

## Cromarty Medieval Burgh Excavations

2014-2015

### Glass Report

K. Robin Murdoch, 29-1-2016

#### Discussion

This is the second report on glass from the Cromarty Medieval Burgh Community excavations and reports on the finds from the 2014-15 seasons.

The previous report on the 2013 glass finds included a considerable amount of general info on Scottish glass and its history. This will not be repeated here and the two reports should be considered together.

A total of 1086 glass shards were recovered in 2014-15. 40% (439) of the submitted assemblage were window glass shards compared to only 18% (196) of the total in 2013. Of the remaining 647 shards, 27 were from finer tableware and 296 were from the ubiquitous wine bottle (some possibly from ale bottles) and covered the period from the late 17<sup>th</sup> to early 19<sup>th</sup> century. Among the truly diagnostic wine bottle shards there appeared to be a majority of first half 18<sup>th</sup> century items rather than later. However as noted in the 2013 report, these bottles could have been in use for a considerable time after manufacture. The remaining 324 shards were mainly from bottles of different types of 19<sup>th</sup> century date.

Unfortunately the 2014-15 assemblage yielded fewer diagnostic shards than 2013 and many could only be roughly dated from colour and condition. The cheap potash fluxed glass commonly used to make wine bottles is particularly prone to corrosion in damp buried environments. Late 17<sup>th</sup> century and 18<sup>th</sup> century examples especially corrode in a fairly predictable manner and the nature and level of corrosion allows for very approximate dating.

The overall impression was the same as with the 2013 assemblage, intensive activity in the 18<sup>th</sup> and 19<sup>th</sup> century followed by abandonment at the end of the latter. The paucity of earlier material is as likely to be related to a lack of availability of glass rather than any reduced activity on site. This is very typical of Scottish glass assemblages.

There were several items in this assemblage worthy of comment beyond the catalogue: The extremely deep kick on the wine bottle from **SF1554** is very similar to Belgian or French examples from the late 18<sup>th</sup> or early 19<sup>th</sup> century. (**Van den Bossche PI 127**)

Three shards of wine glass from **SF1745** conjoin and give a reasonable profile of the vessel apart from the foot since all the foot-rim is missing. The drawn stem and trumpet bowl are found through most of the 18<sup>th</sup> century but the earlier vessels would have had a folded foot (rim doubled over). Drawn stems from around 1730 to 1780 also frequently had internal decorative air or cotton twists. The example here has no twist and the pontil scar on the underside of the foot may have been partly smoothed. From about 1750 the pontil scars on better quality glasses were generally smoothed off and by c1775 the practice was almost universal (**Bickerton p21**). The capacity of the glass has been small and the fluting on the bowl is similar to **Bickerton PI 229**.

Three shards of vessel glass were recovered from **SF1484** and included another plain drawn stem similar to above. The fragment of foot and lower stem from the same **SF** is interesting. It appears to be from a stemmed bowl of considerable size and the pontil scar on the underside is unfinished

indicating a probable pre c1775 date. The significance of this item is that it indicates a fairly prestigious piece of tableware.

Another fairly common find on Scottish sites is the probable shard of case bottle from **SF1268**. Several shards of case bottle had been recovered in 2013. These square section bottles, made to be transported in wooden cases, are known from the 16<sup>th</sup> century onwards and used mostly for spirits from the Low Countries where the bottles were made (**Van den Bossche p47**). The corrosion on this example would indicate a date of no later than 1700.

One of the earliest glass finds from the site is the shard of goblet or beaker in clear glass with a pedestal foot from **SF2164**. Pedestal footed drinking glasses come from a period predating narrow stemmed glasses. The technique involves pushing the base inwards and upwards to form the base of the bowl. This creates a hollow wide foot (pedestal) with double thickness walls situated below a bowl with single thickness walls. This format tends to phase out in the later 17<sup>th</sup> century with the changeover to stemmed varieties and this example is probably 1<sup>st</sup> half 17<sup>th</sup> century although could just be late 16<sup>th</sup>. Close parallels were found at several English glassmaking sites of the first half of the 17<sup>th</sup> century. These included Hutton and Rosedale, Yorkshire, operational from the very late 16<sup>th</sup> century to the early 17<sup>th</sup> ,(**Crossley and Aberg 1972 p125**) Houghton Green, near Manchester, operational between 1615 and 1653 (**R H Vose 1994, fig 9, 28,29,30**) and Kimmeridge, Dorset, operational from 1615 to 1623 (**D.Crossley 1987, p359, fig 7**)

Probably from the same period, ie first half 17<sup>th</sup> century, is the shard of probable beaker from **SF2059**. Made from a pale green glass with some seed and moderate corrosion this vessel has been blown into a mould with wrythen or spiral ribs. Beakers with this type of wrythen moulding were also recovered from the three sites above indicating it was a fairly standard decorative form of the first half of the 17<sup>th</sup> century. The corrosion on **SF2164** and **SF2059** is very similar but the basic glass colour is different indicating they are not from the same vessel. Wrythen moulded glasses are also known from 13<sup>th</sup>/14<sup>th</sup> century forest glass houses in England but this shard came from a mixed context and the level of corrosion was less than might be expected from an earlier vessel.

