ANALYTICAL REPORT

Customer:	Ed Newman Sorby Management Pty Ltd. Care of Toxikos Pty Ltd
Your Reference:	Study of transformation/dissolution of Lead, Copper, Zinc and their compounds in aqueous medium for the Silver Lead Zinc concentrate sample from Sorby Management Pty Ltd
SGS Report Number:	ENV 13722 (LIMS 89630)
Date of Receipt of Samples:	01/09/2011
Sample Description:	Dark grey, powder contained in a plastic bag. The sample was labelled as silver lead zinc concentrate sample from Sorby Management Pty Ltd.

The sample was analysed in accordance with your instructions. The results and associated information are contained in the following pages of the report. Should you have any queries regarding this report please contact the undersigned. This report cancels and supersedes the Report No. ENV13722 dated 04/10/2011 issued by SGS Environmental Services Sydney.

Reported by: Bibiana Ortiz

Date: ___25/10/2011_____

Report authorised by: Paul Pui

Date: ___25/10/2011_____

Background:

SGS was requested by Toxikos Pty Ltd to perform the dissolution test at 7 days on a Silver-Lead-Zinc concentrate sample from Sorby Management Pty Ltd. It was also requested to conduct a full metals analysis and a 24-hour point metals analysis on the concentrate sample at the load of 100mg.

Method

The method used in this study was taken from '*Annex 10 guidance on transformation/dissolution of metals and metal compounds in aqueous media - OECD Environment, Health and Safety Publications, Series on Testing and Assessment, No. 29, Environment Directorate, Organisation for Economic Co-operation and Development, in UNECE 2009'*.
The procedure outlined in the above reference was strictly followed without deviation or alteration. It was conducted by an experienced senior chemist well acquainted with trace level metals handling techniques. Exact details of the work undertaken should be sought in the original reference.
All the trace level metals were analysed at SGS's Laboratory in Alexandria using the in-house method AN318[1]. SGS is NATA Accredited for this analytical method[2]. Validation data for this method is available on request by prior arrangements with SGS Alexandria.
As part of SGS's quality system all raw data is kept for a minimum of 3 (three) years.

A Summary of the Procedures

1. Throughout the whole study, the preparation of reagents and final rinsing of the glassware or any other apparatus was carried out with polished water[3] having the electric conductivity <0.06 µS/cm.

2. All the glass test vessels were cleaned with nitric acid, followed by rinsing with polished water.

3. The testing medium was prepared according to Table 1:

Table 1: Chemical Composition of Testing Medium

Chemical Composition Of Testing Medium	$NaHCO_3$	6.5 mg/L
	KCl	0.58 mg/L
	$CaCl_2.2H_2O$	29.4 mg/L
	$MgSO_4.7H_2O$	12.3 mg/L
CO_2 Concentration (Balance Was Air) In Test Vessel		0.50 %
Calculated pH		6.09

4. Validation of the pH

a) The manufacturer's instructions for the pH meter are followed when calibrating the meter. The slope should be within 95% - 102% or the calibration should be repeated.

[1] Method AN318 determination of elements in trace levels in waters by ICP-MS. The method is based on USEPA 6020A
[2] NATA corporate accreditation No. 2562, site No. 4354.
[3] The term "polished water" is used throughout this document to indicate deionised water for trace level metal analysis produced with a Millipore ® reverse osmosis apparatus.

b) The calibration is checked using the Check Buffer Solution. This solution should give the designated pH value within ± 0.1 unit.
c) The testing medium is brought to room temperature before pH measurement.
d) Approximately 50mL of the medium is poured into the container and the electrode is immersed, the system is stirred gently and allowed to equilibrate for approximately 1 minute.
e) The value of the pH is recorded.
f) The electrode is rinsed with distilled water between samples.

5. Exactly 1L of the testing medium was put into 9 (nine) acid-washed glass amber bottles and capped with Teflon® lined lids these were then tumbled for half an hour. After this period testing medium was taken to be in equilibrium with the atmosphere of the test vessels, the pH, temperature and dissolved oxygen of the test medium in each bottle were measured by relevant calibrated meters. An aliquot of the testing medium from each bottle was filtered by 0.2 µm filter, acidified with ultra pure nitric acid and submitted for ICP/MS (Varian 820-MS).

6. Exactly 1 mg of sample 'Silver-Lead-Zinc from Sorby MGT' was weighed accurately and placed into first three 1L glass bottles to which exactly 1L of test medium had been added. The bottles were labelled as 1A, 1B and 1C. The bottles were then capped with Teflon® lined lids, put into a tumbler and tumbled for 2 hours, 6 hours, 1 day, 4 days and 7 days at a rate of 32 rpm. After each period of tumbling, the temperature, pH and dissolved oxygen (DO) of the liquid were measured and 2 aliquots (10ml each) were taken from each test vessel filtered through a 0.2 µm filter, acidified with ultra pure nitric acid and analysed by ICP/MS (Varian 820-MS) for lead, copper and zinc.

7. Exactly 10 mg of sample 'Silver-Lead-Zinc from Sorby MGT' was weighed accurately into another three 1L glass bottles to which exactly 1L of test medium had been added. The bottles were labelled as 2A, 2B and 2C. The solutions were then processed as described in point 5.

8. By the same token, three 1L solutions of 100 mg of sample 'Silver-Lead-Zinc from Sorby MGT' were made, labelled as 3A, 3B and 3C and processed as described in point 5. The characterisation of the total dissolved metals was also carried out simultaneously on this solution by ICP/MS.

