

Millbrae Glass Report
by
Robin Murdoch

Photographs
By
Tam Ward

Introduction

This specialist's report should be read in conjunction with the site excavation report (Ward & McIntyre 2016). The glass reported here came from an 17th/18th century midden deposit associated with the site of Millbrae Cottages but clearly pre-dating the surviving 19th century building which was excavated. Only a selection of the overall glass assemblage from the midden context was submitted for analyses, on the basis that it would have been representative of the whole.

Catalogue

Catalogue

Notes: The catalogue is in 'bag' number order and where multiple items have the same prefix they are differentiated by the suffix .1, .2, .3 etc

Abbreviations:

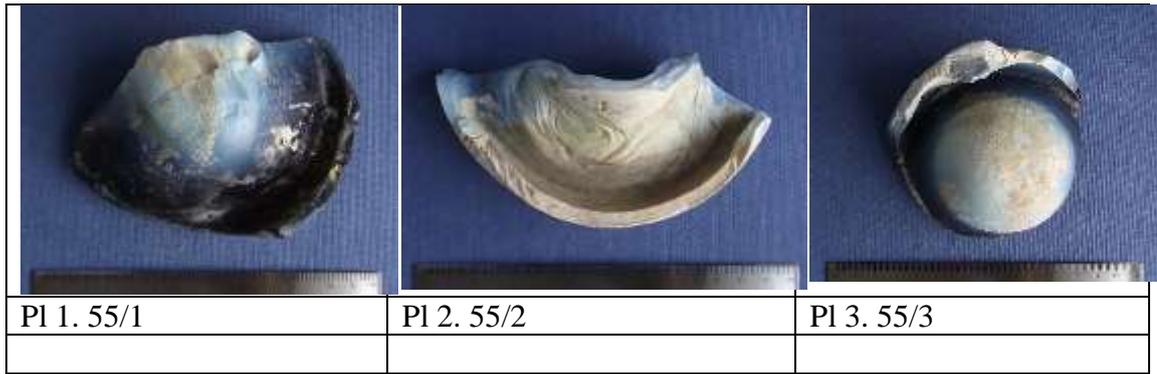
WB: Wine bottle

BR: Base ring

SR: String ring

MB/G/xxx

- 41 Lip and part neck in firebright mid dull green, rounded profile lip separately added to neck which slopes downwards, stepped aperture 38mm reducing to 31mm, probable preserve jar probably mid-19th c.
- 55.1 Part base WB in mid dull green partially distorted by fire damage resulting in pale blue grey discolouration. Original diameter c135mm, 37mm kick, moderate curve through BR, heavy wear. Probable late 1st quarter 18th c to early 2nd quarter 18th c.
- 55.2 Part base WB completely discoloured by fire, probably mates with 55.1. Similar date.
- 55.3 Part base WB mostly discoloured by fire, original diameter 110-120mm, tight BR curve, heavy wear, deep 44mm kick, c45mm pontil. Possible import c1750.



- 55.4 Base and lower body from WB in mid to dark green, partly distorted by fire, diameter 94mm, labelling, kick 27mm, pontil 57mm. c1760-1820.
- 55.5 Part base WB in very dark green (black), distorted by fire. Surface also roughened by fire and with moderate corrosion. Diameter difficult to estimate but fairly narrow. c1760 or later.
- 55.6 Very fire damaged neck. Lip and part shoulder WB. Neck has been 90mm+ height with a broad angular SR, probably 1750-80.



- 55.7 Fire damaged neck and lip, surviving height 92mm, Broad angular SR, aperture c19mm, profile looks similar to 55.6. probably 1750-80.
- 55.8 Part neck and lip WB discoloured and fire damaged, ht 78mm, quite squat neck. Narrow flat section SR below out turned and flattened lip. c1760-1800.
- 55.9 Fire distorted rim WB in very dark green (black). Downturned angular SR below very rounded enhanced lip. 1st quarter 19th c.



55.10 Very distorted and discoloured neck and lip WB, quite narrow SR below out turned lip.

c1760 – 1800.

