

**Customer**

Pascal Rooney  
Monaghan County Council  
Water Services  
Monaghan

## Certificate Of Analysis

**Job Number:** 16-18115  
**Issue Number:** 2  
**Report Date:** 10 August 2016

Reason for re-issuing report: Error with first issue

**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.

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

**Authorised By:**



Caitlin Quinn  
Deputy Quality Manager

**Authorised Date:** 4 July 2016

**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:** 16-18115

**Report Version:** 2

**Site:** Not Applicable

**Sample Description:** E278326 N301592 Magheraclone GWS

**Date of Sampling:** 13/06/2016

**Sample Type:** Treated

**Date Sample Received:** 13/06/2016

**Lab Reference Number:** 321811

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	9.56	ug/l	<= 200.00
D/D3000#	15/06/2016	Ammonia as NH4	0.023	mg/l	<= 0.300
*U	-	Antimony	< 0.33	ug/l	<= 5.00
*U	-	Arsenic	0.43	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	1.10	ug/l	<= 10.00
U	-	Metaldehyde	< 0.01	ug/l	-
D/D3001#	15/06/2016	Cadmium	0.26	ug/l	<= 5.00
D/D3006	13/06/2016	Chlorine, Free	0.060	mg/l	-
D/D3000#	15/06/2016	Chloride	15.064	mg/l	<= 250.000
D/D3001#	15/06/2016	Chromium	2.17	ug/l	<= 50.00
D/D3010#	15/06/2016	Colour True	5.00	Hazen	NAC & ATC
D/D3011#	13/06/2016	Conductivity @ 20°C	175.2	uS/cm @20°C	<= 2500.0
D/D3001#	15/06/2016	Copper	15.38	ug/l	<= 2000.00
*U	-	Cyanide, Total	2.10	ug/l	<= 50.00
*U	-	Cypermethrin	< 0.00	ug/l	-

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*	-	Epichlorohydrin	< 0.10	ug/l	<= 0.10
*U	-	Acrylamide	< 0.013	ug/l	<= 0.100
D/D3015#	20/06/2016	Fluoride	< 0.1	mg/l	<= 0.9
*U	-	Glyphosate	0.00	ug/l	-
D/D3001#	17/06/2016	Magnesium	< 0.150	mg/l	-
D/D3001#	15/06/2016	Iron	< 7.20	ug/l	<= 200.00
D/D3001#	15/06/2016	Lead	1.03	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	1.12	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	7.63	pH Unit	6.50 - 9.50
*U	-	Selenium	< 0.16	ug/l	<= 10.00
D/D3001#	17/06/2016	Sodium	9.901	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

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S/S3224#	16/06/2016	Total Organic Carbon	2.960	mg/l	NAC & ATC
S/S#	21/06/2016	Trichloroethene	< 0.60	ug/l	<= 10.00
D/D3054#	15/06/2016	Turbidity	0.43	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°C	< 1	cfu/ml	NAC
Acid Herbicides					
*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	-

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*U	-	Bentazone	< 0.00	ug/l	-
*U	-	Bromoxynil	< 0.01	ug/l	-
*U	-	Clopyralid	< 0.02	ug/l	-
*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	-	MCPB	< 0.01	ug/l	-
*U	-	MCPB (Mecoprop)	< 0.00	ug/l	-
*U	-	Pentachlorophenol	< 0.01	ug/l	-
*U	-	Triclopyr	< 0.01	ug/l	-
<b>Acid Herbicides</b>					
*U	-	Clopyralid	< 0.01	ug/l	<= 0.10
*U	-	Fenoprop	< 0.01	ug/l	<= 0.10
<b>OCP</b>					
*U	-	Dieldrin	< 0.01	ug/l	<= 0.03
*U	-	p,p'-DDT	< 0.01	ug/l	<= 0.10

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*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
*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

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*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 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
THM					
S/S1016#	21/06/2016	Chloroform	84.93	ug/l	-
S/S1016#	21/06/2016	Bromodichloromethane	20.27	ug/l	-
S/S1016#	21/06/2016	Chlorodibromomethane	2.84	ug/l	-
S/S1016#	21/06/2016	Bromoform	< 0.90	ug/l	-
S/S1016#	21/06/2016	Total THM	<b>108.03</b>	ug/l	<= 100.00

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### PV Limit breached

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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
*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 Canazoles					
*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

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*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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