Serving the Living and the Dead: Ceramic Production in Copper Age Campania, Southern Italy

de Falco, Maria

Abstract

Serving the Living and the Dead: Ceramic Production in Copper Age Campania, Southern Italy

Maria De Falco

The purpose of this study is to analyse the relationship between ceramic production and wider cultural processes taking place in Campania, and more widely in the Italian Peninsula, during the Copper Age (roughly 3900-2200 BC). The study aims to draw new inferences from the evidence of ceramic production by using a holistic approach. This integrates typological analysis typical of the Italian tradition with a broader, theoretically informed, technological approach involving macroscopic observations and archaeometric analyses, and applyies both to ceramic assemblages from four key multi-phase sites not previously investigated in this way.

These integrated typological and technological analyses of different ceramic assemblages make it possible to highlight and relatively date technological innovations as well as strong manufacturing traditions never previously fully characterised for Copper Age Southern Italy. Changes in production processes, vessel types as well as in aesthetics in Neolithic to Copper Age ceramics are defined, and possible functional and social explanations proposed. It is argued that the important socio-economic changes occurring in Southern Italy, especially during the 3rd millennium BC, resulted in radical changes in the production and purpose, and symbolic and material value, of ceramic objects. Embedded in the cultural processes ongoing in this period, a shift from a 'ritual' to a 'functional' demand for ceramic production is theorised for the first time for these contexts.

This integration of multiple lines of evidence (context, typology and technology) also highlights how research on ceramics can contribute to the definition and understanding of broader cultural processes at a regional and wider scale such as demands on production as well as symbolic, and economic drivers of change.

Serving the Living and the Dead:
Ceramic Production in Copper Age Campania, Southern Italy

Two volumes

Volume 2:

Appendixes

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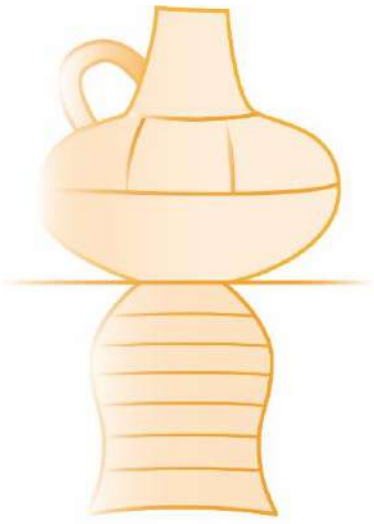
Department of Archaeology

Durham University

2023



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Volume 2: Appendixes

Statement of Copyright

Appendix 1 – Glossary and terminological notes

***Askos*:** Greek term to indicated closed vessel similar to a single handled jug but with an offset neck; also known as 'duck vase'—a type common in the Aegean in the Early Minoan/Early Helladic I and II phases (3579- 2376 cal BC after Cavanagh *et al.* 2016).

***Facies*/culture:** The term 'facies' was created by A. Gressly, a Swiss geologist, in 1838 to describe homogeneous lithological features. It was then borrowed by archaeologists and already used in Italy at the beginning of the 20th century by G. A. Colini (1903). At first it was used almost as an alternative to 'culture', but then began to indicate the observation of recurring features in the material evidence with less marked cultural implications (Dankers 2020, p. 14). Up until the 1960s the terms 'culture' and 'civilization' were used uncritically by Italian scholars (e.g. L. Bernabò Brea, A.M. Radmilli, S. Puglisi, L. Barfield, B. Bagolini and D. Trump). In the 1970s, the critique of archaeological cultures came to the fore, in Italy with the work of R. Peroni, who in subsequent works (1989, 1994, 1998, 2002) described the concept of culture as a 'blunder'. According to Peroni's definition, the word *facies* was more appropriate for archaeological reconstructions, since it described 'the set of archaeological evidence relating to a certain chronological horizon in a given territory, aggregated by typological connections allowing one to link archaeological sources relevant to heterogeneous classes' (Peroni 1994, pp. 22-4).

Since the 1990s, 'facies' has been used by most Italian scholars, rather than 'culture', to define territorial entities characterised by distinct local traditions, recognisable in different aspects of material culture, settlement and burial practices (Cocchi Genick 2005, p. 8). The concept, as developed by Peroni, answers the continued archaeological desire to classify and order the archaeological record on a territorial scale with a strong emphasis on typology, one of the core elements of Peroni's approach. In addition, for the first time, the Italian debate on facies and cultures has echoed broader international trends, following the concept of archaeological culture earlier

formulated by Childe (1929) and redefined by Clarke (1978, de Marinis 2020, p. 33). Despite its original formulation, the archaeological '*facies*' has experienced the same problems as those pointed out for the 'archaeological culture'. This overlapping and confusion between '*facies*' and 'culture' in the Italian archaeological literature has been recently discussed in the conference 'Facies e culture nell'età del Bronzo italiana?' (Dankers, Cavazzuti and Cattanei 2020). What emerged from most of the contributions is the wide misunderstanding and misuse of the two words, which have often been used interchangeably (Dankers 2020; de Marinis 2020). Both at a national and international level, the debate on the use and definition of archaeological cultures is far from resolved, as stated by Roberts and Vander Linden (2007) and repeated by de Marinis (2020, p. 38): 'Cultures have been deconstructed, re-formulated, re-named and simply ignored but have refused to be consigned to the dustbin of archaeological research. Whether they are employed as a background to regional or local investigations or provide the central focus for research, they show no signs of going away'. To avoid perpetuating 'monolithic' cultural definitions and misleading distinctions, in this thesis it was chosen to approach the archaeological evidence of Copper Age Campania by approaching the traditional distinctions critically and especially by focusing mainly on the local evidence and the range of trends and traditions associated with it.

***Figulina*:** Italian term used to indicate a very fine prehistoric and protohistoric ware with few non-plastic inclusions, often made of a calcareous clay. It is present in the Neolithic period in a discontinuous manner in the Italian peninsula, mainly in the south, before disappearing and becoming significantly attested again from the Middle Bronze Age onwards as a specialised wheel-thrown product. It is generally painted and fired at high temperatures, not suitable for use on fire.

Morphology: From the Greek 'study of shapes'. Morphological analyses of the overall shape of the artifacts and their attributes are used to construct artifacts typologies.

Pyxis: Greek term to indicate a small vessel with lid.

Typology: Study of artefacts with common characteristics (in the case of pottery mostly form and decoration), resulting in a classification of artefacts into types to compare artefacts or features across time and space, or to determine relative dates for sites (typo-chronology).

Twin vessel: Ceramic vessel characterised by two elements—generally cups, joined together, termed in Italian as ‘saliera’.

Appendix 2 – 'Across Technologies' Workshop programme

Durham University

MAVIS
Material and Visual Culture Research Group
Research Dialogues 2021

NORTHERN BRIDGE CONSORTIUM DOCTORAL TRAINING PARTNERSHIP
UKRI Arts and Humanities Research Council

Choices, traditions, identities and ideologies in prehistoric pottery production in Europe and the Mediterranean

19th January 2022 - Online workshop - 9.30 GMT

Workshop organized by
PhD candidate Maria De Falco with the support of Dr Kamal Badreshany and Prof. Robin Skeates
Material and Visual Culture: Research and Impact Group
Durham University, Department of Archaeology, UK - Research Dialogues

Final Programme

9.30-9.50 Greetings and Introduction to the workshop
Maria De Falco and Robin Skeates (Durham University)

9.50-10.10 Kamal Badreshany (Durham University)
Potting on the Edge of the Painted Traditions: Ceramic Regionalism and the Role of Craft Production during the Neolithic of the Central Levant

10.10-10.30 Pamela Fragnoli (OEAW)
A technological laboratory for the longue durée: the case-study of Arslantepe (eastern Anatolia)

10.30-10.50 Louise Gomart (CNRS)
Ceramic manufacture and the Neolithisation of Southern Europe: from technical frontiers to social boundaries

10.50-11.10 Clare Burke (OEAW)
Style over Substance? Neolithic Pottery from Svinjarička Čuka, Serbia and it's Place Within Neolithic Potting Traditions

11.10-11.30 Break

11.30-11.50 Silvia Amicone (University of Tubingen)
Exploring regional variability in pottery paste recipes in the Prehistoric Balkans: a case of study from Vinča culture

11.50-12.10 Attila Kreiter (Hungarian National Museum), Tibor Marton and János Jakucs (Hungarian Academy of Sciences)
Enduring traditions and changing strategies of ceramic production among the first farming communities in South-Eastern Transdanubia

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NORTHERN BRIDGE CONSORTIUM
Arts and Humanities Research Council

12.10-12.30 Eve Derenne and Delia Carloni (University of Geneva)
The ceramic chaîne opératoire approach as a tool to unveil the arrival of exogenous cultural traits and social transformations: The case of the ‘Petit-Chasseur’ megalithic necropolis in Switzerland

12.30-12.50 Sébastien Manem (UMR 7055 CNRS)
Ceramic Chaîne Opératoire and Cultural Evolution

12.50-13.10 Discussion

13.10-14.00 Lunch Break

14.00-14.20 Vanessa Forte (University of Pisa)
Ceramic technology and socio-cultural dynamics: exploring Copper Age communities through their pottery production

14.20-14.40 Italo Maria Muntoni (Ministry of Culture - SABAP BAT-FG), Giacomo Eramo (Università di Bari Aldo Moro)
Raw materials and technological choices of the Neolithic and Bronze Age communities of the Tavoliere Plain (Southern Italy)

14.40-15.00 Maria Pilar Prieto-Martinez (Universidade de Santiago de Compostela)
Ceramic technology and social complexity of the NW of Iberia during the Late Prehistory

15.00-15.20 Beatrijs de Groot (University of Edinburgh)
Technological experimentation and the adoption of the potter's wheel in Iron Age Iberia

15.20-15.30 Break

15.30-16.00 Keynote lecture by Prof. Stephen Shennan (University College of London)
Understanding technical traditions

16.00-17.30 Discussion and Round table

Link to attend: *https://forms.gle/kRCf5tp6uhNc4aEJ7*
Contacts: maria.de-falco@durham.ac.uk **Maria De Falco**

Website:
https://www.durham.ac.uk/departments/academic/archaeology/events/mavis-workshop-across-technologies/

Facebook event: https://fb.me/e/209Uw6tV5

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Appendix 3 – Details of Paestum Gaudo cemetery

Detail of the tombs and phases of excavation of the Gaudo cemetery at Paestum displayed in Figure 1:

Phase 1. Excavations by the B.P archaeological unit, 1943–1944. In 1943, during *Operation Avalanche*, US and British allies' armies landed on the coast of Campania and started the construction of a military airport which led to the discovery, and destruction of several rock-cut tombs in the Gaudo cemetery of Paestum. The tombs are assigned Arabic numerals from 1 to 10. Burials from 1 to 5 have been destroyed, while the others are still visible in the ground. Tombs 6 and 7 represent two chambers of the same burial, tombs 8 and 9 each have a single chamber, and tomb 10 is part of a two-chambered burial. These burials are reported without reference to entrance shafts since these were not detected. In some cases (tombs 6–7, 8, 10 and probably 9), the entrance shaft was detected and excavated in the third phase of excavations by Voza. Tomb 10 is the renowned 'Tomb Brinson' later reassessed by Salerno (1993, 1995).

Phase 2. Excavations by Sestieri, 1945–1947. 19 tombs with 24 burial chambers. These are labelled with upper case letters from A to V. Tombs B, C, D and E are not marked in the plan, and can only be generally located in Area C. Tombs B, C, D, E, F, H, Q and R, are poorly preserved. As with the earlier Army activities, in this second phase of excavation, most of the shafts were not excavated; in some cases (tombs A and G), they were subsequently detected by Voza. In the case of tombs H and 'I'[1], there is some uncertainty, since tomb 'I' is probably the entrance shaft of Voza's tomb X, and tomb H might have also been connected to it.

Phase 3. Excavations by Voza, 1962. The most extensive and most complete phase of excavation. It led to the discovery of 15 new tombs and included the re-examination of those from previous phases. Those excavated are numbered from I to XIV with Roman numerals and are located in Areas A and B. On this occasion, both the shaft and the chambers were carefully uncovered. Excavations related to the previously known tombs are indicated with lower case letters. These often investigated either the shaft or a new chamber. Only tomb *f* in

[1] In order to keep clear the identification of the burials, upper case letters that could be mistaken for Roman numerals are placed in inverted commas, e.g. 'I', 'V', 'X'.

Area C is completely new. Specifically, tomb *a* is the entrance shaft of Sestieri's tomb A; tomb *b* is the entrance shaft of the Army's tombs/chambers 6 and 7; tomb *c* is not clearly located, but should be in the southern area of the cemetery, and might correspond to the Army's tomb 9; tomb *d* is the entrance shaft of the Army's tomb 8; tomb *e* is the entrance shaft of the Army's tomb 10, the 'Tomb Brinson'; and tomb *g* is the entrance shaft of Sestieri's tomb G.

Phase 4. Excavations by the Museum of Paestum, 1969. In the area of the Army's excavations a further two-chambered burial was excavated, partially destroyed and named 'tomb 00' (Bailo Modesti and Salerno 1998: 16).

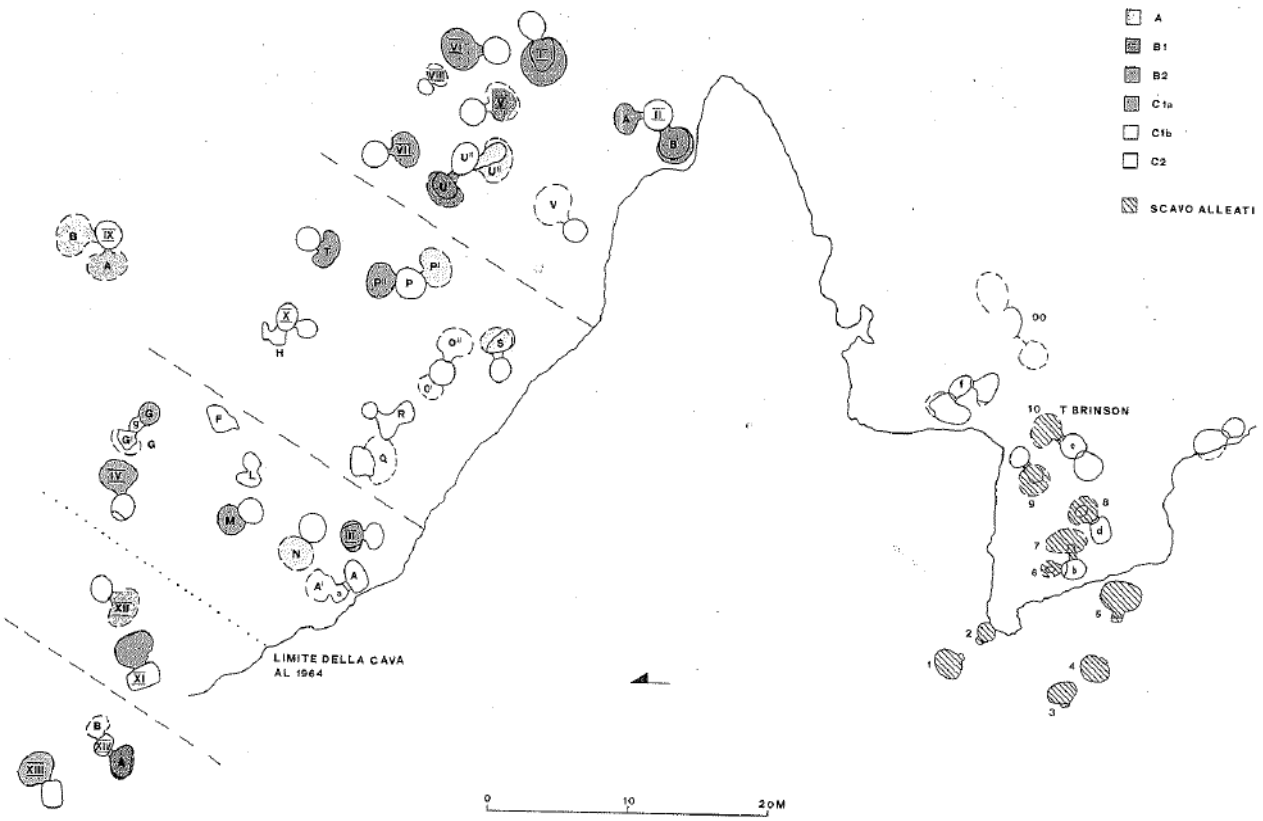


Figure 1. Updated plan of Gaudo burial ground (Aurino 2015) with distribution of the burial layouts and possible grouping: A1) only individuals in anatomical connection; B1) individuals in anatomical connection and a few disarticulated bones; B2) individuals in anatomical connection and abundant disarticulated bones; C1a) only secondary depositions with disarticulated bones, covering the whole floor; C1b) small chamber with only secondary depositions with disarticulated bones, covering the whole floor; C2) only secondary depositions with disarticulated bones gathered in small groups. (After Bailo Modesti and Salerno 1998: fig. 76: 184).

Burial layout

Based on the deposition of the human remains in the chambers, different layouts can be recognised, as explained in Chapter 1.3.4.

A) Only individuals in anatomical connection:

- A2: XII,
- A3: tomb IX chamber a, tomb IX camber b.

B) Individuals in anatomical connection and disarticulated bones:

- B1: tomb V, tomb U chamber a, tomb XIV chamber a.
- B2: tomb M, tomb T, tomb I, tomb III, tomb IV, tomb VI, tomb XIII, tomb G-G' chamber a, tomb P chamber b, tomb II chamber a, tomb II chamber b.

C) Tomb ossuary, only disarticulated bones:

- C1a: tomba VII, tomba XI?
- C1b: tomba L, tomba X, tomba XIV cella b.
- C2: tomba N, tomba S, tomba VIII?, tomba Brinson cella a, tomba P cella a, tomba U cella b.

The most common layout at Paestum is the primary deposition of individuals in anatomical connection, with disarticulated bones placed along the walls. Eleven tombs (M, T, I, III, IV, VI, XIII, G-G' chamber a, P chamber b, II both chambers) contained abundant secondary remains; three (V, U chamber a, XIV chamber a) contained just a few. The second most common arrangement is the so-called 'tomb-ossuary' with abundant disconnected bones either randomly covering the whole chamber floor or gathered into small groups. Six tombs yielded human remains gathered into small groups: N, S, probably VIII, P chamber a, U chamber b and tomb 'Brinson' chamber a. Five tombs yielded depositions covering the whole floor: VII, probably tomb XI and the smaller tomb L, X and XIV chamber b. Finally, three tombs yielded only individuals in anatomical connection (two individuals in tomb XII, twelve overall in tomb IX, six in each chamber). The different burial arrangements are evenly distributed across the cemetery, with no major concentration. Burials with only disconnected bones are generally located some distance from each other.

Spatial distribution in the cemetery

Based on their spatial distribution, the tombs can be divided into groups, with almost all the burial arrangement equally represented in each, as shown in Figure 1. The most striking group, characterised by uncommon grave goods, is in the southern part of the cemetery. It is represented by tombs 'f' and 00 plus all the burials detected by the Army, including tomb 'Brinson'. The burials on the northern side appear to be clustered in four groups. From east to west these are:

1) tombs I, II, V, VI, VII, VIII, U and 'V';

2) tombs X, H, O, P, Q, R, S, T;

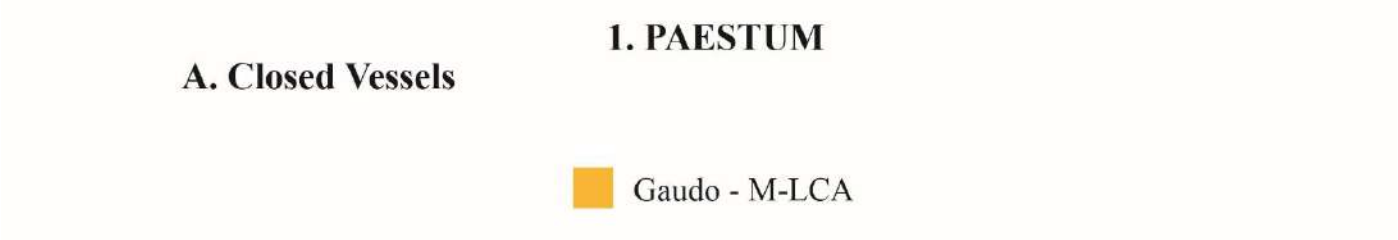
3) tombs III, IV, A, F, G, L, M, N with tombs XI and XII possibly belonging to the same group;

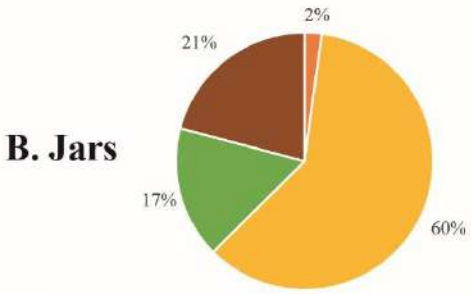
4) tombs XIII and XIV).

Tomb IX appears to be isolated on the north-east side and might represent part of a further group not fully excavated.

Appendix 4 – Vessel categories

In this appendix, the distribution of vessels relative to each category is presented divided by site. Alongside pie charts, when the categories are attested in more than one context, drawings of exemplars are also presented.





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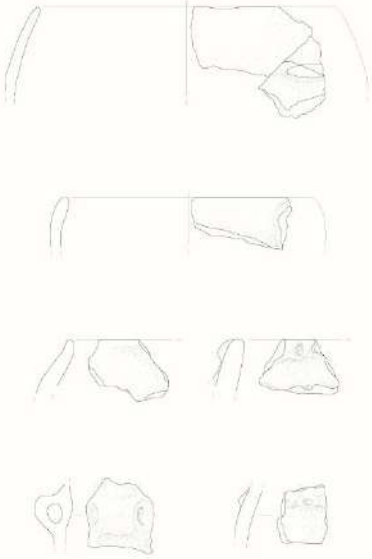
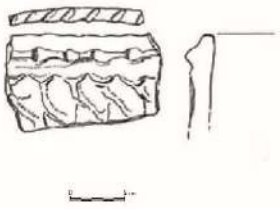
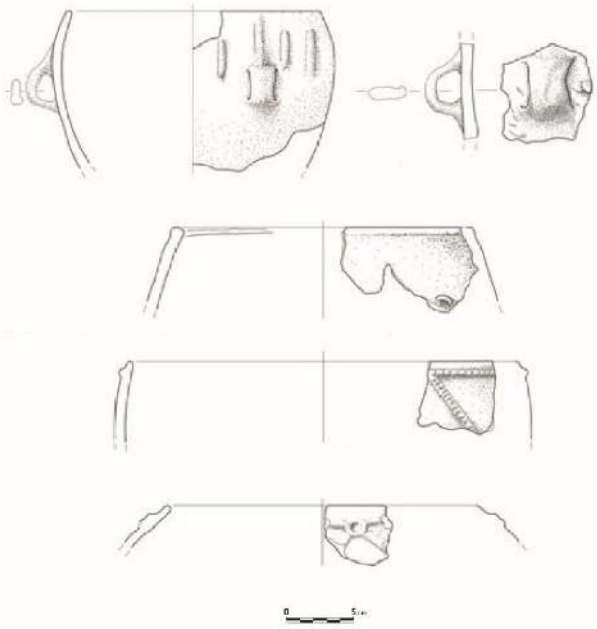
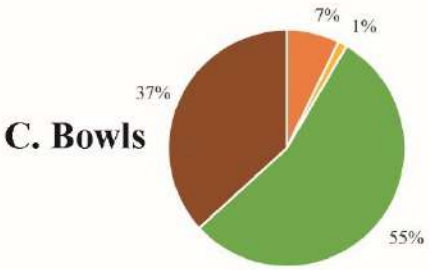


Cerere - M-LCA



Agorà II - M-LCA





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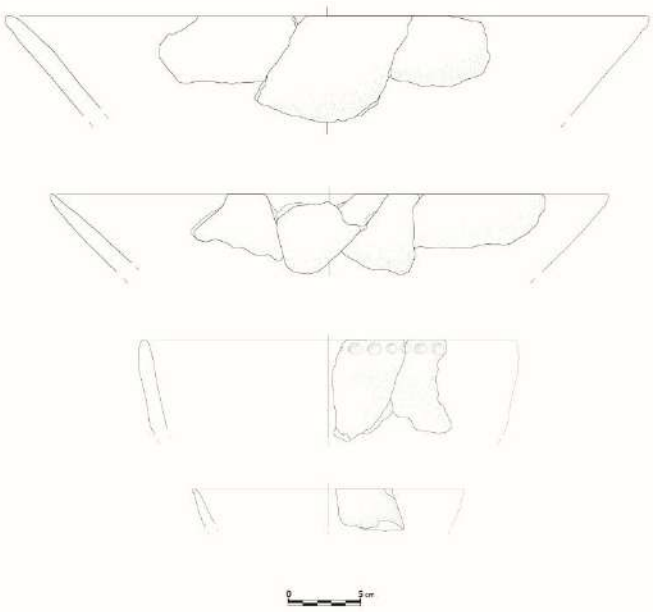
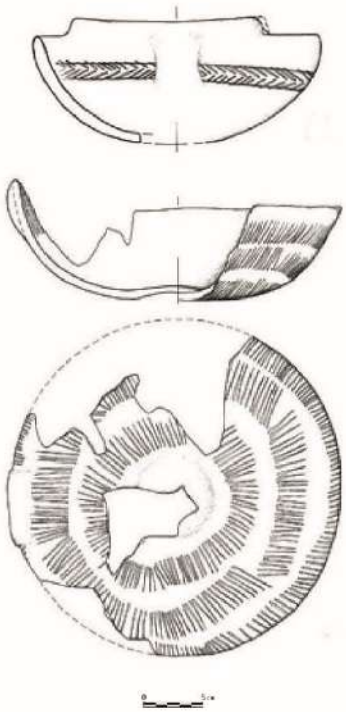


Gaudo - M-LCA

Cerere - M-LCA



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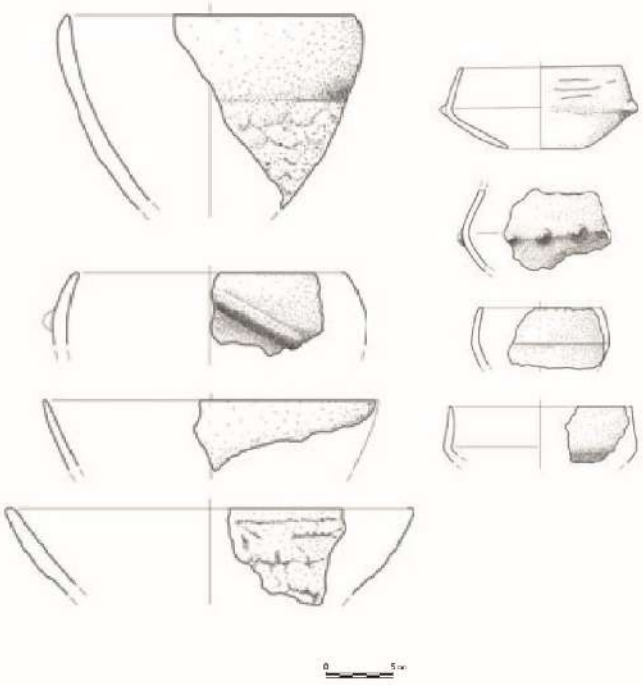

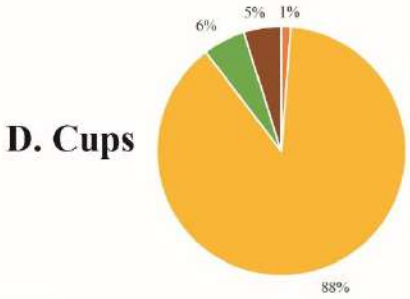

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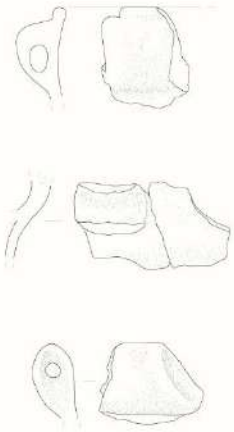
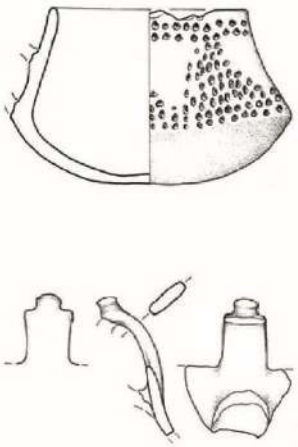


Gaudo - M-LCA

Cerere - M-LCA



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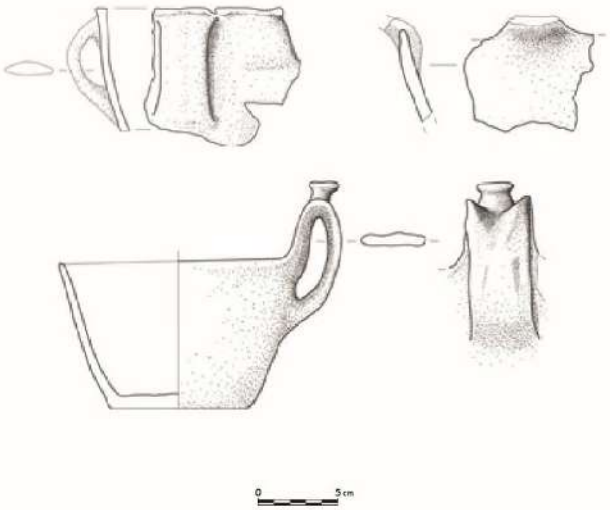
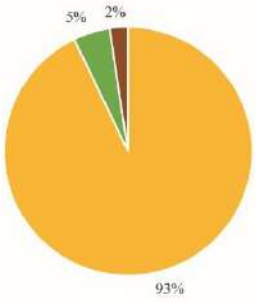


E. Beakers



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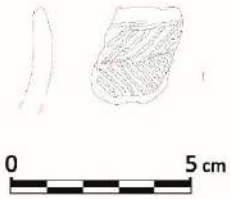
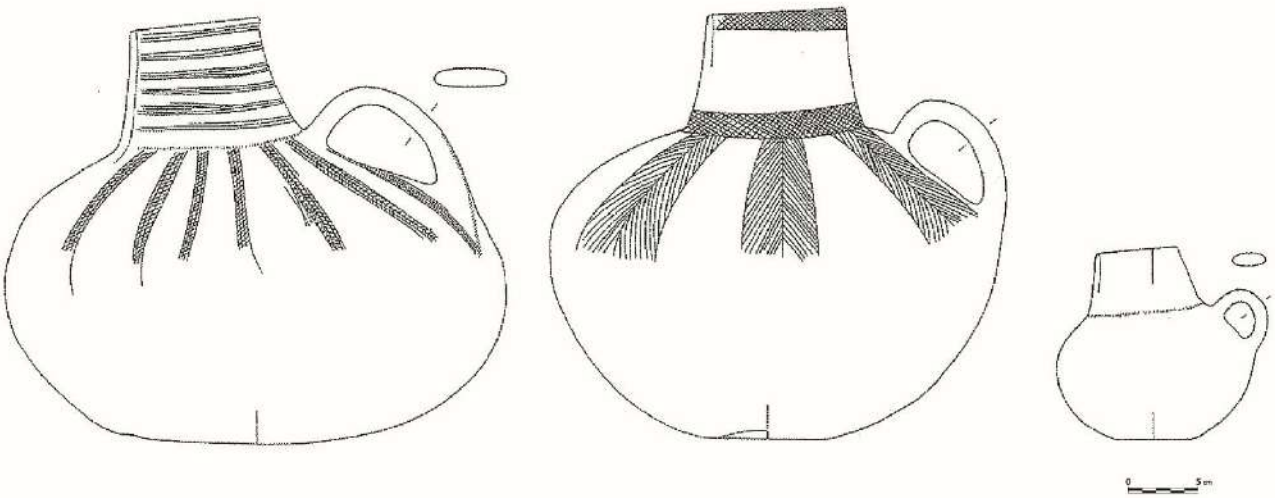


Gaudo - M-LCA

2. PONTECAGNANO

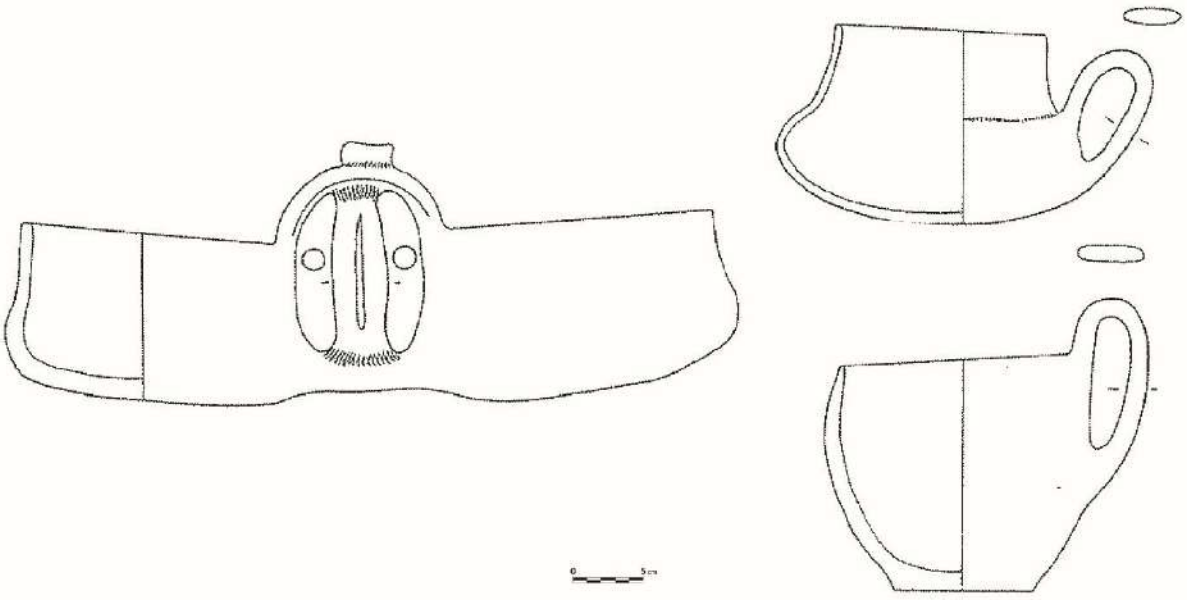
A. Closed Vessels

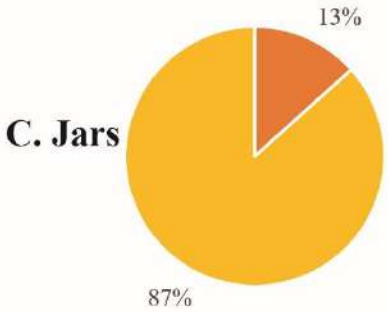
Cemetery - Gaudo M-LCA



B. Cups

Cemetery - Gaudo M-LCA





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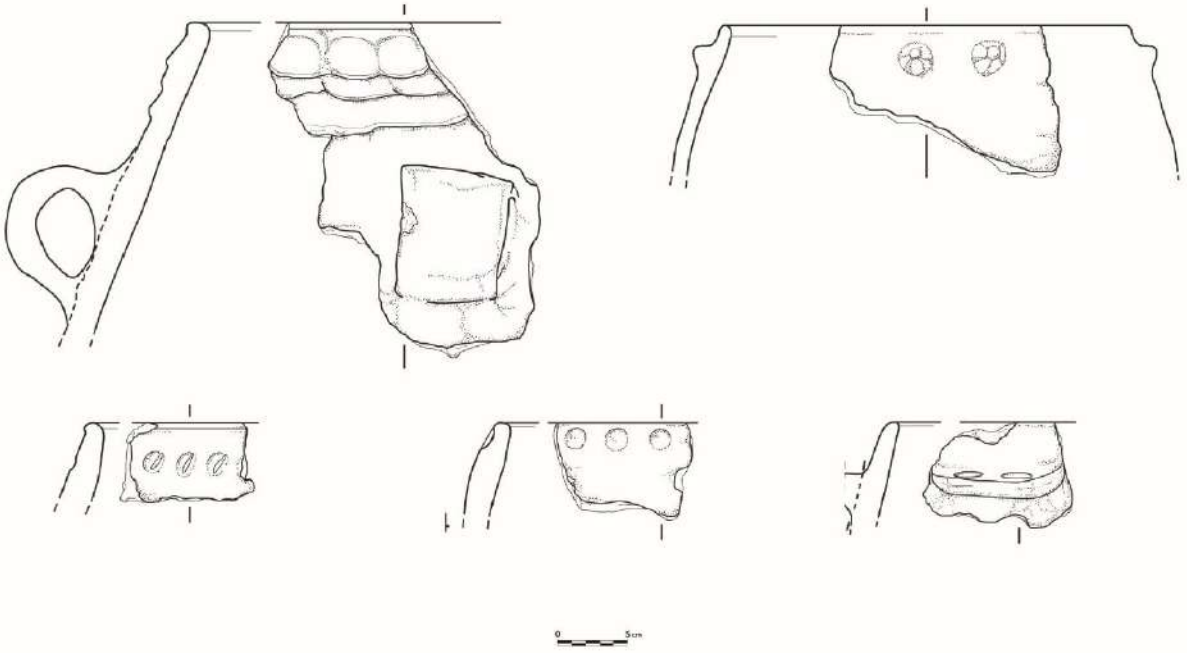
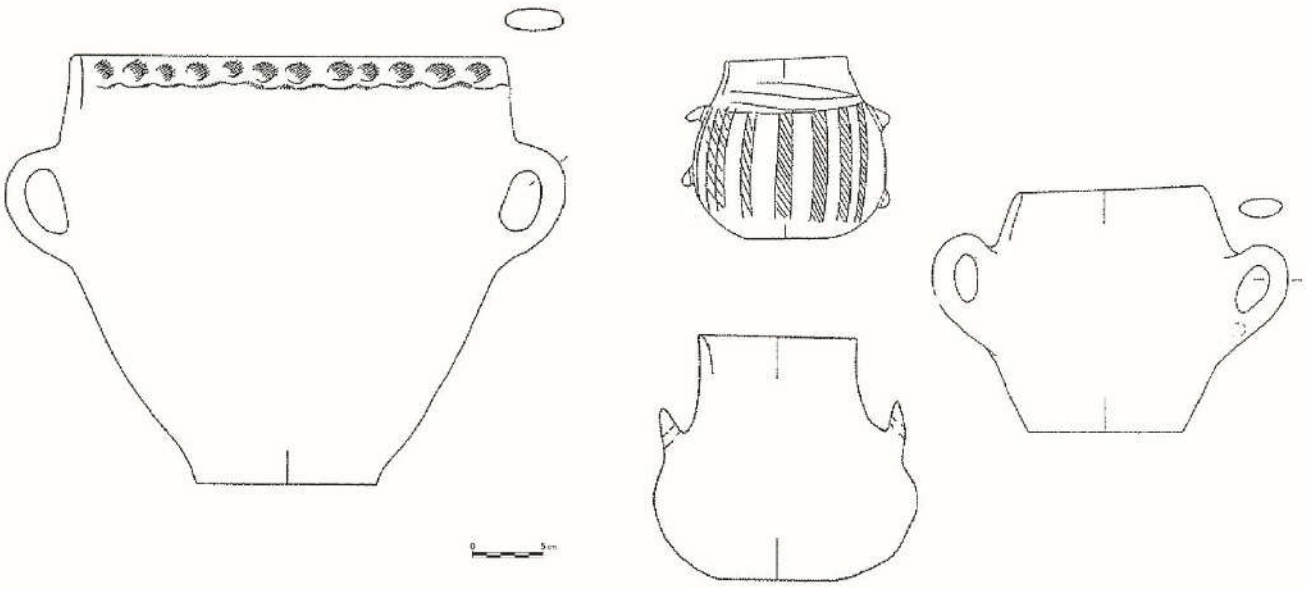
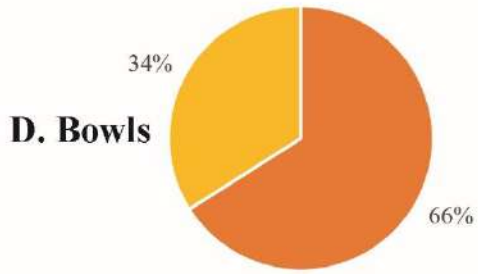


Cemetery - Gaudo M-LCA





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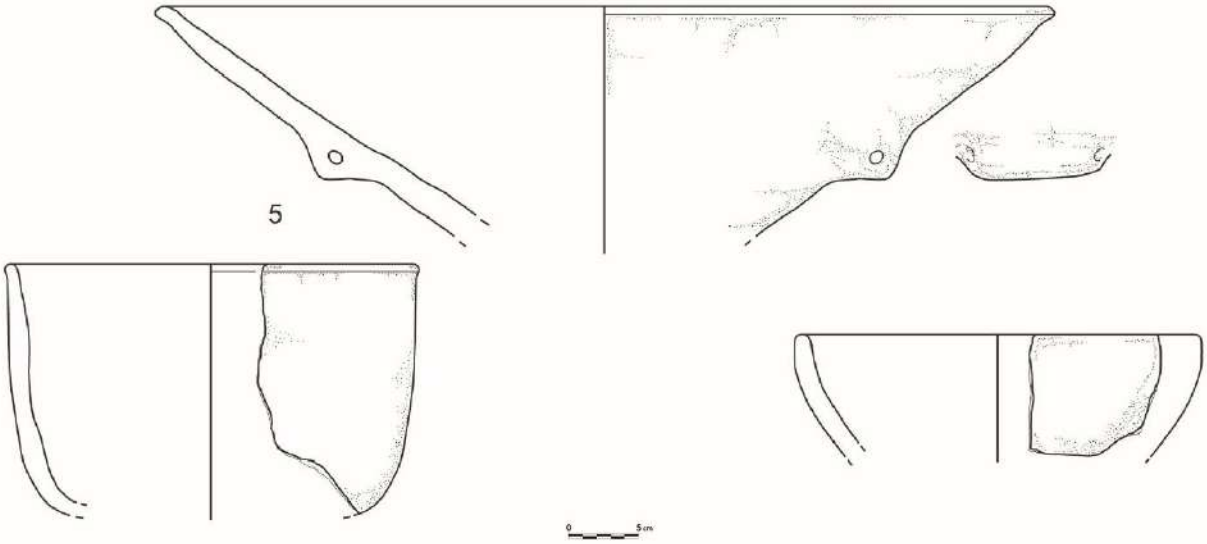
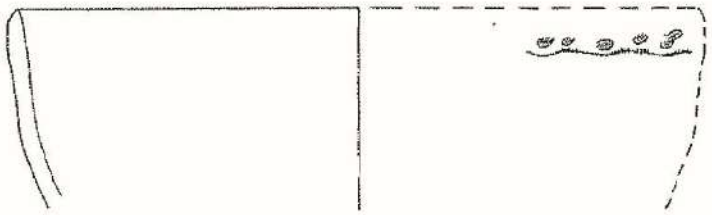
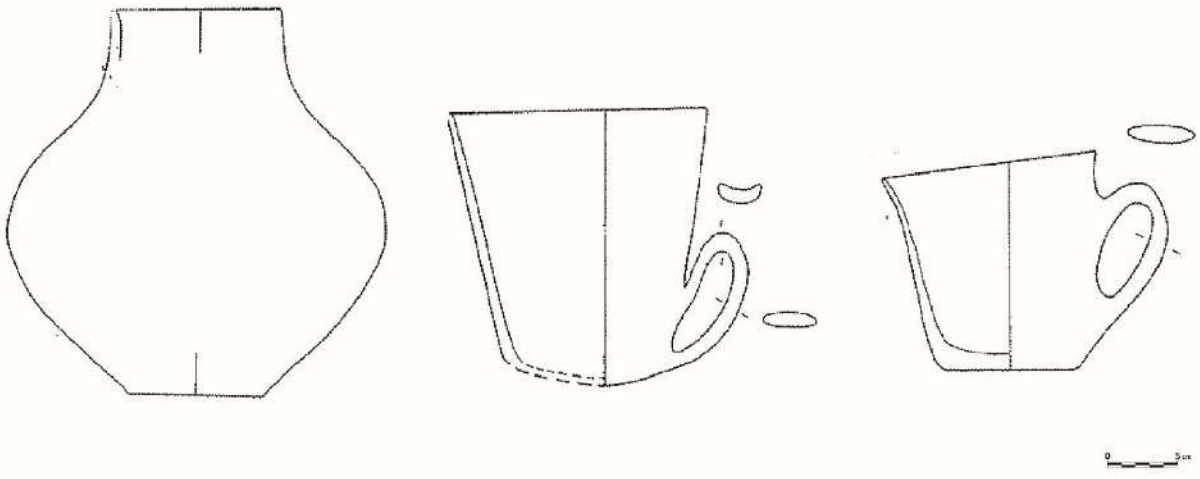


Cemetery - Gaudo M-LCA



E. Beakers

Cemetery - Gaudo M-LCA



3. SALA CONSILINA

A. Jars

Phase I - Taurasi MCA

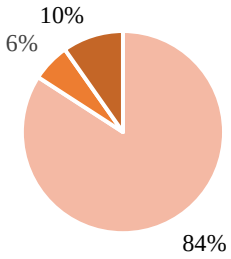
B. Bowls

Phase I - Taurasi MCA

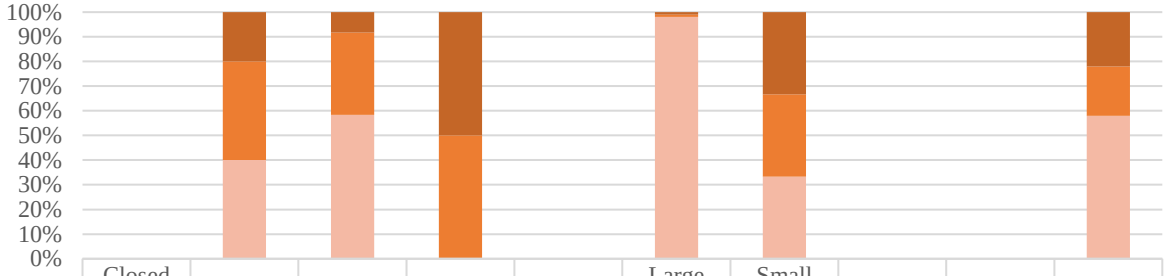
Appendix 5 – Ceramic Wares

Relative distribution of the ceramic wares identified divided by site and context.

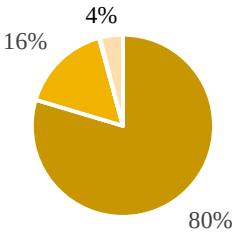
1. PAESTUM



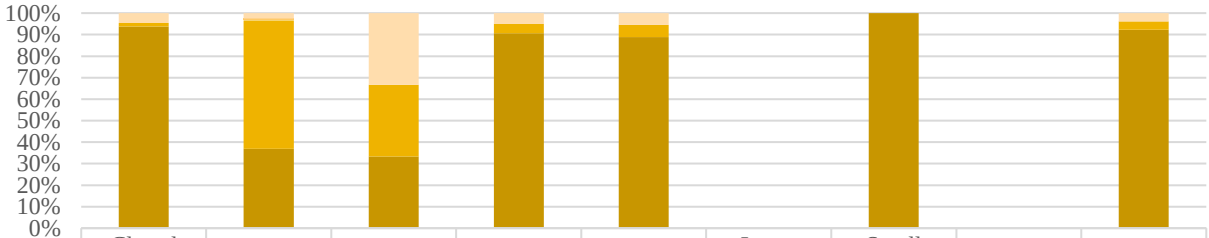
Agorà I ECA - Wares/Vessel category



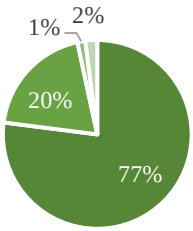
	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Other	NA
Fine/depurated	0	1	1	1	0	1	1	0	0	11
Semifine	0	2	4	1	0	1	1	0	0	10
Coarse	0	2	7	0	0	99	1	0	0	29

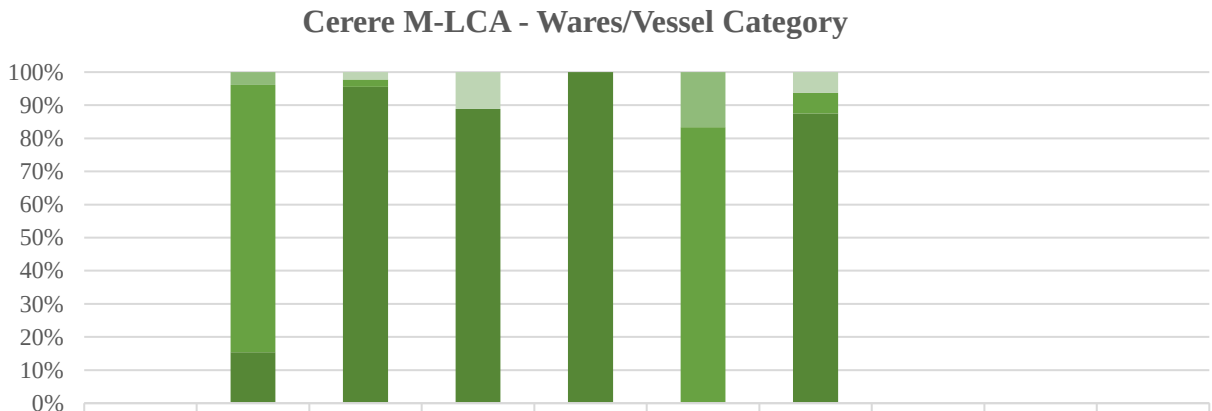


Gaudo M-LCA - Wares/Vessel Category

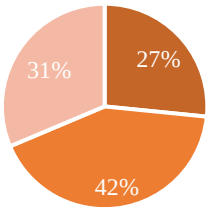


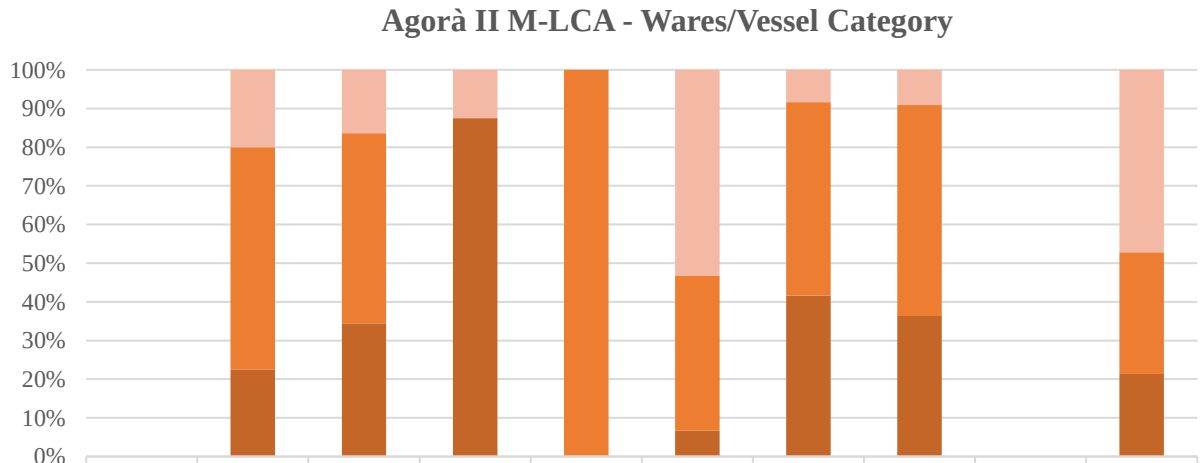
	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Lids
Fin/rough	11	3	1	7	2	0	0	0	1
Scaled	0	1	0	0	0	0	0	0	0
Rough	4	71	1	6	2	0	0	0	1
Finished	228	44	1	127	32	0	15	0	24





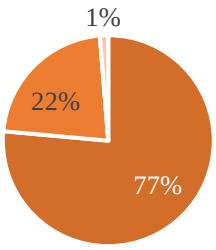
	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessel	Technical	Other	NA
Fin/rough	0	0	2	1	0	0	1	0	0	0
Scaled	0	1	0	0	0	1	0	0	0	0
Rough	0	21	2	0	0	5	1	0	0	0
Finished	0	4	86	8	2	0	14	0	0	0



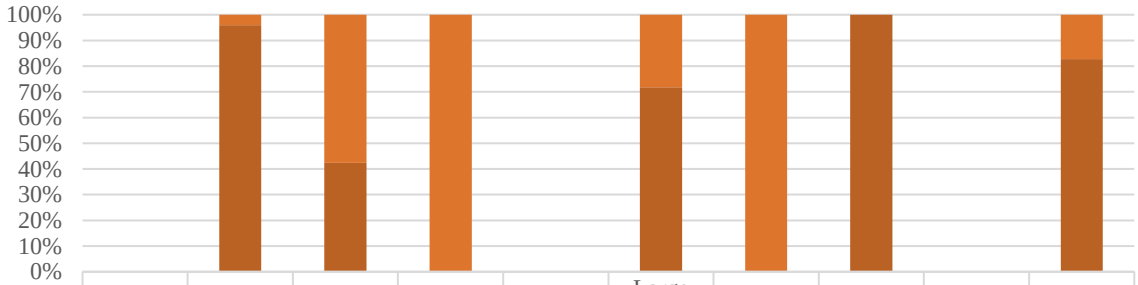


	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessel	Technical	Other	NA
Scaled	0	8	10	1	0	16	1	1	0	42
Rough	0	23	30	0	1	12	6	6	0	28
Finished	0	9	21	7	0	2	5	4	0	19

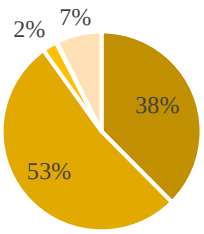
2. PONTECAGNANO



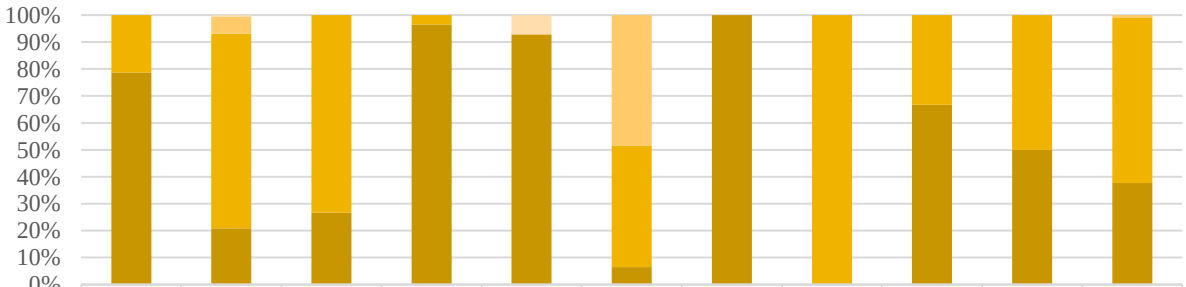
ANAS ECA - Wares/Vessel Category



	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessel	Technical	Other	NA
Fine/depurated	0	0	0	0	0	0	0	0	0	0
Semifine	0	1	19	1	0	13	1	0	0	35
Coarse	0	24	14	0	0	33	0	1	0	168

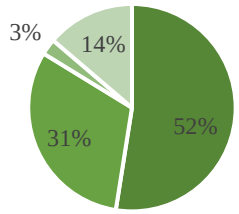


Pontecagnano Gaudo cemetery M-LCA - Wares/Vessel Category

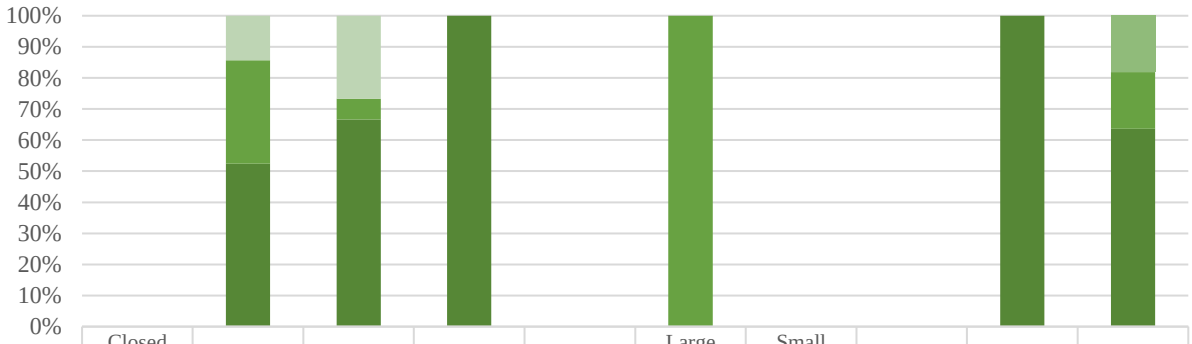


	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Lids	Miniaturised vessels	NA
Fin/rough	0	1	0	0	1	0	0	0	0	0	0
Scaled	0	10	0	0	0	15	0	0	0	0	8
Rough	16	114	11	2	0	14	0	1	1	1	579
Finished	59	33	4	55	13	2	3	0	2	1	356

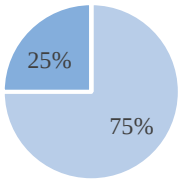
3. SALA CONSILINA



Sala Consilina I MCA - Wares/Vessel category



	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessel	Technical	Other	NA
Fin/rough	0	3	8	0	0	0	0	0	0	0
Scaled	0	0	0	0	0	0	0	0	0	2
Rough	0	7	2	0	0	14	0	0	0	2
Finished	0	11	20	1	0	0	0	0	3	7



Sala Consilina II M-LCA- Wares/Vessel category

	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessel	Technical	Other	NA
Fin/rough	0	0	0	0	0	0	0	0	0	0
Scaled	0	0	0	0	0	0	0	0	0	0
Rough	0	0	0	0	0	0	0	0	0	2
Finished	0	2	4	0	0	0	0	0	0	0

Appendix 6 - Shaping techniques

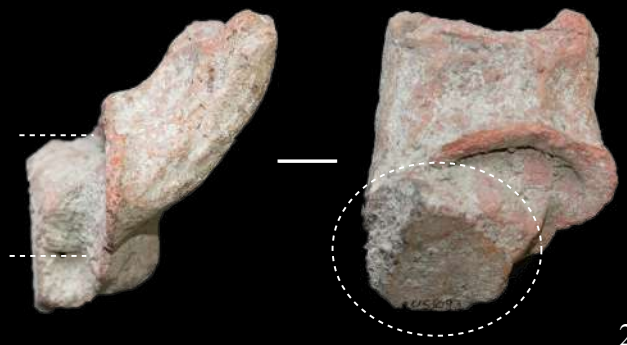
Detail photographs of fashioning traces highlighted with dotted lines and arrows.

