



## CERTIFICATE OF PARTICIPATION

This certificate confirms that:  
**S.C.A. - Servizi Consulenze Ed Analisi**

took part in:  
LEAP EFF Proficiency Test **EFF025**  
Nitrate, Nitrite, Ammonia, Chloride, Orthophosphate, Total Phosphorus, Sulphate, Nitrogen, in Water (after dilution)

and were allocated laboratory number **66** .

The performance of the laboratory is shown in the relevant report, which is available from the secure pages at [www.fapas.com](http://www.fapas.com)

FAPAS®, FEPAS®, GeMMA, LEAP™  
The Food and Environment Research Agency  
Sand Hutton  
York YO41 1LZ

tel: +44 1904 462100  
fax: +44 1904 462040  
[info@fapas.com](mailto:info@fapas.com)  
[www.fapas.com](http://www.fapas.com)

FAPAS®, FEPAS® and GeMMA are UKAS accredited, giving independent confirmation that we comply with the requirements of International Standard ISO/IEC Guide 43-1:1997, through assessment against ILAC G13:2000. Additionally, the Food and Environment Research Agency is an ISO 9001 certified organisation.

**PRINTED COPIES OF THIS DOCUMENT ARE UNCONTROLLED**

**CERTIFIED DOCUMENT**

The integrity of this report can only be confirmed by inspecting the validity of the digital signature embedded within the Adobe PDF file. **ALL** copies, either printed or electronic, should be verified by comparison with the Adobe PDF file that displays a valid FAPAS® digital signature.



LABORATORY NUMBER: [Available to participants from FAPAS SecureWeb](#)

**Effluent & Waste Water**

**LEAP® Scheme Chemistry**

**April 2011 - May 2011**

**Report No. EFF025**

Prepared and authorised on behalf of FAPAS by

A handwritten signature in black ink that reads 'B. May'.

Barry May

Table 4 (continued): Results and z-Scores for Test Material 3A

laboratory number	analyte											
	Nitrate		Nitrite		Ammonia		Chloride		Orthophosphate		Sulphate	
	assigned value	5.06 mg N/L	assigned value	1.90 mg N/L	assigned value	3.11 mg N/L	assigned value	156 mg Cl/L	assigned value	3.90 mg P/L	assigned value	116 mg SO4/L
	result mg N/L	z-score	result mg N/L	z-score	result mg N/L	z-score	result mg Cl/L	z-score	result mg P/L	z-score	result mg SO4/L	z-score
053	4.4	-1.3	1.9	0.0	2.9	-0.7	141.1	-1.0	3.0	<b>-2.3</b>	119.6	0.3
056			1.976	0.4	2.94	-0.5	157.65	0.1			104.13	-1.0
057	5.0	-0.1	2.1	1.0	3.1	0.0	160.6	0.3	4.3	1.0	122.3	0.5
062	5.7	1.3	1.92	0.1	3.3	0.6	165	0.6			114	-0.2
064	5.08	0.0	1.80	-0.5	2.94	-0.5	156	0.0	3.97	0.2	120	0.4
066	4.54	-1.0	1.87	-0.2	3.4	0.9	152.53	-0.2			112.67	<b>-0.3</b>
069	4.36	-1.4	1.8	-0.5	3.5	1.3	145	-0.7	3.8	-0.3	118	0.2
071	5.186	0.3	2.015	0.6	3.95	<b>2.7</b>	164.68	0.5	4.69	2.0	114.28	-0.1
072	4.74	-0.6	1.65	-1.3	3.01	-0.3	154.48	-0.1	4.06	0.4	106.43	-0.8
073	5.14	0.2	1.95	0.3	3.27	0.5	144.35	-0.8	4.13	0.6	116.55	0.1
075	4.93	-0.3	1.83	-0.4	3.56	1.4	159.41	0.2	3.23	-1.7	116.94	0.1
076	4.7	-0.7	1.8	-0.5	3.4	0.9	140	-1.0	3.6	-0.8	110	-0.5
077											129.52	1.2
078	3.50	<b>-3.1</b>	1.82	-0.4	3.15	0.1						
079	4.92	-0.3	1.965	0.3	2.89	-0.7	152.86	-0.2	4.21	0.8	109	-0.6
081	4.67	-0.8	1.82	-0.4	2.92	-0.6	152.11	-0.3	4.13	0.6	108.43	-0.6
082												
087	4.9	-0.3	1.6	-1.6	3.1	0.0	154	-0.1	5.2	<b>3.3</b>	119.6	0.3
089	5.09	0.1	2.17	1.4	3.04	-0.2	157	0.1	3.96	0.1	107	-0.8
090	6.2	<b>2.3</b>	2.0	0.5	3.2	0.3	157	0.1	3.9	0.0	114	-0.2

z-scores outside the satisfactory range, i.e. |z| >2, are shown in bold

Table 5 (continued): Results and z-Scores for Test Material 3B

laboratory number	analyte	
	Total Phosphorus assigned value: 2.02mg P/L	
	result, mg P/L	z-score
053	1.0	<b>-5.1</b>
056	2.0	-0.1
057	1.9	-0.6
062	2.012	-0.1
064	2.12	0.5
066	2.05	0.1
069		
071		
072	2.037	0.1
073	2.25	1.1
075	1.80	-1.1
076	2.0	-0.1
077	2.04	0.1
078		
079	2.27	1.2
081	2.12	0.5
082		
087	1.58	<b>-2.2</b>
089	1.99	-0.2
090	2.0	-0.1

z-scores outside the satisfactory range, i.e.  $|z| > 2$ , are shown in **bold**