**[Supplementary material]**

**Obsidian Procurement and Exchange at the Apogee of Empire: Wari Political Economy in Arequipa, Peru**

David A. Reid1\*, Patrick Ryan Williams2, Augusto Cardona Rosas3, Robin Coleman Goldstein4, Laure Dussubieux5, Cyrus Banikazemi1, and Kurt Rademaker6

1 Department of Anthropology, University of Illinois – Chicago, 1007 West Harrison Street, Chicago, Illinois 60607-7139, USA

2Arizona State University, School of Human Evolution and Social Change, 900 S. Cady Mall, Tempe, AZ 85284, USA

3Centro de Investigaciones Arqueológicas de Arequipa (CIARQ), Arequipa, Peru

4 Department of Anthropology, Northwestern University, 1810 Hinman Avenue, Evanston, IL 60208, USA

5 The Field Museum of Natural History, 1400 S Lake Shore Dr, Chicago, IL 60605, USA

6 Department of Anthropology, Michigan State University, 655 Auditorium Drive, East Lansing, MI 48824, USA

\* Author for correspondence: [dreid5@uic.edu](about:blank)

**Supplemental Table 1. Radiocarbon dates from study sites.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Lab #** | **Site** | **Material** | **Context** | **14C age BP** | **95.4% cal AD** | **Citation** |
| AA53355 | Corralones | n.d. | n.d. | 1284 ± 35 | 682 – 748 (31.8%) | Cardona & Williams |
|  |  |  |  |  | 767 – 885 (63.6%) | pers.comm. |
| AA53356 | Corralones | n.d. | n.d. | 1263 ± 42 | 682 - 747 (19.1%) | Cardona & Williams |
|  |  |  |  |  | 767 – 895 (73.3%) | pers.comm. |
|  |  |  |  |  | 935 – 958 (3.1%) |  |
| AA112751 | El Tambo | bone | Unit 4 (Construction fill) | 1198 ± 23 | 772 - 788 (7.3%) | Reid 2023 |
|  |  |  |  |  | 793 - 814 (5.2%) |  |
|  |  |  |  |  | 856 - 988 (83.0%) |  |
| D-AMS 034442 | El Tambo | charcoal | Unit 5: Feature 5.1 | 1559 ± 35 | 435 - 637 (95.4%) | Reid 2023 |
|  |  |  | (Last occupied surface) |  |  |  |
| AA112749 | Pakaytambo | charcoal | Unit 3 (Construction fill) | 1208 ± 23 | 771 - 818 (23.3%) | Reid 2023 |
|  |  |  |  |  | 839 - 904 (36.4%) |  |
|  |  |  |  |  | 920 - 972 (35.7%) |  |
| AA112753 | Pakaytambo | seed | Unit 7: D-shaped enclosure | 1200 ± 24 | 772 - 815 (15.2%) | Reid 2023 |
|  |  | (*Cenchrus* sp.) | (Construction mortar) |  | 850 - 987 (80.3%) |  |
| AA112754 | Pakaytambo | wood | Unit 7: D-shaped enclosure | 1212 ± 23 | 771 - 820 (27.3%) | Reid 2023 |
|  |  | (*Alnus* sp.) | (Architectural) |  | 835 - 902 (39.4%) |  |
|  |  |  |  |  | 922 - 970 (28.8%) |  |
| AA112755 | Pakaytambo | charcoal | Unit 7: D-shaped enclosure | 1226 ± 23 | 772 - 896 (86.6%) | Reid 2023 |
|  |  |  | (Closing Feature) |  | 933 - 959 (8.9%) |  |
| AA80992 | Huamantambo | charcoal | Terrace construction fill | 1005 ± 42 | 994 – 1004 (2.2%) | Goldstein 2010:210 |
