

## Comhairle Contae Mhuineacháin Monaghan County Council

Acmhainní Daonna Human Resource 047 30586

> Airgeadas Finance 047 30589

Na Bóithre Roads 047 30597

Clár na dToghthóirí Register of Electors 047 30547

> Comhshaol Environment 047 30593

Deontais Ardoideachais Higher Education Grants 047 30550

> Na hEalaíona Arts 047 71114

lasachtaí /Deontais Tithíochta Housing Loans/Grants 047 30527

Leabharlann an Chontae County Library 047 51143

> Mótarcháin Motor Tax 047 81175

Músaem an Chontae County Museum 047 82928

> Pleanáil Planning 047 30532

Pobal & Fiontar Community & Enterprise 047 30500

Rielú Dóiteáin/Foirgnimh Fire/Building Control 047 30521

> Seirbhísí Uisce Water Services 047 30504

Administration, Environmental Licensing Programme,

Office of Climate, Licence and Resource Use,

Environmental Protection Agency,

Headquarters,

P.O. Box 3000, Johnstown Castle Estate,

Co. Wexford.

ENVIRONMENTAL PROTECTION
AGENCY
0.2 NOV 2011

1 st November 2011

**Re: DO494-01 & DO435-01** – Scotstown & Ballinode Agglomerations, revisions to Phosphate results submitted in initial discharge licence application.

Dear Sir/Madam,

I refer to the above referenced applications for Waste Water Discharge Licences for Scotstown and Ballinode agglomerations.

Clarification regarding monitoring results for Total Phosphorus, Ortho Phosphorus and Molybdate Reactive Phosphorus (MRP) for the two agglomerations submitted in the initial discharge licence application is as follows:

- All results tabulated for Total Phosphorus influent, effluent, upstream and downstream are correct for both agglomerations.
- •Ballinode WwTP there are no Ortho P results tabulated until 9/04/'09, this result is correct for this date. The result tabulated for Ortho P in table D.1 (i) (b) for Ortho P =23 is incorrect and therefore should be disregarded.
- •Scotstown WwTP the results tabulated for Ortho P with the exception of the result dated 9/04/'09 are incorrect and should be disregarded.

Comhairle Contae Mhuineachair, Callina Chartee, Ar Chican, Muheachan, Éire Monaghan County Council, Council Offices, The Glad, Monaghan, Feland.



## Comhairle Contae Mhuineacháin Monaghan County Council

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•For both agglomerations, the results tabulated for MRP are not from laboratory analysis, they have been estimated using the formula Total P = 3.07 \* MRP due to molecular weight.

Attachments include laboratory certificates from Euro Environmental Services confirming the aforementioned monitoring results where applicable. Also included are revised tables D1 (iv) influent data and attachment E4 tables 1,2 and 3 for both agglomerations.

Tables D1.(i)(b), F.1(i)(a)aSW-1u and F.1(i)(a)aSW-1d cannot be revised as they were submitted online and cannot be accessed.

As per your requirements the following are enclosed:

- 1 No original hard copy of the submission
- 1 No copy of the submission
- 1 No Electronic copy on CD-ROM.

If you require any further assistance, please do not hesitate to contact us.

Yours Sincarely,

Mark Johnston,

Senior Executive Engineer, Water Services Section, Monaghan County Council. 047 30513

Comhairle Cantae Mhuineachair: Carollan Chontae, An Cleann, Multimachan, Eire

Monaghan County Council, Council Offices, The Gien, Monaghan, Ireland

www.managhan.le

TABLE 1- ATTACHMENT E4 Rev 1 (Oct 2011)

aSW1(P)d Downstream Monitoring Point

Ballinode WWTW

**(** 

D.S.	27.03.2008	g	<b>7</b>	23	<3	90.0		0.03	<0.09										
0 0	28.05.2008	e	2	7	\$	4		0.14	0.13										
	000000000	, (	,	46	,	1,70		0 23	90.0>										
U.S.	27.00.2000	9	,	2		1					$\dagger$	-	+						
D.S.	26.11.2008	9	<2	27	4	0.05		0.02	<0.06				$\dagger$			1		1	
D.S.	09.04.2009	ŋ	<2	33	Ŋ	0.105	0.019		7	0.03	0.03 0.27 0.003	0.003	0.28	⊽	172	7.6	40.1	2.23	10.2

Note 1: The estimated discharge Molybdate Reactive Median Phosphate (MRP) concentration was derived using Total P = 3.07 \* MRP due to molecular weight

TABLE 2 - ATTACHMENT E4

Rev 1 (Oct 2011)

3

aSW1(P)u Upstream Monitoring Point

Ballinode WWTW

			166.00 7.50 <0.1 2.39 10.00
			7.50 <0.1
			7.50
			_
			166.00
			1
Γ			<b>1&gt;</b>
			0.31
			0.01
			0.31
			0.08
0.09	<0.0>	>0.06	<1
90	0.05	0.03	
			0.055
0.12	0.14	60.0	0.12
Ø	8	3	10
20	47	32	36
8	8	8	<2
5	G	9	ၒ
28.05.2008	27.08.2008	26.11.2008	09.04.2009
U.S.W	U.S.W	U.S.W	J.S.W
	28.05.2008 G <2 20 <3 0.12 0.04	28.05.2008         G         <2         20         <3         0.12         0.04           27.08.2008         G         <2	28.05.2008         G         <2         20         <3         0.12         0.04           27.08.2008         G         <2         47         8         0.14         0.05           26.11.2008         G         <2         32         3         0.09         0.03