57.1 Part WB base, pale dull green, slightly dulled, trace of glassgall, original diameter 150mm+, moderate BR curve, heavy wear, kick 28mm. 1st quarter 18th c?

57.2 Part base WB, similar colour and condition to 57.1 (probably same bottle), diameter 150mm+, kick 23mm, moderate BR curve, moderate to heavy BR wear, pontil 65mm. 1st quarter 18th c.



57.3 Most of base plus part side wall WB, firebright pale yellow green, upright side, diameter

c150mm, moderate BR curve, heavy BR wear on high spots, kick 31mm, pontil 52mm, no belling. 2nd quarter 18th c.

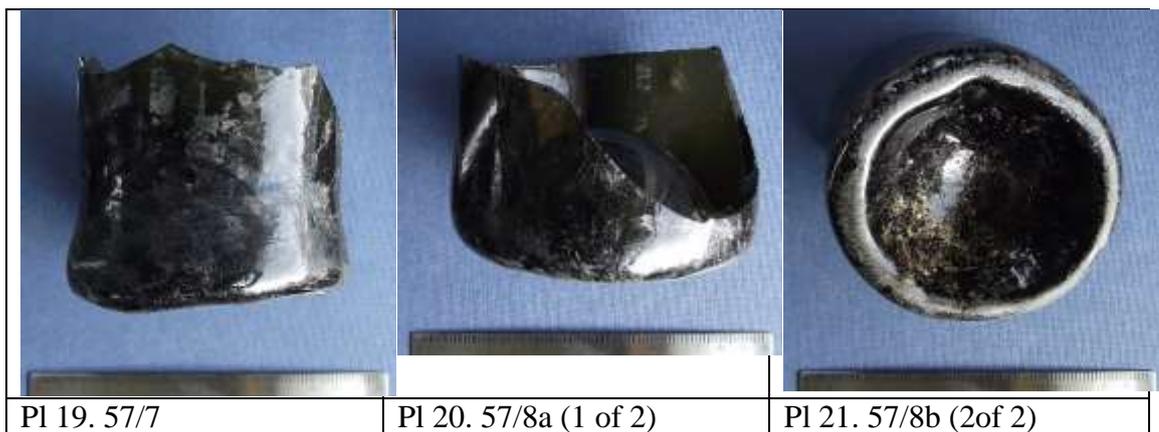
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- 57.4 WB base, mid to dark dull green, some dulling, cylinder shape 110mm diameter, belling, kick 36mm, tight BR curve, moderate to heavy BR wear. Probably 3rd quarter 18th c.



- 57.5 Base and lower body WB, mid slightly yellow green, firebright cylinder, 99mm diameter. Tight BR curve, moderate wear, kick 28mm, pontil 58mm. 3rd quarter 18th c.

- 57.6 Base and lower body WB, firebright, pale slightly yellow green, diameter 102mm, cylinder, belling, kick 30mm, tight BR curve, light to moderate wear, pontil 65mm recessed. 3rd quarter 18th c.



- 57.7 Base and lower body WB, mid to dark slightly yellow green, some dulling and light corrosion, cylinder diameter 98mm, tight BR curve, light to moderate BR wear, kick 39mm, pontil 67mm recessed. 3rd quarter 18th c.

57.8 Base and lower body WB, mid yellow green, firebright cylinder, no belling, tight BR curve, moderate to heavy wear, kick 32mm. 1st quarter 19th c.

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57.9 Base and lower body WB, pale slightly yellow green, firebright cylinder, belling, diameter 97mm, tight BR curve, light to moderate wear, kick 23mm, quite rounded. 3rd quarter 18th c.

57.10 Base and lower body WB, pale slightly yellow green, some dulling, cylinder, slight belling. Diameter 92mm, kick 29mm, tight BR curve, light to moderate wear 4th quarter 18th c.