9. The determination of particle size distribution of the sample was carried out by sieving a weighed amount of sample through a series of calibrated test sieves of decreasing mesh size. The portion of sample retained on each sieve was subsequently weighed and expressed as a percentage of the original sample weight. The final lower pan captures the particles which pass through all the sieves.

10. Quality control: To ensure accuracy and reliability of the data SGS's quality control protocol and procedures for trace level ICP-MS analysis are strictly followed. These include but are not limited to:

a) Certified stock standard solutions are commercially available.
b) Certified reference standards are used and these are run daily and the recovery must be within ±20% of the expected values.

c) Reference stock standards are checked at least once every 3 months and must be with in ±10% of expected value, their trend is monitored over the life of the standard.
d) A method blank is run every 20 analytical samples and must result below the limit of reporting (LOR) for all elements
e) A continuing calibration standard is run every 20 analytical samples and must be with in ±20% of the expected value.
f) A laboratory control standard is run every 20 analytical samples and must be with in ±20% of the expected value
g) A duplicate sample is run every 10 analytical samples and the relative percentage difference must be less than 20%. No criterion is applied if the results are less than 10 times lower than the LOR.
h) 6 elements are used as internal standards: Ir, Tb, Rh, Sc, Y and Li.
i) A spike matrix recovery sample is run every 10 analytical samples and must result with in ±20% of the expected value.

11. The detection and quantification limits of the analytical method for this study are

Element	Units	Value
Lead	µg/L	<1
Copper	µg/L	<1
Zinc	µg/L	<1

12. The adsorption properties of the soluble metal ions on the filters have been studied in previous investigations and the results were negative. Therefore there is not a detectable metal ion adsorption on the filters.

13. The instrumental linearity range for Lead, Copper and Zinc is set out between 0.5µg/L and 300µg/L.

14. The variation results between duplicate samples are expected to fall within the analytical instrumental variability of ±20%, however in practice a higher variation may occur due to the sample preparation procedures carried out before the instrumental analysis by ICP-MS.

Analytical Results:

Table 2: Legend for the Notation Used to Identify the Solutions

X	Y	n	T	-	Z

X= Blank	→	Blank solution
X= 1	→	1 mg/L solution
X= 2	→	10 mg/L solution
X= 3	→	100mg/L solution
Y=A	→	Sample
Y=B	→	Duplicate
Y=C	→	Triplicate
n	→	Number of hour or days
T = H	→	Hours
T = D	→	Days
Z	→	Aliquot number

Examples of Labelling

Solution ID	Notation
Blank 1A	Blank test media solution used for 1 mg/L solution in bottle A
Blank 2A	Blank test media solution used for 10 mg/L solution in bottle A
Blank 3A	Blank test media solution used for 100 mg/L solution in bottle A
1A 2H-1	1 mg/L solution in bottle A after 2 hour tumbling, aliquot 1
1A 6H-1	1 mg/L solution in bottle A after 6 hour tumbling, aliquot 1
1A 1D-1	1 mg/L solution in bottle A after 1 day tumbling, aliquot 1
1A 4D-1	1 mg/L solution in bottle A after 4 day tumbling, aliquot 1
1A 7D-1	1 mg/L solution in bottle A after 7 day tumbling, aliquot 1
2A 2H-1	10 mg/L solution in bottle A after 2 hour tumbling, aliquot 1
3A 2H-1	100 mg/L solution in bottle A after 2 hour tumbling, aliquot 1
1A 2H-2	1 mg/L solution in bottle A after 2 hour tumbling, aliquot 2

Table 3 a), b), c and d): pH, Temperature and Dissolved Oxygen of Solutions of blank, 2 hours, 6 hours and 1 day.

Tab 3a: Blank Solutions			
Solution	**Temperature ºC**	**pH**	**DO (mg O_2/L)**
Blank 1A	20	6.0	5.8
Blank 1B	20	6.0	5.8
Blank 1C	20	6.0	5.8
Blank 2A	20	6.0	5.8
Blank 2B	20	6.0	5.8
Blank 2C	20	6.0	5.8
Blank 3A	20	6.0	5.8
Blank 3B	20	6.0	5.8
Blank 3C	20	6.0	5.8

Tab 3b: Solutions after 2 hours tumbling			
Solution	**Temperature ºC**	**pH**	**DO (mg O_2/L)**
1A-2H	20	6.1	6.1
1B-2H	20	6.1	6.1
1C-2H	20	6.1	6.0
2A-2H	20	6.1	6.1
2B-2H	20	6.1	6.0
2C-2H	20	6.1	6.0
3A-2H	20	6.1	6.0
3B-2H	20	6.1	6.0
3C-2H	20	6.1	6.1

Tab 3c: Solutions after 6 hours tumbling			
Solution	**Temperature ºC**	**pH**	**DO (mg O_2/L)**
1A-6H	20	6.1	6.1
1B-6H	20	6.1	6.1
1C-6H	20	6.1	6.2
2A-6H	20	6.1	6.2
2B-6H	20	6.1	6.2
2C-6H	20	6.2	6.2
3A-6H	20	6.2	6.2
3B-6H	20	6.2	6.2
3C-6H	20	6.2	6.2