Note 1: The estimated discharge Molybdate Reactive Median Phosphate (MRP) concentration was derived using Total P = 3.07 \* MRP due to molecular weight

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**Ballinode Effluent** 

Fiffient	28.05.2008	J	22	09	24	7.50		2.44	18.35				+					T
1	8000 80 70	C	0	8	73	3.57		1.16	11.30									T
EMUREN	27:00:5000	,	,							- 								
CON. soci	26 11 2008	U	6	27	13	7.80		0.91	0.24								Т	Ī
		,	,	ù	96	4.77	4 062		14,14	0.07	12.88	0.137	0.137 13.02	1.12	877	877 7.3 < 0.1	70.47	10.2
Effluent	09.04.2009	ر	0	10	3													

Note 1: The estimated discharge Molybdate Reactive Median Phosphate (MRP) concentration was derived using Total P = 3.07 \* MRP due to molecular weight

Table D.1 (iv) Influent Monitoring Data

Table D.1 (iv) Influent Monitoring Data Rev 1 (Oct 2011) Ballinode WWTW

Influent	27/03/2008	၁	305	1774	861	9.20		3.00	50.91						J				
Influent	28/05/2008	U	510	2935	1486	4.50		1.47	61.2										
Influent	27/08/2008	U	210	672	425	4.57		1.49	32.65										
Influent	26/11/2008	υ	215	1290	182	4.27		1.39	36.24										
Influent	09/04/2009	U	240	737	234	9.48	7.104		44.1	42.49	0.35	0.068	0.42	43.68	1250	7.5	29.62	128	12.7



A copy of this certificate is available on www.euroenv.ie

Unit 35,

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Drogheda, Co. Louth Ireland

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Lab Report Ref. No. 0810/067/07 Customer **Gearoid McCarthy** Monaghan Co. Co. 09/04/2009 Date of Receipt **County Offices Date Testing Commenced** 09/04/2009 The Glen Received or Collected Collected by Euro Co Monaghan Condition on Receipt Acceptable **Customer PO** Date of Report 28/04/2009 **Customer Ref** Ballinode WWTP - Outlet 09/04/09 Sample Type **Trade Effluent** 

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	0.07	mg/L as N	
Arsenic	177	ICPMS	<0.96	ug/L	
Atrazine	191	HPLC	<0.01	ug/L	•
Barium	177	ICPMS	21.1	ug/L	
BOD	113	Electrometry	3	mg/L	
Boron	177	ICPMS	231.0	ug/L	
Cadmium	177	ICPMS	<0.09	ug/L	
Chromium	177	ICPMS	<0.93	ug/l	
COD	107	Colorimetry	51	mg/L	UKAS
Conductivity	112	Electrometry	877.0 £	scm -1@25C	UKAS
Соррег	177	ICPMS	10	ug/L	
Cyanide	138	Colorimetry	<5	ug/L	
Dichloromethane	154	GCMS	<1	ug/L	
Fluoride	115	Colorimetry	0.45	mg/L	
Lead	177	ICPMS	0.4	ug/L	
Mercury	178	ICPMS	<0.2	ug/L	
Nickel	177	ICPMS	0.9	ug/L.	
Nitrate	103	Colorimetry	12.88	mg/L as N	
Nitrite	118	Colorimetry	0.137	mg/L as N	
Nitrogen (Total Kjeldahi)	104	Digestion/ Distillation/ Titrim	1.12	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	13.02	mg/L as N	
Nitrogen (Total)	0	Calculation	14.14	mg/L as N	
pH	110	Electrometry	7.3	pH Units	UKAS
Phenois (Total)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	4.062	mg/L as P	UKAS

Signed : _	DULING HOSLin	Date :
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Donna Heslin - Laboratory Manager

Acc. : Accredited Parameters by ISO 17025:2005

All organic results are analysed as received and all results are corrected for dry weight at 104 C Results shall not be reproduced, except in full, without the approval of EURO environmental services Results contained in this report relate only to the samples tested



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Lab Report Ref. No. 0810/067/07 Customer **Gearoid McCarthy** Monaghan Co, Co. 09/04/2009 Date of Receipt **County Offices** Date Testing Commenced 09/04/2009 The Glen Received or Collected Collected by Euro Co Monaghan Condition on Receipt Acceptable Customer PO Date of Report 28/04/2009 Customer Ref Ballinode WWTP - Outlet 09/04/09

## **CERTIFICATE OF ANALYSIS**

Sample Type

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Phosphate (Total)	166	Digestion/ Colorimetry	4.767	mg/L as P	UKAS
Selenium	177	ICPMS	3	ug/L	
Simazine	191	HPLC	<0.01	ug/L	
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	20	mg/L	
Sulphate	119	Colorimetry	70.47	mg/L as SO4	UKAS
Temperature	715	DO Meter	10.2	degrees C	
Toluene	179	GCMS	<0.28	ug/L	
Tributyitin*	8	GCMS	<0.02	ug/L as Sn	
Volatile Organic Compounds	154	GCMS	<1	ug/L	
Xylene	179	GCMS	<1	ug/L	
Zinc	177	ICPMS	29.9	ug/L	

DUNG HOSLin Signed : Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

Date: 2804 0

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Ballinode WWTP - Upstream 09/04/09

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Customer

**Customer PO** 

**Customer Ref** 

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Lab Report Ref. No. 0810/067/08 **Gearoid McCarthy** Monaghan Co. Co. 09/04/2009 Date of Receipt **County Offices Date Testing Commenced** 09/04/2009 The Glen Received or Collected Collected by Euro