57.11 Base and lower body WB dark dull green (Black) mainly firebright, cylinder, belling, diameter 92mm, kick 30mm, tight BR curve, moderate to heavy wear. Last quarter 18th c – 1st quarter 19th.

57.12 Base plus some lower body WB in mainly firebright dark dull yellow green (black), Diameter 97mm, kick 31mm, cylinder, belling, tight BR curve, heavy wear. Last quarter 18th c – 1st quarter 19th.

57.13 Most of base of WB, firebright very dark yellow green (black). Diameter 116mm, cylindrical, belling, kick 32mm rounded, tight BR curve, moderate wear. 1st quarter, possibly early second quarter 19th c.



Pl 25. 57/11	Pl 26. 57/12	Pl 27. 57/13a (1of 2)
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- 57.14 Part base and lower body WB in very dark brown (black) some dulling, diameter 100 mm, cylinder, bellling, kick 29mm, pontil 61mm indented, tight BR curve, light wear. 1st quarter 19th c.
- 57.15 Firebright mameion (upper part of kick) in dull mid green, normally found on bottles for sparkling wines, mid to late 19th c.
- 58 Part neck and lip WB, in firebright yellow green, height 90mm, very slightly curved splay. Poorly applied SR, plain out-turned lip 6mm above SR, aperture 14.5mm. C1730-50.



Pl 31. 58

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- 59a Part neck and lip WB in mid dull green, dulled, Wide splay to neck 57mm in height. Uptooled SR, plain lip, aperture 15mm. 1st quarter 18th c possibly last quarter 17th
- 59b Part neck and lip WB in mid quite rich green, dulled. Wide splay to neck c57mm height, slightly downtooled SR below plain lip, aperture 14.5mm. 1st quarter 18th c possibly last quarter 17th.
- 59c Part neck and lip WB in dull mid green, mainly firebrigt. Wide splay to neck ht 57mm.
Thinnish triangular SR slightly downtooled, aperture 16.5m.m 1st quarter 18th c.



- 60.1 Part neck WB, mid dull green, light corrosion, curving taper to neck, triangular string ring slightly downturned. 1730-50.
- 60.2 Part neck WB, firebright pale slightly yellow green, neck nipped in by broad triangular SR, out turned lip, neck fairly parallel sided. c1750?
- 60.3 Part neck WB, dulled dark green, slight taper, downturned triangular SR, out turned tooled lip above, 16.5mm aperture, neck height 85mm+, post c1750.



- 60.4 Part neck WB, nicely tooled but with vertical striations, dull mid green, height 98mm+, possible secondary surfaces. Substantial precise triangular SR 4 -6mm below lip. Very slight taper to neck, aperture 19mm. Possibly late 17th c.
- 60.5 Neck and lip WB, firebright mid slightly yellow green, height 95mm. Triangular SR below out turned lip, aperture 19mm. 1730-50?
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- 60.6 Neck and lip WB, dark dull green, height 94mm, slight linear splay, triangular SR below slightly out turned lip, aperture 18.5mm. c1750



- 60.7 Neck. Lip and part shoulder WB, firebright pale grass green, height 91mm, slight linear splay, neck nipped in by poorly tooled flat section SR (quite narrow) below out turned lip, aperture 16.5mm. C1760.

60.8 Neck and lip WB in firebright slightly yellow dark green, height 101mm, slight curving splay, triangular SR below out turned lip, slight neck nip in, aperture 17.5mm. c1750?

