



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

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

Email:

reports@cityanalysts.ie

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Customer

Pascal Rooney
Irish Water
Water Service
Monaghan County Council
Monaghan
Monaghan

Certificate Of Analysis

Job Number: 16-20397

Issue Number: 1

Report Date: 29 September 2016

Site: Carrickmacross PWS

PO Number: 51125947

Date Samples Received: 22/08/2016

Please find attached the results for the samples received at our laboratory on 22/08/2016.

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: 29 September 2016

Caitlin Quinn

Deputy Quality 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.

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Site: Carrickmacross PWS

22/08/2016 Sample Description: Clough Valley Lower, Jim Marks Date of Sampling:

Sample Type: Treated Time of Sampling: 14:15

Lab Reference Number: 329702 Date Sample Received: 22/08/2016

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
S/S1016#	13/09/2016	1,2-Dichloroethane	< 0.50	ug/l	<= 3.00
D/D3001#	26/08/2016	Aluminium, Total	29.24	ug/l	<= 200.00
D/D3000#	25/08/2016	Ammonia as NH4	0.033	mg/l	<= 0.300
*U	-	Antimony	0.87	ug/l	<= 5.00
*U	-	Arsenic	0.24	ug/l	<= 10.00
S/S#	13/09/2016	Benzene	< 0.50	ug/l	<= 1.00
D/D3001#	26/08/2016	Boron	< 50.00	ug/l	<= 1000.00
U	-	Bromate as BrO3	< 0.60	ug/l	<= 10.00
U	-	Metaldehyde	< 0.01	ug/l	-
D/D3001#	29/08/2016	Cadmium	0.30	ug/l	<= 5.00
	22/08/2016	Chlorine, Free Onsite	0.280	mg/l	-
D/D3000#	25/08/2016	Chloride	20.879	mg/l	<= 250.000
D/D3001#	29/08/2016	Chromium	0.87	ug/l	<= 50.00
D/D3010#	26/08/2016	Colour True	< 5.00	Hazen	NAC & ATC
D/D3011#	23/08/2016	Conductivity @ 20 ℃	447.0	uS/cm @20°C	<= 2500.0
D/D3001#	26/08/2016	Copper	6.78	ug/l	<= 2000.00
*	-	Epichlorohydrin	< 0.10	ug/l	<= 0.10
*U	-	Acrylamide	< 0.013	ug/l	<= 0.100

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D/D3015#	25/08/2016	Fluoride	0.7	mg/l	<= 0.9
*U	-	Glyphosate	< 0.01	ug/l	-
D/D3001#	26/08/2016	Iron	< 7.20	ug/l	<= 200.00
D/D3001#	29/08/2016	Lead	0.90	ug/l	<= 10.00
D/D3001#	26/08/2016	Manganese	< 0.70	ug/l	<= 50.00
*U	-	Mercury	< 0.06	ug/l	<= 1.00
D/D3000#	25/08/2016	Nitrite as N02	< 0.066	mg/l	<= 0.500
D/D3000#	25/08/2016	Nitrate as N03	11.785	mg/l	<= 50.000
D/D3001#	29/08/2016	Nickel	0.75	ug/l	<= 20.00
D/	25/08/2016	Odour	0	N/A	-
D/	25/08/2016	Taste (Nature)	0	N/A	-
D/D1041#	23/08/2016	PH	7.42	pH Unit	6.50 - 9.50
*U	-	Selenium	0.24	ug/l	<= 10.00
D/D3001#	26/08/2016	Sodium	20.587	mg/l	<= 200.000
D/D3000#	25/08/2016	Sulphate	< 20.000	mg/l	<= 250.000
S/S1016#	13/09/2016	Tetrachloroethene	0.73	ug/l	<= 10.00
S/S3224#	01/09/2016	Total Organic Carbon	< 0.500	mg/l	NAC & ATC
S/S#	13/09/2016	Trichloroethene	< 0.60	ug/l	<= 10.00

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Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
D/D3054#	26/08/2016	Turbidity	0.46	NTU	NAC & ATC
*U	-	Vinyl Chloride	< 0.50	ug/l	<= 0.10
*	-	Pesticides Total	0.00	ug/l	<= 0.50
D/D1214#	22/08/2016	Clostridium perfringens	< 1	cfu/100ml	<= 0
D/D1201#	22/08/2016	Coliforms	< 1.0	MPN/100ml	<= 0.0
D/D1201#	22/08/2016	E.coli	< 1.0	MPN/100ml	<= 0.0
D/D3200	22/08/2016	Faecal Enterococci	< 1.0	MPN/100ml	<= 0.0
D/D1208#	22/08/2016	TVC @ 22℃	< 1	cfu/ml	NAC
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
*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

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*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	OPP							
*	-	Cypermethrin	< 0.01	ug/l	-			
*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)								

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Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)		
*U	-	Fluoranthene	0.03	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		
ТНМ							
S/S1016#	13/09/2016	Chloroform	2.41	ug/l	-		
S/S1016#	13/09/2016	Bromodichloromethane	3.94	ug/l	-		
S/S1016#	13/09/2016	Chlorodibromomethane	5.90	ug/l	-		
S/S1016#	13/09/2016	Bromoform	3.03	ug/l	-		
S/S1016#	13/09/2016	Total THM	15.28	ug/l	<= 100.00		
Triazines	Triazines						
*U	-	Atrazine	< 0.01	ug/l	<= 0.10		
*U	-	Prometryn	< 0.01	ug/l	-		
*U	-	Propazine	< 0.01	ug/l	<= 0.10		

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*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	< 0.01	ug/l	<= 0.10
*U	-	Pendimethalin	< 0.01	ug/l	<= 0.10
*U	-	Pirimicarb	< 0.01	ug/l	<= 0.10
Urons and Car	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

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*U	-	Carbetamide	< 0.01	ug/l	<= 0.10
*U	-	Carbofuran	< 0.01	ug/l	<= 0.10
*U	-	Propiconazole	< 0.01	ug/l	<= 0.10

Comments

E283446 N305528

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