1. Paestum - Agorà I ECA

3. Paestum - Cerere M-LCA

4. Paestum - Agorà II M-LCA

1



2

3

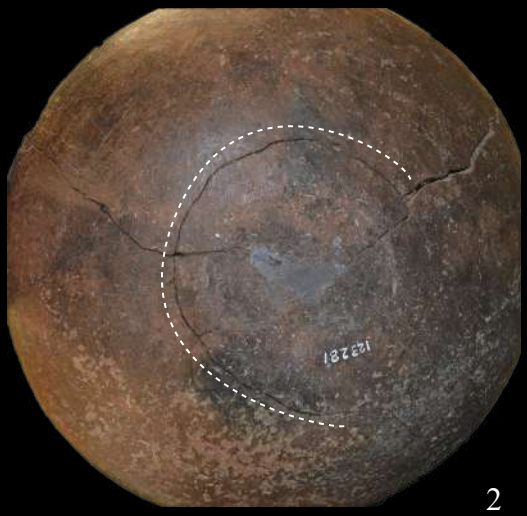
4

5

5. Pontecagnano - ANAS ECA

6. Pontecagnano - Gaudo culture cemetery M-LCA

1



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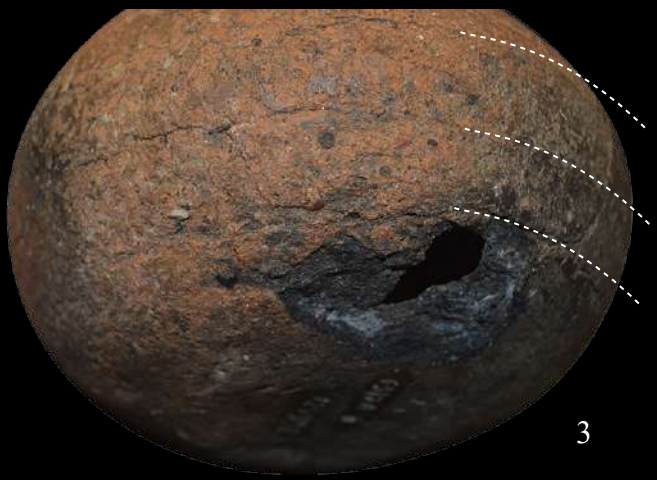


3

4

5

6

6. Pontecagnano - Gaudo culture cemetery M-LCA

7

8

9

10

11

12

13

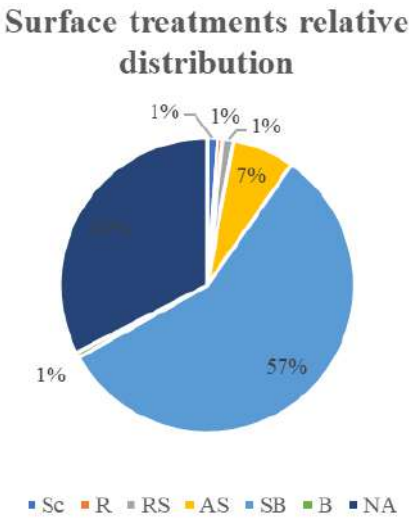
14

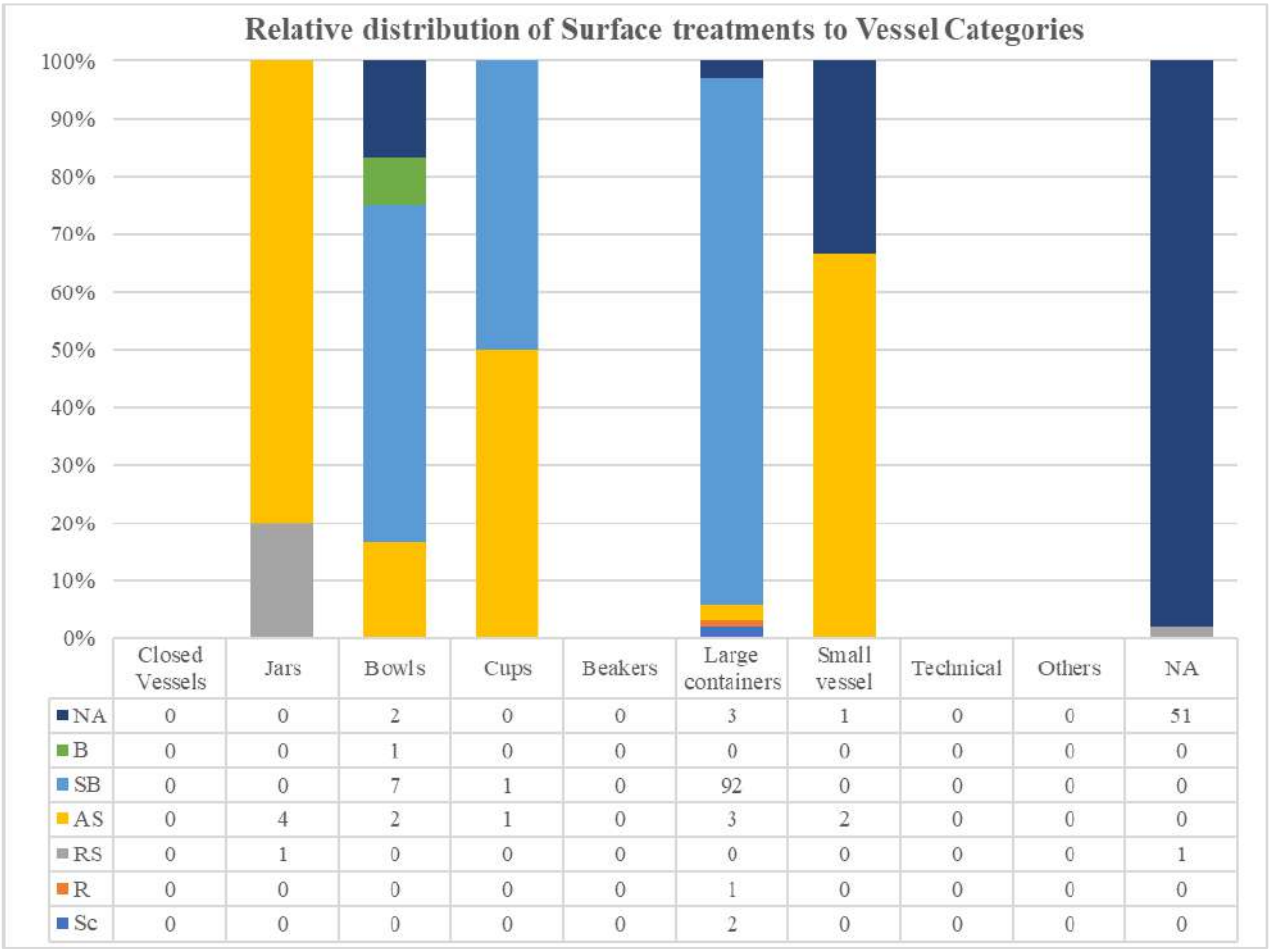
Appendix 7 – Surface treatments

Descriptive pie and bar charts on the distribution of surface treatments divided by site and contexts.

Keys: Sc=Scaled; R=Rough; RS=Roughly Smoothed; AS=Accurately Smoothed; B=Burnished, N/A=non attributable.

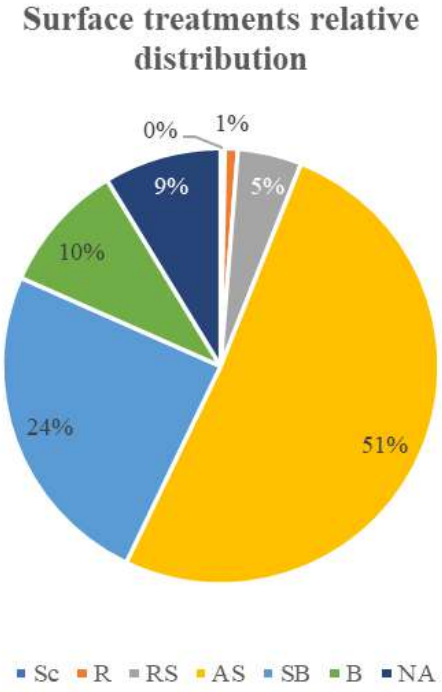
1. PAESTUM – Agorà I ECA

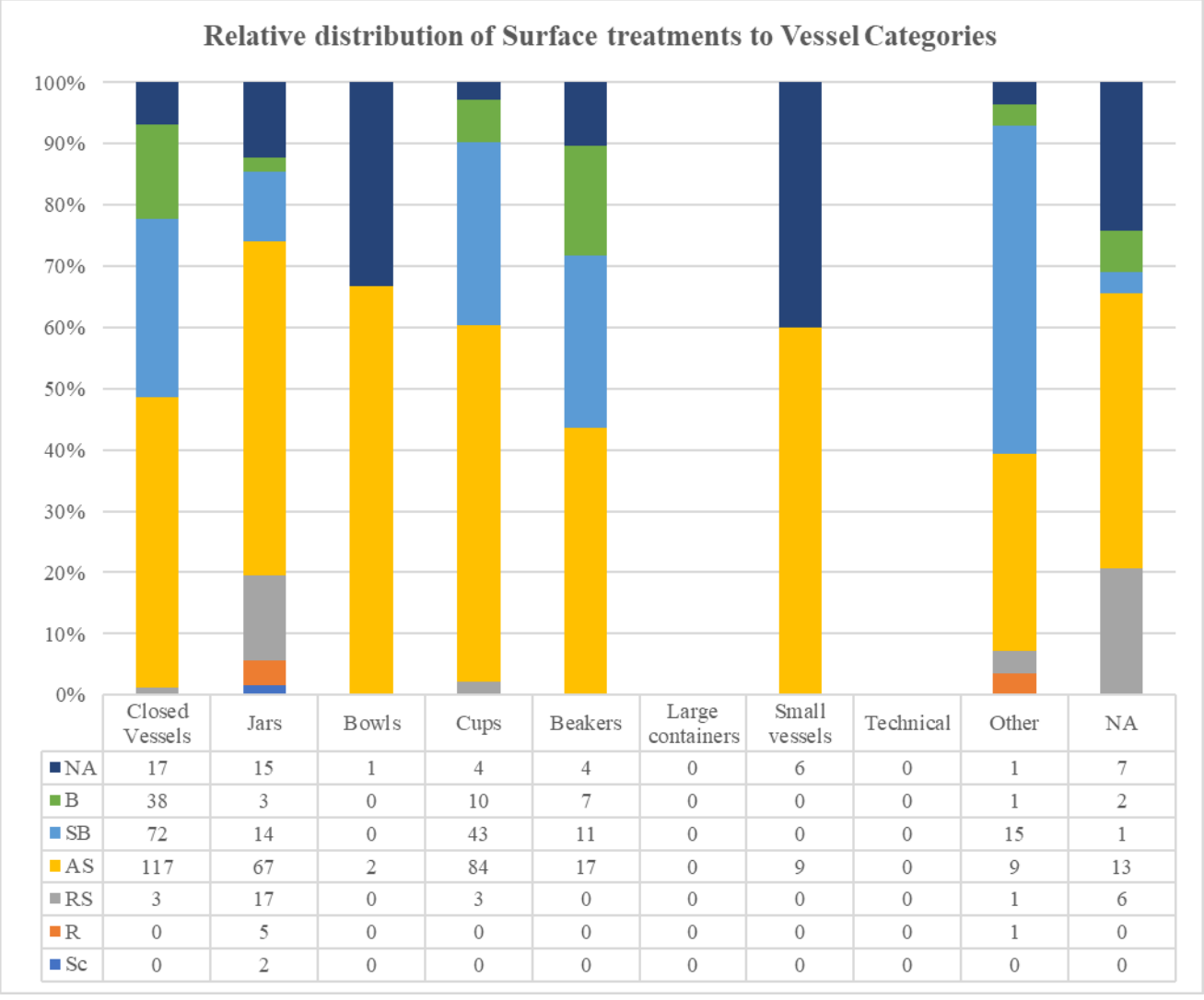




	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessel	Technical	Others	NA
NA	0	0	2	0	0	3	1	0	0	51
B	0	0	1	0	0	0	0	0	0	0
SB	0	0	7	1	0	92	0	0	0	0
AS	0	4	2	1	0	3	2	0	0	0
RS	0	1	0	0	0	0	0	0	0	1
R	0	0	0	0	0	1	0	0	0	0
Sc	0	0	0	0	0	2	0	0	0	0

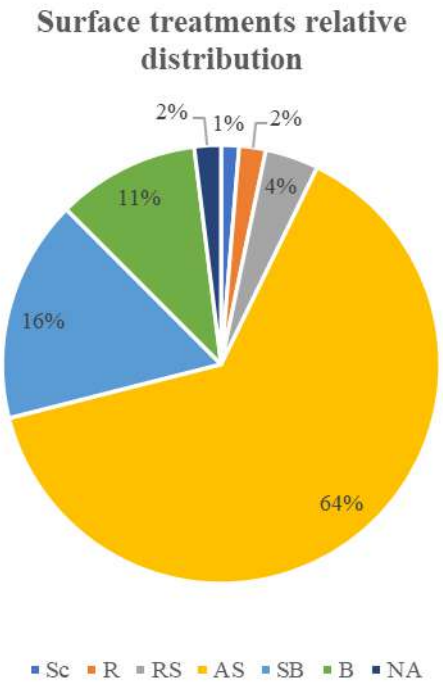
2. PAESTUM – Gaudo M-LCA

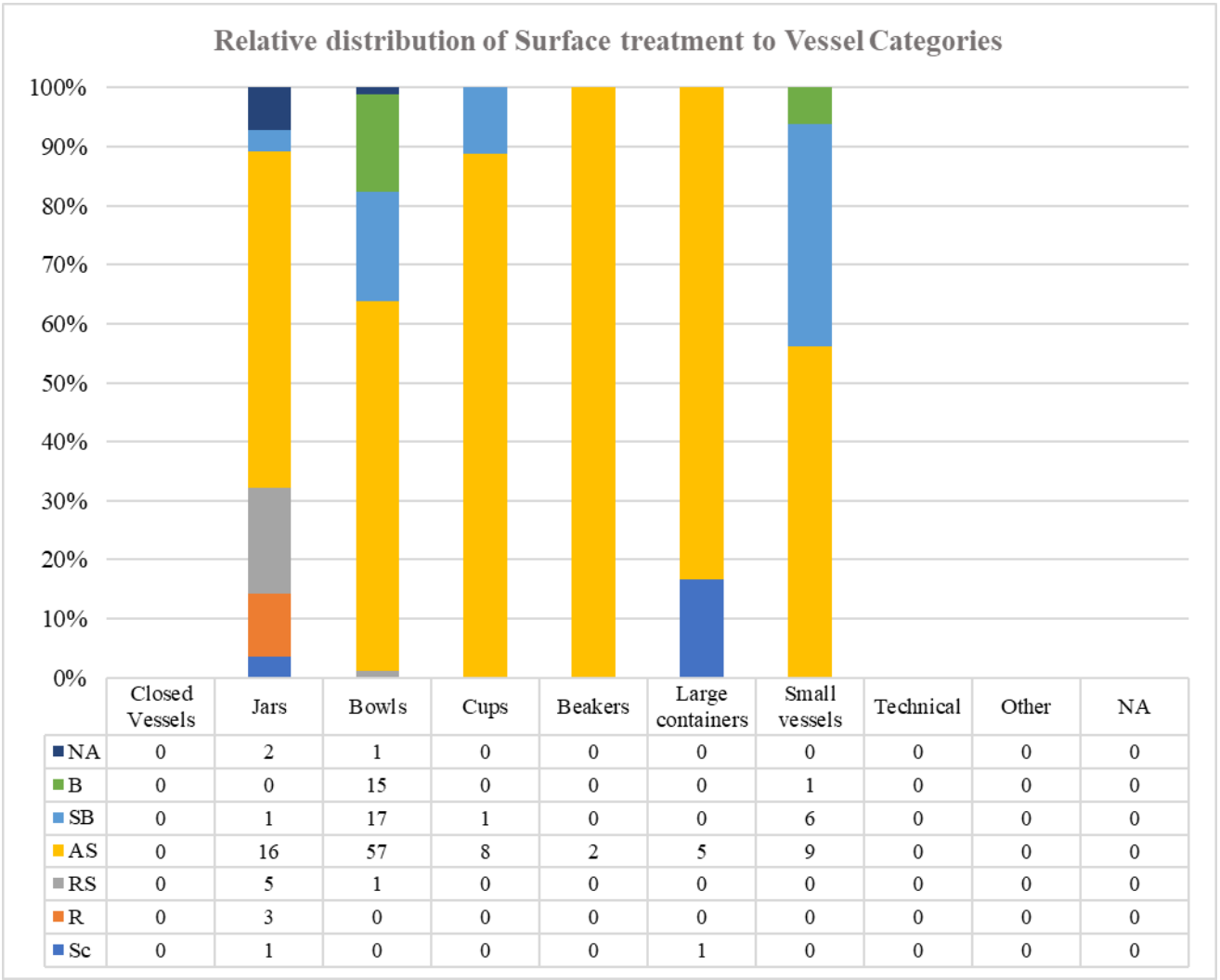




	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Other	NA
NA	17	15	1	4	4	0	6	0	1	7
B	38	3	0	10	7	0	0	0	1	2
SB	72	14	0	43	11	0	0	0	15	1
AS	117	67	2	84	17	0	9	0	9	13
RS	3	17	0	3	0	0	0	0	1	6
R	0	5	0	0	0	0	0	0	1	0
Sc	0	2	0	0	0	0	0	0	0	0

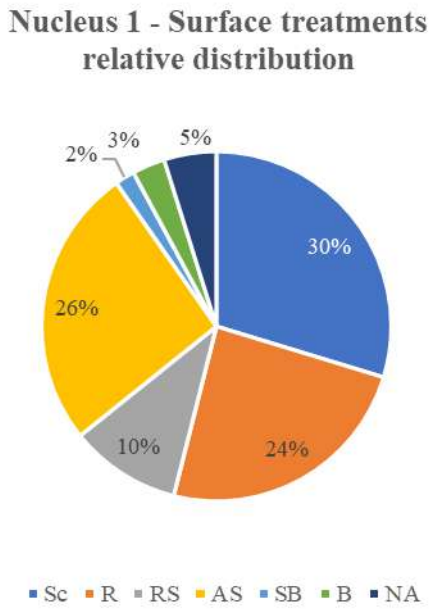
3. PAESTUM – Cerere M-LCA

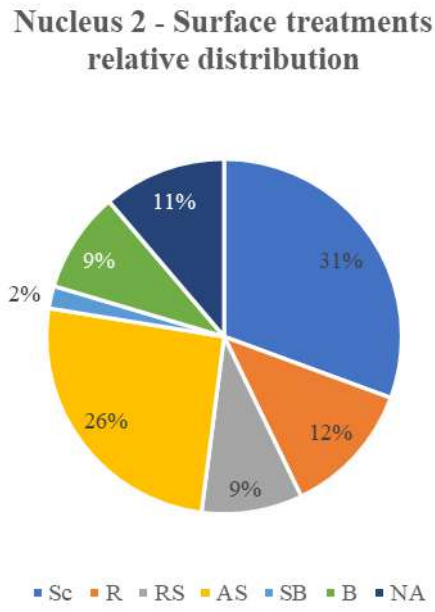


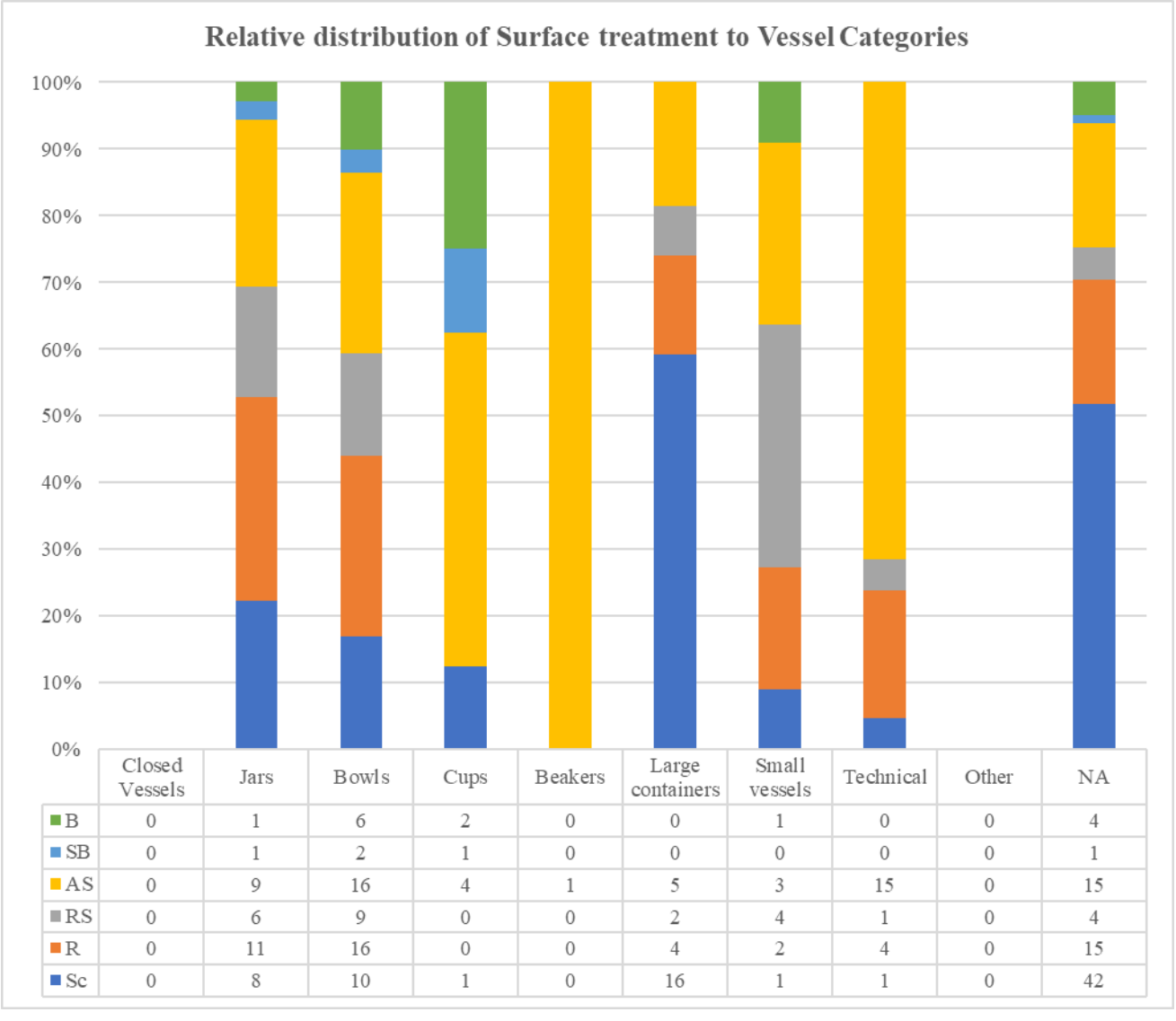


	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Other	NA
NA	0	2	1	0	0	0	0	0	0	0
B	0	0	15	0	0	0	1	0	0	0
SB	0	1	17	1	0	0	6	0	0	0
AS	0	16	57	8	2	5	9	0	0	0
RS	0	5	1	0	0	0	0	0	0	0
R	0	3	0	0	0	0	0	0	0	0
Sc	0	1	0	0	0	1	0	0	0	0

4. PAESTUM – Agorà II M-LCA

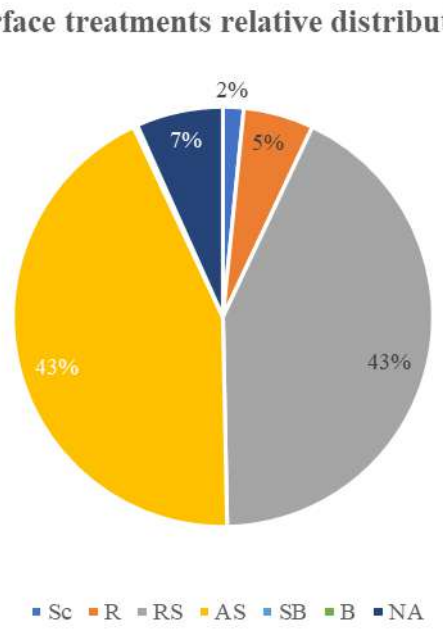


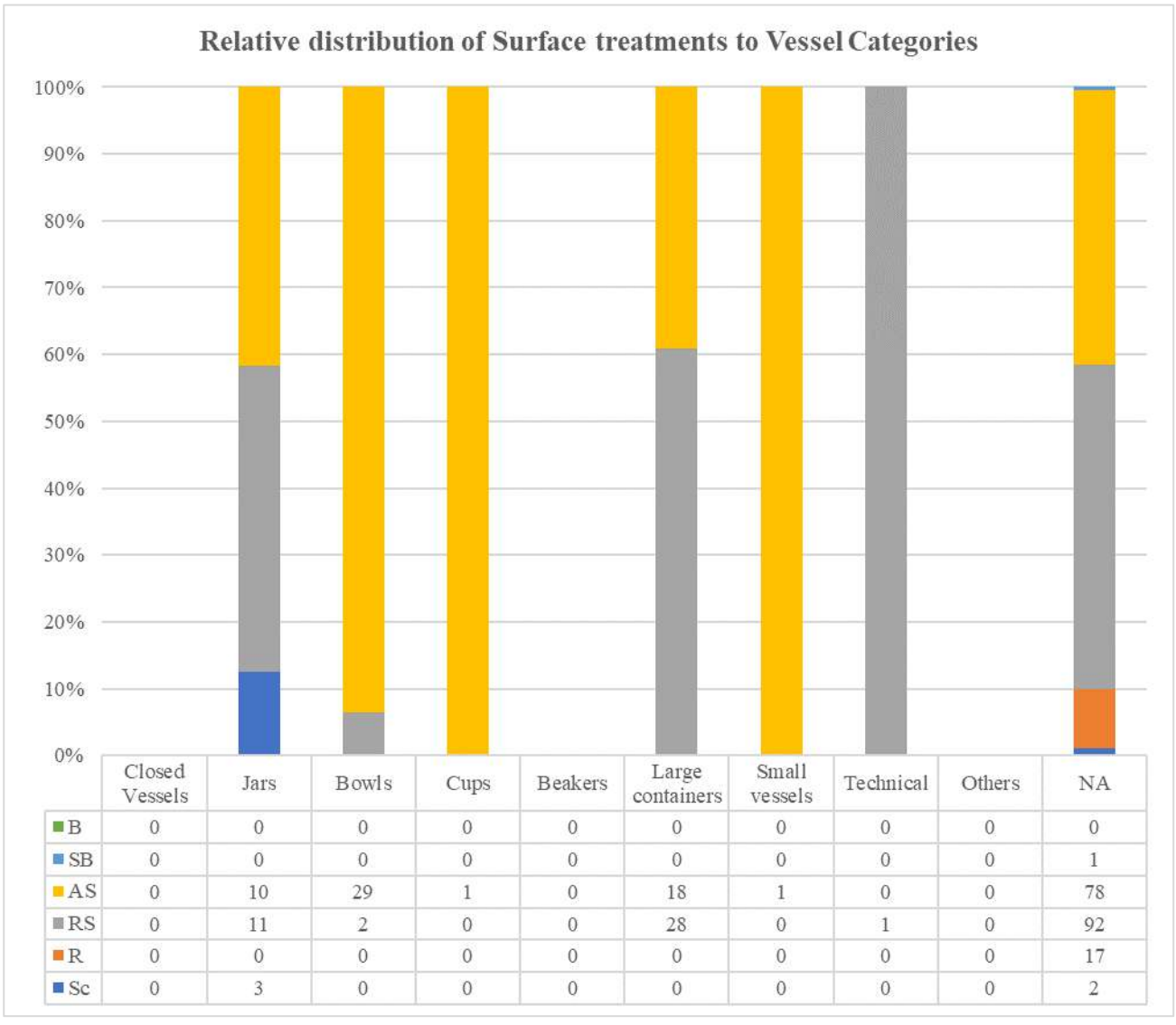




	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Other	NA
B	0	1	6	2	0	0	1	0	0	4
SB	0	1	2	1	0	0	0	0	0	1
AS	0	9	16	4	1	5	3	15	0	15
RS	0	6	9	0	0	2	4	1	0	4
R	0	11	16	0	0	4	2	4	0	15
Sc	0	8	10	1	0	16	1	1	0	42

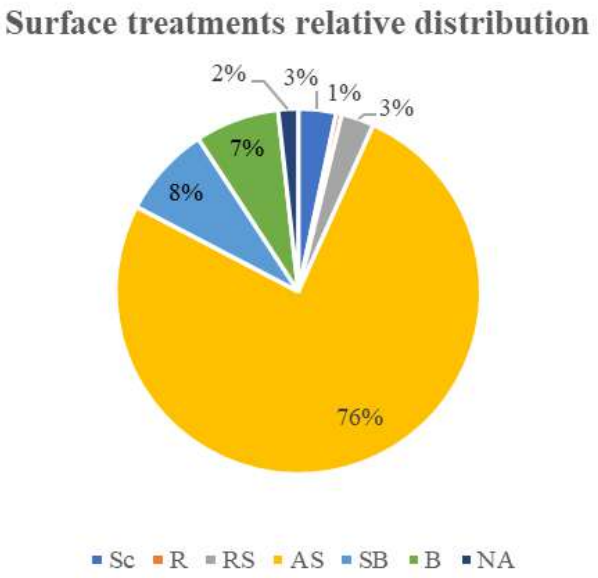
5. PONTECAGNANO – ANAS ECA

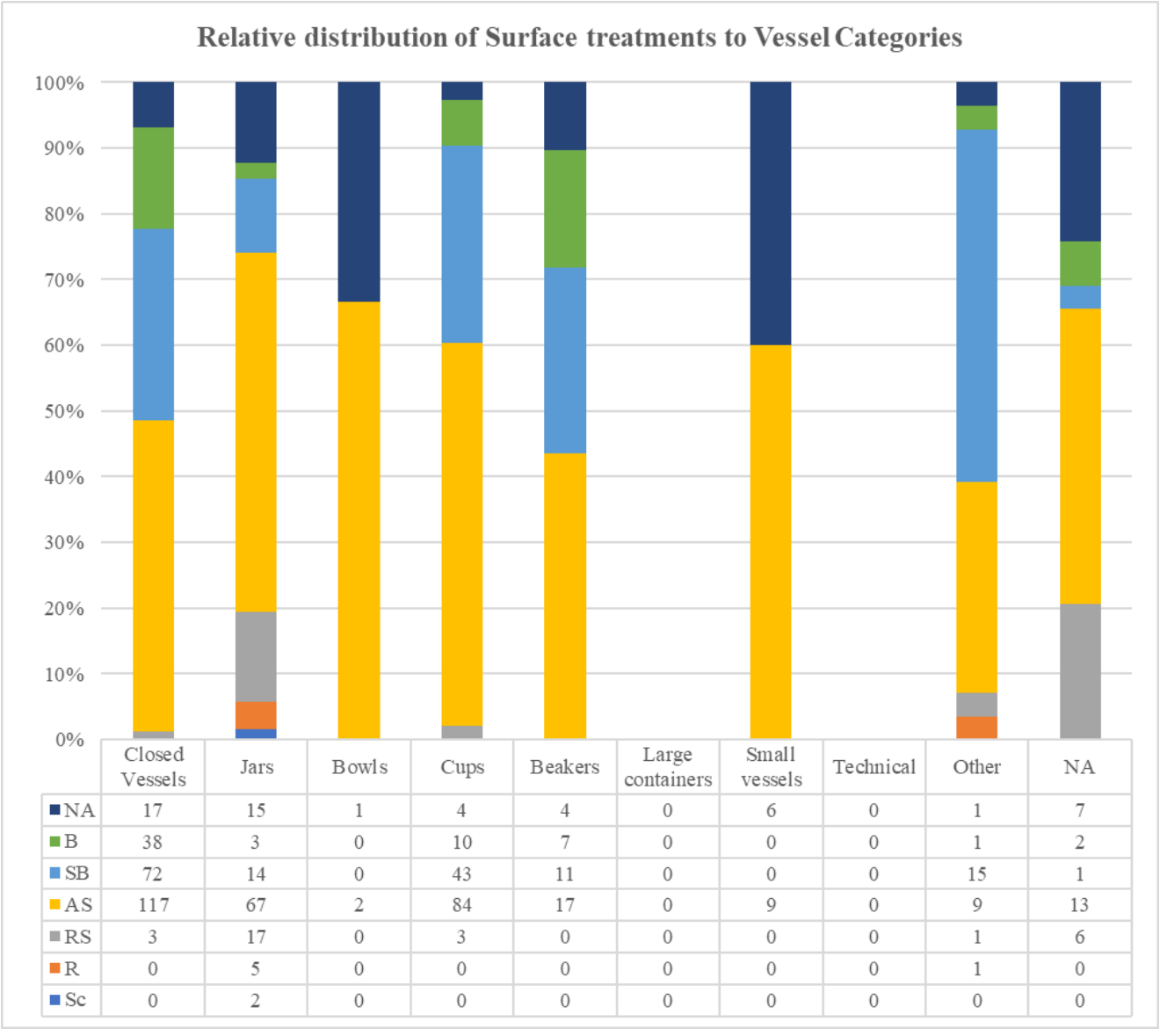




	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Others	NA
B	0	0	0	0	0	0	0	0	0	0
SB	0	0	0	0	0	0	0	0	0	1
AS	0	10	29	1	0	18	1	0	0	78
RS	0	11	2	0	0	28	0	1	0	92
R	0	0	0	0	0	0	0	0	0	17
Sc	0	3	0	0	0	0	0	0	0	2

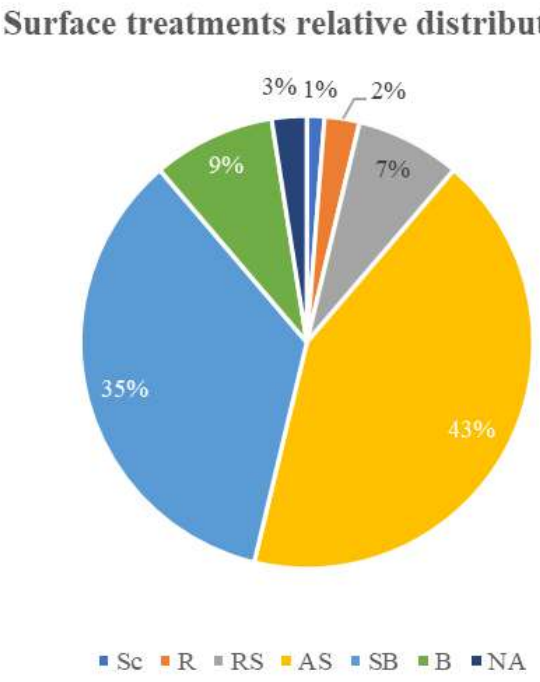
6. PONTECAGNANO – Gaudo Cemetery M-LCA

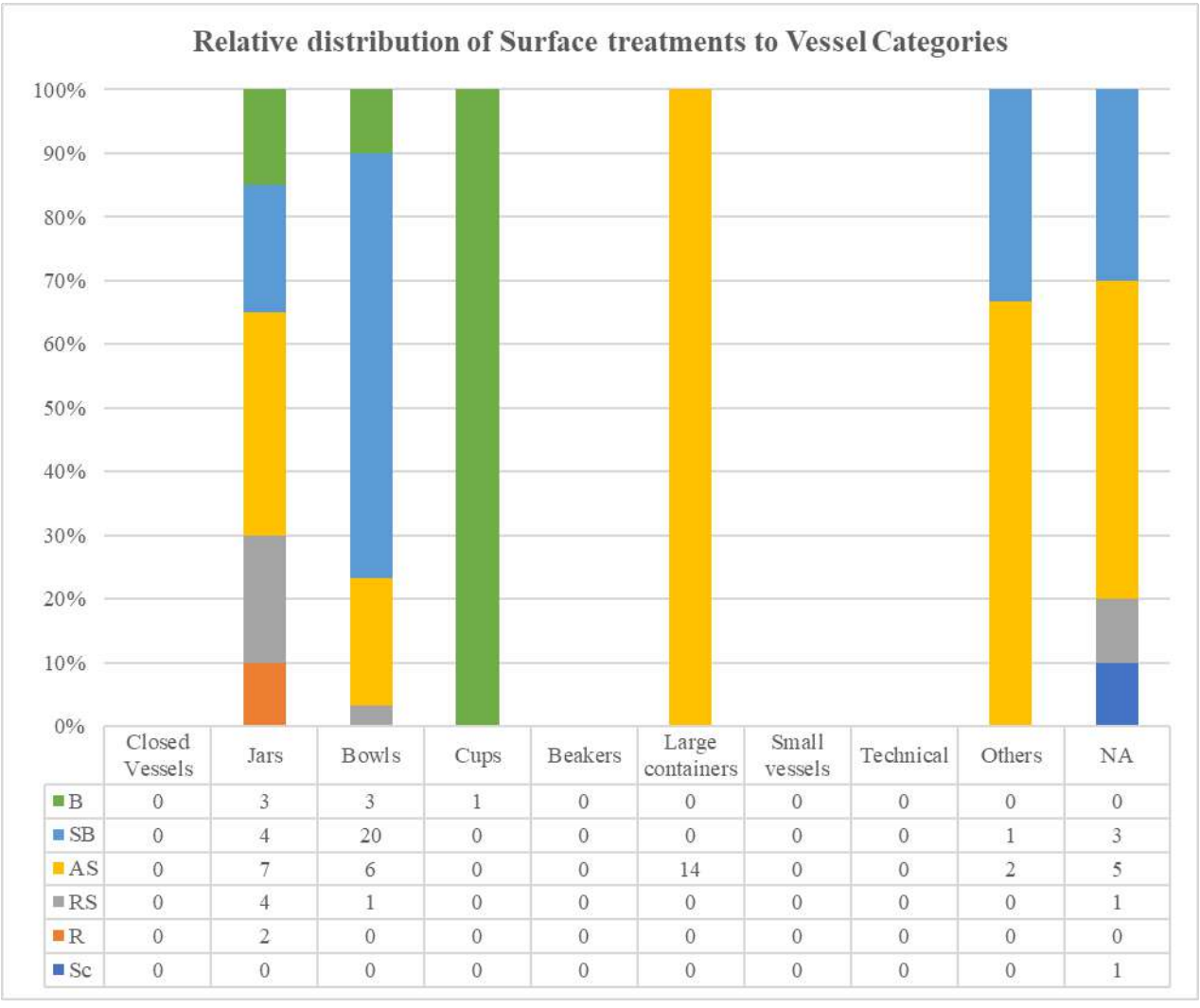




	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Other	NA
NA	17	15	1	4	4	0	6	0	1	7
B	38	3	0	10	7	0	0	0	1	2
SB	72	14	0	43	11	0	0	0	15	1
AS	117	67	2	84	17	0	9	0	9	13
RS	3	17	0	3	0	0	0	0	1	6
R	0	5	0	0	0	0	0	0	1	0
Sc	0	2	0	0	0	0	0	0	0	0

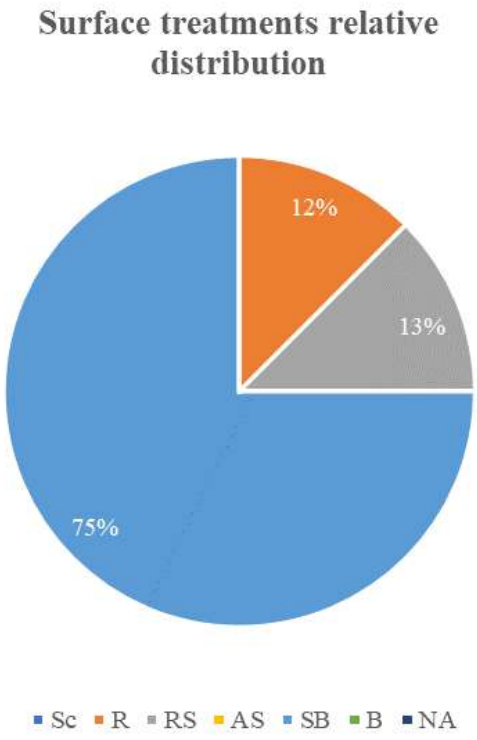
7. SALA CONSILINA – Phase I MCA

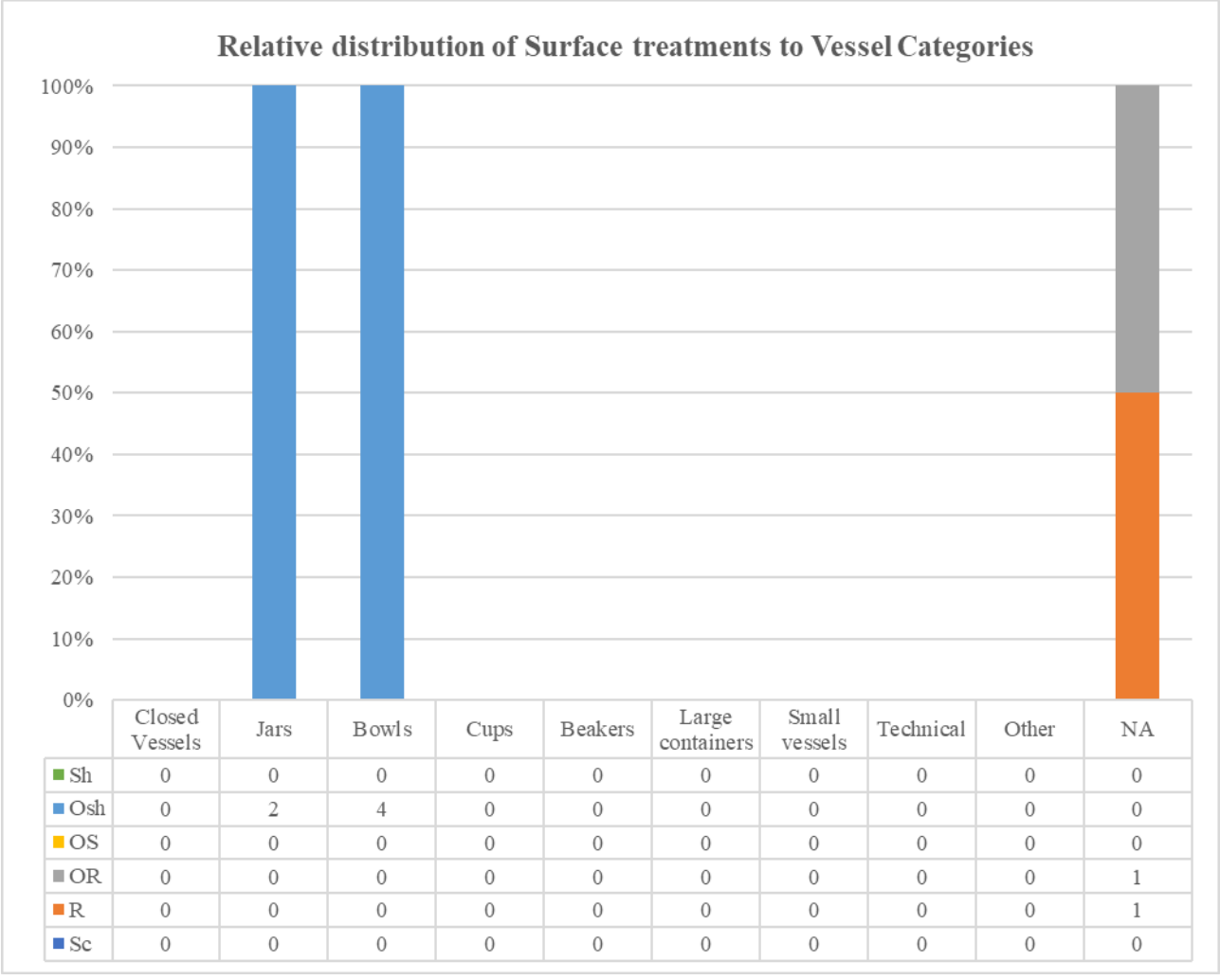




	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Others	NA
B	0	3	3	1	0	0	0	0	0	0
SB	0	4	20	0	0	0	0	0	1	3
AS	0	7	6	0	0	14	0	0	2	5
RS	0	4	1	0	0	0	0	0	0	1
R	0	2	0	0	0	0	0	0	0	0
Sc	0	0	0	0	0	0	0	0	0	1

8. SALA CONSILINA – Phase II M-LCA



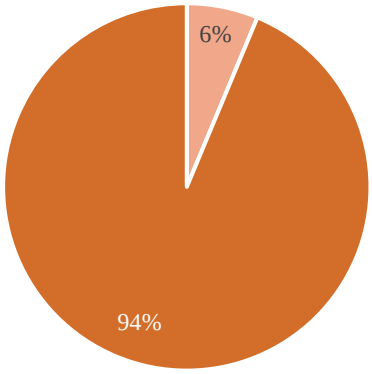


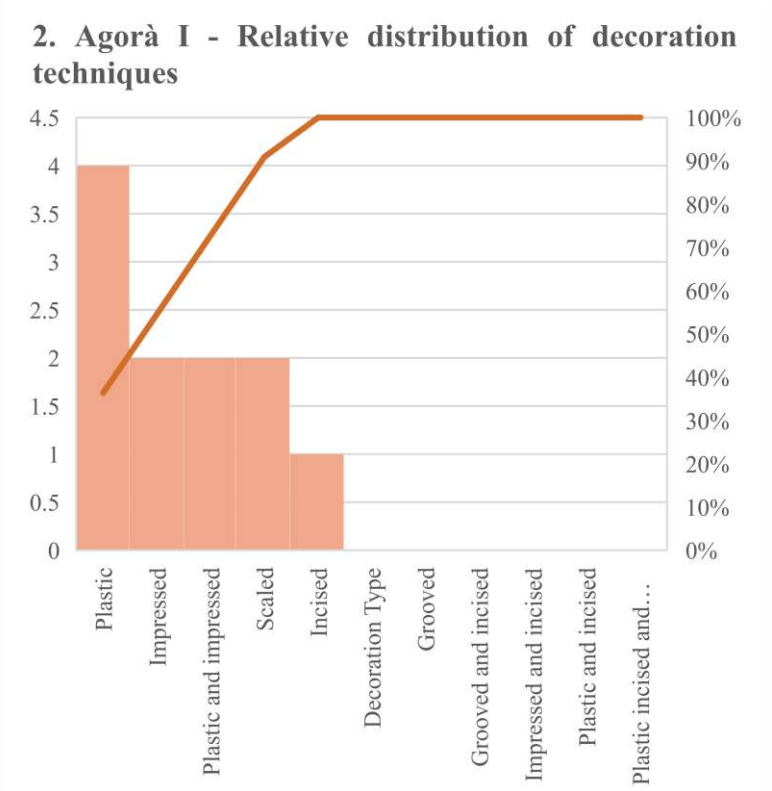
	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Other	NA
Sh	0	0	0	0	0	0	0	0	0	0
Osh	0	2	4	0	0	0	0	0	0	0
OS	0	0	0	0	0	0	0	0	0	0
OR	0	0	0	0	0	0	0	0	0	1
R	0	0	0	0	0	0	0	0	0	1
Sc	0	0	0	0	0	0	0	0	0	0

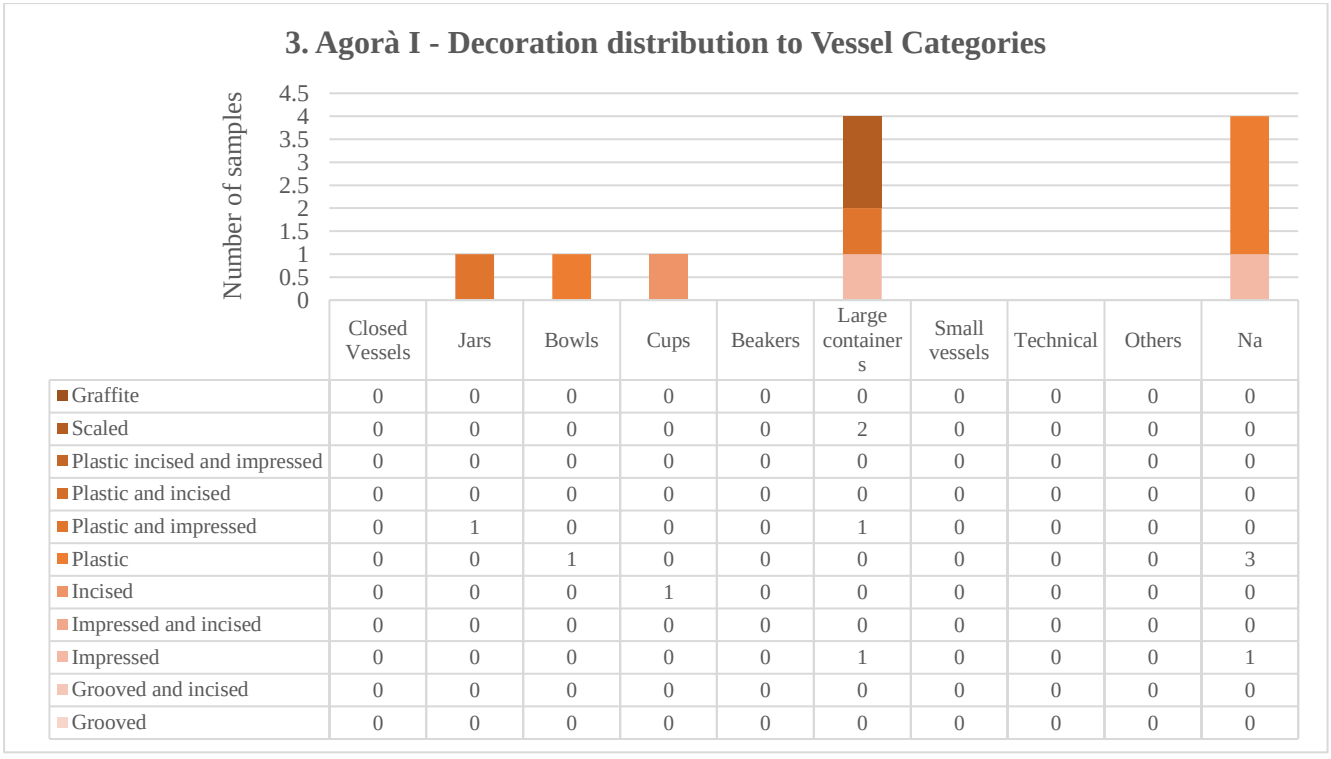
Appendix 8 – Decoration distribution

Descriptive pie and bar charts on the distribution of decoration techniques divided by site and contexts.

1. PAESTUM

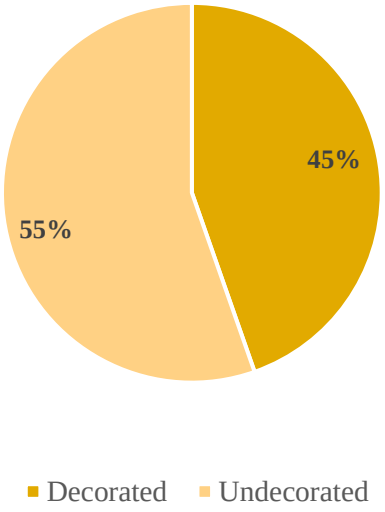




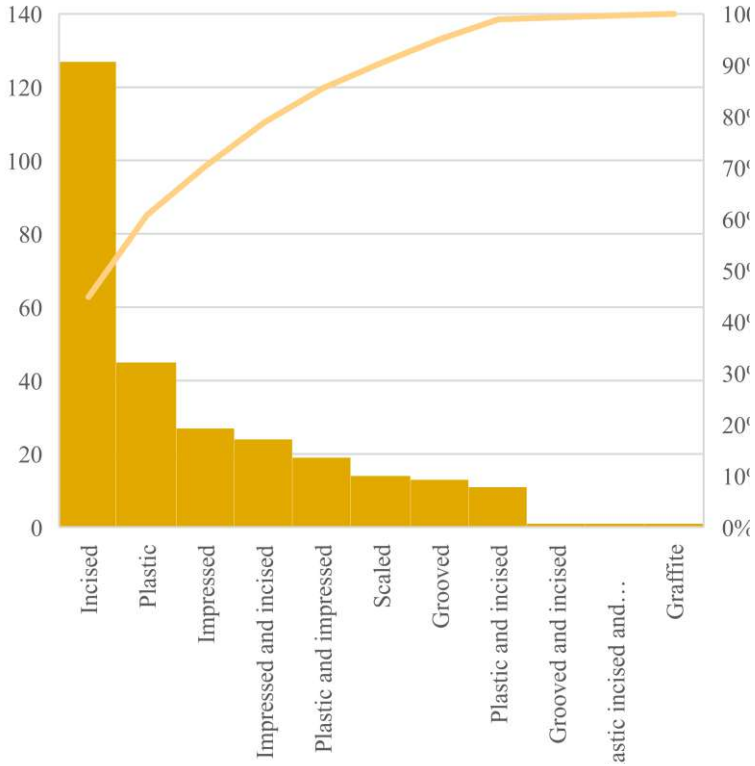


	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Others	Na
Graffite	0	0	0	0	0	0	0	0	0	0
Scaled	0	0	0	0	0	2	0	0	0	0
Plastic incised and impressed	0	0	0	0	0	0	0	0	0	0
Plastic and incised	0	0	0	0	0	0	0	0	0	0
Plastic and impressed	0	1	0	0	0	1	0	0	0	0
Plastic	0	0	1	0	0	0	0	0	0	3
Incised	0	0	0	1	0	0	0	0	0	0
Impressed and incised	0	0	0	0	0	0	0	0	0	0
Impressed	0	0	0	0	0	1	0	0	0	1
Grooved and incised	0	0	0	0	0	0	0	0	0	0
Grooved	0	0	0	0	0	0	0	0	0	0

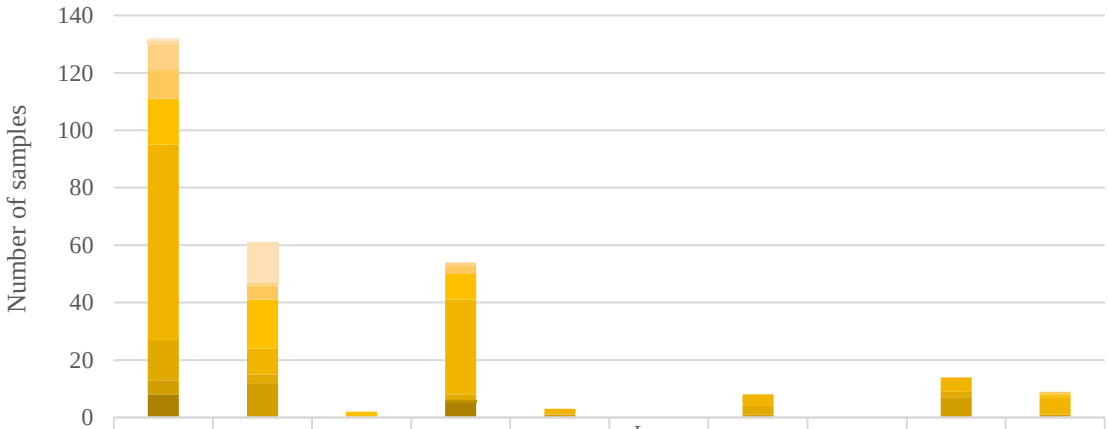
4. Gaudo - Decoration



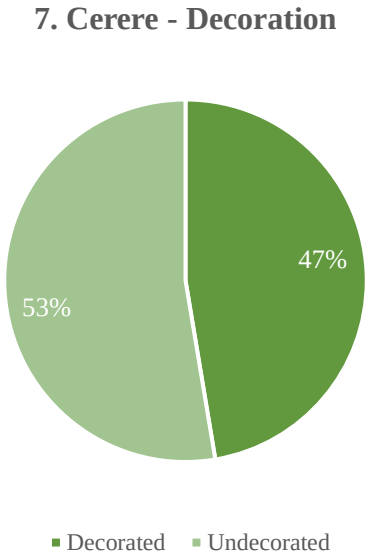
5. Gaudo - Relative distribution of decoration techniques

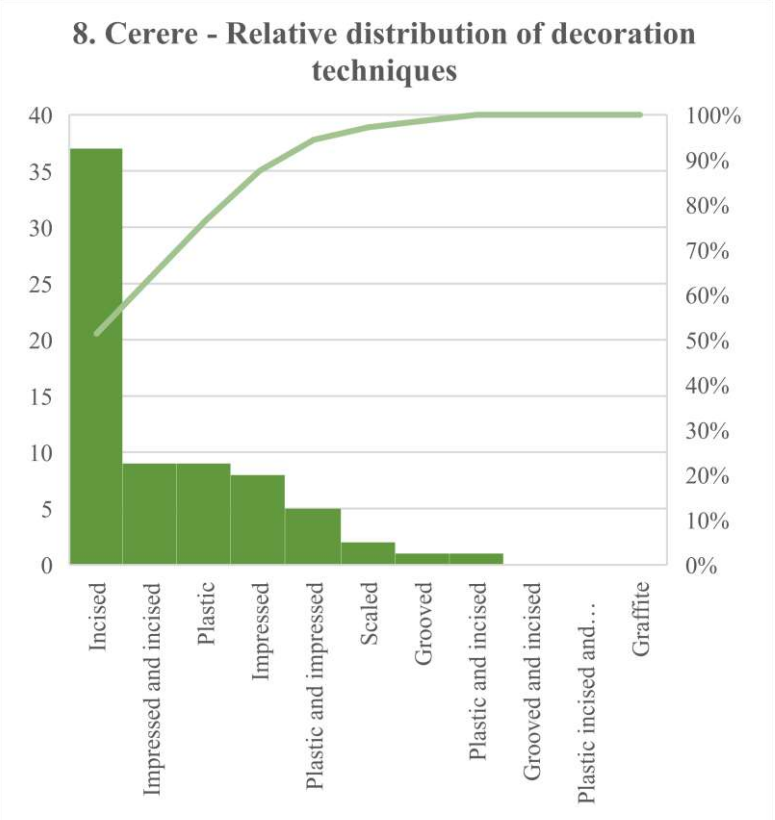


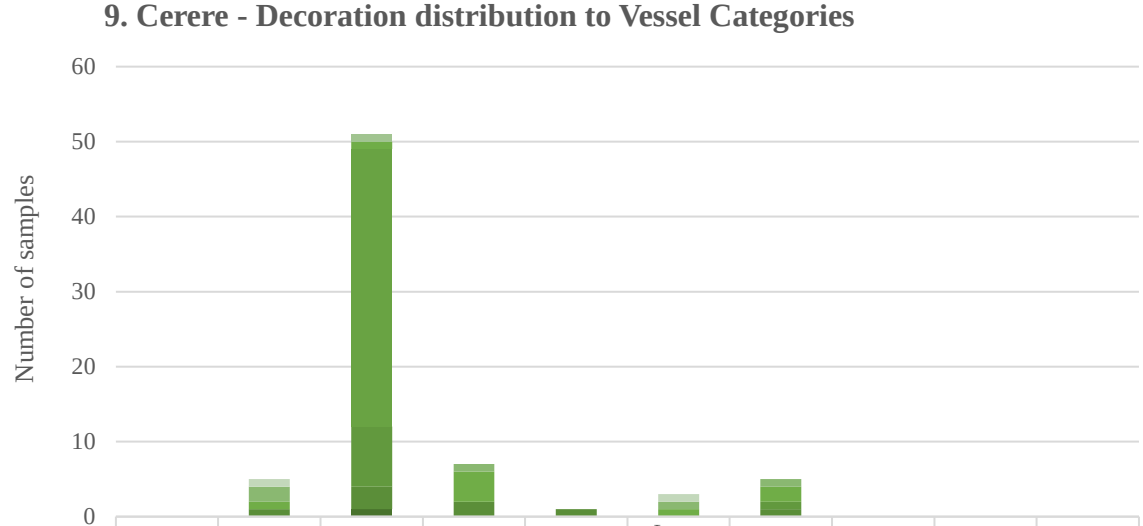
6. Gaudo - Decoration distribution to Vessel Categories



	Closed Vessels	Jars	Bowls	Cups	Beakers	Large Containers	Small vessels	Technical	Lids	Na
Graffite	1	0	0	0	0	0	0	0	0	0
Scaled	0	14	0	0	0	0	0	0	0	0
Plastic incised and impressed	1	0	0	0	0	0	0	0	0	0
Plastic and incised	9	1	0	1	0	0	0	0	0	0
Plastic and impressed	10	5	0	3	0	0	0	0	0	1
Plastic	16	17	2	9	0	0	0	0	0	1
Incised	68	9	0	33	2	0	4	0	5	6
Impressed and incised	14	3	0	2	0	0	3	0	2	0
Impressed	5	12	0	0	1	0	1	0	7	1
Grooved and incised	0	0	0	1	0	0	0	0	0	0
Grooved	8	0	0	5	0	0	0	0	0	0