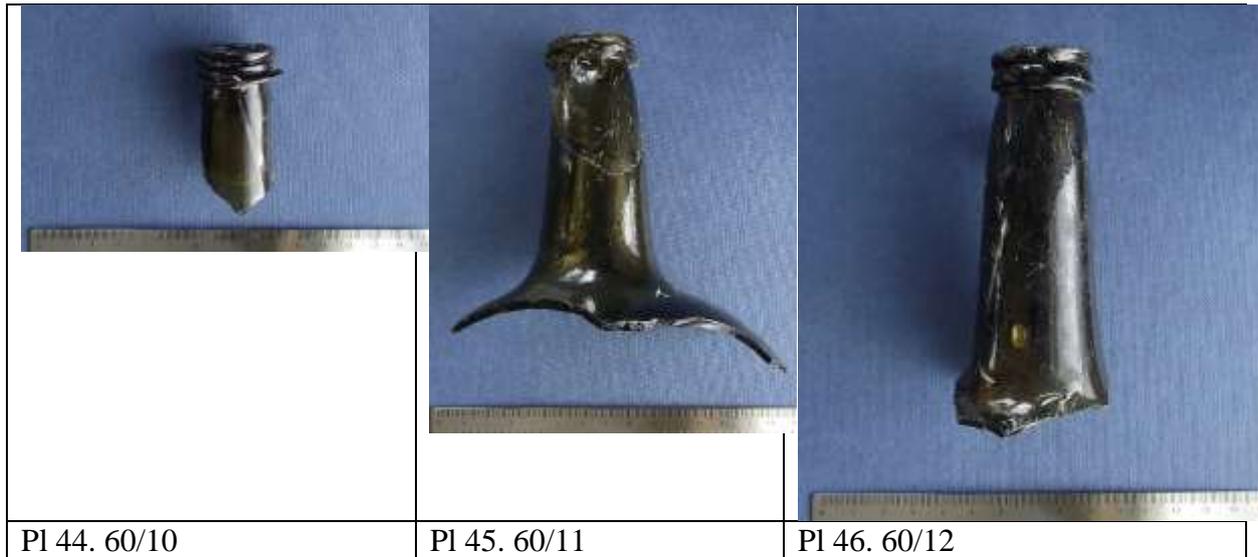
60.9 Part neck and lip WB in firebright slightly yellow green, surviving height 75mm, parallel sided, downturned angular SR nipping in neck, out turned lip, aperture 17.5mm, c1760 – 1780.



60.10 Part neck and lip WB, slightly dulled yellow green, surviving height 60mm, triangular SR nipping in neck, out turned lip, aperture 15.5mm, c1760.

60.11 Neck, lip and part shoulder WB in firebright pale yellow green, probably same bottle as 57.3. Neck height 97mm, slight splay, poorly applied rounded triangular SR nipping in neck. Lip out turned, aperture 21mm, probable chopin sized bottle, c1740-60?

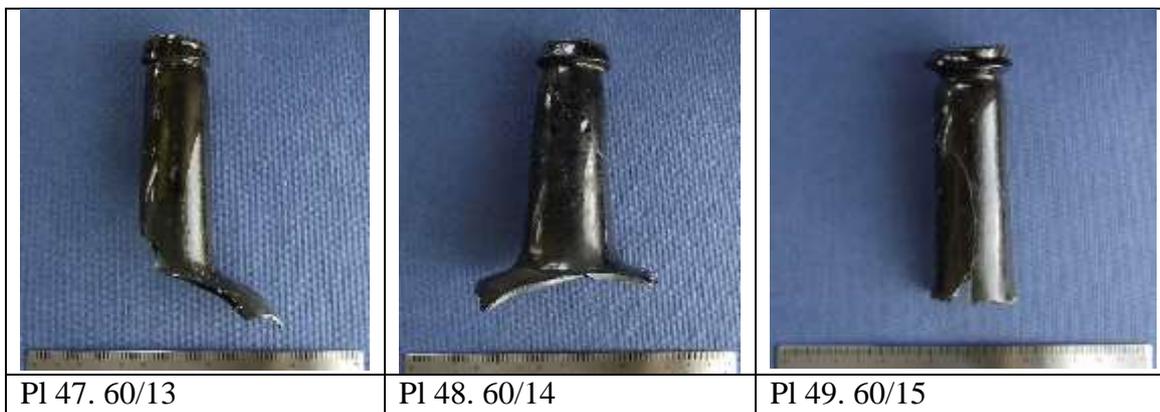
60.12 Neck and lip WB, slightly dulled, dark yellow green, height 101mm, slight splay, downturned angular SR nipping in neck, out turned and tooled lip, aperture 16mm c1760-80.



