

October 2013

88631

New batch of items for conservation – Mauser fragments.

W:\Projects\London Gateway\London Gateway 2012\72439 Materials conservation and recording\72438 Conservation

Tracking: **W*** Ready for long term wet storage.**

DESCRIPTION	WA NUMBER	INTO FINDS	OUT OF FINDS	COMMENTS
*iron – small part	WA1038_14 1239	20.02.2014	26.08.2015	
iron – 3 pieces (1 very small)	WA1038_15 1240	20.02.2014	26.08.2015	
*iron -	WA1038_16 1241	20.02.2014	26.08.2015	
iron – small part	WA1038_17 1242	20.02.2014	26.08.2015	
*iron – small part, small frag. of wood attached	WA1038_18 1238	20.02.2014	26.08.2015	
iron – barrel plus some portion of pistol	WA1038_19 1243	21.02.2014	26.08.2015	much orange corrosion (removed)
iron – barrel plus substantial portion of pistol	WA1038_20 1244	21.02.2014	26.08.2015	
iron – 1 piece loose but in position	WA1038_21 1245	20.02.2014	26.08.2015	
*iron -	WA1038_35 1259	20.02.2014	26.08.2015	some orange corrosion (removed)
wood -	WA1038_22 1246	21.02.2014	W*** iron salts still present	soft surface, black and orange iron corrosion covering all surfaces
*wood -	WA1038_23 1247	21.02.2014	W*** iron salts still present	soft surface, some damage (missing end), black and orange iron corrosion covering all surfaces
*wood -	WA1038_24 1248	27.08.2014	W*** iron salts still present	some concretion, some wood debris in bag
*wood -	WA1038_25 1249	27.08.2014	W***	black sediment
*wood -	WA1038_26 1250	27.08.2014	W***	red sediment, some concretion
*wood – frag. of CuA plate + screw attached	WA1038_27 1251	27.08.2014	W*** iron salts still present	
*wood – small frag.	WA1038_28 1252	27.08.2014	W***	
*wood -	WA1038_29 1253	27.08.2014	W*** iron salts still present	some concretion
*wood -	WA1038_30 1254	27.08.2014	W***	
*wood – large section of stock	WA1038_31 1255	27.08.2014	W*** iron salts still present	
*wood – 2 end sections of stock concreted together	WA1038_32 1256	27.08.2014	W*** iron salts still present	
wood – part of muzzle end of stock, CuA plate attached with 4 rivets	WA1038_33 1257	27.08.2014	W***	

Details:
* = finished

IRON:

***WA1038_14**

- Photo's: 1-3 after cleaning
- 20.02.2014: - as much as possible of loose black corrosion removed with a brush.
- into tap water.
- 21.02.2014: - flash rusting already occurring, tap water replaced by deoxygenated tap water.
- 13.03.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - little flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - few spots of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 29.09.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.10.2014: - very little flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 12.11.2014: - flash rusting removed, air dried and into dry box for long term storage.

NOT TO BE RETAINED

***WA1038_15**

- Photo's: 1-3 after cleaning
4&5 after desalination and drying
- 20.02.2014: - as much as possible of loose black corrosion removed with a brush.
- into tap water.
- 21.02.2014: - flash rusting already occurring, tap water replaced by deoxygenated tap water.
- 13.03.2014: - some flash rusting (removed).

- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - much flash rusting (removed).
- part very fragile, detached.
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - more flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 01.10.2014: - flash rusting removed, air dried and into dry box for long term storage.

***WA1038_16**

- Photo's: 1-3 after cleaning
4&5 after desalination and drying
- 20.02.2014: - as much as possible of loose black corrosion removed with a brush.
- into tap water.
 - 21.02.2014: - flash rusting already occurring, tap water replaced by deoxygenated tap water.
 - 13.03.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
 - 17.04.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
 - 28.05.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
 - 26.06.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
 - 31.07.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
 - 26.08.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
 - 29.09.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap

- water.
- 31.10.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.12.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated water.
- 13.01.2015: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated water.
- 22.02.2015: - salt levels checked.
- 04.03.2015: - flash rusting removed, air dried and into dry box for long term storage.