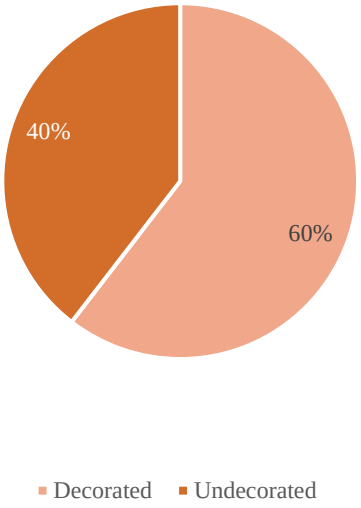




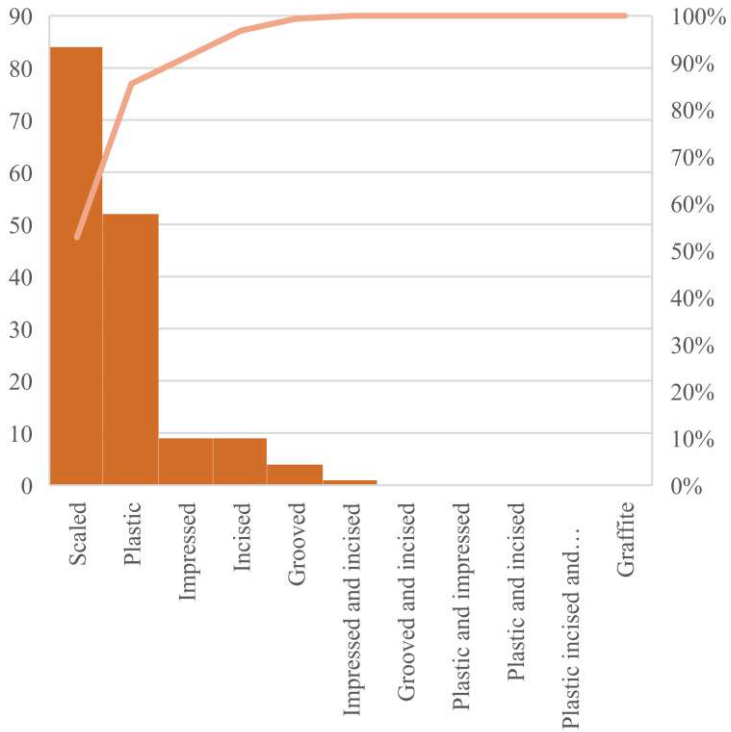


	Closed Vessels	Jars	Bowls	Cups	Beakers	Large Conteiners	Small vessels	Technical	Others	Na
Graffite	0	0	0	0	0	0	0	0	0	0
Scaled	0	1	0	0	0	1	0	0	0	0
Plastic incised and impressed	0	0	0	0	0	0	0	0	0	0
Plastic and incised	0	0	1	0	0	0	0	0	0	0
Plastic and impressed	0	2	0	1	0	1	1	0	0	0
Plastic	0	1	1	4	0	1	2	0	0	0
Incised	0	0	37	0	0	0	0	0	0	0
Impressed and incised	0	0	8	0	0	0	1	0	0	0
Impressed	0	1	3	2	1	0	1	0	0	0
Grooved and incised	0	0	0	0	0	0	0	0	0	0
Grooved	0	0	1	0	0	0	0	0	0	0

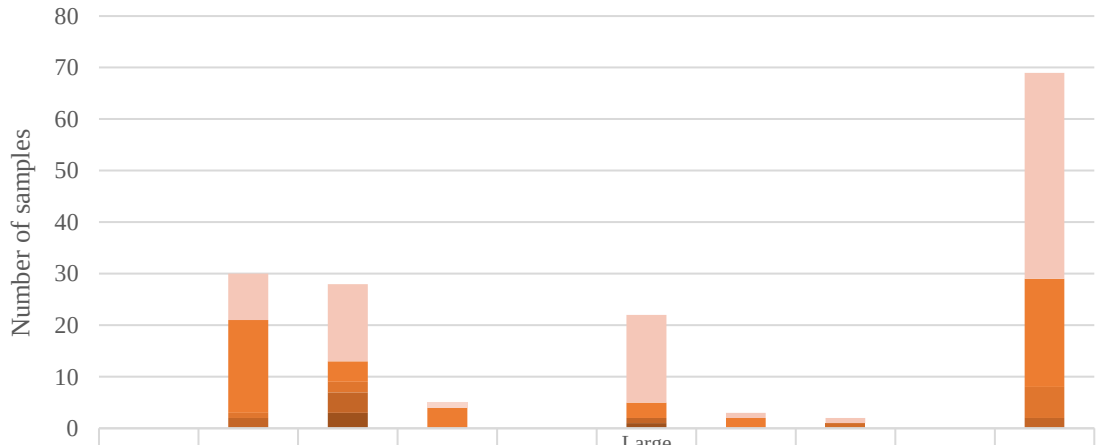
10. Agorà II - Decoration



11. Agorà II - Relative distribution of decoration techniques



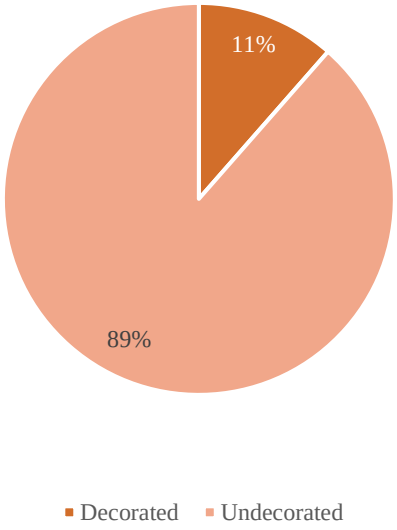
12. Agorà II - Decoration distribution to Vessel Categories



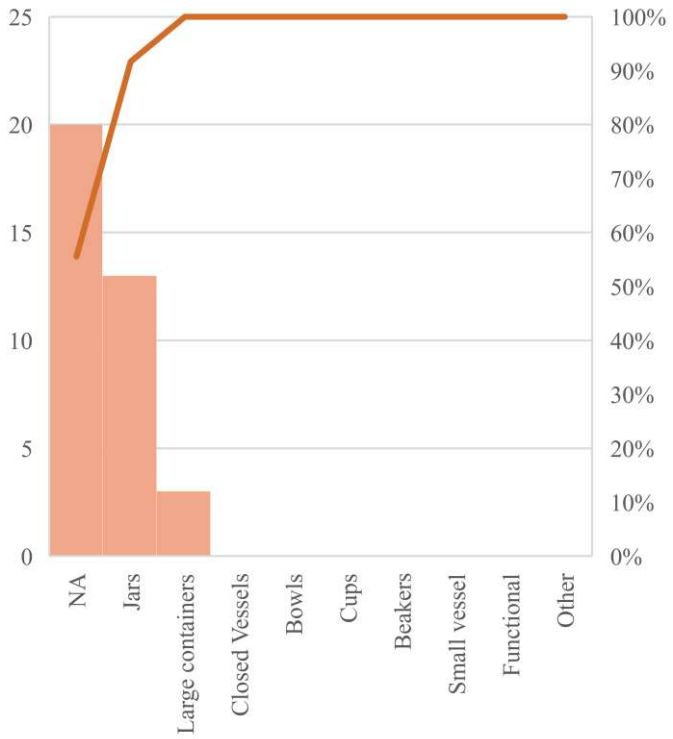
	Closed Vessels	Jars	Bowls	Cups	Beakers	Large Containers	Small vessel	Technical	Other	Na
Graffite	0	0	0	1	0	0	0	0	0	0
Scaled	0	9	15	0	0	17	1	1	0	40
Plastic incised and impressed	0	0	0	0	0	0	0	0	0	0
Plastic and incised	0	0	0	0	0	0	0	0	0	0
Plastic and impressed	0	0	0	0	0	0	0	0	0	0
Plastic	0	18	4	4	0	3	2	0	0	21
Incised	0	1	2	0	0	0	0	0	0	6
Impressed and incised	0	0	0	0	0	0	0	1	0	0
Impressed	0	2	4	0	0	1	0	0	0	2
Grooved and incised	0	0	0	0	0	0	0	0	0	0
Grooved	0	0	3	0	0	1	0	0	0	0

2. PONTECAGNANO

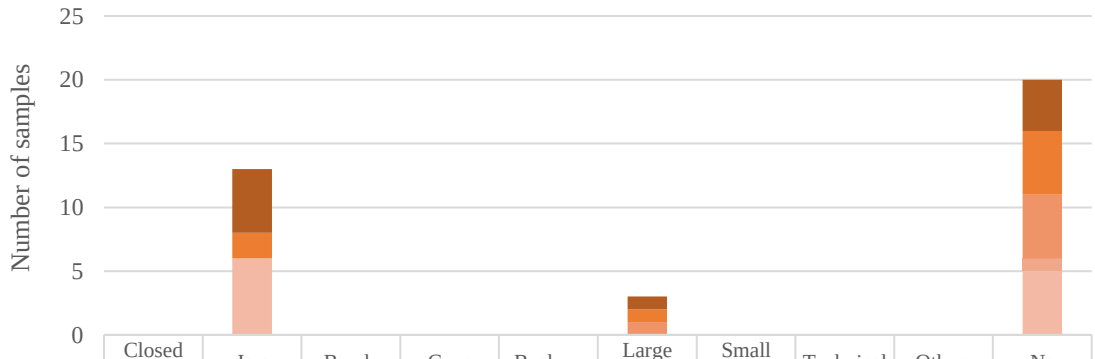
1. ANAS - Decoration



2. ANAS - Relative distribution of decoration techniques

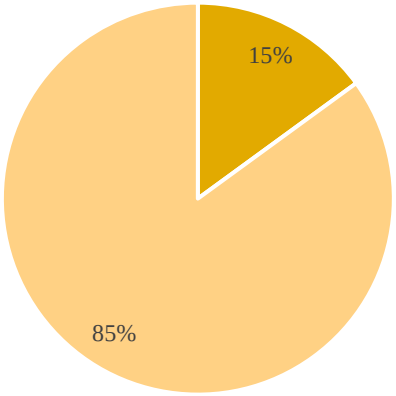


3. ANAS - Decoration distribution to Vessel Categories

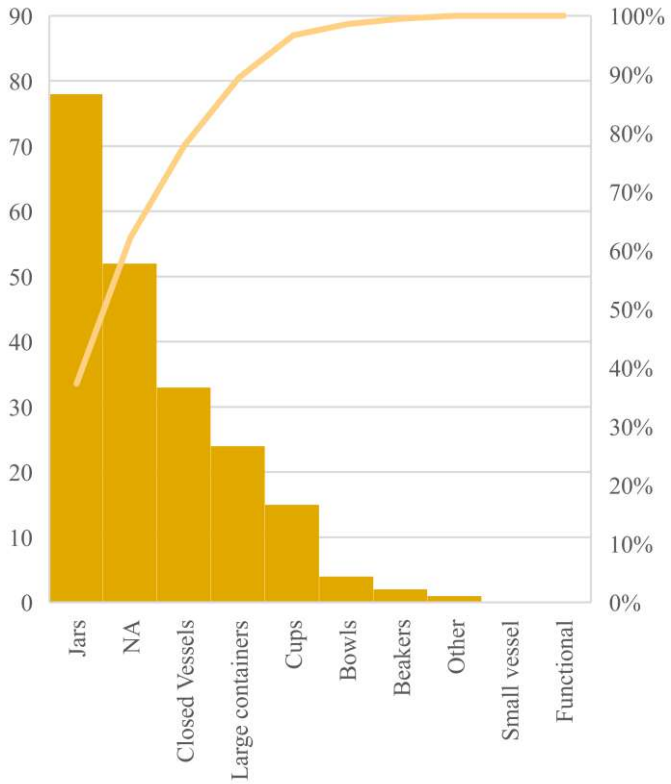


	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Others	Na
Graffite	0	0	0	0	0	0	0	0	0	0
Scaled	0	5	0	0	0	1	0	0	0	4
Plastic incised and impressed	0	0	0	0	0	0	0	0	0	0
Plastic and incised	0	0	0	0	0	0	0	0	0	0
Plastic and impressed	0	0	0	0	0	0	0	0	0	0
Plastic	0	2	0	0	0	1	0	0	0	5
Incised	0	0	0	0	0	1	0	0	0	5
Impressed and incised	0	0	0	0	0	0	0	0	0	1
Impressed	0	6	0	0	0	0	0	0	0	5
Grooved and incised	0	0	0	0	0	0	0	0	0	0
Grooved	0	0	0	0	0	0	0	0	0	0

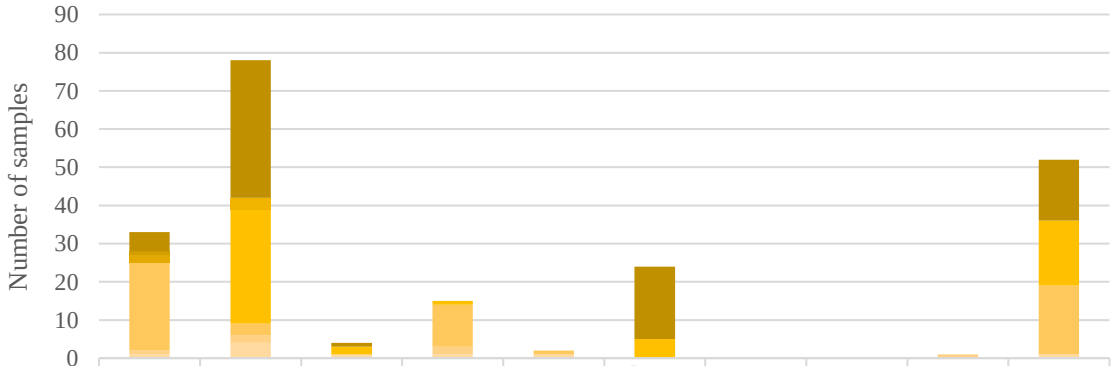
4. Gaudo Cemetery - Decoration



5. Gaudo Cemetery - Relative distribution of decoration techniques



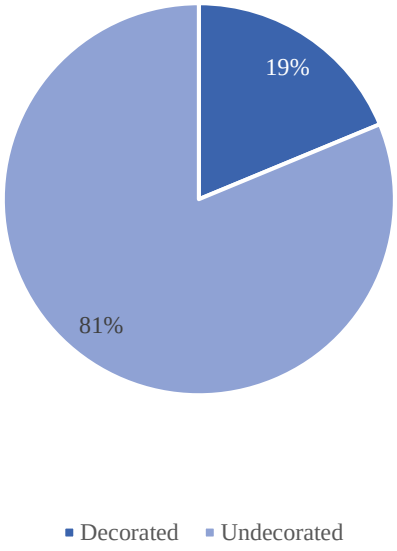
6. Gaudo Cemetery - Decoration distribution to Vessel Categories



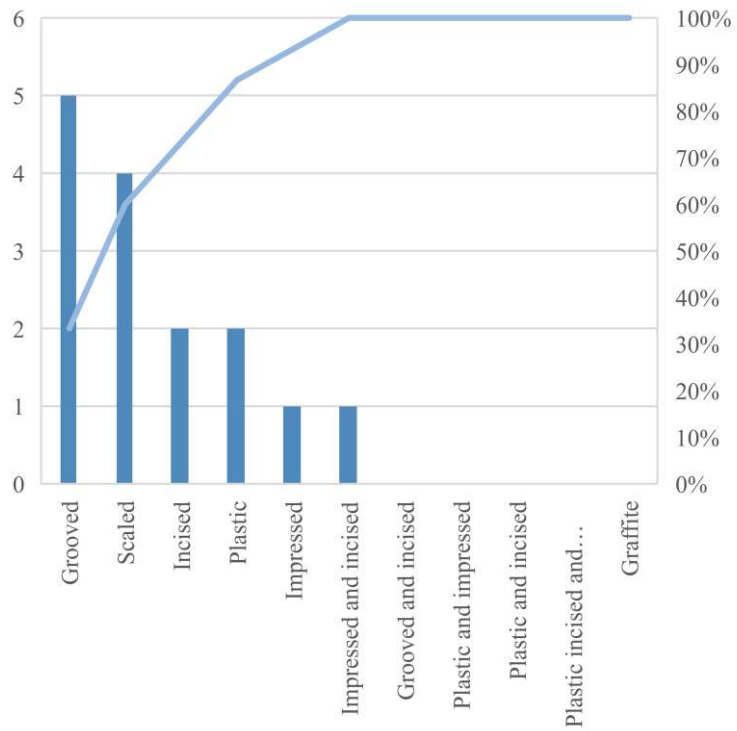
	Closed Vessels	Jars	Bowls	Cups	Beakers	Large Containers	Small vessels	Technical	Lids	Na
Graffite	0	0	0	0	0	0	0	0	0	0
Scaled	5	36	1	0	0	19	0	0	0	16
Plastic incised and impressed	1	0	0	0	0	0	0	0	0	0
Plastic and incised	2	0	0	0	0	0	0	0	0	0
Plastic and impressed	0	3	0	0	0	0	0	0	0	0
Plastic	0	30	2	1	0	5	0	0	0	17
Incised	23	3	0	11	1	0	0	0	0	18
Impressed and incised	1	2	0	2	0	0	0	0	1	0
Impressed	1	4	1	1	1	0	0	0	0	1
Grooved and incised	0	0	0	0	0	0	0	0	0	0
Grooved	0	0	0	0	0	0	0	0	0	0

3. SALA CONSILINA

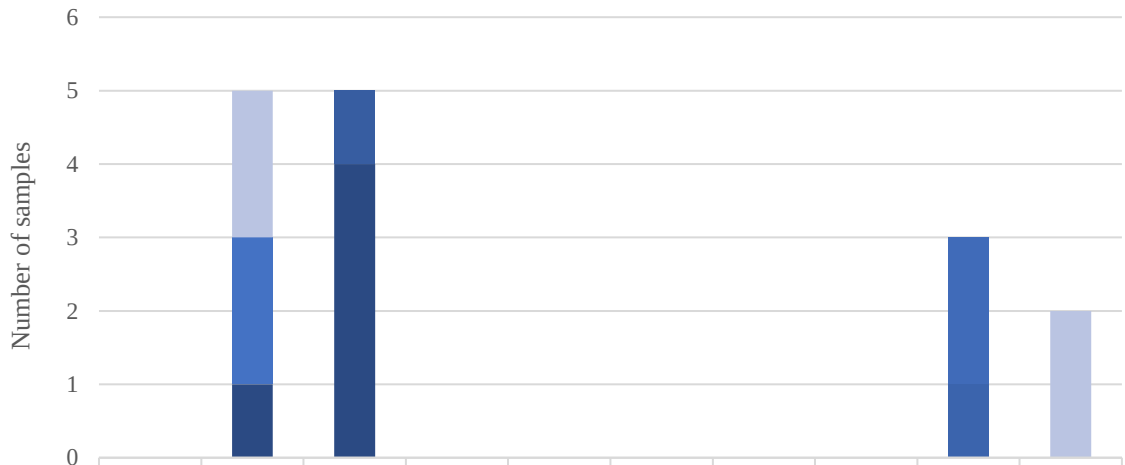
1. Sala I - Decoration



2. Sala I - Relative distribution of decoration techniques



3. Sala I - Decoration distribution to Vessel Categories



	Closed Vessels	Jars	Bowls	Cups	Beakers	Large containers	Small vessels	Technical	Others	Na
Graffite	0	0	0	0	0	0	0	0	0	0
Scaled	0	2	0	0	0	0	0	0	0	2
Plastic incised and impressed	0	0	0	0	0	0	0	0	0	0
Plastic and incised	0	0	0	0	0	0	0	0	0	0
Plastic and impressed	0	0	0	0	0	0	0	0	0	0
Plastic	0	2	0	0	0	0	0	0	0	0
Incised	0	0	0	0	0	0	0	0	2	0
Impressed and incised	0	0	0	0	0	0	0	0	1	0
Impressed	0	0	1	0	0	0	0	0	0	0
Grooved and incised	0	0	0	0	0	0	0	0	0	0
Grooved	0	1	4	0	0	0	0	0	0	0

Appendix 9 - Colour and Firing

Colour ranges and firing conditions for each site and context analysed.

1. Paestum - Agorà I ECA

REDUCING

IRREGULAR

OXIDISING

3. Paestum - Cerere M-LCA

REDUCING

IRREGULAR

OXIDISING

4. Paestum - Agorà II M-LCA

REDUCING

IRREGULAR

OXIDISING

5. Pontecagnano - Anas ECA

REDUCING

IRREGULAR

OXIDISING

6. Pontecagnano - Gaudo culture cemetery M-LCA

REDUCING

IRREGULAR

OXIDISING

Appendix 10 – Samples database

The database presents all the samples gathered for archaeometric analyses from the sites of Paestum, Pontecagnano, Sala Consilina and Atena Lucana and the relative information reported. The details of the information contained in each column are reported in Chapter 5. The database in excel format is also attached as a multimedia file.

Key to abbreviations (surface treatment): Sc=Scaled; R=Rough; RS=Roughly Smoothed; AS=Accurately Smoothed; B=Burnished, N/A=non attributable.

Sample ID	N. inv./US	Site	Provenance	Chronology	Photo	Drawing	Class	Petrographic fabric	Thin section	XRD	XRF	SEM	Typological family	Vessel Part	Height	Length	Thickness min	Thickness max	Surface treatment in	Surface treatment out	Surface color in/out	Section color	Firing	Decoration	Technological traces
ATE.FA.01	US 255	Atena Lucana	US 255	Cetina	yes	no	finished	ATE.2	yes	yes	yes	no	large bowl	body	4.5	4.5	1	1.1	SB	SB	orange red	orange	oxidising	impressed	none
ATE.FA.02	US 291	Atena Lucana	US 291	Cetina	yes	no	rough	ATE.1c	yes	yes	yes	no	large container	body	4.2	4	1.5	1.5	R	RS	brown	brown	irregular	none	none
ATE.FA.03	US 137	Atena Lucana	US 137	Cetina	yes	no	rough	ATE.5	yes	yes	yes	no	jar	body	3.6	4.7	1.1	1.2	AS	RS	reddish grey	grey	irregular	none	none
ATE.FA.04	US 120	Atena Lucana	US 120	Cetina	yes	no	rough	ATE.3	yes	yes	yes	no	large container	body	4	5.2	1.4	1.5	AS	RS	brownish black	brown	irregular	none	coiling
ATE.FA.05	US 273	Atena Lucana	US 273	Cetina	yes	no	rough	ATE.2	yes	yes	yes	no	large container	body	5	4.5	1.2	1.4	AS	AS	reddish brown	reddish brown	black core	none	none
ATE.FA.06	US 273	Atena Lucana	US 273	Cetina	yes	no	rough	ATE.1c	yes	yes	yes	no	large container	body	6.5	5	1	1.4	RS	AS	reddish brown	reddish brown	black core	none	slab building
ATE.FA.07	US 329	Atena Lucana	US 329	Cetina	yes	no	scaled	ATE.6	yes	yes	yes	no	nd	body	3.5	3.8	0.8	1	AS	SC	brownish	brownish black	irregular	scaled	none
ATE.FA.08	US 205	Atena Lucana	US 205	Cetina	yes	no	finished	ATE.6	yes	yes	yes	no	fine vessel	body	3.5	5	0.5	0.5	AS	AS	reddish	reddish	oxidising	none	none
ATE.FA.09	US 117	Atena Lucana	US 117	Cetina	yes	yes	finished	ATE.1a	yes	no	yes	no	cup/ handled beaker	body	4	6	0.6	0.8	AS	AS	blackish	blackish	reducing	none	none
ATE.FA.10	US 139	Atena Lucana	US 139	Cetina	yes	yes	finished	ATE.1a	yes	no	no	no	handled beaker	neck	3.8	3.6	0.3	0.4	AS	AS	blackish	blackish	reducing	incised	none
ATE.FA.11	US 139	Atena Lucana	US 139	Cetina	yes	yes	finished	ATE.1b	yes	no	no	no	cup/ handled beaker	body	2.4	4.5	0.5	0.6	B	B	blackish	blackish	reducing	none	none
ATE.FA.12	US 139	Atena Lucana	US 139	Cetina	yes	no	finished	ATE.1b	yes	no	no	no	cup/ handled beaker	body	4	3.8	0.4	0.5	AS	AS	blackish brown	blackish brown	irregular	none	none
ATE.FA.13	US 90	Atena Lucana	US 90	Cetina	yes	no	baked clay	ATE.4	yes	yes	yes	no	wattle and daub	body	7.5	4.2	2.4	3	NA	NA	orange	orange	oxidising	none	none
PAE.A.II.01	1097	Agorà	area I	Early	yes	no	finished	PAE.7	yes	yes	yes	yes	small bowl	body	3	4.5	0.6	0.8	NA	NA	yellow	yellow	oxidising	none	coiling
PAE.A.II.02	1091	Agorà	area I	Early	yes	yes	finished	PAE.1c	yes	yes	no	no	jar	body	4	4.5	0.6	0.7	AS	AS	reddish	black core	oxidising	none	coiling

PAE.A.II.03	1091	Agorà	area I	Early	yes	yes	rough	PAE.4b	yes	yes	yes	no	large bowl	body	5.2	7.1	1.1	1.2	SB	SB	blackish	brown	reducing	none	coiling
PAE.A.II.04	1091	Agorà	area I	Early	yes	yes	rough	PAE.4b	yes	yes	no	no	large container	body	5.2	5.8	1.1	1.3	NA	NA	black/red dish	black-reddish	oxidising	none	coiling
PAE.A.II.05	1097	Agorà	area I	Early	yes	yes	scaled	PAE.4a	yes	yes	yes	no	jar/deep bowl	body	5.2	7.3	1.2	1.4	AS	SC	reddish	reddish	oxidising	scaled	coiling
PAE.A.II.06	1097	Agorà	area I	Early	yes	yes	rough	PAE.4a	yes	yes	yes	no	jar/deep bowl	body	4.5	5.3	0.8	1.2	R	NA	brownish/ red	brown-red	oxidising	none	coiling
PAE.A.III.01	456	Agorà	area II	Laterza	yes	no	finished	PAE.1c	yes	yes	yes	no	nd	body	4.5	5.5	0.6	0.7	NA	SB	brownish/ grey	grey	reducing	none	none
PAE.A.III.02	454	Agorà	area II	Laterza	yes	no	finished	nd	no	no	no	no	nd	body	3.5	4.7	0.6	0.8	AS	RS	black/red dish	grey	irregular	none	none
PAE.A.III.03	1090	Agorà	area I	Laterza	yes	no	finished	PAE.4a	yes	yes	yes	no	nd	body	4	8.3	0.4	0.7	AS	AS	blackish	grey	reducing	none	smoothing inside
PAE.A.III.04	440	Agorà	area II	Laterza	yes	yes	finished	nd	no	no	no	no	bowl/ small jar	base	4.1	4.5	0.4	0.6	RS	AS	blackish	grey	reducing	none	none
PAE.A.III.05	1092	Agorà	area I	Laterza	yes	yes	finished	PAE.4a	yes	no	no	no	bowl	rim	3.3	3.5	0.3	0.5	AS	SB	blackish	grey/red	reducing	none	smoothing inside
PAE.A.III.06	440	Agorà	area II	Laterza	yes	yes	finished	PAE.3	yes	no	yes	no	high handled cup	rim	3.8	4	0.2	0.5	B	B	reddish	black core	oxidising	none	none
PAE.A.III.07	1090	Agorà	area I	Laterza	yes	no	finished	PAE.4a	yes	no	no	no	nd	body	2.7	3.8	0.3	0.4	B	B	blackish	grey	reducing	none	none
PAE.A.III.08	1090	Agorà	area I	Laterza	yes	no	finished	PAE.4a	yes	no	yes	no	nd	body	3.8	5.4	0.5	0.5	AS	AS	brownish black	grey	reducing	none	coiling
PAE.A.III.09	1093	Agorà	area I	Laterza	yes	no	finished	nd	no	no	no	no	nd	body	4.8	4.5	0.4	0.5	AS	AS	greish/brown	grey	irregular	none	none
PAE.A.III.10	1090	Agorà	area I	Laterza	yes	no	finished	PAE.4a	yes	yes	yes	no	bowl	body	3.6	7.1	0.5	0.6	AS	AS	black/brown	grey	reducing	none	coiling
PAE.A.III.11	454	Agorà	area II	Laterza	yes	yes	scaled	nd	no	no	no	no	jar/deep bowl	body	4	5.3	1.2	1.5	RS	SC	blackish brown	grey	reducing	scaled	coiling
PAE.A.III.12	1080	Agorà	area I	Laterza	yes	yes	scaled	PAE.4a	yes	yes	yes	no	jar/deep bowl	body	5.4	8.5	1.2	1.5	RS	SC	blackish	blackish	reducing	scaled	coiling
PAE.A.III.13	454	Agorà	area II	Laterza	yes	no	rough	nd	no	no	no	no	jar/deep bowl	body	4.5	6.9	0.9	1	RS	RS	black/red dish	grey	irregular	none	none
PAE.A.III.14	448	Agorà	area II	Laterza	yes	no	rough	PAE.4a	yes	yes	yes	no	jar/deep bowl	body	6.6	7.4	0.8	1	AS	RS	black/red dish	grey	irregular	none	coiling, drying cracks
PAE.A.III.15	456	Agorà	area II	Laterza	yes	no	rough	nd	no	no	no	no	jar	body	3.5	4.7	1	1	RS	RS	reddish	black core	oxidising	none	none
PAE.A.III.16	440	Agorà	area II	Laterza	yes	yes	scaled	PAE.4a	yes	yes	yes	no	jar	body	5.2	6.8	1	1.2	SB	SC	blackish/red	grey-reddish	oxidising	scaled	coiling
PAE.A.III.17	448	Agorà	area II	Laterza	yes	no	rough	PAE.2	yes	yes	yes	no	jar/deep bowl	body	8.5	7.5	1.1	1.2	RS	RS	blackish	grey	reducing	none	joint?
PAE.A.III.18	1090	Agorà	area I	Laterza	yes	no	rough	PAE.2	yes	no	yes	no	jar/deep bowl	body	7	6.5	0.8	1	R	R	black/red dish	blackish red	irregular	none	none
PAE.A.III.19	456	Agorà	area II	Laterza	yes	yes	scaled	PAE.3	yes	yes	yes	no	jar/deep bowl	body	4.2	8.1	1.3	1.3	AS	SC	brownish	brownish black	reducing	scaled	coiling
PAE.A.III.20	1080	Agorà	area I	Laterza	yes	no	rough	PAE.4a	yes	yes	yes	yes	jar/deep bowl	body	5.5	9	1	1.2	AS	RS	black/red dish	grey	irregular	none	coiling
PAE.A.III.21	1093	Agorà	area I	Laterza	yes	yes	rough	PAE.2	yes	no	yes	no	large container	body	7.5	9.5	1	1.8	AS	RS	brownish/ red	brownish red	irregular	none	coiling, inner smoothing and base joint

PAE.A.III.22	1085	Agorà	area I-II	Laterza	yes	no	baked clay	PAE.4b	yes	yes	yes	no	slab	body	2	5	1.5	2	impressed	AS	brownish red	brownish red	irregular	impressed	organic impressions
PAE.A.III.23	1080	Agorà	area I	Laterza	yes	no	baked clay	PAE.2	yes	yes	yes	no	slab	body	1.8	6	1.5	1.8	impressed	AS	reddish	reddish	oxidising	impressed	organic impressions
PAE.A.III.24	1090	Agorà	area I	Laterza	yes	no	baked clay	PAE.2	yes	yes	yes	no	slab	edge	1.5	5.2	1.2	1.5	impressed	AS	reddish	brownish	black core	impressed	organic impressions
PAE.A.III.25	1080	Agorà	check	Laterza	yes	yes	rough	PAE.3	yes	yes	yes	no	boiler lid	lid	4.2	6.5	1.3	1.5	RS	RS	brownish red	brownish red	black core	none	hole from inside to outside
PAE.A.III.26	448	Agorà	check	Laterza	yes	yes	rough	PAE.1c	yes	no	yes	no	tuyere	tip	6.5	3	0.4	1.4	RS	AS	brownish red	brownish	irregular	none	hole
PAE.A.III.27	480	Agorà	check	Laterza	yes	no	baked clay	PAE.4a	yes	yes	yes	no	wattle and daub	body	8	5.5	1	1.4	impressed	NA	reddish	reddish	oxidising	none	organic impressions
PAE.C.1.1	none	Cerere	T. 1	Laterza	yes	no	rough	PAE.4a	yes	yes	yes	no	jar	body	5.2	6.8	0.8	1.5	NA	AS	brownish/red	brownish black	oxidising outside	none	coiling
PAE.C.1.2	none	Cerere	T. 1	Laterza	yes	no	scaled	nd	no	no	no	no	nd	body	2.4	4.6	0.8	1	AS	SC	brownish black	blackish	reducing	scaled	imprints for scales
PAE.C.1.3	none	Cerere	T. 1	Laterza	yes	no	rough	PAE.2	yes	no	yes	no	nd	body	4	5.8	0.7	0.8	AS	AS	blackish/red	blackish	oxidising outside	none	none
PAE.C.1.4	none	Cerere	T. 1	Laterza	yes	no	scaled	PAE.2	yes	yes	yes	no	nd	body	2.7	5.2	1	1.2	AS	SC	reddish	black core	black core	scaled	none
PAE.C.2.1	none	Cerere	T. 2	Laterza	yes	no	rough	PAE.5	yes	yes	yes	yes	jar/deep bowl	body	6.9	4.5	0.7	1	AS	AS	brownish black	black	irregular	none	coiling
PAE.C.2.2	none	Cerere	T. 2	Laterza	yes	no	finished	PAE.2	yes	yes	yes	no	fine vessel	body	3.7	4.5	0.5	0.7	SB	SB	blackish	black	reducing	none	none
PAE.C.2.3	none	Cerere	T. 2	Laterza	yes	no	finished	PAE.4a	yes	no	no	no	bowl	body	4.7	4.5	0.3	0.5	AS	AS	blackish	blackish	reducing	none	none
PAE.C.2.4	none	Cerere	T. 2	Laterza	yes	no	rough	PAE.4b	yes	yes	yes	no	jar	body	5	6.5	0.8	1	RS	RS	blackish/red	blackish red	irregular	none	none
PAE.C.2.5	none	Cerere	T. 2	Laterza	yes	no	scaled	PAE.2	yes	no	no	no	nd	body	3.8	6.1	0.9	1.3	AS	SC	brownish black	black	reducing	scaled	coiling
PAE.C.2.6	none	Cerere	T. 2	Laterza	yes	no	scaled	PAE.2	yes	no	yes	no	nd	body	3.9	4.6	0.9	1.2	RS	SC	reddish	reddish brown	oxidising	scaled	coiling
PAE.C.2.7	none	Cerere	T. 2	Laterza	yes	no	finished	nd	no	no	no	no	nd	body	3.8	4.7	0.6	0.7	SB	SB	blackish	blackish	reducing	none	none
PAE.C.2.8	none	Cerere	T. 2	Laterza	yes	yes	finished	PAE.4c	yes	no	yes	no	bowl	rim	3.5	4	0.4	0.7	B	B	blackish	blackish	reducing	none	none
PAE.C.4.1	none	Cerere	T. 4	Laterza	yes	no	finished	PAE.1a	yes	yes	yes	no	fine vessel	body	3.5	6.5	0.3	0.5	AS	AS	brownish	black	irregular	none	coiling?
PAE.C.4.2	none	Cerere	T. 4	Laterza	yes	no	rough	PAE.2	yes	yes	yes	no	nd	body	3.5	6	0.6	1	AS	AS	blackish/red	blackish red	oxidising outside	none	coiling
PAE.C.4.3	none	Cerere	T. 4	Laterza	yes	no	scaled	PAE.2	yes	no	yes	no	nd	body	3.5	3.5	0.9	1	AS	R	blackish/red	blackish red	oxidising outside	scaled	Irregular outside
PAE.C.4.4	none	Cerere	T. 4	Laterza	yes	no	finished	PAE.3	yes	no	no	no	fine vessel	body	2.9	3.6	0.2	0.3	B	B	blackish	blackish	reducing	none	none
PAE.C.4.5	none	Cerere	T. 4	Laterza	yes	no	finished	nd	no	no	no	no	fine vessel	body	3.1	3.5	0.4	0.6	SB	SB	blackish	blackish	reducing	none	none
PAE.C.4.6	none	Cerere	T. 4	Laterza	yes	no	finished	PAE.1a	yes	no	no	no	fine vessel	body	4.5	2.5	0.4	0.6	SB	SB	blackish brown	blackish	reducing	incised	none
PAE.C.4.7	none	Cerere	T. 4	Laterza	yes	no	finished	PAE.4a	yes	no	no	no	small bowl	body	3.6	2.4	0.5	0.5	NA	NA	reddish	black core	black core	none	none

PAE.C.4.8	none	Cerere	T. 4	Laterza	yes	no	finished	nd	no	no	no	no	fine vessel	body	1.7	1.2	0.2	0.3	AS	SB	blackish	blackish	reducing	none	none
PAE.C.5.1	none	Cerere	T. 5	Laterza	yes	no	finished	PAE.1c	yes	yes	no	no	bowl	body	3.1	3.8	0.3	0.5	B	B	brownish red	black	irregular	none	none
PAE.C.5.2	none	Cerere	T. 5	Laterza	yes	no	finished	nd	no	no	no	no	bowl	body	4	5.4	0.2	0.4	B	B	brownish red	black	irregular	none	none
PAE.C.5.3	none	Cerere	T. 5	Laterza	yes	no	finished	PAE.1c	yes	yes	yes	no	nd	body	3.2	2	0.4	0.6	AS	SB	blackish	black	reducing	none	none
PAE.C.A.1	none	Cerere	Zona A centro	Laterza	yes	yes	scaled	nd	no	no	no	no	jar/deep bowl	body	4.5	4.2	1.3	1.4	RS	SC	reddish	black	black core	scaled	coiling
PAE.C.A.2	none	Cerere	Zona A centro	Laterza	yes	yes	scaled	nd	no	no	no	no	jar/deep bowl	body	5.2	4.5	1	1.2	RS	SC	reddish brown	reddish black	irregular	scaled	none
PAE.C.A.3	none	Cerere	Zona A	Laterza	yes	yes	scaled	PAE.4a	yes	yes	yes	no	jar/deep bowl	body	6.3	6.8	1.2	1.4	RS	SC	blackish/light brown	black	irregular	scaled	coiling
PAE.C.A.4	none	Cerere	zona A + a ovest + 1 strada	Laterza	yes	no	scaled	PAE.1c	yes	yes	yes	no	jar/deep bowl	body	4.2	6.5	1.2	1.4	AS	SC	reddish	black core	black core	scaled	coiling
PAE.C.A.5	none	Cerere	Zona A	Laterza	yes	yes	scaled	nd	no	no	no	no	jar/deep bowl	body	3.5	3.5	0.9	1.1	AS	SC	reddish brown	reddish black	irregular	scaled	none
PAE.C.S.1	none	Cerere	Sporadico	Laterza	yes	yes	finished	PAE.3	yes	yes	yes	no	shallow bowl	body	4.2	4.5	0.4	0.5	AS	AS	blackish brown	blackish brown	reducing	incised	coiling?
PAE.C.S.2	none	Cerere	Sporadico	Laterza	yes	yes	finished	PAE.3	yes	no	yes	no	small/shallow bowl	body	3	4.5	0.4	0.5	AS	AS	brownish	black	irregular	incised	none
PAE.C.S.3	none	Cerere	Sporadico	Laterza	yes	no	finished	PAE.4a	yes	no	no	no	bowl	body	3.5	3.5	0.3	0.6	AS	SB	brownish black	black	reducing	none	none
PAE.C.S.4	none	Cerere	Sporadico	Laterza	yes	yes	finished	PAE.4c	yes	yes	yes	no	closed/ fine vessel	body	4	7.4	0.3	0.6	SB	SB	blackish	blackish	reducing	none	none
PAE.C.S.5	none	Cerere	Sporadico	Laterza	yes	yes	finished	PAE.2	yes	no	yes	no	small bowl	body	3.4	3.7	0.3	0.5	AS	AS	reddish	black core	black core	incised	none
PAE.C.T.01	none	Cerere	ovest di T.2 e T.4 prof. 0,70	Laterza	yes	no	finished	PAE.3	yes	yes	yes	no	bowl	body	3.5	4.5	0.3	0.4	B	B	brownish black	black	reducing	none	none
PAE.C.T.02	none	Cerere	Zona tra le tombe 4-5 e 2	Laterza	yes	yes	rough	PAE.2	yes	yes	yes	no	jar/deep bowl	rim	6.5	4.5	0.4	0.7	AS	SB	reddish brown	brown	irregular	none	none
PAE.C.T.03	none	Cerere	Zona tra le t. 1 e 4	Laterza	yes	yes	rough	nd	no	no	no	no	jar	rim	4.5	4.5	0.7	1.2	SB	AS	blackish brown	blackish brown	irregular	plastic	none
PAE.C.T.04	none	Cerere	Zona tra le t. 1 e 4	Laterza	yes	yes	scaled	PAE.4a	yes	yes	yes	no	jar/deep bowl	body	4.3	6	1	1.4	AS	SC	reddish	black core	black core	scaled	coiling
PAE.C.T.05	none	Cerere	Zona tra le t. 1 e 4	Laterza	yes	yes	scaled	PAE.4a	yes	no	yes	no	jar/deep bowl	body	4	4.5	1	1.5	AS	SC	reddish brown	black core	black core	scaled	coiling
PAE.C.T.06	none	Cerere	Zona T. 1	Laterza	yes	no	finished	nd	no	no	no	no	bowl	body	2.2	3.6	0.3	0.5	B	B	brownish black	black	reducing	none	coiling
PAE.C.T.07	none	Cerere	Zona T. 1	Laterza	yes	no	finished	nd	no	no	no	no	nd	body	3	4.5	0.4	0.5	SB	SB	blackish	black	reducing	none	none
PAE.C.T.08	none	Cerere	Zona tra le t. 1 e 4	Laterza	yes	yes	scaled	nd	no	no	no	no	jar/deep bowl	body	4	3.7	1	1.3	AS	SC	reddish	black core	irregular	scaled	coiling
PAE.C.T.09	none	Cerere	Zona tra le t. 1 e 4	Laterza	yes	yes	finished	PAE.1c	yes	no	yes	no	shallow bowl	body	4	5.2	0.5	0.6	SB	AS	blackish	blackish	reducing	incised	none
PAE.C.T.10	none	Cerere	Zona tra le t. 1 e 4	Laterza	yes	yes	scaled	PAE.1c	yes	no	yes	no	jar/deep bowl	body	4.6	5.5	1.2	1.7	RS	SC	reddish	reddish	oxidising	scaled and plastic	coiling

PAE.C.T.11	none	Cerere	Zona tra le t. 2, 4 e 5	Laterza	yes	yes	scaled	nd	no	no	no	no	jar/deep bowl	body	4.2	5.5	1	1.2	AS	SC	reddish	black core	black core	scaled	none
PAE.C.T.12	none	Cerere	Zona tra le t. 2, 4 e 5	Laterza	yes	yes	finished	PAE.4c	yes	no	yes	no	closed	body	4.3	5.4	0.5	0.8	SB	B	blackish	blackish	reducing	none	coiling
PAE.G.00.1	none	Gaudo	T. 00	Gaudo	yes	no	finished	PAE.2	yes	yes	yes	no	jug	body	4	4.5	0.6	0.8	AS	AS	brownish black	black	reducing	none	none
PAE.G.00.2	none	Gaudo	T. 00	Gaudo	yes	no	rough	PAE.6	yes	no	yes	no	jar	body	3.6	4.2	1	1.1	RS	R	reddish/black	reddish/black	irregular	none	outer scraping
PAE.G.00.3	none	Gaudo	T. 00	Gaudo	yes	no	rough	PAE.1c	yes	yes	yes	no	nd	body	5.5	6	0.9	1.2	AS	SB	buff	greish	black core	none	coiling
PAE.G.00.4	none	Gaudo	T. 00	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	nd	body	4.3	6.3	0.9	1	RS	RS	reddish black	grey	irregular	none	inner scraping coiling
PAE.G.00.5	none	Gaudo	T. 00	Gaudo	yes	no	finished	PAE.1a	yes	yes	yes	no	askos	body	3.6	5	0.7	1	AS	AS	brownish black	black	irregular	none	slipped?
PAE.G.00.6	none	Gaudo	T. 00 chamber	Gaudo	yes	no	finished	PAE.1c	yes	yes	yes	no	closed	shoulder	6.5	4.5	0.6	0.8	B	B	brownish black	black	reducing	none	none
PAE.G.00.7	none	Gaudo	T. 00 chamber	Gaudo	yes	no	rough	PAE.1c	yes	yes	yes	no	jar	body	5	5.5	0.7	1	AS	SB	buff	reddish brown	black core	plastic	none
PAE.G.00.8	none	Gaudo	T. 00 chamber	Gaudo	yes	yes	finished	PAE.1a	yes	no	yes	no	nd	neck	3.3	4.9	0.4	0.6	B	B	blackish	blackish red	black core	none	rapid reducing
PAE.G.00.9	none	Gaudo	T. 00 chamber	Gaudo	yes	no	finished	PAE.2	yes	no	yes	no	closed	shoulder	4.2	7.5	0.5	0.8	AS	AS	brownish/red	brown	irregular	none	oxidising outside
PAE.G.A.1	7069	Gaudo	T. A shaft	Gaudo	yes	no	finished	PAE.1c	yes	yes	yes	no	jug	body	3.5	8.9	0.4	0.7	AS	SB	greish	grey	reducing	none	none
PAE.G.A.2	7068	Gaudo	T. A shaft	Gaudo	yes	no	finished	PAE.1c	yes	no	no	no	cup	neck	2.2	3	0.3	0.5	AS	B	reddish brown	reddish brown	irregular	none	none
PAE.G.A.3	?	Gaudo	T. A chamber	Gaudo	yes	no	finished	nd	no	no	no	no	pyxis	body	3	2	nd	nd	AS	B	reddish brown	reddish brown	irregular	none	none
PAE.G.b.1	7059	Gaudo	T. b shaft	Gaudo	yes	yes	finished	PAE.3	yes	no	yes	no	fine vessel	body	5.5	3.2	0.3	0.5	AS	AS	light brown-grey	grey	irregular	none	inner smoothing
PAE.G.b.2	7059	Gaudo	T. b shaft	Gaudo	yes	no	finished	PAE.2	yes	no	yes	no	fine vessel	body	4	5.2	0.5	0.6	AS	AS	blackish	black	reducing	none	none
PAE.G.b.3	7060	Gaudo	T. b shaft	Gaudo	yes	no	finished	nd	no	no	no	no	fine vessel	body	5	3.8	0.6	0.8	NA	SB	blackish	black	reducing	none	none
PAE.G.b.4	7060	Gaudo	T. b shaft	Gaudo	yes	no	finished	PAE.1c	yes	yes	yes	no	fine vessel	body	3.6	6	0.8	1	AS	AS	blackish	black	reducing	none	none
PAE.G.b.5	7060	Gaudo	T. b shaft	Gaudo	yes	no	finished	PAE.3	yes	yes	yes	no	fine vessel	body	3.1	6.5	0.8	1	NA	SB	blackish	black	reducing	none	coiling
PAE.G.b.6	7062	Gaudo	T. b shaft	Gaudo	yes	no	rough	PAE.3	yes	no	yes	no	jar	body	3.5	4.6	0.8	1	AS	AS	brownish/red	black	black core	none	none
PAE.G.C.1	7057	Gaudo	T. C shaft	Gaudo	yes	yes	finished	PAE.1c	yes	yes	yes	no	closed	body	6.2	6.4	0.4	0.6	AS	SB	brownish/red	black core	oxidising	none	neck joint
PAE.G.C.2	7057	Gaudo	T. C shaft	Gaudo	yes	no	finished	PAE.2	yes	yes	yes	no	closed	body	5.5	7	0.5	0.8	SB	B	blackish	black	reducing	none	none
PAE.G.C.3	7057	Gaudo	T. C shaft	Gaudo	yes	no	rough	PAE.3	yes	no	yes	no	jar	body	5.5	6.1	1	1.2	RS	R	reddish	black core	oxidising	none	inner scraping
PAE.G.C.4	7057	Gaudo	T. C shaft	Gaudo	yes	yes	rough	PAE.1c	yes	yes	yes	no	jar	body	10.5	9	0.5	0.8	AS	AS	reddish	black core	black core	none	inner and outer smoothing
PAE.G.d.1	6954	Gaudo	T. d chamber?	Gaudo	yes	no	finished	PAE.2	yes	no	yes	no	askos	body	3.3	3.7	0.7	0.8	NA	B	blackish	black	reducing	none	none

PAE.G.f.1	6999	Gaudo	T. f shaft	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	cup	body	4.5	4.5	0.9	1	SB	SB	reddish/black	black	irregular	none	coiling
PAE.G.f.2	6999	Gaudo	T. f shaft	Gaudo	yes	no	rough	nd	no	no	no	no	jar	body	5.2	5.4	1.1	1.4	RS	RS	reddish	black core	oxidising	none	inner and outer smoothing
PAE.G.f.3	6999	Gaudo	T. f shaft	Gaudo	yes	no	rough	PAE.3	yes	yes	yes	yes	jar	body	4	8	0.7	0.9	RS	RS	brown/reddish	black core	oxidising	none	none
PAE.G.I.1	none	Gaudo	T. I shaft superficiale	Gaudo	yes	yes	finished	nd	no	no	no	no	twin vessel	rim	4.5	7.5	0.4	0.6	B	B	reddish	black core	oxidising	none	none
PAE.G.I.2	6783	Gaudo	T. I shaft	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	nd	body	6	8	0.7	0.9	RS	RS	brownish/red	blackish brown	irregular	none	none
PAE.G.I.3	6784	Gaudo	T. I shaft	Gaudo	yes	no	rough	PAE.1c	yes	yes	yes	no	jar	body	6.8	7.2	0.8	1	AS	RS	blackish/red	black-red	irregular	none	coiling
PAE.G.I.4	6785	Gaudo	T. I shaft	Gaudo	yes	yes	finished	nd	no	no	no	no	cup	body	3.2	4.5	0.3	0.4	SB	SB	pinkish/brown	black core	irregular	none	none
PAE.G.I.5	6787	Gaudo	T. I shaft	Gaudo	yes	no	rough	nd	no	no	no	no	jar	body	4.7	5.2	1	1	RS	RS	brownish/red	black core	irregular	none	none
PAE.G.II.1	6815	Gaudo	T. II shaft	Gaudo	yes	no	finished	nd	no	no	no	no	nd	body	3.4	3.5	0.6	0.8	AS	AS	blackish brown	grey	reducing	none	none
PAE.G.II.2	6816	Gaudo	T. II shaft	Gaudo	yes	yes	scaled	PAE.1c	yes	yes	yes	yes	jar	body	7.3	7	0.5	0.8	SB	SB	brownish/red	grey	irregular	scaled	none
PAE.G.II.3	6818	Gaudo	T. II shaft	Gaudo	yes	no	finished	nd	no	no	no	no	closed	body	4.6	5	0.6	0.8	AS	B	brownish	grey	reducing	none	coiling
PAE.G.II.4	6818	Gaudo	T. II shaft	Gaudo	yes	no	finished	PAE.1a	yes	no	yes	no	closed	shoulder	4.2	4.8	0.4	0.5	AS	B	greish	greish	reducing	none	inner smoothing
PAE.G.II.5	6818	Gaudo	T. II shaft	Gaudo	yes	no	rough	nd	no	no	no	no	nd	body	5	5	0.7	0.8	AS	AS	reddish	black core	oxidising	none	none
PAE.G.II.6	6820	Gaudo	T. II shaft	Gaudo	yes	no	finished	PAE.1a	yes	yes	yes	no	nd	body	5.2	5.2	0.7	0.8	RS	AS	buff	grey	reducing	none	none
PAE.G.II.7	6821	Gaudo	T. II shaft	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	jar	body	4	6.8	0.9	1	R	RS	blackish/red	black-red	irregular	none	coiling fractures
PAE.G.III.1	6842	Gaudo	T. III chamber	Gaudo	yes	yes	finished	PAE.1c	yes	yes	yes	no	closed	neck	5	4.5	0.3	0.4	SB	AS	blackish	black	reducing	none	none
PAE.G.III.2	6842	Gaudo	T. III chamber	Gaudo	yes	yes	finished	nd	no	no	no	no	nd	body	3.5	3.7	0.3	0.6	AS	SB	blackish brown	black	reducing	none	none
PAE.G.III.3	6842	Gaudo	T. III chamber	Gaudo	yes	no	finished	PAE.1c	yes	no	yes	no	fine vessel	body	3	6.8	0.4	0.5	AS	SB	blackish	black	reducing	none	none
PAE.G.III.4	6842	Gaudo	T. III chamber	Gaudo	yes	yes	finished	PAE.3	yes	no	yes	no	fine vessel	body	5.5	4.3	0.4	0.6	AS	B	buff	greish	black core	none	inner smoothing
PAE.G.III.5	6842	Gaudo	T. III chamber	Gaudo	yes	no	rough	PAE.2	yes	no	yes	no	closed	body	3.7	6.5	0.8	0.9	NA	SB	blackish	blackish	reducing	none	none
PAE.G.III.6	6842	Gaudo	T. III chamber	Gaudo	yes	no	rough	nd	no	no	no	no	jar	body	3.6	5.5	0.8	0.9	RS	RS	reddish	black core	black core	none	coiling
PAE.G.III.7	6842	Gaudo	T. III chamber	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	jar	body	4.8	5	0.7	0.8	AS	AS	reddish	reddish	oxidising	none	none
PAE.G.III.8	6841	Gaudo	T. III shaft	Gaudo	yes	yes	rough	PAE.1b	yes	no	yes	no	handled beaker	body	2	2.8	0.3	0.5	AS	NA	light brown	grey	black core	none	none
PAE.G.III.9	6825	Gaudo	T. III chamber	Gaudo	yes	yes	finished	PAE.1c	yes	no	yes	no	jug	neck	3.8	3.6	0.4	0.5	RS	AS	blackish	blackish	reducing	incised	none
PAE.G.IV.1	6944	Gaudo	T. IV shaft	Gaudo	yes	yes	finished	PAE.1a	yes	no	yes	no	twin vessel	body	4.4	4.5	0.4	0.5	SB	SB	buff/greish	grey	reducing	none	none

PAE.G.IV.2	6945	Gaudo	T. IV shaft	Gaudo	yes	no	finished	PAE.1a	yes	yes	yes	yes	nd	body	4.7	6	0.5	0.5	SB	B	greish	greish	reducing	none	none
PAE.G.IV.3	6945	Gaudo	T. IV shaft	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	jar	body	4.8	7.5	1.2	1.3	AS	AS	reddish	black core	oxidising	none	coiling
PAE.G.IV.4	none	Gaudo	T. IV shaft	Gaudo	yes	no	finished	PAE.3	yes	yes	yes	no	closed	body	5.4	7.5	0.7	0.8	RS	AS	reddish	black core	oxidising	none	none
PAE.G.IV.5	none	Gaudo	T. IV shaft	Gaudo	yes	no	rough	nd	no	no	no	no	jar	body	6	7.6	0.7	1	RS	RS	reddish	black core	oxidising	none	none
PAE.G.IV.6	none	Gaudo	T. IV shaft	Gaudo	yes	yes	finished	nd	no	no	no	no	closed	body	6	6.7	0.6	0.7	AS	AS	brownish/ red	grey	reducing	none	none
PAE.G.IV.7	6878	Gaudo	T. IV chamber	Gaudo	yes	no	finished	PAE.1c	yes	yes	yes	no	twin vessel	bridge	4.1	3.2	0.5	0.5	AS	AS	brownish red	brown	irregular	none	ancient restoring holes
PAE.G.IX.1	65781	Gaudo	T. IX shaft	Gaudo	yes	yes	finished	PAE.4c	yes	yes	yes	no	closed	body	4.8	8.2	0.4	0.8	AS	SB	brownish	blackish brown	reducing	none	none
PAE.G.IX.2	65785	Gaudo	T. IX shaft	Gaudo	yes	no	finished	PAE.1a	yes	yes	yes	no	closed	body	5.2	6	0.4	0.5	SB	SB	blackish	blackish grey	reducing	none	neck joint
PAE.G.IX.3	65785	Gaudo	T. IX shaft	Gaudo	yes	no	rough	PAE.1c	yes	yes	yes	yes	jar	body	6.8	9.3	0.9	1.1	RS	RS	blackish/r ed	black-red	irregular	none	coiling
PAE.G.R.1	sni	Gaudo	T. R chamber c?	Gaudo	yes	yes	finished	PAE.3	yes	yes	yes	no	closed	neck	5.5	4.3	0.3	0.5	AS	AS	brownish	brownish	irregular	none	none
PAE.G.R.2	sni	Gaudo	T. R chamber b	Gaudo	yes	no	finished	PAE.1c	yes	no	yes	no	nd	base	3.7	3.9	0.3	0.5	AS	SB	blackish	blackish	reducing	none	none
PAE.G.R.3	sni	Gaudo	T. R chamber	Gaudo	yes	no	finished	PAE.2	yes	no	yes	no	nd	body	3.3	5.5	0.3	0.5	RS	SB	reddish brown	brownish	irregular	none	none
PAE.G.S.1	1654	Gaudo	T. S chamber	Gaudo	yes	yes	finished	PAE.2	yes	no	yes	no	cup	body	4	4.7	0.4	0.5	SB	B	reddish brown	reddish brown	irregular	incised	none
PAE.G.T.1	sni	Gaudo	T. T chamber	Gaudo	yes	yes	finished	PAE.3	yes	no	yes	no	closed	neck	4	5	0.4	0.6	NA	AS	blackish brown	blackish	reducing	none	none
PAE.G.T.2	sni	Gaudo	T. T chamber	Gaudo	yes	no	finished	PAE.3	yes	yes	yes	no	closed	shoulder	4.2	5.5	0.5	0.8	AS	AS	blackish brown	blackish	reducing	none	none
PAE.G.u.1	none	Gaudo	T. u shaft	Gaudo	yes	no	finished	PAE.1c	yes	no	yes	no	cup	body	4.5	5.9	0.4	0.6	AS	AS	brown	grey	reducing	none	inner smoothing
PAE.G.u.2	none	Gaudo	T. u shaft	Gaudo	yes	no	rough	PAE.1c	yes	yes	yes	no	nd	body	5.3	5.3	0.6	0.9	AS	AS	brownish	blackish brown	irregular	none	none
PAE.G.V.1	none	Gaudo	T. V shaft	Gaudo	yes	no	finished	nd	no	no	no	no	closed	body	4.2	4.5	0.6	1	AS	AS	light brown	black core	oxidising	none	coiling
PAE.G.V.2	none	Gaudo	T. V shaft	Gaudo	yes	no	finished	PAE.2	yes	yes	yes	no	nd	body	4	6	0.5	0.7	RS	AS	brownish	black core	oxidising	none	none
PAE.G.V.3	none	Gaudo	T. V shaft	Gaudo	yes	no	rough	PAE.1a	yes	yes	yes	no	jar	body	5.8	6.1	0.9	1.1	RS	AS	reddish	black core	irregular	none	inner smoothing
PAE.G.V.4	none	Gaudo	T. V shaft	Gaudo	yes	no	rough	PAE.4a	yes	yes	yes	no	jar	body	6	7.5	0.8	0.9	RS	RS	reddish	black core	oxidising	none	inner scraping
PAE.G.VII.1	65731	Gaudo	T. VII shaft	Gaudo	yes	no	finished	nd	no	no	no	no	nd	body	6.8	5.2	0.3	0.5	AS	AS	brownish black	black	reducing	none	none
PAE.G.VII.2	65725	Gaudo	T. VII shaft	Gaudo	yes	no	finished	PAE.3	yes	no	yes	no	closed	body	5	7.8	0.7	0.9	AS	AS	brownish black	black	reducing	none	none
PAE.G.VII.3	65732	Gaudo	T. VII shaft	Gaudo	yes	yes	finished	nd	no	no	no	no	nd	body	6.3	5.3	0.5	0.8	AS	SB	brownish	black	reducing	plastic	coiling
PAE.G.VII.4	65725	Gaudo	T. VII shaft	Gaudo	yes	yes	finished	PAE.3	yes	yes	yes	no	closed	neck	4.6	7	0.5	0.6	AS	AS	reddish brown	black core	black core	none	none