One find proved to be enigmatic and lacked enough detail making it difficult to find parallels for. This was from **SF2036** and comprised four small shards from a very thin blown clear bottle. Under magnification the glass proved to be very seedy (small gas bubbles) and had patchy dark brown (potash flux) corrosion. Difficult to ascribe a date or likely provenance for this but it might also be pre 1700.

## **Window Glass**

As already indicated 439 shards of window glass were recovered in the 2014-15 excavations and these are combined in this report with the 196 from 2013 to give a broader picture of the glazing. The 2014-15 shards were divided into 23 different groups based on physical appearance, ie colour tinge, thickness and condition. Each group was given an alpha reference and one sample selected for chemical analysis to establish composition. Before analysis the samples from 2014-15 were compared against those from 2013 in order to relate the two groups to each other. Based on physical appearance ten of the 2014-15 samples matched 2013 samples and had therefore previously been analysed. Samples with the refs A-T were those selected in 2013 and those with refs AA-AM selected from 2014-15 because they did not have close equivalents in the batch from 2013. This means that a total of 33 samples have been analysed to determine composition. However the results for samples AA-AM are only in draft form at the moment and need tweaking for accuracy. Accordingly the compositions assigned may not be absolutely correct. Analysis of these shards is

ongoing and should further work change interpretation, any changes will be provided in an updated report.

**Note:** The method of selection and comparison of shards to specific samples is not an exact science but is the only practical solution other than analysing every single shard. This would not be practical in terms of time and cost and probably would not merit the extra effort. Therefore the identification of all the shards to specific samples will not be completely accurate but hopefully good enough to identify dating patterns within the window glass.

Looking at the results of the analysis we can see quite a distinctive pattern in the use of glazing on site. There are 4 shards of high lime, low alkali (HLLA1) glass of the early type which indicates late 16<sup>th</sup> century manufacture. This is followed by 3 shards of the later HLLA2 glass probably of the first half of the 17<sup>th</sup> century. The relatively small number of window glass shards of this period probably indicates that there was very little glazing on site at that time. However when we get to the later 17<sup>th</sup> century there is ample evidence of glazed windows. The largest group of shards (**30.6% of the total recovered**) are an HLLA glass in which kelp has been used as the fluxing alkali instead of a land based plant alkali. David Dungworth, in his English Heritage dating model of 2011 (**Dungworth p2 table 1**), did not include this composition because, although he had seen it, he did not have good dating provenance (**Dungworth pers comm.**) This composition has been seen in quite a number of Scottish assemblages so far. In particular it was seen in a surviving window at Traquair House, by Innerleithen, Peeblesshire. The window is in a wing of the house added c1690 (**Murdoch unpublished**). At the moment this composition is assigned a later 17<sup>th</sup> century date. In the 2013 report it was stated that this HLLA/kelp glass looked as if it may be a Scottish variant, this is no longer the case after discussions with David Dungworth!

According to Dungworth's model, true kelp fluxed glass was introduced c1700 and continued to be the main composition until c 1835. 28% of the shards recovered were kelp fluxed glass and this was followed by 24.6% SS1 (synthetic soda glass c1835-1870). Only 1% of the total assemblage of window glass could be identified as later than 1870. Summing up there is a very small number of window glass shards dating to the late 16<sup>th</sup> into the early 17<sup>th</sup> century, followed by plenty of evidence of glazing from the later 17<sup>th</sup> century to the third quarter of the 19<sup>th</sup> then nothing later. The activity at the end of the 17<sup>th</sup> century indicates again that Cromarty was quite a sophisticated community for the period. Generally rural communities did not see glazing until the 18<sup>th</sup> or even 19<sup>th</sup> centuries.

A potash lead glass was recovered from three contexts but only single shards from two and 60 from another. It is quite possible that this was a special glass for furniture rather than windows. It dates most likely to the 19<sup>th</sup> century but possibly 18<sup>th</sup>.

The Table below shows the interpreted dates for all the samples as of January 2016.

Samples	Type	Comment	Date
I, K	HLLA1	High lime, low alkali, high manganese	C1567-1600
T, AD	HLLA2	High lime, low alkali, low manganese	C1600-1700
F, G, O, R, AA	H/K	High lime, low alkali, moderate strontium	Late 17 <sup>th</sup> C
A, B, C, E, L, AB, AG, AK, AM	Kelp	Kelp flux, high strontium	C1700-1835
D, H, J, Q, AE, AI, AJ	SS1	Synthetic soda flux, moderate arsenic	C1835-1870
M	SS1/2	May be SS1 or SS2	Mid to late 19 <sup>th</sup> C
AC	SS2	Synthetic soda flux, minimal arsenic	C1870>
N, P, S	P/L	Potash lead	18 <sup>th</sup> /19 <sup>th</sup> C

AF, AH, AL	?	Not known as yet	
------------	---	------------------	--

One item of window glass was slightly out of the ordinary. The crown centre from **SF1904** was partially grozed along one edge indicating that it had been used as actual glazing. Contrary to general belief the bullseye centres were not often used for glazing but discarded after the panes had been cut and often recycled. It is unusual to find one which has been used in glazing and it has probably come from a window of less importance, ie attic, store etc. The rapidly changing thickness of the glass near the centre of the crown table or disc made it very difficult to fit to a frame.