NOT TO BE RETAINED

***WA1038_17**

- Photo's: 1&2 after cleaning
3&4 after desalination and drying
- 20.02.2014: - as much as possible of loose black corrosion removed with a brush.
- into tap water.
- 21.02.2014: - flash rusting already occurring, tap water replaced by deoxygenated tap water.
- 13.03.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 01.10.2014: - flash rusting removed, air dried and into dry box for long term storage.

***WA1038_18**

- Photo's: 1&2 after cleaning
3&4 after desalination and drying
- 20.02.2014: - as much as possible of loose black corrosion removed with a

- brush.
- into tap water.
- 21.02.2014: - flash rusting already occurring, tap water replaced by deoxygenated tap water.
- 13.03.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - few spots of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 01.10.2014: - flash rusting removed, air dried and into dry box for long term storage.

NOT TO BE RETAINED

***WA1038_19**

- Photo's: 1-4 after cleaning
- 5-7 after desalination and drying
- 21.02.2014: - as much as possible of orange corrosion and loose black corrosion removed with a brush.
- into deoxygenated tap water.
- 13.03.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - more flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - few spots of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap

- water.
- 29.09.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.10.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.12.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 13.01.2015: - little flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated water.
- 22.02.2015: - salt levels checked.
- 04.03.2015: - flash rusting removed, air dried and into dry box for long term storage.

***WA1038_20**

- Photo's: 1-3 after cleaning
4&5 after desalination and drying
- 21.02.2014: - as much as possible of loose black corrosion removed with a brush.
- into deoxygenated tap water.
- 13.03.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - few spots of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 29.09.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.10.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.12.2014: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap

- water.
- 13.01.2015: - little flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated water.
- 22.02.2015: - salt levels checked.
- 04.03.2015: - flash rusting removed, air dried and into dry box for long term storage.

***WA1038_21**

- Photo's: 1-4 after cleaning
5-8 after desalination and drying
- 20.02.2014: - as much as possible of loose black corrosion removed with a brush.
- into tap water.
- 21.02.2014: - flash rusting already occurring, tap water replaced by deoxygenated tap water.
- 13.03.2014: - some flash rusting to top surface (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - a large amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - much flash rusting(removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 29.09.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.10.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.12.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 13.01.2015: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 22.02.2015: - salt levels checked.
- 04.03.2015: - much flash rusting (removed).
- water changed for fresh deoxygenated water.

- 10.04.2015: - salt levels checked.
- 23.04.2015: - some flash rusting (removed).
- water changed for fresh deoxygenated water.
- 20.05.2015: - salt levels checked.
- very small amount of flash rusting (removed).
- water changed for fresh deoxygenated water.
- 18.06.2015: - salt levels checked.
- much flash rusting (removed).
- water changed for fresh deoxygenated water.
- 15.07.2015: - salt levels checked.
- much flash rusting (removed).
- water changed for fresh deoxygenated water.
- 14.08.2015: - salt levels checked.
- some flash rusting (removed).
- water changed for fresh deoxygenated water.
- 20.08.2015: - even though salt levels not quite comparable to tap water, to avoid further flash rusting - flash rusting removed, air dried and into dry box for long term storage.

***WA1038_35**

- Photo's: 1-3 after cleaning
4&5 after desalination and drying.
- 20.02.2014: - as much as possible of orange corrosion and loose black corrosion removed with a brush.
- into tap water.
- 21.02.2014: - flash rusting already occurring, tap water replaced by deoxygenated tap water.
- 13.03.2014: - some flash rusting to top surface (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - a large amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.06.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2017: - much flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - few spots of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 29.09.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.10.2014: - some flash rusting (removed).

- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.12.2014: - some flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 13.01.2015: - small amount of flash rusting (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 22.02.2015: - salt levels checked.
- 04.03.2015: - small amount of flash rusting (removed).
- water changed for fresh deoxygenated water.
- 10.04.2015: - salt levels checked.
- 23.04.2015: - small amount of flash rusting (removed).
- water changed for fresh deoxygenated water.
- 20.05.2015: - salt levels checked.
- very small amount of flash rusting (removed).
- water changed for fresh deoxygenated water.
- 18.06.2015: - salt levels checked.
- very small amount of flash rusting (removed).
- water changed for fresh deoxygenated water.
- 15.07.2015: - salt levels checked.
- flash rusting removed, air dried and into dry box for long term storage.

NOT TO BE RETAINED

Chloride monitoring:

Using 1% silver nitrate, comparing sample with tap water.

If tap water is 1:

Date	14	15	16	17	18	19	20	21	35
13.03.2014	3	1	3	0.5	0.5	2	1	3	2
17.04.2014	2	1.5	2	1.5	1.5	1.5	1.5	2	1.5
28.05.2014	1.5	1	1.5	1	1	1.5	1.5	1	1
26.06.2014	1.5	1	2	1	1	1.5	1.5	3	1.5
31.07.2014	1	0.5	2	1	1	1	1	2	2
26.08.2014	1	1	2.5	1	1	1.5	1.5	2	2
29.09.2014	1	finished	missing reading	finished	finished	missing reading	1	5	2
31.10.2014	1		2			2	2	1.5	2
	finished								
17.12.2014			3			2	2	5	3
13.01.2015			1			1	1	3	1
22.02.2015			1			1	1	3	2
04.03.2015			finished			finished	finished		
10.04.2015								2	1.5
20.05.2015								1.5	1
18.06.2015								1.5	1
15.07.2015								1.5	finished
14.08.2015								1.5	
20.08.2015								taken out	

WATER NOTES:

- 17.04.2014: - all small boxes (14-18, 21, 35) same batch, lukewarm.
- larger boxes (19 & 20) same batch, hot.
- 31.07.2014: - all boxes same batch, water left over night before use.
- 26.08.2014: - less flash rusting from last time.
- new batch left no more than few hours, water for higher numbers fairly hot.
- 29.09.2014: - 14, 16, 19, 21 & 35 old water deoxygenated a couple of weeks before.
- 20 half old, half cold fresh deoxygenated.
- 17.12.2014: - all fresh hot deoxygenated water.
- 13.01.2015: - all fresh hot deoxygenated water.
- 20.05.2015: - fresh boiling deoxygenated water.
- 18.06.2015: - fresh boiling deoxygenated water.

WOOD:

WA1038_22

Photo's: 1&2 after cleaning

- 21.02.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush.
- into deoxygenated tap water.
- 07.03.2014: - iron salts in water very bad (removed).
- water replaced temporarily with tap water.
- 13.03.2014: - some iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - a large amount of iron salts (removed).
Salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - a large amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - small amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - small amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 01.10.2014: - some iron salts still present (removed).
- salt levels not checked as down to acceptable levels, but water changed for fresh deoxygenated water to carry on removing iron salts.
- 03.11.2014: - some iron salts present (removed).
- water changed for fresh tap water.
- 17.12.2014: - some iron salts present (removed).
- water changed for fresh tap water.
- 13.01.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 05.03.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 23.04.2015: - large amounts of iron salts present (removed)
- water changed for fresh tap water.
- 21.05.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 18.06.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
- 16.07.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
- 14.08.2015: - small amount of iron salts present (removed).
- musty smell.
- water changed for fresh tap water.
- 24.09.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
- 20.10.2015: - small amount of iron salts present (removed).

- musty smell.
- water changed for fresh tap water.
- 10.12.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
- 27.01.2016: - small amount of iron salts present (removed).
- water changed for fresh tap water.