PAE.G.VII.5	65767	Gaudo	T. VII shaft	Gaudo	yes	no	rough	PAE.1c	yes	yes	yes	no	jar	body	5.2	5.1	0.9	1	RS	RS	reddish	black core	black core	none	none
PAE.G.VII.6	65729	Gaudo	T. VII shaft	Gaudo	yes	no	rough	PAE.6	yes	yes	yes	no	jar	body	7.2	7.5	0.9	1.4	RS	RS	brownish/ red	black core	black core	none	coiling
PAE.G.XI.1	65878	Gaudo	T. XI shaft	Gaudo	yes	yes	finished	PAE.1c	yes	yes	yes	yes	small jug	body	4.2	6	0.5	0.5	NA	SB	reddish/ black	grey	irregular	impressed	none
PAE.G.XI.2	65880	Gaudo	T. XI shaft	Gaudo	yes	yes	finished	PAE.1c	yes	yes	yes	no	closed	shoulder	4.5	7.1	0.6	0.7	NA	SB	blackish	grey	reducing	none	neck joint
PAE.G.XI.3	65880	Gaudo	T. XI shaft	Gaudo	yes	no	rough	PAE.6	yes	yes	yes	no	jar	body	5.2	5.5	0.9	1	R	RS	brown/ reddish	grey/red	irregular	none	inner smoothing
PAE.G.XI.4	65880	Gaudo	T. XI shaft	Gaudo	yes	no	finished	PAE.1c	yes	yes	yes	no	closed	body	8	7.7	0.5	0.6	RS	SB	brownish	pinkish grey	irregular	none	inner scraping
PAE.G.XI.5	65880	Gaudo	T. XI shaft	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	closed	body	2.5	9	0.8	1	RS	RS	reddish	reddish	oxidising	none	none
PAE.G.XI.6	65880	Gaudo	T. XI shaft	Gaudo	yes	no	finished	nd	no	no	no	no	nd	body	3.4	7.5	0.8	1	AS	SB	blackish	grey	reducing	none	none
PAE.G.XI.7	65880	Gaudo	T. XI shaft	Gaudo	yes	no	finished	nd	no	no	no	no	closed	body	3.1	4.8	0.5	0.5	NA	RS	blackish	black	reducing	none	coiling
PAE.G.XI.8	65906	Gaudo	T. XI chamber	Gaudo	yes	no	finished	PAE.1b	yes	yes	yes	no	jug	body	7.5	5	0.6	0.8	AS	AS	blackish light brown	black	reducing	none	internal light brown slip?
PAE.G.XIII.1	65927	Gaudo	T. XIII shaft	Gaudo	yes	yes	rough	nd	no	no	no	no	nd	base	3.1	6.7	0.8	1	RS	R	blackish red	black-red	oxidising	none	base joint
PAE.G.XIII.2	none	Gaudo	T. XIII shaft	Gaudo	yes	no	finished	PAE.1c	yes	yes	yes	no	closed	body and neck	5.7	4.4	0.4	0.7	B	B	blackish/ brown	grey	reducing	incised	inner smoothing
PAE.G.XIII.3	none	Gaudo	T. XIII shaft	Gaudo	yes	no	finished	PAE.1c	yes	no	no	no	nd	body	3.2	5.8	0.5	0.7	B	B	brownish/ black	grey	irregular	impressed	none
PAE.G.XIII.4	none	Gaudo	T. XIII shaft ?	BR?	yes	no	rough	PAE.2	yes	yes	yes	no	large jar	body	5.3	6.7	0.9	1.1	RS	R	brownish	black core	oxidising	none	none
PAE.G.XIV.1	150696	Gaudo	T. XIV shaft	Gaudo	yes	yes	finished	PAE.1c	yes	no	yes	no	closed	body and neck	6	5.8	0.3	0.5	AS	SB	blackish	black	reducing	none	none
PAE.G.XIV.2	150696	Gaudo	T. XIV shaft	Gaudo	yes	no	rough	PAE.1c	yes	yes	yes	no	nd	body	5.5	5.2	0.8	0.9	AS	AS	brown	black	reducing	none	none
PAE.G.XIV.3	150696	Gaudo	T. XIV shaft	Gaudo	yes	no	rough	PAE.2	yes	yes	yes	no	jar	body	7.3	5	0.8	1	AS	SB	reddish brown	black core	black core	none	coiling
PAE.G.XIV.4	150696	Gaudo	T. XIV shaft	storica?	yes	no	rough	nd	no	no	no	no	nd	body	4.7	4.4	0.5	0.8	AS	AS	reddish/ black	red	oxidising	none	none
PNT.A.20.01	20013	ANAS	Liv. 1 AOA	Early	yes	no	coarse	nd	no	no	no	no	nd	body	5.1	4.5	0.8	1.1	RS	RS	reddish	reddish	oxidising	none	none
PNT.A.20.02	20013	ANAS	Saggio 2 PC A3	Early	yes	no	fine	PNT.3	yes	yes	yes	no	nd	body	4	7	0.6	0.8	RS	RS	brownish grey	grey	irregular	none	coiling
PNT.A.20.03	20013	ANAS	Saggio 2 PC A3	Early	yes	no	coarse	PNT.2	yes	no	no	no	nd	body	3.8	5.5	0.7	0.8	AS	AS	light red	light red	oxidising	none	coiling
PNT.A.20.04	20013	ANAS	AO liv. 5	Early	yes	no	coarse	PNT.3	no	no	no	no	nd	body	3.8	4.2	1.3	1.4	RS	RS	greish/red	greish/red	irregular	none	none
PNT.A.20.05	20013	ANAS	Liv. A, A3, liv. 4	Early	yes	no	coarse	PNT.2	no	no	no	no	nd	body	4.8	4.5	0.7	0.8	RS	RS	orange red	brownish red	oxidising	none	none
PNT.A.20.06	20013	ANAS	Liv. A, A3, liv. 4	Early	yes	no	coarse	PNT.3	yes	no	yes	no	nd	body	4.5	5.7	0.8	1	RS	RS	greish red	greish red	irregular	none	none
PNT.A.20.07	20013	ANAS	AO liv. 4	Early	yes	no	coarse	PNT.2	no	no	no	no	nd	body	4.7	5	0.7	1	RS	RS	greish red	greish red	irregular	none	black flaring

PNT.A.20.08	20013	ANAS	AO liv. 4	Early	yes	no	coarse	PNT.1	no	no	no	no	nd	body	3.3	6	0.7	0.8	RS	RS	brown/ reddish	brown	irregular	none	none
PNT.A.20.09	20014	ANAS	Sett. 2	Early	yes	no	fine	PNT.2	yes	yes	yes	no	nd	body	4.8	5	0.8	1	AS	AS	light brown red	light brown red	irregular	none	coiling
PNT.A.20.10	20014	ANAS	Sett. 3	Early	yes	no	coarse	PNT.6	no	no	no	no	nd	body	4	5.3	0.8	1.2	AS	AS	light red	light red	oxidising	none	coiling
PNT.A.20.11	20014	ANAS	Box 8	Early	yes	no	coarse	PNT.2	yes	no	yes	no	nd	body	3.3	4.8	0.5	0.7	RS	RS	blackish	blackish	reducing	none	coiling
PNT.A.20.12	20014	ANAS	Box 8	Early	yes	no	semicoarse	PNT.2	no	no	no	no	nd	body	4.2	4.8	0.7	0.9	RS	RS	reddish	reddish	oxidising	none	none
PNT.A.20.13	20014	ANAS	Box 8	Early	yes	no	coarse	PNT.2	yes	yes	yes	yes	nd	body	4.8	4.4	1.2	1.4	RS	AS	reddish brown	reddish brown	irregular	none	none
PNT.A.20.14	20014	ANAS	Box 8 sect. 3	Early	yes	no	fine	PNT.1b	yes	yes	yes	no	nd	body	4.8	5	0.7	0.8	AS	AS	light brown	black	black core	none	coiling
PNT.A.20.15	20014	ANAS	PA3	Early	yes	no	coarse	PNT.4	yes	yes	yes	yes	nd	body	5.5	6	1	1.3	RS	RS	light brown	light brown	irregular	none	none
PNT.A.20.16	20072	ANAS	Sett. 2	Early	yes	no	fine	PNT.6	yes	no	no	no	nd	body	2.7	4.4	0.6	0.7	AS	AS	light grey	light grey	oxidising	none	none
PNT.A.20.17	20072	ANAS	Sett. 2	Early	yes	no	fine	nd	no	no	no	no	nd	body	4.3	5	0.6	0.8	RS	RS	greish	greish	reducing	none	coiling
PNT.A.20.18	20072	ANAS	Sett. 2	Early	yes	no	fine	PNT.2	no	no	no	no	nd	body	3.5	4.2	0.6	0.8	RS	RS	reddish	reddish	oxidising	none	coiling
PNT.A.20.19	20072	ANAS	Sett. 2	Early	yes	no	semicoarse	PNT.2	yes	no	no	no	nd	body	3.8	5.6	1	1.2	RS	AS	reddish	reddish	oxidising	none	none
PNT.A.20.20	20072	ANAS	Sett. 2	Early	yes	no	semicoarse	PNT.2b	yes	no	no	no	nd	body	5.1	5.2	0.8	1	RS	AS	brownish	brownish	irregular	none	none
PNT.A.20.21	20072	ANAS	Sett. 2	Early	yes	no	coarse	PNT.2	yes	no	no	no	nd	body	4.5	4	1.2	1.4	RS	AS	reddish	reddish	oxidising	none	none
PNT.A.20.22	20098	ANAS	Box 6	Early	yes	no	fine	PNT.1	no	no	no	no	nd	body	4	5	0.6	1	RS	RS	reddish	grey	black core	none	coiling
PNT.A.20.23	20098	ANAS	Box 6	Early	yes	no	fine	PNT.1	no	no	no	no	nd	body	5	6	0.8	1	AS	AS	blackish/ red	grey	irregular	none	none
PNT.A.20.24	20098	ANAS	Box 6	Early	yes	no	semicoarse	PNT.1	no	no	no	no	nd	body	4.8	4.4	0.9	1	AS	AS	brownish	grey	irregular	none	none
PNT.A.20.25	20098	ANAS	Box 6	Early	yes	no	coarse	PNT.2	yes	no	yes	no	nd	body	4.8	5	0.5	0.8	RS	RS	reddish	reddish	oxidising	none	none
PNT.A.20.26	20098	ANAS	Box 6	Early	yes	no	coarse	PNT.2	yes	yes	yes	no	nd	body	4.2	5	1.2	1.4	AS	RS	reddish	reddish	oxidising	none	none
PNT.A.20.27	20140	ANAS	PCA3	Early	yes	no	fine	PNT.1	no	no	no	no	nd	body	4	3.5	0.5	0.6	RS	RS	blackish	blackish	reducing	none	none
PNT.A.20.28	20140	ANAS	PCA3	Early	yes	no	coarse	PNT.2	yes	yes	yes	no	nd	body	3.9	3.4	1.2	1.4	RS	AS	light grey	greish	irregular	none	coiling
PNT.A.20.29	20140	ANAS	PCA3	Early	yes	no	semicoarse	PNT.1	no	no	no	no	nd	body	3.7	3.5	1	1.2	RS	RS	blackish/ red	blackish red	irregular	none	none
PNT.A.20.30	20149	ANAS		Early	yes	no	fine	PNT.1	no	no	no	no	nd	body	3.2	5.3	0.5	0.6	RS	RS	greish	greish	irregular	none	coiling
PNT.A.20.31	20149	ANAS		Early	yes	no	semicoarse	PNT.1	no	no	no	no	nd	body	3.5	4.5	0.9	1	RS	RS	reddish	brown	black core	none	none
PNT.A.20.32	20149	ANAS		Early	yes	no	coarse	PNT.1	no	no	no	no	nd	body	3.7	4.7	1.5	1.5	RS	RS	reddish	reddish	oxidising	none	none
PNT.A.21.01	21030	ANAS	Sett. 1	Early	yes	no	coarse	PNT.5	yes	yes	yes	yes	nd	body	3.5	6.4	0.6	1	RS	AS	greish/red	greish/red	irregular	none	coiling
PNT.A.21.02	21030	ANAS	Sett. 1	Early	yes	no	coarse	PNT.1	no	no	no	no	nd	body	4.6	5.2	1	1.1	RS	AS	reddish	reddish	oxidising	none	none
PNT.A.21.03	21030b	ANAS	Sett. 1	Early	yes	no	fine	PNT.3	no	no	no	no	nd	body	4	4	0.5	0.8	RS	AS	greish	black	irregular	none	none
PNT.A.21.04	21030b	ANAS	Sett. 1	Early	yes	no	coarse	PNT.2	yes	no	yes	no	nd	body	3.5	6.2	0.7	1	RS	AS	greish/red	black	irregular	none	coiling

PNT.A.21.05	21030b	ANAS	Sett. 1	Early	yes	no	coarse	PNT.2b	yes	yes	yes	no	nd	body	4.2	4.9	1.1	1.3	RS	RS	orange red	orange red	oxidising	none	none
PNT.G.11a.1	none	Gaudo cemetery	T. 6511 A	Gaudo	yes	no	finished	PNT.1	no	no	no	no	cup	body	1.4	1.6	0.2	0.4	SB	B	brown	reddish-brown	oxidising	none	none
PNT.G.11a.2	none	Gaudo cemetery	T. 6511 A	Gaudo	yes	yes	finished	PNT.1a	yes	yes	yes	no	small hanging jar	body	4	3.3	0.5	0.6	AS	B	brown	reddish brown	oxidising	incised	none
PNT.G.11a.3	none	Gaudo cemetery	T. 6511 A	Gaudo	yes	no	finished	PNT.1b	yes	no	no	no	cup	body	2.3	3	0.5	0.6	AS	SB	light brown/ brown	grey-brown	irregular	none	none
PNT.G.11a.4	none	Gaudo cemetery	T. 6511 A	Gaudo	yes	no	rough?	PNT.1	no	no	no	no	nd	body	2.7	2	0.6	0.8	AS	SB	brown	brown	irregular	none	none
PNT.G.12a.1	120796	Gaudo cemetery	T. 6512 a	Gaudo	yes	no	rough	PNT.1a	yes	yes	yes	no	nd	body	6.2	4.8	0.5	0.8	AS	AS	brownish/ red	brown	black core	none	coiling
PNT.G.12b.1	120810	Gaudo cemetery	T. 6512 b	Gaudo	yes	no	finished	PNT.1a	yes	no	no	no	nd	body	5.5	5.2	0.3	0.5	SB	SB	reddish/ brown	brown	irregular	none	inner smoothing
PNT.G.12b.2	120810	Gaudo cemetery	T. 6512 b	Gaudo	yes	no	finished	PNT.1a	yes	no	yes	no	nd	body	4.2	3.8	0.5	1	SB	SB	blackish	black	reducing	none	none
PNT.G.12b.3	120810	Gaudo cemetery	T. 6512 b	Gaudo	yes	no	rough	PNT.1a	yes	yes	yes	no	nd	body	4.8	6.7	0.6	0.8	AS	RS	reddish	reddish	oxidising	none	coiling
PNT.G.12p.1	120780	Gaudo cemetery	T. 6512p	Gaudo	yes	yes	rough	PNT.1a	yes	yes	yes	no	nd	body	9.5	6.6	0.6	0.8	AS	AS	brown/ reddish	black	oxidising outside	scaled	slab building
PNT.G.12p.2	120780	Gaudo cemetery	T. 6512p	Gaudo	yes	no	rough	PNT.1	no	no	no	no	jar	body	4.3	6	0.6	1.1	AS	AS	reddish brown	black	black core	none	coiling
PNT.G.12p.3	120780	Gaudo cemetery	T. 6512p	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	nd	body	6.2	6.7	1	1.3	AS	SB	reddish	reddish	oxidising	none	none
PNT.G.13a.1	120879	Gaudo cemetery	T. 6513 a	Gaudo	yes	no	finished	PNT.1a	yes	no	yes	no	nd	body	5.4	3.2	0.5	0.8	AS	SB	blackish	black	reducing	none	none
PNT.G.13a.2	120879	Gaudo cemetery	T. 6513 a	Gaudo	yes	no	finished	PNT.1	no	no	no	no	nd	body	4	2.8	0.5	0.6	AS	AS	blackish brown	brown	reducing	none	none
PNT.G.13a.3	120879	Gaudo cemetery	T. 6513 a	Gaudo	yes	no	rough	PNT.1a	yes	yes	yes	no	nd	body	3.7	5	0.6	0.8	AS	AS	brownish/ red	black core	black core	none	coiling
PNT.G.13b.1	120892	Gaudo cemetery	T. 6513 b	Gaudo	yes	no	finished	PNT.1a	yes	yes	yes	yes	closed	body	5.5	5.6	0.4	0.5	SB	B	blackish brown	black	reducing	none	none
PNT.G.13b.2	120892	Gaudo cemetery	T. 6513 b	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	nd	body	3	6	0.8	1	AS	AS	reddish	black core	oxidising	none	coiling
PNT.G.13p.1	120848	Gaudo cemetery	T. 6513 p	Gaudo	yes	yes	finished	PNT.1	no	no	no	no	nd	body	4.3	6.3	0.8	0.8	AS	AS	light brown/ brown	brown	irregular	none	coiling
PNT.G.13p.2	120848	Gaudo cemetery	T. 6513 p	Gaudo	yes	no	finished	PNT.1a	yes	no	yes	no	nd	body	6.3	5.2	0.3	0.6	AS	AS	brown/ light brown	brown	irregular	none	none
PNT.G.13p.3	120848	Gaudo cemetery	T. 6513 p	Gaudo	yes	no	finished	PNT.1a	yes	yes	yes	no	nd	body	4.6	7	0.5	1.1	AS	SB	reddish/ brown	brown	reducing	none	none
PNT.G.13p.4	120848	Gaudo cemetery	T. 6513 p	Gaudo	yes	no	rough	PNT.1b	yes	yes	yes	no	nd	body	5.8	8.8	0.9	1.1	AS	AS	brownish	brown	black core	none	coiling
PNT.G.13p.5	120848	Gaudo cemetery	T. 6513 p	Gaudo	yes	no	rough	PNT.1	no	no	no	no	jar	body	6.4	8	1	1.2	AS	AS	reddish brown	reddish brown	irregular	none	coiling
PNT.G.13p.6	120848	Gaudo cemetery	T. 6513 p	Gaudo	yes	no	finished	PNT.3	yes	no	yes	no	nd	body	4.3	5.8	0.7	0.7	AS	AS	brownish	black	reducing	none	none
PNT.G.13p.7	120848	Gaudo cemetery	T. 6513 p	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	nd	body	4.7	6.3	0.7	0.8	RS	RS	reddish brown	black core	black core	none	none
PNT.G.14a.1	120921	Gaudo cemetery	T. 6514 a	Gaudo	yes	no	finished	PNT.1a	yes	no	yes	no	nd	body	3.5	5.8	0.4	0.7	AS	AS	blackish	blackish	reducing	none	none

PNT.G.14a.2	120921	Gaudo cemetery	T. 6514 a	Gaudo	yes	no	finished	PNT.1b	yes	no	no	no	nd	body	2.6	4.5	0.7	0.9	AS	SB	light brown	blackish brown	black core	none	none
PNT.G.14a.3	120921	Gaudo cemetery	T. 6514 a	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	nd	body	6.3	6.1	0.8	1	SB	AS	brownish	brownish	black core	none	coiling
PNT.G.14a.4	120921	Gaudo cemetery	T. 6514 a	Gaudo	yes	no	rough	PNT.1a	yes	no	no	no	nd	body	4.2	5.8	0.7	1.1	RS	AS	reddish brown	reddish brown	irregular	none	none
PNT.G.14b.1	120931	Gaudo cemetery	T. 6514 b	Gaudo	yes	no	finished	PNT.1a	yes	yes	yes	no	fine vessel	body	5	5.3	0.5	1	AS	B	blackish	blackish	reducing	none	none
PNT.G.14b.2	120931	Gaudo cemetery	T. 6514 b	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	nd	body	4.6	5.3	0.3	0.6	RS	RS	brownish red	black core	irregular	none	coiling
PNT.G.14b.3	120931	Gaudo cemetery	T. 6514 b	Gaudo	yes	no	rough	PNT.1a	yes	yes	yes	no	jar	body	6	5	0.8	1	AS	AS	reddish	black core	black core	none	coiling
PNT.G.14b.4	120931	Gaudo cemetery	T. 6514 b	Gaudo	yes	no	rough	nd	no	no	no	no	nd	body	1.7	2.1	0.8	1	AS	AS	reddish	black	black core	none	none
PNT.G.14p.1	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	yes	finished	PNT.1a	yes	no	no	no	nd	body	4.3	3.9	0.3	0.4	AS	SB	brownish black	black	reducing	none	none
PNT.G.14p.2	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	yes	finished	PNT.1b	yes	yes	yes	no	closed	body	5.9	4.8	0.5	0.8	AS	AS	brownish black	black	reducing	none	coiling
PNT.G.14p.3	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	no	rough	PNT.3	yes	yes	yes	yes	jar	body	6.1	6.1	1	1.1	AS	AS	reddish brown	black core	black core	none	coiling
PNT.G.14p.4	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	no	rough	nd	no	no	no	no	jar	body	3.5	6.8	0.6	0.9	RS	RS	reddish	black core	black core	none	coiling
PNT.G.14p.5	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	jar	body	5.5	8	1	1.3	AS	AS	reddish	reddish	oxidising	none	coiling
PNT.G.14p.6	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	no	rough	nd	no	no	no	no	nd	body	5.1	7.8	1	1.2	AS	AS	reddish brown	reddish brown	irregular	none	none
PNT.G.14p.7	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	no	rough	PNT.1a	yes	yes	yes	no	nd	body	4.4	4.5	0.7	0.8	AS	AS	brownish red	brownish red	irregular	none	none
PNT.G.14p.8	120904	Gaudo cemetery	T. 6514 p	Gaudo	yes	no	rough	PNT.1a	yes	no	no	no	nd	body	2.9	2.5	0.8	0.8	AS	AS	brownish red	brownish red	irregular	none	none
PNT.G.15.1	120947	Gaudo cemetery	T. 6515	Gaudo	yes	no	finished	PNT.1a	yes	no	no	no	askos	body	4.4	4.8	0.3	0.4	NA	SB	reddish brown	black	black core	none	none
PNT.G.15.2	120947	Gaudo cemetery	T. 6515	Gaudo	yes	no	finished	nd	no	no	no	no	askos	body	3.8	2	0.5	0.4	NA	SB	reddish brown	black	black core	incised	none
PNT.G.15.3	120948	Gaudo cemetery	T. 6515	Gaudo	yes	no	finished	PNT.1a	yes	no	no	no	jug	body	1.6	2	0.6	0.7	AS	AS	brownish red	brown	irregular	none	none
PNT.G.15.4	120952	Gaudo cemetery	T. 6515	Gaudo	yes	no	finished	PNT.1a	yes	no	no	no	cup	body	1.5	2.3	0.4	0.5	AS	B	blackish	black	reducing	none	none
PNT.G.16.1	120963	Gaudo cemetery	T. 6516	Gaudo	yes	no	finished	PNT.1b	yes	yes	yes	no	nd	body	4.6	5.9	0.4	0.7	AS	B	blackish brown	black	reducing	none	none
PNT.G.16.2	120963	Gaudo cemetery	T. 6516	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	jar	body	4	4.1	0.7	1	RS	RS	reddish	brown	black core	none	coiling
PNT.G.16.3	120963	Gaudo cemetery	T. 6516	Gaudo	yes	no	rough	nd	no	no	no	no	jar	body	3.8	5	0.6	1	AS	AS	brownish red	brown	black core	none	none
PNT.G.17b.1		Gaudo cemetery	T. 6517 b	Gaudo	yes	no	finished	nd	no	no	no	no	nd	body	2.7	3.6	0.3	0.6	AS	AS	brownish	brownish	reducing	none	none
PNT.G.17b.2		Gaudo cemetery	T. 6517 b	Gaudo	yes	no	finished	PNT.1a	yes	no	yes	no	nd	body	2.9	5	0.4	0.5	AS	AS	reddish brown	brownish	reducing	none	none
PNT.G.17p.1	120985	Gaudo cemetery	T. 6517 p	Gaudo	yes	no	finished	nd	no	no	no	no	nd	body	4.4	5.5	0.7	1.1	AS	SB	blackish	blackish	reducing	none	none
PNT.G.17p.2	120985	Gaudo cemetery	T. 6517 p	Gaudo	yes	no	finished	PNT.1b	yes	yes	yes	no	nd	body	3	6	0.7	0.9	AS	SB	blackish	blackish	reducing	none	coiling
PNT.G.17p.3	120985	Gaudo cemetery	T. 6517 p	Gaudo	yes	no	finished	PNT.3	yes	no	no	no	cup	body	1.5	3.4	0.5	0.8	AS	AS	brownish	reddish brown	black core	none	none
PNT.G.17p.4	120985	Gaudo cemetery	T. 6517 p	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	nd	body	4.5	5.3	0.7	1	SB	AS	reddish	reddish brown	black core	none	none

PNT.G.17p.5	120981	Gaudo cemetery	T. 6517 p	Gaudo	yes	no	rough	PNT.1a	yes	no	no	no	nd	handle	2.5	2.2	0.8	1.2	AS	AS	brownish	brownish	reducing	none	none
PNT.G.18p.1	121012	Gaudo cemetery	T. 6518 p	Gaudo	yes	no	rough	PNT.1b	yes	yes	yes	no	jar	body	3.9	5.7	0.9	1	RS	RS	brownish	brownish	irregular	none	coiling
PNT.G.18p.2	121012	Gaudo cemetery	T. 6518 p	Gaudo	yes	no	rough	nd	no	no	no	no	jar	body	3.5	5	0.9	1	RS	RS	brownish	brownish	black core	none	none
PNT.G.20p.1	123291	Gaudo cemetery	T. 6520 p	Gaudo	yes	no	finished	PNT.1a	yes	yes	yes	no	nd	body	3.5	5	0.5	0.6	AS	AS	brownish red	brownish	irregular	none	inner smooth
PNT.G.20p.2	123291	Gaudo cemetery	T. 6520 p	Gaudo	yes	no	rough	PNT.1b	yes	no	yes	no	nd	body	4.2	3.5	0.6	0.8	AS	AS	light brown/brown	brownish red	black core	none	none
PNT.G.90p.1	123310	Gaudo cemetery	T. 6590 p	Gaudo	yes	no	rough	PNT.1a	yes	no	yes	no	jar	body	4	4.2	0.7	0.8	AS	AS	reddish/brown	black core	black core	none	none
SAL.C.I.01	7095	Capo la Piazza	US 133/134	Taurasi	yes	no	finished	SAL.1	yes	no	no	no	large bowl	body	3	3.5	0.5	0.6	B	B	blackish	black	reducing	none	none
SAL.C.I.02	7097	Capo la Piazza	US 133/134	Taurasi	yes	no	finished	SAL.1	yes	yes	yes	no	hanging jar	body	3.3	7	0.5	0.7	AS/SB	SB	reddish/brown	reddish brown	black core	none	irregular polishing
SAL.C.I.03	7084	Capo la Piazza	US 120	Taurasi	yes	no	finished	SAL.1	yes	no	yes	no	small hanging jar	body	3.5	3	0.8	0.8	AS	B	brownish black	blackish	reducing	none	inner scraping
SAL.C.I.04	7091	Capo la Piazza	US 133/134	Taurasi	yes	no	finished	SAL.1	yes	no	yes	no	hanging jar	body	3	2	0.5	0.8	SB	B	brownish	reddish brown	irregular	grooved	none
SAL.C.I.05	7108	Capo la Piazza	US 133/134	Taurasi	yes	no	finished	SAL.1	yes	no	yes	no	large bowl	body	2.8	4.5	0.8	0.8	SB	SB	brownish black	black	reducing	none	joint
SAL.C.I.06	7109	Capo la Piazza	US 133/134	Taurasi	yes	no	rough	SAL.3	yes	yes	yes	no	hanging jar	body	5.5	3.5	0.6	0.8	AS	AS	light brown/brown	brown	irregular	none	none
SAL.C.I.07	7110	Capo la Piazza	US 133/134	Taurasi	yes	no	rough	SAL.2	yes	yes	yes	no	large container	body	4	5.8	1	1.2	AS	RS	brownish/red	brownish red	irregular	none	coiling
SAL.C.I.08	7082	Capo la Piazza	US 117	Taurasi	yes	no	finished	SAL.1	yes	no	no	no	hanging jar	body	3	3.2	0.5	0.7	SB	SB	blackish	blackish	reducing	none	none
SAL.C.I.09	7080	Capo la Piazza	US 112	Taurasi	yes	no	finished	SAL.1	yes	no	yes	no	hanging jar	body	2	4	0.7	0.8	NA	SB	reddish/black	black	reducing	none	none
SAL.C.I.10	7081	Capo la Piazza	US 112	Taurasi	yes	no	finished	SAL.1	yes	no	yes	no	jar	body	3	4	0.5	0.8	NA	SB	reddish/black	brown	irregular	none	none
SAL.C.I.11	7100	Capo la Piazza	US 134	Taurasi	yes	no	finished	SAL.1	yes	no	yes	no	large bowl	body	2	4	0.5	0.7	SB	SB	brownish black	blackish	reducing	none	none
SAL.C.I.12	7098	Capo la Piazza	US 134	Taurasi	yes	no	finished	SAL.1	yes	yes	yes	no	deep bowl	body	3	3	0.4	1	SB	AS	brownish	brownish	irregular	none	none
SAL.C.I.13	7105	Capo la Piazza	US 139	Taurasi	yes	no	rough	SAL.4	yes	yes	yes	no	pyxis	body	3.5	3	0.9	0.5	NA	NA	reddish grey	reddish grey	overfired	none	none
SAL.C.I.14	7072	Capo la Piazza	Q. 2A n	Taurasi	yes	no	finished	SAL.5	yes	yes	yes	no	nd	body	4	5	0.7	0.8	AS	AS	greish	greish	reducing	none	none
SAL.C.II.1	7014	Capo la Piazza	T. 1073	Laterza	yes	no	finished	SAL.2	yes	no	yes	no	small bowl	body	2	2	0.3	0.8	SB	SB	reddish brown	brown	irregular	none	none
SAL.C.II.2	7020	Capo la Piazza	T. 1076	Laterza	yes	no	finished	SAL.2	yes	no	no	no	small jar	body	3	2	0.5	0.5	AS	SB	brownish black	black	reducing	none	none
SAL.C.II.3	7021	Capo la Piazza	T. 1076	Laterza	yes	no	rough	SAL.2	yes	no	yes	no	nd	body	3	4	0.7	0.9	AS	R	brown/reddish	brown	irregular	none	none
SAL.C.II.4	7021	Capo la Piazza	T. 1076	Laterza	yes	no	rough	SAL.1	yes	yes	yes	no	nd	body	3.4	3.5	1.2	1.2	AS	RS	reddish	black core	black core	none	none
SAL.C.II.5	7024	Capo la Piazza	T. 1077	Laterza	yes	no	finished	SAL.2	yes	no	no	no	small jar	body	3	2	0.5	0.7	AS	SB	reddish brown	brown	irregular	none	none

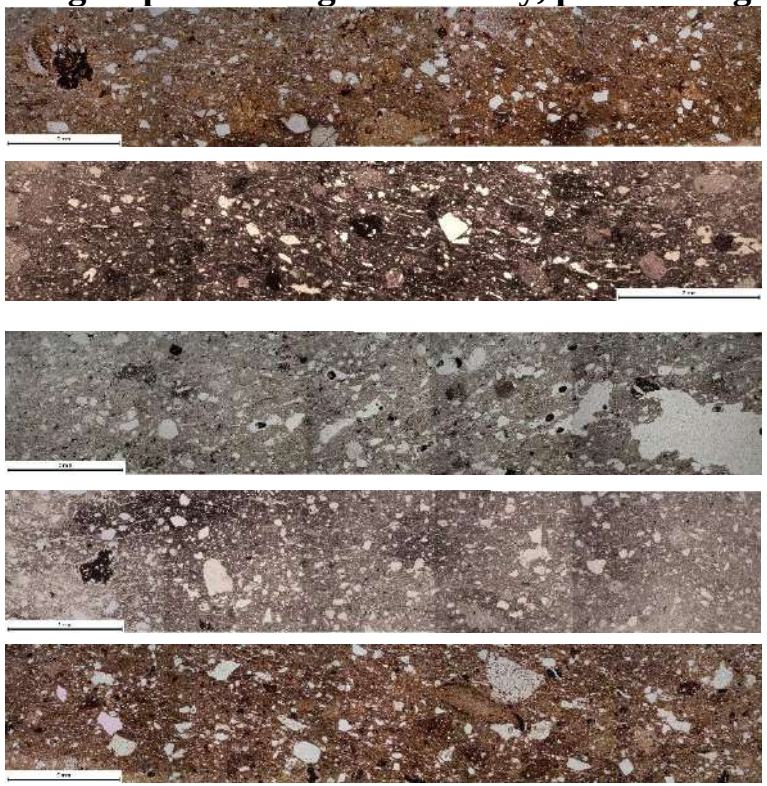
Appendix 11 – Fabrics descriptions

In this Appendix the full petrographic descriptions of the fabrics detected for each sites are listed. Stitched microphotographs of each samples are shown taken in PPL and XPL. The high resolution images are attached as multimedia files.

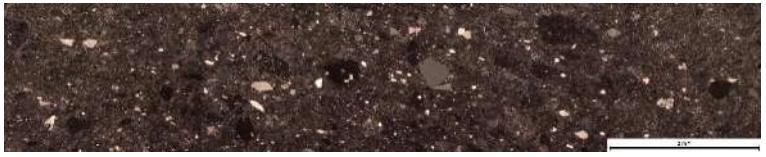
1. PAESTUM – FABRICS DESCRIPTIONS

Fabric Pae1 – Quartz-feldspathic with grog – fine to coarse granulometry - TOT 46 samples

Subgroup 1a – fine granulometry, poor sorting – 10 samples



PAE.C.4.01

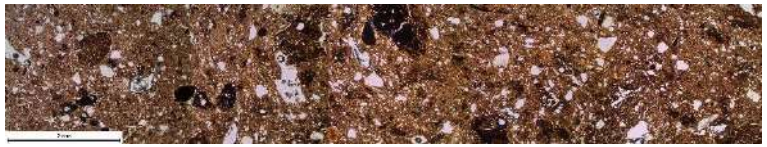
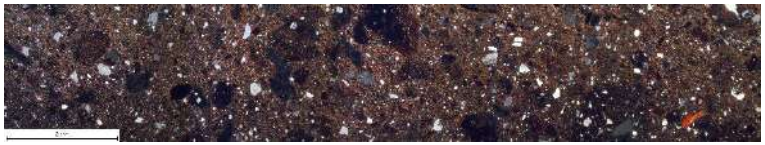


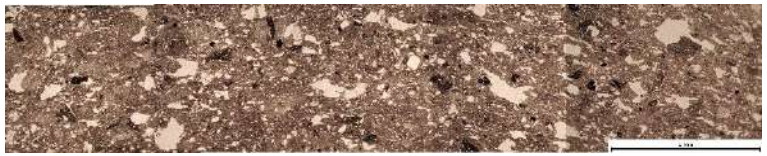
PAE.C.4.6

PAE.G.00.5

PAE.G.00.8

PAE.G.II.04



PAE.G.II.06



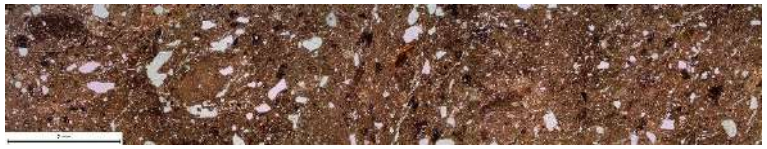
PAE.G.IV.1



PAE.G.IV.2

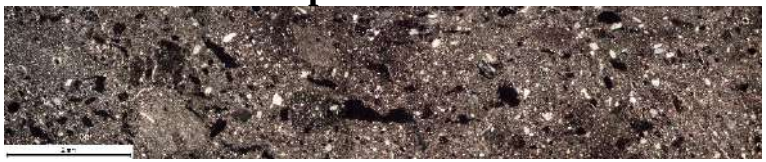


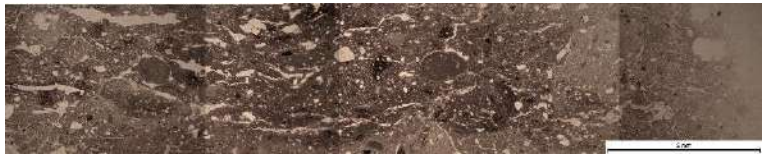
PAE.G.IX.2



PAE.G.V.3

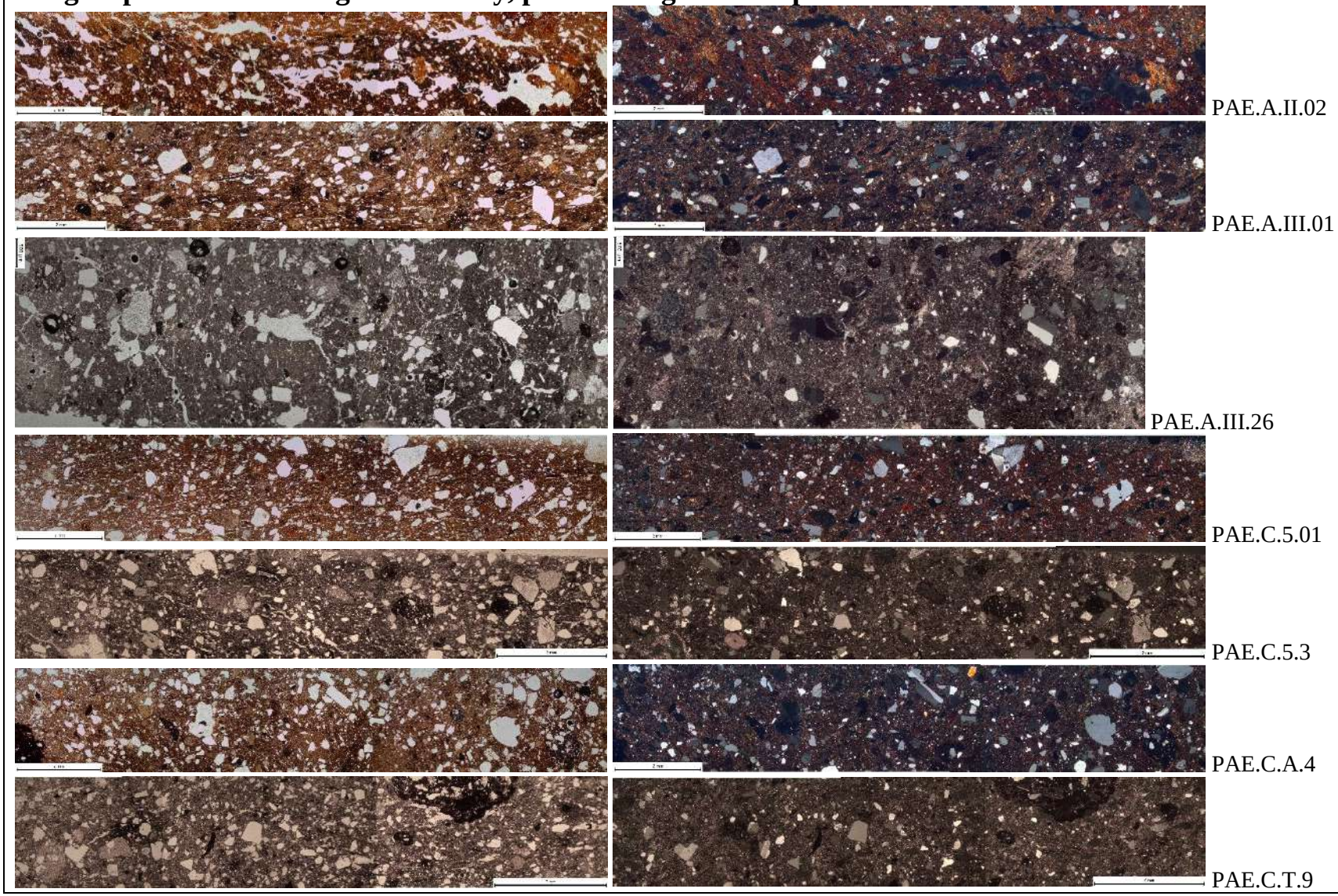
Subgroup Pae1b – fine granulometry, carbonate inclusions – 2 samples



PAE.G.XI.8



PAE.G.III.8

Subgroup Pae1c – coarse granulometry, poor sorting – 34 samples



PAE.A.II.02

PAE.A.III.01

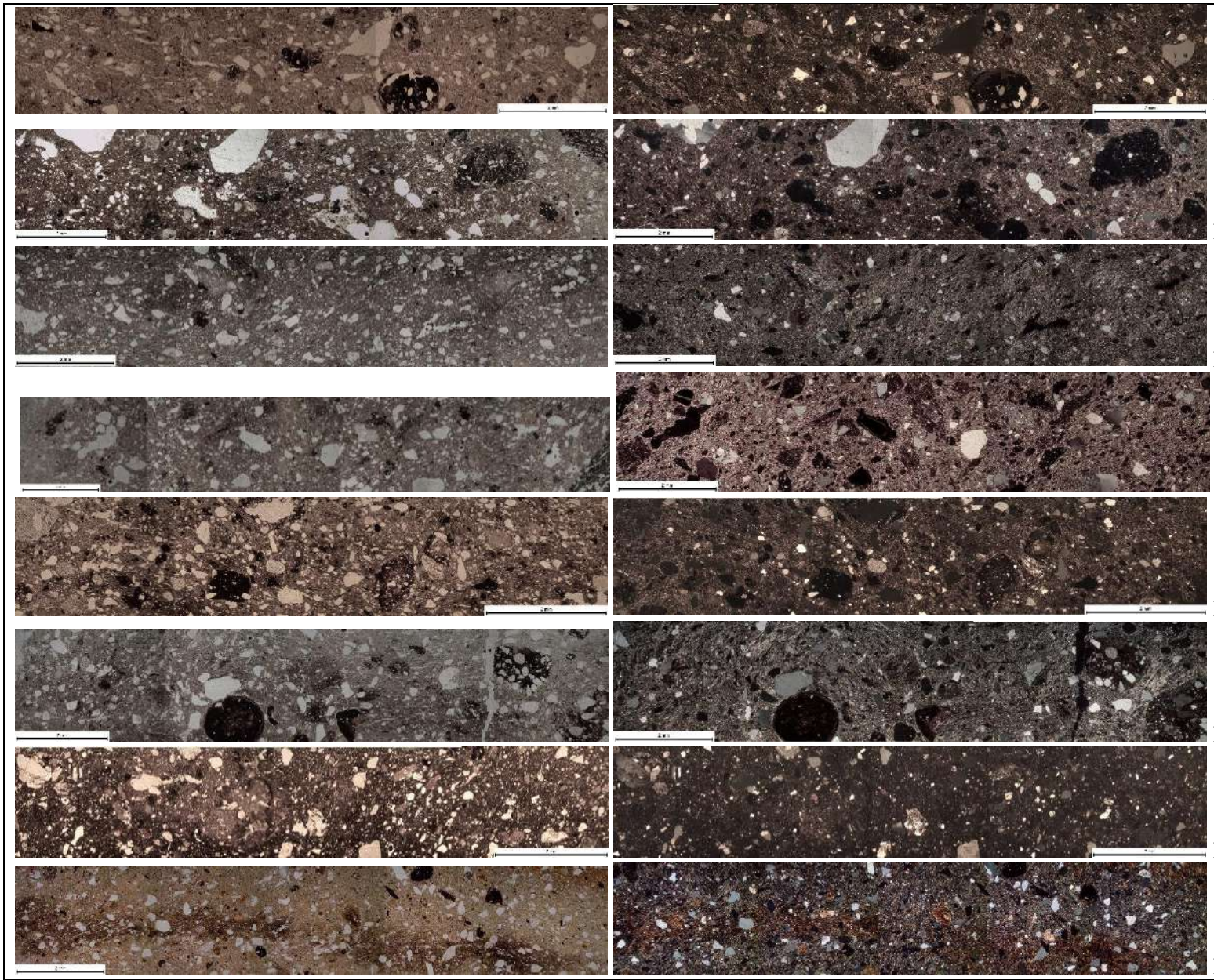
PAE.A.III.26

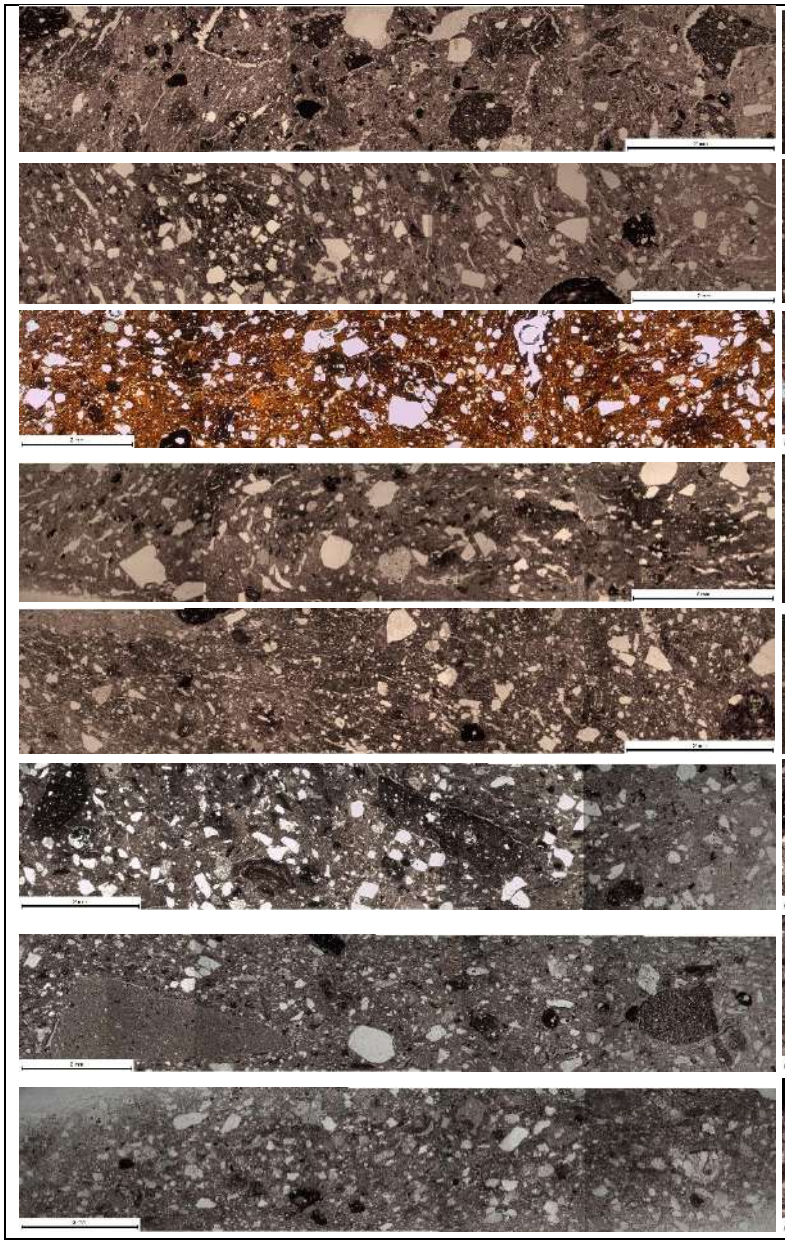
PAE.C.5.01

PAE.C.5.3

PAE.C.A.4

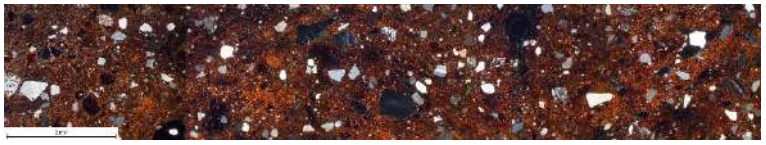
PAE.C.T.9


PAE.C.T.10
PAE.G.00.3
PAE.G.00.6
PAE.G.00.7
PAE.G.A.1
PAE.G.A.2
PAE.G.b.4
PAE.G.C.1



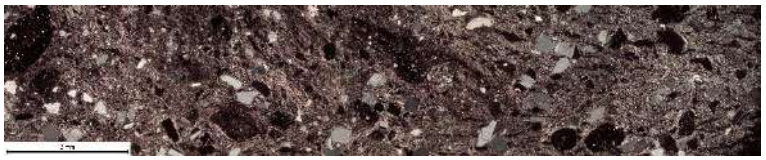

PAE.G.C.4


PAE.G.I.3


PAE.G.II.02

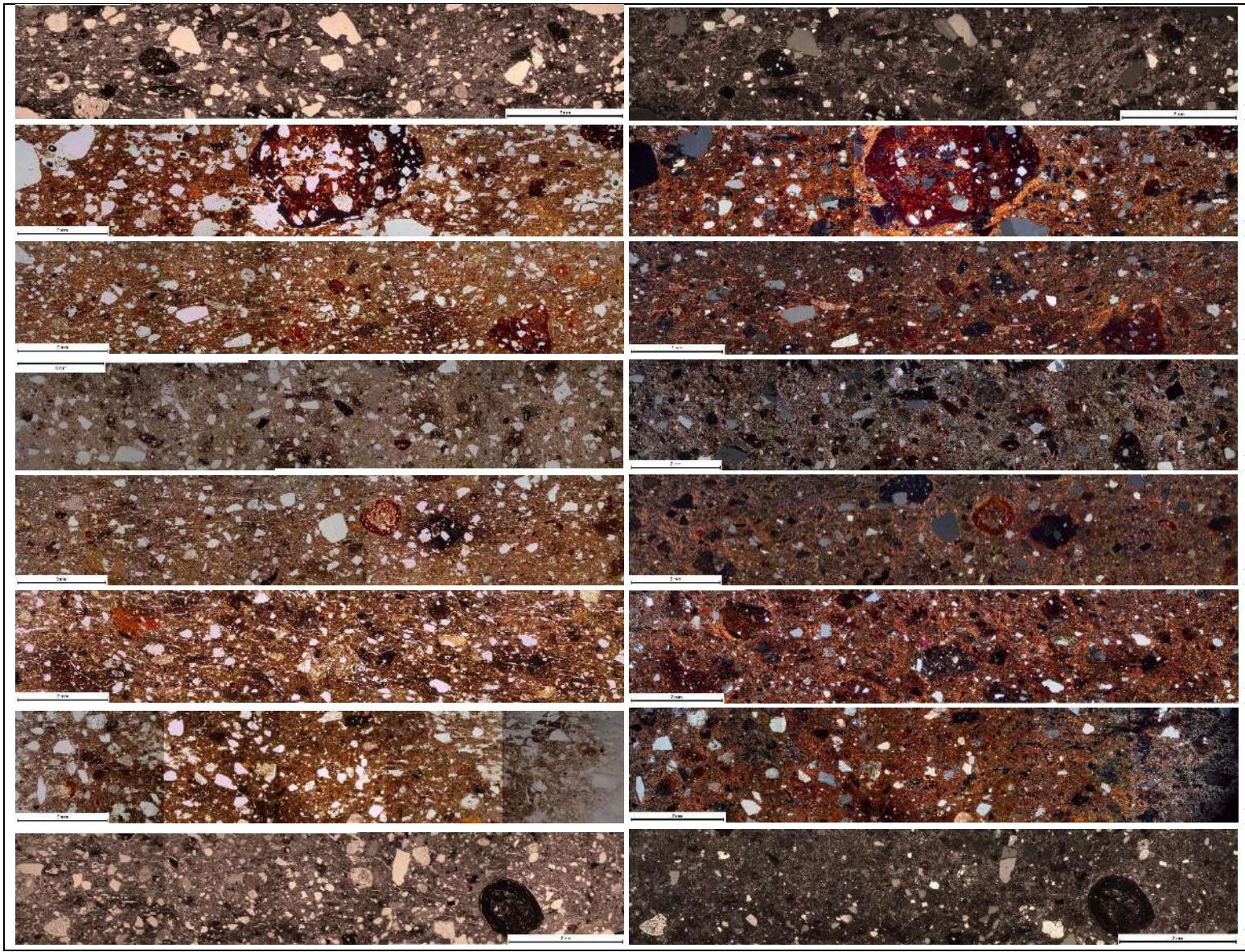

PAE.G.III.1


PAE.G.III.3


PAE.G.III.9


PAE.G.IV.7


PAE.G.R.2



PAE.G.u.1

PAE.G.u.2

PAE.G.XI.01

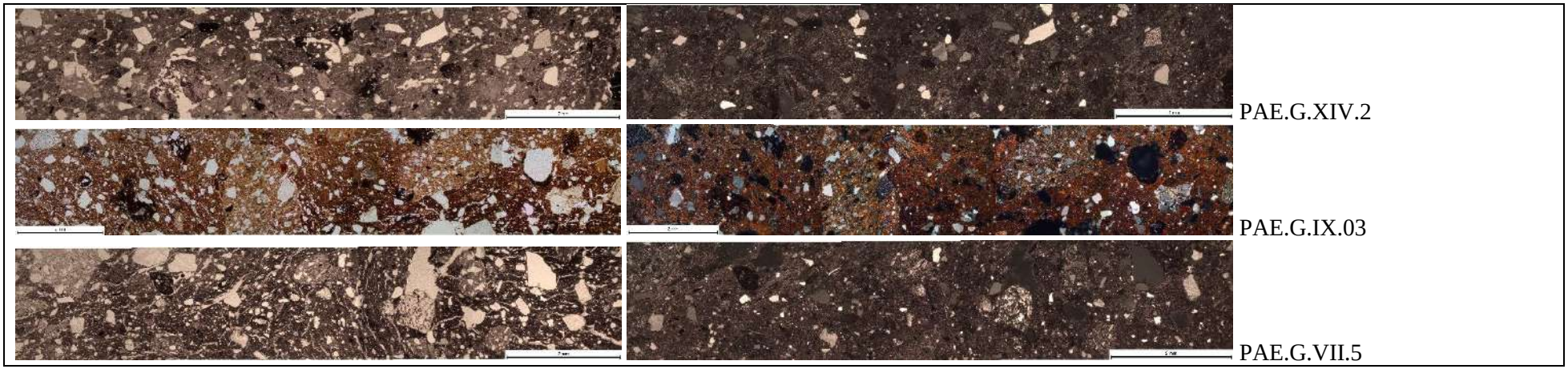
PAE.G.XI.02

PAE.G.XI.04

PAE.G.XIII.02

PAE.G.XIII.03

PAE.G.XIV.1



Petrographic description subgroups Pae1a and Pae1b

Inclusions

30% eq. & el. a-r. <1.6, mode = 0.11-0.68. Single spaced. Poorly aligned to margin. Unimodal, poorly sorted grain size distribution. Fine inclusions and few coarse ones mainly grog or rock fragments.

Dominant: Quartz; eq. & el. sr-sa. < 0.5, mode = 0.2 Monocrystalline and polycrystalline. Often polycrystalline. Generally wavy extinction.
Frequent: K-feldspars, orthoclase/sanidine, el., a-sr, <1.2 mm, mode = 0.3. Common Carlsbad twinning. Cloudy.
Common: Argillaceous rock fragments/Grog; el & eq. a-sr. <3mm, mode = 0.7 mm. Few only in PAE.G.00.05. Three main types attested:
1. Dark brown. Different density. Sharp boundaries. Optically inactive, at times slightly active.
2. Light brown. Often same density. Sharp to merging boundaries. Slightly optically active.
3. Medium brown. Different density. Sharp to merging boundaries. Optically inactive.
4. Light brown-orange. Almost same density. Sharp to merging boundaries. Possible clay pellets or poorly hydrated clay.

Grog fragments with relic edges can be found in PAE.C.T.9, PAE.G.II.6, PAE.G.c.4, PAE.G.XI.4, PAE.G.XIII.2 and PAE.G.IV.2. In the latter also possible sintered grog.
Common: Opaques; el.-eq., sr. <0.3 mm, mode = 0.1 mm. Ferromagnesian.
Few: Volcanic rock fragments, eq. & el., sr.-r., <1.1 mm, mode = 0.4. Generally, trachyte with glassy groundmass and feldspar crystals.
Few: mica/biotite, el., a. Common silt size mica, few larger biotite, <0.8, mode = 0.2. Biotite in PAE.G.V.3.
Rare: Chert eq., a-sr. <0.2, mode = 0.17.
Rare: Clinopyroxene, eq.-el., sa. 0.2-0.3 mm. Subhedral.
Rare/absent: Plagioclase, eq. & el., a-sa., <0.3 mm, mode = 0.2. Twinning, albite/anorthite generally attested.
Rare/absent: Fine grained quartz rick rocks with partial layering, metamorphic, el., 0.28-0.6. (PAE.G.V.3) In some case with aligned mica (PAE.G.II.6). Possibly residual gneiss or schist, attested in the area.

Rare/absent: Pisolith, eq., r., <1.2 mm.
Rare/absent: Calcedony, eq., sr., size = 0.4 mm. (PAE.A.III.01, PAE.G.I.3, PAE.G.V.3, PAE.G.XIII.3).
Few/rare: Quart rich porous rock fragments, sedimentary; eq & el. sr. size, 1-2 mm. Often rich in mica but no layering.
Rare/absent: Arenaceous sedimentary rock fragments; eq & el. a-r. 3-1 mm. Rich in quartz and often mica, generally with iron cement.
Rare/absent: Siltstone/mudstone; el. sr.-sa, 1.4-1.2 mm. (red, orange and brown/grey) (PAE.G.IV.2, IX.2, V.3, II.4).
Rare/absent: Calcareous inclusions 0.15-0.9 mm, poorly preserved, only in sample PAE.G.V.3.
Rare/absent: Textural features, PAE.C.4.1, PAE.G.b.4, PAE.G.I.3, PAE.G.II.06.

PAE.1b
Common: rounded carbonatic bodies and secondary calcite: PAE.G.XI.8 and PAE.G.III.08.

Matrix
65%. Non-calcareous clay. Light brown, grey-brown, to brown in PPL, brown to dark brown in XPL. Homogeneous to inhomogeneous. Optically active, with strial and in few cases striated b-fabric. Black core in PAE.G.V.3. Possible secondary calcite in PAE.G.III.8 and PAE.G.XI.8 probably due to redistribution of carbonatic inclusions characteristic of subfabric Pae1b. PAE.G.II.06 shows textural features with clay rich bodies and different concentration of inclusion which might be due to uneven clay mixing. Also present in PAE.G.IV.2, optically active, which could be due to incomplete hydration or uneven clay mixing.

Voids
5%. Consisting mainly in planar voids and meso and macro-vughs, mainly equant. Moderate alignment of planar voids to margins. Vughs especially common in PAE.G.II.6 Burnt organics in all the samples, recognised through voids with blackened edge.

Notes
- PAE.G.IX.2 less common grog and ARF, more abundant trachytic rocks and fine grained quartz rich rock.
- PAE.G.V.3 rich in trachytic rock fragments and poor in mica.
- PAE.G.II.6 rich in polycrystalline quartz.
- PAE.G.IV.2 rich in volcanic rock fragments.