Co Monaghan Condition on Receipt

Date of Report

Sample Type

Acceptable 28/04/2009

Trade Effluent

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	0.08	mg/L as N	
Arsenic	177	ICPMS	1.7	ug/L	
Atrazine	191	HPLC	<0.01	ug/L	
Barium	177	ICPMS	38.4	ug/L	
BOD	113	Electrometry	<2	mg/L	
Boron	177	ICPMS	99.4	ug/L.	
Cadmium	177	ICPMS	1	ug/L.	
Chromium	177	ICPMS	<0.93	ug/L	
COD	107	Colorimetry	36	mg/L	UKAS
Conductivity	112	Electrometry	166.0 #	scm -1@25C	UKAS
Copper	177	ICPMS	3	ug/L	
Cyanide	138	Colorimetry	<5	ug/L	
Dichloromethane	154	GCMS	<1	ug/L	
Fluoride	115	Colorimetry	0.18	mg/L	
Lead	177	ICPMS	1.8	ug/L	
Mercury	178	ICPMS	<0.2	ug/L	
Nickel	177	ICPMS	2.7	ug/L	
Nitrate	103	Colorimetry	0.31	mg/L as N	
Nitrite	118	Colorimetry	0.006	mg/L as N	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ Titrim	<1.00	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	0.31	mg/L as N	
Nitrogen (Total)	0	Calculation	<1.00	mg/L as N	
Hq	110	Electrometry	7.5	pH Units	UKAS
Phenols (Total)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	0.055	mg/L as P	UKAS

Signed : _	Dulina Haslin
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Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

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Date: 28104



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l	Customer	Gearoid McCarthy	Lab Report Ref. No.	0810/067/08
١		Monaghan Co. Co.	Date of Receipt	09/04/2009
		County Offices	Date Testing Commenced	09/04/2009
١		The Glen Co Monaghan	Received or Collected	Collected by Euro
١		oo monagnan	Condition on Receipt	Acceptable
İ	Customer PO		Date of Report	28/04/2009
	Customer Ref	Ballinode WWTP - Upstream 09/04/09	Sample Type	Trade Effluent

### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Phosphate (Total)	166	Digestion/ Colorimetry	0.123	mg/L as P	UKAS
Selenium	177	ICPMS	3	ug/L	
Simazine	191	HPLC	<0.01	ug/L	
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	10	mg/L	
Sulphate	119	Colorimetry	2.39	mg/L as SO4	UKAS
Temperature	715	DO Meter	10.0	degrees C	
Toluene	179	GCMS	<0.28	ug/L	
Tributyltin*	0	GCMS	<0.02	ug/L as Sn	
Volatile Organic Compounds	154	GCMS	<1	ug/L	
Xylene	179	GCMS	<1	ug/L	
Zinc	177	ICPMS	<4.6	ug/L	

Signed :	Donna	Hoslin
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Donna Heslin - Laboratory Manager

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Page 2 of 2



Ballinode WWTP - Downstream 09/04/09

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**Customer Ref** 

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**Trade Effluent** 

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Lab Report Ref. No. 0810/067/09 Customer **Gearoid McCarthy** Monaghan Co. Co. 09/04/2009 Date of Receipt **County Offices** Date Testing Commenced 09/04/2009 The Glen Received or Collected Collected by Euro Co Monaghan Condition on Receipt Acceptable **Customer PO** Date of Report 28/04/2009

CERTIFICATE OF ANALYSIS

Sample Type

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	0.03	mg/L as N	
Arsenic	177	ICPMS	<0.96	ug/L	
Atrazine	191	HPLC	<0.01	ug/L	
Barium	177	ICPMS	30.9	ug/L	
BOD	113	Electrometry	<2	mg/L	
Boron	177	ICPMS	160.8	ug/L	
Cadmium	177	ICPMS	<0.09	ug/L	
Chromium	177	ICPMS	<0.93	ug/L	
COD	107	Colorimetry	39	mg/L	UKAS
Conductivity	112	Electrometry	172.0	scm -1@25C	UKAS
Copper	177	ICPMS	<0.2	ug/L	
Cyanide	138	Colorimetry	<5	ug/L	
Dichloromethane	154	GCMS	<1	ug/L	
Fluoride	115	Colorimetry	0.18	mg/L	
Lead	177	ICPMS	<0.38	ug/L	
Mercury	178	ICPMS	<0.2	ug/L	
Nickel	177	ICPMS	1.1	ug/L	
Nitrate	103	Colorimetry	0.27	mg/L as N	
Nitrite	118	Colorimetry	0.003	mg/L as N	
Nitrogen (Total Kjeldahi)	104	Digestion/ Distillation/ Titrim	<1.00	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	0.28	mg/L as N	
Nitrogen (Total)	0	Calculation	<1.00	mg/L as N	
рН	110	Electrometry	7.6	pH Units	UKAS
Phenois (Total)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	0.019	mg/L as P	UKAS

signed: IJUNNA HOSLin
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Donna Heslin - Laboratory Manager

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Page 1 of 2



# EURO environmental services

Environmental Science & Management Water, Soil & Air Testing

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Lab Report Ref. No. 0810/067/09 Customer **Gearoid McCarthy** Monaghan Co. Co. 09/04/2009 Date of Receipt **County Offices Date Testing Commenced** 09/04/2009 The Glen Received or Collected Collected by Euro Co Monaghan Condition on Receipt Acceptable **Customer PO** Date of Report 28/04/2009 **Customer Ref** Ballinode WWTP - Downstream 09/04/09 Trade Effluent Sample Type

