



City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Customer

Pascal Rooney Monaghan County Council Water Services Monaghan

Certificate Of Analysis

Job Number: 16-18077

Issue Number:

Report Date: 4 July 2016

Site: Not Applicable
PO Number: Not Supplied

Date Samples Received: 13/06/2016

Please find attached the results for the samples received at our laboratory on 13/06/2016.

Should you have any queries regarding the report or require any further services, we would be happy to discuss your requirements. For additional information about the company please log-on to our website at the above address.

Authorised Date:

Thank you for choosing City Analysts Limited. We look forward to assisting you again.

Caitlin Quinn

Deputy Quality Manager

Notes:

Authorised By:

Results relate only to the items tested.

Information on methods of analysis and performance characteristics is available on request. Any opinions or interpretations indicated are outside the scope of our INAB accreditation.

This test report shall not be reproduced except in full or with written approval of City Analysts Limited.

Page 1 of 8 Template: 1146 Revision: 018

4 July 2016





Report Version: 1

City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Certificate Of Analysis

Pascal Rooney Monaghan County Council Water Services Monaghan

Customer

Site: Not Applicable

E287103 N303466 Killanny GWS Date of Sampling: 13/06/2016 Sample Description: Sample Type: Treated Date Sample Received: 13/06/2016

321810 Lab Reference Number:

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
S/S1016#	21/06/2016	1,2-Dichloroethane	< 0.50	ug/l	<= 3.00
D/D3001#	15/06/2016	Aluminium, Total	5.15	ug/l	<= 200.00
D/D3000#	15/06/2016	Ammonia as NH4	< 0.013	mg/l	<= 0.300
*U	-	Antimony	< 0.33	ug/l	<= 5.00
*U	-	Arsenic	0.37	ug/l	<= 10.00
S/S#	21/06/2016	Benzene	< 0.50	ug/l	<= 1.00
D/D3001#	14/06/2016	Boron	< 50.00	ug/l	<= 1000.00
U	-	Bromate as BrO3	< 0.30	ug/l	<= 10.00
U	-	Metaldehyde	< 0.01	ug/l	-
D/D3001#	15/06/2016	Cadmium	0.99	ug/l	<= 5.00
D/D3006	13/06/2016	Chlorine, Free	0.550	mg/l	-
D/D3000#	15/06/2016	Chloride	50.913	mg/l	<= 250.000
D/D3001#	15/06/2016	Chromium	3.76	ug/l	<= 50.00
D/D3010#	15/06/2016	Colour True	< 5.00	Hazen	NAC & ATC
D/D3011#	13/06/2016	Conductivity @ 20 ℃	496.0	uS/cm @20℃	<= 2500.0
D/D3001#	15/06/2016	Copper	25.15	ug/l	<= 2000.00
*U	-	Cyanide, Total	2.10	ug/l	<= 50.00
*U	-	Cypermethrin	< 0.00	ug/l	-
*	-	Epichlorohydrin	< 0.10	ug/l	<= 0.10

^{# =} INAB Accredited, U = UKAS Accredited, * = Subcontracted

Note:

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers.

Site D = Analysed at City Analysts Dublin. Site S = Analysed at City Analysts Shannon





Report Version: 1

City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Certificate Of Analysis

Customer Pascal Rooney

Monaghan County Council Water Services Monaghan

Site: Not Applicable

E287103 N303466 Killanny GWS Date of Sampling: 13/06/2016 Sample Description: Sample Type: Treated Date Sample Received: 13/06/2016

321810 Lab Reference Number:

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*U	-	Acrylamide	< 0.013	ug/l	<= 0.100
D/D3015#	20/06/2016	Fluoride	< 0.1	mg/l	<= 0.9
*U	-	Glyphosate	< 0.01	ug/l	-
D/D3001#	17/06/2016	Magnesium	7.351	mg/l	-
D/D3001#	15/06/2016	Iron	7.62	ug/l	<= 200.00
D/D3001#	15/06/2016	Lead	3.96	ug/l	<= 10.00
*U	-	Mercury	< 0.06	ug/l	<= 1.00
D/D3000#	15/06/2016	Nitrite as N	< 0.005	mg/l	-
D/D3000#	15/06/2016	Nitrate as N	< 2.000	mg/l	-
D/D3001#	15/06/2016	Nickel	2.92	ug/l	<= 20.00
D/	15/06/2016	Odour	0	N/A	-
D/	15/06/2016	Taste (Nature)	0	N/A	-
D/D1041#	13/06/2016	PH	7.29	pH Unit	6.50 - 9.50
*U	-	Selenium	0.20	ug/l	<= 10.00
D/D3001#	17/06/2016	Sodium	25.587	mg/l	<= 200.000
D/D3000#	16/06/2016	Sulphate	< 20.000	mg/l	<= 250.000
S/S1016#	21/06/2016	Tetrachloroethene	< 0.60	ug/l	<= 10.00
S/S3224#	16/06/2016	Total Organic Carbon	1.230	mg/l	NAC & ATC
S/S#	21/06/2016	Trichloroethene	< 0.60	ug/l	<= 10.00

^{# =} INAB Accredited, U = UKAS Accredited, * = Subcontracted

Note:

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers.