Petrographic Description of subfabric Pae1c

Inclusions
35% eq. & el. a-r. < 2, mode = 0.48. Single spaced. Poorly aligned to margin. Slightly bimodal, poorly sorted grain size distribution. Fine inclusions and frequent coarse ones mainly grog or rock fragments.

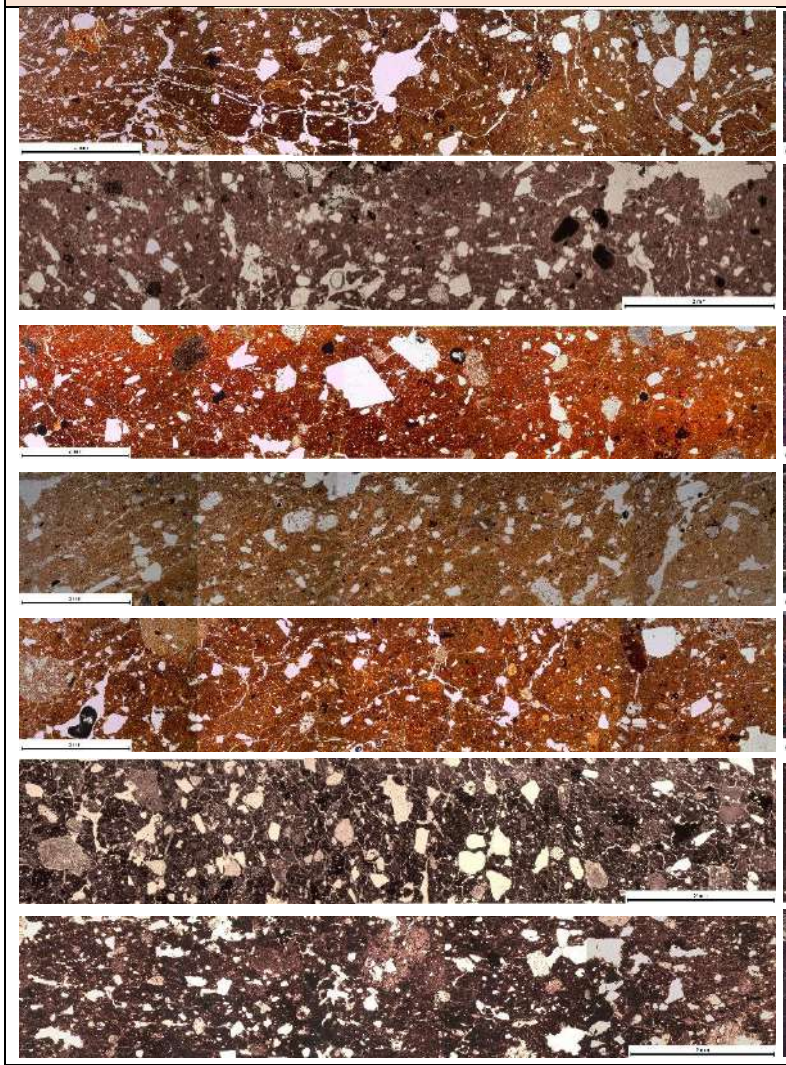
Dominant: Quartz; eq. & el. sr-sa. < 0.66, mode = 0.19, anhedral. Monocrystalline. Generally wavy extinction.
Frequent: Polycrystalline quartz; eq. & el., sr-sa., < 0.84, mode = 0.30. Quartzite with metamorphic origin give the clear wavy extinction. In some case with layering. PAE.C.5.01 very rich in polycrystalline quartz. One grain also containing plagioclase.

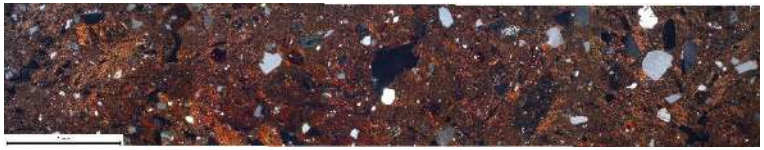
Frequent: K-feldspars (orthoclase, sanidine) el. & eq., a-sr. < 0.94 mode = 0.30, subhedral. Often altered with clay minerals. Common twinning.
Frequent/Common: Argillaceous rocks fragments/grog, size < 1.3, mode = 0.47, different types attested:
1. Dark brown. Different density. Mainly sharp edges. Optically inactive, at times slightly active.
2. Light brown. Different density, in some cases same density. Sharp to merging boundaries. Slightly optically active.
3. Medium brown. Slightly different density. Sharp to merging boundaries. Optically inactive.
Grog with relic edge in PAE.G.XIII.2, PAE.C.T.9, PAE.G.C.4, PAE.G.XIV.2. In some cases, especially ARF might be the result of irregular clay mixing.
Common: Plagioclase eq, a-sr, < 0.29, mode = 0.16, subhedral.
Common/few: Common mica mainly silt sized, el., a. < 0.31, mode = 0.16; few el., a., biotite (PAE.G.b.4).
Common/few: Volcanic rock fragments, trachyte eq, r-sr, < 0.72, mode = 0.28. Igneous effusive rocks (trachytic) and in PAE.G.XIII.03 glassy matrix with pyroxenes crystals interlocked.
Common/few: Opaques, eq., r-sa, < 1, mode = 0.31, particularly abundant in PAE.G.C.4.
Few: Igneous rocks, eq., sa., < 0.94, mode = 0.77, particularly common in PAE.C.5.01 (or polyquartz with plagioclase?), PAE.G.b.04.
Few: Chert, eq., sr., < 0.45, mode = 0.20.
Few: Pyroxene, el., sa., < 0.25, mode = 0.20, subhedral, often twinned.
Few: Metamorphic rock fragments, eq. & el., sr-sa., < 1, mode = 0.46 (PAE.A.II.2, PAE.G.00.3). Fine grained and not, layered. Mostly polycrystalline quartz. Especially common in PAE.G.IX.3 and PAE.G.VII.5, especially in association with micaceous ARF.
Few: Sedimentary rocks, very fine sandstones and siltstones, el., sr, mode = 0.43. Generally iron rich or clay cement. In PAE.G.b.4 a sandstone with calcite cement. In PAE.G.IV.7 possible limestone with bioclasts.
Few: Pisolith, eq., r, <5 mm, mode = 1.2 mm, also fragmented.
Rare/absent: Microcline eq., a, <0.3 mm, mode = 0.3 (PAE.G.II.2, PAE.G.u.1, PAE.G.XIII.3).
Rare/absent: Calcedony, eq. & el., size < 0.75 (PAE.A.III.1, PAE.G.I.3, PAE.G.XIII.3, PAE.G.XI.4).
Rare/absent: Hornblende, eq., sa., < 0.85, mode = 0.70, subhedral, often twinned (PAE.C.5.3, PAE.G.II.2, PAE.G.III.1, PAE.G.III.3).
Very rare/absent: Micaceous argillaceous rocks fragments or mica rich grog, with parallel mica orientation or conglomerate, eq. & el., 2 mm. In PAE.G.IX.3 and possibly PAE.G.VII.5.
Very rare/absent: Calcareous inclusions, eq., sr-sa, 1.2 mm, only in sample PAE.A.III.26

Matrix
60%. Non calcareous clay. Light brown, yellowish, orange, grey, brown to dark brown in PPL, dark brown to reddish brown in XPL. Mainly inhomogeneous. Optically active from low to high with speckled and some cases striated b-fabric. Black core in: PAE.G.IX.3, c.1, u.2. A relic coil can be detected in PAE.G.C.1 due to the orientation of the clay matrix and inclusions and the breakage. PAE.A.III.26 is possibly characterised by an irregular clay mixing and common clay pellets.

Voids
3-7%. Consisting mainly in elongated and equant macro and meso vughs, planar voids and small vughs. Moderate alignment of voids to margins with planar voids mainly parallel or fluidal. Burnt organics always attested.

Fabric Pae2 – Bimodal quartz-feldspathic with grog: TOT 33 samples



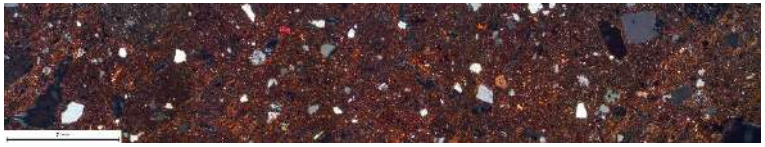


PAE.A.III.17

PAE.A.III.18

PAE.A.III. 21

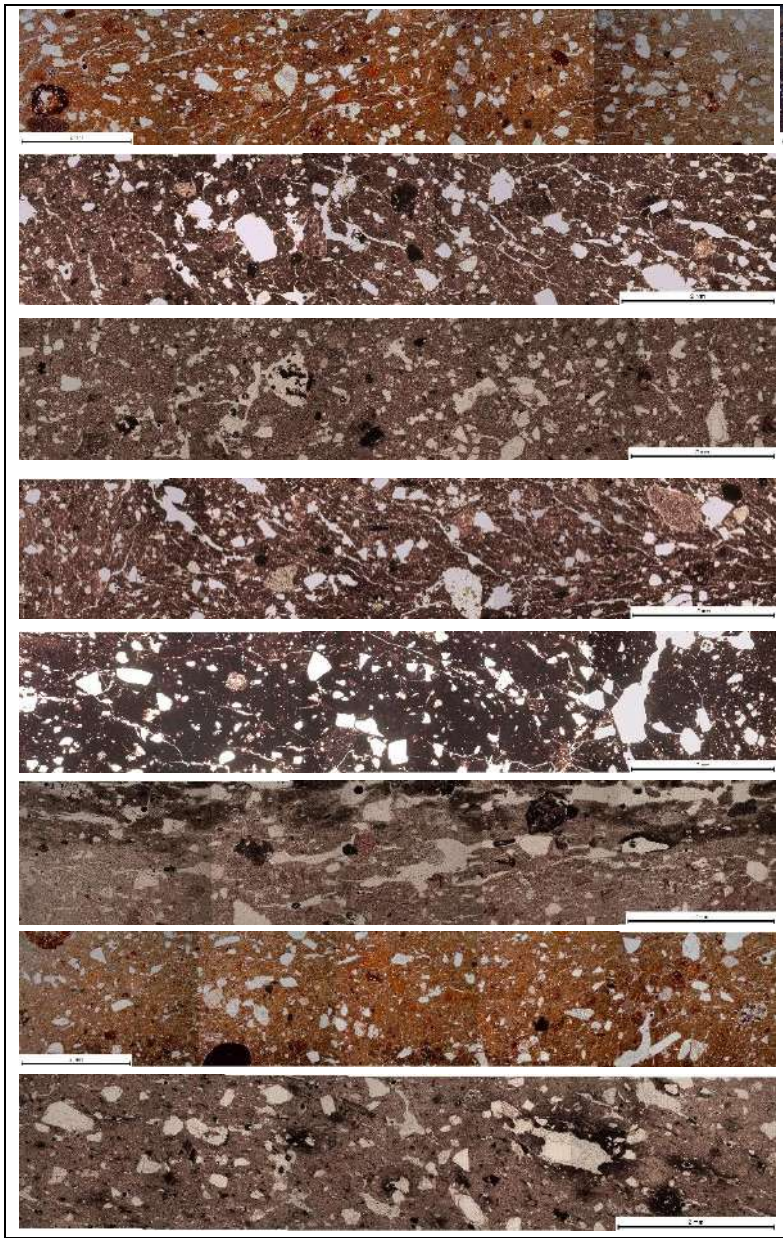
PAE.A.III.24 slab



PAE.A.III.23 slab

PAE.C.1.3

PAE.C.1.4



PAE.C.2.02

PAE.C.2.5

PAE.C.2.6

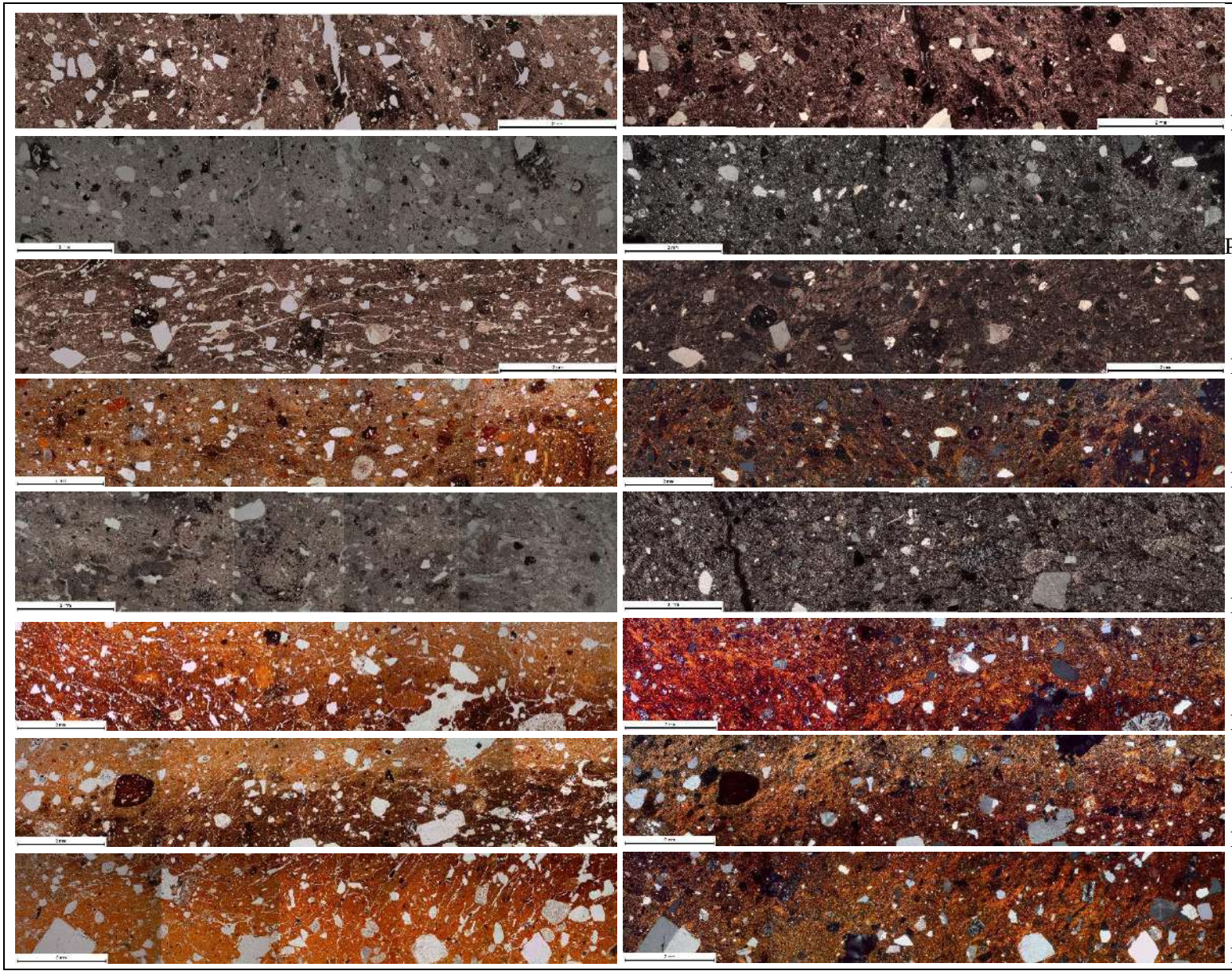
PAE.C.4.2

PAE.C.4.3

PAE.C.S.5

PAE.C.T.02

PAE.G.00.1



PAE.G.00.4

PAE.G.00.9

PAE.G.b.2

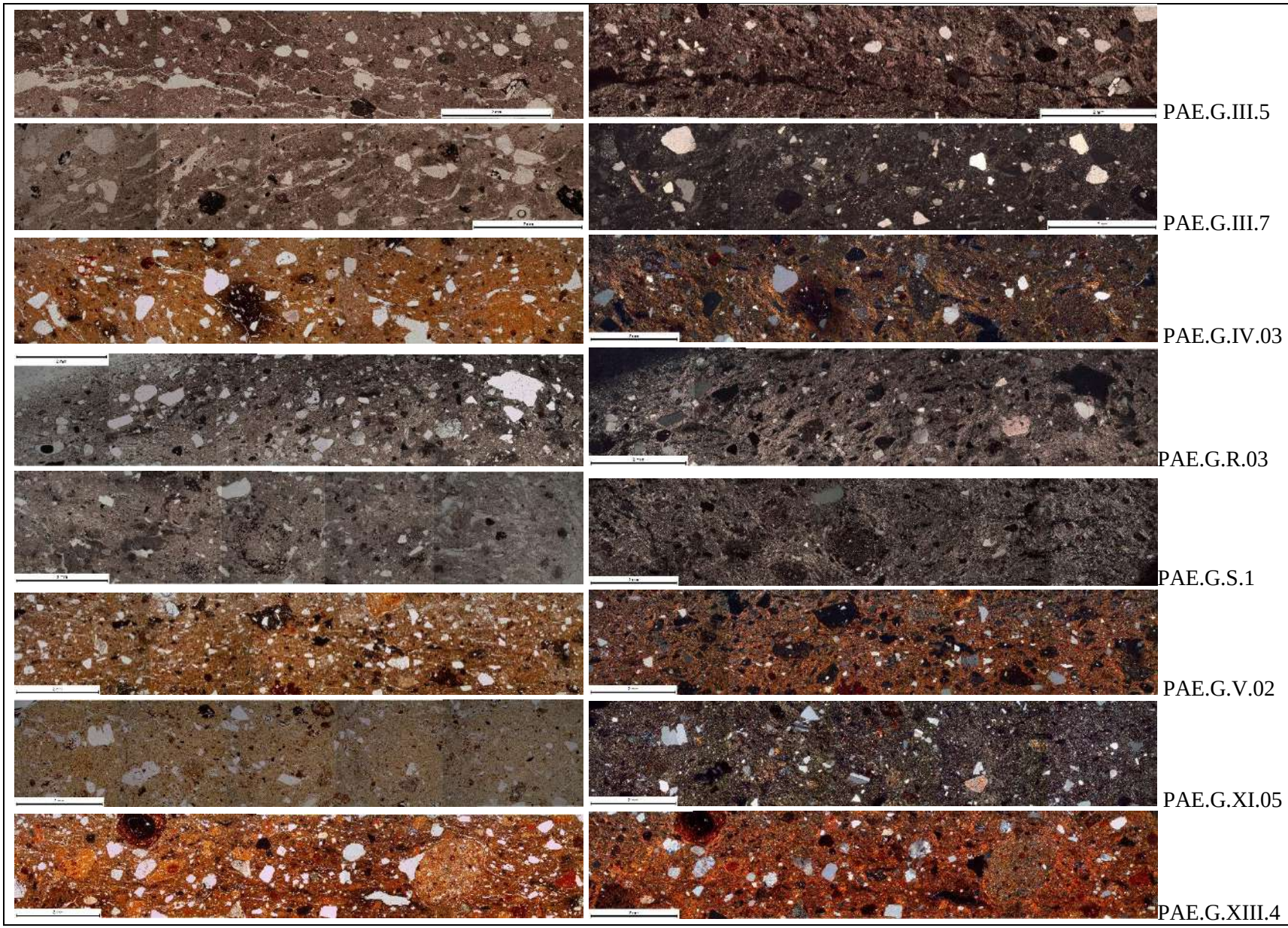
PAE.G.C.02

PAE.G.d.1

PAE.G.f.01

PAE.G.I.02

PAE.G.II.07


PAE.G.III.5
PAE.G.III.7
PAE.G.IV.03
PAE.G.R.03
PAE.G.S.1
PAE.G.V.02
PAE.G.XI.05
PAE.G.XIII.4


PAE.G.XIV.03

Petrographic Description

Inclusions

25% eq. & el., a-r < 1.17, mode = 0.29. Double to single spaced. Mainly randomly oriented. Bimodal grain size distribution.

Coarse fraction

69%, 1.17-0.15 mm.

Dominant: Quartz eq., sr.-sa., < 0.82, mode = 0.23. Monocrystalline and few polycrystalline quartz, subrounded generally with wavy extinction. Polycrystalline particularly present in PAE.C.2.02.
Frequent/Common: ARF/grog eq. & el. sa-sr, < 1.03, mode = 0.41. In some case sintered. Three main types, common shrinking:
1. Light brown-orange clay, slightly different density, generally merging edges, optically active;
2. Dark brown, often sintered. In some cases dark brown grog/arf with blackened edges. Different density, sharp to merging edges.
3. Light brown, similar to clay matrix but different colour. Slightly different density, sharp to merging edges.
4. Iron rich brownish-red. Different density. Sharp to merging boundaries. Optically active. PAE.G.XIII.4.
Grog with relic edge in PAE.G.C.02, PAE.G.XIV.3. Sintered in PAE.G.I.2.
Common: K-feldspar, sanidine or orthoclase, el., a-sr, < 1.17, mode = 0.30. Common Carlsbad twinning. Often altered.
Common: Volcanic rock fragments, eq.-el., sr., < 1.06, mode = 0.31, trachyte. Feldspars crystals in a glassy groundmass. Often with iron alteration.
Few: Chert, eq.-el., sr.- a., < 0.56, mode = 0.29, often with iron alterations.
Few: Plagioclase, el.-eq., sa.-sr., < 0.41, mode = 0.20, anhedral, twinning. Albite mainly attested. Abundant in PAE.C.1.3.
Few: Clinopyroxene, < 0.6, mode = 0.24, anhedral and euhedral. Bigger fragments compared to previous fabric Pae1. Abundant in PAE.C.1.4, PAE.C.2.6. Large common 0.3 mm. clinopyroxenes in PAE.G.R.03, mode = 0.3 mm (probably also in PAE.C.1.4).
Few: Sedimentary rock fragments, el.-eq., sr., < 1.02, mode = 0.51. Sandstone with iron or calcite cement, generally equant, siltstone generally elongated.
Few: Igneous rock, eq., a-sr., < 0.89, mode = 0.37. Mainly constituted by quartz, feldspar, biotite and iron rich opaques.
Few: Opaques, sr-sa, eq-el., < 0.87, mode = 0.15. Iron rich. Abundant in PAE.G.V.2.
Few: Mica/biotite, el., a., < 0.48, mode = 0.24. Larger grains than in fabric Pae1.
Very few: Pisolith, eq., r., < 2.4 mm, mode = 0.9 mm.
Very few: Microcline, eq., sa., mode = 0.20, anhedral, tartan twinning.
Rare: Hornblende, eq-el., sa., euhedral, mode = 0.15.
Rare: Calcedony, eq., sr., < 0.57, mode = 0.48.
Very Rare-Absent: metamorphic rock fragments. < 0.48, mode = 0.26. Gneiss/schist in PAE.G.f.1, PAE.G.I.2 and PAE.C.T.02.

Very Rare-Absent: Calcareous inclusions, eq.-el., sr., 0.57. Attested in samples PAE.C.2.5, PAE.G.b.2, PAE.G.III.5.
Very Rare-Absent: Clay minerals, eq.-el., sr., optically active, in samples PAE.C.1.4, PAE.C.2.02, PAE.C.4.3, PAE.G.00.1, PAE.G.C.03, PAE.G.XI.3, PAE.G.XI.5.
Very Rare-Absent: Weathered Pyroxene or Epidote, embayed, sr., el., 0.6 mm, only in sample PAE.C.S.5.

Fine fraction
31%, < 0.15 mm.

Dominant: Quartz
Dominant-frequent: K-feldspars
Frequent: Mica

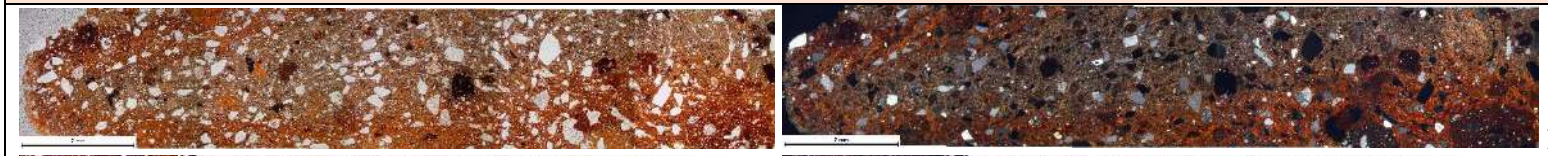
Matrix

70%. Non-calcareous. Brown, orange brown, light brown and reddish brown, to yellowish in PPL, brown to dark and reddish brown, light brown to yellowish, in XPL. Secondary calcite in PAE.A.III.21, PAE.G.f.1. Homogeneous to inhomogeneous clay mixing. Particularly inhomogeneous in PAE.G.XI.5, due to irregular clay mixing, with presence of clay pellets, probably incompletely hydrated. Optically active, from high to low with strial or striated b-fabric. Almost sintered in PAE.C.1.3, sintered core in PAE.C.4.3. Relic coil in PAE.A.III.17, PAE.C.4.2, PAE.G.00.04.

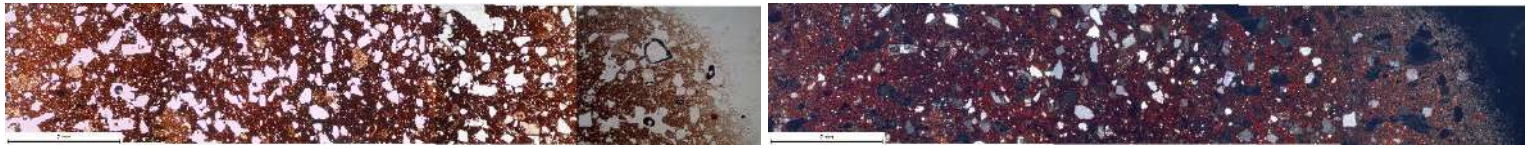
Voids

5%. Consisting mainly of meso- and macro-elongate and equant vughs ad planar voids, generally moderately aligned to margins. In some cases, charred remains inside burnt vughs.

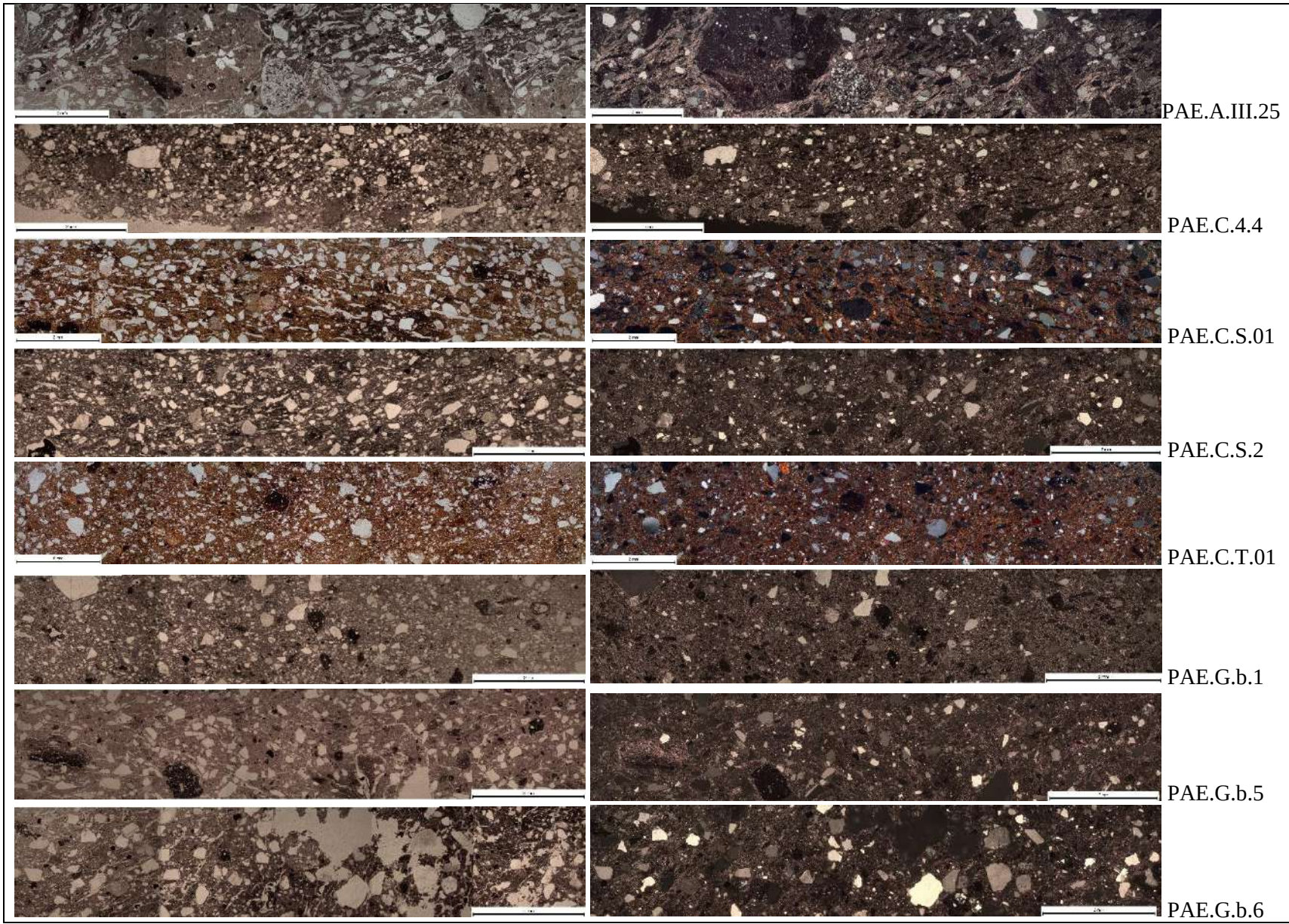
Fabric Pae3 – Quartz-feldspathic sand with grog: TOT 19 samples

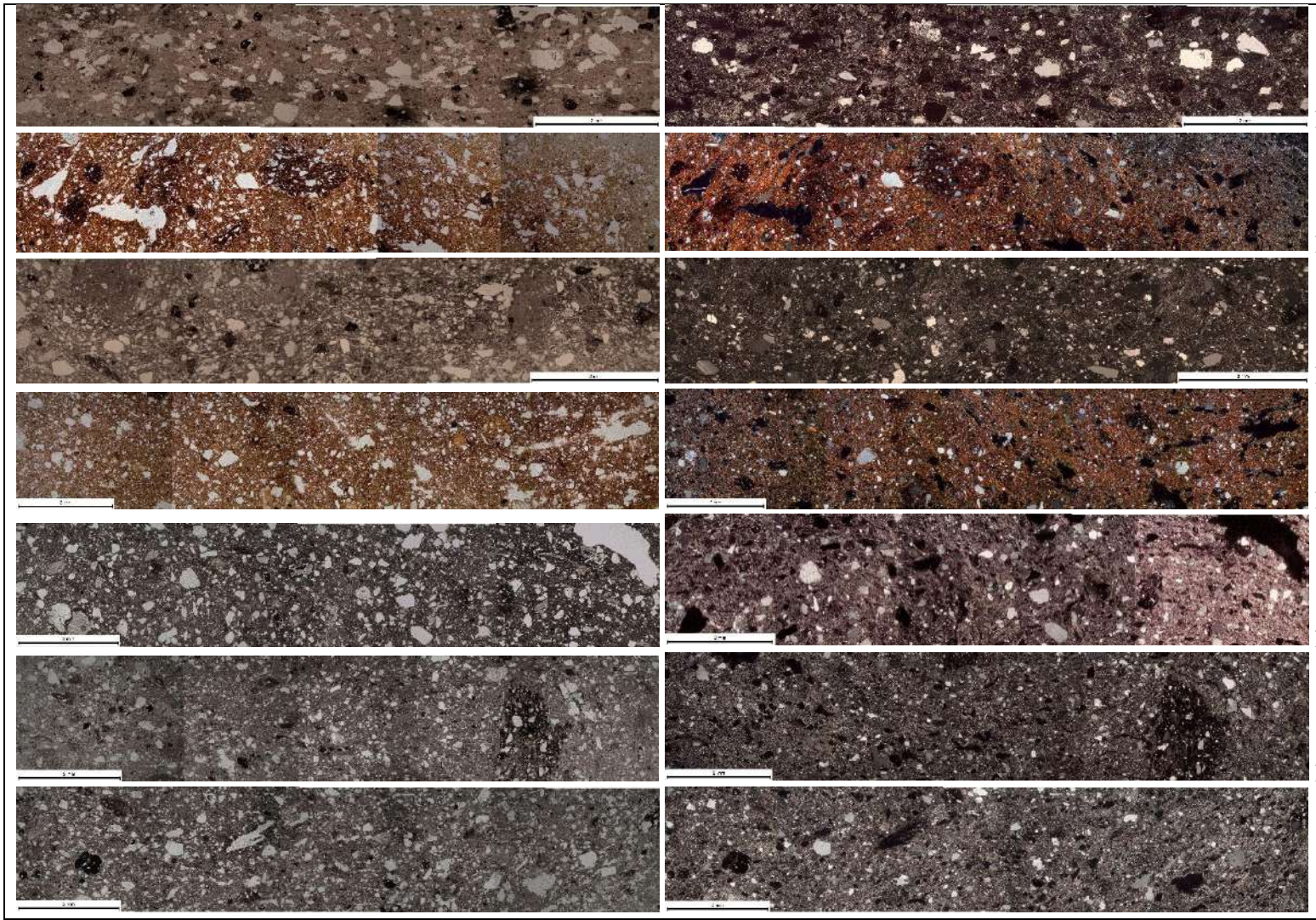


PAE.A.III.06



PAE.A.III.19


PAE.A.III.25
PAE.C.4.4
PAE.C.S.01
PAE.C.S.2
PAE.C.T.01
PAE.G.b.1
PAE.G.b.5
PAE.G.b.6



PAE.G.C.3

PAE.G.f.03

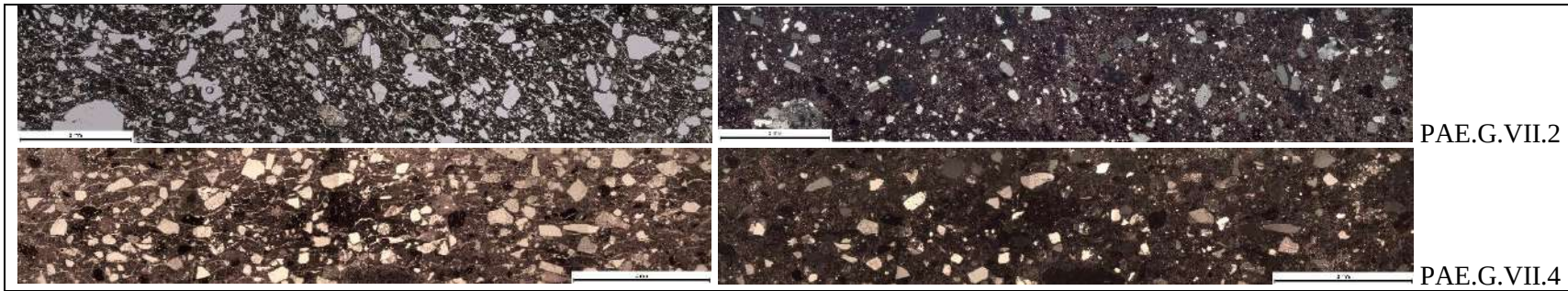
PAE.G.III.4

PAE.G.IV.04

PAE.G.R.01

PAE.G.T.01

PAE.G.T.02


PAE.G.VII.2

PAE.G.VII.4

Petrographic description

Inclusions

35% eq. & el. a-r. <2.5, mode = 0.4-0.6. Single spaced. Medium to fine sand sized. Poorly aligned to margin. Slightly bimodal, moderately sorted grain size distribution (quartz and feldspars), poorly sorted coarser grog grains and rock fragments.

Dominant: Quartz; eq. & el. sr-sa. < 0.9, mode = 0.3 Monocrystalline and polycrystalline. Often polycrystalline. Generally wavy extinction. Polycrystalline
Frequent: K-feldspars, orthoclase/sanidine, el., a-sr, <0.9 mm, mode = 0.6. Common Carlsbad twinning. Cloudy.
Common: Argillaceous rock fragments/Grog; eq & el. sa-sr. <2.5mm, mode = 0.6 mm. Two main types:
1. Dark brown. Different density. Sharp to merging boundaries. Low optical activity.
2. Medium brown brown. Slightly different density. Sharp to merging boundaries. Slightly optically active.
Sintered grog in PAE.A.III.06.
Few: Arenaceous sedimentary rock fragments; eq & el. r. <1.2 mm. Rich in quartz, generally with iron cement.
Few: Volcanic rock fragments, eq. & el., sr.-r., <0.9 mm, mode = 0.4. Generally, trachyte with glassy groundmass and feldspar crystals.
Few: Plagioclase, eq. & el., a-sa., <0.6, mode = 0.2. Twinning, albite/anorthite generally attested.
Few: Opaques; el.-eq., sr. <0.3 mm, mode = 0.1 mm. Ferromagnesian.
Few: Chert eq., a-sr. <1.2, mode = 0.45. Common in PAE.A.III.25.
Few: mica/biotite, el., a. Common silt size mica, few biotite, <0.8, mode = 0.2.
Rare: Clinopyroxene, eq.-el., sa. 0.2-0.3 mm. Subhedral.
Rare/absent: Pisolith, eq., r., 0.9.
Rare/absent: Calcedony, eq., sr., size = 0.6 mm.
Rare/absent: Metamorphic rock fragments, like schist (quartz and layered mica), sr., el., 0.3,
Rare/absent: Hornblende, eq., sa., 0.15, anhedral.
Rare/absent: Siltstone/mudstone; el., sr., 0.6 mm. (red, orange).
Rare/absent: Microcline, eq., sa., 0.3 mm.

Matrix
60%. Non-calcareous clay. Mostly brown in PPL and XPL, in some cases yellowish, reddish and orange brown. Mostly homogeneous with moderate optical activity, variously strial, striated or speckled. Sintered PAE.G.VII.2 and sintered core in PAE.A.III.19.

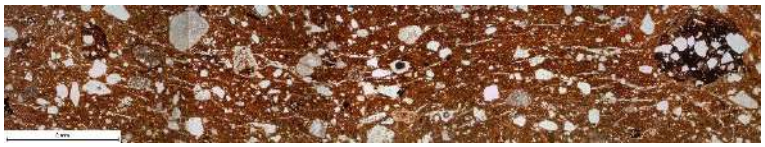
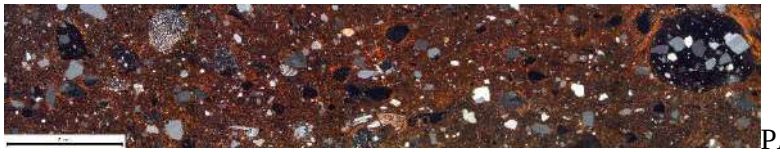
Voids
5%. Consisting mainly in planar voids parallel to margins and meso and macro-vughs, mainly equant. In PAE.G.T.1 vesicles, channels in PAE.G.T.2. Burnt organics in all the samples, recognised through voids with blackened edge.

Fabric Pae4 – Quartz-feldspathic sand: TOT 28 samples

Subgroup Pae4a – Sandy – 20 samples



PAE.A.II.05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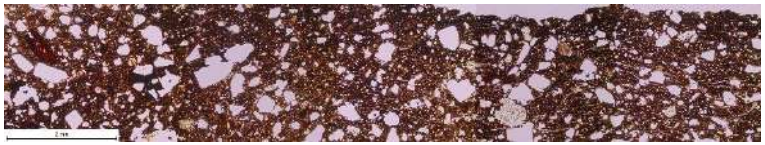
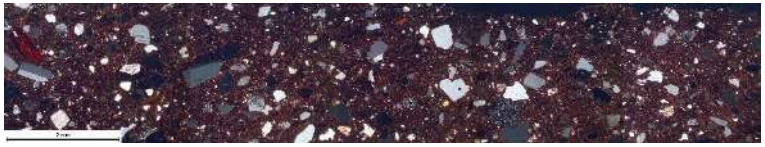
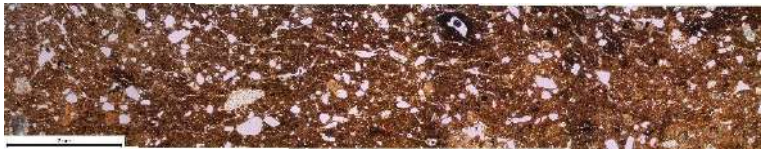
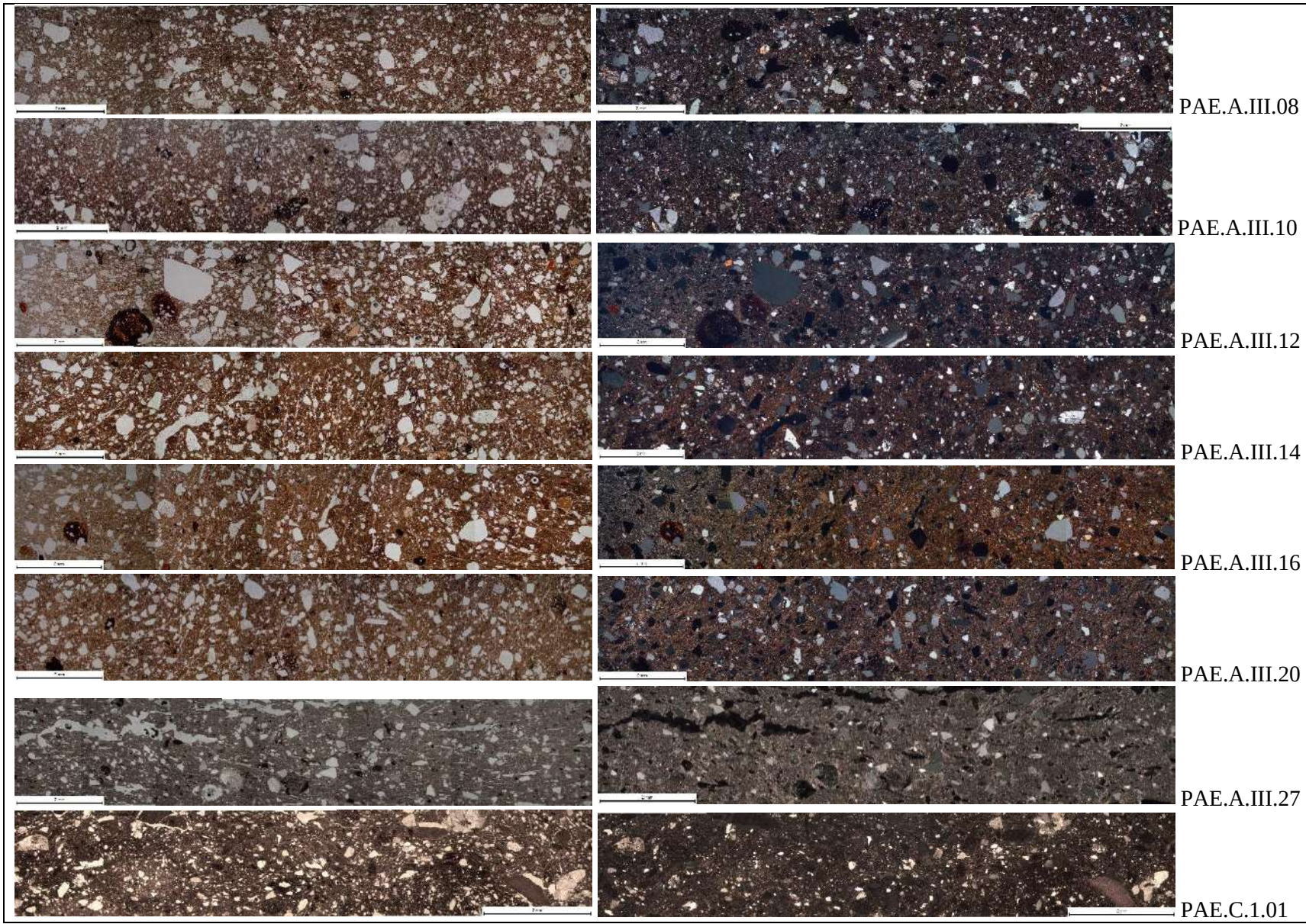


PAE.A.III.3



PAE.A.III.5



PAE.A.III.07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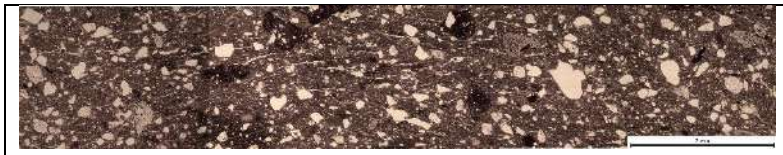
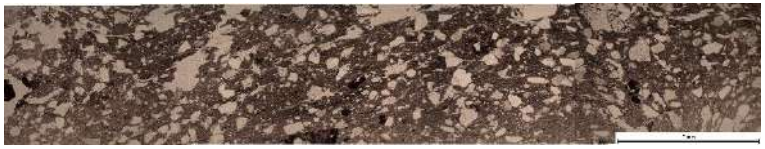
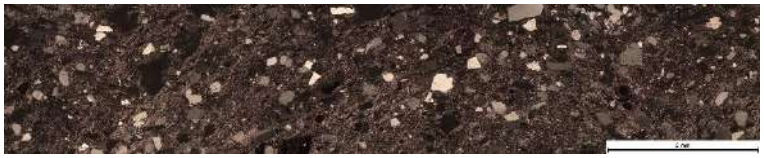
PAE.A.III.16
PAE.A.III.20
PAE.A.III.27
PAE.C.1.01



PAE.C.2.3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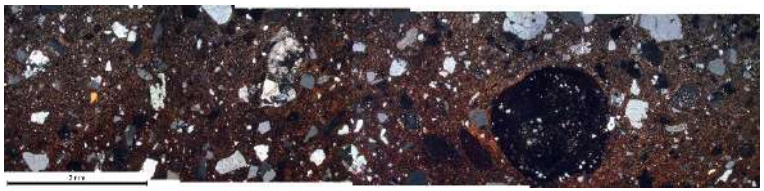
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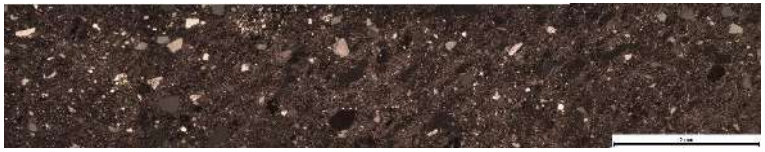
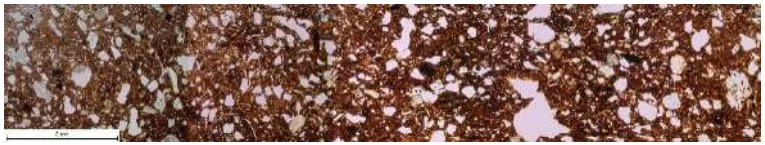
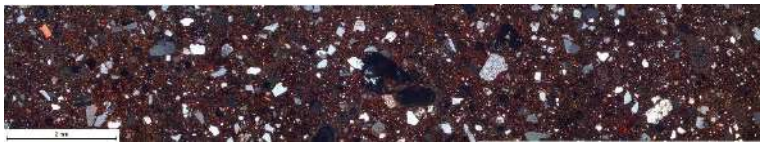

PAE.C.S.3



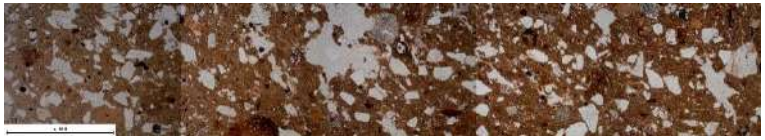
PAE.C.T.04



PAE.C.T.05

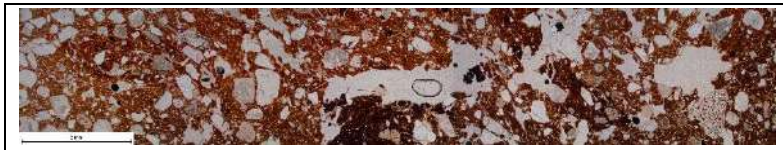
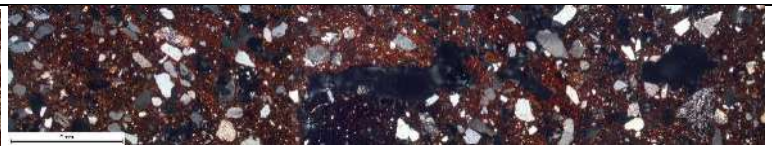


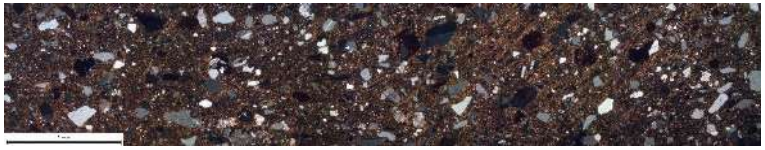
PAE.G.V.04

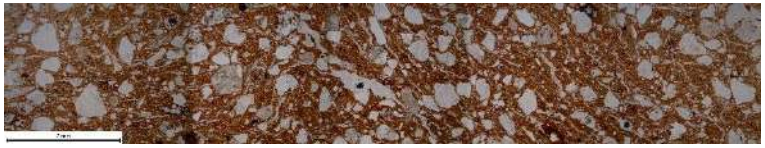
Subgroup Pae4b - Medium Sand – 4 samples



PAE.A.II.03

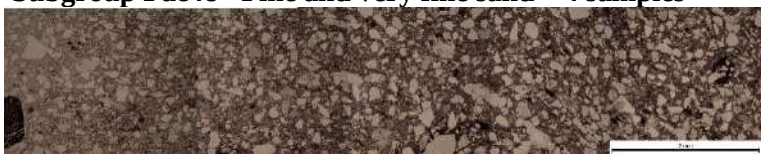


PAE.A.II.04



PAE.A.III.22 slab



PAE.C.2.4

Subgroup Pae4c - Fine and very fine sand – 4 samples



PAE.C.2.8


PAE.C.S.4



PAE.C.T.12



PAE.G.IX.01

Petrographic Description

Inclusions

40% eq. & el., sr. to sa., < 1.27 mm, medium to fine sand, single-spaced or less. Mainly randomly oriented. Moderate to well sorted grain size distribution.
Dominant: Quartz eq., sr.-sa., < 1.3, mode = 0.20 (Pae4a), 0.30 (Pae4b), 0.14 (Pae4c)mm, and silt size. Angular in Pae4a, rounded in Pae4b, medium to fine sand size.
Frequent: K-feldspar, el., sa., < 1.3, mode = 0.23-0.25. Sanidine or orthoclase with twinning.
Frequent: Polycrystalline quartz, eq.-el., sr.-sa., < 0.62, mode = 0.31-0.39.
Common: Volcanic rock fragments, eq.-el., sr., < 0.78, mode = 0.20-0.43. Trachytic, feldspars crystals in glass groundmass.
Common/Few: Igneous rock fragments, eq., sa-sr., < 1.27, mode = 0.23-0.40. Constituted of quartz, k-feldspar/plagioclase, mica and opaques, iron alterations.
Few/Common: Mica, el, sa., mainly silt size.
Few: Biotite, el., a., 0.10-0.23.
Few: Opaques, eq., sr., < 0.36, mode = 0.14.
Few: Plagioclase, eq.-el., sa., < 0.63, mode = 0.15. Albite twinning.
Few: Chert, eq.-el., sr.-sa., < 0.53, mode = 0.25.
Very few: Pisolith, eq., r., < 2.1 mm.
Very few: Hornblende, eq., a., < 0.3, mode = 0.25.
Very few: Pyroxenes, eq.-el., sa., < 0.53, mode = 0.22.
Rare: ARF/Grog, el.-eq., sa.-sr., < 0.90, mode = 0.52. Two main types: light brown and dark brown. Surely grog only in PAE.A.II.5, and sintered in PAE.A.III.20. In the other cases mainly arf or clay pellets.
Rare: Microcline, eq., sa., mainly in Pae4c, 0.3 mm.
Rare: Sedimentary rock fragments, eq.-el., sr., < 1.2, mode = 0.35. Siltstone, generally with iron cement.
Rare: Metamorphic rock fragments, el., sr., < 1.2, mode = 0.3, quartz rich with partial layering.
Rare-Absent: Calcedony, el., sr., < 1.2, mode = 0.6, PAE.A.III.12, PAE.G.V.4. Particularly common in PAE.A.II.3. In PAE.C.A.3 calcedony not within a clast, but probably in a void, size 1.10 mm, possible pore- or vug-filling cement with dissolution of the encasing clast or post-depositional.

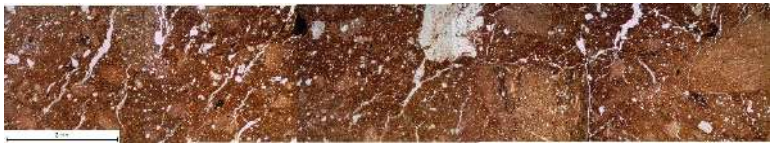
Matrix

57%. Non-calcareous clay. Light brown, yellowish, orange brown and brown in PPL, brown to dark brown in XPL. Mainly homogeneous, in few cases slightly inhomogeneous. The optical activity is present, generally strial, but often low also due to the mainly reducing firing conditions, high optical activity only in PAE.C.2.4, PAE.C.4.7. In PAE.A.II.5 it is almost sintered.

Voids

3%. Consisting mainly of macro, meso and micro planar voids and vughs mainly parallel to margin. Burnt organics attested in the majority of the samples.

Fabric Pae5 – ARF: 1 sample



PAE.C.2.01

Petrographic Description

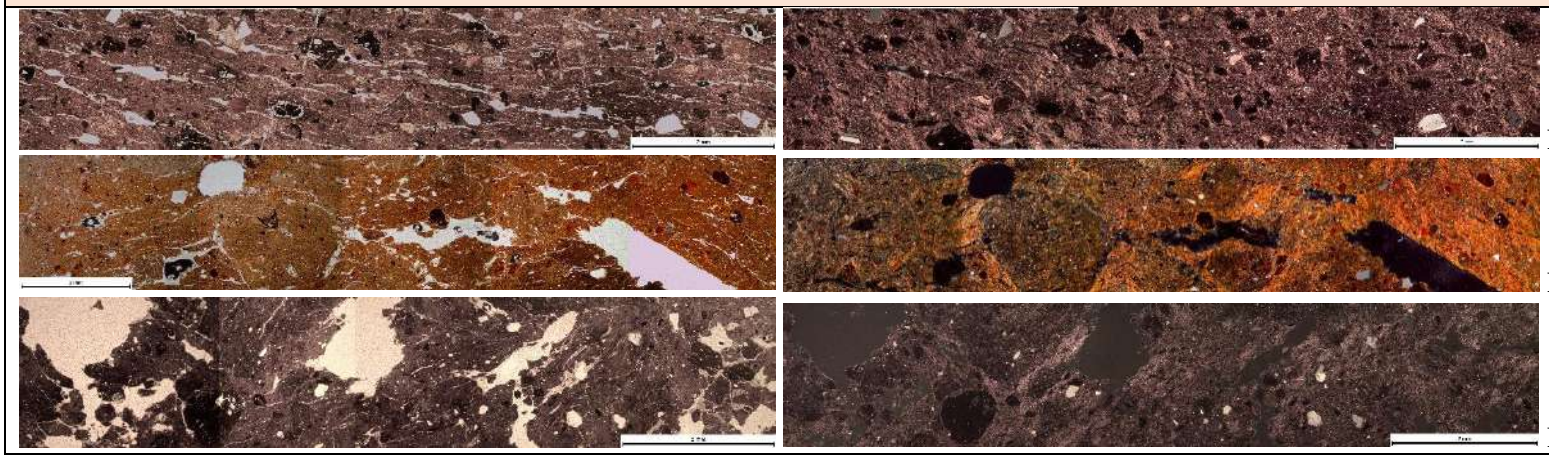
Inclusions
40% eq. & el., sa-sr., <2.8, mode = 0.31-0.77. Single spaced. Poorly aligned to margin. Bimodal distribution with poorly sorted sedimentary rock fragments and clay pellets, from pebble to sand size. Other components mainly silt size.

Dominant: Sedimentary rock fragments, eq., sr., < 2.8, mode = 0.77. Mainly mudstone, few sandstones with iron cement.
Frequent: Clay pellets, eq.-el., sr., < 0.8, mode = 0.55. Possibly due to irregular clay mixing.
Common: Quartz, eq.-el., sr., < 0.14, mode = 0.09. Mainly silt size.
Common: Volcanic rock fragments, eq.-el., sr.-sa., < 1.8, mode = 0.44. Feldspar crystal in a glassy matrix.
Few: K-Feldspar, silt size.
Few: Mica, silt size.
Few: Carbonate rock, el., sa., 0.3 mm.
Few: Chert, eq., sa., 1.2 mm.
Few: Clinopyroxene, eq., sa., < 0.3 mm, mode = 0.15 mm.
Rare: Opaques, < 0.37, mode = 0.20.
Rare: Calcedony, large mudstone with silicified bioclasts, el., sr., 2.1 mm.

Matrix
57%. Non calcareous clay. Brown in PPL and XPL. Inhomogeneous. Moderately optically active, striated b-fabric. Clay pellets highly optically active with striated b-fabric.

Voids
3%. Consisting in meso vughs mainly elongated and planar voids with fluidal alignment.

Fabric Pae6 – Organic temper: 3 samples



Petrographic Description

Inclusions

5% eq. & el., a-r < 2.1, mode = 0.3. Open spaced. Mainly randomly oriented.

Frequent: ARF/grog eq. & el. sa-sr, < 2, mode = 0.6. In some case sintered. Three main types, common shrinking:
1. Light brown-orange clay, slightly different density, generally merging edges, optically active probably clay pellets, same composition of the matrix;
2. Dark brown, often sintered or low optical activity. Different density, sharp to merging edges.
3. Light brown, similar to clay matrix but different colour. Slightly different density, sharp to merging edges. Optically active.

Common: Quartz eq., sr.-sa., Generally silt size, <0.45, mode = 0.15. Monocrystalline and few polycrystalline quartz, subrounded generally with wavy extinction.
Few: K-feldspar, sanidine or orthoclase, el., a-sr, < 0.6, mode = 0.30. Common Carlsbad twinning.
Few: Opaques, sr., eq., < 0.3. Iron rich.
Rare/absent: Chert, eq., sr., mode = 0.2. Mostly attested in PAE.G.VII.6.
Rare/absent: Muscovite/biotite, el., a., mostly silt-sized.
Very rare/absent: Clinopyroxene, < 0.3, mode = 0.2, anhedral and euhedral. Mostly attested in PAE.G.VII.6.
Very rare/absent: Pisolith, eq., r., <2.1 mm.
Very rare/absent: Microcline, eq., sa., mode = 0.20, anhedral, tartan twinning.
Very Rare/Absent: Calcareous inclusions, eq., sr., 0.9. Attested in sample PAE.G.VII.6.

Matrix

75%. Non-calcareous. Brown to orange brown in PPL and XPL. Inhomogeneous clay mixing probably due to irregular clay mixing, with presence of clay pellets, probably incompletely hydrated. Generally highly optically active, striated b-fabric.

Voids

20%. Consisting mainly of meso- and macro-elongate and equant vughs ad planar voids, generally moderately aligned to margins. Organics, particularly abundant in PAE.G.00.2 and PAE.G.XI.3. In some case charred remains inside burnt vughs.

Fabric Pae7 – Carbonatic with grog: 1 sample

PAE.A.II.01

Petrographic Description

Inclusions

17%, eq. & el., sa-sr., < 2.47, mode = 0.21. Single to double spaced. Moderately aligned to margin. Moderately bimodal, poorly sorted grain size distribution. Fine inclusions and few coarse ones mainly grog and rock fragments.