60.13 Part neck and lip in firebright pale olive green, height 105mm, irregular downturned angular SR nipping in neck, lip out turned and slightly flattened, aperture 14-16mm C1760 – 1780.

60.14 Slightly dulled neck and lip WB in mid slightly yellow green. Neck height 100mm, slight splay, downturned angular SR nipping in neck. Lip out turned and slightly flattened, aperture 14-16mm, c1760 – 1780.

60.15 Part neck and lip WB in mid slightly brownish dull green. Parallel sided neck surviving height 104mm, slightly down turned triangular SR nipping in neck, out turned lip, aperture? C1760.



60-16 Neck and lip WB in firebright similar colour to 60.15, parallel neck 104mm height, triangular SR nipping in neck, slightly flattened lip. C1760.

60-17 Neck and lip WB in slightly dulled dull mid green, parallel neck 96mm height, downturned angular SR nipping in neck, out turned slightly flattened lip, aperture 16mm, c1760 – 1780.

60.18 Neck. Lip and part shoulder WB in pale dull green some light to moderate corrosion, abundant seed. Parallel neck, height? slightly uptooled SR nipping in neck, broad sloping lip, aperture 15.5mm, bottle diameter c100mm, possible import, c1760-80.



60.19 Neck and lip WB in firebright slightly yellow green, height 103mm, parallel sided, poorly applied triangular SR nipping in neck, out turned broadened lip, aperture 16mm, c1760=80.

60.20 Neck and lip WB in firebright mid slightly yellow green, height 104mm, parallel sided with inward step 30mm below lip. Flat to angular SR below sloping enhanced lip, aperture 15.5mm. C1780-1820.

60.21 Neck and lip WB in slightly dulled slightly yellow mid green. Parallel sided neck slightly nipped in by downturned angular SR, broad enhanced lip, c1760-1800.



60.22 Neck and lip WB in dulled very dark green (black), squat neck 74mm height, slightly round SR nipping in neck below flattened enhanced lip, aperture 16mm, c1800-1830.

60.23 Neck and lip WB in slightly dulled mid slightly yellow green. Fairly parallel neck nipped in 23mm below lip. Flattish section SR below projecting sloped enhanced lip, 17mm aperture, height 99mm, c1780-1800.

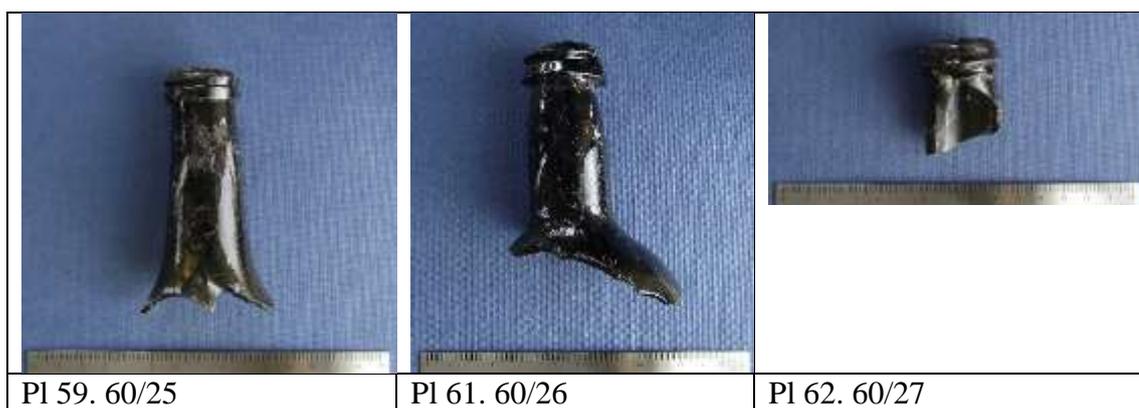
60.24 Short neck and lip WB in firebright black, squat shape 67mm height, irregular mainly flat section SR below rounded enhanced lip, aperture 17mm. 1st quarter 19th c.