Tab 3d: Solutions after 1 day tumbling			
Solution	**Temperature ºC**	**pH**	**DO (mg O_2/L)**
1A-1D	20	6.2	6.2
1B-1D	20	6.2	6.2
1C-1D	20	6.2	6.2
2A-1D	20	6.2	6.3
2B-1D	20	6.3	6.4
2C-1D	20	6.3	6.4
3A-1D	20	6.3	6.4
3B-1D	20	6.4	6.4
3C-1D	20	6.3	6.4

Table 3 e) and f): pH, Temperature and Dissolved Oxygen of Solutions at 4 and 7 days

Tab 3e: Solutions after 4 days tumbling			
Solution	**Temperature ºC**	**pH**	**DO (mg O_2/L)**
1A-4D	20	6.3	6.3
1B-4D	20	6.3	6.3
1C-4D	20	6.3	6.3
2A-4D	20	6.3	6.3
2B-4D	20	6.3	6.4
2C-4D	20	6.4	6.4
3A-4D	20	6.4	6.5
3B-4D	20	6.4	6.4
3C-4D	20	6.4	6.5

Tab 3f: Solutions after 7 days tumbling			
Solution	**Temperature ºC**	**pH**	**DO (mg O_2/L)**
1A-7D	20	6.3	6.4
1B-7D	20	6.4	6.4
1C-7D	20	6.4	6.4
2A-7D	20	6.4	6.4
2B-7D	20	6.5	6.5
2C-7D	20	6.5	6.5
3A-7D	20	6.5	6.5
3B-7D	20	6.5	6.5
3C-7D	20	6.5	6.5

Table 4: Tests and analysis tests

Date / time	**Test**	**Analysis**
12/09/11 8:00am	Start the test	
12/09/11 9:00am	Sampling blanks	ore composition
12/09/11 11:00am	Sampling 2 hours	Moisture and particle size.
12/09/11 3:00pm	Sampling 6 hours	
13/09/11 9:00am	Sampling 24 hours	
16/09/11 9:00am	Sampling 4 days	Blanks, 2h, 6h, and 24 hours
19/09/11 9:00am	Sampling 7days	4 days, 7 days.

Table 5: Lead, Copper and Zinc Concentrations in Blank Testing Medium

Solution	Lead (µg Pb/L)	Copper (µg Cu/L)	Zinc (µg Zn/L)
Blank 1A	<1	<1	<1
Blank 1B	<1	<1	<1
Blank 1C	<1	<1	<1
Blank 2A	<1	<1	<1
Blank 2B	<1	<1	<1
Blank 2C	<1	<1	<1
Blank 3A	<1	<1	<1
Blank 3B	<1	<1	<1
Blank 3C	<1	<1	<1

Concentrations which are lower than the PQL (Practical Quantification limit) are reported with a "<"sign followed by the PQL. The results reported in the tables 6, 7, 8, 9 and 10 correspond to the results recorded as SE89630, SE89630A, SE89630B, SE89630C, and SE89630D.

Table 6: Lead, Copper and Zinc Concentrations in Solutions Tumbled for 2 Hours

Solution	Lead (µg Pb/L)	Copper (µg Cu/L)	Zinc (µg Zn/L)
1A 2H-1	<1	<1	1
1A 2H-2	<1	<1	1
1B 2H-1	<1	<1	<1
1B 2H-2	<1	<1	<1
1C 2H-1	<1	<1	<1
1C 2H-2	<1	<1	<1
2A 2H-1	2	<1	<1
2A 2H-2	3	<1	1
2B 2H-1	3	<1	<1
2B 2H-2	3	<1	<1
2C 2H-1	3	<1	<1
2C 2H-2	3	<1	<1
3A 2H-1	80	<1	1
3A 2H-2	80	<1	3
3B 2H-1	82	<1	2
3B 2H-2	86	<1	3
3C 2H-1	84	<1	3
3C 2H-2	82	<1	1

Table 7: Lead, Copper and Zinc Concentrations in Solutions Tumbled for 6 Hours

Solution	Lead (µg Pb/L)	Copper (µg Cu/L)	Zinc (µg Zn/L)
1A 6H-1	<1	<1	2
1A 6H-2	<1	<1	<1
1B 6H-1	<1	<1	1
1B 6H-2	<1	<1	<1
1C 6H-1	1	<1	1
1C 6H-2	<1	<1	1
2A 6H-1	5	<1	<1
2A 6H-2	5	<1	<1
2B 6H-1	7	<1	<1
2B 6H-2	6	<1	1
2C 6H-1	7	<1	1
2C 6H-2	5	<1	<1
3A 6H-1	93	<1	2
3A 6H-2	93	<1	3
3B 6H-1	91	<1	3
3B 6H-2	90	<1	3
3C 6H-1	93	<1	3
3C 6H-2	88	<1	2

Table 8: Lead, Copper and Zinc Concentrations in Solutions Tumbled for 1 Day

Solution	Lead (µg Pb/L)	Copper (µg Cu/L)	Zinc (µg Zn/L)
1A 1D-1	<1	1	2
1A 1D-2	<1	<1	1
1B 1D-1	<1	<1	2
1B 1D-2	1	<1	2
1C 1D-1	<1	<1	3
1C 1D-2	<1	<1	1
2A 1D-1	18	<1	2
2A 1D-2	18	<1	<1
2B 1D-1	18	<1	2
2B 1D-2	20	<1	2
2C 1D-1	18	<1	<1
2C 1D-2	18	<1	<1
3A 1D-1	96	<1	5
3A 1D-2	93	<1	6
3B 1D-1	93	<1	5
3B 1D-2	94	<1	6
3C 1D-1	92	<1	6
3C 1D-2	93	<1	6