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	<b>Analytical Technique</b>	Result	Units	Acc.
Phosphate (Total)	166	Digestion/ Colorimetry	0.105	mg/L as P	UKAS
Selenium	177	ICPMS	1	ug/L	
Simazine	191	HPLC	<0.01	ug/L	
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	5	mg/L	
Sulphate	119	Colorimetry	2.23	mg/L as SO4	UKAS
Temperature	715	DO Meter	10.2	degrees C	
Toluene	179	GCMS	<0.28	ug/L	
TributyItIn*	0	GCMS	<0.02	ug/L as Sn	
Volatile Organic Compounds	154	GCMS	<1	ug/L	
Xylene	179	GCMS	<1	ug/L	
Zinc	177	ICPMS	<4.6	ug/L	

signed: DONNA HESLis

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

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# services

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Customer

Gearoid McCarthy Monaghan Co. Co. **County Offices** 

The Gien Co Monaghan

**Customer PO** 

**Customer Ref** 

Ballinode WWTP - Inlet 09/04/09

Lab Report Ref. No.

Date of Receipt

Date Testing Commenced

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/087/10

09/04/2009

09/04/2009

Collected by Euro

Acceptable

28/04/2009

**Trade Effluent** 

## CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	42.49	mg/L as N	UKAS
BOD	113	Electrometry	240	mg/L	
COD	107	Colorimetry	737	mg/L	UKAS
Conductivity	112	Electrometry	1250.0	ıscm -1@25C	UKAS
Nitrate	103	Colorimetry	0.35	mg/L as N	
Nitrite	118	Colorimetry	0.068	mg/L as N	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ Titrim	43.68	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	0.42	mg/L as N	
Nitrogen (Total)	0	Calculation	44.10	mg/L as N	
pН	110	Electrometry	7.5	pH Units	UKAS
Phenois (Total)	223	GCMS	29.62	ug/L	
Phosphate (Ortho)	117	Colorimetry	7.104	mg/L as P	UKAS
Phosphate (Total)	166	Digestion/ Colorimetry	9.478	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	234	mg/L	
Sulphate	119	Colorimetry	128.50	mg/L as SO4	UKAS
Temperature	715	DO Meter	12.7	degrees C	

Signed: DOWNA HCSLin Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

Date: 2804 05

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# environmental services

**Environmental Science & Management** Water, Soil & Air Testing

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Customer

Gearoid McCarthy Monaghan Co. Co. **County Offices** The Glen

Co Monaghan

Customer PO

**Customer Ref** 

Ballinode WWTP - Inlet 09/04/09

Lab Report Ref. No.

Date of Receipt

**Date Testing Commenced** 

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/067/10

09/04/2009

09/04/2009

Collected by Euro

Acceptable 28/04/2009

**Trade Effluent** 

# CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	42.49	mg/L as N	UKAS
BOD	113	Electrometry	240	mg/L	
COD	107	Colorimetry	737	mg/L	UKAS
Conductivity	112	Electrometry	1250.0	ıscm -1@25C	UKAS
Nitrate	103	Colorimetry	0.35	mg/L as N	
Nitrite	118	Colorimetry	0.068	mg/L as N	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ Titrim	43.68	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	0.42	mg/L as N	
Nitrogen (Total)	0	Calculation	44.10	mg/L as N	
pН	110	Electrometry	7.5	pH Units	UKAS
Phenois (Total)	223	GCMS	29.62	ug/L	
Phosphate (Ortho)	117	Colorimetry	7.104	mg/L as P	UKAS
Phosphate (Total)	166	Digestion/ Colorimetry	9.478	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	234	mg/L	
Sulphate	119	Colorimetry	128.50	mg/L as SO4	UKAS
Temperature	715	DO Meter	12.7	degrees C	

signed: NOWA HCSLin

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

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Customer

**Eugene Farmer** 

Monaghan Co Co Monaghan WWTP

Monaghan Co Co The Glen

Monaghan

**Customer PO** 

**Customer Ref** 

Ballinode Raw 26/11/08

Lab Report Ref. No.

Date of Receipt

Date Testing Commenced

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/054/01

29/11/2008

01/12/2008

Courier: Interlink

Acceptable

08/12/2008

**Trade Effluent** 

**CERTIFICATE OF ANALYSIS** 

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	36.24	mg/L as N	UKAS
BOD	113	Electrometry	215	mg/L	UKAS
COD	107	Colorimetry	1290	mg/L	UKAS
Nitrogen (Total Oxidised)	151	Colorimetry	<0.03	mg/L as N	
Phosphate (Total)	166	Digestion/ Colorimetry	4.273	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	182	mg/L	

Signed: Douna Histin

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

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Date: 08/12/08



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Customer Eugene Farmer

Monaghan Co Co Monaghan WWTP Monaghan Co Co The Glen

Monaghan

Customer PO

**Customer Ref** 

Ballinode Final 26/11/08

Lab Report Ref. No.

Date of Receipt

Date Testing Commenced

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/054/02

29/11/2008

01/12/2008

Courier: Interlink

Acceptable

08/12/2008

Trade Effluent

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	0.24	mg/L as N	UKAS
BOD	113	Electrometry	9	mg/L	UKAS
COD	107	Colorimetry	27	mg/L	UKAS
Nitrogen (Total Oxidised)	151	Colorimetry	10.80	mg/L as N	
Phosphate (Total)	166	Digestion/ Colorimetry	2.848	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	13	mg/L	

Signed :	DONNA	Haslin
Signed :	BUMA	HESLIA

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

Date : \_\_\_\_

08/12/08

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Customer

**Eugene Farmer** Monaghan Co Co

Monaghan WWTP Monaghan Co Co

The Glen

Monaghan

**Customer PO** 

**Customer Ref** 

Ballinode U.S 26/11/08

Lab Report Ref. No.