60.25 Neck and lip WB in firebright slightly yellow green, height 87.5mm, slightly curving splay, flat section SR below tooled lip. C1760-80.

60.26 Neck, lip and part shoulder WB in firebright mid slightly yellow green. Squat slightly convex neck 82mm height, neck slightly nipped in by broad angular SR below broad enhanced lip, original bottle diameter ,100mm, aperture 17.5mm, c1780-1820.

60.27 Part neck and lip WB in firebright dark dull green, surviving height 47mm, narrow poorly applied SR below broad enhanced lip, aperture 16.5mm. C1780-1820.



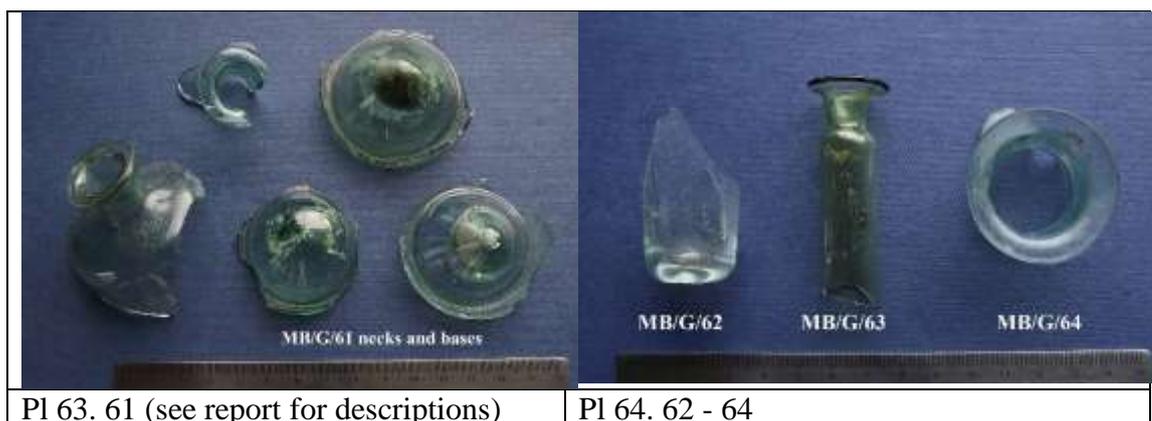
60.28 Part neck and lip in firebright dark slightly yellow dull green, surviving height 34mm. Angular SR below broad enhanced lip, aperture 15.5mm, c1780-1820.

Follows medicine and other bottles.

61 Base in firebright greenish aqua from medicine bottle, 55mm diameter, pointed 19mm kick, obscured pontil 26mm. Second base similar 50mm diameter, pointed kick 22mm, obscured pontil 20mm. Third base similar, more greenish colour, 48mm

diameter, pointed kick 20mm, partially obscured pontil 21mm. Part body and lip from medicine bottle c53mm diameter, neck height 13mm, lip OD 26mm, ID 12mm, slightly tapering. Second neck and lip similar, neck height 13mm, lip OD 27mm, ID 12mm, slightly tapering. Small shard 4rd lip, slightly bigger than the others, 28 further body and neck shards from the above. 2 shards from flat sided bottles. All above probable mid to later 18th century.

- 62 Base and lower body probable medium phial, firebright very pale green, kick obscured by a film of glass from pontil. Rounded base and body tapers out slightly as it rises, 26mm nominal diameter. Second body shard from similar phial but firebright clear, mid to late 18th c and 19th c.
- 63 Very fine blown medicine phial in firebright lime green, surviving height 62mm, diameter 16.2mm near neck increasing slightly lower down. Neck diameter 11.3-13.8mm, everted lip 23.5mm OD, 8.7mm ID. Late 18th – E19th c. Further shard from same.
- 64 Neck and lip in pale aqua, slightly dulled, medicine bottle, everted lip over narrower neck then broadening quickly to the shoulder. OD of lip 41mm, ID 23.5mm, neck height 12.5mm. Probably L18th –E19th c.



