

NEW RESEARCH ON ROMAN OLIVE OIL PRODUCTION AT BARBARIGA

Candace M. Rice, Davor Bulić, Andrew McLean, Fabian Welc, Robert Matijašić



R3NUrb MSCA Project

ELRI and RoLand

Economic Landscapes of Roman Istria (ELRI)

- Davor Bulić, Juraj Dobrila University of Pula (Croatia)
- Candace M. Rice, Joukowsky Institute for Archaeology and Ancient History, Brown University (USA)
- Andrew McLean, Barcelona Supercomputing Centre (Spain)

~

- Robert Matijašić - Juraj Dobrila University in Pula (Croatia) (Emeritus) – Project Advisor
- Katarina Gerometta - Juraj Dobrila University in Pula (Croatia) - Landscape and Environment
- Fabian Welc - Cardinal Stefan Wyzinski University in Warsaw, Institute of Archaeology (Poland) – Geophysical Survey
- Ana Konestra – Institute of Archaeology, Zagreb (Croatia) – Ceramics
- Zach Silvia (Stanford University)
- Anna Soiger (University of Puget Sound)

Roman Landscape and settlement dynamics of the Istrian colonial territories project (RoLand)

- Davor Bulić, Croatian Science Foundation

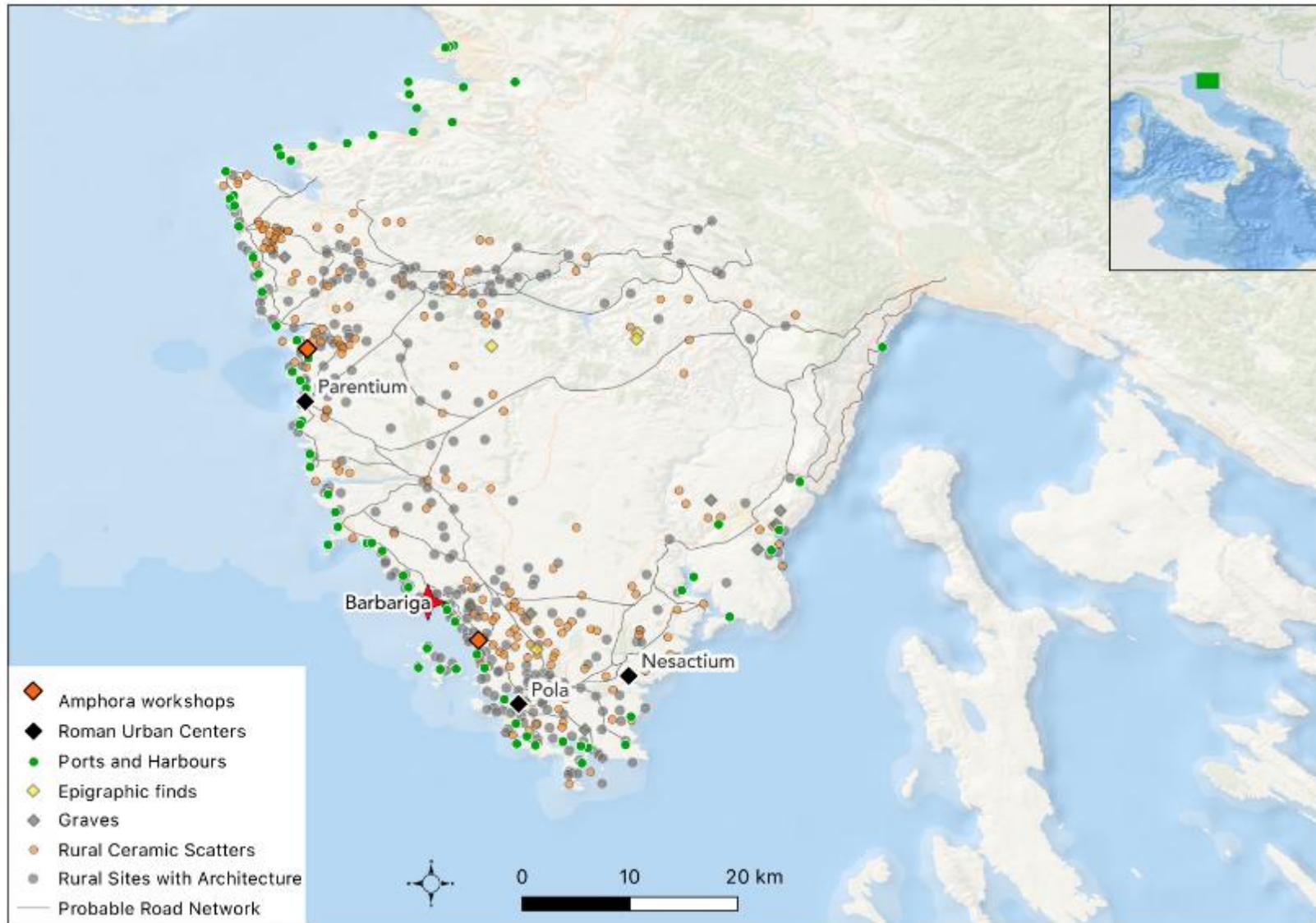


Juraj Dobrila University of Pula



HRZZ-IP-2022-10-5496

Roman Istria



- Bulić, D. (2014). Rimska ruralna arhitektura Istre u kontekstu ekonomske i socijalne povijesti, University of Zadar, PhD dissertation.
- Bulić, D. and Matijašić, R. (2014). 'L'architettura rurale romana dell'agro Polese in luce delle indagini recenti', *Studia Universitatis Hereditatis* 1-2: 119-135.
- Matijašić, R. (1998). "Gospodarstvo antičke Istre. Arheološki ostaci kao izvori za poznavanje društveno-gospodarskih odnosa u Istri u antici (I. st.pr. Kr. - III st. posl. Kr.)." *Povijest Istre*, IV. Pula: ZN 'Žakan Juri'

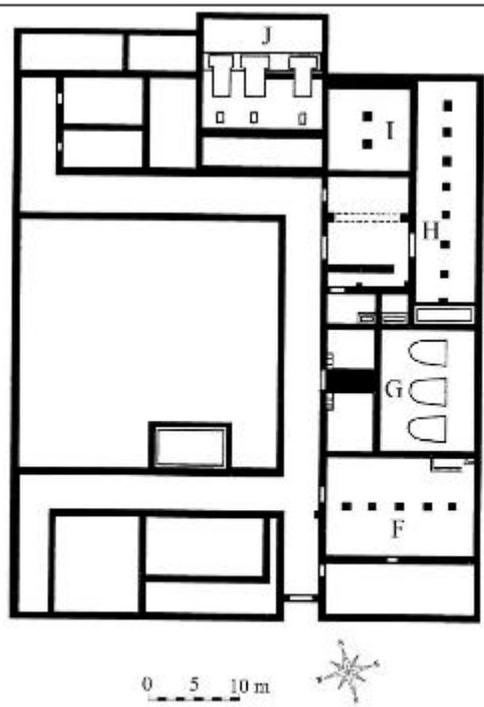


Fig. 2. La villa di Val Madonna sull'isola di Brioni Maggiore (© D. Bulić, R. Matijević; rielaborazione di MATIJEVIĆ 1998).

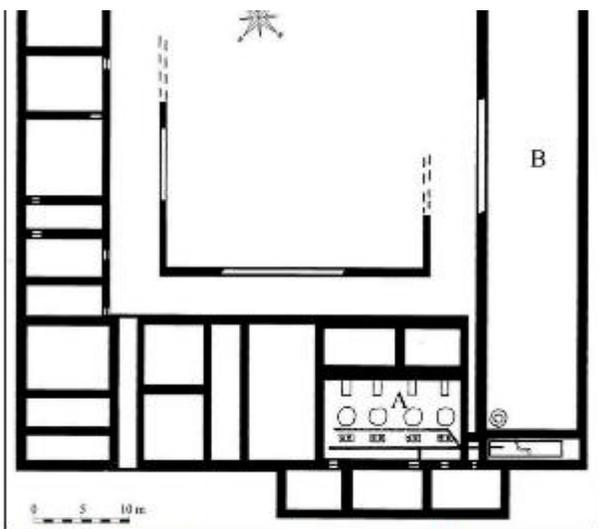


Fig. 3. La villa di Menze Collisi sull'isola di Brioni Maggiore (© D. Bulić, R. Matijević; rielaborazione di MATIJEVIĆ 1998).