Table 9: Lead, Copper and Zinc Concentrations in Solutions Tumbled for 4 Days

Solution	Lead (µg Pb/L)	Copper (µg Cu/L)	Zinc (µg Zn/L)
1A 4D-1	3	<1	1
1A 4D-2	2	<1	3
1B 4D-1	3	<1	1
1B 4D-2	3	<1	<1
1C 4D-1	<1	<1	<1
1C 4D-2	<1	<1	<1
2A 4D-1	60	<1	1
2A 4D-2	60	<1	2
2B 4D-1	60	<1	2
2B 4D-2	64	<1	1
2C 4D-1	60	<1	2
2C 4D-2	60	<1	2
3A 4D-1	85	<1	7
3A 4D-2	83	<1	6
3B 4D-1	84	<1	7
3B 4D-2	89	<1	8
3C 4D-1	86	<1	8
3C 4D-2	87	<1	8

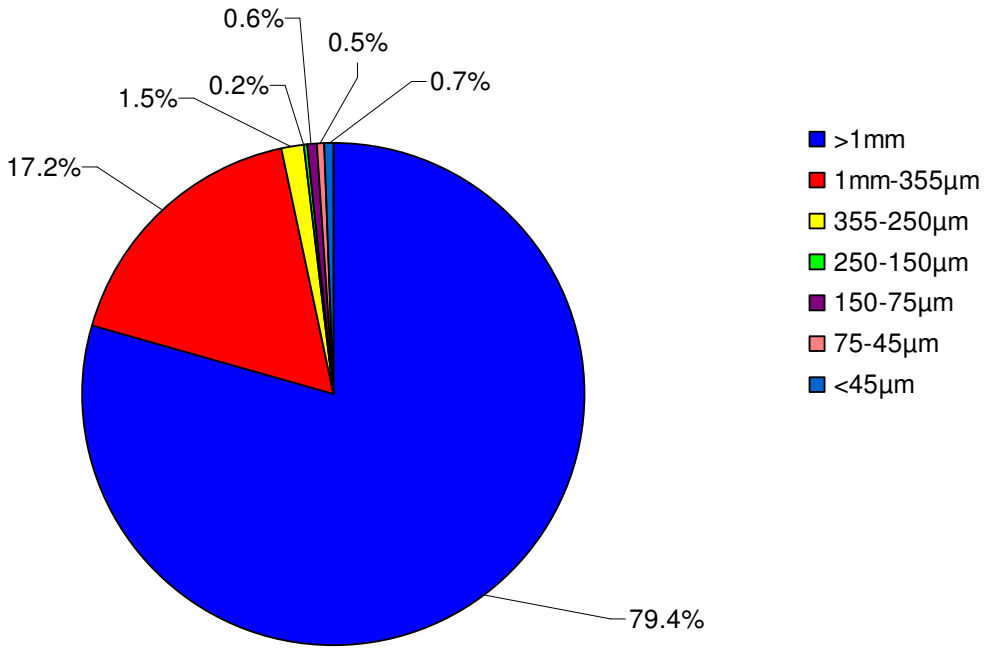
Table 10: Lead, Copper and Zinc Concentrations in Solutions Tumbled for 7 Days

Solution	Lead (µg Pb/L)	Copper (µg Cu/L)	Zinc (µg Zn/L)
1A 7D-1	<1	<1	3
1A 7D-2	4	<1	<1
1B 7D-1	4	<1	<1
1B 7D-2	5	<1	<1
1C 7D-1	2	<1	2
1C 7D-2	<1	<1	<1
2A 7D-1	80	<1	3
2A 7D-2	83	<1	4
2B 7D-1	82	<1	4
2B 7D-2	80	<1	3
2C 7D-1	83	<1	5
2C 7D-2	83	<1	4
3A 7D-1	80	<1	12
3A 7D-2	80	<1	9
3B 7D-1	81	<1	12
3B 7D-2	80	<1	12
3C 7D-1	81	<1	10
3C 7D-2	81	<1	10

Table 11: Particle Size Distribution of 'Silver-Lead-Zinc from Sorby MGT sample`

Particle size	Percentage (% w/w)
>1mm	79.4
1mm - 355µm	17.2
355µm - 250µm	1.5
250µm - 150µm	0.2
150µm - 75µm	0.6
75µm - 45µm	0.5
<45µm	0.7

Particle size distribution of Silver Lead Zinc concentrate sample from Sorby Mgt Pty Ltd



The result for particle size could exhibit variations due to the particles having a propensity to undergo aggregation forming big clusters which are retained in the sieves.