Two appendices are attached to this report. A descriptive list of all 33 window glass samples and a distribution chart of the occurrence of sample types by context.

### Works consulted

- Ash D 1962**                    *How to Identify English Drinking Glasses and Decanters, 1680-1839*  
London
- Bickerton L 1971**            *Eighteenth-Century English Drinking Glasses, South Brunswick and New York*
- Crossley D W and  
Aberg F A 1972**            *16<sup>th</sup> Century Glass Making in Yorkshire: Excavations at Hutton and Rosedale, North Riding 1968-71. Post-Medieval Archaeology 6, 1972*
- Crossley D W 1987**        *Sir William Clavell's Glasshouse at Kimmeridge, Dorset, The Excavation Of 1980-81. Archaeological Journal 144, 1987.*
- Dungworth D 2011  
& Girbal B**                *Walmer Castle, Deal, Kent, Analysis of Window Glass, English Heritage Research Report Series no 2-2011.*
- Turnbull J 2001**            *The Scottish Glass Industry 1610-1750, Monograph Series No 18, Society of Antiquaries of Scotland, Edinburgh*
- Van den Bossche W  
2001**                        *Antique Glass Bottles, Their History and Evolution 1500-1850. Suffolk*
- Vose R H 1994**            *Excavations at the 17<sup>th</sup> century Glasshouse at Houghton Green, Denton near Manchester, Post-Medieval Archaeology 28, 1994*

### Catalogue

**Notes:** The catalogue is in small find (SF) number order followed by context number

**WB:** wine bottle

**WG:** window glass

## 2014 season

SF	Con	
801	TT602	Two shards WB, 18 <sup>th</sup> c
806	TT502	2 WG type AE 2 WG type F 1 WG type J
821	TT401	1 WG type AA 1 WG type AC
831	TT401	Base of bottle/jar in clear, 20 <sup>th</sup> c Small base shard in clear from probable tumbler, heavy base ring wear, 19 <sup>th</sup> c?
832	TT401	5 shards in firebright clear from stemmed drinking vessel, quite thickly blown, no pontil scar, mid to later 19 <sup>th</sup> c
833	TT401	Mixed bag of 18 shards 15 WB, only one with significant corrosion (environment). Base ring curves indicate early to mid 18 <sup>th</sup> c date for 13, probably mid 19 <sup>th</sup> for other two Part WB kick 19 <sup>th</sup> c Bottle shard probably 19 <sup>th</sup> c Thin bottle shard in pale aqua, probably 19 <sup>th</sup> c.
838	TT502	Shard bottle neck with upright lip, firebright very dark green (black), mid 19 <sup>th</sup> c
839	TT502	3 WB shards, E18th c 1 WB shard, L17th c
855	TT504	6 shards WB, pale green, heavy corrosion, E18th possibly L17th c
880	TT501	3 WG type F, 1.3, 1.6, 1.6mm thk 1 WG type AB, 1.8mm thk 1 WG type AJ, 1.1mm thk
885	TT501	21 various bottle shards, some wine, some beer, all in very dark or black glass, date range c18th c to mid 19 <sup>th</sup> c 6 shards bottle, pale green, mid to later 19 <sup>th</sup> c Shard bottle, cobalt blue, probably later 19 <sup>th</sup> c Part bottle neck, very pale green, firebright, L19th-20 <sup>th</sup> c 5 shards clear bottle probably L19th – 20 <sup>th</sup> c Part of press-moulded bowl in clear, post c1840 and probably late 19 <sup>th</sup> c 1 WG type F, bullseye centre 11 WG type F, 1.2-1.8mm 8 WG type B, 1.1-1.3mm thk 1 WG type AK, 1.3mm thk 1 WG type H, 1.6mm thk 9 shards in pale green-aqua, incl. neck and lip from 'egg' bottle, mid to later 19 <sup>th</sup> c Glass strap handle in clear from table vessel, probably 19 <sup>th</sup> c 15 shards various colours of bottles all mid to later 19 <sup>th</sup> c