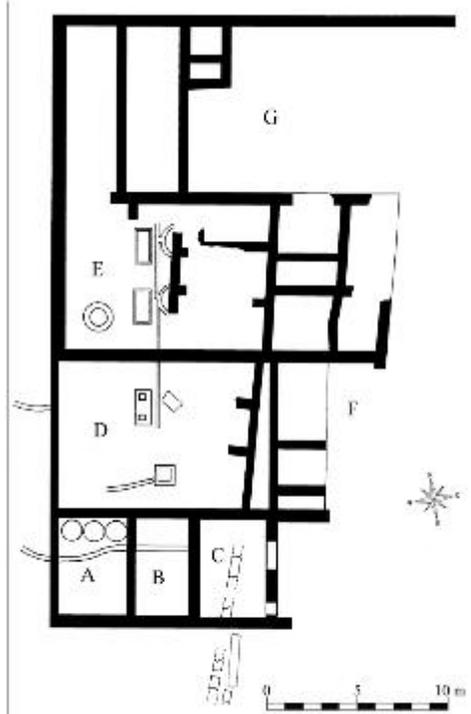
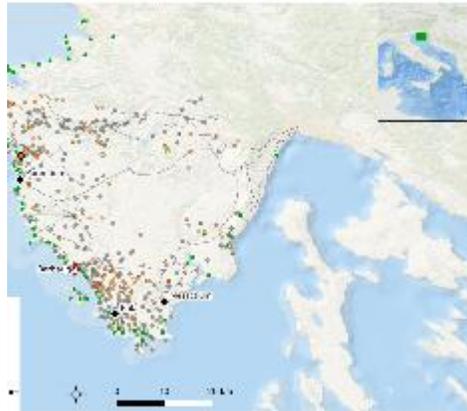
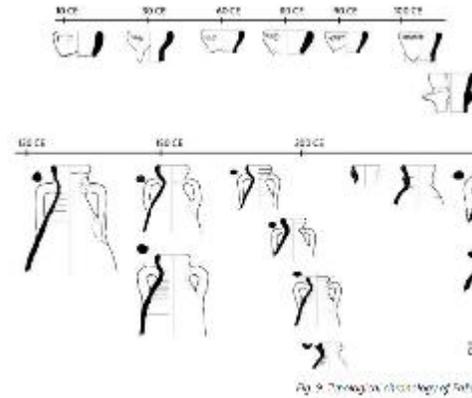


Fig. 4. La villa di Corvina Poca (© D. Bulić, R. Matijević; rielaborazione di MATIJEVIĆ 1998).



Fažana workshop (Dressel 6B amphorae)

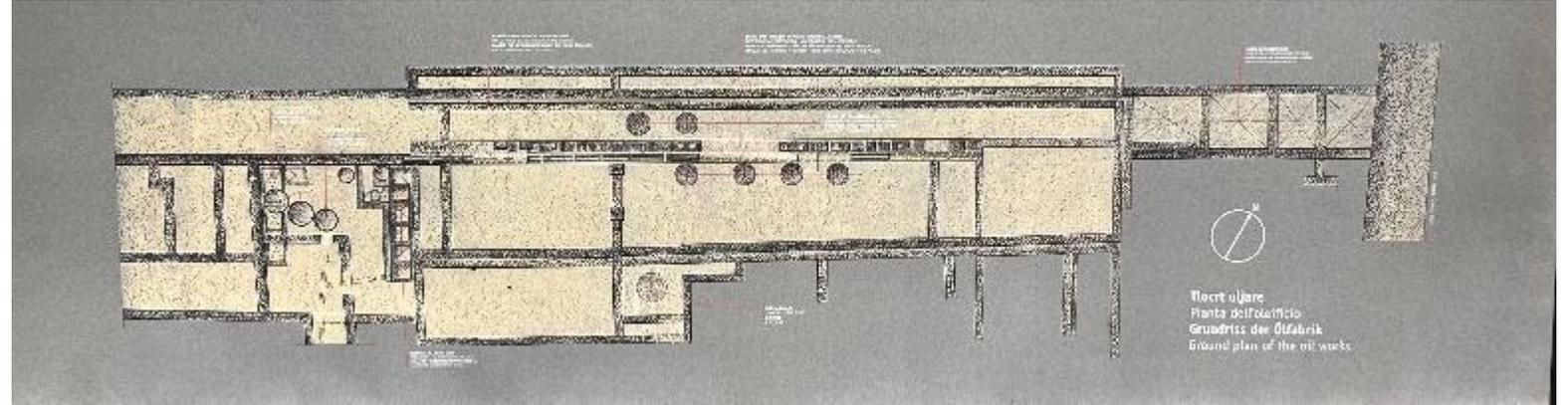
- ca. 40 BC to AD 78: Property of the gens Laecanius
- AD 78 – 138: Property and workshop integrated into res private by Vespasian
- Late 2nd to early 3rd AD: M. Aurelius Iustus produced amphorae