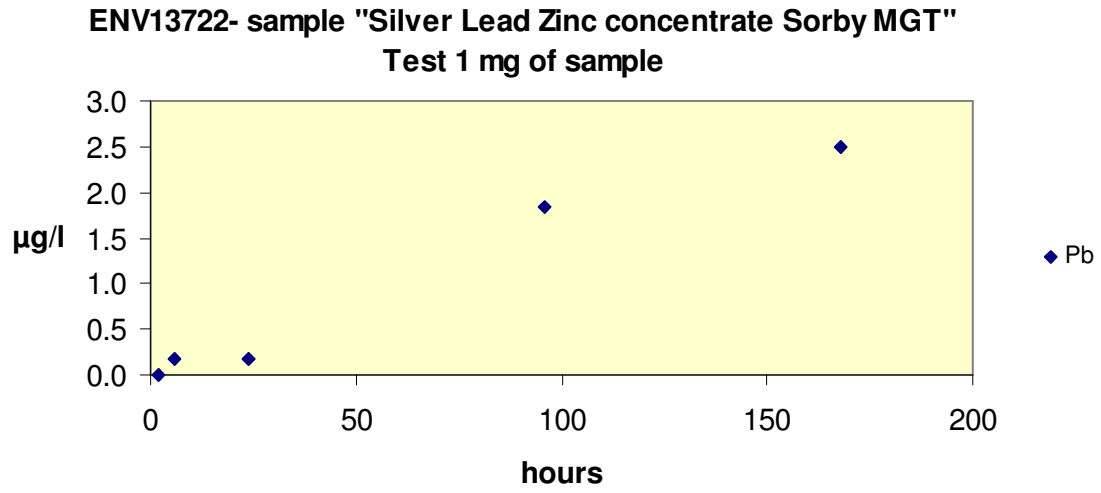
Photo 1. Sample as received.

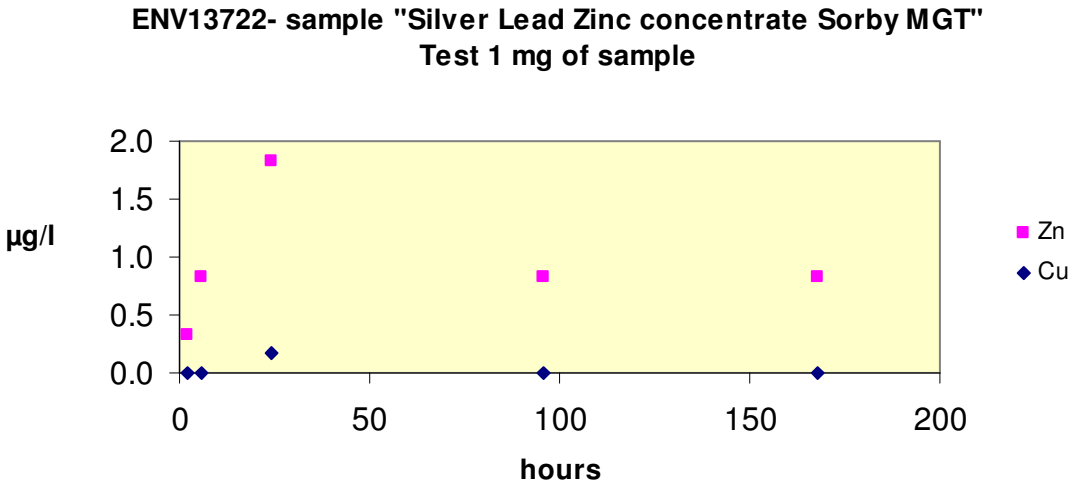
Graphs of the Average concentration of the Test at 1 mg

ENV 13722 - sample 'Silver-Lead-Zinc from Sorby MGT`			
Test 1 mg	*Average Concentration*		
	µg/l	µg/l	µg/l
Hours	Zn	Cu	Pb
2	<1.0	<1.0	<1.0
6	<1.0	<1.0	<1.0
24	1.8	<1.0	<1.0
96	<1.0	<1.0	1.8
168	<1.0	<1.0	2.5

ENV 13722	Sorby MGT		
Test 1 mg	Deviation		
Hours	Zn	Cu	Pb
2	0.5	0.0	0.0
6	0.8	0.0	0.4
24	0.8	0.4	0.4
96	1.2	0.0	1.5
168	1.3	0.0	2.2

ENV 13722	Sorby MGT					
Test 1 mg	Confidence intervals at 95%					
Hours	Zn		Cu		Pb	
	min interval	max interval	min interval	max interval	min interval	max interval
2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6	<1.0	1.0	<1.0	<1.0	<1.0	<1.0
24	1.0	2.0	2.0	<1.0	<1.0	<1.0
96	<1.0	2.0	<1.0	<1.0	<1.0	3.0
168	<1.0	2.0	<1.0	<1.0	<1.0	4.0





Note: The intersection point, 0.00, in the graphs refers to the value which is under the detection limit, <1 for copper, zinc and lead.

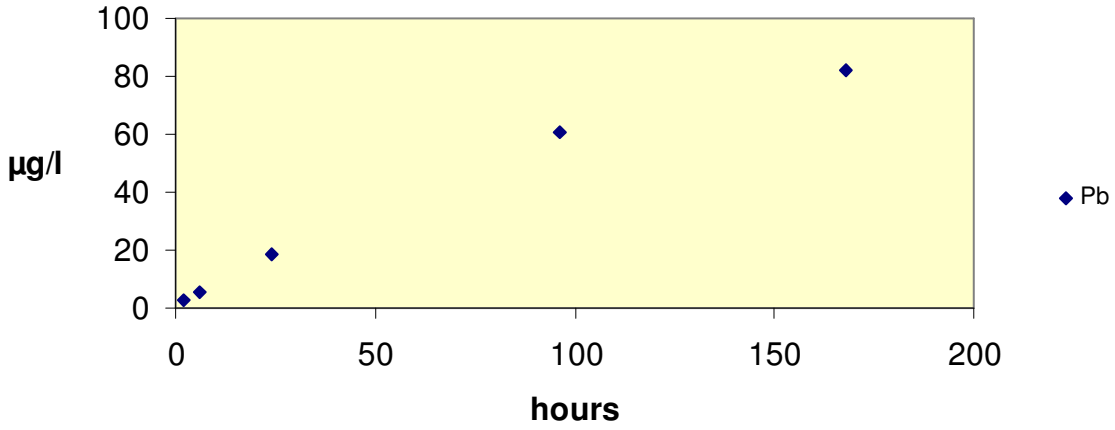
Graphs of the Average concentration of the Test at 10 mg