Date of Receipt

**Date Testing Commenced** 

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/054/03

29/11/2008

01/12/2008

Courier: Interlink

Acceptable

08/12/2008

Trade Effluent

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	<0.06	mg/L as N	
BOD	113	Electrometry	<2	mg/L	
COD	107	Colorimetry	32	mg/L	UKAS
Nitrogen (Total Oxidised)	151	Colorimetry	0.47	mg/L as N	
Phosphate (Total)	166	Digestion/ Colorimetry	0.085	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	3	mg/L	

Duna Hislin Signed: Donna Heslin - Laboratory Manager

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Page 1 of 1

Date: 08/12



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Customer

Eugene Farmer Monaghan Co Co Monaghan WWTP Monaghan Co Co

Ballinode D.S 26/11/08

The Glen Monaghan

Customer PO

**Customer Ref** 

Lab Report Ref. No.

Date of Receipt

**Date Testing Commenced** Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/054/04

29/11/2008

01/12/2008

Courier: Interlink

Acceptable

08/12/2008

**Trade Effluent** 

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	<0.06	mg/L as N	
BOD	113	Electrometry	<2	mg/L	
COD	107	Colorimetry	27	mg/L	UKAS
Nitrogen (Total Oxidised)	151	Colorimetry	0.56	mg/L as N	
Phosphate (Total)	166	Digestion/ Colorimetry	0.051	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	4	mg/L	

signed: DDWA HOSLIN Donna Heslin - Laboratory Manager

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Date: 08/12/08

TABLE 1- ATTACHMENT E4 Rev 1 (Oct 2011)

Scotstown Effluent

Efffluent	27.03.08	S	8	35	5	2.27		0.74	8:38										
Efffluent	28.05.08	ပ	22	45	- 21	3.89		1.27	13.96										
Efffluent	27.08.08	C	20	35	8	2.64		0.86	10.70										
Efffluent	26.11.08	၁	<2	17	3	1.73		0.56	0.21										
Efffluent	09.04.09	U	<2	24	<3	2.534	2.39		11.13	0.18	9.87	0.20	10.01	1.12	633.00	8.00	<0.10	54.06	10.90

Note 1: The estimated discharge Molybdate Reactive Median Phosphate (MRP) concentration was derived using Total P = 3.07 \* MRP due to molecular weight

TABLE 2 - ATTACHMENT E4 Rev 1 (Oct 2011)

aSW1(P)u Upstream Monitoring Point Scotstown WWTW

Note 1: The estimated discharge Molybdate Reactive Median Phosphate (MRP) concentration was derived using Total P = 3.07 \* MRP due to molecular weight

TABLE 3- ATTACHMENT E4

Rev 1 (Oct 2011)

aSW1(P)d Downstream Monitoring Point

Scotstown WWTW

DSW	27.03.08	9	<2	25	\$	0.0		0.02	<0.0>									· ·	
MSQ	28.05.08	9	<b>7&gt;</b>	20	♡	90:0		0.02	0.13										
MSQ	27.08.08	ۍ	<2	51	4	2.08		89.0	<0.09										
MSQ	26.11.08	ဗ	<2	30	\$	0.045		0.01	<0.06										
MSQ	09.04.09	9	<b>~</b>	40	2	0.075	0.021		>0.06	0.02	0.28	0.01	0.29	7	153.00	7.60	<.10	1.49	10.50

Note 1: The estimated discharge Molybdate Reactive Median Phosphate (MRP) concentration was derived using Total P = 3.07 \* MRP due to molecular weight

Note 1: The estimated discharge Molybdate Reactive Median Phosphate (MRP) concentration was derived using Total P = 3.07 \* MRP due to molecular weight



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0810/067/01 Lab Report Ref. No. Customer **Gearoid McCarthy** Monaghan Co. Co. 09/04/2009 Date of Receipt **County Offices Date Testing Commenced** 09/04/2009 The Gien Received or Collected Collected by Euro Co Monaghan Condition on Receipt Acceptable **Customer PO** Date of Report 28/04/2009

Customer Ref

Scotstown WWTP - Outlet 09/04/09

Sample Type

**Trade Effluent** 

**CERTIFICATE OF ANALYSIS** 

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	0.18	mg/L as N	UKAS
Arsenic	177	ICPMS	<0.98	ug/L.	
Atrazine	191	HPLC	<0.01	ug/L	
Barium	177	ICPMS	21.9	ug/L	
BOD	113	Electrometry	<2	mg/L	
Boron	177	ICPMS	<4.2	ug/L	
Cadmium	177	ICPMS	<0.09	ug/L	
Chromium	177	ICPMS	<0.93	ug/L	
COD	107	Colorimetry	24	mg/L	UKAS
Conductivity	112	Electrometry	633.0 #	scm -1@25C	UKAS
Copper	177	ICPMS	4	ug/L	
Cyanide	138	Colorimetry	<5	ug/L	
Dichloromethane	154	GCMS	<1	ug/L	
Fluoride	115	Colorimetry	0.39	mg/L	
Lead	177	ICPMS	<0.38	ug/L	
Mercury	178	ICPMS	<0.2	ug/L	
Nickel	177	ICPMS	<0.47	ug/L	
Nitrate	103	Colorimetry	9.81	mg/L as N	
Nitrite	118	Colorimetry	0.197	mg/L as N	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ Titrim	1.12	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	10.01	mg/L as N	
Nitrogen (Total)	0	Calculation	11.13	mg/L as N	
pH ·	110	Electrometry	8.0	pH Units	UKAS
Phenois (Total)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	2.390	mg/L as P	UKAS

Signed :	unna	teslin	

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

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Scotstown WWTP - Outlet 09/04/09

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Customer Gearoid McCarthy

Customer PO

Customer Ref

Monaghan Co. Co. County Offices The Glen

Co Monaghan

Date Testing Commenced
Received or Collected

Condition on Receipt

Lab Report Ref. No.

