation	* 25/07/25 13:30				0		
Validation	* 25/07/25 13:30				0		

Zinc - Dissolved [M3194]

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Your sample reference	P1687 MW1	Analysis started on	24/07/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Zinc (Zn)	30/07/25 10:26	EW188	1		15.9	µg/l	C6

⁴ Accreditation Information

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

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Certificate of Analysis

Sample number	966-2025-00028286	Received on	24/07/2025
Your sample reference	P1687 MW2	Analysis started on	24/07/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
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	25/07/25 08:07 ^{7C}	EW175	0.01		3.23	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	25/07/25 08:07	EW175	0.01		3.93	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	24/07/25 17:29 ^{7C}	Ew001R	1		5.70	mg/l	C6
Cadmium - Dissolved [M3164]							
Cadmium (Cd)	30/07/25 10:33	EW188			<0.1	µg/l	C6
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	25/07/25 13:09 ^{7C}	EW094	8		96.0	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	25/07/25 08:07 ^{7C}	EW175	5		13.8	mg/l	C6
Chromium - Dissolved [M3166]							
Chromium (Cr)	30/07/25 10:33	EW188			<1	µg/l	C6
Copper - Dissolved [M3168]							
Copper (Cu)	30/07/25 10:33	EW188	0.003		<0.003	mg/l	C6
Iron - Dissolved [M3172]							
Iron (Fe)	30/07/25 10:33	EW188	5		135	µg/l	C6
Lead - Dissolved [M3173]							
Lead (Pb)	30/07/25 10:33	EW188	0.51		<0.51	µg/l	C6

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Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
Time Sampled	11:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Magnesium - Dissolved [M3174]							
Magnesium (Mg)	30/07/25 10:33	EW188	1.11		7.53	mg/l	C6
Manganese - Dissolved [M3175]							
Manganese (Mn)	30/07/25 10:33	EW188			1630	µg/l	
Mercury - Dissolved [M3176]							
Mercury	30/07/25 10:33 ^{7C}	EW188	0.03		0.0640	µg/l	C6
Nickel - Dissolved [M3178]							
Nickel (Ni)	30/07/25 10:33	EW188			6.75	µg/l	C6
Nitrate (as N) - Gallery [M301A]							
Nitrate (as N) - Gallery	25/07/25 08:07 ^{7C}	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]							
Nitrate as NO3 (Calc) - Gallery	25/07/25 08:07 ^{7C}	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]							
Nitrite (as N) - Gallery	25/07/25 08:07 ^{7C}	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]							
Nitrite as NO2 (Calc) - Gallery	25/07/25 08:07 ^{7C}	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]							
Phosphate (Ortho/MRP) as P - Gallery	25/07/25 08:07 ^{7C}	EW175	0.01		0.0610	mg/l	C6
Potassium - Dissolved [M3180]							
Potassium (K)	30/07/25 10:33	EW188	0.15		1.79	mg/l	C6

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Your sample reference	P1687 MW2	Analysis started on	24/07/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
Time Sampled	11:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sodium - Dissolved [M3184]							
Sodium (Na)	30/07/25 10:33	EW188	1.5		13.3	mg/l	C6
Sulphate mg/L - Gallery [M300N]							
Sulphate mg/L - Gallery	25/07/25 08:07 ^{7C}	EW175	1		18.7	mg/l	C6
Suspended Solids [M3002]							
Suspended Solids	25/07/25 10:40 ^{7C}	EW013	5		4790	mg/l	
Total Dissolved Solids (TDS) [M3006]							
Total dissolved solids @ 180°C	25/07/25 08:54 ^{7C}	EW046	15		305	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]							
Total Kjeldahl Nitrogen-TKN (CalcGallery)	30/07/25 09:51	EW010	2		5.92	mg/l	C6
Total Nitrogen [M3007]							
Total Nitrogen	30/07/25 09:44 ^{7C}	EW140	1		5.92	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]							
Total Oxidised Nitrogen (TON) as N - Gallery	25/07/25 08:07 ^{7C}	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]							
TPH >C10-C21	* 25/07/25 13:30		0.1		<0.1	µg/l	
TPH >C21-C40	* 25/07/25 13:30		0.1		<0.1	µg/l	
TPH >C6-C10	* 25/07/25 13:30		0.1		<0.1	µg/l	
TPH Total >C6-C40	* 25/07/25 13:30		10		<10	µg/l	YA
Validation	* 25/07/25 13:30				0		
Validation	* 25/07/25 13:30				0		

Zinc - Dissolved [M3194]

Signed: _____



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Certificate of Analysis

Sample number	966-2025-00028286	Received on	24/07/2025
Your sample reference	P1687 MW2	Analysis started on	24/07/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	23/06/2025
Time Sampled	11:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Zinc (Zn)	30/07/25 10:33	EW188	1		10.7	µg/l	C6

⁴ Accreditation Information

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

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.