ENV 13722 - sample 'Silver-Lead-Zinc from Sorby MGT`			
Test 10 mg	*Average Concentration*		
	µg/l	µg/l	µg/l
Hours	Zn	Cu	Pb
2	<1.0	<1.0	2.8
6	<1.0	<1.0	5.8
24	1.0	<1.0	18.3
96	1.7	<1.0	60.7
168	3.8	<1.0	81.8

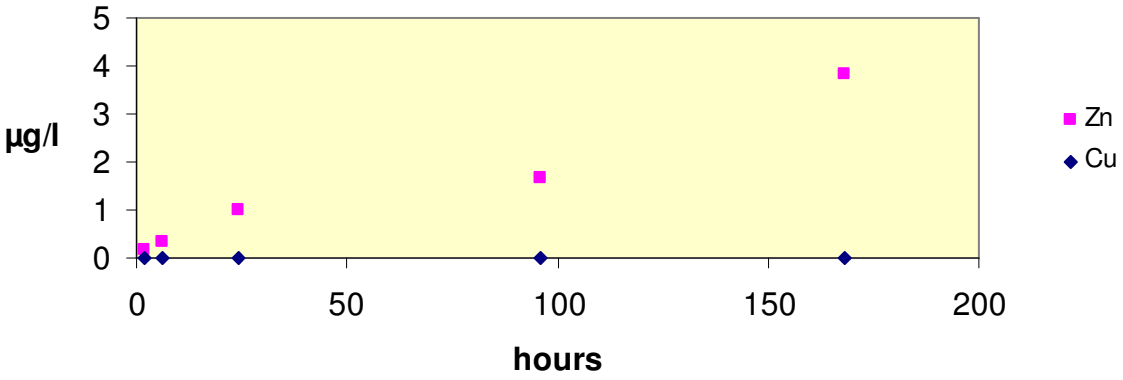
ENV 13722	Sorby MGT		
Test 10 mg	Deviation		
Hours	Zn	Cu	Pb
2	0.4	0.0	0.4
6	0.5	0.0	1.0
24	1.1	0.0	0.8
96	0.5	0.0	1.6
168	0.8	0.0	1.5

ENV 13722	Sorby MGT					
Test 10 mg	Confidence intervals at 95%					
Hours	Zn		Cu		Pb	
	min interval	max interval	min interval	max interval	min interval	max interval
2	<1	<1	<1.0	<1.0	2.5	3.2
6	<1.0	<1.0	<1.0	<1.0	5.0	6.6
24	<1.0	1.9	<1.0	<1.0	17.7	19.0
96	1.3	2.1	<1.0	<1.0	59.4	62.0
168	3.2	4.4	<1.0	<1.0	80.7	83.0

ENV13722- sample "Silver Lead Zinc concentrate Sorby MGT"
Test 10 mg of sample



ENV13722- sample "Silver Lead Zinc concentrate Sorby MGT"
Test 10 mg of sample



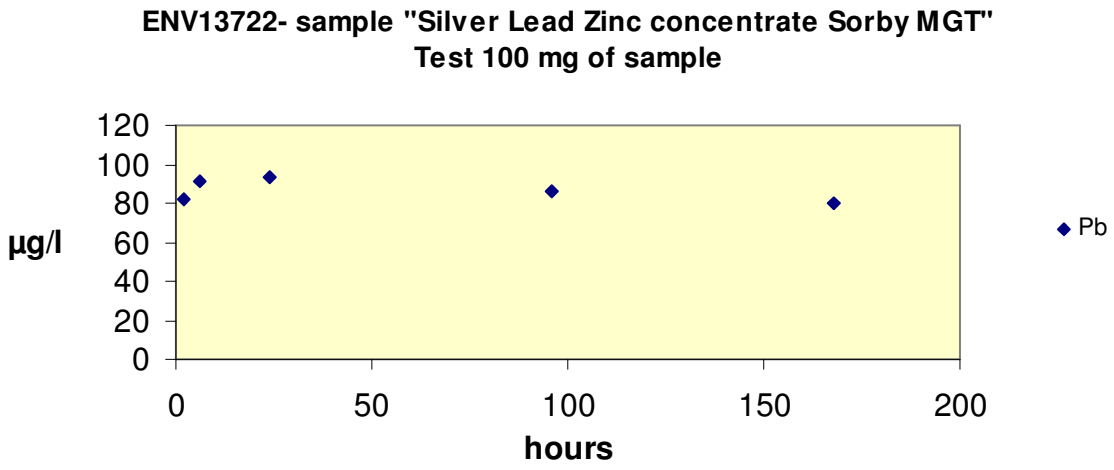
Note: The intersection point, 0.00, in the graphs refers to the value which is under the detection limit, <1 for copper, zinc and lead.