Dominant: Quartz eq., sr., < 0.86, mode = 0.17. Wavy extinction. Monocrystalline and polycrystalline.
Frequent: K-feldspar, eq.-el., a., < 0.36, mode = 0.22. Sanidine/orthoclase.
Frequent: Grog, eq.-el., a.-sr., < 0.97, mode = 0.35, dark brown, different density, sintered and with relic edge, quartz and feldspar inclusions.
Frequent: Chert, eq.-el., a.-sr., < 0.75, mode = 0.3.
Common: Volcanic rock fragments, < 0.28, mode = 0.23. Feldspars in glassy matrix.
Common: Plagioclase, eq.-el., a., < 0.31, mode = 0.20. Irregular twinning.
Common: Sedimentary rocks fragments, el., sr., < 2.47, mode = 0.30. Fine sandstone with iron cement, in some cases with partial layering. Orange mudstones.
Few: Opaques and iron aggregates, eq., sr., < 0.40, size = 0.21.
Few: Mica, silt size.
Few: Clinopyroxene, eq., sr., < 0.3, mode = 0.12-0.16.

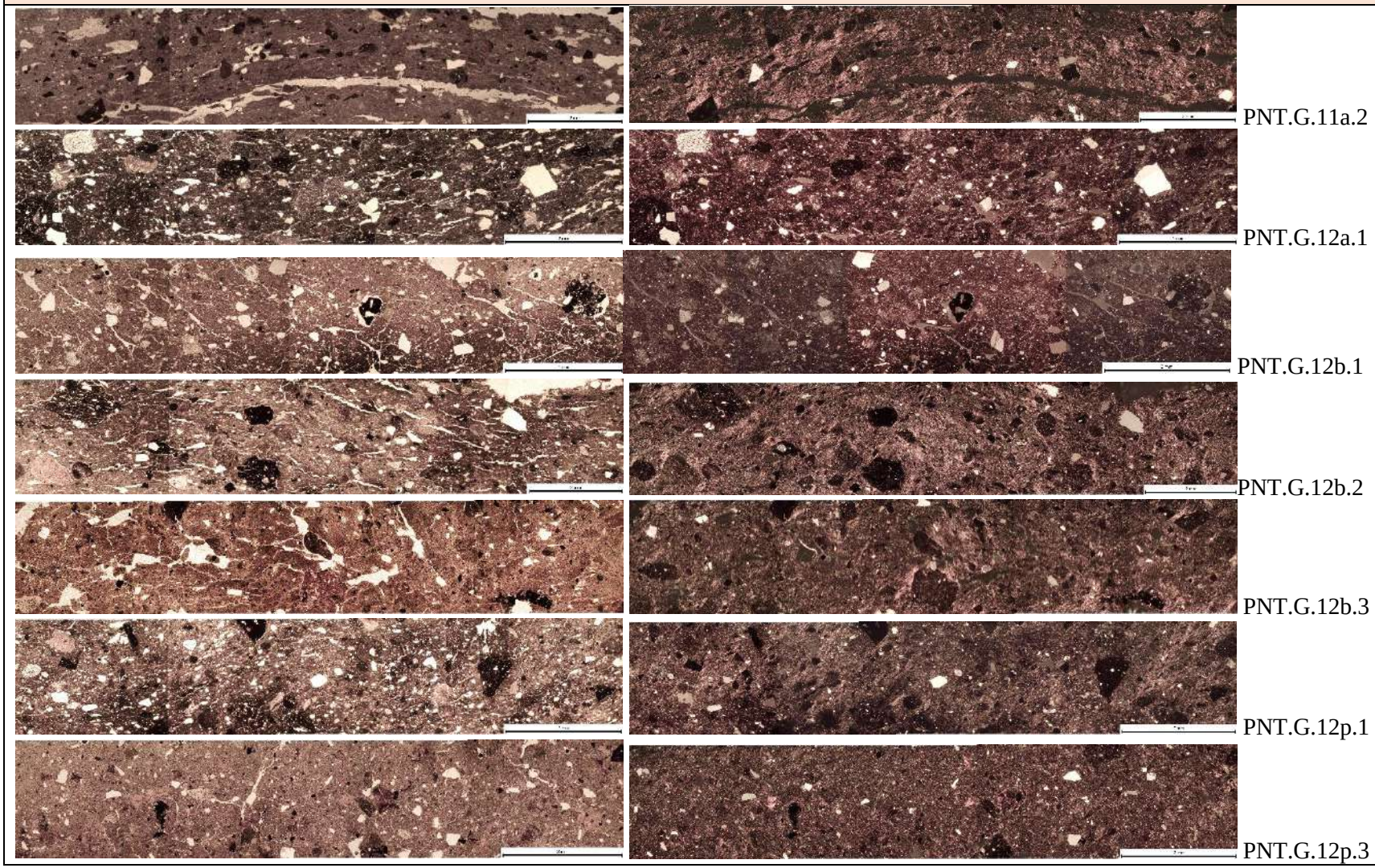
Few: Calcite grains with twin lamellae, eq., a., euhedral, < 0.35, size = 0.15.
Rare: Calcareous rock fragments, eq., sr., < 0.81, mode = 0.21. Possibly limestone.

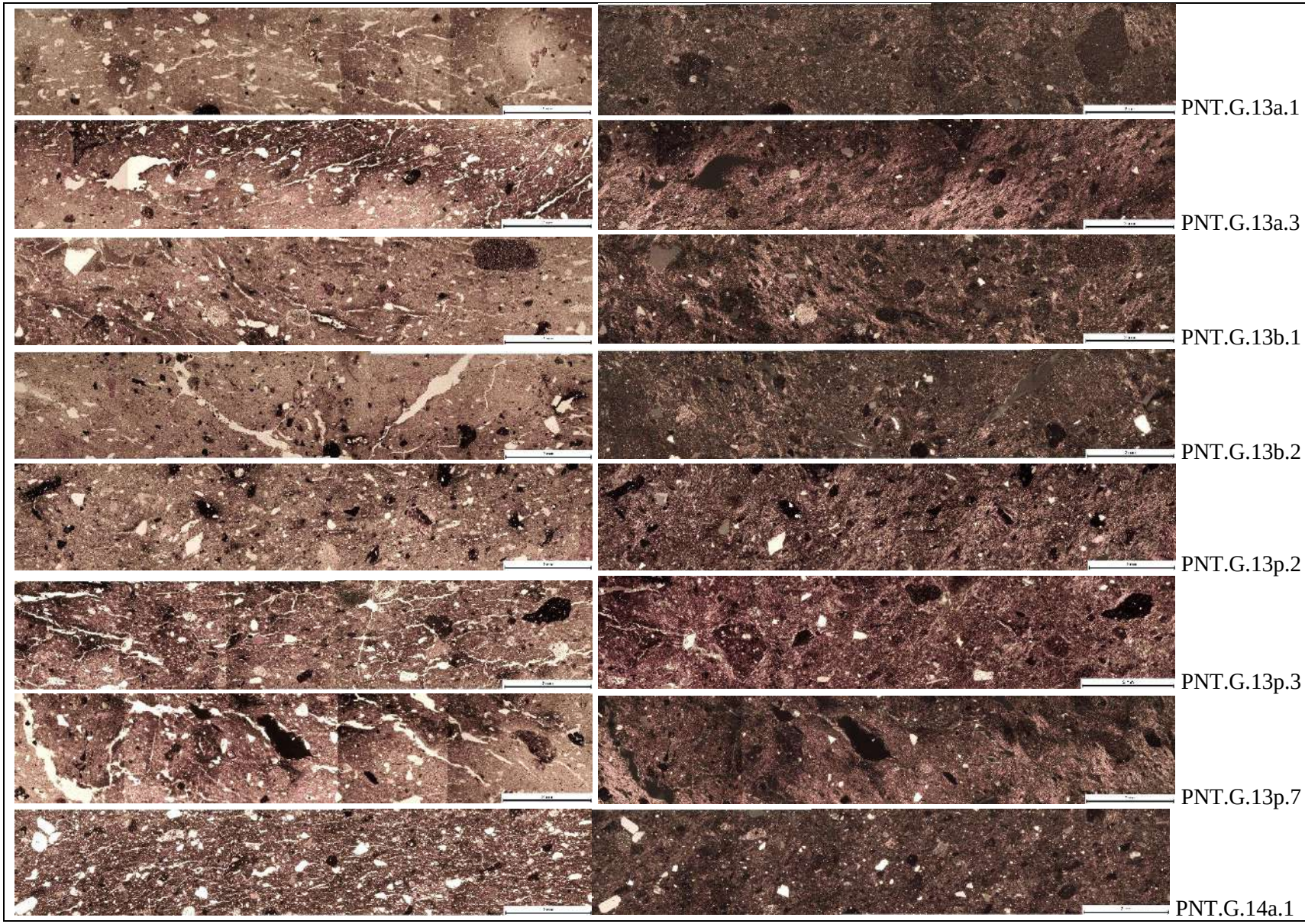
Voids
3% Pores/vesicles, and few planar voids randomly oriented.

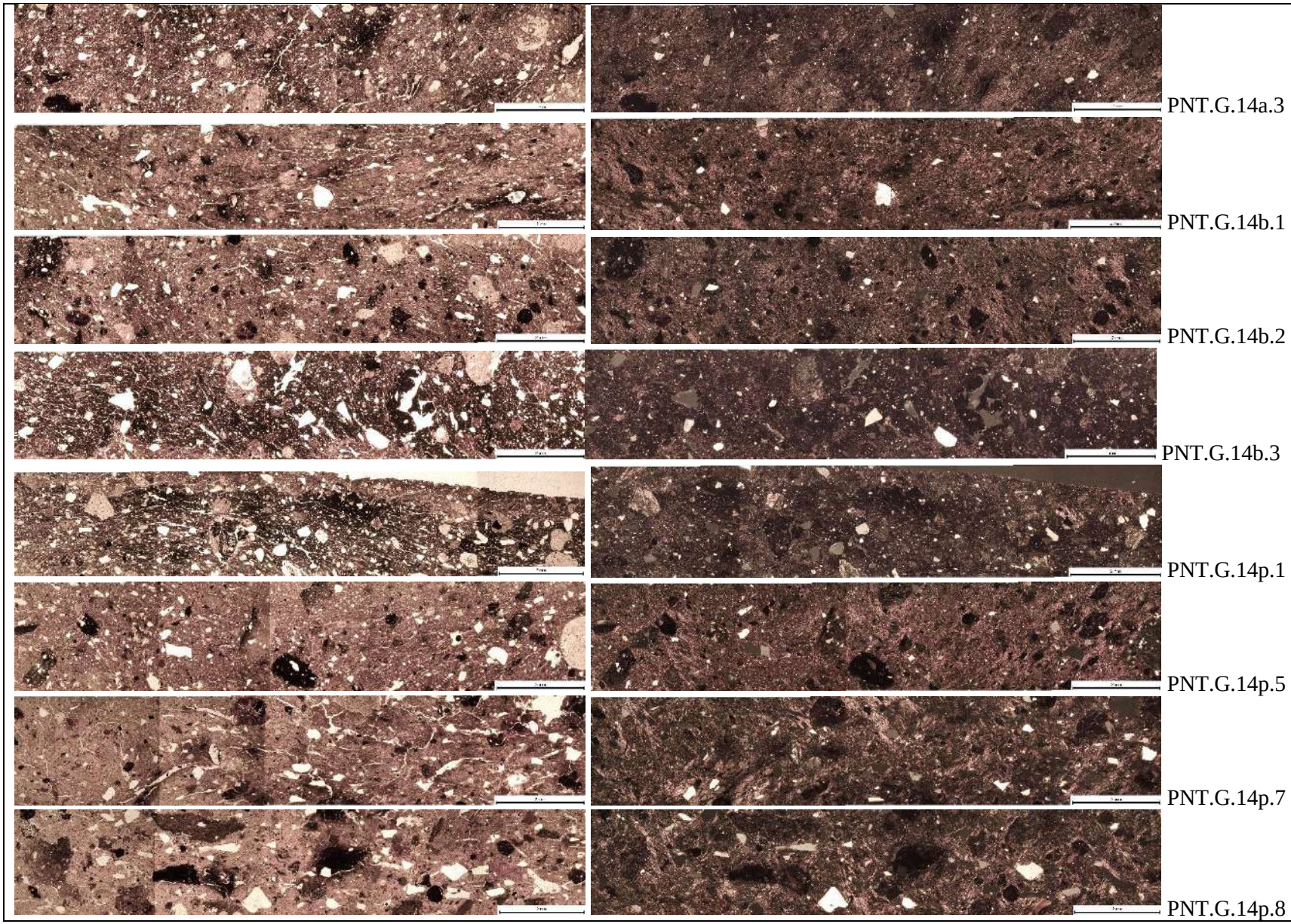
Matrix
80%. Homogeneous, calcareous clay, low optical activity, speckled b-fabric. Yellowish PPL, light brown XPL.

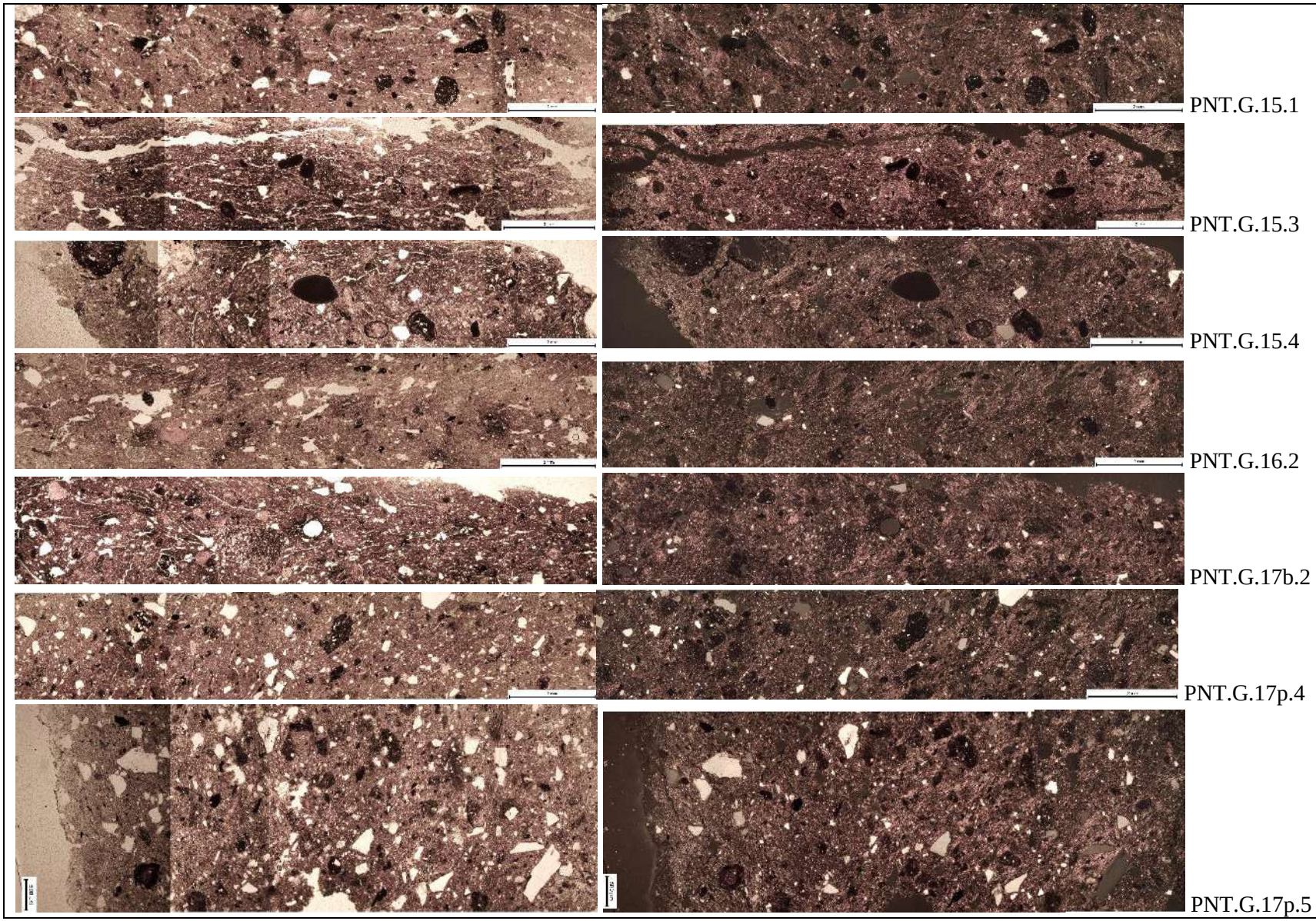
2. PONTECAGNANO – FABRICS DESCRIPTIONS

Fabric Pnt1 – Grog and burnt organics: TOT 42 samples




PNT.G.13a.1
PNT.G.13a.3
PNT.G.13b.1
PNT.G.13b.2
PNT.G.13p.2
PNT.G.13p.3
PNT.G.13p.7
PNT.G.14a.1


PNT.G.14a.3
PNT.G.14b.1
PNT.G.14b.2
PNT.G.14b.3
PNT.G.14p.1
PNT.G.14p.5
PNT.G.14p.7
PNT.G.14p.8



PNT.G.15.1

PNT.G.15.3

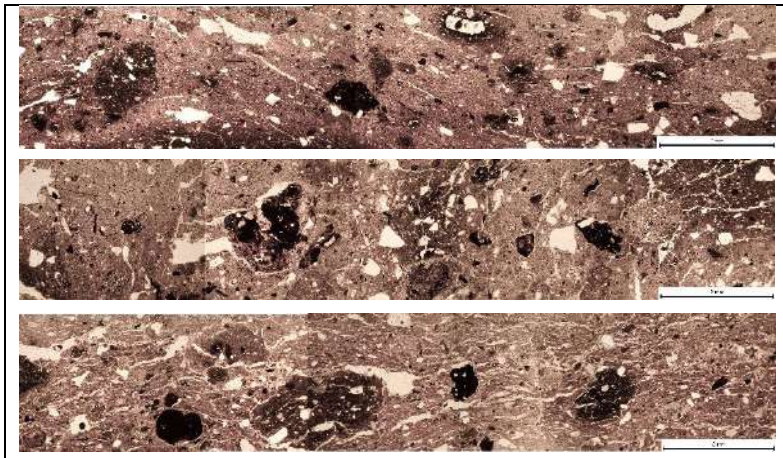
PNT.G.15.4

PNT.G.16.2

PNT.G.17b.2

PNT.G.17p.4

PNT.G.17p.5

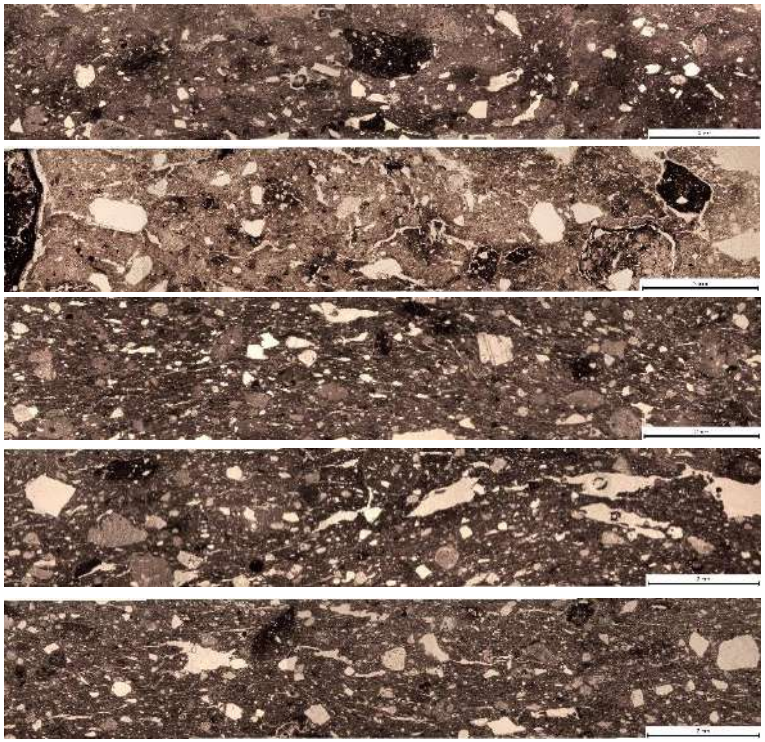


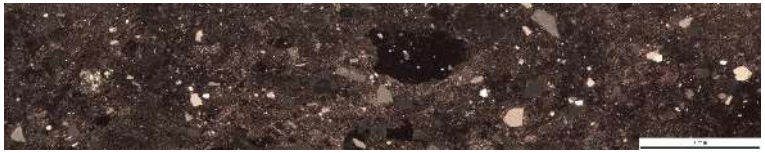
PNT.G.20p.1

PNT.G.90p.1

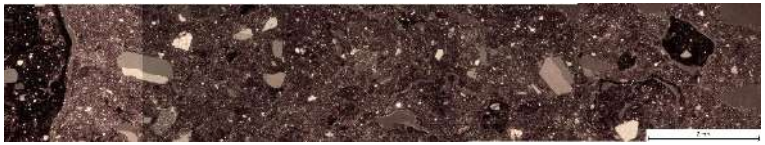
PNT.G.14a.4

Pnt1b: GROG + QUARTZ AND FELDSPARS





PNT.A.20.14

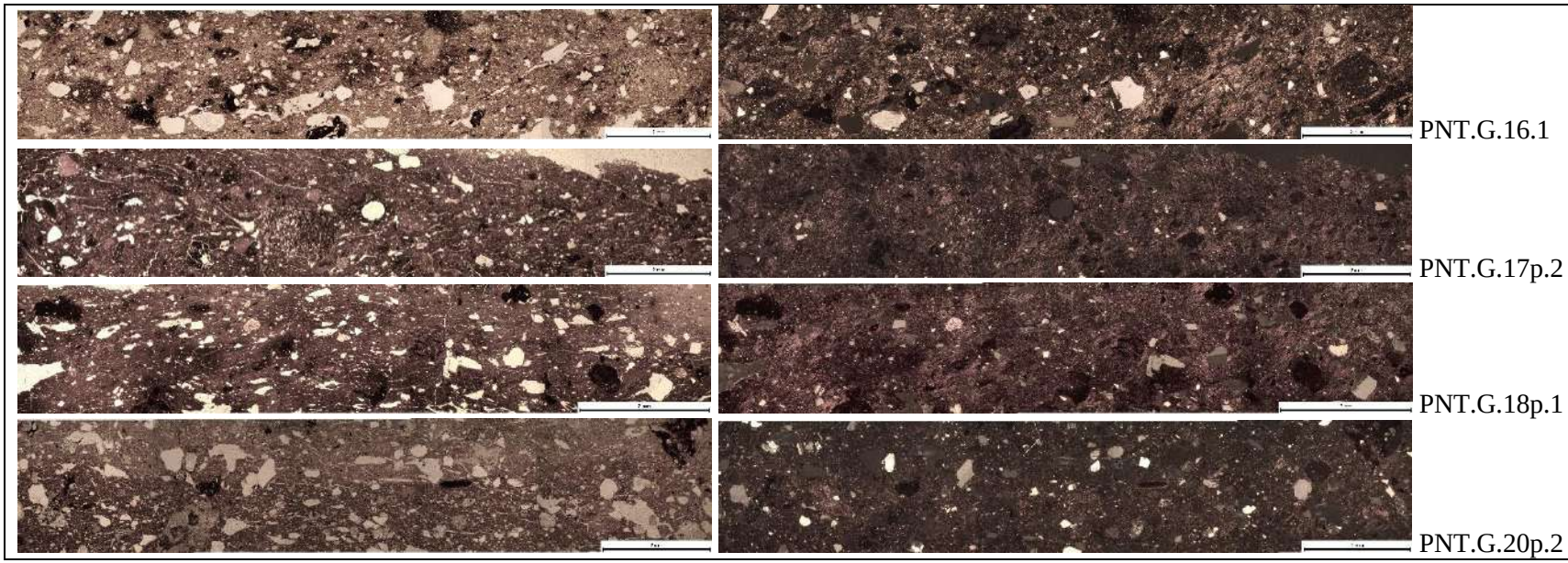


PNT.G.11a.3

PNT.G.13p.4

PNT.G.14a.2

PNT.G.14p.2



Petrographic Description

Inclusions

20% eq. & el. <2.1, mode = 0.6, double to single spaced. Poorly sorted grain size distribution. Mainly randomly oriented. In PNT.G.14p.8, parallel to margin.

Dominant: ARF/grog eq. & el. sa-sr, <2.1, mode = 0.6. In some case sintered.
Three main types: light brown-orange clay, optically active; Dark brown, often sintered; Orange highly optically active and with few inclusions;
Relic surfaces attested. In some case the brown grog shows volcanic (trachyte) inclusions.
Grog rich in inclusions mainly quartz and small mica in PNT.G.12p.1.
Opaques: dominant, iron rich. Also present iron smearings, 0.4.
Frequent: Quartz eq., sr.-sa., < 0.6 mode = 0.3. Monocrystalline, subrounded or subangular with generally wavy extinction.
Common: K-feldspar, orthoclase or sanidine, el.-eq., a-sr, <1.2, mode=0.45. Few Carlsbad twinning.
Common/Few: Plagioclase feldspars, el.-eq., sa., mode = 0.25, twinning. Albite/anorthite attested.
Common/Few: Volcanic rock fragments, eq.-el., sr., < 1.5, mode = 0.6, trachyte.
Few: Clinopyroxene, eq.-el., sa., < 0.7, mode = 0.3, anhedral and euhedral, small dimensions.
Few: Muscovite/mica, el., a., silt size.
Few: Biotite, el. a., 0.3.

Few: Sedimentary rock fragments, el.-eq., sr., 0.6. Sandstone with iron or calcite cement, generally equant, siltstone generally elongated.
Very few: Chert, eq.-el., sr.- a., <0.9, mode = 0.3: often with iron alterations.
Very few: Pisolith, eq., r., < 5mm, mode = 0.9 mm.
Rare: horneblende, eq., sa., size. Euhedral to anhedral. Twinned. PNT.G.12b.3, PNT.G.14p.8.

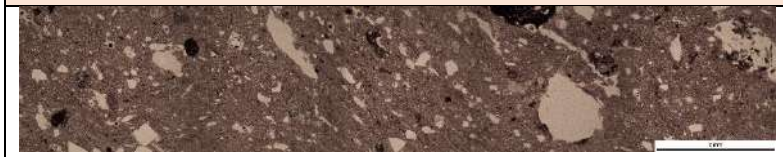
Matrix
70%. Non-calcareous. From orange, light brown to dark brown in PPL, light brown to TOT in XPL. Homogeneous to inhomogeneous (PNT.G.11a.2). Low to high optically active, generally strial b-fabric.

Voids
10%. Consisting mainly of meso- and macro-elongate and equant vughs and planar voids, generally moderately aligned to margins. Almost always present burnt organics. Sample PAE.G.14a.4 particularly rich in voids (20%), planar voids well aligned to margin.

Variants
Variant 1b: richer in feldspars (frequent), 30% inclusions polycrystalline quartz, chert, pyroxenes and rock fragments (especially sedimentary 0.6).

Notes
PNT.G.11a.2: rich in planar voids parallel to margin.
PNT.G.13b.2: rich in burnt organics.
PNT.G.13p.2: rich in iron opaques, dark sintered grog or opaque
PNT.G.17p.4 and p.5: less voids from organics, more compact and higher firing

Fabric Pnt2 – Volcanic: TOT 12 samples



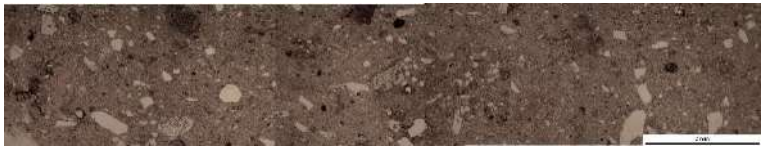
PNT.A.20.25



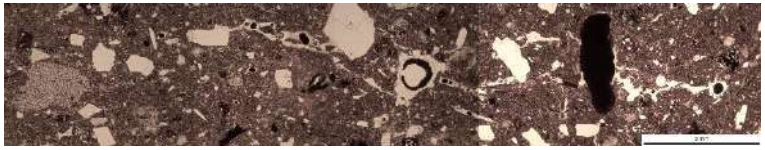
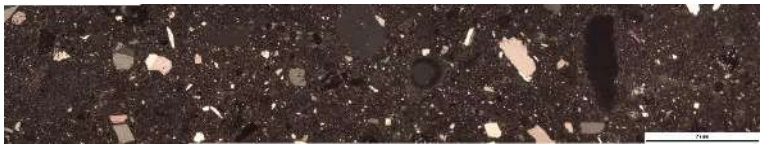
PNT.A.21.4

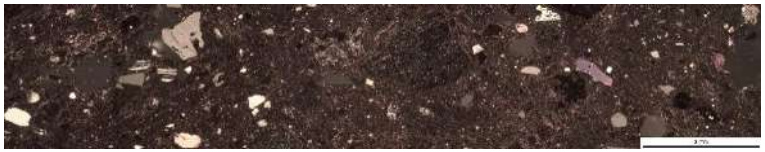


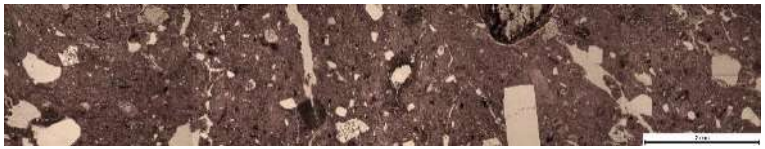
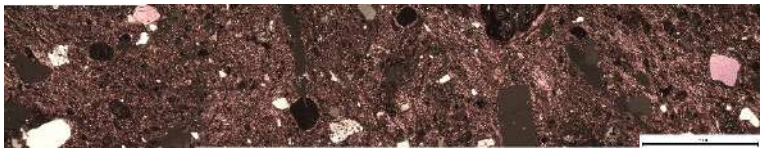
PNT.A.20.28



PNT.A.20.9

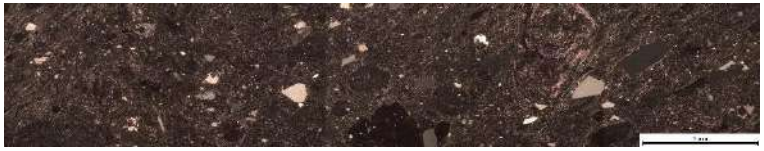


PNT.A.20.26



PNT.A.20.21



PNT.A.20.13



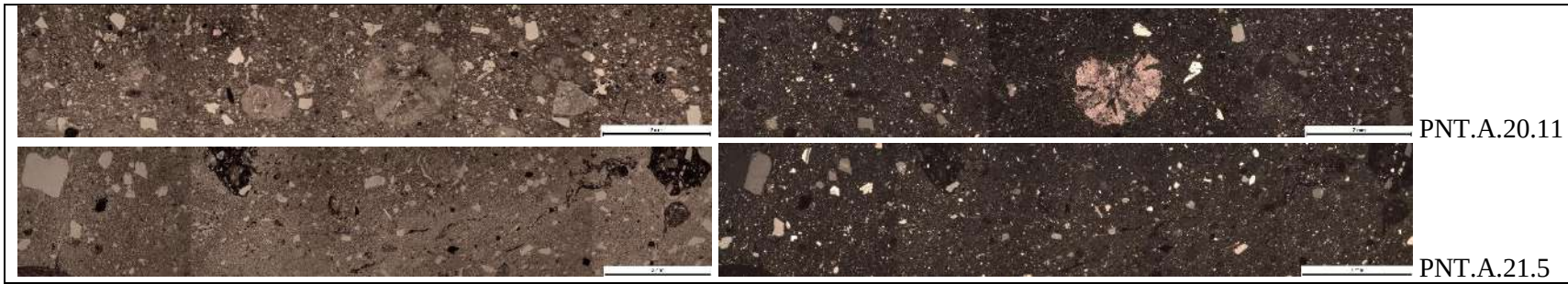
PNT.A.20.19



PNT.A.20.3

PNT.2b Volcanic + feldspar + Calcareous



PNT.A.20.20


PNT.A.20.11

PNT.A.21.5

Petrographic Description

Inclusions
15% eq. & el. sa-sr. <2.1, mode = 0.45. Single spaced. Poorly aligned to margin. Slightly bimodal grain size distribution. Fine inclusions and coarse ones mainly volcanic lithics (trachyte), pyroxenes and k-feldspars.
Dominant: K-feldspar, orthoclase or sanindine, el.-eq., a-sa, <1.5 mm, mode = 0.45. Carlsbad twinning, in some cases zoning.
Frequent: Quartz eq., sr.-sa., <2.1 mm, mode = 0.3. Monochrystalline, subrounded or subangular with generally wavy extinction.
Opaques: common, iron rich.
Common: Clinopyroxene, el.-eq., sa., <2.1 mm, mode = 0.45, anhedral and euhedral.
Common: Plagioclase feldspars, el.-eq., sa., < 2.1, mode= 0.45, twinning. Albite/anorthite attested. Possible microcline in PAE.A.20.13.
Common: Volcanic lithics, eq.-el., sr.-sa., <1.7 mm, mode = 0.6, trachyte and volcanic glass.
Few: ARF and clay pellets, brown, optically active, slightly different density, sr.-sa., < 1.5,
Few: Horneblende, eq., sa., 0.3 mm. Euhedral to anhedral.
Few: Muscovite/mica, el., a., silt size.
Few: Chert, eq.-el., sr.- a., <1.2 mm.
Few: Pisoliths, < 2mm, whole and in some cases fragmented.
Very rare/absent: Biotite, el., a., 0.6 mm.
Very rare-Absent: sedimentary rock fragments, el.-eq., sr., dimensions. Sandstone with iron or calcite cement, generally equant, siltstone generally elongated.
Very Rare-Absent: calcareous inclusions, sr., partially preserved, eq., < 1.5 mm.

Voids
5%. Mainly meso and micro vughs, in some cases vesicles and planar voids, mostly randomly oriented.

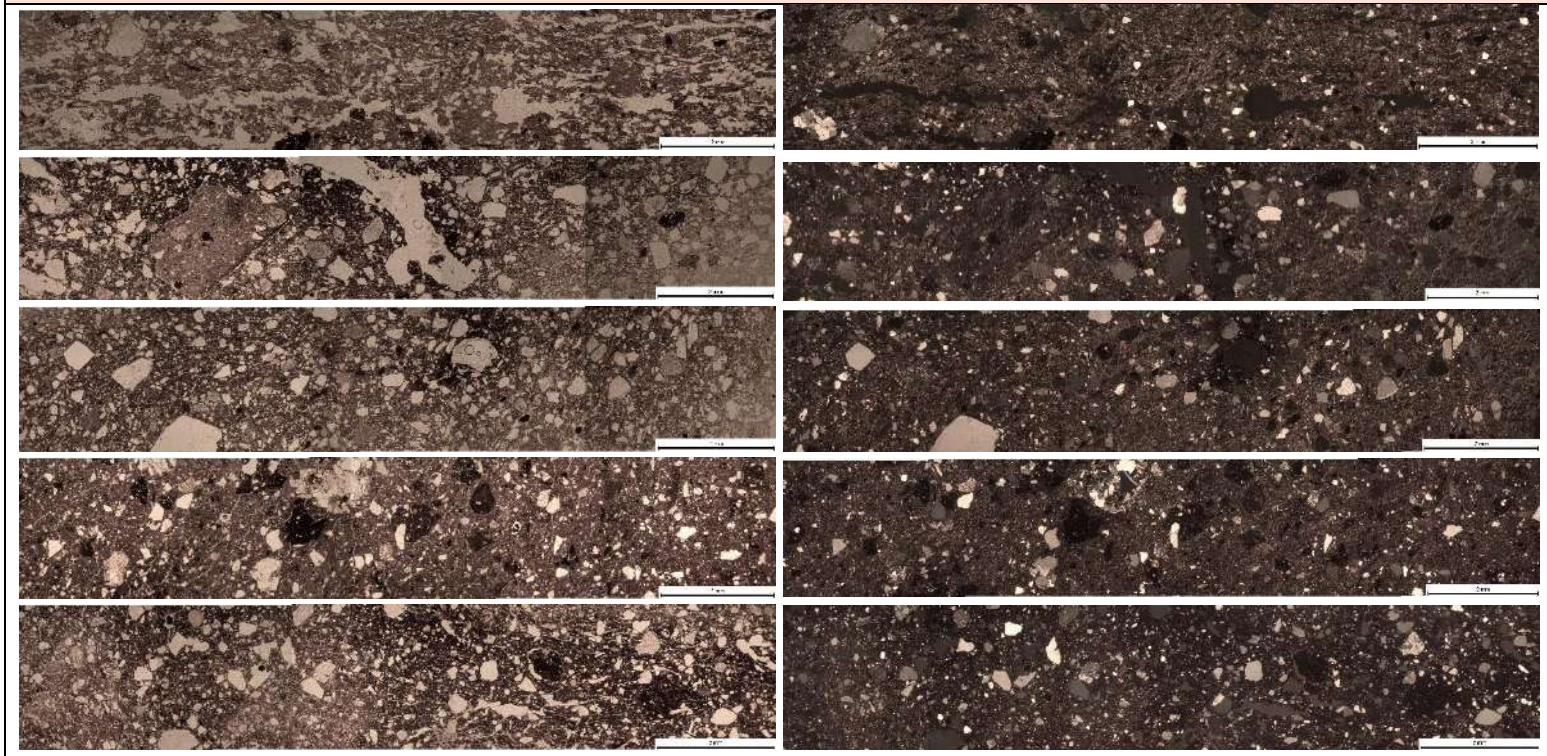
Matrix

80%. Non-calcareous. From orange, light brown, yellow, reddish to brown in PPL, brown to dark brown in XPL. The matrix is mostly homogeneous, only in few samples slightly heterogeneous (PNT.A.20.19, PNT.A.20.28), moderate to low optical activity, generally striated b-fabric.

Notes

Variant with more feldspars, silt size quartz and feldspars, micritic calcite in some cases and carbonatic inclusions, 30% inclusions. Large angular quartz grains.

Fabric Pnt3 – Sandy: TOT 5 samples



PNT.G.17p.3

PNT.G.13p.6

PNT.A.20.2

PNT.G.14p.3

PNT.A.20.6

Petrographic Description

Inclusions

35% eq &.el., sr-sa., <2.1, mode = 0.30. Single spaced. Moderately aligned to margin. Well sorted, medium to fine sand size.

Dominant: Quartz, eq., sa.-sr., < 1.5, mode = 0.3.Wavy extinction, polycrystalline also present. Quartzite
Frequent: K-Feldspar, el., sa., < 0.6, mode = 0.45. Twinned. Often with iron or clay alterations.
Common: Plagioclase, eq. sa., < 0.3, mode = 0.15. Carlsbad twinning.
Common/Few: Chert, eq.-el., sa., <0.75 mm, mode = 0.2-3 mm.
Few: Microcline, eq. sr., < 0.25, mode = 0.15.
Few: Volcanic rock fragments, el.- eq., sr.-sa., < 0.75, mode = 0.6. Feldspar crystals in a glassy matrix.
Few: Grog, el., sa., < 2.1, mode = 0.6-9 mm. One large fr. With relic surface, on average smaller with different density, mostly sharp boundaries.
Few: Mica, el., sa, silt size, with few larger biotites 0.2 mm.
Rare: Clinopyroxene, el., sa., <0.3, mode = 0.15, generally anhedral.
Rare: Opaques, < 0.3, mode = 0.15.
Very rare: Rock fragments, quartzite, sedimentary, quartz+feldspars, sr. quartz with mica layering metamorphic.

Matrix

60%. Non calcareous, homogeneous, light brown PPL and XPL. Moderate optical activity, speckled b-fabric.

Voids

5%. Consisting in meso and macro vughs mainly equant and elongated poorly aligned to margins. In PNT.G.17p.3 also planar voids aligned to margins. Few large burnt organics.

Fabric Pnt4 – Carbonatic: TOT 1 sample



PNT.A.20.15

Petrographic Description

Inclusions

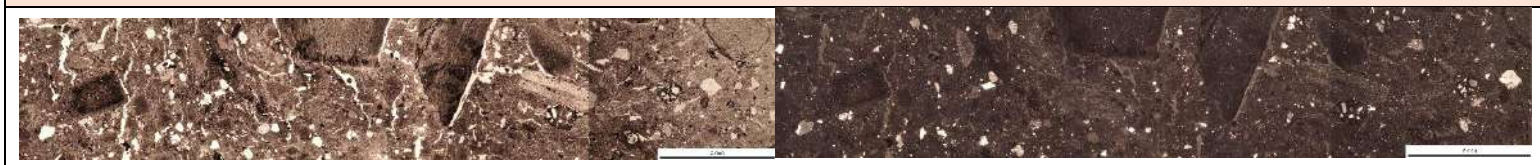
30% el. & eq., sr-sa., <2.8, mode = 0.45. Single spaced. Moderately aligned to margin. Poorly sorted, calcareous inclusions of different dimensions from pebble to silt size. Other components mainly sand sized.

Dominant: Calcareous fragments, el.-eq., sr.-sa., < 2.8, mode = 0.6. In some cases also shell fragments.
Frequent: Quartz, eq., sa.-sr., < 0.6, mode = 0.45.Wavy extinction, polycrystalline also present.
Common: Volcanic rock fragments, eq-el., sr.-sa., < 0.45, mode = 0.3. Feldspar crystal in a glassy matrix.
Few: Sedimentary rock fragments, mudstone (orange) and siltstone made of quartz and mica, < 2.4 mm, mode = boulder size, in one case with partial mica layering.
Few: K-Feldspar, el., sa., twinned, 0.6.
Few: Mica, el., sa, very fine sand size and biotite, < 0.45 mm.
Rare: Clinopyroxene, el., sa., 0.3 mm, subhedral.
Very rare: Plagioclase, eq. sa., 0.15.

Matrix
65%. Calcareous clay. Slightly inhomogeneous, grey-light brown PPL and XPL. Low optical activity.

Voids
3-5%. Consisting in meso vughs mainly elongated and planar voids with moderate alignment to margins.

Fabric Pnt5 – Sedimentary – 1 sample


PNT.A.21.01

Petrographic Description

Inclusions

35% el. & eq., sr-sa., <3.3, mode = 1-0.3. Single to double spaced. Not aligned to margin. Poorly sorted, slightly bimodal: large (pebble size) mudstones/clay pellets and chert angular fragments and smaller slate, quartz and rock fragments.

Dominant: Mudstones or clay pellets, el.-eq., sa., < 3.3, mode = 1.2. In some cases rich in iron.
Frequent: Quartz, eq., sa., < 0.6, mode = 0.3.Wavy extinction, polycrystalline also present.
Frequent: Chert, el., a., 0.49 mm.
Few: Volcanic rock fragments, el.- eq., sr.-sa., 0.3. Feldspar crystal in a glassy matrix. One with highly developed crystals.

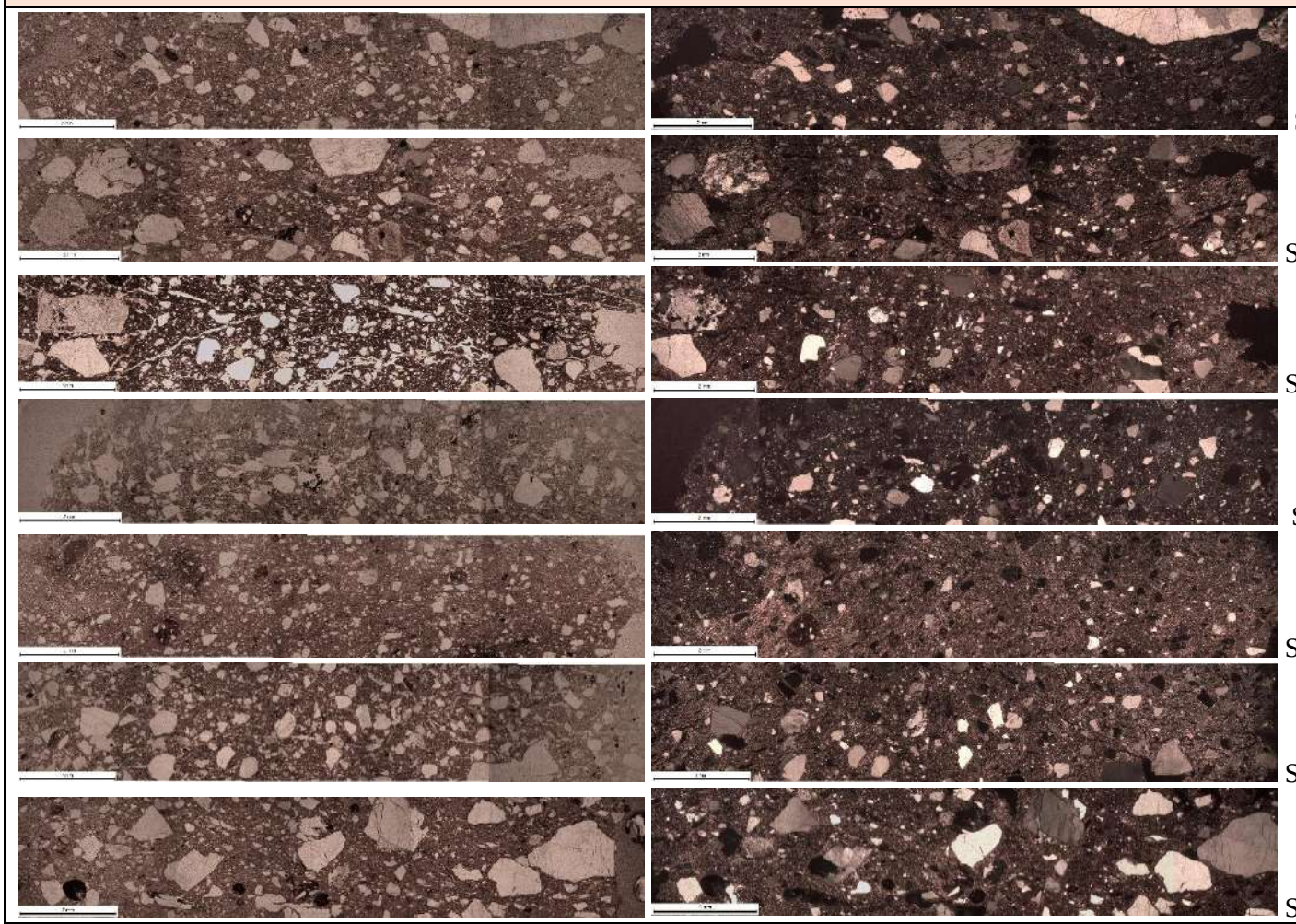
Few: K-Feldspar, el., sa., <0.6, mode= 0.3, twinned.
Few: Mica, el., sa, also biotite.
Few: Opaques, 0.20.
Rare: Sedimentary or igneous (plutonic) rock fragment, 0.9, quartz, plagioclase, k-feldspar grains, iron cement, highly weathered see picture.
Very rare: Clinopyroxene, el., sa., 0.45.
Very rare: Plagioclase, eq. sa., 0.2.

Matrix
58%. Inhomogeneous, grey PPL, dark grey XPL. No optical activity. Uneven clay mixing, rich in clay pellets or ARF. Iron smearings.

Voids
7%. Consisting in macro and meso vughs, randomly oriented. Ring voids around some slate inclusions.

3. SALA CONSILINA – FABRICS DESCRIPTIONS

Fabric Sal1 – Quartz metamorphic– 11 samples



SAL.C.I.01

SAL.C.I.02

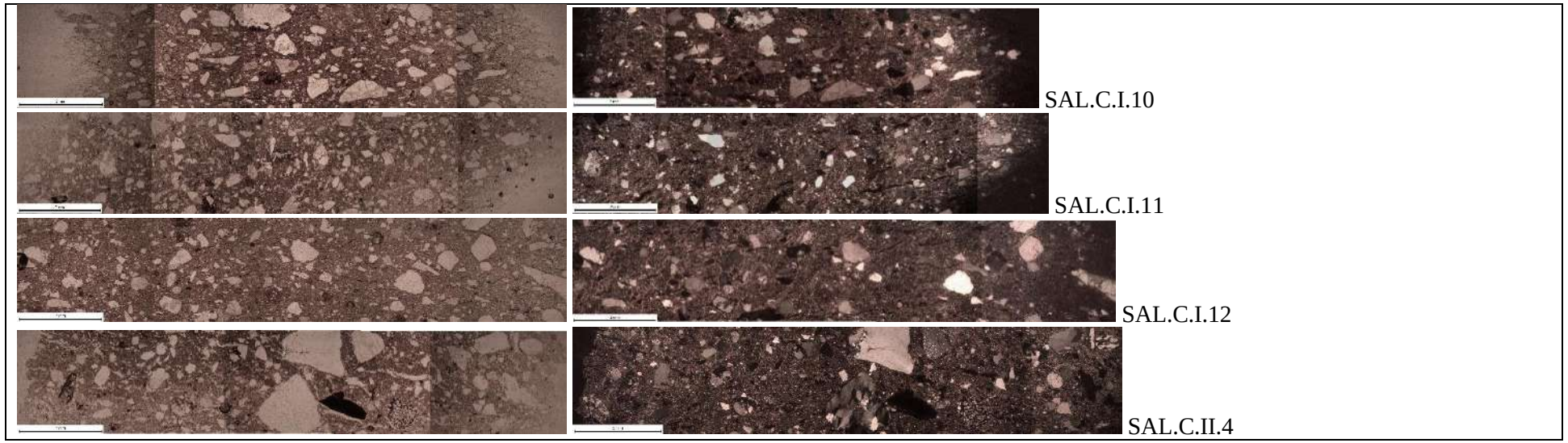
SAL.C.I.03

SAL.C.I.04

SAL.C.I.05

SAL.C.I.08

SAL.C.I.09



Petrographic description

Inclusions

35% eq. & el. sr.-sa., <4, mode = 0.6 mm. Close spaced. Poorly aligned to margin. Moderately bimodal with larger rock fragments, poorly sorted grain size distribution.
Dominant: Quartz grains; eq., sa-sr. <4, mode = 0.9. Monocrystalline and polycrystalline. Metamorphic origin.
Frequent: K-feldspars, orthoclase/sanidine, highly altered, eq.-el., sr-sa., <3 mm, mode = 0.6.
Common: Plagioclase, twinning, often altered, <1.5 mm, mode = 0.6.
Common: Rock fragments with quartz and feldspars grains, often altered, eq.-el., sr.-sa., <1.8 mm, mode = 0.9 mm.
Rare: Microcline, eq., sr-sa., <0.8 mm, mode = 0.3.
Rare: Opaques, sr., eq., mode = 0.15.
Rare: Trachyte, sr., eq., <0.3 mm.
Rare: Chert, sr., eq., <1.3, mode = 0.2 mm.
Rare/absent: Sedimentary rock fragments; eq. r. 0.8 mm. Quartz and feldspars grains in iron cement. Siltstones, el., sr. 1.2 mm.
Rare/absent: Clinopyroxene, euhedral to anhedral, <0.45 mode = 0.3 mm.
Very rare: Metamorphic rock fragment, probably shist with layered mica, el. sr., 0.7 mm. Only in SAL.C.I.12.
Very rare/absent: ARF, attested in SAL.C.I.01 (Possible pisolith) and SAL.C.I.05, r., eq., 0.6 mm.

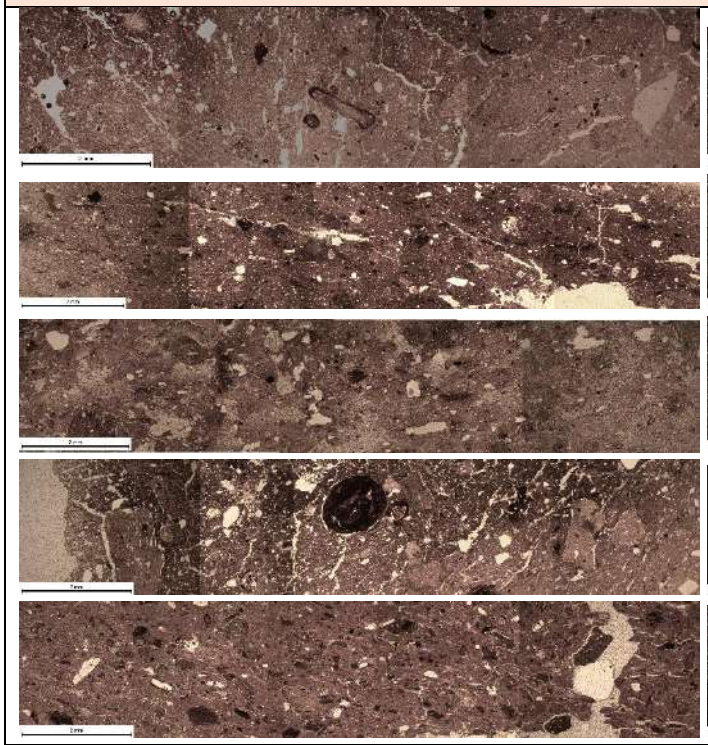
Matrix

60%. Non-calcareous clay. Light brown to dark brown in PPL and XPL. Mostly homogeneous. Moderately optically active with strial/striated b-fabric. In some cases there are iron rich particles and clay pellets. Silt size mica and quartz grains.

Voids
5%. Consisting mainly in meso and micro-vughs, mainly elongated, and planar voids mostly parallel to margins. In some samples attested few voids with blackened edges probably due to burnt organics.

Notes
SAL.C.I.04 rich in mica.
SAL.C.I.05 slightly different because more single grains. Irregular clay mixing, evident a clay pellet.
SAL.C.II.04 sedimentary rock fragments and clay pellets.

Fabric Sal2 – Grog/ARF – 5 samples



SAL.C.I.07

SAL.C.II.01

SAL.C.II.02

SAL.C.II.03

SAL.C.II.05

Petrographic description

Inclusions

10% eq. & el. sa-sr. <1.2, mode = 0.3. Double spaced. Mostly good alignment to margin. Moderately bimodal with grog arf as larger grains and in some cases rock fragments.

Dominant: Quartz; eq. & el. sr-sa. <0.9, mode = 0.3. Monocrystalline and polycrystalline. Silt size.
Frequent: Argillaceous rock fragments/Grog; eq & el. sr-sa. <0.9 mm, mode = 0.3 mm. Dark brown with different density, sharp boundaries and low optical activity. Medium brown with similar density in ppl, eq & el. sr. <1.2 mm, mode = 0.6 mm. Sharp to merging boundaries, optically active (clay pellets?). Relic surface in SAL.C.II.2.
Common: Plagioclase, twinning, a., el., 0.45 mm
Common: K-feldspars, orthoclase/sanidine, eq.-el., a-sr, <0.45 mm.
Few: Pisolith, ferrous bodies, eq., sr., <1.2 mm. Absent in some of the samples.
Few: Sedimentary rock fragments, el., sr., siltstone/mudstone, < 0.9, mode = 0.6 mm.
Few: Opaques, eq., sr, 0.15 mm.
Rare: Chert, eq. sr., 0.25 mm.
Rare/absent: Trachyte, eq., sr., 0.3 mm.
Rare/absent: Sedimentary rock fragments; el. r. 0.6 mm. Quartz grains in iron cement.
Rare/absent: Metamorphic rock fragments with quartz, feldspars grains and mica layering, el., sr., <0.9 mm (SAL.C.I.07). Possible schist.
Very rare/absent: Clinopyroxene, el.-eq., sa. 0.2 mm. Subhedral.

Matrix

85%. Non-calcareous clay. Orange to brown in PPL and XPL. Mostly inhomogeneous. Moderately to highly optically active with strial or striated b-fabric. Iron rich particles. In two cases partial black core, SAL.C.I.07, SAL.C.II.03. Silt size mica and quartz grains.

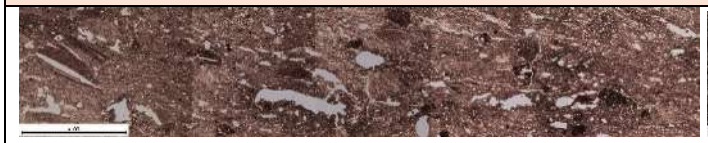
Voids

5%. Consisting mainly in meso and macro-vughs, mainly elongated, planar voids and in some cases vesicles (SAL.C.II.2-3), fluidal or parallel to margin. Vughs in some cases probably generated by burnt organics due to slightly blackened edges.

Notes

SAL.C.II.3 variant
Similar to ATE.FA.3 ferrous.

Fabric Sal3 – Sedimentary



SAL.C.I.06

Petrographic description

Inclusions

10% eq. & el. a-sr. <1.8, mode = 0.3. Double spaced. Mostly good alignment to margin. Moderately bimodal with Arf as larger grains.
Dominant: Siltstone/shale; el. sr-sa. <1.8 mm, mode = 0.9 mm. Brown with similar density, highly optically active, rare inclusions, mostly fine with bedding. Sharp to merging boundaries, optically active (clay pellets?).
Frequent: Quartz; eq. & el. sr-sa. <0.9, mode = 0.3. Monocrystalline and polycrystalline. Silt size.
Common: Argillaceous rock fragments, eq., sr., < 0.9, mode = 0.36 mm. Brown with different density, sharp to merging boundaries, low optical activity. Silt size quartz and mica inclusions.
Rare: Chert, el. sr., 0.36 mm.
Rare: Clinopyroxene, eq., sr. 0.1 mm. Subhedral.

Matrix

80%. Non-calcareous clay. Brown in PPL and XPL. Inhomogeneous. Moderately optically active with strial b-fabric. Few silt sized quartz and mica grains.

Voids

10%. Consisting mainly in meso and macro planar voids, channels and vughs, mostly parallel to margin. Vughs in some cases probably generated by burnt organics due to blackened edges.

Fabric Sal4 – Fine



SAL.C.I.13

Petrographic description

Inclusions

5% eq. & el. a-sr. <0.45, mode = 0.15. Open spaced. Poor alignment to margin. Moderately sorted.

Dominant: Quartz; eq. & el. sr-sa. <0.45, mode = 0.3. Monocrystalline.
Frequent: K-feldspars, orthoclase/sanidine, el., a-sr, <0.3 mm.
Common: Plagioclase, eq., sa., 0.24 mm.
Common: Mica, silt size, el., a.
Few: Opaques, sr., eq., 0.15 mm.
Rare: Chert, eq. r., 0.12 mm. Radiolarite.
Rare: Trachyte, eq., sr., 0.06 mm.
Rare: Trachyte, eq., sr., < 0.3 mm, mode = 0.12.
Very rare: Sedimentary rock, el., sr., 0.24 mm, silt sized quartz grains in iron/clay cement.
Very rare: Clinopyroxene, el., sa. 0.15 mm. Subhedral.

Matrix
90%. Non-calcareous clay. Grey-brown in PPL, dark to reddish brown in XPL. Inhomogeneous. Almost sintered, with patches. Silt sized quartz, mica and possible feldspars grains. Rich in textural features, especially following the margins. Irregular clay mixing?

Voids
5%. Consisting mainly in meso and macro vughs and vesicles, mostly randomly oriented. Vughs in some cases probably generated by burnt organics due to blackened edges.

Fabric Sal5 – Carbonatic



SAL.C.I.14

Petrographic description
Inclusions
90% eq. & el., sr-r. <0.6, mode = 0.15. Closely packed. Poor alignment to margin. Moderately sorted.
Dominant: Fine carbonate sand. Small carbonate grains and some possibly calcite, eq., sr., <0.6, mode = 0.15.
Common: Quartz; eq. & el. sr-sa. <0.45, mode = 0.2. Monocrystalline and polycrystalline.
Few: Plagioclase, eq., sa., 0.24 mm.
Few: K-feldspars, orthoclase/sanidine, el., a-sr, <0.4 mm.
Rare: ARF, non-calcareous, brown with merging boundaries. Possible grog or clay pellet of the clay matrix not yet mixed with the carbonatic temper.

Rare: Mica, el., sa. 0.06 mm.
Rare: Chert, el., sa., 0.24 mm.