Date of Receipt

Date of Report

Sample Type

0810/067/01

09/04/2009

09/04/2009

Collected by Euro

Acceptable

28/04/2000

28/04/2009

**Trade Effluent** 

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Phosphate (Total)	166	Digestion/ Colorimetry	2.534	mg/L as P	UKAS
Selenium	177	ICPMS	1	ug/L	
Simazine	191	HPLC	<0.01	ug/L	
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	<3	mg/L	
Sulphate	119	Colorimetry	54.06	mg/L as SO4	UKAS
Temperature	715	DO Meter	10.9	degrees C	
Toluene	179	GCMS	<0.28	ug/L	
TributyItin*	0	GCMS	<0.02	ug/L as Sn	
Volatile Organic Compounds	154	GCMS	1.488	ug/L	
Xylene	179	GCMS	<1	ug/L	
Zinc	177	ICPMS	13.1	ug/L	

Signed: DOWA HOSLin

Donna Heslin - Laboratory Manager

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28/04/2009

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Customer Gearoid McCarthy Lab Report Ref. No. 0810/067/02

Monaghan Co. Co.Date of Receipt09/04/2009County OfficesDate Testing Commenced09/04/2009The Glen

Co Monaghan

Received or Collected by Euro

Condition on Receipt

Acceptable

Customer PO Condition on Receipt

Date of Report

Customer Ref Scotstown WWTP - Upstream 09/04/09 Sample Type Trade Effluent

**CERTIFICATE OF ANALYSIS** 

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	0.02	mg/L as N	
Arsenic	177	ICPMS	<0.96	ug/L.	
Atrazine	191	HPLC	<0.01	ug/L	
Barium	177	ICPMS	29.9	ug/L	
BOD	113	Electrometry	<2	mg/L	
Boron	177	ICPMS	<4.2	ug/L	
Cadmium	177	ICPMS	<0.09	ug/L	
Chromium	177	ICPMS	<0.93	ug/L	
COD	107	Colorimetry	43	mg/L	UKAS
Conductivity	112	Electrometry	141.0 a	scm -1@25C	UKAS
Copper	177	ICPMS	<0.2	ug/L	
Cyanide	138	Colorimetry	<5	ug/L	
Dichloromethane	154	GCMS	<1	ug/L	
Fluoride	115	Colorimetry	0.19	mg/L	
Lead	177	ICPMS	<0.38	ug/L	
Mercury	178	ICPMS	<0.2	ug/L	
Nickel	177	ICPMS	1.2	ug/L	
Nitrate	103	Colorimetry	0.31	mg/L as N	
Nitrite	118	Colorimetry	0.004	mg/L as N	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ Titrim	<1.00	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	0.31	mg/L as N	
Nitrogen (Total)	0	Calculation	<1.00	mg/L as N	
Hq	110	Electrometry	7.7	pH Units	UKAS
Phenois (Total)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	0.031	mg/L as P	UKAS

Signed : _	1001LIG HOSLin	
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Donna Heslin - Laboratory Manager

 $\sim$ 

Acc. : Accredited Parameters by ISO 17025:2005

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Page 1 of 2

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Customer **Gearoid McCarthy**  Lab Report Ref. No.

0810/067/02

Monaghan Co. Co.

Date of Receipt

09/04/2009

**County Offices** The Glen

**Date Testing Commenced** 

09/04/2009

Received or Collected

**Collected by Euro** 

Co Monaghan

Condition on Receipt

Acceptable

**Customer PO** 

**Customer Ref** 

Scotstown WWTP - Upstream 09/04/09

Date of Report Sample Type

28/04/2009

**Trade Effluent** 

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Phosphate (Total)	166	Digestion/ Colorimetry	0.076	mg/L as P	UKAS
Selenium	177	ICPMS	<0.74	ug/L	
Simazine	191	HPLC	<0.01	ug/L	
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	17	mg/L	
Sulphate	119	Colorimetry	1.55	mg/L as SO4	
Temperature	715	DO Meter	11.9	degrees C	
Toluene	179	GCMS	<0.28	ug/L	
TributyItin*	0	GCMS	<0.02	ug/L as Sn	
Volatile Organic Compounds	154	GCMS	<1	ug/L	
Xylene	179	GCMS	<1	ug/L	
Zinc	177	ICPMS	<4.6	ug/L	

Donna Heslin - Laboratory Manager

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0810/067/03 Lab Report Ref. No. **Gearoid McCarthy** Monaghan Co. Co. 09/04/2009 Date of Receipt **County Offices Date Testing Commenced** 09/04/2009 The Glen