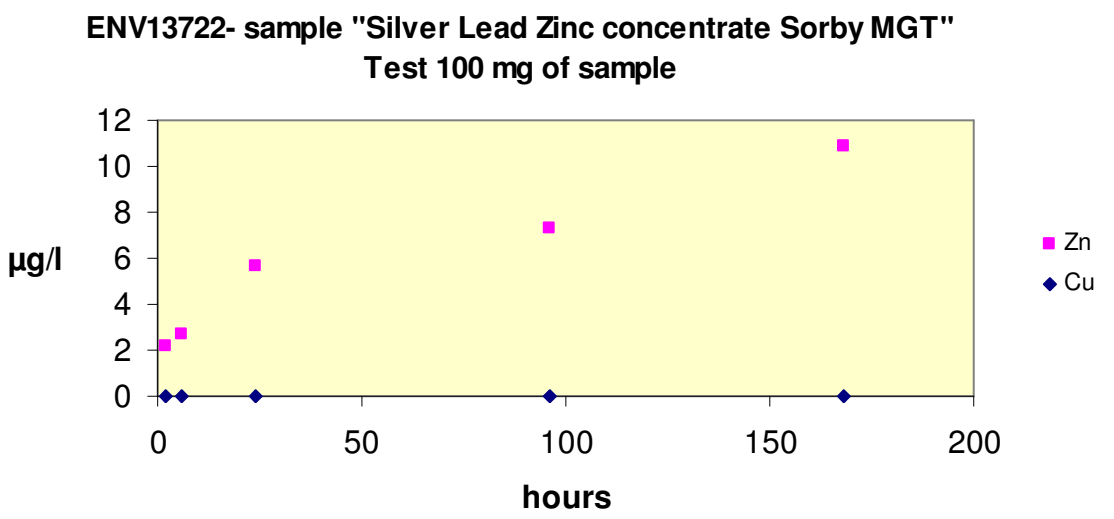
Graphs of the Average concentration of the Test at 100 mg

ENV 13722 - sample 'Silver-Lead-Zinc from Sorby MGT`			
Test 100 mg	*Average Concentration*		
	µg/l	µg/l	µg/l
Hours	Zn	Cu	Pb
2	2.2	<1.0	82.3
6	2.7	<1.0	91.3
24	5.7	<1.0	93.5
96	7.3	<1.0	85.7
168	10.8	<1.0	80.5

ENV 13722	Sorby MGT		
Test 100 mg	Deviation		
Hours	Zn	Cu	Pb
2	1.0	0.0	2.3
6	0.5	0.0	2.1
24	0.5	0.0	1.4
96	0.8	0.0	2.2
168	1.3	0.0	0.5

ENV 13722	Sorby MGT					
Test 100 mg	Confidence intervals at 95%					
Hours	Zn		Cu		Pb	
	min interval	max interval	min interval	max interval	min interval	max interval
2	1.4	3.0	<1.0	<1.0	80.5	84.2
6	2.3	3.1	<1.0	<1.0	89.7	93.0
24	5.3	6.1	<1.0	<1.0	92.4	94.6
96	6.7	8.0	<1.0	<1.0	83.9	87.4
168	9.8	11.9	<1.0	<1.0	80.1	80.9





Note: The intersection point, 0.00, in the graphs refers to the value which is under the detection limit, <1 for copper, zinc and lead.

Table 12: Characterization of total metals in the 'Silver-Lead-Zinc from Sorby MGT`

Parameters	U.M.	**Silver-Lead-Zinc from Sorby MGT**
Residue at 105°C	%	91.9
Water	%	8.1
Silver	mg/kg	526
Aluminium	mg/kg	957
Arsenic	mg/kg	752
Boron	mg/kg	34
Beryllium	mg/kg	3
Barium	mg/kg	30
Cadmium	mg/kg	96
Cobalt	mg/kg	10
Chromium	mg/kg	137
Copper	mg/kg	3007
Iron	mg/kg	80000
Potassium	mg/kg	750
Magnesium	mg/kg	1640
Manganese	mg/kg	89
Molybdenum	mg/kg	14
Sodium	mg/kg	360
Nickel	mg/kg	50
Phosphorus	mg/kg	1000
Lead	mg/kg	643000
Sulphur	mg/kg	150000
Selenium	mg/kg	34
Silicon	mg/kg	5194
Tin	mg/kg	34
Strontium	mg/kg	14
Titanium	mg/kg	116
Thallium	mg/kg	14
Vanadium	mg/kg	7
Zinc	mg/kg	12985
Mercury	mg/kg	0.07