SF	Con	
886	TT402	Part neck plus two small shards WB, 1 <sup>st</sup> quarter 18 <sup>th</sup> c 1 WG type AD, 1.7mm thk
895	5203	WB shard probably 1 <sup>st</sup> half 18 <sup>th</sup> c Firebright bottle shard, mid to later 19 <sup>th</sup> c
876	TT501	8 shards WB, variable corrosion, early to mid 18 <sup>th</sup> c
904	5204-2c	Tiny shard WB?, probably L18th c
916	5211	1 WG type N, 1.4mm Shard WB, probably 18 <sup>th</sup> c
920	5003	WB shard, 1 <sup>st</sup> half 18 <sup>th</sup> c 1 WG type O, 1.4mm
925	TT411	Bottle shard 19 <sup>th</sup> c possibly L18th
938	5201	Three shards WB, 18 <sup>th</sup> c Tiny shard medicine phial, bluish aqua, L18th-E19th c Shard WG, type AD, light corrosion, grozed edge Second WG shard, similar colour
941	5408	WB shard, 1 <sup>st</sup> half 18 <sup>th</sup> c
947	5211	2 WG type N
961	5200	2 WB shards, 1 <sup>st</sup> half 18 <sup>th</sup> c 1 WB shard, 2 <sup>nd</sup> half 18 <sup>th</sup> c
964	5204	WB shard dull green, belling, L18th-E19th c
976	5228	1 WG type J 2 WG type F 5 WG type AC
977	5228	Mixed bag of 12 shards 4 black mid 19 <sup>th</sup> c 3 copper blue, mid to later 19 <sup>th</sup> c 3 pale green, mid to later 19 <sup>th</sup> c 1 firebright dark green, mid to later 19 <sup>th</sup> c Shard WB, moderate to heavy corrosion, 18 <sup>th</sup> c
992	5231	Probable WB shard, L18th-E19th c
998	5211	WB shard 18 <sup>th</sup> c 1 WG type AJ, 1.8mm thk
1007	5201	WB kick mi 19 <sup>th</sup> c

SF	Con	
1008	5201	Almost complete WB base originally c125mm diameter, pale dull green with moderate corrosion, base ring diameter 95mm, moderate to heavy wear, kick depth 32.5mm, 2 <sup>nd</sup> quarter to mid 18 <sup>th</sup> c Further WB shard, 18 <sup>th</sup> c
1044	5234	2 WG type AA, 1.2, 1.6mm thk 3 WG type B, 1.5, 1.6, 1.6mm thk 5 shards WB, probably 18 <sup>th</sup> c Shard clear from drinking vessel
1053	5236	3 WG type F, 1.3, 1.4 and 1.6mm thk 2 WG type AG, 1.4, 1.8mm thk
1067	5259	1 WG type F, 1.5mm thk Bottle shard very pale green, L19th c?
1080	5201	1WG type AK, 1.4mm thk 11 WG type N, 1.4-1.8mm thk 2 WG type F, 1.3, 3.3mm 17 various shards WB including neck and lip, dull green, light corrosion. Neck ht 76mm, curving taper into shoulder (mallet bottle?), triangular string ring, 2 <sup>nd</sup> quarter 18 <sup>th</sup> c One body shard shows belling therefore later than c1740 One shard looks like mallet shape, c1730 14 others all 18 <sup>th</sup> c Shard neck greyish green Two small black bottle shards probably 19 <sup>th</sup> c Bottle shard in pale dull green probably 19 <sup>th</sup> c
1097	5207	WB shard dark dull green, L18th-E19th c.
1101	5218	mixed bag 2 WG type R, 2.7. 3.0mm thk 1 WG type F, 1.2mm thk Neck and lip WB, pale dull green, light to moderate corrosion, enhanced lip over sloppy string ring, aperture 16mm, later 18 <sup>th</sup> c Part base and lower body WB in firebright black, belling, original diameter c90mm, 1 <sup>st</sup> quarter 19 <sup>th</sup> c 5 further WB shards 18 <sup>th</sup> c Plain drawn stem in clear, patchy white corrosion, springing of bowl. Minimum stem diameter 14mm
1111	5234	Mixed bag of mainly 18 <sup>th</sup> c WB shards including 3 necks: Pale dull green with moderate corrosion, 83mm high, curving splay, triangular SR, slightly out turned lip. Aperture 16.5mm, 2 <sup>nd</sup> quarter 18 <sup>th</sup> c Two further necks darker in colour and much shorter, one has aperture 14.5mm, 1 <sup>st</sup> quarter 18 <sup>th</sup> c Two base shards probably from the same bottle with belling, post c1740.