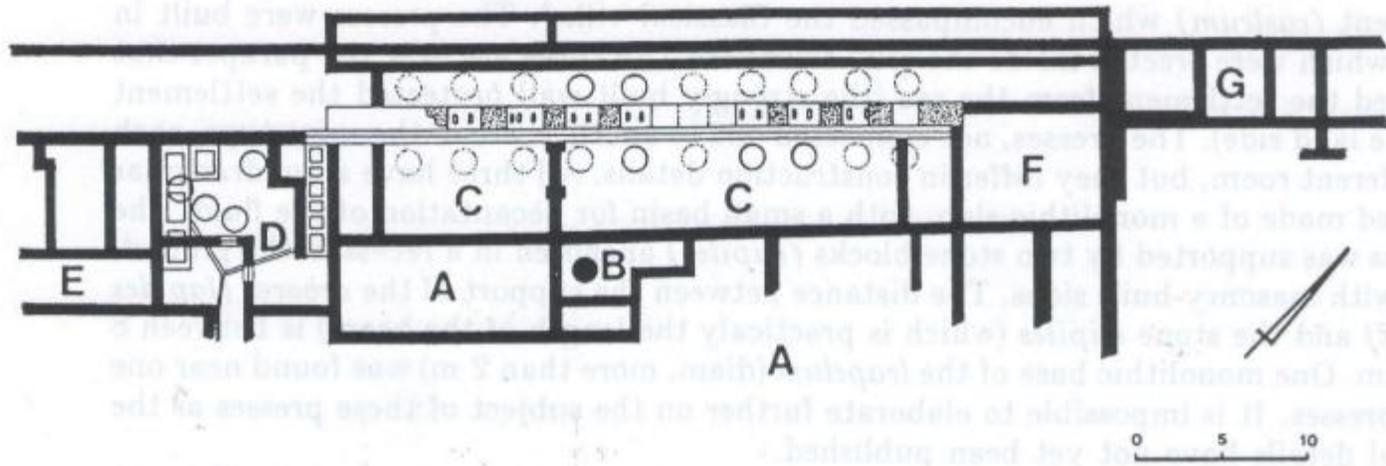


Barbariga Oil Mill



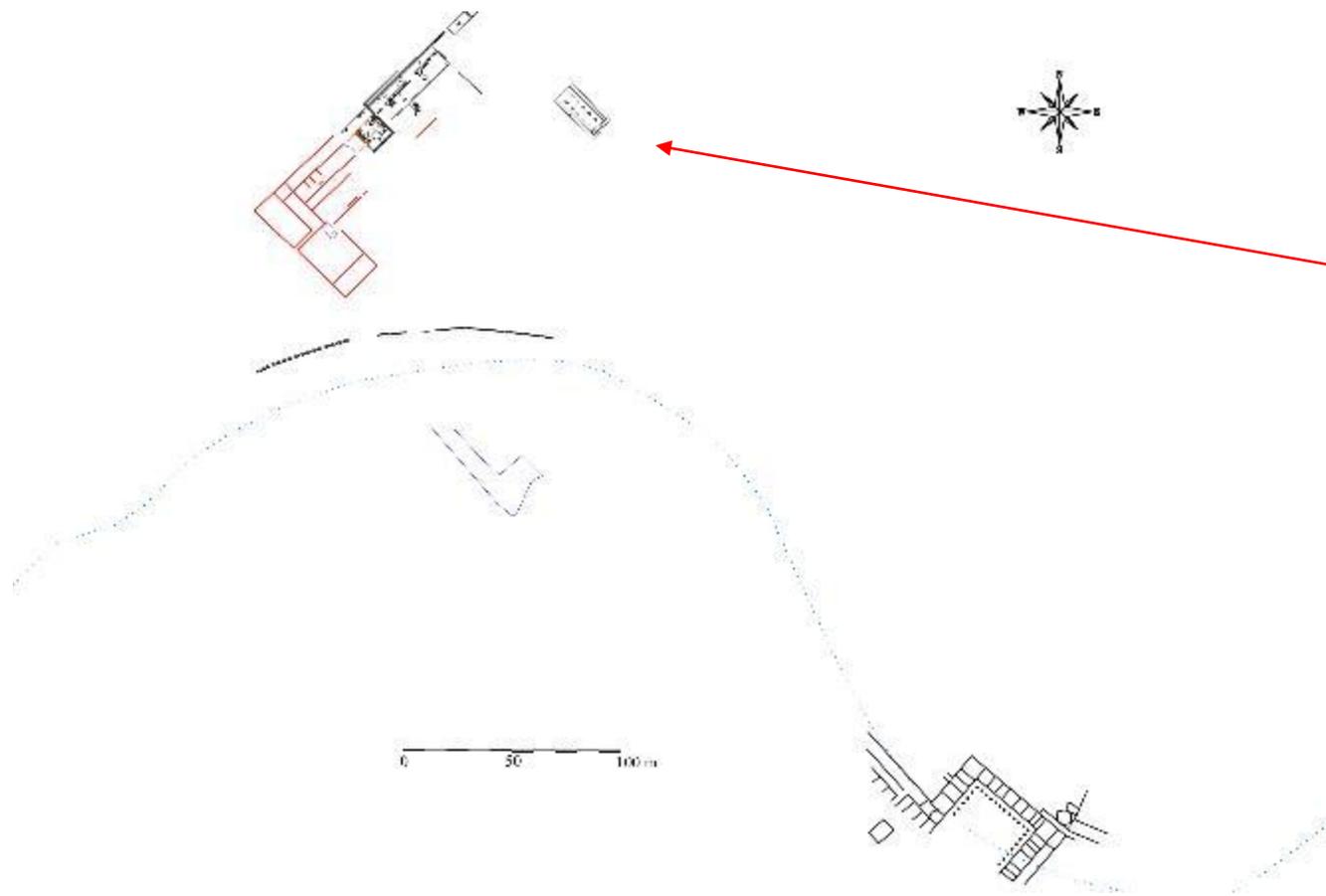
Initial Exploration of the Barbariga Oil Mill: Štefan Mlakar, 1953





Matijašić, R. (1982). 'Roman Rural Architecture in the Territory of Colonia Iulia Pola', *American Journal of Archaeology* 86/1: 53-64.

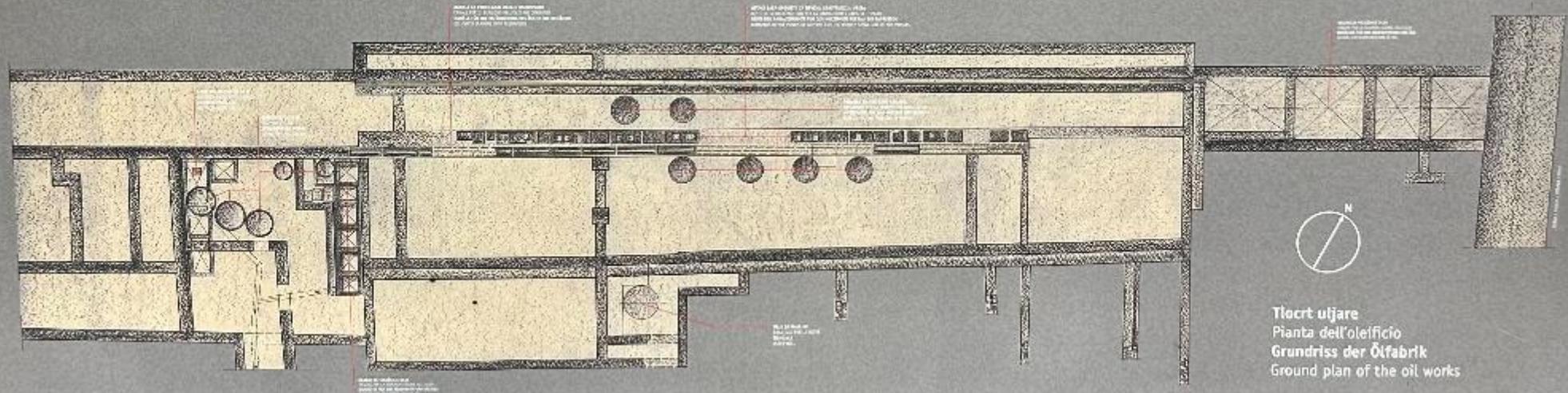
Barbariga: Central Cistern



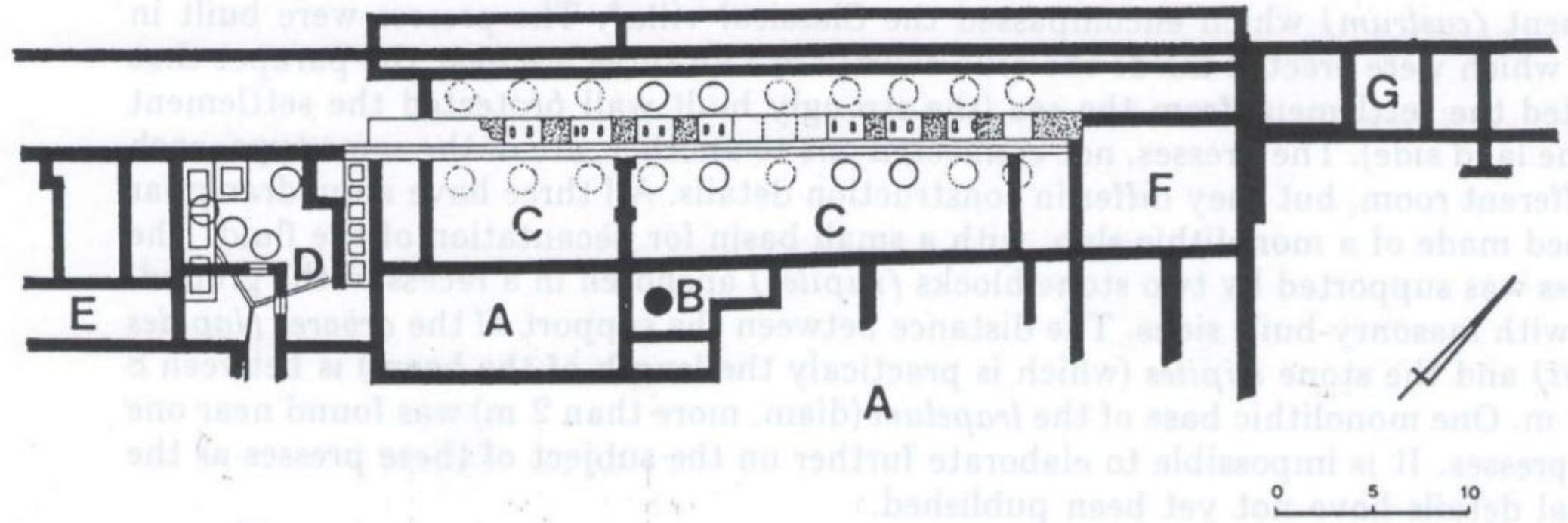
Barbariga: Central Cistern Welc, F., Han, A. Markowicz, K., Bulić, D., Matijašić, R., Rice, C.M., Konestra, A., McLean, A. "Water shortage resilience in a preindustrial East Adriatic context: an attempt to evaluate the efficiency of the large Roman cistern at Barbariga Stancija (Casematte, Istria, Croatia)," *Journal of Quaternary Science*.

