

**Customer**

Pascal Rooney  
Irish Water  
Water Service  
Monaghan County Council  
Monaghan  
Monaghan

**Certificate Of Analysis**

**Job Number:** 16-15607  
**Issue Number:** 1  
**Report Date:** 21 April 2016

**Site:** Monaghan PWS  
**PO Number:** 51125947  
**Date Samples Received:** 24/03/2016

Please find attached the results for the samples received at our laboratory on 24/03/2016.

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.

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



**Authorised By:**

**Authorised Date:** 21 April 2016

Shane Wilmoth  
Chemistry Technical Manager

**Notes:**

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.

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**Report Reference:** 16-15607

**Report Version:** 1

**Site:** Monaghan PWS

**Sample Description:** N54.24363W006.98529 TeachNa Ndaoine

**Date of Sampling:** 24/03/2016

**Sample Type:** Treated

**Date Sample Received:** 24/03/2016

**Lab Reference Number:** 314704

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
S/S1016#	31/03/2016	1,2-Dichloroethane	< 0.50	ug/l	<= 3.00
D/D3001#	29/03/2016	Aluminium, Total	< 5.00	ug/l	<= 200.00
D/D3000#	29/03/2016	Ammonia as NH4	0.084	mg/l	<= 0.300
*U	-	Antimony	< 0.33	ug/l	<= 5.00
*U	-	Arsenic	0.70	ug/l	<= 10.00
S/S	31/03/2016	Benzene	< 0.50	ug/l	<= 1.00
D/D3001#	29/03/2016	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#	29/03/2016	Cadmium	0.20	ug/l	<= 5.00
D/D3006	24/03/2016	Chlorine, Free	0.420	mg/l	-
D/D3000#	29/03/2016	Chloride	17.681	mg/l	<= 250.000
D/D3001#	29/03/2016	Chromium	1.24	ug/l	<= 50.00
D/D3010#	29/03/2016	Colour True	< 5.00	Hazen	NAC & ATC
D/D3011#	24/03/2016	Conductivity @ 20 °C	417.0	uS/cm @20 °C	<= 2500.0
D/D3001#	29/03/2016	Copper	30.14	ug/l	<= 2000.00
*U	-	Cyanide, Total	3.50	ug/l	<= 50.00
*U	-	Cypermethrin	< 0.00	ug/l	-
*	-	Epichlorohydrin	< 0.10	ug/l	<= 0.10

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*U	-	Acrylamide	< 0.013	ug/l	<= 0.100
D/D3015#	29/03/2016	Fluoride	<b>0.9</b>	mg/l	<= 0.9
*U	-	Glyphosate	< 0.01	ug/l	-
D/D3001#	29/03/2016	Iron	37.34	ug/l	<= 200.00
D/D3001#	29/03/2016	Lead	2.52	ug/l	<= 10.00
D/D3001#	29/03/2016	Manganese	5.39	ug/l	<= 50.00
*U	-	Mercury	< 0.06	ug/l	<= 1.00
D/D3000#	29/03/2016	Nitrite as N02	< 0.066	mg/l	<= 0.500
D/D3000#	29/03/2016	Nitrate as N03	< 8.900	mg/l	<= 50.000
D/D3001#	29/03/2016	Nickel	1.25	ug/l	<= 20.00
D/	24/03/2016	Odour	0	N/A	-
D/	24/03/2016	Taste (Nature)	0	N/A	-
D/D1041#	24/03/2016	PH	7.12	pH Unit	6.50 - 9.50
*U	-	Selenium	< 0.16	ug/l	<= 10.00
D/D3001#		Sodium	29.880	mg/l	<= 200.000
D/D3000#	29/03/2016	Sulphate	70.254	mg/l	<= 250.000
S/S1016#	31/03/2016	Tetrachloroethene	< 0.60	ug/l	<= 10.00
S/S3224#	31/03/2016	Total Organic Carbon	1.660	mg/l	NAC & ATC
S/S#	31/03/2016	Trichloroethene	< 0.60	ug/l	<= 10.00