**SF Con**

- 21 various shards WB mostly 1<sup>st</sup> half to mid 18<sup>th</sup> c.  
 Shard folded foot in clear from stemmed drinking vessel, original diameter c70mm, probable 1<sup>st</sup> half 18<sup>th</sup> c  
 Two firebright shards from 3-piece moulded bottle, post 1821 and probably mid 19<sup>th</sup>  
 Small shard clear drinking vessel bowl.  
 4 WG type F  
 2 WG type N  
 3 WG type AA  
 1 WG type AB  
 1 WG type AC
- 1117 5230 2 shards WB probable from same bottle, L18th-E19th c
- 1154 5211 1 WG type F, 1.6mm thk  
 Shard WB, 1<sup>st</sup> half 18<sup>th</sup> c
- 1155 5219 1 WG type N, 1.2mm thk  
 2 WG type AJ, 1.5, 1.7mm thk
- 1156 5258 Shard WB, probably 1<sup>st</sup> half 18<sup>th</sup> c
- 1197 5218 2 WB shards, 1<sup>st</sup> half 18<sup>th</sup> c. possible L17th  
 Black glass shard, mid 19<sup>th</sup> c  
 1 WG type F, 2.5mm  
 1 WG type N, 2.2mm thk
- 1204 5257 5 WG type J, 2.1-3, 3, 3, 2, 1.5mm thk  
 1WG type AJ, 1.9mm thk  
 1 WG type AK, 1.8mm thk  
 1 WG type C, 1.9mm thk  
 4 WG type F, 1.1, 1.6, 1.6, 1.7mm thk  
 4 WG type B, 1.3x3, 1.7mm thk  
 Shard completely moulded beer/ale bottle in firebright black, original diameter 75mm, mid 19<sup>th</sup> c  
 Shard WB? in black, belling, 1<sup>st</sup> quarter 19<sup>th</sup> c  
 Shard WB?, similar  
 6 shards WB, moderate corrosion, mid 18<sup>th</sup> c  
 Shard bottle greyish olive, probably 19<sup>th</sup> c  
 Shard bottle in clear, probably 19<sup>th</sup> c  
 Shatter shard in pale aqua  
 Two flat shards (not window) moderate corrosion, probably mid 18<sup>th</sup> c.
- 1205 5218 1 WG type N  
 1 WG type AC  
 2 WG type M  
 Shard bottle possibly 18<sup>th</sup> c  
 Firebright bottle shard, mid 19<sup>th</sup> c  
 Small medicine bottle lip in pale aqua, rolled lip, 12mm aperture, 19<sup>th</sup> c

SF	Con	
1206	5250	12 shards WB, corrosion would indicate probable 1 <sup>st</sup> half to mid 18 <sup>th</sup> c 2 shards WB probably 2 <sup>nd</sup> half 18 <sup>th</sup> c 4 WG type F, 1.4, 1.4, 1.7 and 2.1mm thk 1 WG type AG, 1.7mm thk 1 WG type AH, 1.3mm thk 1 WG type AI, 1.3mm thk
1226	5218	Shard WB probably 18 <sup>th</sup> c 1 WG type C, 1.8mm thk 3 WG type AF, originally one shard, very heavy dark brown corrosion, 2mm thick. Late medieval?
1232	5018	Part WB base, dull green light corrosion, original diameter c90mm, L18th c Body shard WB moderate corrosion, probably mid 18 <sup>th</sup> c
1268	5225	Shard from probable square section bottle, very heavy dark brown corrosion. Possibly from case bottle but could be from late medieval bottle
1271	5228	Small clear shard drinking vessel, firebright, 19 <sup>th</sup> c?
1280	5274	Shard WB, moderate corrosion, mid 18 <sup>th</sup> c
1302	5228	11 shards bottle, green, brownish olive and black, one with three piece mould mark, mid 19 <sup>th</sup> c 2 WG type F, 1.6, 1.9mm 3 WG type J, 1.6, 1.6, 1.7mm thk 2 WG type N, 1.2, 1.7mm thk
1304	5234	mixed bag 9 bottle shards probably 19 <sup>th</sup> c 1 WB shard, 18 <sup>th</sup> c, possibly early 1 WG type O, 2.1-2.6mm
1368	5086	Heavy WB neck, moderate corrosion, downturned string ring, 21mm aperture, 2 <sup>nd</sup> quarter to mid 18 <sup>th</sup> c 4 further WB shards probably 2 <sup>nd</sup> half 18 <sup>th</sup> c Firebright bottle neck, probably 19 <sup>th</sup> c 5 WG type F, 4x1.2mm, 1.6mm thk
1434	5245	WG shard, type F, lozenge shape, 2.2mm thk.
1451	TT509	Shard WB?, slightly brownish olive, probably 1 <sup>st</sup> half 19 <sup>th</sup> c
1482	5237	23 various WB shards from more than one bottle The base and kick shards indicate small diameter bottles, <90mm with sharp base ring curves, late 18 <sup>th</sup> c The neck fragment however is probably 2 <sup>nd</sup> quarter to mid 18 <sup>th</sup> c, certainly before c1760 One thin blown WB body shard has corrosion typical of L17th c types