Received or Collected Collected by Euro Co Monaghan Acceptable

Condition on Receipt

**Customer PO** Date of Report 28/04/2009

Customer Ref Scotstown WWTP - Downstream 09/04/09 Sample Type **Trade Effluent** 

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	0.02	mg/L as N	
Arsenic	177	ICPMS	<0.96	ug/L	
Atrazine	191	HPLC	<0.01	ug/L	
Barium	177	ICPMS	26.8	ug/L	
BOD	113	Electrometry	<2	mg/L	
Boron	177	ICPMS	<4.2	ug/L	
Cadmium	177	ICPMS	<0.09	ug/L	
Chromium	177	ICPMS	<0.93	ug/L	
COD	107	Colorimetry	40	mg/L	UKAS
Conductivity	112	Electrometry	153.0 』	scm -1@25C	UKAS
Copper	177	ICPMS	<0.2	ug/L	
Cyanide	138	Colorimetry	<5	ug/L	
Dichloromethane	154	GCMS	<1	ug/L	
Fluoride	115	Colorimetry	0.18	mg/L	
Lead	177	ICPMS	<0.38	ug/L	
Mercury	178	ICPMS	<0.2	ug/L	
Nickel	177	ICPMS	0.5	ug/L	
Nitrate	103	Colorimetry	0.28	mg/L as N	
Nitrite	118	Colorimetry	0.005	mg/L as N	
Nitrogen (Total Kjeldahi)	104	Digestion/ Distillation/ Titrim	<1.00	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	0.29	mg/L as N	
Nitrogen (Total)	0	Calculation	<1.00	mg/L as N	
pH	110	Electrometry	7.6	pH Units	UKAS
Phenols (Total)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	0.021	mg/L as P	UKAS

Signed :	Douna	Hrslin	Date :	28/04/09

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

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**Gearoid McCarthy** Monaghan Co. Co. **County Offices** The Glen

Co Monaghan

Customer PO

Customer Ref

Scotstown WWTP - Downstream 09/04/09

Lab Report Ref. No.

Date of Receipt

Date Testing Commenced

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Condition on Receipt

Date of Report

Sample Type

0810/067/03

09/04/2009

09/04/2009

Collected by Euro

Acceptable

28/04/2009

**Trade Effluent** 

## **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Phosphate (Total)	166	Digestion/ Colorimetry	0.075	mg/L as P	UKAS
Selenium	177	ICPMS	1	ug/L	
Simazine	191	HPLC	<0.01	ug/L	
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	6	mg/L	
Sulphate	119	Colorimetry	1.49	mg/L as SO4	
Temperature	715	DO Meter	10.5	degrees C	
Toluene	179	GCMS	<0.28	ug/L	
Tributyitin*	0	GCMS	<0.02	ug/L as Sn	
Volatile Organic Compounds	154	GCMS	<1	ug/L	
Xylene	179	GCMS	<1	ug/L	
Zinc	177	ICPMS	<4.6	ug/L	

Signed :	Donna	Hoslin
Donna Heslin	- Laboratory Ma	anager

Acc.: Accredited Parameters by ISO 17025:2005

Date: 2804 05

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Customer Gearold McCarthy

Monaghan Co. Co. County Offices

The Glen Co Monaghan

Customer PO

Customer Ref

Scotstown WWTP - Inlet 09/04/09

Lab Report Ref. No.

Date of Receipt

**Date Testing Commenced** 

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/067/11

09/04/2009

0010412000

09/04/2009

Collected by Euro

Acceptable

28/04/2009

Trade Effluent

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	5.59	mg/L as N	UKAS
BOD	113	Electrometry	9	mg/L	
COD	107	Colorimetry	38	mg/L	UKAS
Conductivity	112	Electrometry	751.0	ıscm -1@25C	UKAS
Nitrate	103	Cotorimetry	0.63	mg/L as N	
Nitrite	118	Colorimetry	1.470	mg/L as N	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ Titrim	6.72	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	2.10	mg/L as N	UKAS
Nitrogen (Total)	G	Calculation	8.82	mg/L as N	
рH	110	Electrometry	7.6	pH Units	UKAS
Phenois (Totai)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	2.667	mg/L as P	UKAS
Phosphate (Total)	166	Digestion/ Colorimetry	2.793	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	17	mg/L	
Sulphate	119	Colorimetry	67.99	mg/L as SO4	UKAS
Temperature	715	DO Meter	9.7	degrees C	

signed: NUNIA HOSLin

Donna Hesiin - Laboratory Manager

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Customer **Gearoid McCarthy** 

Monaghan Co. Co.

**County Offices** 

The Glen

Co Monaghan

**Customer PO** 

**Customer Ref** 

Scotstown WWTP - Inlet 09/04/09

Lab Report Ref. No.

Date of Receipt

Date Testing Commenced

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/067/11

09/04/2009

09/04/2009

Collected by Euro

Acceptable

21/04/2009

**Trade Effluent** 

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	5.59	mg/L as N	UKAS
BOD	113	Electrometry	9	mg/L	UKAS
COD	107	Colorimetry	38	mg/L	UKAS
Conductivity	112	Electrometry	751.0	ıscm -1@25C	UKAS
Nitrate	103	Colorimetry	0.63	mg/L as N	
Nitrite	118	Colorimetry	1.470	mg/L as N	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ Titrim	6.72	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	2.10	mg/L as N	UKAS
Nitrogen (Total)	0	Calculation	8.82	mg/L as N	
pH	110	Electrometry	7.6	pH Units	UKAS
Phenois (Total)	223	GCMS	<0.10	ug/L	
Phosphate (Ortho)	117	Colorimetry	2.667	mg/L as P	UKAS
Phosphate (Total)	166	Digestion/ Colorimetry	2.793	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	17	mg/L	
Sulphate	119	Colorimetry	67.99	mg/L as 804	UKAS
Temperature	715	DO Meter	9.7	degrees C	

Signed :	Dorma	HCSLin
-		

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

All organic results are analysed as received and all results are corrected for dry weight at 104 C Results shall not be reproduced, except in full, without the approval of EURO environmental services Results contained in this report relate only to the samples tested

Date: 21/11/05





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Customer

Eugene Farmer

Monaghan Co Co

Monaghan WWTP

Monaghan Co Co

The Glen

Monaghan

Customer PO

**Customer Ref** 

Scotstown Raw 26/11/08

Lab Report Ref. No.