Site D = Analysed at City Analysts Dublin. Site S = Analysed at City Analysts Shannon





Report Version: 1

City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Certificate Of Analysis

Customer Pascal Rooney

Monaghan County Council Water Services Monaghan

Site: Not Applicable

E287103 N303466 Killanny GWS Date of Sampling: 13/06/2016 Sample Description: Sample Type: Treated Date Sample Received: 13/06/2016

321810 Lab Reference Number:

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
D/D3054#	15/06/2016	Turbidity	0.29	NTU	NAC & ATC
*U	-	Vinyl Chloride	< 0.50	ug/l	<= 0.10
D/D1214#	13/06/2016	Clostridium perfringens	< 1	cfu/100ml	<= 0
D/D1201#	13/06/2016	Coliforms	< 1.0	MPN/100ml	<= 0.0
D/D1201#	13/06/2016	E.coli	< 1.0	MPN/100ml	<= 0.0
D/D3200	13/06/2016	Faecal Enterococci	< 1.0	MPN/100ml	<= 0.0
D/D1208#	13/06/2016	TVC @ 22℃	< 1	cfu/ml	NAC
Acid Herbicide	es				
*U	-	2,3,6-TBA Trichlorobenzoic Acid	< 0.01	ug/l	-
*U	-	2,4,5-T	< 0.01	ug/l	-
*U	=	2,4,5-TP Fenoprop	< 0.01	ug/l	-
*U	-	2,4-D	< 0.01	ug/l	-
*U	-	2,4-DB	< 0.01	ug/l	-
*U	-	2,4-DP Dichlorprop	< 0.01	ug/l	-
*U	-	Asulam	< 0.01	ug/l	-
*U	-	Benazolin	< 0.01	ug/l	-
*U	-	Bentazone	< 0.00	ug/l	-
*U	-	Bromoxynil	< 0.00	ug/l	-
*U	-	Clopyralid	< 0.02	ug/l	-

^{# =} INAB Accredited, U = UKAS Accredited, * = Subcontracted

Note:

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers.

Site D = Analysed at City Analysts Dublin. Site S = Analysed at City Analysts Shannon





Report Version: 1

City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Certificate Of Analysis

Customer Pascal Rooney

Monaghan County Council Water Services Monaghan

Site: Not Applicable

E287103 N303466 Killanny GWS Date of Sampling: 13/06/2016 Sample Description: Sample Type: Treated Date Sample Received: 13/06/2016

321810 Lab Reference Number:

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*U	-	Dicamba	< 0.02	ug/l	-
*U	-	Fluroxypyr	< 0.01	ug/l	-
*U	-	Imazapyr	< 0.01	ug/l	-
*U	-	loxynil	< 0.00	ug/l	-
*U	-	MCPA	< 0.01	ug/l	-
*U	-	МСРВ	< 0.01	ug/l	-
*U	-	MCPP (Mecoprop)	< 0.00	ug/l	-
*U	-	Pentachlorophenol	< 0.01	ug/l	-
*U	-	Triclopyr	< 0.01	ug/l	-
Acid Herbicide	es				
*U	-	Clopyralid	< 0.01	ug/l	<= 0.10
*U	-	Fenoprop	< 0.01	ug/l	<= 0.10
OCP					
*U	-	Dieldrin	< 0.01	ug/l	<= 0.03
*U	-	p,p'-DDT	< 0.01	ug/l	<= 0.10
*U	-	Aldrin	< 0.01	ug/l	<= 0.03
*U	-	Alpha BHC	< 0.01	ug/l	<= 0.10
*U	-	Beta BHC	< 0.01	ug/l	<= 0.10
*U	-	Gamma BHC	< 0.01	ug/l	<= 0.10

^{# =} INAB Accredited, U = UKAS Accredited, * = Subcontracted

Note:

TVC - Total viable count

Site D = Analysed at City Analysts Dublin. Site S = Analysed at City Analysts Shannon

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers.





City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Certificate Of Analysis

Customer

Pascal Rooney Monaghan County Council Water Services Monaghan

Report Reference: 16-18077

Report Version: 1

Site: Not Applicable

E287103 N303466 Killanny GWS Date of Sampling: 13/06/2016 Sample Description: Sample Type: Treated Date Sample Received: 13/06/2016