SF	Con	
1483	99	2 WG type J, 2.2, 2.6mm thk 5 WG type F, 1.2, 1.2, 1.3, 1.4, 1.6mm thk 1 WG type O, 2.2mm thk Shard pale aqua bottle, 19 <sup>th</sup> c
1484	99	Lower stem and part foot from substantial stemmed bowl or dish, stem 22.5mm diameter, unfinished pontil scar, 18 <sup>th</sup> c Part of foot c85mm diameter, probably not from above, later 18 <sup>th</sup> -E19 <sup>th</sup> c Plain drawn stem from drinking vessel, probably mid 18 <sup>th</sup> c
1485	99	6 black shards from completely moulded beer/ale bottles, one is upright lip, mid 19 <sup>th</sup> c Base shard in very dark green (black), hand finished kick, L18th-E19th c
1486	99	11 various shards from mid to later 19 <sup>th</sup> c bottles including medicine and aereated Waters 3 WG type F, 1.3, 2.0, 3.4mm thk
1487	5262	Substantial WB base and kick from bottle c 130mm diameter, pale green, moderate to heavy corrosion, kick depth c30mm, 1 <sup>st</sup> half 18 <sup>th</sup> c
1488	F walk	Part neck and shear lip from small condiment bottle in pale copper blue, mid to later 19 <sup>th</sup> c

### 2015 season

SF	Con	
1521	5105	4 shards WB, pale green, light corrosion, original diameter c95mm, belling, 2 <sup>nd</sup> half 18 <sup>th</sup> c Shard WB, pale green, heavy corrosion, 1 <sup>st</sup> quarter 18 <sup>th</sup> possibly late 17 <sup>th</sup> c 3 shards bottle, firebright brown, mid to later 19 <sup>th</sup> c 5 shards bottle, firebright pale olive, mid to later 19 <sup>th</sup> c.
1530	5344	4 WG type AA, 1.6x3, 1.7mm thk 2 WG type F, 1.9, 2.9mm thk 4 WG type H, 2.1, 2.1, 2.3, 3.3-6.6 (near crown centre) 1 WG type AK, 2.2mm (glazing score) 1 WG type B, 1.2mm 1 WG type AM, 1.4mm 3 WG type AJ, 2.6, 3.7-7.9 (2 conjoin from near crown centre)
1533	5201	2 shards bottle mid 19 <sup>th</sup> c Shard WB, probably L18th c
1549	Spoil	Neck plus body shard from 'egg' bottle mid to late 19 <sup>th</sup> c Base of moulded cobalt blue bottle mid to late 19 <sup>th</sup> c Shard heavy bottle in pale green, probably L19th c Lower body shard WB with belling, diameter c95mm, mid 18 <sup>th</sup> c Base shard WB, moderate base ring curve, 1 <sup>st</sup> half 18 <sup>th</sup> c

SF	Con	
1554	5344	Two shards WB with very deep kick 65mm+, dull yellowish green, light corrosion Import WB shard in black, E19th c Beer bottle base in black, mid 19 <sup>th</sup> c Two kickup shards WB, probably 2 <sup>nd</sup> half 18 <sup>th</sup> c
1555	5344	7 bottle shards very dark green and black, mid to later 19 <sup>th</sup> c 3 pale green bottle shards, mid to L 19 <sup>th</sup> c WB neck shard, L18th-E19th c 2 WB shards probably mid 18 <sup>th</sup> c
1557	5204	Bottle shard firebright mid green, 19 <sup>th</sup> c
1562	5252	15 WG type J, 1.3-1.8mm 24 WG type N, 1.4-2.6mm 17 WG type AI, 1.2-2mm 3 WG type AK, 1.3mm 4 WG type B, 1.3mm 5 WG type AJ, 1.5-1.8mm 2 WG type M, 2.3-3.2mm Bottle shard probably L19th c
1563	5252	10 shards bottle all pale green, including shard of 'egg' bottle, 19 <sup>th</sup> c Twp shards bottle, cobalt blue, 19 <sup>th</sup> c 59 bottle shards all 19 <sup>th</sup> c including 2 with belling, ie early 19 <sup>th</sup> c Moulded bottle stopper in clear, probably 19 <sup>th</sup> c Bottle base in clear embossed 'YG Co', York Glass Company, 19 <sup>th</sup> c Shard WB, some corrosion, possibly L18th c
1564	5252	6 WB shards pale green, moderate to heavy corrosion, conjoin as 3 pairs possibly from same bottle. Slightly flattened sidewall (mallet shape?) no later than c1730 WB neck plus conjoining shard, pale green light corrosion, enhance lip over flat section string ring, aperture 18.5mm, Late 3 <sup>rd</sup> quarter 18 <sup>th</sup> c
1573	5343	Base plus wall shard in black, completely moulded bottle, mid 19 <sup>th</sup> c 4 further bottle shards probably 2 <sup>nd</sup> half 19 <sup>th</sup> c Base shard WB probably L18th c Base shard WB, E18th c WB shard 18 <sup>th</sup> c 4 small probable bottle shards
1574	5343	2 WG type AA, 2.0mm thk
1579	5252	1 WG type AJ, 2.9mm 1 WG type F, 2.2mm 1 WG type H, 1.6mm 2 WG type J, 2mm Bottle shard pale green probably L 19 <sup>th</sup> c Very thin clear shard, possible lamp glass, 19 <sup>th</sup> c