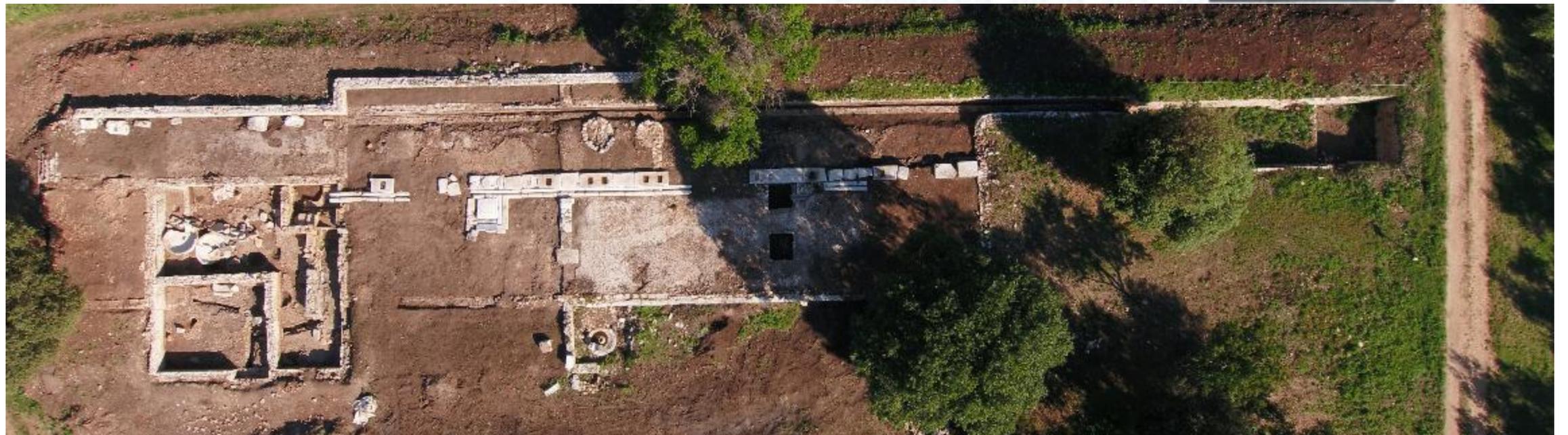
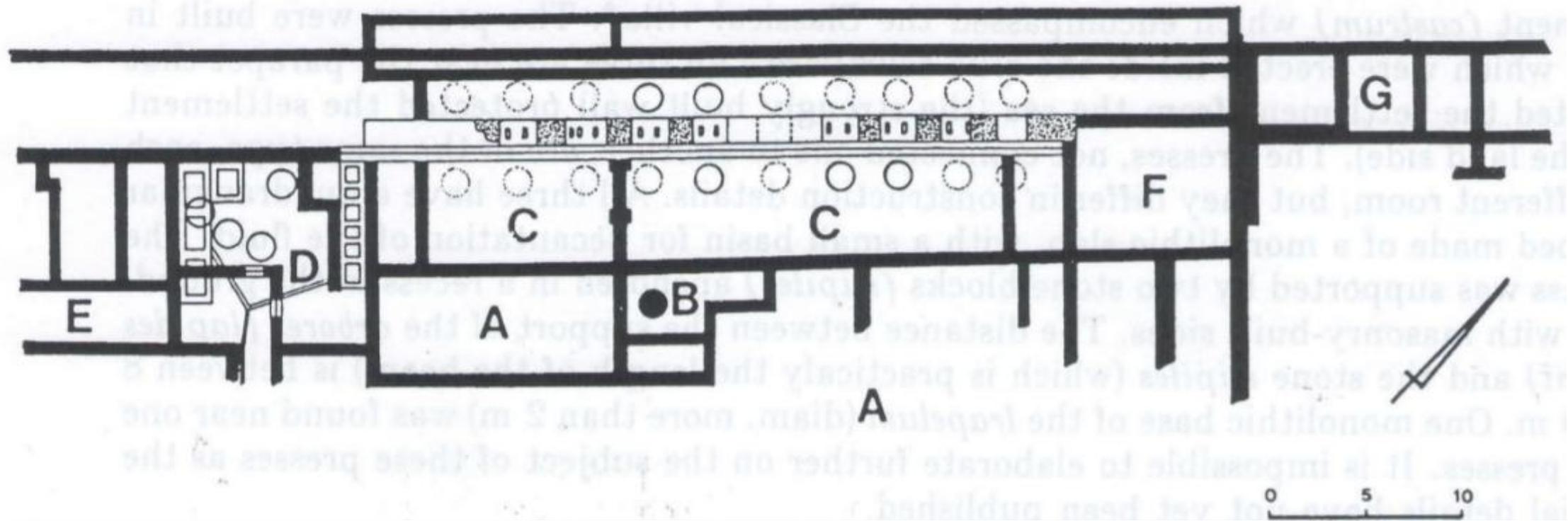
Barbariga: Maritime Villa





Tloct uljare
 Pianta dell'oleificio
 Grundriss der Ölfabrik
 Ground plan of the oil works





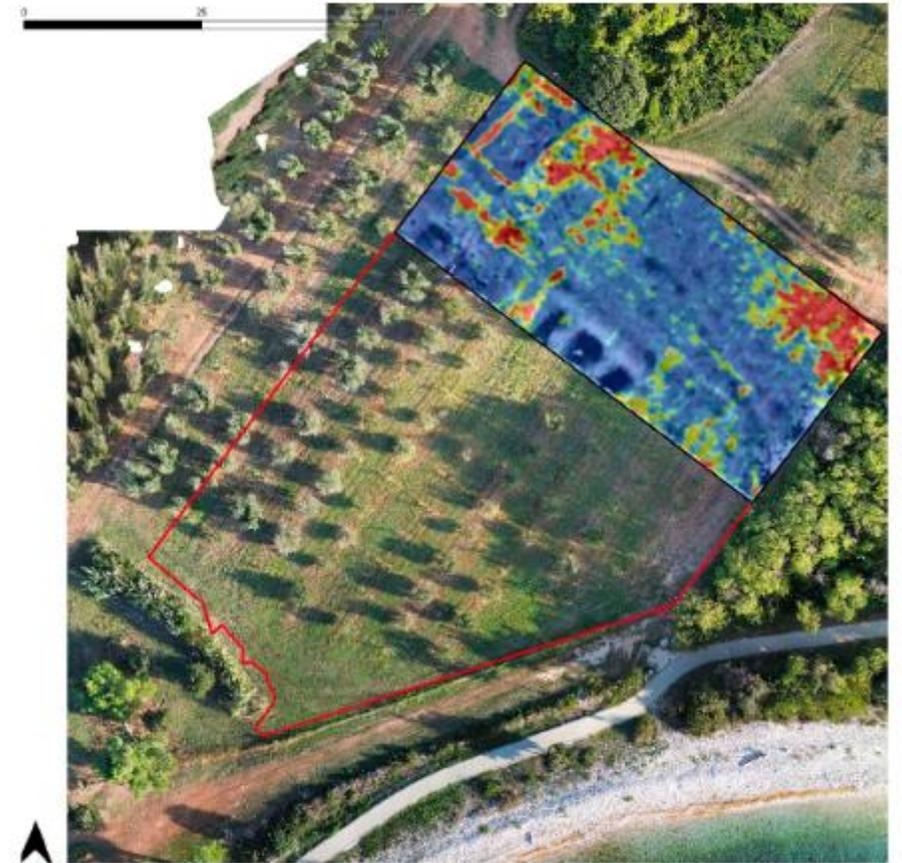
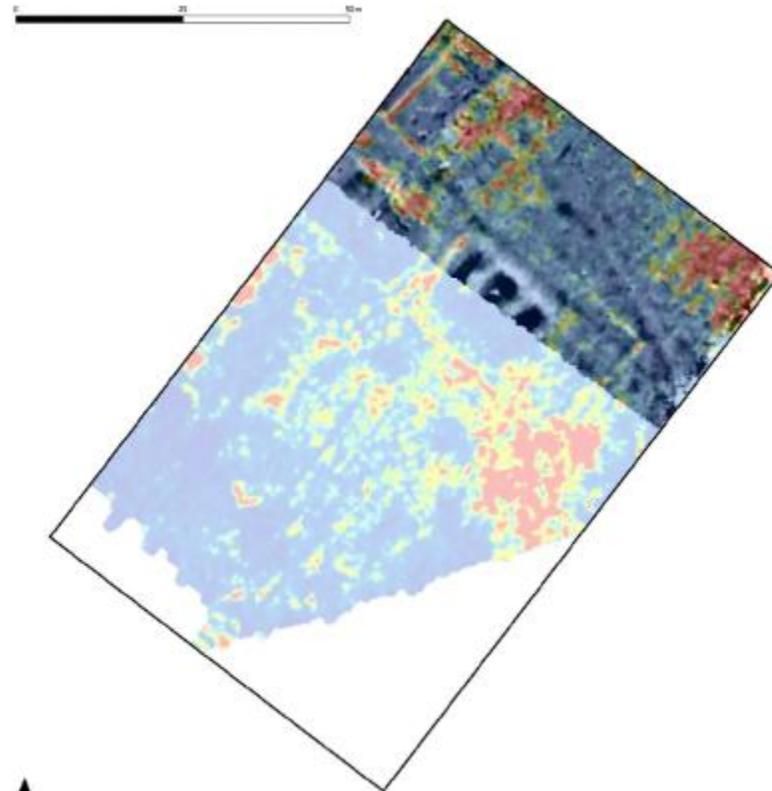
Initial Non-Invasive Survey at Barbariga