WA1038_23

Photo's: 1-3 after cleaning

- 21.02.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush.
- into deoxygenated tap water.
- 07.03.2014: - iron salts in water very bad (removed).
- water replaced temporarily with tap water.
- 13.03.2014: - small amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 17.04.2014: - a large amount of iron salts (removed).
- Salt levels checked, water changed for fresh deoxygenated tap water.
- 28.05.2014: - large amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 31.07.2014: - large amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 26.08.2014: - large amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 29.09.2014: - large amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 03.11.2014: - some iron salts present (removed).
- salt levels checked, water changed for fresh tap water.
- 17.12.2014: - large amount of iron salts still present (removed).
- salt levels not checked as down to acceptable levels, but water changed for fresh tap water to carry on removing iron salts.
- 13.01.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 05.03.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 23.04.2015: - large amounts of iron salts present (removed)
- water changed for fresh tap water.
- 21.05.2015: - large amounts of iron salts (removed).
- water changed for fresh tap water.
- 18.06.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 16.07.2015: - some iron salts present (removed).

- water changed for fresh tap water.
- 14.08.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 24.09.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 20.10.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 10.12.2015: - large amount of iron salts present (removed).
- very small amount of slime (removed).
- water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_24

Photo's: 1 & 2 after cleaning

- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush. As much as possible of sediment removed with wooden point, some concretion left.
- into deoxygenated tap water.
- 29.09.2014: - large amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 03.11.2014: - large amount of iron salts (removed).
- salt levels checked, water changed for fresh tap water.
- 17.12.2014: - some iron salts (removed).
- salt levels checked, water changed for fresh tap water.
- 13.01.2015: - very little iron salts present (removed).
- salt levels not checked as down to acceptable levels, but water changed for fresh tap water to carry on removing iron salts.
- 05.03.2015: - large amounts of iron salts present (removed).
- water changed for fresh tap water.
- 23.04.2015: - large amounts of iron salts present (removed)
- water changed for fresh tap water.
- 21.05.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 18.06.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 16.07.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 14.08.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 24.09.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 20.10.2015: - some iron salts present (removed).
- water changed for fresh tap water.
- 10.12.2015: - large amount of iron salts present (removed).
- water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_25

Photo's: 1 & 2 after cleaning

- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush. As much as possible of sediment removed with wooden point.
- into deoxygenated tap water.
- 29.09.2014: - large amount of iron salts (removed).
- salt levels checked, water changed for fresh deoxygenated tap water.
- 03.11.2014: - some iron salts present (removed).
- salt levels checked, water changed for fresh tap water.
- 17.12.2014: - some iron salts (removed).
- salt levels checked, water changed for fresh tap water.
- 13.01.2015: - very little iron salts present (removed).
- salt levels not checked as down to acceptable levels, but water changed for fresh tap water to carry on removing iron salts.
- 05.03.2015: - very little iron salts present (removed).
- water changed for fresh tap water.
- 23.04.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
- 21.05.2015: - no iron salts present.
- water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_26

Photo's: 1 & 2 after cleaning

- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush.
- into deoxygenated tap water.
- 29.09.2014: - no iron salts present.
- salt levels checked, water changed for fresh deoxygenated tap water.
- 03.11.2014: - no iron salts present.
- salt levels checked, water changed for fresh tap water.
- 17.12.2014: - no iron salts present.
- salt levels checked, water changed for fresh tap water.
- 13.01.2015: - salt levels not checked as down to acceptable levels, but water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_27

Photo's: 1-3 after cleaning

- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush.
- into deoxygenated tap water.
- 29.09.2014: - large amount of iron salts (removed).