SF	Con	
1580	5252	Base plus 32 shards mostly from the same bottle, completely moulded black, pimple kick, 3-piece mould, 75mm diameter, mid to later 19 <sup>th</sup> c Neck and lip from possible whisky bottle, L19th-E20th c 8 bottle shards various colours all from 19 <sup>th</sup> c Clear bottle shard
1582	5215	1 WG type AA, 1.1mm
1593	5215	3 WB shards, 18 <sup>th</sup> c
1601	5258	3 WG type N, 1.3, 1.6, 1.8mm thk 4 WG type B, 1.2, 1.7, 2.0, 1.6mm thk
1602	5258	two shards WG?, possibly conjoin, type AL, 3.1mm thk 7 various bottle shards 19 <sup>th</sup> c Bottle shard 18 <sup>th</sup> c?
1603	5258	WB base in rich green, heavy corrosion, original diameter c140mm, gentle base ring curve, base ring diameter 95mm, moderate to heavy wear, kick 22mm. Probable true 'onion' bottle of 1 <sup>st</sup> quarter 18 <sup>th</sup> c
1619	spoil	WB shard, pale rich green, mottled heavy corrosion, E18th possibly L17th c.
1656	5252	2 WG type N, 1.4mm 1 WG type H, 1.3mm
1660	5258	1 WG type F, 2.3mm thl 1 WG type AG, 1.7mm thk 1 WG type AK, 2,2mm thk 2 tiny rim shards drinking vessel in clear, probably 18 <sup>th</sup> c
1661	5258	Two shards WB, corrosion would indicate probable mid 18 <sup>th</sup> c
1681	5257	Shard WB, probably L18th c
1682	5257	4 WG type H, 1.2, 1.2, 2.9, 3mm 3 WG type J, 1.1, 1.1, 1.3mm 2 WG type AG, 1.1, 1.5mm 1 WG type B, 1.2mm 1 WG type F? 1.7mm
1719	5230	7 WG type F, 1.9-2.3mm 13 WG type N, 1.3-1.5mm 2 WG type J, 1.4mm 3 WG type A, 1.6mm 1 WG type AK, 2mm crown edge
1734	5357	2 WG type F, 1.1, 2.2mm thk 4 WG type AG, 3x1.0mm, 1.7mm thk

SF	Con	
1744	5252	Circular glass disc, clear possibly very pale blue tinge, grozed all round, moderate pale corrosion. 35mm diameter, thickness varies from from 1.6mm at the edge to 2.3mm in the centre giving slight magnification. Possible spectacle lens or watch bezel. Corrosion would suggest pre c1800
1745	5230	Small capacity drinking vessel in clear and consisting of 3 conjoining shards. Central part of foot, rim missing, with plain drawn stem phasing into lightly fluted bowl. Minimal attempt has been made to disguise the pontil scar. 18 <sup>th</sup> c
1757	5150	4 shards bottle, one with 3-piece mould mark, mid to later 19 <sup>th</sup> c Bottle shard pale green, dulled
1765	5237	5 WG type AJ, 1.1x4, 1.6mm Bottle shard with 3-piece mould mark, mid to later 19 <sup>th</sup> c
1789	Spoil	2 bottle shards, one pale green, one copper blue, L19 <sup>th</sup> c
1797	5035	1 WG type B, 1.2mm
1904	5115	Central 'bullseye' of crown WG disc, type F varying from 3-18.5mm thk, dulled in patches, one edge roughly grozed
1928	5284	Two shards WB, one from bottle original diameter c 100mm, belling, mid 18 <sup>th</sup> c
1931	5211	Shard WB, moderate corrosion, probable 2 <sup>nd</sup> half 18 <sup>th</sup> c
1932	5211	1 WG type H, 1.7mm 2 WG type B, 1.3, 1.4mm 2 WG type AK, 2.5, 2.6mm 1 WG type AA, 1.8mm 1 WG type M, 2.7mm
1975	5015	1 WG type J, 1.7mm
2021	5355	Shard black bottle, mid to late 19 <sup>th</sup> c
2029	5363	3 shards pale green bottle, 10 shards ark green to black, all mid to later 19 <sup>th</sup> c
2030	5363	4 wG type J, 1.3, 1.4, 1.5, 2.3mm thk 3 WG type B, 1.2, 2, 3mm thk 1 WG type AJ, 2.3mm thk
2034	5230	1 WG type R?, 1.3mm
2036	5230	12 shards possibly from same WB, mid green, firebright, belling, 1 <sup>st</sup> quarter 19 <sup>th</sup> c 1 WG type F, crown rim shard, 2.4mm thk 4 shards clear?, very blotchy corrosion, thin blown, probably from small bottle, some very large seed, possibly late medieval.