Prof. Fabian Welc, Cardinal Stefan Wyszyński University, Warsaw



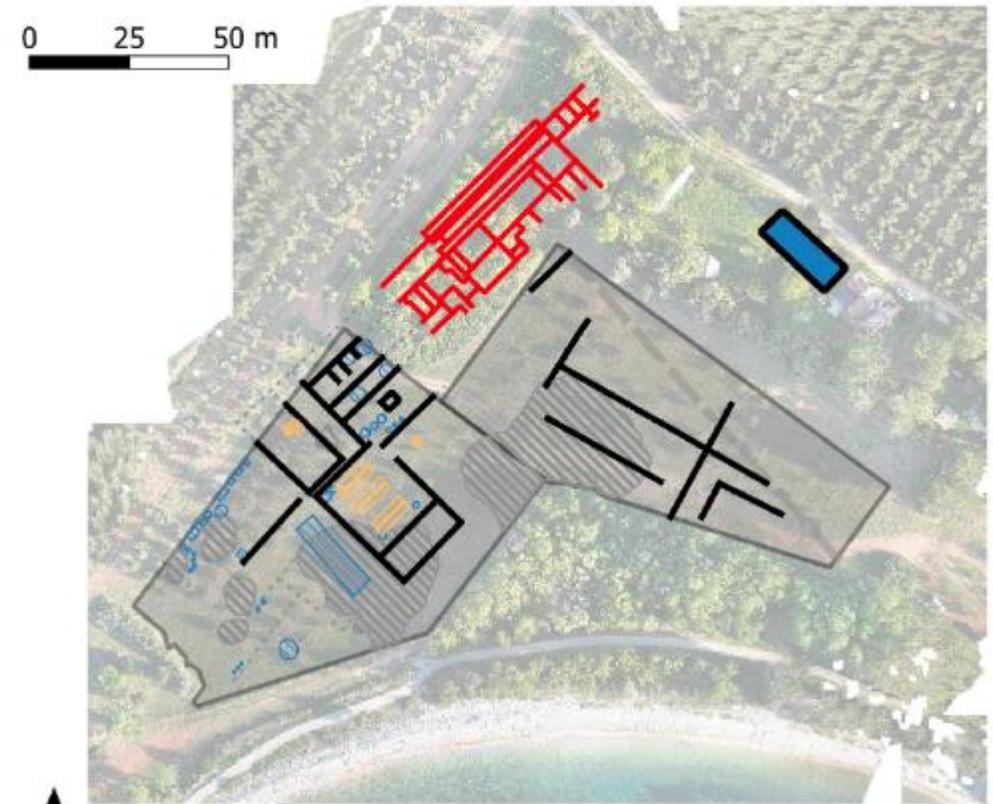
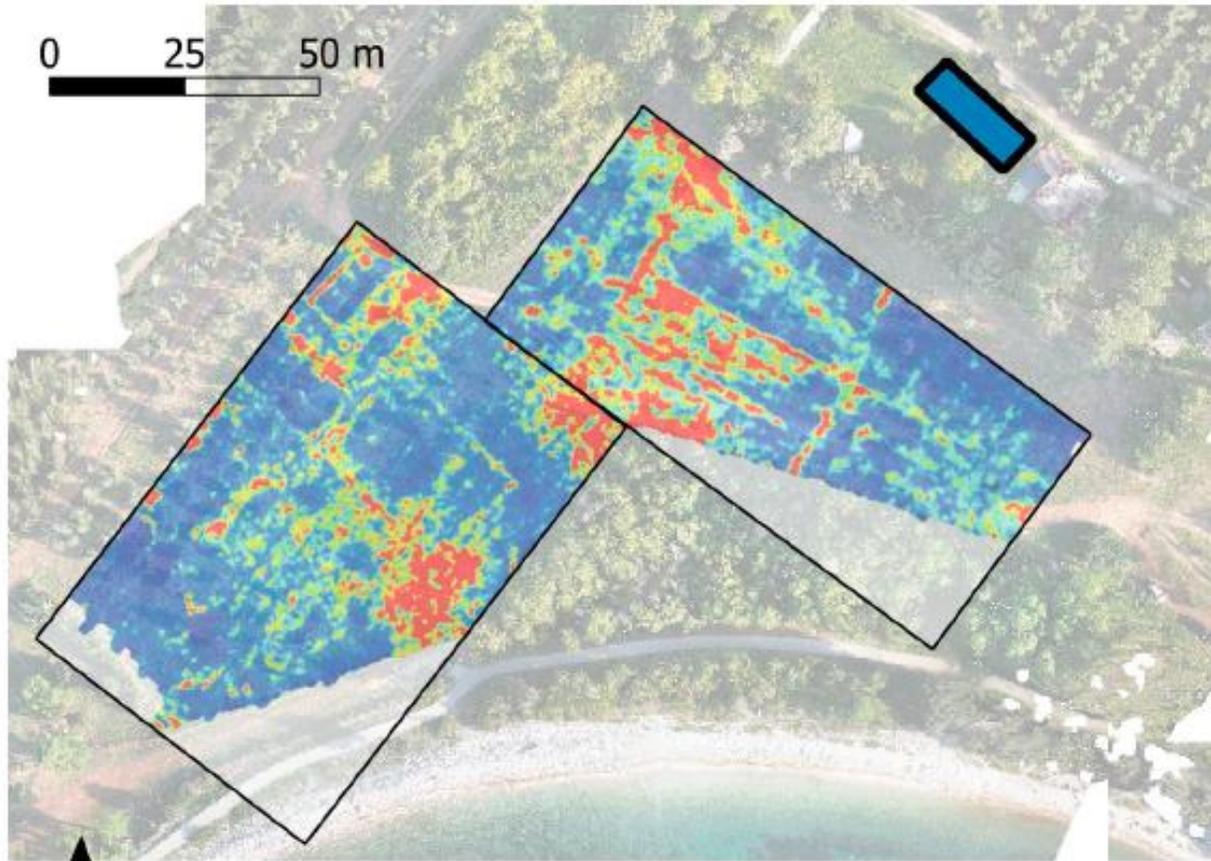
- GPR profiling.
- Select magnetometry profiling
- Photogrammetric documentation of the site by drone.
- Creation of a DEM model of the site based on the photogrammetry.
- Geodetic measurements with RTK/GPS station.