- salt levels checked, water changed for fresh deoxygenated tap water.
- 03.11.2014: - some iron salts (removed).
 - salt levels checked, water changed for fresh tap water.
- 17.12.2014: - large amount of iron salts still present and possibly biological growth (all removed).
 - salt levels not checked as down to acceptable levels, but water changed for fresh tap water to carry on removing iron salts.
- 13.01.2015: - small amount of iron salts present (removed).
 - water changed for fresh tap water.
- 05.03.2015: - small amount of iron salts present (removed).
 - water changed for fresh tap water.
- 23.04.2015: - some iron salts present & some slime growth (both removed)
 - water changed for fresh tap water.
- 21.05.2015: - small amount of iron salts present (removed).
 - some biological growth (removed).
 - water changed for fresh tap water.
- 18.06.2015: - small amount of iron salts present (removed).
 - some biological growth (removed).
 - water changed for fresh tap water.
- 16.07.2015: - small amount of iron salts present (removed).
 - some biological growth (removed).
 - water changed for fresh tap water.
- 14.08.2015: - small amount of iron salts present (removed).
 - some biological growth (removed).
 - water changed for fresh tap water.
- 24.09.2015: - small amount of iron salts present (removed).
 - some biological growth (removed).
 - water changed for fresh tap water.
- 20.10.2015: - very small amount of iron salts present (removed).
 - some biological growth (removed).
 - water changed for fresh tap water.
- 10.12.2015: - small amount of iron salts present (removed).
 - some slime present (removed).
 - water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_28

- Photo's: 1 & 2 after cleaning
- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush.
 - into deoxygenated tap water.
 - 29.09.2014: - very small amount of iron salts present (removed).
 - salt levels checked, water changed for fresh deoxygenated tap water.
 - 03.11.2014: - no iron salts present.
 - salt levels checked, water changed for fresh tap water.
 - 17.12.2014: - no iron salts present.

- salt levels not checked as down to acceptable levels, but water changed for fresh tap water.

13.01.2015: - water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_29

Photo's: 1-3 after cleaning

27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush.

- into deoxygenated tap water.

29.09.2014: - very large amount of iron salts present (removed).

- salt levels checked, water changed for fresh deoxygenated tap water.

03.11.2014: - large amount of iron salts present (removed).

- salt levels checked, water replaced with fresh tap water.

17.12.2014: - large amount of iron salts present (removed).

- salt levels checked, water replaced with fresh tap water.

13.01.2015: - large amount of iron salts (removed).

- salt levels checked, water replaced with fresh tap water.

22.02.2015: - salt levels checked and down to acceptable levels.

04.03.2015: - large amounts of iron salts (removed).

- water changed for fresh tap water.

23.04.2015: - large amounts of iron salts present (removed)

- water changed for fresh tap water.

21.05.2015: - large amounts of iron salts present (removed).

- water changed for fresh tap water.

18.06.2015: - some iron salts present (removed).

- water changed for fresh tap water.

16.07.2015: - some iron salts present (removed).

- water changed for fresh tap water.

14.08.2015: - large amounts of iron salts present (removed).

- water changed for fresh tap water.

24.09.2015: - large amounts of iron salts present (removed).

- water changed for fresh tap water.

20.10.2015: - some iron salts present (removed).

- water changed for fresh tap water.

10.12.2015: - large amount of iron salts present (removed).

- water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_30

Photo's: 1 & 2 after cleaning

27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush.

- into deoxygenated tap water.

29.09.2014: - large amount of iron salts present (removed).

- salt levels checked, water changed for fresh deoxygenated tap water.

- 03.11.2014: - some iron salts present (removed).
- salt levels checked, water replaced with fresh tap water.
- 17.12.2014: - small amount of iron salts present (removed).
- salt levels not checked as down to acceptable levels, but water changed for fresh tap water to carry on removing iron salts.
- 13.01.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
- 05.03.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
- 23.04.2015: - very small amount of iron salts present (removed)
- water changed for fresh tap water.
- 21.05.2015: - no iron salts present.
- water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_31