Signed: _____



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15/08/2025

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Certificate Code: AR-25-M3-027992-01
Page Number: Page 1 of 8
PO reference:

Certificate of Analysis

Sample number	966-2025-00030786	Received on	15/08/2025
Your sample reference	P1687 MW1 Red Rock	Analysis started on	15/08/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	14/08/2025
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	15/08/25 16:34	EW175	0.01		0.0680	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	15/08/25 16:34	EW175	0.01		0.0820	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	15/08/25 16:29	Ew001R	1		<1	mg/l	C6
Cadmium mg/l [AN179]							
Cadmium (Cd)	*		0.0002		< 0.0002	mg/l	L8
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	20/08/25 17:08	EW094	8		<8	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	15/08/25 16:34	EW175	5		8.86	mg/l	C6
Chromium mg/l [AN181]							
Chromium (Cr)	*		0.001		< 0.001	mg/l	L8
Copper mg/l [AN186]							
Copper (Cu)	*		0.001		< 0.001	mg/l	L8
Iron mg/l [AN182]							
Iron (Fe)	*		0.005		< 0.005	mg/l	L8
Lead mg/l [AN177]							
Lead (Pb)	*		0.001		< 0.001	mg/l	L8

Signed:



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Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	14/08/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Magnesium mg/l [AN188]								
Magnesium (Mg)	*			0.02		26.4	mg/l	L8
Manganese mg/l [AN189]								
Manganese (Mn)	*			0.001		0.342	mg/l	L8
Mercury [AAS] mg/l [AN0AJ]								
Mercury (Hg)	*			0.0001		< 0.0001	mg/l	L8
Nickel mg/l [AN192]								
Nickel (Ni)	*			0.001		0.001	mg/l	L8
Nitrate (as N) - Gallery [M301A]								
Nitrate (as N) - Gallery		15/08/25 16:34	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]								
Nitrate as NO3 (Calc) - Gallery		15/08/25 16:34	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]								
Nitrite (as N) - Gallery		15/08/25 16:34	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]								
Nitrite as NO2 (Calc) - Gallery		15/08/25 16:34	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]								
Phosphate (Ortho/MRP) as P - Gallery		15/08/25 16:34	EW175	0.01		0.0100	mg/l	C6
Potassium mg/l [AN184]								
Potassium (K)	*			0.05		2.31	mg/l	L8

Signed:



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Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	14/08/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sodium mg/l [AN191]								
Sodium (Na)	*			0.05		25.3	mg/l	L8
Sulphate mg/L - Gallery [M300N]								
Sulphate mg/L - Gallery		15/08/25 16:34	EW175	1		3.97	mg/l	C6
Suspended Solids [M3002]								
Suspended Solids		18/08/25 12:14	EW013	5		17.0	mg/l	C6
Total Dissolved Solids (TDS) [M3006]								
Total dissolved solids @ 180°C		20/08/25 09:04	EW046	15		307	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]								
Total Kjeldahl Nitrogen-TKN (CalcGallery)		19/08/25 09:37	EW010	2		0.00	mg/l	C6
Total Nitrogen [M3007]								
Total Nitrogen		19/08/25 09:06	EW140	1		<1	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]								
Total Oxidised Nitrogen (TON) as N - Gallery		15/08/25 16:34	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]								
TPH >C10-C21	*	15/08/25 14:27		0.1		<0.1	µg/l	
TPH >C21-C40	*	15/08/25 14:27		0.1		<0.1	µg/l	
TPH >C6-C10	*	15/08/25 14:27		0.1		<0.1	µg/l	
TPH Total >C6-C40	*	15/08/25 14:27		10		<10	µg/l	YA
Validation	*	15/08/25 14:27				0		
Validation	*	15/08/25 14:27				0		

Zinc mg/l [AN210]

Signed: _____



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Sample number	966-2025-00030786	Received on	15/08/2025
Your sample reference	P1687 MW1 Red Rock	Analysis started on	15/08/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	14/08/2025
Time Sampled	10:00		

Test Code Analyte	SUB ⁵ Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Zinc (Zn)	*		0.002		< 0.002	mg/l	L8

⁴ Accreditation Information

C6: ISO/IEC 17025:2017 INAB 138-T
L8: DIN EN ISO/IEC 17025:2018 DAkkS D-PL-14078-01-00
YA: Accredited (External Subcontractor)

Signed:



08/09/2025

Aoife De Barra - Organics & Instrumentation Team Lead CIE016

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

Certificate Code: AR-25-M3-027992-01
Page Number: Page 5 of 8
PO reference:

Certificate of Analysis

Sample number	966-2025-00030787	Received on	15/08/2025
Your sample reference	P1687 MW2 Red Rock	Analysis started on	15/08/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	14/08/2025
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	15/08/25 16:34	EW175	0.01		1.54	mg/l	C6
Ammonia as NH3 (Calc) - Gallery [M3000]							
Ammonia as NH3 (Calc) - Gallery	15/08/25 16:34	EW175	0.01		1.88	mg/l	C6
Biochemical Oxygen Demand (BOD) Robotic Method [M304E]							
Biochemical oxygen demand (BOD) 5d by Robotic Method	15/08/25 17:36	Ew001R	1		<1	mg/l	C6
Cadmium mg/l [AN179]							
Cadmium (Cd)	*		0.0002		< 0.0002	mg/l	L8
Chemical Oxygen Demand (COD) [M3004]							
Chemical oxygen demand (COD)	20/08/25 17:08	EW094	8		21.0	mg/l	C6
Chloride mg/L - Gallery [M300S]							
Chloride mg/L - Gallery	15/08/25 16:34	EW175	5		12.9	mg/l	C6
Chromium mg/l [AN181]							
Chromium (Cr)	*		0.001		< 0.001	mg/l	L8
Copper mg/l [AN186]							
Copper (Cu)	*		0.001		< 0.001	mg/l	L8
Iron mg/l [AN182]							
Iron (Fe)	*		0.005		0.054	mg/l	L8
Lead mg/l [AN177]							
Lead (Pb)	*		0.001		< 0.001	mg/l	L8

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PO reference:

Certificate of Analysis

Sample number	966-2025-00030787	Received on	15/08/2025
Your sample reference	P1687 MW2 Red Rock	Analysis started on	15/08/2025
Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	14/08/2025
Time Sampled	11:00		

Test Code Analyte	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Magnesium mg/l [AN188]								
Magnesium (Mg)	*			0.02		10.7	mg/l	L8
Manganese mg/l [AN189]								
Manganese (Mn)	*			0.001		2.20	mg/l	L8
Mercury [AAS] mg/l [AN0AJ]								
Mercury (Hg)	*			0.0001		< 0.0001	mg/l	L8
Nickel mg/l [AN192]								
Nickel (Ni)	*			0.001		0.004	mg/l	L8
Nitrate (as N) - Gallery [M301A]								
Nitrate (as N) - Gallery		15/08/25 16:34	EW175	1		<1	mg/l	C6
Nitrate as NO3 (Calc) - Gallery [M300L]								
Nitrate as NO3 (Calc) - Gallery		15/08/25 16:34	EW175	4.4		<4.4	mg/l	C6
Nitrite (as N) - Gallery [M3016]								
Nitrite (as N) - Gallery		15/08/25 16:34	EW175	0.01		<0.01	mg/l	C6
Nitrite as NO2 (Calc) - Gallery [M300Y]								
Nitrite as NO2 (Calc) - Gallery		15/08/25 16:34	EW175	0.033		<0.033	mg/l	C6
Phosphate (Ortho/MRP) as P - Gallery [M300P]								
Phosphate (Ortho/MRP) as P - Gallery		15/08/25 16:34	EW175	0.01		0.0340	mg/l	C6
Potassium mg/l [AN184]								
Potassium (K)	*			0.05		1.59	mg/l	L8

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Sample Matrix	Ground water		
Sample Condition on Arrival	Satisfactory	Sample Date	14/08/2025
Time Sampled	11:00		

Test Code Analyte	SUB ⁵	Analysis Started	Method	LOQ ³	SPEC ²	Result	Units	ACCRED ⁴
Sodium mg/l [AN191]								
Sodium (Na)	*			0.05		12.6	mg/l	L8
Sulphate mg/L - Gallery [M300N]								
Sulphate mg/L - Gallery		15/08/25 16:34	EW175	1		9.62	mg/l	C6
Suspended Solids [M3002]								
Suspended Solids		18/08/25 12:15	EW013	5		1500	mg/l	C6
Total Dissolved Solids (TDS) [M3006]								
Total dissolved solids @ 180°C		20/08/25 09:04	EW046	15		299	mg/l	C6
Total Kjeldahl Nitrogen-TKN (CalcGallery) [M3128]								
Total Kjeldahl Nitrogen-TKN (CalcGallery)		19/08/25 09:37	EW010	2		1.90	mg/l	C6
Total Nitrogen [M3007]								
Total Nitrogen		19/08/25 09:06	EW140	1		1.90	mg/l	C6
Total Oxidised Nitrogen (TON) as N - Gallery [M300U]								
Total Oxidised Nitrogen (TON) as N - Gallery		15/08/25 16:34	EW175	1		<1	mg/l	C6
TPH 3 Band (C6-10-21-40) in water [M502B]								
TPH >C10-C21	*	15/08/25 14:27		0.1		<0.1	µg/l	
TPH >C21-C40	*	15/08/25 14:27		0.1		<0.1	µg/l	
TPH >C6-C10	*	15/08/25 14:27		0.1		<0.1	µg/l	
TPH Total >C6-C40	*	15/08/25 14:27		10		<10	µg/l	YA
Validation	*	15/08/25 14:27				0		
Validation	*	15/08/25 14:27				0		

Zinc mg/l [AN210]

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Certificate of Analysis

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

Signed:



08/09/2025

Aoife De Barra - Organics & Instrumentation Team Lead CIE016

© **HYDRO-ENVIRONMENTAL SERVICES**

22 Lower Main Street, Dungarvan, Co. Waterford, X35 HK11
T: +353-(0)58-441 22 F: +353-(0)58-442 44 E: info@hydroenvironmental.ie

www.hydroenvironmental.ie