Magnetometry and Combined Results



Interpretation

- CISTERN
- OLD EXCAVATIONS
- INTERPRETATION - FEATURES DETECTED BY MAGNETOMETRY
- INTERPRETATION - AREAS OF DESTRUCTION
- INTERPRETATION - DETECTED WALLS
- INTERPRETATION - OLD ROAD
- INTERPRETATION - DETECTED POSSIBLE WALLS
- INTERPRETATION - DETECTED ARCHEO STRUCTURES

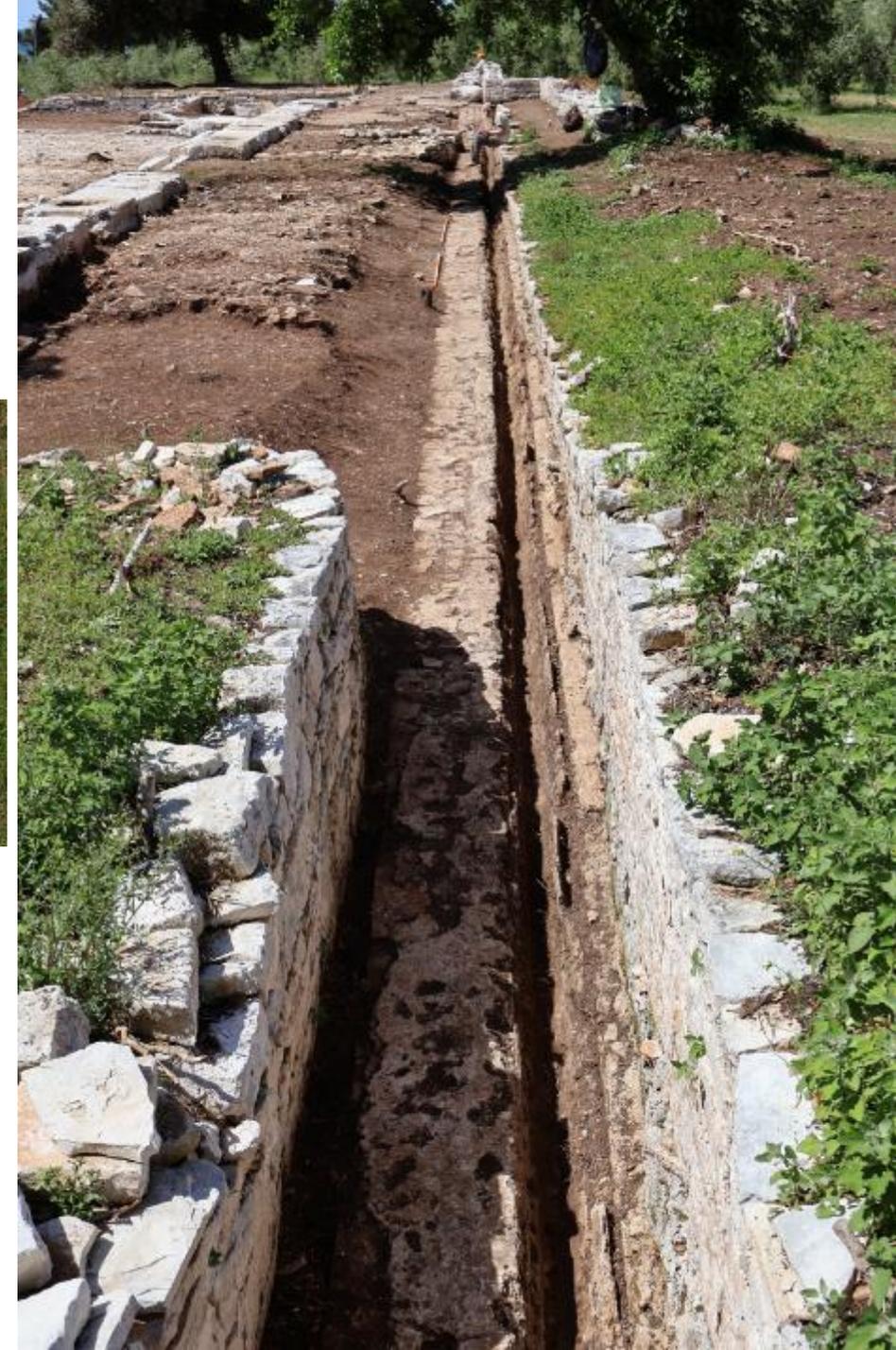


Water (?) Channel

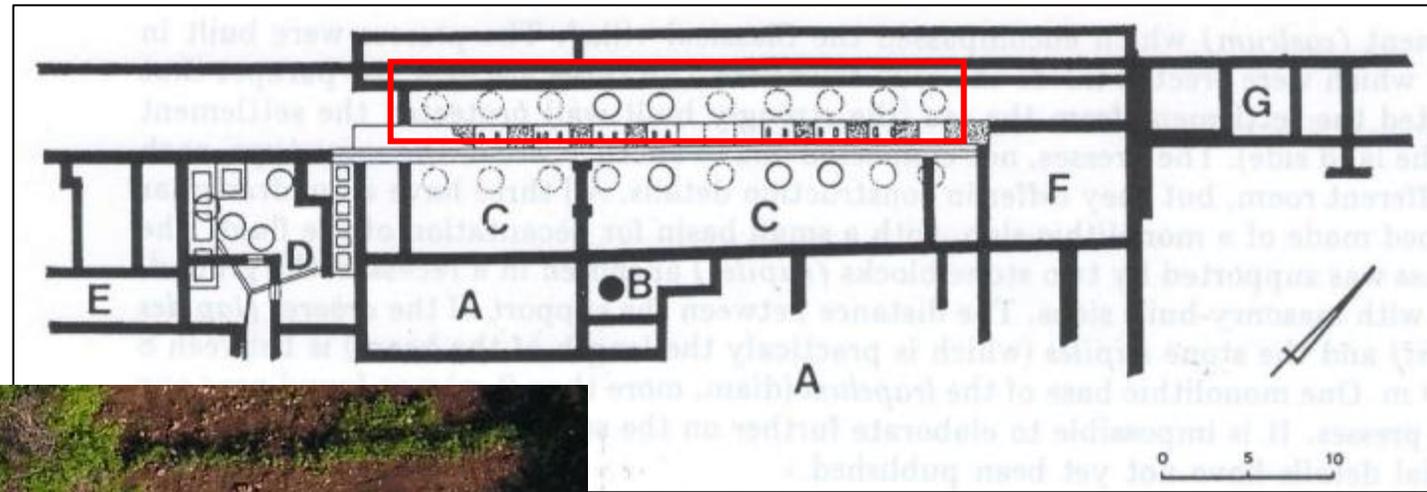
Josip Broz Tito visiting the
Barbariga Oil Mill in 1950s



Water (?) Channel



Vertical Oil Mills (*molae oleariae*?)