- Photo's: 1 & 2 after cleaning
- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush. As much as possible of sediment removed with wooden point.
- into deoxygenated tap water.
 - 30.10.2014: - some iron salts present (removed).
- salt levels checked, water changed for fresh deoxygenated water.
 - 03.11.2014: - some iron salts present (removed).
- salt levels checked, water replaced with fresh tap water.
 - 17.12.2014: - some iron salts present (removed).
- salt levels not checked as down to acceptable levels, but water changed for fresh tap water to carry on removing iron salts.
 - 13.01.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
 - 05.03.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
 - 23.04.2015: - some iron salts present (removed)
- water changed for fresh tap water.
 - 21.05.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
 - 18.06.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
 - 16.07.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
 - 14.08.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
 - 24.09.2015: - very small amount of iron salts present in inside (removed).
- water changed for fresh tap water.
 - 20.10.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.

- 10.12.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_32

Photo's: 1 & 2 after cleaning

- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush. As much as possible of sediment removed with wooden point.
- into deoxygenated tap water.
- 30.10.2014: - some iron salts present (removed).
- salt levels checked, water changed for fresh deoxygenated water.
- 03.11.2014: - small amount of iron salts present (removed).
- salt levels checked, water changed for fresh tap water.
- 17.12.2014: - small amount of iron salts present (removed).
- salt levels checked, water replaced with fresh tap water.
- 13.01.2015: - small amount of iron salts present (removed).
- salt levels not checked, but water changed for fresh tap water to carry on removing iron salts.
- 05.03.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
- 23.04.2015: - small amount of iron salts present (removed)
- water changed for fresh tap water.
- 21.05.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
- 18.06.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
- 16.07.2015: - small amount of iron salts present (removed).
- water changed for fresh tap water.
- 14.08.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
- 24.09.2015: - very small amount of iron salts present in two areas (removed).
- water changed for fresh tap water.
- 20.10.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.
- 10.12.2015: - very small amount of iron salts present (removed).
- water changed for fresh tap water.

NOT TO BE RETAINED

WA1038_33

Photo's: 1 & 2 after cleaning

- 27.08.2014: - as much as possible of iron corrosion (black and orange) removed with a soft brush. As much as possible of sediment removed with wooden point.
- into deoxygenated tap water.
- 30.10.2014: - some iron salts present (removed).
- salt levels checked, water changed for fresh deoxygenated

water.

- 03.11.2014: - small amount of iron salts present (removed).
- salt levels checked, water changed for fresh tap water.
- 17.12.2014: - small amount of iron salts present (removed).
- salt levels not checked as down to acceptable levels, but water changed for fresh tap water to carry on removing iron salts.
- 13.01.2015: - no iron salts present.
- water changed for fresh tap water.
- 27.01.2015: - OK.

Chloride monitoring:

Using 1% silver nitrate, comparing sample with tap water.

If tap water is 1:

Date	22	23	24	25	26	27	28	29	30	31	32	33
03.03.2014	1	2										
17.04.2014	1	1										
28.05.2014	1	1										
31.07.2014	0.5	1										
26.08.2014	1	1										
29.09.2014	finished	missing reading	2	2	1.5	1	1	3	1	1.5	1.5	1
03.11.2014		1	1	1	1	1	1	1.5	0.5	0.5	1	1
		finished				finished	finished		finished	finished		finished
17.12.2014			1	1	1			2			1	
			finished	finished	finished						finished	
13.01.2015								1				
22.02.2015								1				
04.03.2015								finished				

WATER NOTES:

- 17.04.2014: - 22 & 23 same batch, hot.
- 31.07.2014: - 22 & 23 same batch, left over night before use.
- 26.08.2014: - 22 & 23 same batch, fairly hot.
- 29.09.2014: - 23 old water deoxygenated a couple of weeks before.
- 24 – 27 cold fresh deoxygenated.
- 28 – 30 half cold, half hot deoxygenated.
- 31 – 33 half cold from day before, half fresh hot deoxygenated.
- 03.11.2014: - all replaced with tap water.
- 17.12.2014: - all replaced with tap water.
- 13.01.2015: - all replaced with tap water.