|  |  |  |  |  | 1017 – 1162 (91.2%) |  |
|  |  |  |  |  | 1168 – 1180 (2.1%) |  |
| AA80990 | Huamantambo | charcoal | Feasting and offering event | 881 ± 42 | 1051 – 1082 (5.0%) | Goldstein 2010:210 |
|  |  |  |  |  | 1147 – 1279 (90.5%) |  |
|  |  |  |  |  |  |  |
| AA112746 | La Angostura | charcoal | Construction | 1214 ± 23 | 771 – 819 (29.2%) | Reid 2020:265 |
|  |  |  |  |  | 835 – 900 (40.8%) |  |
|  |  |  |  |  | 924 – 968 (25.4%) |  |
| AA112747 | La Angostura | charcoal | Construction fill | 1144 ± 23 | 893 – 994 (95.4%) | Reid 2020:265 |
| AA112745 | La Angostura | charcoal | Last occupied surface | 1079 ± 23 | 907 – 916 (0.8%) | Reid 2020:265 |
|  |  |  |  |  | 972 – 1035 (94.6%) |  |
| AA112744 | La Angostura | charcoal | Last occupied surface | 1078 ± 23 | 908 – 915 (0.7%) | Reid 2020:265 |
|  |  |  |  |  | 973 – 1041 (94.8%) |  |
| AA80993 | Número 8 | charcoal | Terrace construction fill | 1181 ± 42 | 772 – 817 (11.4%) | Goldstein 2010:210 |
|  |  |  |  |  | 841 – 994 (84.1%) |  |
| AA80991 | Número 8 | charcoal | Floor | 1066 ± 42 | 900 – 926 (5.4%) | Goldstein 2010:210 |
|  |  |  |  |  | 966 – 1054 (63.0%) |  |
|  |  |  |  |  | 1060 – 1070 (1.5%) |  |
|  |  |  |  |  | 1080 – 1150 (25.5%) |  |
| AA73293 | Número 8 | charcoal | Floor | 959 ± 35 | 1030 – 1189 (91.3%) | Goldstein 2010:210 |
|  |  |  |  |  | 1195 – 1210 (4.2%) |  |
| AA73294 | Número 8 | charcoal | Termination fill | 803 ± 35 | 1212 – 1297 (95.0%) | Goldstein 2010:210 |
|  |  |  |  |  | 1370 – 1373 (0.4%) |  |
| AA73297 | Qoscopa | charcoal | Floor 1 (lowest floor) | 977 ± 33 | 1027 – 1182 (95.4%) | Goldstein 2010:210 |
| AA112743 | Santa Rosa II | maize cob | Midden | 1208 ± 24 | 771 – 819 (23.3%) | Reid 2020:265 |
|  |  |  |  |  | 837 – 905 (36.6%) |  |
|  |  |  |  |  | 918 – 973 (35.6%) |  |
| AA112741 | Santa Rosa II | charcoal | Last occupied surface | 1189 ± 23 | 772 – 785 (3.9%) | Reid 2020:265 |
|  |  |  |  |  | 800 – 810 (1.6%) |  |
|  |  |  |  |  | 876 – 989 (90.0%) |  |
| AA112740 | Santa Rosa II | charcoal | Construction fill | 1137 ± 23 | 893 – 942 (46.6%) | Reid 2020:265 |
|  |  |  |  |  | 951 – 995 (43.5%) |  |
|  |  |  |  |  | 1005 – 1018 (5.4%) |  |
| AA112742 | Santa Rosa II | maize cob | Construction fill | 1132 ± 24 | 893 – 942 (43.3%) | Reid 2020:265 |
|  |  |  |  |  | 951 – 995 (42.6%) |  |
|  |  |  |  |  | 1002 – 1020 (9.5%) |  |
| AA112739 | Santa Rosa II | charcoal | Last occupied surface | 1126 ± 24 | 895 – 936 (38.3%) | Reid 2020:265 |
|  |  |  |  |  | 956 – 1021 (57.2%) |  |

\* all dates calibrated using OxCal v4.4.4 (Bronk Ramsay 2021) using Hogg et al. (2020) SH20 Calibration (95.4%)