COMPOSITION IN PERCENTAGE OF THE CONCENTRATE FROM SORBY MANAGEMENT PTY LTD

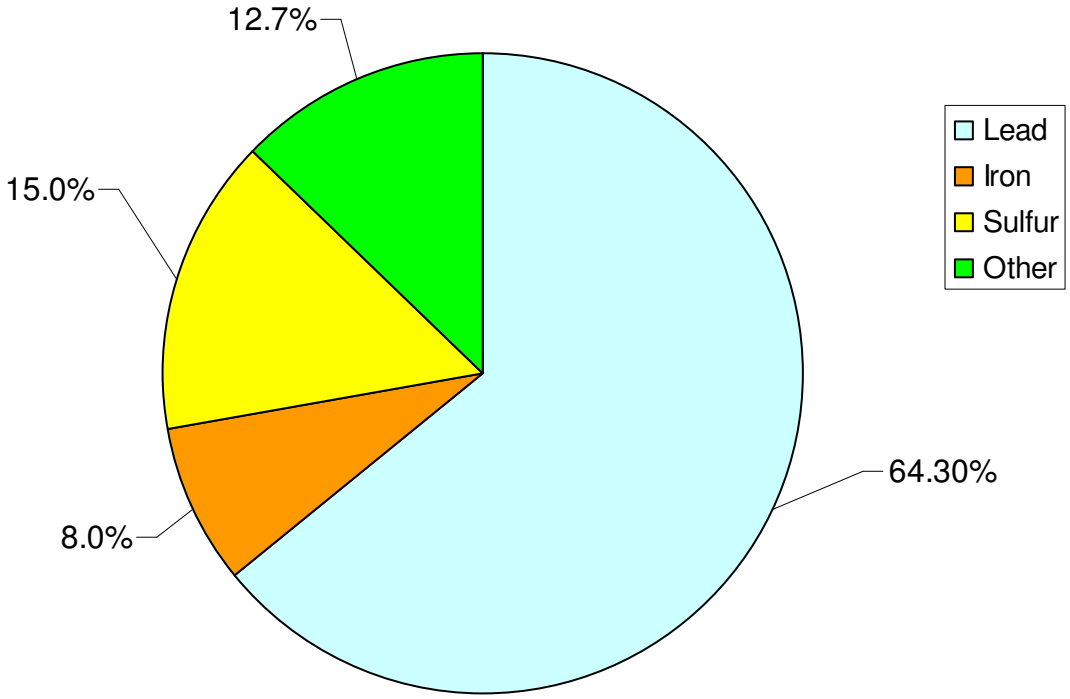


Table 13: Characterization of total dissolved metals in the waters blank of the 'Silver-Lead-Zinc from Sorby MGT ` test 100 mg

Parameters	U.M.	Blank 3 A	Blank 3 B	Blank 3 C
Silver	µg/L	<1	<1	<1
Aluminium	µg/L	<1	<1	<1
Arsenic	µg/L	1	<1	1
Boron	µg/L	<1	<1	<1
Beryllium	µg/L	<1	<1	<1
Barium	µg/L	<1	<1	<1
Cadmium	µg/L	<0.1	<0.1	<0.1
Cobalt	µg/L	<1	<1	<1
Copper	µg/L	<1	<1	<1
Chromium	µg/L	<1	<1	<1
Iron	µg/L	<5	<5	<5
Manganese	µg/L	<1	<1	<1
Molybdenum	µg/L	<1	<1	<1
Nickel	µg/L	<1	<1	<1
Lead	µg/L	<1	<1	<1
Selenium	µg/L	<2	<2	<2
Strontium	µg/L	2	2	2
Titanium	µg/L	<1	<1	<1
Vanadium	µg/L	<1	<1	<1
Thallium	µg/L	<1	<1	<1
Zinc	µg/L	<1	<1	<1
Magnesium (Dissolved)	mg/L	1.3	1.2	1.2
Potassium (Dissolved)	mg/L	0.3	0.3	0.3
Sodium (Dissolved)	mg/L	2.2	2	2
Phosphorus (Dissolved)	mg/L	<0.05	<0.05	<0.05
Sulphur (Dissolved)	mg/L	0.5	0.5	0.5
Silicon (Dissolved)	mg/L	<0.03	<0.03	<0.03
Tin (Dissolved)	mg/L	<0.05	<0.05	<0.05
Mercury (Dissolved)	mg/L	<0.0001	<0.0001	<0.0001
Sulphate	mg/L	<1	<1	<1

Table 14: Characterization of total dissolved metals in the 'Silver-Lead-Zinc from Sorby MGT` test 100 mg at 24 hours (1 day)

Parameters	U.M.	3A 1D 1	3A 1D 2	3B 1D 1	3B 1D 2	3C 1D 1	3C 1D 2
Silver	µg/L	<1	<1	<1	<1	<1	<1
Aluminium	µg/L	<1	<1	1	1.1	<1	1.1
Arsenic	µg/L	<1	<1	<1	<1	<1	<1
Boron	µg/L	<1	<1	<1	<1	<1	<1
Beryllium	µg/L	<1	<1	<1	<1	<1	<1
Barium	µg/L	<1	<1	<1	<1	<1	<1
Cadmium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	µg/L	<1	<1	<1	<1	<1	<1
Copper	µg/L	<1	<1	<1	<1	<1	<1
Chromium	µg/L	<1	<1	<1	<1	<1	<1
Iron	µg/L	<5	<5	<5	<5	<5	<5
Manganese	µg/L	<1	<1	<1	<1	<1	<1
Molybdenum	µg/L	<1	<1	<1	<1	<1	1
Nickel	µg/L	1	1	<1	1	<1	<1
Lead	µg/L	96	93	93	94	92	93
Selenium	µg/L	<2	<2	<2	<2	<2	<2
Strontium	µg/L	3	3	3	3	3	3
Titanium	µg/L	<1	<1	<1	<1	<1	<1
Vanadium	µg/L	<1	<1	<1	<1	<1	<1
Thallium	µg/L	<1	<1	<1	<1	<1	<1
Zinc	µg/L	5	6	5	6	6	6
Magnesium (Dissolved)	mg/L	1.4	1.4	1.4	1.4	1.4	1.4
Potassium (Dissolved)	mg/L	0.3	0.3	0.3	0.3	0.3	0.3
Sodium (Dissolved)	mg/L	1.9	1.9	1.9	1.9	1.9	1.9
Phosphorus (Dissolved)	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sulphur (Dissolved)	mg/L	2	1.8	1.9	1.8	2.3	2
Silicon (Dissolved)	mg/L	0.44	0.43	0.51	0.52	0.48	0.48
Tin (Dissolved)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Mercury (Dissolved)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001