Date of Receipt

**Date Testing Commenced** 

Received or Collected Condition on Receipt

Date of Report

Sample Type

0810/054/05

29/11/2008

01/12/2008

Courier: Interlink

Acceptable

08/12/2008

Trade Effluent

## **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Anaiytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	39.39	mg/L as N	UKAS
BOD	113	Electrometry	540	mg/L	UKAS
COD	107	Colorimetry	1720	mg/L	UKAS
Nitrogen (Total Oxidised)	151	Colorimetry	0.11	mg/L as N	
Phosphate (Total)	166	Digestion/ Colorimetry	2.198	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	615	mg/L	

Donna Hos Signed:\_\_

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

All organic results are analysed as received and all results are corrected for dry weight at 104 C Results shall not be reproduced, except in full, without the approval of EURO environmental services Results contained in this report relate only to the samples tested

Page 1 of 1

Date: 08 12 08



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Customer

Eugene Farmer Monaghan Co Co Monaghan WWTP Monaghan Co Co

The Glen

Monaghan

**Customer PO** 

Customer Ref

Scotstown Final 26/11/08

Lab Report Ref. No.

Date of Receipt

Date Testing Commenced

Received or Collected

Condition on Receipt Date of Report

Sample Type

0810/054/06 29/11/2008

01/12/2008

Courier: Interlink

Acceptable

08/12/2008

Trade Effluent

#### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	<b>Analytical Technique</b>	Result	Units	Acc.
Ammonia	114	Colorimetry	0.21	mg/L as N	UKAS
BOD	113	Electrometry	<2	mg/L	
COD	107	Colorimetry	17	mg/L	UKAS
Nitrogen (Total Oxidised)	151	Colorimetry	7.94	mg/L as N	UKAS
Phosphate (Total)	166	Digestion/ Colorimetry	1.734	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	3	mg/L	

Duna Hastin Signed : \_\_\_\_\_

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

All organic results are analysed as received and all results are corrected for dry weight at 104 C Results shall not be reproduced, except in full, without the approval of EURO environmental services

Results contained in this report relate only to the samples tested

Date: 08 12 08





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Customer

**Eugene Farmer** 

Monaghan Co Co

Monaghan WWTP

Monaghan Co Co

The Glen

Monaghan

Customer PO

Customer Ref

Scotstown U.S 26/11/08

Lab Report Ref. No.

Date of Receipt

Date Testing Commenced

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/054/07

29/11/2008

01/12/2008

Courier: Interlink

Acceptable

08/12/2008

**Trade Effluent** 

### **CERTIFICATE OF ANALYSIS**

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Ammonia	114	Colorimetry	<0.06	mg/L as N	
BOD	113	Electrometry	<2	mg/L	
COD	107	Colorimetry	58	mg/L	UKAS
Nitrogen (Total Oxidised)	151	Colorimetry	0.36	mg/L as N	
Phosphate (Total)	166	Digestion/ Colorimetry	0.051	mg/L as P	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	<3	mg/L	

Signed :	Durina	HOSLin

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025:2005

All organic results are analysed as received and all results are corrected for dry weight at 104 C Results shall not be reproduced, except in full, without the approval of EURO environmental services Results contained in this report relate only to the samples tested

Date: 0817



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Customer Eugene Farmer

Monaghan Co Co Monaghan WWTP

Monaghan Co Co The Glen

Monaghan

**Customer PO** 

Customer Ref

Scotstown D.S 26/11/08

Lab Report Ref. No.

Date of Receipt

- - - · -

Date Testing Commenced

Received or Collected

Condition on Receipt

Date of Report

Sample Type

0810/054/08

29/11/2008

01/12/2008

Courier: interlink

Acceptable

08/12/2008

Trade Effluent

#### **CERTIFICATE OF ANALYSIS**

SOP	Analytical Technique	Result	Units	Acc.
114	Colorimetry	<0.06	mg/L as N	
113	Electrometry	<2	mg/L	
107	Coforimetry	30	mg/L	UKAS
151	Colorimetry	0.46	mg/L as N	
166	Digestion/ Colorimetry	0.045	mg/L as P	UKAS
106	Filtration/ Drying @ 104C	<3	mg/L	
	114 113 107 151 166	114 Colorimetry 113 Electrometry 107 Colorimetry 151 Colorimetry 166 Digestion/ Colorimetry	114         Colorimetry         <0.06	114         Colorimetry         <0.06

signed: <u>Mona Hestin</u>

Donna Heslin - Laboratory Manager

Acc.: Accredited Parameters by ISO 17025;2005

All organic results are analysed as received and all results are corrected for dry weight at 104 C Results shall not be reproduced, except in full, without the approval of EURO environmental services Results contained in this report relate only to the samples tested

Date: 08/12/08

Page 1 of 1