



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: 16-19876

Issue Number:

Report Date: 5 September 2016

Site: Monaghan PWS

PO Number: 51125947

Date Samples Received: 08/08/2016

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

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: 5 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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Page 1 of 9 Template: 1146 Revision: 018





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Site: Monaghan PWS

08/08/2016 Sample Description: E265927 N333457 Pamela Isradley 61 Knock Date of Sampling: Sample Type: Treated Date Sample Received: 08/08/2016

Lab Reference Number: 328377

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
S/S1016#	15/08/2016	1,2-Dichloroethane	< 0.50	ug/l	<= 3.00
D/D3001#	09/08/2016	Aluminium, Total	< 5.00	ug/l	<= 200.00
D/D3000#	11/08/2016	Ammonia as NH4	0.040	mg/l	<= 0.300
*U	-	Antimony	< 0.33	ug/l	<= 5.00
*U	-	Arsenic	0.47	ug/l	<= 10.00
S/S#	15/08/2016	Benzene	< 0.50	ug/l	<= 1.00
D/D3001#	10/08/2016	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#	09/08/2016	Cadmium	0.60	ug/l	<= 5.00
D/D3006	08/08/2016	Chlorine, Free	0.110	mg/l	-
D/D3000#	11/08/2016	Chloride	18.036	mg/l	<= 250.000
D/D3001#	09/08/2016	Chromium	1.14	ug/l	<= 50.00
D/D3010#	13/08/2016	Colour Apparent	< 5.00	Hazen	-
D/D3011#	08/08/2016	Conductivity @ 20 ℃	438.0	uS/cm @20°C	<= 2500.0
D/D3001#	10/08/2016	Copper	5.99	ug/l	<= 2000.00
*U	-	Cyanide, Total	1.90	ug/l	<= 50.00
*	-	Epichlorohydrin	< 0.10	ug/l	<= 0.10

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*U	-	Acrylamide	< 0.013	ug/l	<= 0.100
D/D3015#	12/08/2016	Fluoride	0.7	mg/l	<= 0.9
*U	-	Glyphosate	< 0.01	ug/l	-
D/D3001#	09/08/2016	Iron	51.66	ug/l	<= 200.00
D/D3001#	09/08/2016	Lead	2.73	ug/l	<= 10.00
D/D3001#	09/08/2016	Manganese	15.53	ug/l	<= 50.00
*U	-	Mercury	< 0.06	ug/l	<= 1.00
D/D3000#	11/08/2016	Nitrite as N02	< 0.066	mg/l	<= 0.500
D/D3000#	12/08/2016	Nitrate as N03	< 8.900	mg/l	<= 50.000
D/D3001#	09/08/2016	Nickel	2.47	ug/l	<= 20.00
D/D1041#	08/08/2016	PH	7.24	pH Unit	6.50 - 9.50
*U	-	Selenium	< 0.16	ug/l	<= 10.00
D/D3001#	12/08/2016	Sodium	32.225	mg/l	<= 200.000
D/D3000#	09/08/2016	Sulphate	54.405	mg/l	<= 250.000
S/S1016#	15/08/2016	Tetrachloroethene	< 0.60	ug/l	<= 10.00
S/S3224#	15/08/2016	Total Organic Carbon	2.210	mg/l	NAC & ATC
D/D3054#	13/08/2016	Turbidity	0.60	NTU	NAC & ATC
*U	-	Vinyl Chloride	< 0.50	ug/l	<= 0.10

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Site: Monaghan PWS

Sample Description:E265927 N333457 Pamela Isradley 61 KnockDate of Sampling:08/08/2016Sample Type:TreatedDate Sample Received:08/08/2016

Lab Reference Number: 328377

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*	-	Pesticides Total	0.13	ug/l	<= 0.50
D/D1214#	08/08/2016	Clostridium perfringens	< 1	cfu/100ml	<= 0
D/D1201#	08/08/2016	Coliforms	< 1.0	MPN/100ml	<= 0.0
D/D1201#	08/08/2016	E.coli	< 1.0	MPN/100ml	<= 0.0
D/D3200	08/08/2016	Faecal Enterococci	< 1.0	MPN/100ml	<= 0.0
D/D1208#	08/08/2016	TVC @ 22 ℃	< 1	cfu/ml	NAC
Acid Herbicide	es				
*U	-	Propyzamide	< 0.01	ug/l	<= 0.10
*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	< 0.01	ug/l	<= 0.10
*U	-	Dicamba	< 0.02	ug/l	<= 0.10
*U	-	Dichlorprop	< 0.01	ug/l	<= 0.10
*U	-	MCPA	0.06	ug/l	<= 0.10
*U	-	МСРВ	< 0.01	ug/l	<= 0.10
*U	-	Mecoprop (Total)	< 0.01	ug/l	<= 0.10
*U	-	Tricloypr	0.02	ug/l	<= 0.10

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Monaghan Monaghan Report Reference: 16-19876

Report Version: 1

Site: Monaghan PWS

08/08/2016 Sample Description: E265927 N333457 Pamela Isradley 61 Knock Date of Sampling: Sample Type: Treated Date Sample Received: 08/08/2016

Lab Reference Number: 328377

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*	-	2,3,6 TBA	0.04	ug/l	-
*U	-	Benazolin	< 0.01	ug/l	<= 0.10
*U	-	Fenoprop	< 0.01	ug/l	<= 0.10
*U	-	Picloram	< 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
*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

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Lab Reference Number: 328377

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*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	-
Odour					
*U	-	Odour Dilution Ratio	0	N/A	-
*U	-	Odour Nature	none	N/A	-
OPP					
*	-	Cypermethrin	0.00	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 Suit	e (6 Constituents	s)			
*U	-	Fluoranthene	< 0.01	ug/l	-

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Lab Reference Number: 328377

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
Taste					
*U	-	Taste (Dilution Ratio)	0	N/A	-
*U	-	Taste (Nature)	none	N/A	-
THM					
S/S1016#	15/08/2016	Chloroform	60.18	ug/l	-
S/S1016#	15/08/2016	Bromodichloromethane	22.08	ug/l	-
S/S1016#	15/08/2016	Chlorodibromomethane	8.03	ug/l	-
S/S1016#	15/08/2016	Bromoform	1.33	ug/l	-
S/S1016#	15/08/2016	Total THM	91.62	ug/l	<= 100.00
Triazines					•
*U	-	Atrazine	< 0.01	ug/l	<= 0.10

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Monaghan Monaghan Report Reference: 16-19876

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Lab Reference Number: 328377

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*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
*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

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Lab Reference Number: 328377

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*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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