Pl 63. 61 (see report for descriptions)

Pl 64. 62 - 64

- 65 Part neck and lip in very seedy clear probable medicine bottle, moulded oval section, everted lip. Neck height 21mm, aperture 19mm. Probable mid to late 19th c. Slightly curved thin (0.9mm) shard in firebright clear, probable lamp glass Mid to late 19th c.
- 66 8 shards bottle, pale green but distinctly opaline blue in the shatter. All appear to be from the same bottle, square section with rounded shoulders. A glass seal has been applied to the top of the shoulder but the design of the image is not recognisable. Probable case bottle for spirits. Probable import from Baltic area. C1850
- 67 4 shards thick firebright bottle in pale greenish aqua, flattened oval shape, one shard is everted lip medicine bottle type 19th c just possible L18th.
- 68 Shard domed foot, quite thickly blown, mainly firebright, large seed. Diameter c 70mm, centre of dome at least 10mm lift. L18th c? Small shard folded foot in clear, quite firebright. Rim folded under, original diameter c60mm. Probable pre c1740.

- 69 14 shards firebright clear bottle probably 19th c.
 2 shards thin clear lamp glass?
 Clear shard bottle base with flat ground base ring, 19th .c
 Bottle base, clear with domed kick and unfinished pontil, 19th c.
 Small wall shard from drinking vessel, clear some white corrosion, possibly late 18th c.
- c.
 Part shoulder and neck bottle in pale aqua with mould mark, 19th c.
 Wall shard bottle? Pale olive firebright, very seedy, 19th c.
 8 very thin blown shards, pale green, firebright, possible lamp glass 19th c.

Discussion

This assemblage of glass represents only part of what was recovered from Millbrae and was of particular interest to the excavators in assessing the earlier history of the site. The rest of the glass was deemed to be 19th century and not submitted for separate assessment.

Of particular interest are the wine (possibly also ale) bottles whose evolution is well known and can give good dating evidence. A word of caution however, these bottles were very useful for containing liquids other than wine or ale and could have continued in use well beyond their original function. Not only that but until the end of the 18th century they were often re-filled by the vintner and the substantial wear on most of the Millbrae items is testimony to considerable re-use. This means that there could be years between manufacture and deposition.

There is a further disadvantage from the usual assemblages of this type and era. The condition of the glass is very good with the exception of the fire-damaged shards. Normally the cheap potash-fluxed glass used to make wine bottles is prone to corrosion especially in alkaline surroundings, e.g. the rubble from lime mortared buildings. In neutral or acidic conditions the corrosion is much less or non-existent. Glass is a fairly tolerant material to make and can have substantial variations in composition to achieve visibly similar end results. However, when the glass corrodes the colour and nature or that corrosion can vary considerably. This means that detached shards can often be related to each other by the nature of the corrosion. The good condition of the Millbrae glass precludes this approach and it is almost impossible to match necks and bases given that the metal (glass) colour is very similar for much of the assemblage. This similarity in colour also indicates a common source for most of the wine bottle shards and perhaps a relatively tight timescale for production. Further reconstruction is probably the only way necks and bases can be related to each other. Geographically the most likely source would have been the Glasgow bottle works which was situated at the junction of what became Jamaica St. and the Broomielaw. James Montgomery opened these works in 1702. (**Turnbull p270**)

Starting with the fire-damaged shards, they appear to range in date from c1720-30 (**55.1 and 55.2** which appear to probably come from the same bottle) to as late as c1830 (**55.9**).

Undamaged bases numbered 14 of which only two (**57.1 and 57.2**) date to the first quarter of the 18th century and are from onion bottles. **57.3** appears to come from a squat, possibly larger capacity, bottle of c1730-50. The rest of the bases are from cylindrical bottles and date between c1750-60 and the 1st quarter of the 19th century. **57.15** is a mamelon which is a feature found in the centre of the kick of mid to late 19th century wine bottles, particularly those for sparkling wine.