321810 Lab Reference Number:

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)		
*U	-	Chlorothalonil	< 0.01	ug/l	<= 0.10		
*U	-	Dichlobenil	< 0.01	ug/l	<= 0.10		
*U	-	Alpha-Endosulphan	< 0.01	ug/l	<= 0.10		
*U	-	Endosulphan-beta	< 0.02	ug/l	<= 0.10		
*U	-	Endrin	< 0.01	ug/l	<= 0.10		
*U	-	Hexachlorobenzene	< 0.01	ug/l	<= 0.10		
*U	-	Heptachlor	< 0.01	ug/l	<= 0.03		
*U	-	Heptachlor Epoxide	< 0.01	ug/l	<= 0.03		
*U	-	Isodrin	< 0.01	ug/l	<= 0.10		
*U	-	Alachlor	< 0.01	ug/l	<= 0.03		
*U	-	Heptachlor-endo-epoxide	< 0.01	ug/l	<= 0.10		
*U	-	Heptachlor-exo-epoxide	< 0.01	ug/l	-		
OPP							
*U	-	Malathion	< 0.01	ug/l	<= 0.10		
*U	-	Chlorfenvinphos	< 0.01	ug/l	<= 0.10		
*U	-	Diflufenican	< 0.01	ug/l	<= 0.10		
*U	-	Propetamphos	< 0.01	ug/l	<= 0.10		
PAH EPA Suit	PAH EPA Suite (6 Constituents)						
*U	-	Fluoranthene	< 0.01	ug/l	-		

^{# =} INAB Accredited, U = UKAS Accredited, * = Subcontracted

Note:

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers.

Site D = Analysed at City Analysts Dublin. Site S = Analysed at City Analysts Shannon





Report Version: 1

City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Certificate Of Analysis

Customer Pascal Rooney

Monaghan County Council Water Services Monaghan

Site: Not Applicable

E287103 N303466 Killanny GWS Date of Sampling: 13/06/2016 Sample Description: Sample Type: Treated Date Sample Received: 13/06/2016

321810 Lab Reference Number:

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*U	-	Benzo(b)fluoranthene	< 0.01	ug/l	-
*U	-	Benzo(k)fluoranthene	< 0.01	ug/l	-
*U	-	Benzo(a)pyrene	< 0.01	ug/l	-
*U	-	Benzo(ghi)perylene	< 0.01	ug/l	-
*U	-	Ideno (123cd) pyrene	< 0.01	ug/l	-
*U	-	Anthracene	< 0.01	ug/l	-
*U	-	Total PAH	< 0.01	ug/l	<= 0.10
THM					•
S/S1016#	21/06/2016	Chloroform	15.92	ug/l	-
S/S1016#	21/06/2016	Bromodichloromethane	16.54	ug/l	-
S/S1016#	21/06/2016	Chlorodibromomethane	10.99	ug/l	-
S/S1016#	21/06/2016	Bromoform	1.78	ug/l	-
S/S1016#	21/06/2016	Total THM	45.23	ug/l	<= 100.00
Triazines					
*U	-	Atrazine	< 0.01	ug/l	<= 0.10
*U	-	Prometryn	< 0.01	ug/l	-
*U	-	Propazine	< 0.01	ug/l	<= 0.10
*U	-	Simazine	< 0.01	ug/l	<= 0.10
*U	-	Terbutryn	< 0.01	ug/l	<= 0.10

^{# =} INAB Accredited, U = UKAS Accredited, * = Subcontracted

Note:

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers.

Site D = Analysed at City Analysts Dublin. Site S = Analysed at City Analysts Shannon





Report Version: 1

City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Certificate Of Analysis

Customer Pascal Rooney

Monaghan County Council Water Services Monaghan

Site: Not Applicable

E287103 N303466 Killanny GWS Date of Sampling: 13/06/2016 Sample Description: Sample Type: Treated Date Sample Received: 13/06/2016

321810 Lab Reference Number:

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*U	-	Trietazine	< 0.01	ug/l	<= 0.10
*U	-	Fenpropimorph	< 0.01	ug/l	<= 0.10
*U	-	Pendimethalin	< 0.01	ug/l	<= 0.10
*U	-	Pirimicarb	< 0.01	ug/l	<= 0.10
Urons and Ca	nazoles				
*U	-	Chlorotoluron	< 0.01	ug/l	<= 0.10
*U	-	Diuron	< 0.01	ug/l	<= 0.10
*U	-	Isoproturon	< 0.01	ug/l	<= 0.10
*U	-	Linuron	< 0.01	ug/l	<= 0.10
*U	-	Monuron	< 0.01	ug/l	<= 0.10
*U	-	Methabenzthiazuron	< 0.01	ug/l	<= 0.10
*U	-	Metamitron	< 0.01	ug/l	<= 0.10
*U	-	Prothioconazole	< 0.01	ug/l	<= 0.10
*U	-	Tebuconazole	< 0.01	ug/l	<= 0.10
*U	-	Tebuthiuron	< 0.01	ug/l	<= 0.10
*U	-	Epoxiconazole	< 0.01	ug/l	<= 0.10
*U	-	Carbetamide	< 0.01	ug/l	<= 0.10
*U	-	Carbofuran	< 0.01	ug/l	<= 0.10
*U	-	Propiconazole	< 0.01	ug/l	<= 0.10

^{# =} INAB Accredited, U = UKAS Accredited, * = Subcontracted

Note:

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers.

Site D = Analysed at City Analysts Dublin. Site S = Analysed at City Analysts Shannon