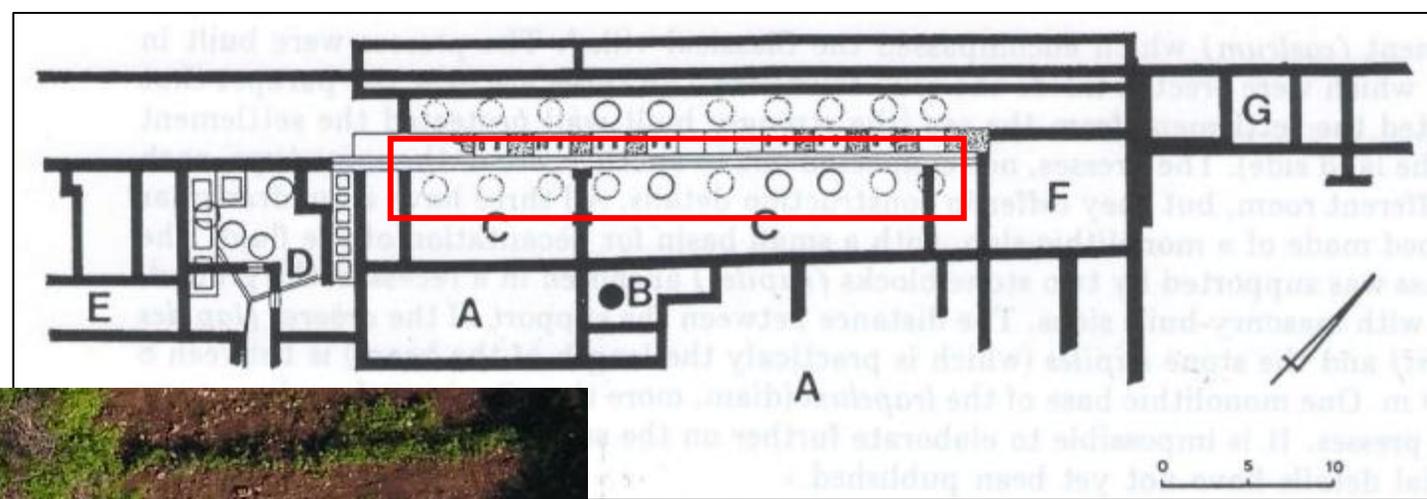


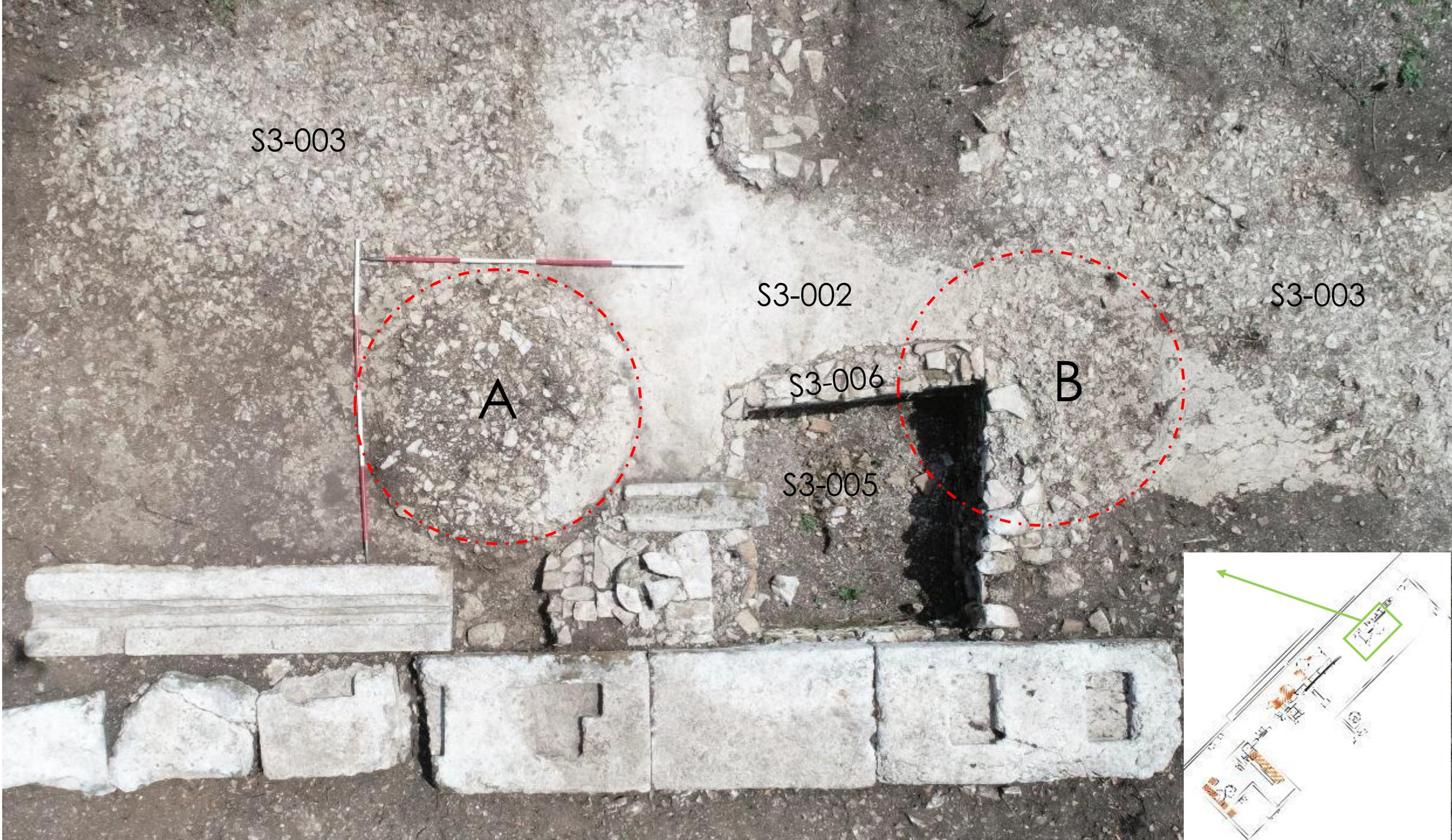
Vertical Oil Mills (*molae oleariae*?)