Necks and lips show a similar tendency to the bases with only a few dating to the early 18th century (just possibly late 17th). The wide splayed **59a, 59b and 59c** are no later than 1st quarter 18th century.

60.1, 60.5 and 60.11 are c1730-50 and **60.2, 60.3, 60.6 and 60.8** appear to be all just pre 1760.

Round about 1760 there was a significant change to the design of the lip which became broader and flattened quite distinctively. This change was not seen before c1760 and became standard until moulding started in the 19th century. All of the other necks and lips are post c1760 apart from one (**60.4**) which is rather unusual. It is very precisely made with a neat string ring and has late 17th century characteristics. However, the neck has quite distinctive vertical (they are usually twisted) striations and it may just be an import. The only necks and bases that could be related to each other with any degree of confidence are base **57.3** with neck **60.11** and base **57.1** with neck **59b**.

Note: The excel date chart which accompanies this report shows the likely spread of dates for each of the wine bottle necks and bases. Those coloured green are probable dates, those coloured yellow, possible dates

Chemist's wares

The assemblage from Millbrae contained a considerable number of shards of pharmaceutical use. These vessels are difficult to date with any accuracy having been made in very similar forms over a long period of time. (**See online collection in Museum of London**) However several items (**61**) were very similar in colour and shape to finds from Smithwood Bastle House (Ward 2012) and can reasonably be attributed a similar mid-18th century date. One particular greenish aqua vessel (**67**) seems to have been of considerable size judging by the size and thickness of the glass and appears to have had flattened sides suggesting a more likely 19th century date. Another thinner-blown everted lip (**64**) is also quite large diameter and could be late 18th or early 19th c.

Based on its very pale green colour (**62**) is likely to be 19th century. The pale olive green phial upper body and lip (**63**) is very precisely made with no mould marks and could be late 18th or 19th century.

(**65**) is from a medicine style bottle in clear and has been 2-piece moulded in a pointed oval form indicating a probable mid to late 19th century date.

Other vessels

The rounded lip on the dark green bottle/jar shard (41) is a mid to late 19th century form. The internal ledge may be an indication that the lid/stopper was wire clipped on, a common mid to late 19th century feature.

Fragments of only two drinking vessels were present, both from (68). The first was a shard of domed foot from a stemmed glass where the dome was considerable and the item had a plain rim. Unfortunately, the part where the pontil scar would have been was missing and therefore an important diagnostic feature had been lost. Originally feet had been steeply domed to lift the unfinished pontil scar clear of the table to stop scratching it. From about 1780 the pontil scar started to be ground or smoothed away and the feet gradually became flatter. The height of dome in this case indicates the glass was probably not later than the 1st quarter of the 19th century.

The second shard was also from a drinking vessel foot but in this case the rim was folded under for double thickness. This feature was to strengthen the rim against chipping and, generally speaking, phased out about 1740 (**Bickerton p20**) dating this shard probably to the first half of the 18th century.

Number (66) was rather unusual, it consisted of 8 shards probably all from the same bottle. The bottle has been square in section with rounded shoulders and possibly a short neck. Some shards are firebright and others look as if they may have been heat affected. The colour is basically pale green but assumes an unexpectedly different shade in the shatter. A seal has been attached to the top of the shoulder near the springing of the neck. The seal carried a device of some sort but it was not possible to work out what. Bottles of this type were produced in several continental countries especially around the Baltic. They were normally used for bulk transportation of spirits such as liqueur, brandy or gin, where several bottles might be packed in a wooden case. (**Van den Bossche p208**)

Post script

Numerous sherds of window glass including one piece with the word "Lolly" scratched on to it, will be covered in an addendum to this report. Glass of both the 19th and the 18th century was found in the excavation, however, a large quantity of the earlier glass was found in the midden along with most of the glass described above.

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Acknowledgement

North Clyde Archaeological Society wish to express their appreciation to the Catherine Mackichan Trust for their grant which funded this report.

