



**AGLAE Association**

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**Certificate of participation - assigned codes for the Proficiency Testing Scheme - 2018**

GWA MBH IWU LUISENTHAL - Site No. 18178  
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ALLEMAGNE

Chemistry in solid matrices		
PT	Title	Assigned code
18M51A.1	Easily liberatable cyanide, total cyanide and phenol index in waste (leaching)	30

## REVIEW OF THE RESULTS 18M51A.1

### EASILY LIBERATABLE CYANIDE, TOTAL CYANIDE AND PHENOL INDEX IN WASTE (LEACHING)

DECEMBER 2018 TO JANUARY 2019

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**Warning:**

This document provides a quick feedback. z-scores, means and standard deviations are given on a provisional basis. Only the thorough statistical treatment carried out for the final report ensures the reliability of the information. Anomalies in data distribution, deviation between methods, unsuitable quality of the test materials or other singularities may lead us to invalidate the raw data treatment carried out in this document.

**Therefore, we would like to warn you about any hasty conclusion** that you may draw from this raw information.

Should there be any differences between the French and English versions of this document, the French version shall prevail.



## PREPARATION OF THE TEST MATERIALS

### Matrix used:

Batch 1: APCR (Air Pollution Control Residues), dried, crushed and sieved at 250µm

Batch 2: Sludge from WWTP, dried, crushed and sieved at 250µm

Number of batches prepared: 2

Batch number	Parameter or group of parameters	Identification of the bottles	Stabilisation
Batch 1	dry matter, Easily liberatable cyanide, total cyanide	Polyethylene bottles (weight ≈ 60g) labelled A, B	-
Batch 2	dry matter, phenol index	Yellow glass bottles (weight ≈ 70g) labelled C, D	-

## TABLE WITH PROVISIONAL MEANS AND STANDARD DEVIATIONS FOR EACH PARAMETER

Parameter	Mean (m)	Standard deviation (Sz)	Unit
dry matter Batch 1	98,14	0,25	% by mass of raw matter
Easily liberatable cyanide	151,1554	61,6390	µg/kg of dry matter of waste
total cyanide	201,344	70,225	µg/kg of dry matter of waste
dry matter Batch 2	90,70	0,50	% by mass of raw matter
phenol index	1497,6432	889,1119	µg/kg of dry matter of waste

TABLES WITH PROVISIONAL MEANS AND Z-SCORES FOR EACH PARAMETER AND EACH PARTICIPANT: see pages 3 to 4

The proficiency test report will be available in your member area no later than:

*Friday 22 February 2019 (provisional date)*

You will receive an email as soon as your report is issued or should there be any delay.





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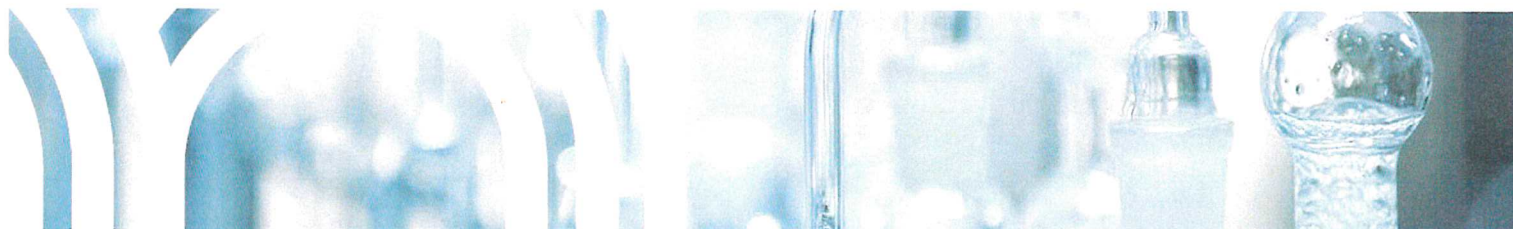
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Chemistry in solid matrices		
PT	Title	Assigned code
18M51B.1	Chemical analyses and metals in waste (leaching)	17



## REVIEW OF THE RESULTS 18M51B.1

### CHEMICAL ANALYSES AND METALS IN WASTE (LEACHING)

DECEMBER 2018 TO JANUARY 2019

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## PREPARATION OF THE TEST MATERIALS

### Matrix used:

Batch 1: electrofilter dust dried, crushed and sieved at 250µm

Batch 2: sand from foundry dried and sieved at 250µm

Number of batches prepared: 2

Batch number	Parameter or group of parameters	Identification of the bottles	Stabilisation
Batch 1	Dry residue at 105°C of the eluate, dry matter, soluble fraction, pH, conductivity, DOC, Cl <sup>-</sup> , F <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> , Cd, Cr, Cu, Hg, Ni, Pb, Zn	Polyethylene bottles (weight≈65g) labelled A, B	-
Batch 2	dry matter, As, Ba, Mo, Sb, Se	Polyethylene bottles (weight≈35g) labelled C, D	-

TABLE WITH PROVISIONAL MEANS AND STANDARD DEVIATIONS FOR EACH PARAMETER

Parameter	Mean (m)	Standard deviation (Sz)	Unit
Dry residue at 105°C of the eluate	48660,224	1047,345	mg/L
dry matter Batch 1	99,55	0,15	% by mass of raw matter
soluble fraction	<b>No provisional z-score calculation – awaiting the thorough statistical treatment</b>		
pH	6,910	0,115	pH unit at 20°C
conductivity	57464,0	1261,6	µS/cm at 25°C
DOC	22,7769	13,7437	mg of C/kg of dry matter of waste
Cl <sup>-</sup>	136,538	5,619	g/kg of dry matter
F <sup>-</sup>	122,8944	14,6978	mg/kg of dry matter of waste
SO <sub>4</sub> <sup>2-</sup>	153,206	6,732	g of SO <sub>4</sub> <sup>2-</sup> /kg of dry matter of waste
Cd	656,536	46,632	mg/kg of dry matter of waste
Cr	354,398	119,598	µg/kg of dry matter of waste
Cu	1062,65	664,89	µg/kg of dry matter of waste
Hg	0,9160	0,7089	µg/kg of dry matter of waste
Ni	804,982	232,951	µg/kg of dry matter of waste
Pb	56,4224	9,7288	mg/kg of dry matter of waste
Zn	9,4241	1,1785	g/kg of dry matter
dry matter Batch 2	96,08	0,38	% by mass of raw matter
As	824,92	89,74	µg/kg of dry matter of waste
Ba	177,446	84,411	µg/kg of dry matter of waste
Mo	448,842	45,612	µg/kg of dry matter of waste



Parameter	Mean (m)	Standard deviation (Sz)	Unit
Sb	219,8834	45,3549	µg/kg of dry matter of waste
Se	107,1814	17,6501	µg/kg of dry matter of waste

**TABLES WITH PROVISIONAL MEANS AND Z-SCORES FOR EACH PARAMETER AND EACH PARTICIPANT:** see pages 4 to 11

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*Friday 1 March 2019 (provisional date)*

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