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### PV Limit breached

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Lab Reference Number: 314704

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
D/D3054#	29/03/2016	Turbidity	0.23	NTU	NAC & ATC
*U	-	Vinyl Chloride	< 0.50	ug/l	-
*	-	Pesticides Total	0.04	ug/l	-
D/D1214#	24/03/2016	Clostridium perfringens	< 1	cfu/100ml	<= 0
D/D1201#	24/03/2016	Coliforms	< 1.0	MPN/100ml	<= 0.0
D/D1201#	24/03/2016	E.coli	< 1.0	MPN/100ml	<= 0.0
D/D3200	24/03/2016	Faecal Enterococci	< 1.0	MPN/100ml	<= 0.0
D/D1208#	24/03/2016	TVC @ 22°C	< 1	cfu/ml	NAC
Acid Herbicides					
*U	-	2,4 D	< 0.01	ug/l	<= 0.10
*U	-	Bentazone	< 0.01	ug/l	<= 0.10
*U	-	Bromoxynil	< 0.01	ug/l	<= 0.10
*U	-	Clopyralid	< 0.02	ug/l	<= 0.10
*U	-	Dicamba	< 0.01	ug/l	<= 0.10
*U	-	Dichlorprop	< 0.01	ug/l	<= 0.10
*U	-	MCPA	< 0.01	ug/l	<= 0.10
*U	-	MCPB	< 0.01	ug/l	<= 0.10
*U	-	Mecoprop (Total)	0.03	ug/l	-
*U	-	Triclopyr	< 0.02	ug/l	-

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*U	-	Benazolin	< 0.01	ug/l	<= 0.10
*	-	2,3,6 TBA	< 0.01	ug/l	-
*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	-
*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
*U	-	Chlorothalonil	< 0.01	ug/l	-
*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

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*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	-	Chlorfenvinphos	< 0.01	ug/l	<= 0.10
*U	-	Diazinon	< 0.01	ug/l	<= 0.10
*U	-	Dichlorvos	< 0.01	ug/l	<= 0.10
*U	-	Dimethoate	< 0.01	ug/l	<= 0.10
*U	-	Malathion	< 0.01	ug/l	<= 0.10
*U	-	Propetamphos	< 0.01	ug/l	<= 0.10
PAH EPA Suite (6 Constituents)					
*U	-	Fluoranthene	< 0.01	ug/l	-
*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

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THM					
S/S1016#	31/03/2016	Chloroform	25.38	ug/l	-
S/S1016#	31/03/2016	Bromodichloromethane	15.39	ug/l	-
S/S1016#	31/03/2016	Chlorodibromomethane	8.29	ug/l	-
S/S1016#	31/03/2016	Bromoform	1.16	ug/l	-
S/S1016#	31/03/2016	Total THM	50.21	ug/l	<= 100.00
Triazines					
*U	-	Atrazine	< 0.01	ug/l	<= 0.10
*U	-	Prometryn	< 0.01	ug/l	-
*U	-	Propiconazole	< 0.01	ug/l	<= 0.10
*U	-	Propazine	< 0.01	ug/l	<= 0.10
*U	-	Simazine	< 0.01	ug/l	<= 0.10
*U	-	Terbutryn	< 0.01	ug/l	<= 0.10
*U	-	Trietazine	< 0.01	ug/l	<= 0.10
*U	-	Fenpropimorph	< 0.20	ug/l	<= 0.10
*U	-	Pendimethalin	< 0.20	ug/l	-
*U	-	Pirimicarb	< 0.20	ug/l	<= 0.10
*U	-	Propyzamide	< 0.01	ug/l	-
Urons and Canazoles					

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*U	-	Chlorotoluron	< 0.01	ug/l	-
*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

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