



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
Irish Water
Water Service
Monaghan County Council
Monaghan
Monaghan

Certificate Of Analysis

Job Number: 16-21494

Issue Number: 1

Report Date: 7 November 2016

Site: Lough Egish PWS

PO Number: 51125947

Date Samples Received: 22/09/2016

Please find attached the results for the samples received at our laboratory on 22/09/2016.

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: 7 November 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.

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

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Site: Lough Egish PWS

Trevor Gilliland 15 Hall St Ballybay Date of Sampling: 22/09/2016 Sample Description: Sample Type: Treated Date Sample Received: 22/09/2016

Lab Reference Number: 333118

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
S/S1016#	03/10/2016	1,2-Dichloroethane	< 0.50	ug/l	<= 3.00
D/D3001#	23/09/2016	Aluminium, Total	52.26	ug/l	<= 200.00
D/D3000#	22/09/2016	Ammonia as NH4	0.023	mg/l	<= 0.300
*U	-	Antimony	< 0.33	ug/l	<= 5.00
*U	-	Arsenic	0.55	ug/l	<= 10.00
S/S#	03/10/2016	Benzene	< 0.50	ug/l	<= 1.00
D/D3001#	26/09/2016	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#	23/09/2016	Cadmium	< 0.13	ug/l	<= 5.00
	23/09/2016	Chlorine, Free Onsite	0.050	mg/l	-
D/D3000#	22/09/2016	Chloride	17.906	mg/l	<= 250.000
D/D3001#	23/09/2016	Chromium	< 0.60	ug/l	<= 50.00
D/D3010#	27/09/2016	Colour Apparent	8.00	Hazen	-
D/D3011#	23/09/2016	Conductivity @ 20 ℃	248.3	uS/cm @20℃	<= 2500.0
D/D3001#	26/09/2016	Copper	12.12	ug/l	<= 2000.00
*U	-	Cyanide, Total	2.90	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#	27/09/2016	Fluoride	0.6	mg/l	<= 0.9
*U	-	Glyphosate	< 0.01	ug/l	-
D/D3001#	23/09/2016	Iron	65.31	ug/l	<= 200.00
D/D3001#	23/09/2016	Lead	1.16	ug/l	<= 10.00
D/D3001#	23/09/2016	Manganese	7.61	ug/l	<= 50.00
*U	-	Mercury	< 0.06	ug/l	<= 1.00
D/D3000#	22/09/2016	Nitrite as N02	< 0.066	mg/l	<= 0.500
D/D3000#	22/09/2016	Nitrate as N03	< 8.900	mg/l	<= 50.000
D/D3001#	23/09/2016	Nickel	1.73	ug/l	<= 20.00
D/	27/09/2016	Odour	0	N/A	-
D/	27/09/2016	Taste (Nature)	Slight Musty	N/A	-
D/D1041#	23/09/2016	PH	8.03	pH Unit	6.50 - 9.50
*U	-	Selenium	0.20	ug/l	<= 10.00
D/D3001#	23/09/2016	Sodium	31.355	mg/l	<= 200.000
D/D3000#	26/09/2016	Sulphate	44.989	mg/l	<= 250.000
S/S1016#	03/10/2016	Tetrachloroethene	< 0.60	ug/l	<= 10.00
S/S3224#	27/09/2016	Total Organic Carbon	3.630	mg/l	NAC & ATC

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Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
S/S#	03/10/2016	Trichloroethene	< 0.60	ug/l	<= 10.00
D/D3054#	28/09/2016	Turbidity	0.62	NTU	NAC & ATC
*U	-	Vinyl Chloride	< 0.50	ug/l	<= 0.50
*	-	Pesticides Total	0.14	ug/l	<= 0.50
D/D1214#	22/09/2016	Clostridium perfringens	< 1	cfu/100ml	<= 0
D/D1201#	22/09/2016	Coliforms	< 1.0	MPN/100ml	<= 0.0
D/D1201#	22/09/2016	E.coli	< 1.0	MPN/100ml	<= 0.0
D/D3200	22/09/2016	Faecal Enterococci	< 1.0	MPN/100ml	<= 0.0
D/D1208#	22/09/2016	TVC @ 22℃	2	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	-	МСРА	0.03	ug/l	<= 0.10

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Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*U	-	МСРВ	< 0.01	ug/l	<= 0.10
*U	-	Mecoprop (Total)	< 0.01	ug/l	<= 0.10
*U	-	Tricloypr	< 0.01	ug/l	<= 0.10
*	-	2,3,6 TBA	< 0.02	ug/l	-
*U	-	Benazolin	0.02	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

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Lab Reference Number: 333118

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*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					
*	-	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 Suit	e (6 Constituent	s)			
*U	-	Fluoranthene	0.01	ug/l	-

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Lab Reference Number: 333118

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#	03/10/2016	Chloroform	59.14	ug/l	-
S/S1016#	03/10/2016	Bromodichloromethane	20.48	ug/l	-
S/S1016#	03/10/2016	Chlorodibromomethane	4.75	ug/l	-
S/S1016#	03/10/2016	Bromoform	< 0.90	ug/l	-
S/S1016#	03/10/2016	Total THM	84.37	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

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Lab Reference Number: 333118

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*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
*U	-	Carbetamide	< 0.01	ug/l	<= 0.10

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Sample Type: Treated Date Sample Received: 22/09/2016

Lab Reference Number: 333118

Site / Method Ref.	Analysis Start Date	Parameter	Result	Units	PV Value (Drinking Water Only)
*U	-	Carbofuran	< 0.01	ug/l	<= 0.10
*U	-	Propiconazole	< 0.01	ug/l	<= 0.10

Comments

E271631 N320520

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

TVC - Total viable count

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