SF	Con	
2040	5230	1 WG type B, 1.1mm
2059	5105	Mixed bag Neck and possible base shard from WB, pale green, moderate corrosion. Neck height 99mm, slightly twisted, triangular string ring poorly applied, aperture 17.5mm. Base shard similar corrosion, moderate base ring curve, 2 <sup>nd</sup> quarter to mid 18 <sup>th</sup> c 4 further 18 <sup>th</sup> c WB shards Complete WB base firebright black, belling, heavy base ring wear, diameter 86mm, kick 34mm, 1 <sup>st</sup> quarter 19 <sup>th</sup> c 3 further 19 <sup>th</sup> c bottle shards Most unusual rim shard from jar with wrythen moulding, pale green with very similar corrosion to WB glass
2060	5105	1 WG type F, 1.3mm 1 WG type AA, 1.2mm Small shard WB? L18th c?
2075	5228	2 shards bottle , 19 <sup>th</sup> c
2093	5462	Shard kick WB, probably mid 18 <sup>th</sup> c
2095	5457	Firebright green bottle shard, quite seedy, probably L 19 <sup>th</sup> c
2101	5116	20 WB shards from at least 3 different bottles based on base ring curves. All have moderate corrosion and look to be mid 18 <sup>th</sup> c to slightly later. The neck shard is of pre c1760 type
2113	5354	3 shards WB moderate corrosion including base with moderate base ring curve, 2 <sup>nd</sup> quarter to mid 18 <sup>th</sup> c
2132	5431	Firebright clear bottle shard probably 20 <sup>th</sup> c 2 WG type H, 1.3, 1.7mm
2142	5204	Unusual colour small diameter (c70mm) bottle, pale dull firebright green, belling, WB type kick, E19th possibly L18th c
2164	5298	Shard folded foot from pedestal glass, heavy flaky corrosion
2221	5115	Tumbler base in clear 73mm diameter, flat ground base with concave kick, pontil scar ground off, probable 19 <sup>th</sup> c Two shards bottle 19 <sup>th</sup> c Shard WB base moderate to heavy corrosion, original diameter c95mm, mid 18 <sup>th</sup> c
2223	5115	bag of mainly window glass shards: 29 WG type AA, 1.4-3.4mm thk 16 WG type AI, 1.5-2.8mm thk 39 WG type J, 1.1-2.1mm thk 26 WG type F, 1.4-2.7nn thk Two shards clear drinking vessel, dulled, quite thinly blown, probably 18 <sup>th</sup> c

SF	Con	
2338	99	Smallish WB neck and lip, dull mid green, moderate corrosion, lip tooled out over string ring. Aperture 14mm, probably last quarter 18 <sup>th</sup> c.
2339	99	Mould blown beer bottle base in black, mainly firebright, some BR wear mid 19 <sup>th</sup> c
2340	99	Shard WB base, moderate corrosion, abraded, original diameter c90mm, sharp BR curve, mid to later 18 <sup>th</sup> c
2341	99	3 shards WB, one base with sharp BR curve, light to moderate corrosion, L18/E19th c Two shards WB, pale green, heavy corrosion, 1 <sup>st</sup> half 18 <sup>th</sup> c Bottle neck and lip, mainly firebright mid green, blob top, L19th possibly E20th c
2342	99	Neck and part lip from small bottle, mainly firebright cobalt blue, mid to later 19 <sup>th</sup> c

### 70008 Walled Garden

SF	Con	
19	38	Lower body shard bottle, firebright black, no belling. Mid 19 <sup>th</sup> c Body shard WB. Dull mid green, moderate corrosion, probably late 18 <sup>th</sup> c
25	001	Shard WB, pale green, moderate possibly secondary corrosion, probably 1 <sup>st</sup> half 18 <sup>th</sup> c Shard bottle neck, firebright black, mid to later 19 <sup>th</sup> c Shard square section bottle in clear with indented sides, firebright, partial embossing 'the syrup co'
26	001	Part WB kick, dull mid green, moderate corrosion. Medium BR curve, probably second quarter 18 <sup>th</sup> c.
27	001	Probable WB base shard, firebright black, slight belling, late 1 <sup>st</sup> quarter early 2 <sup>nd</sup> quarter 18 <sup>th</sup> c Drinking vessel shard, clear, light iridescence WG shard type N. 1.5mm thk
30	001	Mixed bag of ten shards: Neck and lip WB, 92mm tall, pale dull green, moderate corrosion. Lip tooled out over string ring, neck nipped in, aperture 17mm. 3 <sup>rd</sup> quarter 18 <sup>th</sup> c. Lower body shard bottle, firebright pale green, L19th/20 <sup>th</sup> c 1 WG type M, 2.8mm thk. 1 WG type AI, 1.6mm thk Part base WB, heavy stable dark brown corrosion, gentle BR curve, moderate BR wear, neat 14mm deep kick, 1 <sup>st</sup> quarter 18 <sup>th</sup> possibly L17th c Second part base WB similar, some corrosion detached leaving iridescent secondary surface, 1 <sup>st</sup> quarter 18 <sup>th</sup> possibly L17th c. Two lower body shards WB, moderate to heavy corrosion. Both appear to be from pre-belling bottles (<c1740) Lower neck shard WB, probably 1 <sup>st</sup> half 18 <sup>th</sup> c Body shard WB, secondary surfaces, 1 <sup>st</sup> half 18 <sup>th</sup> c