Matrix
5%. Highly calcareous clay. Matrix almost not detectable. Brown in PPL, grey in XPL. Low optical activity. Silt sized calcareous grains and mica.

Voids
5%. Consisting mainly in meso and macro vesicles and channels, mostly randomly oriented, probably generated by burnt organics due to blackened edges.

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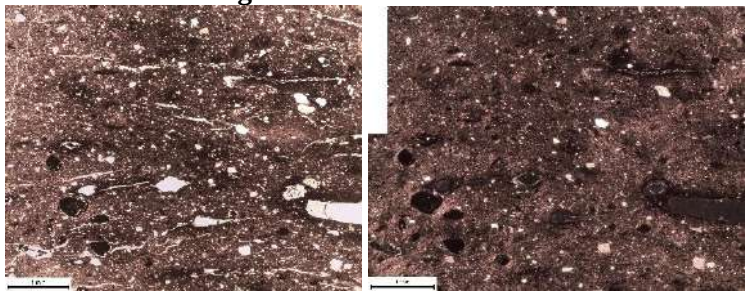
4 ATENA LUCANA – FABRICS DESCRIPTIONS

Fabric Ate1 – ARF and organics

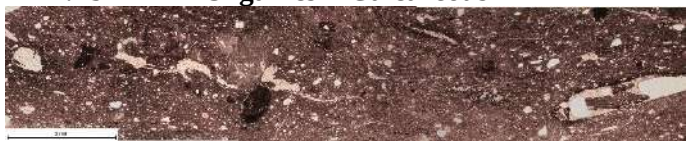
ATE.1a ARF + Organics



ATE.FA.09

ATE.FA.10

ATE.1b ARF + Organics + Calcareous

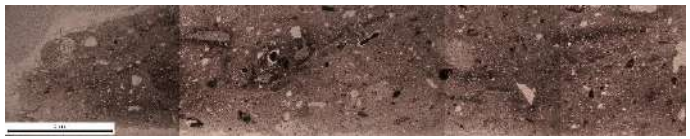


ATE.FA.12

ATE.FA.11

ATE.1c ARF + Organics

ATE.FA.02



ATE.FA.06

Petrographic description

Inclusions

10% eq. & el. a-sr. <1.5, mode = 0.2-3. Open spaced. Moderately aligned to margin (well aligned in ATE.FA.09). Moderately bimodal, poorly sorted grain size distribution.
Dominant: Quartz; eq. & el. sa-sr. <0.45, mode = 0.15. Monocrystalline and polycrystalline. Often polycrystalline.
Common: K-feldspars, orthoclase/sanidine, eq.-el., a-sr, <0.3 mm, mode = 0.2.
Few: Opaques; el.-eq., sr. <0.3 mm, mode = 0.1 mm. Ferromagnesian.
Few: Argillaceous rock fragments/Grog; eq & el. a-sr. <1.5 mm, mode = 0.3 mm. Mainly dark brown with different density, sharp boundaries and low optical activity. In some cases also medium brown with similar density, sharp to merging boundaries, optically active (clay pellets?).
Rare: Chert eq., sr. <0.2, mode = 0.17. Often spheric, radiolarite.
Rare/absent: Plagioclase, twinning, sr., <0.4 mm.
Rare-absent: Clinopyroxene, eq.-el., sa. 0.2-0.3 mm. Subhedral.
Very Rare-absent: Trachyte, eq.-el., sa. 0.24 mm.

Variant calcareous ATE.FA.11-12
Common: Calcareous inclusions, eq., sr., <0.96, mode = 0.24. Carbonatic inclusions. Single larger one in ATE.FA.11 <4,8 mm.
Few: Pisolith, ferrous bodies, eq., sr., <0,5 mm.
Rare/absent: Sedimentary rock fragments (more common in ATE.FA.11); eq-el. sr. 1.2 mm. Quartz grains in iron cement. Mudstones; el. sr., 2.1-1.2 mm.
Few: Argillaceous rock fragments/Grog; eq & el. a-sr. <2 mm, mode = 0.3 mm. Mainly dark brown with different density, sharp boundaries and low optical activity. Common in ATE.FA.12.
Very rare/absent: Silicified bioclast only in ATE.FA.11, el., 0.24 mm.

Matrix

85%-80%. Non-calcareous clay. Brown to dark brown in PPL and XPL. Mostly homogeneous. Moderately to highly optically active with strial b-fabric.
Iron rich particles.

Voids

5-10%. Consisting mainly in planar voids and meso and macro-vughs, mainly elongated. Moderate alignment to margins. Vughs especially common. Vughs generated by burnt organics due to blackened edges and in some cases carbonised organic residues still present.

Petrographic description ATE.1c similar but with slightly more ARF.

Inclusions

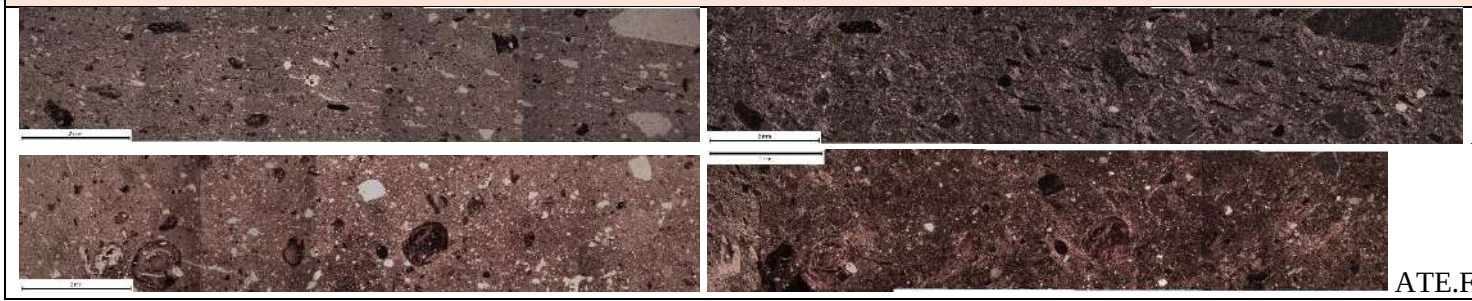
10% eq. & el. a-sr. <0.3, mode = 0.15. Open spaced. Moderately aligned to margin. Poorly sorted grain size distribution.
Dominant: Quartz; eq. & el. sa-sr. <0.3, mode = 0.1. Monocrystalline and polycrystalline. Very fine sand size. Often polycrystalline (in some cases possible chert).
Common: K-feldspars, orthoclase/sanidine, eq.-el., a-sr, <0.45 mm, mode = 0.1.

Common: Ferrous bodies; eq., sr. <0.2 mm, mode = 0.1 mm. Possibly ferromagnesian.
Common: Argillaceous rock fragments/Grog; eq & el. sr-sa. <0.9 mm, mode = 0.3 mm. Mainly dark brown with different density, sharp boundaries and low optical activity. Medium brown with similar density in ppl, eq & el. sr. <1.2 mm, mode = 0.6 mm. Sharp to merging boundaries, optically active (clay pellets?). One shows a pyroxene inclusion.
Few: Pisolith, ferrous bodies, eq., sr., <0,5 mm.
Rare-absent: Clinopyroxene, el.-eq., sa. 0.1 mm. Subhedral.
Rare/absent: Plagioclase, twinning, a., el., 0.12 mm.
Rare/absent: Sedimentary rock fragments; el. r. 0.6 mm. Quartz grains in iron cement.

Matrix
85%. Non-calcareous clay. Light brown to dark brown towards the inner surface in PPL and XPL. Mostly homogeneous. Moderately to highly optically active with strial/striated b-fabric. Iron rich particles. Clay pellets possibly due to uneven clay mixing.

Voids
5%. Consisting mainly in meso and macro-vughs and channels, mainly elongated, and planar voids mostly in ATE.FA.06, parallel to margin. Vughs in some cases probably generated by burnt organics due to slightly blackened edges.

Fabric Ate2 – Chert and iron-rich


ATE.FA.01
ATE.FA.05

Petrographic description
Inclusions
10% eq. & el. a-sr. <2.1, mode = 0.9. Double to open spaced. Poorly aligned in ATE.FA.05 and well aligned in ATE.FA.01. Moderately bimodal, larger ARF and chert grains, moderately sorted grain size distribution.
Dominant: Iron rich bodies, probably part or small pisoliths, eq., sr., <0.9 mm, mode = 0.3 mm. In some cases with quartz inclusions in the centre.
Frequent: Quartz; eq., sa-sr. <0.3, mode = 0.1. Monocrystalline and few polycrystalline. Very fine sand size.
Common/Few: Chert, a., el., < 2,1, mode = 1,2 mm. More common and larger in ATE.FA.01. Only few in ATE.FA.05.

Few/Common: Pisolith, eq., sr., <2,1 mm, mode = 0,9 mm. Often quartz inclusions in the centre.
Few: Argillaceous rock fragments/Grog; eq & el. sa-sr. <0.9 mm, mode = 0.3 mm. Two main types:

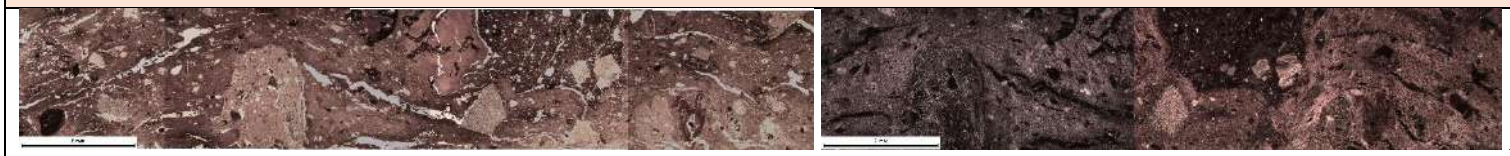
- Dark brown with different density, sharp boundaries and moderate optical activity.
- Light brown with similar density in ppl Sharp to merging boundaries, optically active. Possible clay pellets.

Large clay pellet with calcareous inclusion in ATE.FA.05. Possible consequence of irregular clay mixing since the size and the similarity to the matrix.
Few: K-feldspars, orthoclase/sanidine, eq.-el., a-sr, <0.3 mm, mode = 0.15.
Rare/absent: Plagioclase, twinning, a., el., 0.18 mm.
Rare/absent: Sedimentary rock fragments; eq. r. 0.48 mm. Rounded quartz grains in iron cement.

Matrix
87%. Non-calcareous clay. Light brown to orange brown in PPL, yellowish to reddish brown in XPL. Mostly homogeneous. Moderately to highly optically active with strial/striated b-fabric. Iron rich particles. Silt size quartz, richer in ATE.FA.05.

Voids
3%. Consisting mainly in meso and macro-vughs, mainly elongated, and planar voids parallel to margin (especially in ATE.FA.01). Vughs in some cases probably generated by burnt organics due to slightly blackened edges.

Fabric Ate3 – Carbonatic and sedimentary


ATE.FA.04

Petrographic description

Inclusions
30% eq. & el., sr-sa. <2.1, mode = 0.3-0.6. Single spaced. Poorly aligned to margin. Moderately bimodal, poorly sorted grain size distribution.
Dominant: Carbonate and calcite grains; eq & el., sa-sr., <1.8 mm, mode = 0.6 mm. Crystalline habit probably coming from calcite veins.
Frequent: Argillaceous rock fragments/Grog; el & eq. sa-sr. <0.9 mm, mode = 0.3 mm. Mainly light to dark brown with different density, sharp boundaries and moderate optical activity, often with carbonate inclusions, and chert radiolarite. Medium brown with similar density in ppl, eq & el. sr. <1.2 mm, mode = 0.6 mm. Sharp to merging boundaries, optically active (clay pellets?).
Common: Quartz; eq. & el. sa-sr. <0.3, mode = 0.1. Monocrystalline and polycrystalline. Very fine sand size.
Common: Ferrous bodies; eq., sr. <1.2 mm, mode = 0.3 mm. Possibly ferromagnesian.
Few: Sedimentary rock fragments; eq. sr. 2.1 mm. Quartz grains in iron or clay cement.
Rare-absent: K-feldspars, orthoclase/sanidine, eq.-el., a-sr, 0.3 mm.

Matrix
60%. Non-calcareous clay (?). Brown in PPL and XPL. Heterogeneous, rich in clay and iron rich textural features. Moderately to high optically active with strial/striated b-fabric. Iron rich particles.

Voids
10%. Consisting mainly in meso and macro-vughs, mainly elongated, and channels, mainly parallel to margin. Vughs in some cases probably generated by burnt organics due to blackened edges.

Fabric Ate4 – Carbonatic and organics



ATE.FA.13

Petrographic description
Inclusions
30% eq. & el. sa-sr. <5, mode = 0.6. Single spaced. Poorly aligned to margin. Poorly sorted grain size distribution.
Dominant: Carbonate grains; eq., sr., <5 mm, mode = 0.4 mm. Well-rounded carbonates.
Frequent: Quartz; eq. & el. sa-sr. <0.6, mode = 0.3. Monocrystalline and polycrystalline.
Common: K-feldspars, orthoclase/sanidine, eq.-el., a-sr, <0.6 mm, mode = 0.6. Highly altered. Perthitic.
Common: Rock fragments with quartz and feldspars grains; eq. & el. sa-sr. <0.6. Possible granitoids (microcline, perthitic k-feldspars). Sand derived from granitoids.
Few: Trachyte or iron altered chert, el., sr., altered, <0.9 mm.
Few: Sedimentary rock fragments; eq. sr. 0.7 mm. Quartz grains in iron cement and siltstones.
Rare: Microcline, el., sa., 0.6 mm.
Rare: Clinopyroxene, el.-eq., sa. <0.3 mm. Subhedral. Possibly also epidote.
Rare: Chert, a.-r., el.-eq., < 0.6. Rounded also, radiolarite.

Matrix
60%. Calcareous clay. Brown in PPL and XPL. Heterogeneous, few clay pellets. Sintered. Secondary calcite possible percolated from the carbonate inclusions.
Voids
10%. Consisting mainly in macro-vughs, randomly oriented. Possible organics due to the shape of the vughs.

Fabric Ate5 – Quartz and bioclasts



ATE.FA.03

Petrographic description

Inclusions

20% eq. & el. a-sr. <0.3, mode = 0.15. Single to double spaced. Moderately aligned to margin. Moderately bimodal, larger ARF and rock fragments. Poorly sorted grain size distribution.
Dominant: Quartz; eq. & el. sr-sa. <0.45, mode = 0.1. Monocrystalline and polycrystalline.
Frequent: K-feldspars, orthoclase/sanidine, el.-eq., a-sr, <0.3 mm, mode = 0.15.
Common: Chert, r., eq., < 0.42, mode = 0.12. Radiolarite.
Few: Silicified bioclasts, el., r., 0.12 mm.
Few: Opaques; eq., sr. <0.2 mm, mode = 0.15 mm.
Few: Sedimentary rock fragments; el. sr. 2.7 mm. Quartz and possibly feldspars grains in iron cement.
Few: Argillaceous rock fragments/Grog; eq. sa-sr. <2.4 mm, mode = 2.4 mm. Dark brown with different density, sharp boundaries and no optical activity, quartz, polycrystalline quartz and feldspars inclusions.
Rare: Clinopyroxene, el.-eq., sa. <0.4 mm. Subhedral.
Rare: Rock fragment with silicified bioclasts, el., sa., 2.4 mm.
Rare: Plagioclase, twinning, a., el., 0.18 mm.
Rare: Trachyte, el., sr., 4.8 mm.

Note: possible calcite ghosts.

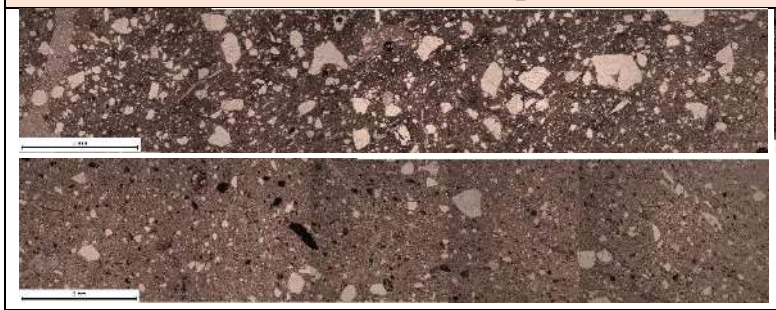
Matrix

70%. Non-calcareous clay. Dark brown in PPL, grey XPL. Homogeneous. Sintered. Slightly optically active towards the inner surface. Silt size quartz and mica.

Voids

10%. Consisting mainly in meso and macro-vughs, mostly parallel to margin. Vughs in some cases probably generated by burnt organics due to slightly blackened edges.

Fabric Ate6 – Quartz metamorphic



ATE.FA.07


ATE.FA.08

Petrographic description

Inclusions

10-20% eq. & el. a-sr. <4, mode = 0.15. Close spaced. Poorly aligned to margin. Moderately bimodal, poorly sorted grain size distribution. ATE.FA.08 finer.

Dominant: Quartz grains; eq., sa-sr. <1, mode = 0.3. Monocrystalline and polycrystalline. Metamorphic origin.
Common: Rock fragments with quartz and feldspars grains, often altered, <0.9 mm, mode = 0.6.
Few: K-feldspars, orthoclase/sanidine, eq.-el., sr-sa., <0.6 mm, mode = 0.6.
Few: Plagioclase, twinning, often altered, <0.6 mm, mode = 0.6.
Few: Mica and biotite, el., a., < 0.24, mode 0.12 mm.
Rare: Opaques, sr., eq., mode = 0.05. mostly in ATE.FA.08.
Rare: Trachyte, sr., eq., <0.2 mm.
Rare: Chert, sr.-sa., eq.-el., <0.7, mode = 0.12 mm. Radiolarite also.
Rare: Microcline, eq., sr-sa., 0.18 mm.
Rare/absent: Sedimentary rock fragments; eq. r. 0.4 mm. Quartz and feldspars grains in iron cement. Siltstones, el., sr. 0.7 mm.
Rare/absent: Clinopyroxene, euhedral to anhedral, <0.24 mode = 0.12 mm.
Very rare/absent: hornblende, euhedral, el., a., 0.12 mm, in ATE.FA.08.
Very rare/absent: Metamorphic rock fragment, layered quartz and few mica, el. sr., 0.24 mm.
Very rare/absent: Pisolith, 2 mm, in ATE.FA.07.

Matrix

87-77%. Non-calcareous clay. Light brown to dark brown in PPL and XPL. Mostly homogeneous. Moderately optically active, lower in ATE.FA.08, with strial/striated b-fabric. Few clay pellets. Silt size mica and quartz grains.

Voids

3%. Consisting mainly in meso and micro-vughs, mainly elongated, and planar voids mostly parallel to margins. Few voids with blackened edges probably due to burnt organics only in ATE.FA.07.

Appendix 12 – XRD results

The database presents the qualitative results of XRD analyses on samples from the four sites analysed as presented in Chapter 5 and discussed in Chapter 7.

The database in excel format is also attached as a multimedia file.

Sample	Fabric	Quartz	Plagioclase	K-Feldspar	Illite/Muscovite	Smectite	Kaolinite/Chlorite	Hematite	Pyroxene	Calcite	Horneblende	Notes
ATE.FA.01	ATE.2	x	x	x	x	x						
ATE.FA.02	ATE.1c	x	x	x	x	x						
ATE.FA.03	ATE.5	x	x	x	x	x						
ATE.FA.04	ATE.3	x			x	x				x		
ATE.FA.05	ATE.2	x	x	x	x	x						
ATE.FA.06	ATE.1c	x	x	x	x	x						
ATE.FA.07	ATE.6	x	x	x	x	x						
ATE.FA.08	ATE.6	x	x	x	x	x			x			
ATE.FA.13	ATE.4	x	x	x	x	x				x		
PAE.A.II.01	PAE.7	x	x	x	x	x				x		
PAE.A.II.02	PAE.1c	x	x	x	x	x						
PAE.A.II.03	PAE.4b	x	x	x	x	x						
PAE.A.II.04	PAE.4b	x	x	x	x	x		x				
PAE.A.II.05	PAE.4a	x	x	x	x	x						
PAE.A.II.06	PAE.4a	x	x	x	x	x		x				
PAE.A.III.01	PAE.1c	x	x	x	x	x						
PAE.A.III.03	PAE.4a	x	x	x	x	x						
PAE.A.III.10	PAE.4a	x	x	x	x							
PAE.A.III.12	PAE.4a	x	x	x	x	x						
PAE.A.III.14	PAE.4a	x	x	x	x	x						
PAE.A.III.16	PAE.4a	x	x	x	x							
PAE.A.III.17	PAE.2	x	x	x	x	x						
PAE.A.III.19	PAE.3	x	x	x	x	x						

PAE.A.III.20	PAE.4a	x	x	x	x	x						
PAE.A.III.21	PAE.2	x	x	x	x	x		x				
PAE.A.III.22	PAE.4b	x	x	x	x	x						
PAE.A.III.24	PAE.2	x	x	x	x	x						
PAE.A.III.25	PAE.3	x	x	x	x	x						
PAE.A.III.27	PAE.4a	x	x	x	x	x						
PAE.C.1.1	PAE.4a	x	x	x	x	x						
PAE.C.1.4	PAE.2	x	?	x	x	x						
PAE.C.2.1	PAE.5	x	x	x	x	x				?		
PAE.C.2.2	PAE.2	x	x	x	x							
PAE.C.2.4	PAE.4b	x	x	x	x	x						
PAE.C.4.1	PAE.1a	x	x	x	x							
PAE.C.4.2	PAE.2	x	x	x	x	x						
PAE.C.5.1	PAE.1c	x	x	x	x	x						
PAE.C.5.3	PAE.1c	x	x	x	x	x					x	
PAE.C.A.3	PAE.1c	x	x	x	x	x						
PAE.C.A.4	PAE.1c	x	x	x	x	x						
PAE.C.S.1	PAE.3	x	x	x	x							
PAE.C.S.4	PAE.4c	x	x	x	x	x						
PAE.C.T.1	PAE.3	x	x	x	x							
PAE.C.T.2	PAE.2	x	x	x	x	x			x			
PAE.C.T.4	PAE.4a	x	x	x	x	x						Higher displacement
PAE.G.00.1	PAE.2	x	x	x	x	x						
PAE.G.00.3	PAE.1c	x	x	x	x	x						
PAE.G.00.4	PAE.2	x	x	x	x	x						
PAE.G.00.5	PAE.1a	x	x	x	x	x						High feldspars peaks
PAE.G.00.6	PAE.1c	x	x	x	x	x						
PAE.G.00.7	PAE.1c	x	x	x	x	x						
PAE.G.A.1	PAE.1c	x	x	x	x	x						
PAE.G.b.4	PAE.1c	x	x	x	x	x						
PAE.G.b.5	PAE.3	x	x	x	x	x						

PAE.G.C.1	PAE.1c	x	x	x	x	x						
PAE.G.C.2	PAE.2	x	x	x	x	x	x					
PAE.G.C.4	PAE.1c	x	x	x	x	x						
PAE.G.f.1	PAE.2	x	x	x	x	x						
PAE.G.f.3	PAE.3	x	x	x	x	x						
PAE.G.I.2	PAE.2	x	x	x	x	x						
PAE.G.I.3	PAE.1c	x	x	x	x	x						
PAE.G.II.2	PAE.1c	x	x	x	x	x						Unreliable
PAE.G.II.6	PAE.1a	x	x	x	x	x						
PAE.G.II.7	PAE.2	x	x	x	x	x		x				
PAE.G.III.1	PAE.1c	x	x	x	x	x						
PAE.G.III.7	PAE.2	x	x	x	x	x						
PAE.G.IV.2	PAE.1a	x	x	x	x							
PAE.G.IV.3	PAE.2	x	x	x	x							Unreliable
PAE.G.IV.4	PAE.3	x	x	x	x	x						
PAE.G.IV.7	PAE.1c	x	x	x	x	x						
PAE.G.IX.1	PAE.4c	x	x	x	x		x					
PAE.G.IX.2	PAE.1a	x	x	x	x	x						
PAE.G.IX.3	PAE.1c	x	x	x	x							
PAE.G.R.1	PAE.3	x	x	x	x	x						
PAE.G.T.2	PAE.3	x	x	x	x	x						
PAE.G.u.2	PAE.1c	x	x	x	x	x						
PAE.G.V.2	PAE.2	x	x	x	x	x	x					
PAE.G.V.3	PAE.1a	x	x	x	x	x				?		Corrected by 0.1
PAE.G.V.4	PAE.4a	x	x	x	x							
PAE.G.VII.4	PAE.3	x	x	x	x	x						
PAE.G.VII.5	PAE.1c	x	x	x	x	x						
PAE.G.VII.6	PAE.6	x	?	x	x	x	x					
PAE.G.XI.1	PAE.1c	x	x	x	x		x			x		
PAE.G.XI.2	PAE.1c	x	x	x	x	x						
PAE.G.XI.3	PAE.6	x	x	x	x	x						

PAE.G.XI.4	PAE.1c	x	x	x	x	x	x					
PAE.G.XI.5	PAE.2	x	x	x	x	x						
PAE.G.XI.8	PAE.1b	x	x	x	x	x				x		
PAE.G.XIII.2	PAE.1c	x	x	x	x	x						
PAE.G.XIII.4	PAE.2	x	x	x	x	x						
PAE.G.XIV.2	PAE.1c	x	x	x	x	x						
PAE.G.XIV.3	PAE.2	x	x	x	x	x						Biotite
PNT.A.20.02	PNT.3	x	x	x	x	x						
PNT.A.20.09	PNT.2	x	x	x	x	x						
PNT.A.20.13	PNT.2	x	x	x	x	x						High feldspars
PNT.A.20.14	PNT.1b	x	x	x	x	x						
PNT.A.20.15	PNT.4	x	x	x	x	x				x		
PNT.A.20.26	PNT.2	x	x	x	x	x					x	
PNT.A.20.28	PNT.2	x	x	x	x	x						
PNT.A.21.01	PNT.5	x	x	x	?	x						
PNT.A.21.05	PNT.2b	x	x	x	x	x						
PNT.G.11a.2	PNT.1a	x	x	x	x	x	x					
PNT.G.12a.1	PNT.1a	x	x	x	x	x						
PNT.G.12b.3	PNT.1a	x	?	x	x	x						
PNT.G.12p.1	PNT.1a	x	x	x	x	x						
PNT.G.13a.3	PNT.1a	x	x	x	x	x						
PNT.G.13b.1	PNT.1a	x	x	x	x	x					x	
PNT.G.13p.3	PNT.1a	x	?	x	x	x						
PNT.G.13p.4	PNT.1b	x	?	x	x	x						
PNT.G.14b.1	PNT.1a	x	x	x	x	x						
PNT.G.14b.3	PNT.1a	x	x	x	x	x						
PNT.G.14p.2	PNT.1b	x	x	x	x	x						
PNT.G.14p.3	PNT.3	x	x	x	x	x						
PNT.G.14p.7	PNT.1a	x	x	x	x	x						
PNT.G.16.1	PNT.1b	x	x	x	x	x						
PNT.G.17p.2	PNT.1b	x	x	x	x	x						

PNT.G.18p.1	PNT.1b	x	x	x	x	x						
PNT.G.20p.1	PNT.1a	x	?	x	x	x						
SAL.C.I.02	SAL.1	x	x	x	x	x						
SAL.C.I.06	SAL.3	x			x	x						
SAL.C.I.07	SAL.2	x	x	x	x	x						
SAL.C.I.12	SAL.1	x	x	x	x	x	x		?			
SAL.C.I.13	SAL.4	x	x	x		low						Wollastonite
SAL.C.I.14	SAL.5	x	x	x	x	x				x		
SAL.C.II.4	SAL.1	x	x	x	x	x						

Appendix 13 – XRF raw data

The database presents the results of major and minor and trace elements XRF analyses on samples from the four sites analysed as presented in Chapter 5 and discussed in Chapter 7. The database in excel format is also attached as a multimedia file.

Major elements (wt. %)

Sample	Site	Fabric	SiO2 %	TiO2 %	Al2O3 %	Fe2O3 %	Mn3O4 %	MgO %	CaO %	Na2O %	K2O %
ATE.FA.01	Atena Lucana	ATE.2	51.651	0.835	19.316	6.954	0.225	0.676	2.395	0.555	2.368
ATE.FA.02	Atena Lucana	ATE.1	52.528	0.837	19.829	6.88	0.252	0.737	2.34	0.609	2.281
ATE.FA.03	Atena Lucana	ATE.5	59.959	0.888	19.505	7.944	0.374	1.318	1.913	0.535	2.214
ATE.FA.04	Atena Lucana	ATE.3	42.222	0.619	17.992	6.747	0.297	1.186	8.371	0.222	1.767
ATE.FA.05	Atena Lucana	ATE.2	53.517	0.868	19.757	7.017	0.315	0.731	2.51	0.589	2.432
ATE.FA.06	Atena Lucana	ATE.1	54.447	0.874	20.153	7.071	0.251	0.735	2.616	0.571	2.311
ATE.FA.07	Atena Lucana	ATE.6	63.744	0.618	16.007	5.952	0.076	0.636	1.764	0.556	1.925
ATE.FA.08	Atena Lucana	ATE.6	53.703	0.757	17.818	6.078	0.098	0.94	2.636	0.889	2.987
ATE.FA.09	Atena Lucana	ATE.1	50.789	0.8	18.705	6.509	0.3	0.714	2.707	0.597	2.136
ATE.FA.13	Atena Lucana	ATE.4	49.832	0.659	14.903	5.441	0.199	1.832	9.276	0.745	2.19
PAE.A.II.01	Paestum	PAE.7	52.334	0.715	15.763	5.815	0.174	1.696	5.25	0.796	2.336
PAE.A.II.03	Paestum	PAE.4	53.158	0.577	17.523	5.11	0.253	0.564	2.064	1.117	2.508
PAE.A.II.05	Paestum	PAE.4	64.971	0.683	15.27	4.38	0.278	0.789	1.189	1.813	3.829
PAE.A.II.06	Paestum	PAE.4	56.434	0.645	16.415	5.242	0.415	0.746	2.092	1.229	2.875
PAE.A.III.01	Paestum	PAE.1	52.412	0.652	19.003	5.334	0.101	0.677	2.231	1.155	2.601
PAE.A.III.03	Paestum	PAE.4	54.569	0.611	16.14	4.711	0.13	0.892	2.547	1.354	3.044
PAE.A.III.06	Paestum	PAE.3	58.468	0.704	17.895	5.07	0.135	0.753	2.099	1.513	3.177
PAE.A.III.08	Paestum	PAE.4	63.516	0.623	14.259	3.849	0.15	0.705	1.612	1.552	3.026
PAE.A.III.10	Paestum	PAE.4	54.12	0.582	18.594	5.202	0.165	0.69	2.304	1.142	2.764
PAE.A.III.12	Paestum	PAE.4	59.356	0.599	14.718	4.613	0.29	0.496	1.608	1.481	3.406
PAE.A.III.14	Paestum	PAE.4	57.04	0.59	17.694	5.171	0.251	0.629	1.868	1.348	3.119

PAE.A.III.16	Paestum	PAE.4	61.804	0.644	13.545	3.871	0.147	0.693	1.697	1.452	2.923
PAE.A.III.17	Paestum	PAE.2	50.893	0.634	19.154	5.126	0.086	0.658	2.367	1.091	2.572
PAE.A.III.18	Paestum	PAE.2	52.457	0.65	19.448	5.147	0.118	0.759	2.119	1.405	3.363
PAE.A.III.19	Paestum	PAE.3	52.609	0.6	18.123	5.283	0.105	0.579	1.981	1.192	2.453
PAE.A.III.20	Paestum	PAE.4	59.262	0.677	17.05	5.509	0.303	0.633	1.914	1.438	3.142
PAE.A.III.21	Paestum	PAE.2	51.03	0.665	20.257	6.086	0.164	0.784	2.455	1.246	2.895
PAE.A.III.22	Paestum	PAE.4	58.716	0.66	18.68	5.176	0.177	0.561	1.601	1.597	3.173
PAE.A.III.23	Paestum	PAE.2	49.842	0.61	19.92	5.812	0.11	0.765	2.324	1.063	2.603
PAE.A.III.24	Paestum	PAE.2	52.545	0.69	20.182	5.505	0.091	0.749	2.316	1.23	2.994
PAE.A.III.25	Paestum	PAE.3	63.252	0.623	17.423	5.49	0.087	0.737	1.759	0.963	2.428
PAE.A.III.26	Paestum	PAE.1	56.048	0.72	18.901	5.135	0.098	0.937	2.378	1.229	3.304
PAE.A.III.27	Paestum	PAE.4	58.492	0.681	18.763	5.408	0.186	0.627	1.777	1.253	2.975
PAE.C.1.1	Paestum	PAE.4	58.166	0.732	15.613	5.61	0.134	1.186	1.474	0.853	1.989
PAE.C.1.3	Paestum	PAE.2	49.09	0.644	19.467	5.049	0.101	0.874	2.212	1.104	2.643
PAE.C.1.4	Paestum	PAE.2	50.421	0.76	22.241	6.651	0.185	0.996	2.491	1.148	3.265
PAE.C.2.1	Paestum	PAE.5	52.551	0.898	19.72	7.299	0.155	1.084	2.348	0.367	2.28
PAE.C.2.2	Paestum	PAE.2	52.808	0.582	18.144	5.006	0.133	0.827	1.998	1.075	2.563
PAE.C.2.4	Paestum	PAE.4	63.458	0.546	13.897	3.891	0.04	0.544	1.24	1.395	2.053
PAE.C.2.6	Paestum	PAE.2	52.888	0.66	18.265	5.717	0.31	0.862	2.402	1.245	3.101
PAE.C.2.8	Paestum	PAE.4	66.3	0.571	13.713	3.994	0.131	0.658	1.209	1.619	2.633
PAE.C.4.1	Paestum	PAE.1	51.253	0.716	17.734	5.049	0.23	0.789	2.035	1.261	2.975
PAE.C.4.2	Paestum	PAE.2	48.975	0.683	19.55	5.44	0.099	0.947	2.287	1.238	2.991
PAE.C.4.3	Paestum	PAE.2	44.575	0.662	20.97	5.89	0.09	0.844	2.261	0.931	2.58
PAE.C.5.3	Paestum	PAE.1	52.911	0.647	18.347	5.006	0.156	0.689	2.215	1.224	2.635
PAE.C.A.3	Paestum	PAE.4	56.518	0.595	18.112	5.27	0.376	0.716	1.562	1.215	2.87
PAE.C.A.4	Paestum	PAE.1	54.815	0.676	17.193	5.294	0.344	0.736	1.636	1.488	3.208
PAE.C.S.1	Paestum	PAE.3	60.186	0.537	14.869	4.529	0.211	0.866	1.597	1.147	2.499
PAE.C.S.2	Paestum	PAE.3	59.173	0.681	17.679	5.288	0.322	0.899	1.853	1.408	3.063
PAE.C.S.4	Paestum	PAE.4	60.608	0.526	13.557	4.885	0.131	0.99	1.298	0.947	1.638
PAE.C.S.5	Paestum	PAE.2	50.945	0.674	21.244	5.607	0.124	0.871	2.518	1.086	2.871
PAE.C.T.01	Paestum	PAE.3	59.336	0.817	16.458	5.486	0.064	1.024	1.347	1.002	2.289

PAE.C.T.02	Paestum	PAE.2	49.897	0.642	19.472	5.186	0.104	0.902	2.147	1.106	2.689
PAE.C.T.04	Paestum	PAE.4	56.155	0.752	17.287	5.253	0.296	0.655	1.488	1.612	3.504
PAE.C.T.05	Paestum	PAE.4	55.991	0.739	17.212	5.234	0.244	0.678	1.464	1.602	3.448
PAE.C.T.09	Paestum	PAE.1	56.781	0.636	16.515	4.984	0.324	0.872	1.756	1.293	2.652
PAE.C.T.10	Paestum	PAE.1	55.955	0.698	18.745	5.51	0.255	0.813	1.807	1.406	3.114
PAE.C.T.12	Paestum	PAE.4	58.915	0.585	15.297	4.559	0.051	0.668	1.666	1.116	2.337
PAE.G.00.1	Paestum	PAE.2	48.217	0.621	20.446	5.044	0.059	0.682	2.048	0.974	2.359
PAE.G.00.2	Paestum	PAE.6	46.564	0.9	21.126	6.651	0.048	0.796	2.042	0.461	1.868
PAE.G.00.3	Paestum	PAE.1	57.173	0.654	16.644	5.202	0.066	0.99	1.218	1.268	2.962
PAE.G.00.4	Paestum	PAE.2	48.573	0.691	20.195	5.693	0.067	0.772	1.904	1.025	2.698
PAE.G.00.5	Paestum	PAE.1	56.105	0.685	16.832	4.879	0.049	0.752	1.344	0.897	1.986
PAE.G.00.6	Paestum	PAE.1	57.699	0.74	17.237	4.945	0.084	0.901	1.28	1.22	2.951
PAE.G.00.7	Paestum	PAE.1	59.767	0.656	17.213	5.481	0.06	1.085	1.173	1.341	3.147
PAE.G.00.8	Paestum	PAE.1	56.059	0.693	16.52	4.697	0.091	0.783	1.521	1.169	2.778
PAE.G.00.9	Paestum	PAE.2	49.343	0.651	20.992	5.011	0.083	0.622	2.281	1.017	2.522
PAE.G.a.1	Paestum	PAE.1	56.872	0.628	15.386	4.63	0.084	0.792	1.5	1.107	2.117
PAE.G.b.1	Paestum	PAE.3	57.909	0.556	15.041	4.671	0.08	1.049	1.386	1.748	3.14
PAE.G.b.2	Paestum	PAE.2	49.799	0.651	18.934	5.35	0.082	0.835	2.05	1.142	2.787
PAE.G.b.4	Paestum	PAE.1	53.39	0.645	16.096	4.858	0.15	0.938	1.997	1.118	2.764
PAE.G.b.5	Paestum	PAE.3	51.641	0.604	18.64	5.278	0.088	0.575	2.106	1.396	2.897
PAE.G.b.6	Paestum	PAE.3	57.726	0.681	16.286	5.19	0.068	0.507	1.374	1.132	2.182
PAE.G.C.1	Paestum	PAE.1	51.243	0.675	18.594	5.204	0.125	0.582	2.251	1.11	2.485
PAE.G.C.2	Paestum	PAE.2	47.884	0.62	19.891	5.186	0.083	0.774	1.961	0.963	2.385
PAE.G.C.3	Paestum	PAE.3	49.848	0.621	18.959	5.468	0.144	0.558	2.134	1.044	2.395
PAE.G.C.4	Paestum	PAE.1	55.139	0.676	16.446	6.899	0.247	0.782	1.634	0.899	2.318
PAE.G.d.1	Paestum	PAE.2	51.268	0.66	20.658	5.445	0.054	0.753	2.078	0.995	2.662
PAE.G.f.1	Paestum	PAE.2	45.135	0.611	20.202	5.162	0.104	0.752	2.045	1.013	2.671
PAE.G.f.3	Paestum	PAE.3	55.699	0.797	16.459	5.473	0.042	0.731	1.821	0.821	2.118
PAE.G.I.2	Paestum	PAE.2	51.265	0.637	20.724	5.285	0.079	0.768	1.848	1.358	2.516
PAE.G.I.3	Paestum	PAE.1	54.618	0.62	18.217	5.477	0.243	0.726	1.973	1.146	2.913
PAE.G.II.2	Paestum	PAE.1	58.81	0.631	16.553	4.92	0.115	0.75	1.418	1.294	2.753

PAE.G.II.4	Paestum	PAE.1	53.881	0.742	17.943	5.588	0.056	0.602	1.689	1.056	2.332
PAE.G.II.6	Paestum	PAE.1	54.672	0.739	16.684	6.196	0.229	1.168	1.635	0.972	2.146
PAE.G.II.7	Paestum	PAE.2	50.581	0.616	20.105	5.202	0.097	0.745	1.93	1.517	2.577
PAE.G.III.1	Paestum	PAE.1	50.889	0.641	18.694	5.698	0.173	0.942	1.923	1.185	2.987
PAE.G.III.3	Paestum	PAE.1	53.265	0.651	17.568	5.546	0.148	0.98	1.693	1.027	2.63
PAE.G.III.4	Paestum	PAE.3	64.032	0.72	14.158	4.177	0.112	0.652	1.287	1.421	2.501
PAE.G.III.5	Paestum	PAE.2	50.122	0.592	19.349	5.031	0.086	0.856	1.719	1.066	2.606
PAE.G.III.7	Paestum	PAE.2	51.57	0.643	20.979	5.367	0.077	0.567	1.727	1.175	2.735
PAE.G.III.8	Paestum	PAE.1	49.349	0.62	13.352	4.843	0.129	1.581	10.21	0.706	2.386
PAE.G.III.9	Paestum	PAE.1	51.882	0.641	20.918	5.295	0.063	0.906	2.216	1.31	3.441
PAE.G.IV.1	Paestum	PAE.1	57.906	0.864	18.564	6.088	0.045	0.599	2.159	0.848	2.268
PAE.G.IV.2	Paestum	PAE.1	55.797	0.812	17.563	6.078	0.047	0.657	1.695	0.823	2.035
PAE.G.IV.3	Paestum	PAE.2	49.91	0.634	20.326	5.19	0.057	0.546	2.212	0.957	2.284
PAE.G.IV.4	Paestum	PAE.3	57.681	0.624	15.178	5.807	0.08	1.369	1.327	0.883	2.204
PAE.G.IV.7	Paestum	PAE.1	48.335	0.589	19.503	4.937	0.052	0.569	1.876	1.078	2.244
PAE.G.IX.1	Paestum	PAE.4	61.65	0.509	15.603	4.707	0.083	1.055	1.392	1.113	2.664
PAE.G.IX.2	Paestum	PAE.1	57.875	0.751	18.009	6.363	0.152	0.698	1.42	0.946	2.259
PAE.G.IX.3	Paestum	PAE.1	60.092	0.666	16.784	5.281	0.354	1.031	1.84	1.351	3.069
PAE.G.R.1	Paestum	PAE.3	57.541	0.545	15.032	4.785	0.072	1.211	1.581	0.985	2.641
PAE.G.R.2	Paestum	PAE.1	58.157	0.652	16.914	5.238	0.38	1.015	2.065	1.303	2.711
PAE.G.R.3	Paestum	PAE.2	51.386	0.778	17.765	6.324	0.191	1.027	2.166	1.275	3.137
PAE.G.S.1	Paestum	PAE.2	46.257	0.716	18.868	5.596	0.124	1.064	1.725	1.097	2.537
PAE.G.T.1	Paestum	PAE.3	57.798	0.753	15.242	5.083	0.049	0.538	1.623	0.818	2.068
PAE.G.T.2	Paestum	PAE.3	58.506	0.761	15.466	5.051	0.048	0.541	1.742	0.851	2.129
PAE.G.U.1	Paestum	PAE.1	55.501	0.613	16.434	5.207	0.352	0.895	2.031	1.214	2.596
PAE.G.U.2	Paestum	PAE.1	55.445	0.645	16.717	5.272	0.272	0.668	1.707	1.227	2.634
PAE.G.V.2	Paestum	PAE.2	55.045	0.664	16.383	5.402	0.067	1.027	1.313	1.495	2.676
PAE.G.V.3	Paestum	PAE.1	51.113	0.768	18.067	5.971	0.152	0.733	2.267	1.267	2.302
PAE.G.V.4	Paestum	PAE.4	53.641	0.594	18.311	5.038	0.144	0.516	2.096	1.151	2.374
PAE.G.VII.2	Paestum	PAE.3	53.431	0.608	17.162	4.822	0.146	0.669	2.241	1.232	2.716
PAE.G.VII.4	Paestum	PAE.3	56.646	0.534	16.231	4.977	0.112	0.615	1.989	1.112	2.485

PAE.G.VII.5	Paestum	PAE.1	57.169	0.616	16.031	5.214	0.394	0.926	1.684	1.265	2.773
PAE.G.VII.6	Paestum	PAE.6	46.499	0.749	20.218	6.665	0.13	1.033	2.697	0.475	1.865
PAE.G.XI.1	Paestum	PAE.1	54.502	0.722	18.729	5.967	0.075	0.83	1.707	1.148	2.497
PAE.G.XI.2	Paestum	PAE.1	56.351	0.732	18.384	5.289	0.098	0.809	1.958	1.262	2.82
PAE.G.XI.3	Paestum	PAE.6	48.889	0.94	21.75	6.729	0.051	1.058	2.086	0.424	1.988
PAE.G.XI.4	Paestum	PAE.1	52.501	0.693	17.878	5.729	0.128	0.907	1.496	1.268	2.589
PAE.G.XI.5	Paestum	PAE.2	50.171	0.631	20.618	5.334	0.074	0.541	2.245	1.06	2.43
PAE.G.XI.8	Paestum	PAE.1	48.598	0.622	13.572	5.219	0.187	1.421	8.26	0.701	2.337
PAE.G.XIII.2	Paestum	PAE.1	52.996	0.642	17.777	5.227	0.128	1.026	1.857	0.9	2.273
PAE.G.XIII.4	Paestum	PAE.2	53.668	0.658	17.361	5.688	0.13	1.062	1.462	0.977	2.647
PAE.G.XIV.1	Paestum	PAE.1	55.222	0.63	16.672	5.132	0.38	0.636	1.884	1.133	2.613
PAE.G.XIV.2	Paestum	PAE.1	48.895	0.604	19.572	5.059	0.091	0.669	2.288	0.954	2.352
PAE.G.XIV.3	Paestum	PAE.2	48.579	0.63	20.073	5.158	0.085	0.547	2.232	0.964	2.421
PNT.A.20.02	Pontecagnano	PNT.3	56.532	0.532	16.401	4.027	0.075	0.434	1.711	1.43	3
PNT.A.20.06	Pontecagnano	PNT.3	56.635	0.529	16.372	4.041	0.078	0.442	1.721	1.423	2.986
PNT.A.20.09	Pontecagnano	PNT.2	47.198	0.714	19.375	5.957	0.06	0.798	2.766	1.313	3.234
PNT.A.20.11	Pontecagnano	PNT.2	50.005	0.673	17.718	5.561	0.07	0.735	2.458	0.991	2.259
PNT.A.20.13	Pontecagnano	PNT.2	46.335	0.659	19.621	6.565	0.092	0.643	2.308	1.375	3.33
PNT.A.20.14	Pontecagnano	PNT.1	49.098	0.7	18.621	4.692	0.054	0.62	2.033	1.004	2.528
PNT.A.20.15	Pontecagnano	PNT.4	37.57	0.586	16.081	1.521	0.037	0.437	14.934	0.811	1.907
PNT.A.20.25	Pontecagnano	PNT.2	49.338	0.652	19.525	7.064	0.151	0.633	2.571	1.48	3.492
PNT.A.20.26	Pontecagnano	PNT.2	50.637	0.71	18.455	5.871	0.095	0.687	2.26	1.733	4.17
PNT.A.20.28	Pontecagnano	PNT.2	47.844	0.723	20.475	5.256	0.056	0.715	2.332	1.223	2.998
PNT.A.21.1	Pontecagnano	PNT.5	57.996	0.706	17.843	4.348	0.116	0.803	1.19	0.476	1.321
PNT.A.21.4	Pontecagnano	PNT.2	49.925	0.7	19.712	5.411	0.042	0.628	1.974	1.265	3.385
PNT.A.21.5	Pontecagnano	PNT.2	51.542	0.686	20.67	3.817	0.138	0.429	2.072	1.789	3.769
PNT.G.11a.2	Pontecagnano	PNT.1	43.853	0.842	23.216	7.117	0.102	0.874	1.218	0.571	1.979
PNT.G.12a.1	Pontecagnano	PNT.1	52.23	0.688	20.432	5.697	0.094	0.677	1.8	1.015	2.529
PNT.G.12b.2	Pontecagnano	PNT.1	48.662	0.646	19.415	5.766	0.092	0.898	1.911	1.046	2.697
PNT.G.12b.3	Pontecagnano	PNT.1	46.117	0.704	21.117	5.997	0.085	0.655	2.13	0.827	2.382
PNT.G.12p.1	Pontecagnano	PNT.1	49.406	0.697	19.757	5.951	0.122	0.625	1.607	1.077	2.947

PNT.G.12p.3	Pontecagnano	PNT.1	45.601	0.743	22.22	6.523	0.145	0.659	1.403	1.104	2.84
PNT.G.13a.1	Pontecagnano	PNT.1	47.703	0.799	21.367	6.426	0.081	0.929	1.852	0.632	2.22
PNT.G.13a.3	Pontecagnano	PNT.1	48.311	0.755	19.692	6.321	0.084	0.758	1.441	0.897	2.669
PNT.G.13B.1	Pontecagnano	PNT.1	48.111	0.694	19.266	5.929	0.075	0.767	1.886	0.931	2.606
PNT.G.13b.2	Pontecagnano	PNT.1	45.256	0.909	23.505	7.248	0.134	0.76	1.749	0.562	2.15
PNT.G.13p.2	Pontecagnano	PNT.1	47.8	0.676	19.146	6.726	0.1	0.59	1.65	1.181	3.099
PNT.G.13p.3	Pontecagnano	PNT.1	45.435	0.648	21.016	5.424	0.057	0.754	1.788	1.002	2.607
PNT.G.13p.4	Pontecagnano	PNT.1	50.193	0.621	18.942	5.246	0.127	0.68	1.646	0.944	2.837
PNT.G.13p.6	Pontecagnano	PNT.3	61.342	0.579	13.957	4.747	0.144	0.796	1.04	0.945	2.082
PNT.G.13p.7	Pontecagnano	PNT.1	47.822	0.746	20.456	6.641	0.104	0.718	1.328	0.894	2.575
PNT.G.14a.1	Pontecagnano	PNT.1	52.167	0.782	19.322	6.014	0.089	0.919	1.92	0.908	2.678
PNT.G.14a.3	Pontecagnano	PNT.1	51.952	0.713	18.344	5.437	0.145	0.889	1.942	1.167	3.186
PNT.G.14b.1	Pontecagnano	PNT.1	49.661	0.724	19.612	5.979	0.091	0.876	1.701	0.864	2.374
PNT.G.14b.2	Pontecagnano	PNT.1	49.337	0.742	20.043	6.325	0.105	0.755	1.739	1.054	2.989
PNT.G.14b.3	Pontecagnano	PNT.1	50.91	0.691	19.045	5.955	0.143	0.796	1.933	1.07	3.016
PNT.G.14p.2	Pontecagnano	PNT.1	52.074	0.66	18.514	5.161	0.138	0.664	1.621	1.103	3.022
PNT.G.14p.3	Pontecagnano	PNT.3	54.892	0.743	17.045	5.647	0.141	1.012	1.171	1.02	2.17
PNT.G.14p.5	Pontecagnano	PNT.1	50.837	0.766	20.189	6.879	0.067	0.89	1.223	1.111	3.131
PNT.G.14p.7	Pontecagnano	PNT.1	45.153	0.668	22.375	5.906	0.064	0.66	1.629	0.871	2.476
PNT.G.16.1	Pontecagnano	PNT.1	45.82	0.618	17.236	5.302	0.139	0.679	1.442	0.969	2.56
PNT.G.16.2	Pontecagnano	PNT.1	47.948	0.646	19.933	6.103	0.109	0.588	1.726	1.039	2.995
PNT.G.17b.2	Pontecagnano	PNT.1	49.936	0.696	20.398	6.063	0.062	0.887	2.039	0.942	2.911
PNT.G.17p.2	Pontecagnano	PNT.1	47.734	0.734	19.368	6.514	0.149	1.055	1.582	0.624	2.079
PNT.G.17p.4	Pontecagnano	PNT.1	49.821	0.793	19.39	6.118	0.159	0.612	1.558	1.472	3.462
PNT.G.18p.1	Pontecagnano	PNT.1	45.606	0.692	21.016	5.941	0.1	0.704	1.704	0.893	2.414
PNT.G.20p.1	Pontecagnano	PNT.1	45.262	0.674	21.505	5.9	0.084	0.514	1.845	0.973	2.629
PNT.G.20p.2	Pontecagnano	PNT.1	54.756	0.736	18.118	5.377	0.182	0.749	2.232	1.347	3.235
PNT.G.90p.1	Pontecagnano	PNT.1	47.894	0.723	20.609	6.053	0.136	0.569	1.568	0.918	2.604
SAL.C.I.02	Sala Consilina	SAL.1	60.817	0.509	15.045	4.534	0.165	0.927	1.111	1.079	2.364
SAL.C.I.03	Sala Consilina	SAL.1	59.62	0.535	14.962	4.064	0.085	0.942	1.244	1.068	2.3
SAL.C.I.04	Sala Consilina	SAL.1	58.8	0.628	16.174	5.096	0.146	0.894	1.364	1.012	2.294

SAL.C.I.05	Sala Consilina	SAL.1	56.566	0.695	18.903	5.74	0.115	1.287	1.506	0.988	2.499
SAL.C.I.06	Sala Consilina	SAL.3	51.257	0.839	17.458	7.486	0.088	1.616	1.636	0.235	1.34
SAL.C.I.07	Sala Consilina	SAL.2	53.282	0.85	18.015	6.363	0.172	1.587	1.951	0.665	2.432
SAL.C.I.09	Sala Consilina	SAL.1	62.056	0.566	15.946	4.748	0.144	1	1.246	1.04	2.576
SAL.C.I.10	Sala Consilina	SAL.1	59.793	0.533	15.431	4.574	0.11	0.946	1.111	1.05	2.355
SAL.C.I.11	Sala Consilina	SAL.1	61.122	0.508	14.48	4.347	0.083	0.843	1.213	1.03	2.233
SAL.C.I.12	Sala Consilina	SAL.1	63.586	0.521	16.051	4.735	0.111	1.062	1.131	1.088	2.533
SAL.C.I.13	Sala Consilina	SAL.4	59.61	0.985	21.655	7.712	0.212	2.198	1.354	0.751	2.606
SAL.C.I.14	Sala Consilina	SAL.5	29.007	0.48	10.47	3.352	0.039	10.16	13.436	0.353	1.128
SAL.C.II.01	Sala Consilina	SAL.2	50.556	0.902	22.374	7.376	0.104	1.905	1.345	0.506	2.378
SAL.C.II.03	Sala Consilina	SAL.2	50.692	0.79	18.328	6.965	0.277	1.606	1.402	0.6	2.2
SAL.C.II.04	Sala Consilina	SAL.1	60.008	0.517	14.992	4.58	0.152	0.623	1.136	0.923	2.555

Minor and trace elements (ppm)

Sample	Fabric	Ag	As	Bi	Ce (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Ga (ppm)	Hf (ppm)	La (ppm)	Mo (ppm)	Nb (ppm)	Nd (ppm)	Ni (ppm)	Pb (ppm)	Rb (ppm)	Sb (ppm)	Sc (ppm)	Se (ppm)	Sm (ppm)	Sn (ppm)	Sr (ppm)	Ta (ppm)	Th (ppm)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Y (ppm)	Zn (ppm)	Zr (ppm)
ATE.FA.01	ATE.2	0.4	18.6	1.6	197.1	19.7	61.1	21.3	21.5	8.3	84.6	2.2	48.7	56.4	30.9	47.5	158.7	0.1	6.8	0.5	10.6	2.9	171.7	1	29.8	1.2	4.5	95.4	14.1	37.3	100.3	383.2
ATE.FA.02	ATE.1	0.8	19.7	1.4	181.8	17.6	59.6	21.9	21.3	8.9	97.2	1.4	48.7	61.3	30.9	44.4	159.6	2.1	7.7	0.1	9.7	4.3	185.2	1.4	28	1.5	4	106.6	13.9	40.2	104.5	376
ATE.FA.03	ATE.5	1.3	14.1	0.9	164.9	26.7	87.3	37.3	23.4	9.4	81.7	1.9	38.1	50.2	51.4	42	146.2	0.4	9.8	0.1	7.9	4.1	145.3	1.8	22.3	1.1	4.2	130.5	14.1	38	123.6	339.8
ATE.FA.04	ATE.3	0.7	13.6	1.3	95.6	12.4	95.1	33.9	23.1	6.2	63.3	1.1	27.4	36.1	44.1	21.9	108.5	0.1	1.5	0.1	0.8	2	140.7	1.2	16	0.4	3.3	115.6	12.4	27	106.1	214.5
ATE.FA.05	ATE.2	0.3	18.9	1.2	214.5	24.4	59.7	18.8	20.6	8.8	85.7	1.7	46.5	53.8	31.4	50.1	168.2	1.3	6.4	1.1	10.1	3.6	169.7	2.3	27.1	0.8	4	107.4	13.3	34.8	105.5	380.7
ATE.FA.06	ATE.1	1.2	19.6	0.9	181.3	19	59.7	20.9	19.8	9.3	98.8	2.1	47.5	58	31	43.3	154.7	1.3	8	0.9	8.3	5.1	188.4	3.7	26.8	1.1	5.1	108.4	14	42.1	103.5	372.2
ATE.FA.07	ATE.6	0.4	13.9	0.7	81.2	5.2	76	17.5	16.7	5.2	55.4	2	18.4	29.6	18.7	29.9	104	1.3	8.3	0.2	2.5	3.2	108.2	0.5	15.9	0.7	3.4	100.8	9.4	20.1	53.1	194.8
ATE.FA.08	ATE.6	0.6	20.5	0.8	189.9	16.6	78	25.9	19.1	9.6	101.6	1.4	44.1	62.6	44.5	46.6	157.3	0.5	7.8	0.5	10.3	4.7	221.4	0.8	27.5	1	4.7	106.1	12	45.9	91.4	372.8
ATE.FA.09	ATE.1	1.2	20.1	1.2	194.6	19.9	57.3	20.6	21.4	7.4	90.2	1.5	46.4	54.9	29.3	46	146.6	0.8	6	0.9	14.5	4.4	195.2	2.9	26.8	1.6	4.7	111.8	12.5	37.4	96.9	366.3
ATE.FA.13	ATE.4	0.4	7.9	0.3	105.8	16.1	71.4	28.4	16.9	4.8	62.2	1	24.2	36.6	36.6	27	109	0.2	1.5	0.3	4	2.8	142.6	0.5	16.5	0.6	3.1	79.3	8.4	28.7	101.9	215.6
PAE.A.II.01	PAE.7	0.7	9.7	0.9	90.9	15.5	89.5	24.4	18.8	6.2	51.6	0.4	24.5	30.4	53.8	23.6	114.9	0.2	4.8	0.1	4.1	2.4	228.3	1.5	14.3	1	3	100.7	10.3	26.1	145.6	185.8
PAE.A.II.03	PAE.4	1.2	13.6	0.1	159.5	18.6	47.4	20.1	15.8	6.6	71	1.8	35.9	42.6	21.6	42.8	173.9	0.8	5.7	0.1	6.7	2.9	227.8	1	20	1	5.7	90	8.4	29.7	70.6	327.4
PAE.A.II.05	PAE.4	0.5	15.2	1	160.2	18.5	46.2	20	16	6.2	68.8	2	36.4	42.3	20.6	42.5	171.6	0.3	6.9	0.6	5.4	2.2	226.7	0.8	22.4	1.1	5.6	89.4	8	31.2	69.4	329.7
PAE.A.II.06	PAE.4	0.3	16.9	1	277	25	59.3	15.5	16.8	8.3	90.6	2.4	39.4	52	31.5	50.5	147.9	1.9	4.4	0.5	12.3	3.4	350.8	1.8	20.7	1.5	3.9	99.2	11.7	31.6	81.3	312.5
PAE.A.III.01	PAE.1	0.2	23.2	0.8	134.7	8	57.3	11.7	19.6	9.1	70.2	1.8	48.3	46.5	24.1	39.2	135.6	1.2	5.2	1.1	7.4	3.4	308.6	1.7	24.6	1.6	4.6	86	11	28	77.2	358.3
PAE.A.III.03	PAE.4	0.7	12.6	0.8	106	9.1	38.5	24.5	15	8.7	66.5	1.9	33	38.8	18.6	34.7	154.8	1.1	7.2	0.4	4.6	3.8	263.4	1.6	20.5	1.5	5.5	70.1	8	31.2	91.7	285.9
PAE.A.III.06	PAE.3	0.6	16.4	1.1	95.9	7	38.3	13	17.7	8.9	44.6	2.3	45.2	23.8	23.6	37.1	184.7	0.8	5.5	0.5	2.8	2.9	272.9	2.2	23.9	1.8	5	79.2	9.5	16.1	81.5	332.8
PAE.A.III.08	PAE.4	0.5	9.7	0.6	93.8	16.1	89.8	24.8	18.8	5.1	53.6	0.6	24.8	32	54.7	23.7	115	0.1	3.1	0.3	5.6	2.6	228.6	2.4	14.4	0.9	3.7	102.8	10	24.5	145.9	185.9
PAE.A.III.10	PAE.4	0.2	12.7	0.7	106.7	8.9	38.2	24.1	15.2	7.7	65.3	1.9	32.6	40	17.8	34.4	155.1	0.4	5.7	0.9	9.2	3.6	262.4	1.3	19.7	1.5	5.2	69	7.3	29.3	90.1	286.9
PAE.A.III.12	PAE.4	0.5	20.5	1.1	159.7	20.4	58.7	15	15.1	7.6	59.7	2.1	34.3	35.8	15.4	43.8	143.2	0.6	3.3	0.7	8.2	2.6	356.8	1.8	17.6	1.3	5	93.1	10.3	22.7	70.4	292.9
PAE.A.III.14	PAE.4	0.6	18.9	0.8	138.5	13.9	37.5	17.6	18.3	9.6	69.8	1.4	39.7	42.5	18.9	41.6	141.3	1.9	6.4	1	3.8	3.4	330.4	1.1	20.3	1.7	6.3	88.6	10.5	27.1	65.1	315.3
PAE.A.III.16	PAE.4	0.6	15.9	1.4	143.9	11.2	54.1	9.5	17.1	5.8	57.6	1.4	39.5	37.3	19.7	39.8	136.6	2	8	0.3	6.4	4	365.9	3.3	22.4	1.9	5.9	71.9	9.9	23	64.9	307.7
PAE.A.III.17	PAE.2	0.7	25.9	0.9	130.2	8.7	28.5	14.3	20.4	5.4	64.8	2	54.4	35.9	28.9	43.2	156.2	0.2	4.3	0.4	4.6	4.2	307.2	3	28.4	1.4	4	76.9	11.1	22.4	80.8	392.5
PAE.A.III.18	PAE.2	0.5	20.9	1.1	161.9	8.6	34.4	18.7	19.3	7.7	84.6	3.2	52.6	51.6	22.5	42	147.2	0.8	5	0.4	7.4	4.2	363.3	3	27.4	2.2	5.1	73.9	9.8	28.1	94.6	383.9
PAE.A.III.19	PAE.3	0.5	18.3	1	121	13.3	43.9	16.1	19.2	7.3	52.8	1.7	54.8	31.3	26.1	43	130.3	0.6	4.4	0.7	6.1	4.1	273	1.9	28.1	1.4	4.9	74.2	12.7	18.9	72.7	400.1