7 preserved / partially preserved; 2 probable

Press Beds





S3-003

S3-002

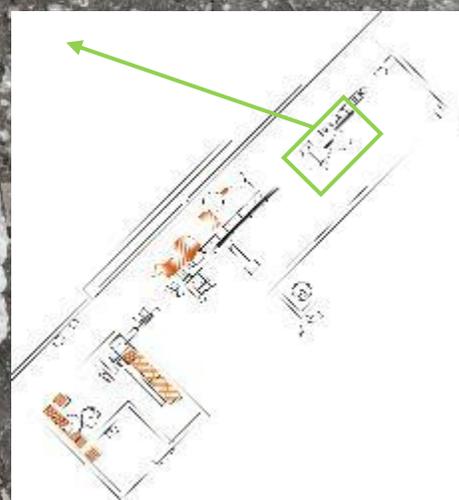
S3-003

A

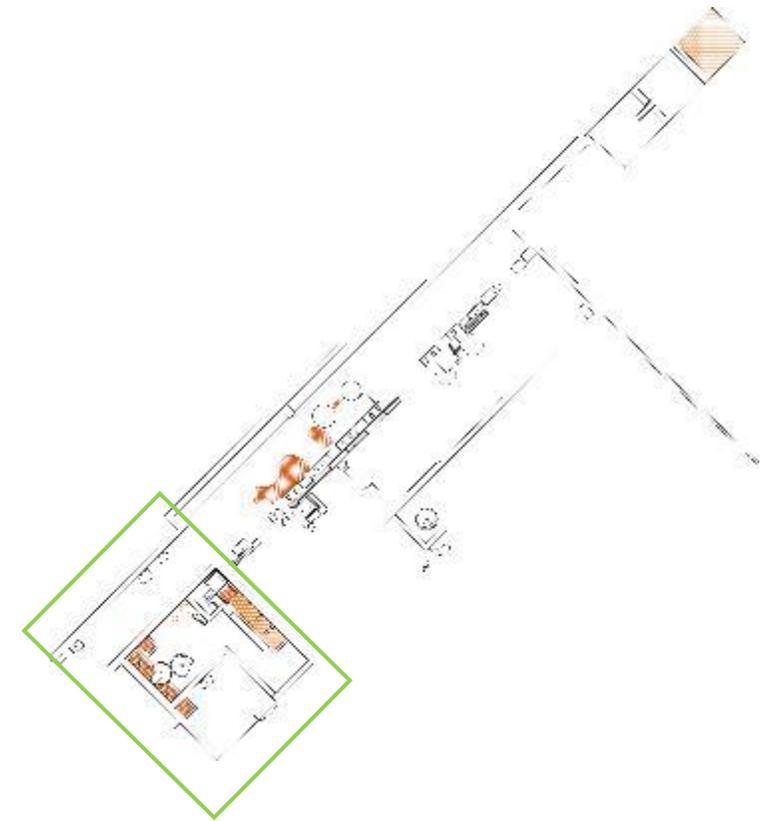
S3-006

B

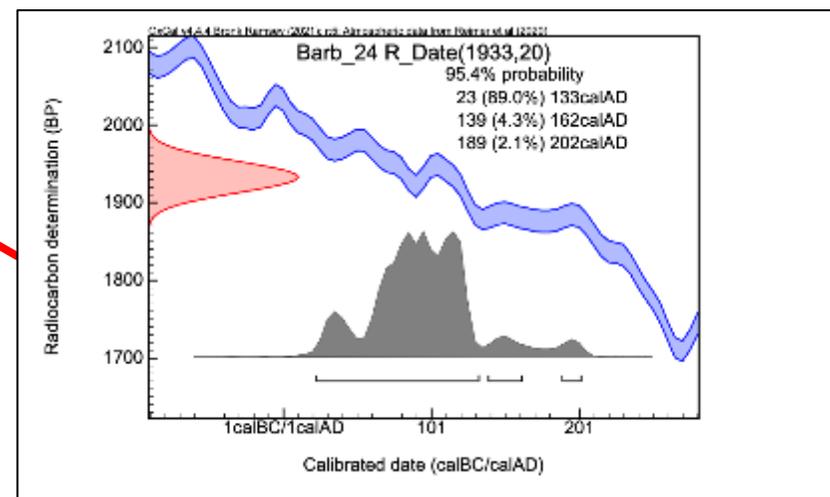
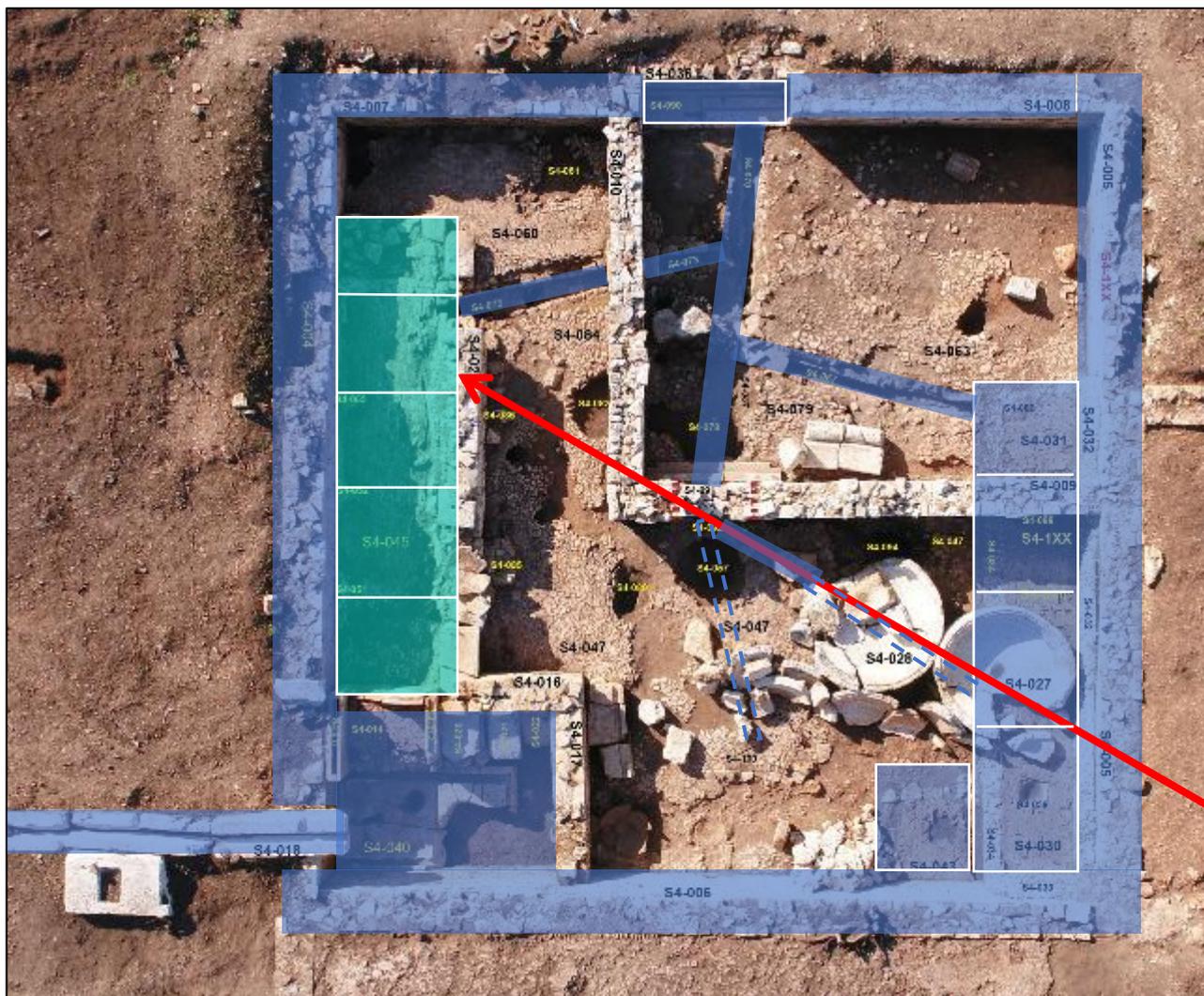
S3-005



Sonda 4



Sonda 4: Oil Collection Room, Phase II



Sonda 4: Oil Collection Room, Late Roman – Early Medieval Phases

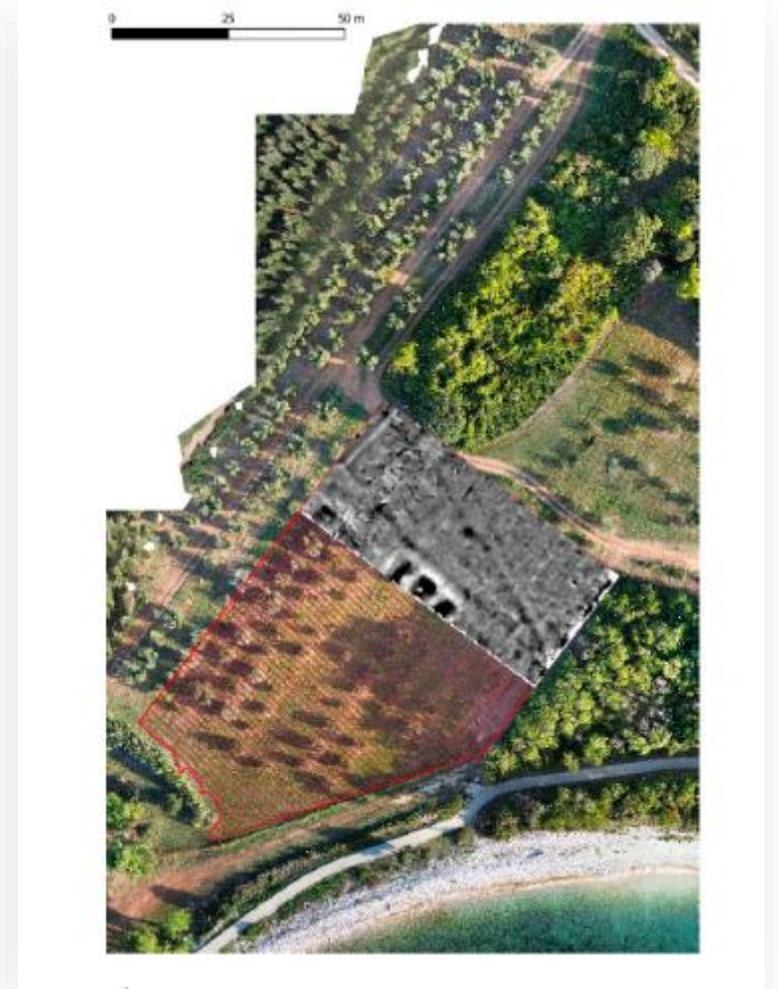


Sonda 4: Dolia





Sonda 6: Kiln!





Acknowledgements

- Fantastic Team!
Funding
 - Croatian Science Foundation
 - Loeb Classical Library Fund
 - Rust Family Foundation
 - Brown University
 - City of Vodnjan - Dignano
- Terra Eno Olea d.o.o.