PAE.A.III.20	PAE.4	0.2	19.8	0.8	204.7	18.7	47.9	16	16.8	6.7	79.9	1.7	40.4	47.3	20.6	41.6	144.9	0.1	5.4	0.1	8.1	2.1	316.8	0.7	21.1	2	5.2	93.8	11.8	28.1	75.7	319
PAE.A.III.21	PAE.2	0.4	34.9	1.1	175.3	10.6	37.3	16.4	21.2	10.9	102.5	2.1	55.6	60.1	34.9	43.3	175.4	0.6	4.7	0.4	13.5	4.4	362.3	4.2	27.4	2.2	4.7	77.8	13.7	39.7	118.9	399.7
PAE.A.III.22	PAE.4	0.1	17.3	1.3	137.3	10.8	34.9	6.5	19.1	6.1	51.9	1.2	48.1	33.3	18.3	42.6	145.5	0.9	5.5	0.6	5.3	3.5	280.9	2.5	25.1	1.8	6.1	75.7	13.5	19.3	75.6	366.8
PAE.A.III.23	PAE.2	0.5	36.4	0.8	159.4	10.2	35.6	17.7	19.8	7.2	78.6	1.9	54.5	46.3	35.7	41.6	173	1.2	6	0.3	5.8	4.8	316.7	2.5	28	1.9	3.8	79.4	11	29.1	122.4	386.5
PAE.A.III.24	PAE.2	0.1	29.9	2	176	11.2	41.2	15.3	21.2	10.1	84.5	1.8	56.4	49.1	33.3	45.6	174.8	0.7	5	0.4	7.2	3.8	348.4	3.1	28.5	2.4	3.2	82.8	12.4	32.3	122.6	412.1
PAE.A.III.25	PAE.3	0.8	21	1.2	149.5	9.3	41.9	26.1	18.6	9.1	76.8	1.6	48.1	46.7	39.7	42.3	178	1.6	5.4	0.7	10.4	4.6	308.4	2.1	26.4	2.3	3.8	82.2	10.1	25.6	104.4	358.8
PAE.A.III.26	PAE.1	0.4	21.7	0.9	100.8	9.2	48.5	11	17.6	7.6	58.1	2.9	33.5	33.9	22.9	29.5	139.6	1.8	6.7	0.3	9.5	3.3	211.6	1.6	20.8	0.8	4.1	96.2	9.6	23	94.5	275.9
PAE.A.III.27	PAE.4	0.3	17.7	0.9	139.2	14.5	37.7	9.5	17.5	7.1	53.1	1.9	41.1	34.4	19.1	44.7	133.8	0.8	3.8	0.6	7.6	3.5	286	1.8	23.5	1.2	5.1	76.7	11.5	21.7	74.7	324.8
PAE.C.1.1	PAE.4	0.1	6.8	0.7	83.3	14	90.2	19.4	18.2	5.7	50.9	1.4	21	28.1	37.1	20.9	112.1	0.2	9.3	0.3	1.5	0.7	209.9	1.4	13.5	0.9	3.3	108.2	10.6	23.8	124.1	210.8
PAE.C.1.3	PAE.2	0.2	20.3	1	166.7	8.4	33.3	12	17.6	5.5	84.5	2.1	54	55.1	23.1	41.8	140.8	1.3	2.4	0.6	6.8	3.6	423.5	0.3	28.6	1.6	4	75.5	11.4	31.5	76.5	390
PAE.C.1.4	PAE.2	0.1	40.4	1.3	178.5	12.4	39.7	13	21.4	9.8	101.4	3.2	56.8	65.3	33.8	45.7	168.9	0.4	4	0.3	13.4	4.7	398.3	3	28.1	2.1	3.8	95.5	13.9	42.1	84.9	409.7
PAE.C.2.1	PAE.5	0.7	19.2	0.6	118.8	19.8	99.9	27.6	23.2	4.8	73.2	1.7	32.2	47	57.5	28.1	111.9	1.4	9.7	0.9	8.8	3.3	274.9	1.4	18.7	1.6	4	123.4	12.6	35.4	116.3	281.7
PAE.C.2.2	PAE.2	0.4	26.1	1.2	152.2	9.6	30.3	8.7	16.8	6.4	64.9	2.8	47.2	40.5	40.8	39	152.8	1.4	6.2	0.4	1.6	4.6	361.7	2.9	25.4	2.2	4.3	72.9	12	24.1	79.1	339.9
PAE.C.2.4	PAE.4	0.4	20.4	0.4	45.4	2.3	30.8	7.1	13.3	5.8	34.6	1.4	29.5	16	27	24.9	112.3	1.9	5.8	0.7	1.6	2.8	226.8	1.9	17.7	1.4	3.1	73.2	9	13.4	46.8	264.3
PAE.C.2.6	PAE.2	0.3	17.6	1.5	231.8	15.8	39.1	15.4	18.7	8.9	95.3	1.5	51.4	59.7	30.4	42.5	161.5	0.9	3.5	0.2	10.3	4	462.2	1.4	28	2	4.2	89.6	13.2	32.9	69.7	375.5
PAE.C.2.8	PAE.4	0.8	17.9	0.9	115.8	15.1	50.3	14.1	13.3	6.4	49.9	1.4	24	32.2	35.5	28.7	122.1	1.6	8.1	0.6	7	3.5	210.4	0.3	17.3	1.6	3.2	81.5	6.9	23.4	54.2	246
PAE.C.4.1	PAE.1	0.6	28.6	0.7	159.3	9	34.9	14.6	17.1	9.4	91.7	1.9	52.8	55.9	36.5	44.1	152.8	2	4.1	1	12.4	3.8	375.7	1.9	28.3	2.2	5.7	93.8	9.5	40.2	75.6	387.4
PAE.C.4.2	PAE.2	0.6	20.5	1.3	175.5	9.1	31.3	12.2	19	7.4	100.3	5.1	55.3	60.7	54.4	41.6	169.7	1.7	5.7	0.9	13.2	4.5	406.1	3.8	29.1	1.6	3.5	82.3	11.9	36.6	75.9	393.3
PAE.C.4.3	PAE.2	0.3	40	1	175.1	11.1	35	17	22.1	11	76.6	2.1	57.4	48.6	47.3	45.5	181.1	1.6	5.2	0.9	7.7	4.2	303.3	2.9	29.3	1.9	3	87.9	12.8	31	92.1	407
PAE.C.5.3	PAE.1	0.7	20.6	0.8	148	9.8	30.8	11.2	17.4	7.9	72.7	2.1	51.2	44.9	20.3	41.3	139.5	0.5	3.6	0.5	10.6	4.5	387.6	1.6	28.3	1.9	4.6	76.5	11.1	29.4	77.2	375.7
PAE.C.A.3	PAE.4	0.5	15.4	1.2	180.2	19.7	41.9	13.8	19	7.7	59.5	2.5	35.9	37.4	26.7	40.8	134.7	1	6.3	0.7	8.4	3.8	316.7	1.5	21.2	2.3	4.2	86.3	10.1	25.1	58.2	293.8
PAE.C.A.4	PAE.1	0.4	20.1	1.7	180	14.9	38.4	13	18.1	9	74.3	2.6	48.3	42.1	19.8	45.8	159	0.4	4.8	0.7	6.5	3.7	365.1	1.4	25.6	2	5.4	91.4	12.2	25.9	79.5	363
PAE.C.S.1	PAE.3	0.3	15.2	0.4	181.6	14.7	38.1	18.3	15.7	7.5	66.9	1.1	31	42.7	40.3	32.8	137.1	0.7	4.3	0.4	9.4	2.3	281.3	1.1	17.8	1.6	2.9	78.7	8.8	25	55.7	251
PAE.C.S.2	PAE.3	0.3	18.2	1.1	155.7	15.7	40.2	12.8	17.7	9.5	70.6	1.7	45	39	21	43.5	146.4	1.4	5.1	0.7	9.1	4.5	346	2.5	24	2.3	4.7	87.4	10.9	26.1	63.7	355.6
PAE.C.S.4	PAE.4	0.7	14.1	0.6	69.6	10	67.2	15.3	14.3	7.1	39.4	1.8	21.4	26.6	47.9	18.7	103.8	1.3	8.1	0.4	3.8	2.1	188.3	2	13.6	2.4	2.6	89.5	10.1	26.7	113.9	262.2
PAE.C.S.5	PAE.2	0.4	23.8	1.5	170.2	8.4	29.6	9.6	18	7.3	76.9	2.2	55	48	27.7	43.3	139.3	1.1	3.7	0.8	7.4	6.6	455.6	3.1	27.8	2.3	4.2	69.4	11.1	27.3	85.6	389.3
PAE.C.T.01	PAE.3	0.5	18	0.8	130.2	19.7	40.7	20.4	16.9	7.4	70.4	1.6	37.9	44.7	43.8	34.1	137.6	1.5	7.9	0.3	10.5	4.1	262.8	1.6	22.6	2.1	4.3	100.6	10	26.1	90.2	326.8
PAE.C.T.02	PAE.2	0.1	20.8	1.4	161.4	8.8	31.3	14.9	17.1	8.6	74.5	2.7	52.8	49.5	25.6	41.8	147.7	1.3	3.7	0.4	9.1	3.6	389.5	2.3	28.5	2	4.1	69.5	11.8	28.5	83.1	381.4
PAE.C.T.04	PAE.4	0.9	21	1.4	157.1	11.9	32.2	11.9	18.8	8.6	74.5	2.8	52.8	42	19.3	46.4	174.2	0.1	3.6	0.8	6.5	3.2	339.9	2	27.2	2.1	5.6	83.9	12.5	23.7	79.2	395.8
PAE.C.T.05	PAE.4	0.7	15.2	1.3	161.6	10.6	31.5	17.4	18.4	11	75.3	2.5	51.7	41.5	19.8	45.8	185.1	1.7	5.5	0.7	3.2	3.6	329.2	2.5	26.6	1.8	4.7	76.5	10.6	24.1	76.7	389.1
PAE.C.T.09	PAE.1	0.2	18.9	1.1	161.1	17.4	41.5	10.8	16.7	5.6	68.1	2.1	43.3	40.9	20.2	44.3	134.1	1.2	5.6	0.1	7.9	3.3	329.1	2.5	24	2.2	4.8	87.6	10.8	27.4	62.8	338.2

PAE.C.T.10	PAE.1	0.6	17.7	1.1	176.2	11.7	37.8	8.6	19.8	7.7	83.2	1.7	48.2	51.6	19	44	159.4	1.1	6.7	0.9	9.3	3.6	364.9	1.9	24.6	1.9	5.8	84.1	11.2	31.6	74.3	368.3
PAE.C.T.12	PAE.4	0.2	14.4	1	46.2	4.3	30.3	8.3	15.2	5	35.9	1.7	39.6	16	17.8	31.1	139.6	1.2	4	0.5	4.4	3.5	308.9	1.9	21.6	1.5	4.5	80.5	10.7	11	65.1	302.9
PAE.G.00.1	PAE.2	0.4	25.5	0.9	132.7	5.2	28.4	11.7	21.9	9.8	67.9	1.6	55.7	44.5	20.3	42.4	130.4	2.2	4.8	0.6	5.2	4.2	230.6	1.9	28.5	1.4	4.4	80.3	10.8	27.8	72.6	393.8
PAE.G.00.2	PAE.6	0.4	15.3	0.8	88.9	9.3	90.9	21.2	22.6	6.9	66.8	2.5	44.6	35.1	42.3	35	117.3	1	9.6	0.7	2.4	4.6	157.2	2.5	24.7	0.8	3.9	144.6	11.1	28.2	91.7	338.4
PAE.G.00.3	PAE.1	0.4	14.6	0.8	94.9	9.4	47.3	20.3	18.8	4.9	56.3	1	34.9	32.9	23.7	33.3	173.3	0.2	8	0.1	3.4	3.7	140.1	1.8	20.8	1.2	4.1	85.2	9.3	24.3	79.5	294.1
PAE.G.00.4	PAE.2	1.1	21.8	0.6	133	9.1	34.8	11.3	21.3	9.4	67.4	4.6	55.9	40.2	23	42.8	172.6	1.3	6.4	0.3	3.9	4.9	240.9	1.5	30	1.4	3.4	88.8	13.1	24.5	74.9	403.4
PAE.G.00.5	PAE.1	0.6	19.6	0.9	87.9	9.3	65.2	26	21.1	9	43.6	1.5	39.4	24.6	32.9	37.1	107.1	1.8	9.1	1.1	1.9	4.8	134.6	2.1	21.7	2	5.1	105.4	9.6	17.9	81.4	308.9
PAE.G.00.6	PAE.1	0.1	24.6	0.9	131.8	8.4	37.8	18.6	19.2	7.9	73	1.7	46.6	48.2	18.7	40.6	163.5	2.5	6.9	0.7	10.2	4	194.9	2.9	27	1	5.1	90.1	11.1	33.6	62.7	369.9
PAE.G.00.7	PAE.1	0.2	13	0.9	87.8	8.9	47.5	19	19.7	7.4	51.2	1.2	34.6	31.2	24.7	32.4	177.3	1	7.7	0.2	7.4	4.4	146.7	1.6	20.7	1.8	3.1	87.3	11	23.6	79.2	299.5
PAE.G.00.8	PAE.1	0.3	23.6	0.9	132.9	7.4	36.5	18.1	18.5	8.7	71.3	1.8	46.1	44	16.8	39.3	148.5	1.4	7.4	0.4	7.3	4.8	181.1	1.3	26	1.3	6	91.2	11.3	32.4	60	362.8
PAE.G.00.9	PAE.2	0.6	23.7	0.9	139.5	7.2	42	9.7	20.9	8.3	71.3	1.8	55.8	42.3	20.4	43.9	126	1.5	5.2	0.3	5.5	4	246.7	1.7	28.4	1.1	4.2	77.7	9.6	26.5	68.7	400.2
PAE.G.a.1	PAE.1	0.9	15.6	0.5	102	11.7	45.9	10.5	17.5	6.5	43.7	1.3	37.7	26.8	21.1	37.4	128.4	2	5.8	0.6	1.2	4.1	205.4	2.4	20.8	1.4	3.5	89.5	12	19.2	61.6	324.1
PAE.G.b.1	PAE.3	0.4	7.8	1.2	90.6	16.6	93.1	12.8	17.7	6.7	50.4	0.6	27.1	28.3	52.3	32.8	181.6	0.9	7.1	0.5	1.5	4.9	219.1	2.4	17	1.7	3.9	74.1	9.7	23.8	70.8	249.1
PAE.G.b.2	PAE.2	0.4	20.1	0.9	148.9	9	30.8	10.1	19.8	6.7	75	3.6	52.4	47.4	22.6	40.8	146.5	1.2	5.7	0.7	7.1	4.2	292.1	1.8	28.5	1.5	3.6	84.1	11	28.3	66.1	376.6
PAE.G.b.4	PAE.1	0.25	17.4	0.9	116.7	9	36.8	17.9	17.2	8.4	65.2	1.2	38.8	41.4	18.4	36.2	153	0.4	5.8	0.8	9.9	2.3	272.9	1.8	22.8	1.7	5.4	76.2	9.1	28.6	75.5	308.6
PAE.G.b.5	PAE.3	0.4	19	0.8	123.1	9.2	24.9	10.2	16.4	7.5	57.2	0.9	46.4	34.9	15.8	39.3	113.2	1.6	3.9	0.5	9.1	3.9	315.5	1.5	23.9	1.2	5.5	79.2	10.2	20.4	46.2	335.7
PAE.G.b.6	PAE.3	0.25	19.7	0.9	77.1	5.2	31.4	9	16	7.7	53.7	1.7	40.1	29.3	15.1	32.9	125.1	2	6.5	0.6	4	39.5	210.7	0.7	24.5	1.1	3.2	86.3	10.6	20.2	50.6	325.4
PAE.G.C.1	PAE.1	0.2	16.4	0.4	108.9	6.8	42.8	8.1	18.3	9.8	61	1.4	51.5	38.8	20.2	37.2	117.7	0.5	5.4	0.4	7	4	280.8	2	25.9	1	5.1	74.5	10.6	23.4	63.4	379.3
PAE.G.C.2	PAE.2	0.1	24.9	0.9	170.2	9.6	36.5	9.3	20.7	10.1	76.7	2.3	56.2	50.4	23.7	44.7	133.8	1.5	5.3	0.8	8.5	4.8	249.6	2	29.4	1.5	3.6	80.6	11.4	29	71.7	403.2
PAE.G.C.3	PAE.3	0.1	23.1	0.3	150.3	9.7	31.6	8.1	17.7	6.6	55	2.4	49.3	32.8	21.2	39.7	114	1.8	3.8	0.4	8.3	4.5	276.6	3.3	26.1	1.4	5.8	84.2	11.8	18.1	57.9	355.1
PAE.G.C.4	PAE.1	0.7	18.2	0.6	129.7	27.7	58.3	24.6	16.8	5.9	56.8	2.1	35.7	31.8	32	41.3	107.7	1.7	7.3	0.4	5.4	3.1	210.1	0.5	20.3	1.3	4.7	104	11.7	22.7	79.5	289.7
PAE.G.d.1	PAE.2	0.8	23.4	0.9	159.1	6	35.8	12.9	22.1	10.5	95.3	2.1	51.3	57.4	22.1	42.2	130.3	2	5.7	0.9	10.4	4.9	320.9	1.8	27.3	1.4	5	86.5	9.6	37.2	82.3	374.1
PAE.G.f.1	PAE.2	0.1	24.9	0.4	151.6	8.1	35.9	10.7	21	8.5	73.2	2.8	55.3	47.1	22.8	42.5	171.9	0.8	4.6	0.1	7	3.1	260	2.6	29.2	1.3	4.6	74	9.1	27.5	72.5	398.6
PAE.G.f.3	PAE.3	0.25	17.7	1.1	89.7	5.1	50.5	12.6	19.6	5.8	49.9	2.4	41	27.3	20.6	36.2	151.6	1.1	6.8	0.1	5.9	3.5	175.1	1.2	23.3	1.3	5.2	94.6	11.6	20.7	63	355.4
PAE.G.I.2	PAE.2	0.25	21.8	0.7	117.6	6.8	35.1	11.9	19.9	9.1	56.7	2.6	51.4	35.1	26.5	38.9	116.7	1.6	2.6	0.8	7.9	4.4	375.1	1.7	26.4	0.7	4	71.6	10.9	21.5	62.2	374.4
PAE.G.I.3	PAE.1	0.4	14.7	0.6	170.5	15.8	45.4	10.1	17.1	7.5	58.2	1.1	39.1	36.4	18.7	38.1	135.8	0.2	5.1	0.4	6.1	3	271.2	1.7	21.1	1.1	5.3	78.9	10.5	22.5	55	302.8
PAE.G.II.2	PAE.1	0.4	15.7	0.8	147.7	11.2	37.9	10.2	17	8	52.9	2.2	41	38.8	18.9	39.1	136.6	1	5.9	0.6	6.7	3.1	258.1	2.8	22.9	0.8	3	77.4	11.3	22.3	51.2	315.4
PAE.G.II.4	PAE.1	0.7	20.9	1.1	83.3	7.4	49.6	11.7	18.4	6.3	41.9	1.7	48.6	23.6	19.9	40.1	123.7	0.9	5.4	0.9	2.8	4.5	257.9	2.5	26.6	1.2	5.4	95.2	10.7	16.6	56.1	387.6
PAE.G.II.6	PAE.1	0.5	10.6	1.2	113.2	24.5	92.1	34	20.6	4.9	58.4	1.9	27.5	36.5	51.4	29.3	127	1.6	10.7	0.6	5.2	2.2	231.7	2.4	16.1	0.9	3.7	110.5	12	27.3	88.7	231.9
PAE.G.II.7	PAE.2	0.25	23.1	1.4	139.5	8.4	32.5	8.1	19.2	8.6	70.7	3.2	54.7	45.4	22.7	41.3	125.1	0.6	3.1	0.3	6.5	3.7	383.3	2.5	28.7	0.8	4	66	11	27.7	70.9	384.1
PAE.G.III.1	PAE.1	0.8	19.7	1.2	170.3	11.4	45.9	10	19.6	9.1	69.5	1.4	48.4	43.8	21.4	42.8	151.7	1.7	6.7	0.6	9.6	4.6	372.1	1.4	25.2	1.4	4.5	92.4	12.4	29.3	65.5	352.7

PAE.G.III.3	PAE.1	0.6	16.8	1	113.1	10.8	50	14.1	19.2	6.7	57.2	1.3	37.6	33.6	26.6	36.2	152.6	1.2	7.3	0.9	2.2	4.8	275.4	2.6	22.7	1.4	4.1	88.5	11.9	27.2	78.8	306.6
PAE.G.III.4	PAE.3	0.7	12	1.2	101.1	9.3	43.9	10.2	14	6.3	55	0.7	32.6	32	17.4	30.4	127.7	1.1	5.5	0.2	4.8	3	236.2	1.7	18.6	0.8	4.4	77.9	8.4	25.8	48.8	324.4
PAE.G.III.5	PAE.2	0.9	25.5	0.4	140.4	7.8	25.8	8.8	19.6	8	68.1	2.6	52.9	42.4	21.5	40.1	146.4	1.9	5.5	0.9	6.9	3.7	288.5	2.1	27.5	1.2	3.5	73.8	10.3	28	67.9	374.8
PAE.G.III.7	PAE.2	0.1	24.9	1.3	134.3	6.7	31.4	6.7	19.8	7.7	68.4	2.7	57.3	41.8	18.8	46.7	136.8	0.5	5.7	0.2	8.2	4.1	278.7	2.5	30.6	0.7	4.1	71.9	11.5	26.7	63	419.4
PAE.G.III.8	PAE.1	1.5	11	0.3	66.7	10.9	75.1	11.1	15.5	7	41.9	1	19	24.7	37	30.4	135.3	2.2	1.5	0.7	2.7	3.8	202.2	2.2	11.5	1.1	2.7	76.5	9.6	19.5	67.1	180.4
PAE.G.III.9	PAE.1	0.4	17.1	1	111.7	7	34.6	7	19.7	7	50.2	1.4	40.3	35	18.2	33.8	139.2	0.8	4.8	0.8	4.7	3.8	273	1.6	19.5	1.2	4.1	82.9	10.4	22.8	60.7	309.5
PAE.G.IV.1	PAE.1	0.8	13.7	0.9	86.4	5.5	73.7	16	19.2	8.1	50.5	2.7	38.8	27.8	20.4	33.1	124.2	1.6	7.9	0.7	1.9	5	152.1	2.4	21.6	0.9	5.2	105.1	10.6	18.6	58.5	309.7
PAE.G.IV.2	PAE.1	0.8	15.1	0.7	81.7	6.6	97.7	15.9	20.3	7.2	46.1	3.1	39.4	24.5	21.7	35.1	143.3	1.8	7.6	0.9	4	4	145.8	1.7	22.6	1.4	5.1	109.1	12.4	18.4	63.7	311.4
PAE.G.IV.3	PAE.2	0.7	23.8	1.2	112.3	6.1	29.9	8.6	20.5	8.7	59.2	2.8	58	37.5	21.3	43.7	149.1	1.7	4.7	0.9	6.8	4.5	230.2	2.4	31.3	1.8	4.1	67.8	10	22.6	70.1	410.6
PAE.G.IV.4	PAE.3	0.7	19.9	0.7	73.5	15.1	97.8	20.3	19.1	5.6	37.1	1.1	17.1	19.3	59.9	28.4	159.2	1.4	10.7	0.8	1.5	2.6	159.8	0.5	18.4	2.3	3.6	107.4	10.9	19.7	76.5	228.5
PAE.G.IV.7	PAE.1	0.7	25.1	1.4	114.9	5.2	27.2	10	21.9	6.9	62.2	2.2	53.5	41.9	20.2	41.4	133.2	0.5	4	0.3	5.7	4.1	206.6	1	28.3	1.4	4.3	74.7	10	24.5	82.2	381.8
PAE.G.IX.1	PAE.4	0.7	7.6	0.5	71.9	10.8	66	13.4	18.4	5.6	31.4	1.1	17.9	17.5	26.8	24.6	171.5	0.5	8.8	0.5	0.4	4.4	122.9	0.5	14.1	1.2	3.1	79.5	7.6	15.4	98.1	186.7
PAE.G.IX.2	PAE.1	0.9	16	0.6	139.4	17.4	51.4	20.2	19.7	5.1	62.5	2.2	48.1	39.5	27.5	43.5	141.1	1.5	8	0.2	5.8	3.8	171.4	2.4	24.2	1.5	6.2	101.6	12.7	25.2	75.3	359.8
PAE.G.IX.3	PAE.1	0.6	12	0.9	219.3	19.9	51.2	13.2	17	7.3	82.1	2.2	32	45.9	26.8	38.1	142.7	1.4	7.4	0.7	7.2	2.8	218.7	1.1	18.8	1.3	3.1	82.1	10.9	29.5	60.8	269.1
PAE.G.R.1	PAE.3	0.4	11.7	0.8	59.4	9.4	53.4	23.3	18	7.1	37.5	1.4	25.6	21.4	31	28.5	145.8	1.7	7.8	0.7	3.1	6.4	155.2	1.1	15.1	0.7	3.3	87.2	9.8	17.2	71.5	229.7
PAE.G.R.2	PAE.1	0.8	19.3	0.8	172.6	19.2	41.1	11.6	15.9	7.1	64.9	1.9	41.1	40	24.2	43	132.4	0.4	6.6	0.8	4.8	4.2	406.3	1.4	20.1	2.6	5.1	94.8	11.2	23.5	74	325.4
PAE.G.R.3	PAE.2	0.1	16	0.8	149	16.3	51.6	15	19.5	6.7	77.9	2.7	49.5	45.8	21.2	46.5	163.1	1.1	6.6	0.3	9.5	4.4	259.1	1.9	26.7	1.1	4.5	97.4	13.9	30.9	86.7	388.1
PAE.G.S.1	PAE.2	0.6	17.4	1.8	171.8	9.6	42.6	10.3	22.2	11.1	89	2.7	57.3	50.2	26.2	53.9	165.2	0.8	7.4	0.5	10.4	4.1	374.2	3.1	34.2	1.7	3.4	96.3	13.5	26.9	167.6	396.6
PAE.G.T.1	PAE.3	0.25	19	0.5	90.2	6	47.5	12.3	16.5	5.8	47.5	1.5	41.2	28.7	20.1	35.3	155.2	0.9	6.4	0.6	1.6	4.1	123.1	2.7	23.3	1	5	94.2	11.4	19.8	57.7	355.2
PAE.G.T.2	PAE.3	0.4	18.5	1.6	88.8	6	51.5	10.7	17.3	6.8	47.7	2	41.2	25.2	19.8	35.7	124.9	1.5	7.3	0.9	3.9	3.7	127.6	2.2	23.6	1.5	4.5	93	10.9	20.7	56.3	361.1
PAE.G.U.1	PAE.1	0.2	17.5	1.2	243.9	21.6	37.4	13.4	16.5	8.7	77.2	1.3	36.6	47.1	24.6	43.4	131.5	0.8	5.8	0.9	4.9	2.3	306.5	2.3	19.9	1.8	4.2	93.4	12	29.9	58.8	293.6
PAE.G.U.2	PAE.1	0.5	18.9	1	163.2	15.8	40	12.1	16.4	6.5	64.2	2	39.4	39.1	19.5	41.3	147	2.2	6.3	0.7	7.6	3	285.3	1.4	21.3	1.3	4.5	92.9	10.6	25.3	53.9	314.4
PAE.G.V.2	PAE.2	0.1	12.4	0.9	67.7	5.5	48.2	12.4	18.2	7	35	1.8	34.9	22	23.4	29.8	166.5	0.9	9	0.5	1.5	3	269.3	1.5	18.7	0.9	4.1	85.2	11	14.3	64.3	282.6
PAE.G.V.3	PAE.1	0.7	21.1	1.2	171.3	15.5	56.6	17.2	18	7.1	70.7	1.6	48.6	43.5	26.3	40	112.9	0.5	5.7	0.8	7.6	3	379.9	2.1	25.9	1.5	3.3	107.7	12.5	26.9	80.3	364.8
PAE.G.V.4	PAE.4	0.5	24.4	0.9	155.6	8.6	29.3	7.4	18.4	9	64.9	2	47.7	39.3	22.3	38.7	126.5	1.5	2.7	0.5	4.1	4.3	212.1	2	24.6	1.1	4.5	73.5	10.2	26.7	61.2	350.5
PAE.G.VII.2	PAE.3	0.8	15.2	0.8	162.8	12.6	48.9	9.3	17.2	4.9	51.3	1	35.6	33.7	24.4	35.8	128.5	0.9	5.3	0.4	6.5	3.8	200.9	0.6	18.7	0.7	3.5	75.7	9.2	20.7	49.3	290.3
PAE.G.VII.4	PAE.3	0.8	20.4	0.9	131.5	8.9	28.5	9.3	15.5	6.5	65.8	3.3	40.8	41	21.5	33.4	152	0.7	4.9	0.3	6.1	3.9	203.8	1.7	21.6	1.5	3.6	66.7	9.8	25.9	62	304.2
PAE.G.VII.5	PAE.1	0.2	13.3	0.6	251.6	22.6	40.7	14	17.3	6.7	85.1	1.2	32.4	51.6	31.2	39.8	153.5	1.6	7.9	0.4	6.8	2.8	218.1	2	18.5	1.8	3.9	85.9	10.8	29.4	62.1	277.9
PAE.G.VII.6	PAE.6	0.6	18.8	0.5	141.5	14.9	85.7	19	23.5	6.7	68.3	1.9	38.7	46	40.4	33.3	153.2	1.5	7.8	0.5	3.8	4.2	155.9	1	23.7	1.2	3.4	132.9	12.9	34.6	81.2	316
PAE.G.XI.1	PAE.1	0.4	19.3	0.7	98.5	12.8	42.3	13.8	20.4	9.6	52.8	2.4	44.7	30.7	19.6	39.3	155.4	0.7	7.4	0.6	7.7	4	215.3	2.8	22.3	1.7	5.6	105	11.3	22.1	65.3	351.3
PAE.G.XI.2	PAE.1	0.5	15.7	0.2	94.4	6.9	48.2	10.6	19.3	6	57	0.9	41.5	32.2	18.4	35.3	154.2	1.6	7.3	0.4	8.4	3.4	210.1	1.2	21.8	1.4	5.8	90.6	10.4	23.5	55.6	320.7

PAE.G.XI.3	PAE.6	0.8	14.9	1	95	11.3	100.4	21.4	22.8	6.8	66.4	2.6	45.4	36.5	44.6	36.1	139.1	1.3	8.7	0.1	5.1	4.3	142.8	1.4	25	1	3.6	147.5	11.2	26.8	96.2	346.8
PAE.G.XI.4	PAE.1	0.1	20.2	0.3	114	9.2	45.8	14.4	20.6	7.7	65.1	1.7	44	35.1	26.2	38.5	161.3	0.7	7	0.4	4.2	3.9	216.7	2.6	22.8	0.8	5.2	94.7	12.1	28	69.5	340
PAE.G.XI.5	PAE.2	0.6	24.3	1.4	129.2	6.7	31.7	7.1	19	9.7	63	1.5	53.9	39.7	18.4	41	126.7	2	3.7	0.8	6.7	5.7	331.1	1.3	28.3	1.7	3.8	61.8	10.4	24.5	65.7	388.6
PAE.G.XI.8	PAE.1	0.2	15.6	0.9	71.8	14.3	70.5	24	17.1	5.3	46.3	1.4	20.5	25.8	35.6	19.7	129.1	0.2	1.5	0.6	4.1	5.2	294.5	1.4	11.2	0.9	3.2	93.6	10	22.1	77.6	189.6
PAE.G.XIII.2	PAE.1	0.6	35.9	0.5	176.3	11	37.1	15.5	21.3	11.1	104.3	3	56	62.1	34.6	43.7	176.1	1.6	6.3	0.4	9.5	5.4	365.2	2.2	28.5	2.6	4.3	77.5	12.9	40	117.7	399.9
PAE.G.XIII.4	PAE.2	0.5	14.4	0.5	135.9	14	49.5	26.8	19.1	6.1	75.2	2	40.2	44	28.2	35.8	152	0.4	5.2	0.1	9.5	3.2	198.3	2.7	21.6	0.7	3.5	91.6	11.8	29.8	80.3	313.1
PAE.G.XIV.1	PAE.1	0.3	17.5	0.9	287.3	23	39.3	11.8	17.1	10.4	74.6	1.9	38.7	48.1	21.6	46.8	116.5	0.6	6.3	0.9	6	3.2	333.5	1.6	22	1.3	4.8	94.6	11.1	29.1	55.2	310.8
PAE.G.XIV.2	PAE.1	0.7	26.4	1	163.3	8.1	27.5	6.7	17.9	7.8	70.1	2.2	52.6	46.7	20.9	41.8	111.9	1.6	4.9	0.9	6.2	4.8	356.6	2.6	28.1	1.1	4.1	72.8	11.3	26.6	64.5	381.8
PAE.G.XIV.3	PAE.2	0.1	26.3	1.4	153.8	7.4	29.8	14	19.8	10.3	76.9	0.8	53.9	48.6	19.9	41.8	109.9	1.5	4.7	0.3	12.2	3.9	387.8	1.9	27.5	1.2	4.1	76.2	10.2	29.2	68	394.3
PNT.A.20.02	PNT.3	0.3	10.3	1.4	67.1	9.7	56.7	16.4	17.1	8.7	34.3	1.1	29.5	24	28.4	26.3	134.8	0.7	6.3	0.9	1.5	2.5	150.9	2.3	14.2	0.7	3	93.4	11.4	19.3	66.1	253.5
PNT.A.20.06	PNT.3	0.4	14.9	0.2	120.5	6.2	29.4	11.5	16.3	7.3	65	3	43.7	38.1	12.9	39.5	126.1	0.7	4.6	0.7	4.8	3.6	252.3	2	23.1	1.2	3.8	62.5	8.2	25.6	51	338.6
PNT.A.20.09	PNT.2	0.7	20.9	0.7	151.4	8.5	31.7	10.2	19.3	9.4	79.3	1.2	56.3	46.8	16.1	47.4	152.1	0.7	4.6	0.1	10.2	3.9	421	2.2	26.4	1.3	4.8	94.7	13.4	23.8	60.4	381.2
PNT.A.20.11	PNT.2	0.6	20.4	0.8	121.7	8.7	45.5	28.7	19.4	8.2	71.5	1.6	46.2	42.3	21.8	41.4	106.4	1	4.5	0.4	4	4.2	278.8	2	22.7	1.5	4.8	90	10.1	30.1	70.3	349.5
PNT.A.20.13	PNT.2	0.5	24	1.2	153.3	10.3	30.8	13.7	20.7	9	67.8	2	58.3	39.8	17.8	51.4	188.1	1.5	4.2	0.5	5.5	5.3	335.7	2.6	27.6	2.1	5.9	94.4	16.8	23.1	72.3	384.7
PNT.A.20.14	PNT.1	0.25	19.3	1.7	157.8	9.9	43.1	12.2	20.5	9.4	66.6	2.2	51.3	41.9	17.7	43.2	164.4	2.1	4.9	1.2	12.7	4.5	283.3	2	25.1	1.2	5	98.8	11.4	21.1	65.8	366.9
PNT.A.20.15	PNT.4	0.1	12.2	0.9	69.4	3.5	50.3	5.5	15.7	6.7	42.6	0.8	36.7	25.3	30.5	31.3	79.5	0.2	1.5	0.6	1.5	2.5	274.4	0.8	19.2	0.9	3.6	59.9	3.2	13.8	39.7	259.3
PNT.A.20.25	PNT.2	0.8	22.9	1.1	159.5	11.2	28.5	13	19.9	11.7	77.6	1.8	58.6	44.5	16.3	50.9	159.1	0.8	5.9	0.2	6.9	4.9	354.6	2.5	27.9	2.1	5.4	80.8	15.5	28.4	88.5	393.4
PNT.A.20.26	PNT.2	0.5	19.3	1.2	112.6	10.3	32.7	15.2	17	8.6	61.5	3.1	57.5	35.6	15.3	49.7	198.5	0.1	3.2	0.9	7	4.1	382.8	1.8	27.9	2.1	6.3	88.5	13	21.9	79.2	374.3
PNT.A.20.28	PNT.2	0.8	20.6	1.2	157.5	8.1	35.7	14	20.4	10.5	77.2	2	62.4	45.7	19.7	51.5	146.4	1.7	5.7	0.3	4.4	4.9	334.2	2.7	31.3	1.7	5.2	93.6	10.5	26.6	71.5	415.9
PNT.A.21.1	PNT.5	0.4	9.4	0.4	73.2	15.3	91.9	37.5	22.4	5.6	48	2.7	24.5	28.3	48.4	19.7	59.1	1.1	7.8	0.5	2.5	8.1	122.7	0.4	13.3	0.6	3.4	131.5	8.2	24.6	135.4	199.6
PNT.A.21.4	PNT.2	0.8	21.4	1.2	72.9	5.3	32.2	9.7	20.4	10.2	51.6	2	57.5	24.4	13.7	47.3	180.5	1.3	5.2	1	0.2	4.7	321.2	2	30	1.9	6.1	87.8	12.7	17.1	56.4	393.6
PNT.A.21.5	PNT.2	0.4	21.4	1.4	142.1	9.5	27.4	7.3	21	11.6	69.5	2.5	65	40.2	11.3	61.6	150.3	0.8	2.5	0.7	9.6	4.5	405.1	1.9	31.5	2	5.9	70.1	7.3	22.4	61.2	444.4
PNT.G.11a.2	PNT.1	0.6	34	1.2	196.2	11.5	51.4	16.9	26.9	10.1	129.3	2.5	62.5	71.6	29.1	54.3	188.6	2.4	8.4	0.7	11.7	5.7	175.8	3.7	39.6	2	5.7	138.8	16.5	43	115	480.9
PNT.G.12a.1	PNT.1	0.1	18.5	0.8	96.5	7.7	29.3	11.2	21.9	12	47.7	1.8	65	28.7	14.6	47.7	129.4	1.4	5.9	0.8	3.3	5	247.3	3.7	34	1.1	7.3	75.2	13.4	15.9	79.2	452.3
PNT.G.12b.2	PNT.1	0.7	21.9	1	131	9.1	27.3	12.7	21.5	9.2	77.4	2.1	54.3	44.3	16.7	46	151.8	1.1	6.2	0.6	6.1	4.1	300.4	2.8	29.3	2.2	5.4	84.8	11.4	31.5	90.2	382.3
PNT.G.12b.3	PNT.1	1.1	25	0.9	211.6	8.9	26.5	11.7	22.3	8.7	66.1	1.1	61.8	44.7	13.8	46.6	131.1	1.8	5.5	0.2	9.5	5.1	300.5	2.5	33.1	1.3	5.6	76.1	14.4	22.6	99.5	445.1
PNT.G.12p.1	PNT.1	0.7	22.8	1.1	127.6	9	31.4	13.9	20.5	8.7	90.9	2.3	55	53.6	14.8	46.8	141	1.8	6.2	0.4	13.5	4.7	269.3	3.4	30	0.8	6.4	92.8	13.7	35.2	71	396.6
PNT.G.12p.3	PNT.1	0.5	27.3	0.7	177.9	11.2	22.3	13.6	23.4	9.7	119.9	2	71.2	70.1	14.1	54.3	174.4	1.2	5.7	0.9	13.6	5.4	288.5	4.3	36.9	1.5	5.9	79.7	14.9	39.7	103.6	485.9
PNT.G.13a.1	PNT.1	0.7	26.1	1.6	158.2	10.3	48.3	14.2	23.4	11.8	105.5	1.8	53.3	65.7	22.6	51.5	149.7	1.4	7.6	0.1	9.9	4.7	211.8	2.5	38.7	1.5	4.9	113.4	13.3	31.2	99	435.5
PNT.G.13a.3	PNT.1	0.9	21.9	1.3	103.9	10	34.8	12.8	21.7	13.3	62.3	2.6	54.6	36.4	15.8	50.5	141.2	0.5	6.8	1.1	7.9	5.1	234.8	2.2	29	1.1	5.9	101.7	14.1	23.7	64.3	398.5
PNT.G.13B.1	PNT.1	0.6	22.9	1.3	163.6	9.1	32	14.8	21	9.9	94.2	1.8	55.6	61.1	16.3	46	152.6	1.3	6.1	0.8	10.8	5	268.9	0.6	29.2	1.4	4.7	92.2	11.2	35.2	82.5	405.2

PNT.G.13b.2	PNT.1	0.9	35.1	1.1	231.9	13	47.4	18.4	25	9.8	125.2	2.7	59.7	84.8	24.9	47.8	125.3	0.5	8.2	1	17.3	5	223	2.9	36	1.9	6.2	115.5	15.4	47.8	76.6	462.3
PNT.G.13p.2	PNT.1	0.4	29.8	1.2	113.8	12.6	27.9	13.8	19.5	9.5	62.9	2.8	55.5	35.8	13	54.7	145.1	1.2	6.1	1.3	7.3	4.6	279.7	2.5	28.3	1.1	8.8	115	14.9	23.8	61.1	400.2
PNT.G.13p.3	PNT.1	0.1	23.2	0.8	117.2	5.7	31.8	15	22.1	9.9	65.2	1.4	61	36.6	18.4	45.9	120.6	1.3	6	0.3	7.1	4.7	328.1	2.3	32.1	0.7	6.6	89.2	12.6	24.2	88	412
PNT.G.13p.4	PNT.1	0.8	20.7	1	140.7	8.4	29	15.8	18.9	6.4	83.2	1.8	50	49.8	15.3	45	144.5	1.9	7.4	0.9	7.1	4.7	271.1	1.2	30.2	1	6.5	75.7	10.9	34.5	72.2	378.1
PNT.G.13p.6	PNT.3	0.8	12.1	0.5	128.3	16.4	50.7	18.4	16.3	5.1	68.1	1.7	28.2	40.8	24.7	31.6	111.7	0.7	8.4	0.1	7.2	3	128.9	0.3	17	1.2	3.2	101.4	9.3	28.4	73.2	273.8
PNT.G.13p.7	PNT.1	1	24.4	1.2	98.6	10.6	33	14.5	21.6	7.5	65.7	2.2	57.6	38.2	15.6	50.8	143.6	2.2	8.2	0.8	9.6	4.9	229.1	1.2	31.1	1.5	6.1	106.7	13.9	25.5	73.7	415.9
PNT.G.14a.1	PNT.1	0.5	16.9	0.6	140	8.8	36.2	12.3	21.1	10.4	80	2	54	45.8	17.5	43.4	158.3	1.8	5.9	0.1	9.5	5.3	265.6	1.5	30.4	1.2	5.3	94.3	12	30	89.6	392.7
PNT.G.14a.3	PNT.1	0.1	17.5	1.3	134	10.5	32.5	17.2	19.4	11.2	79.5	3.1	52.5	46.3	15.5	44.7	175.6	0.6	5.4	0.6	9.7	3.1	307.2	1.3	30.6	1.2	6.7	82.8	10.8	32.9	85.4	384.1
PNT.G.14b.1	PNT.1	0.3	19.3	1	130.4	10.2	33.5	11.4	20.3	7.3	74.4	1.7	52	44.1	15.8	43.3	135	1.1	6	0.8	6	4.5	252.3	1.7	28.9	1.6	5.1	97.3	12.4	27.8	77	379.1
PNT.G.14b.2	PNT.1	0.4	25.8	1.4	141.9	11	31.3	14.5	21.7	11.4	76.2	2.7	59.6	43.7	16.7	54.7	145.9	1.5	7	0.7	4	5	277.6	1.7	31.6	1.6	6.7	99.8	14.3	28.3	90.1	414
PNT.G.14b.3	PNT.1	0.6	19.4	1.1	146.8	12.2	32.4	17.5	20.1	9.8	82.3	2.3	54.3	50.5	17.8	46.9	144.2	0.5	6.8	0.6	10.5	4	282.9	3.1	30.7	0.9	7.2	88.9	13.6	34.9	84.1	390
PNT.G.14p.2	PNT.1	0.7	19.9	1.4	165.8	9.4	27.5	18.1	19.6	11.1	95.6	1.6	51.3	59.5	13.4	46	138.1	0.4	5	1.1	8.9	3.8	294.6	1.9	29.5	1.1	8.1	76.9	11.1	42	81.7	382.7
PNT.G.14p.3	PNT.3	0.2	17.3	1.2	89.3	14.3	69	30.2	19.6	4.7	83.1	2.3	36.5	49.1	36.8	34	117.4	0.6	8	0.6	7.2	3.2	132	1.5	20.9	1	4.8	111.1	11.7	37.7	102.3	283.7
PNT.G.14p.5	PNT.1	0.4	22.9	0.8	116.8	9.9	43.6	12.5	21.3	6.6	85.6	3.8	57.1	46.3	20.2	49.2	211.7	0.5	6.6	0.7	7	4	240.5	3.4	30.1	1.5	4.2	128.7	16.3	28.8	95.5	418.9
PNT.G.14p.7	PNT.1	0.3	24.6	1.3	121.3	6.2	19.9	10.9	23.1	10.2	79.6	1.6	73	48	12.7	51.3	133	0.25	5.9	0.1	11	4.3	239.2	4.1	39.2	0.5	5.2	70.2	13.3	29.1	73.5	506.2
PNT.G.16.1	PNT.1	0.7	18.7	1.2	153.1	12.1	35.7	13.6	20.5	9.3	86	1.5	49.9	52.5	18.8	43.6	133.2	1	5.9	0.3	9	3.8	254.7	1.5	25.6	1.4	5.5	90.8	11.8	30.7	73.1	367.8
PNT.G.16.2	PNT.1	0.7	21.8	1.1	110	9.7	24.7	10.9	19.9	10.2	72.2	1.9	55.6	41.4	12.7	49.2	139	1.2	5.6	0.4	5.6	4.4	284.2	3.7	30.2	1.3	6.2	85.1	13.1	25.5	55.3	401.3
PNT.G.17b.2	PNT.1	0.25	20.7	0.7	106.1	7.6	44.2	13.4	20.6	5.5	81.7	2.4	51.5	50.2	22	41.9	153.5	0.2	6.5	0.4	8.5	3.6	277.9	2.5	27.4	1.6	5.9	101.8	12.6	29.8	70.6	375
PNT.G.17p.2	PNT.1	0.7	21.8	1.1	180.2	14.4	57.3	24	23.4	11.1	126.2	3	44.1	81.2	34.2	38.7	156.2	0.3	9.2	0.5	15.6	3.4	164.4	2.7	26	1.6	5.4	128.1	13.9	56.3	86.8	348
PNT.G.17p.4	PNT.1	0.5	27.8	1	239	12.9	32.1	16	21.2	11.6	107.4	2.2	68	68.5	17.3	60.3	180.4	1.6	5.6	0.5	10.7	5.2	285.5	3.1	33.3	1.6	4.4	103.4	14.9	38.6	89.8	482.3
PNT.G.18p.1	PNT.1	1	22.8	0.5	126.9	9.6	26.3	11.6	22.2	12	93.5	2.5	61.8	58.9	15.5	48	129.7	2.1	6.7	0.5	6.7	5.8	242.2	3.7	32.1	1.3	6.6	83.7	14.5	35.4	71.3	437.6
PNT.G.20p.1	PNT.1	0.8	27.1	1.1	107.8	7.9	22.9	13.9	22.3	11.4	80.6	1.7	62.2	48.2	13.8	49.6	114.2	0.7	6	0.3	6	4.7	310.8	1.7	34.1	0.9	4	83.4	11.8	27.9	75.7	432.6
PNT.G.20p.2	PNT.1	0.6	20.1	1.2	154.4	11.2	35.9	19.5	17.4	7.1	107.7	1.3	44.9	67.5	16.7	40.2	148.8	1.1	6.2	0.2	6.8	2.7	403.8	0.5	26.4	1.2	6.1	85.1	10.1	41.6	69.6	331.9
PNT.G.90p.1	PNT.1	0.4	26.5	0.8	142.2	9.2	35.3	12.6	22.3	11.4	75	2.2	62.2	48.3	16	48.3	142.9	0.9	6.6	0.6	6.1	4.7	241.9	2.7	31.4	1.9	6.3	91.7	13.3	31.7	64.6	443.4
SAL.C.I.02	SAL.1	0.1	9.1	1.1	99.1	12.5	66.5	12.2	16.3	2.5	60.2	1.6	23.9	35.3	25	26	123.2	0.5	8.3	0.3	5.5	2.2	76.6	0.4	15.1	1.7	2.3	89.2	9.6	23.4	70.9	204.3
SAL.C.I.03	SAL.1	1	8.3	0.6	80.5	7.6	62	13.1	16.4	5.7	59.3	0.3	22.8	35.3	22.4	24.9	111.9	1.5	8.4	0.8	5	3.3	81.3	1	13.8	0.6	2.4	83.6	7.8	25.1	63.2	201
SAL.C.I.04	SAL.1	0.5	10.3	0.4	89.7	11.4	77.1	13	17.1	6.5	59.5	0.9	25.3	33.6	25.7	27.2	109	0.9	7.1	0.7	2.1	2.4	89.5	1.6	14.8	1.2	3.2	94.8	10.3	25	70.3	229.9
SAL.C.I.05	SAL.1	0.7	13.3	1	93.3	10.3	82.5	17.4	20.1	8.9	63.2	1.2	33.7	37.5	36.6	30.8	147.7	1.9	7.7	0.3	4.6	3.8	91.4	0.4	20.4	1.3	3	136.5	9.6	28.2	87.3	287.4
SAL.C.I.06	SAL.3	0.6	7.6	0.8	87.2	22.6	136.5	35.6	21.5	3	58.8	1.3	23.8	33.7	42.6	22.2	71.7	0.6	11	0.3	6.7	2.8	64.6	2.7	12.8	0.7	2.7	148.9	13.8	26.1	117.9	207.5
SAL.C.I.07	SAL.2	0.4	12.6	1.2	116.4	15.6	88.5	23.3	18.1	5.6	71.4	1.1	33.2	41.9	36.9	31.4	125.1	1.3	8.1	0.9	8.7	4.2	119.2	2.3	20.4	1.2	3.6	118.3	11.3	33.2	107.2	279.7
SAL.C.I.09	SAL.1	0.6	8	0.4	82	10.6	61.7	11.1	16.7	5.9	53.2	1	22.8	32.1	23	25.5	126.3	1.1	6.9	0.2	7.9	3.3	85.5	1.5	12.2	0.5	2.8	86.5	9.6	24.7	66.5	196.8

SAL.C.I.10	SAL.1	0.6	7	0.8	74.9	8	68.4	13.2	17.7	5.8	51.7	0.7	22.8	29.7	22.7	24.2	134.9	1.6	7.7	0.5	2.3	3.1	78.4	0.8	12.1	0.9	3.1	84.1	8.3	21.9	69.8	197.9
SAL.C.I.11	SAL.1	0.4	8.6	1	79.3	7.8	66.3	11.5	15.8	6.5	52.2	0.5	22.8	34.1	23.3	24.2	107.8	0.7	8	0.2	2.1	2.2	79.9	2.1	12.3	1.4	2.7	85.6	8.9	24	66.4	198.1
SAL.C.I.12	SAL.1	0.5	6.8	0.6	92.7	11.4	68.7	13.3	18.4	3.9	60.5	0.9	23.8	33.2	25.4	26.2	154.9	1.1	7.9	0.4	7.1	3.6	78.7	1.3	13.9	0.9	2.4	93.9	7.9	22.2	68.9	208.5
SAL.C.I.13	SAL.4	1.1	10.1	0.2	139.4	20	102.2	29.6	25.3	8.4	80.1	0.9	39.7	45.8	43.8	38.4	152.4	1.9	12.5	0.2	6.3	5.3	144.2	2.9	22.8	1.5	5.1	137.2	13.2	35.5	131.4	329.1
SAL.C.I.14	SAL.5	0.25	4.1	0.15	77.6	6.4	73.6	7.2	10.8	4.4	55.2	1	22.7	31	20.3	20.2	85.8	0.3	1.5	0.5	6.9	1.3	76.4	1.3	15.7	0.3	3.3	75.8	6.7	22.3	66.2	183.3
SAL.C.II.01	SAL.2	0.9	14.4	1.3	198	15	83.2	16.7	25.9	10.3	109.5	1.1	40.9	66.8	34.9	57	225.3	1.7	12.4	0.2	10.8	4.8	102.2	1.9	39.3	2.4	3.1	119.6	14.5	34.7	96.8	389
SAL.C.II.03	SAL.2	0.6	13.8	1.1	161.9	20.6	104.9	23.7	20.3	7.6	80.9	1.3	35.1	45.5	46.2	41.7	143.7	0.5	10.7	0.3	8.5	2.5	95.2	0.5	25.4	1.8	3.7	121.8	13.2	33.9	97.4	311.8
SAL.C.II.04	SAL.1	0.2	11.1	0.8	85.9	10.5	65.1	13.1	16.2	6.2	55.7	1.5	23.3	34.5	24.2	25.5	113.9	0.25	7.7	1	5.2	2.6	82.5	0.6	13.1	1.1	2.8	86.1	9	24.9	67.4	199.5

Appendix 14 – XRF LOD values

Table for Indicative best performance for Limits of detection on Zetium WDXRF for soils, sediments and rocks.

Atomic number	Symbol	Name	LOD	Sample preparation
	SiO2	Silicon dioxide	0.1%	Fused Bead
	TiO2	Titanium oxide	0.01%	Fused Bead
	Al2O3	Aluminium oxide	0.2%	Fused Bead
	Fe2O3	Ferrous oxide	0.01%	Fused Bead
	MnO	Manganese oxide	0.005%	Fused Bead
	MgO	Magnesium oxide	0.3%	Fused Bead
	CaO	Calcium oxide	0.05%	Fused Bead
	Na2O	Sodium oxide	0.3%	Fused Bead
	K2O	Potassium oxide	0.01%	Fused Bead
47	Ag	Silver	0.5 ppm	Pressed Pellet
33	As	Arsenic	0.9 ppm	Pressed Pellet
56	Ba	Barium	1 ppm	Pressed Pellet
83	Bi	Bismuth	0.3 ppm	Pressed Pellet
35	Br	Bromine	0.8 ppm	Pressed Pellet
48	Cd	Cadmium	0.5 ppm	Pressed Pellet
58	Ce	Cerium	1 ppm	Pressed Pellet
27	Co	Cobalt	1.5 ppm	Pressed Pellet
24	Cr	Chromium	3 ppm	Pressed Pellet
55	Cs	Caesium	1 ppm	Pressed Pellet
29	Cu	Copper	1.3 ppm	Pressed Pellet
31	Ga	Gallium	1 ppm	Pressed Pellet
32	Ge	Germanium	0.5 ppm	Pressed Pellet

Atomic number	Symbol	Name	LOD	Sample preparation
72	Hf	Hafnium	1 ppm	Pressed Pellet
80	Hg	Mercury		Pressed Pellet
53	I	Iodine	0.5 ppm	Pressed Pellet
57	La	Lanthanum	1 ppm	Pressed Pellet
25	Mn	Manganese		Pressed Pellet
42	Mo	Molybdenum	0.2 ppm	Pressed Pellet
41	Nb	Niobium	1 ppm	Pressed Pellet
60	Nd	Neodymium	4 ppm	Pressed Pellet
28	Ni	Nickel	1.3 ppm	Pressed Pellet
82	Pb	Lead	1.3 ppm	Pressed Pellet
46	Pd	Palladium		Pressed Pellet
37	Rb	Rubidium	1 ppm	Pressed Pellet
51	Sb	Antimony	0.5 ppm	Pressed Pellet
21	Sc	Scandium	3 ppm	Pressed Pellet
34	Se	Selenium	0.2 ppm	Pressed Pellet
62	Sm	Samarium	3 ppm	Pressed Pellet
50	Sn	Tin	0.5 ppm	Pressed Pellet
38	Sr	Strontium	1 ppm	Pressed Pellet
73	Ta	Tantalum	1 ppm	Pressed Pellet
52	Te	Tellurium	0.5 ppm	Pressed Pellet
90	Th	Thorium	0.7 ppm	Pressed Pellet
81	Tl	Thallium	0.5 ppm	Pressed Pellet
92	U	Uranium	0.5 ppm	Pressed Pellet
23	V	Vanadium	3 ppm	Pressed Pellet
74	W	Tungsten	0.6 ppm	Pressed Pellet
39	Y	Yttrium	1 ppm	Pressed Pellet
70	Yb	Ytterbium	1.5 ppm	Pressed Pellet
30	Zn	Zinc	1.3 ppm	Pressed Pellet
40	Zr	Zirconium	1 ppm	Pressed Pellet