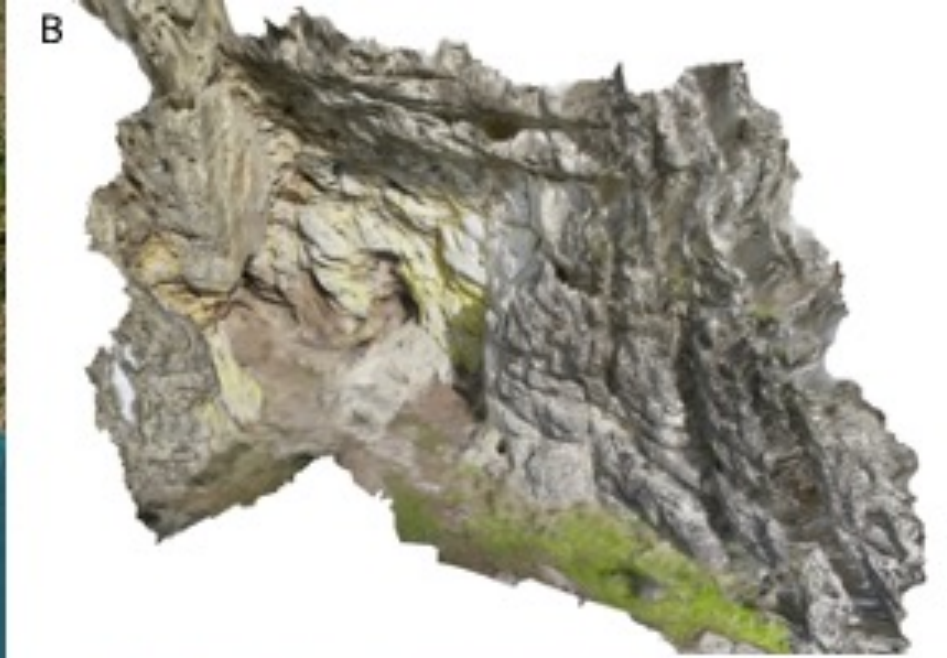


ARCHEOMETRICAL CHARACTERIZATION OF ROCK-ART  
PIGMENTS FROM PUERTO ROQUE OPEN-AIR ROCK ART SHELTER  
(VALENCIA DE ALCÁNTARA, EXTREMADURA, SPAIN)

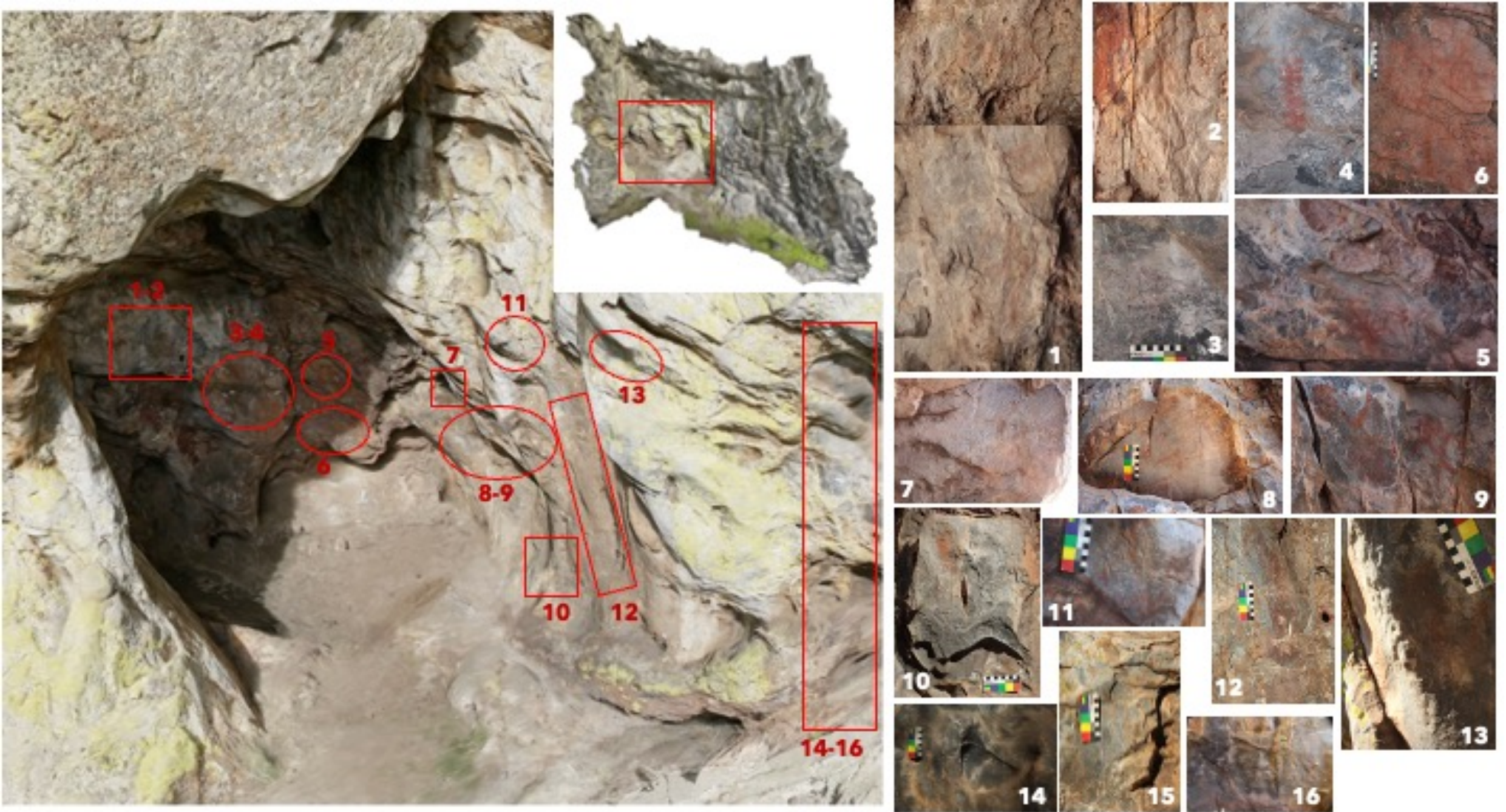
SUPPLEMENTARY MATERIALS

FIGURES 1 - 22



**FIGURE S1:** (A) LOCALIZATION OF ABRIGO PUERTO ROQUE (VALENCIA DE ALCÁNTARA, CÁCERES, SPAIN); (B) 3D REPRESENTATION OF THE SHELTER; (C) ELEVATED POSITION ON THE ROCKY CLIFF.

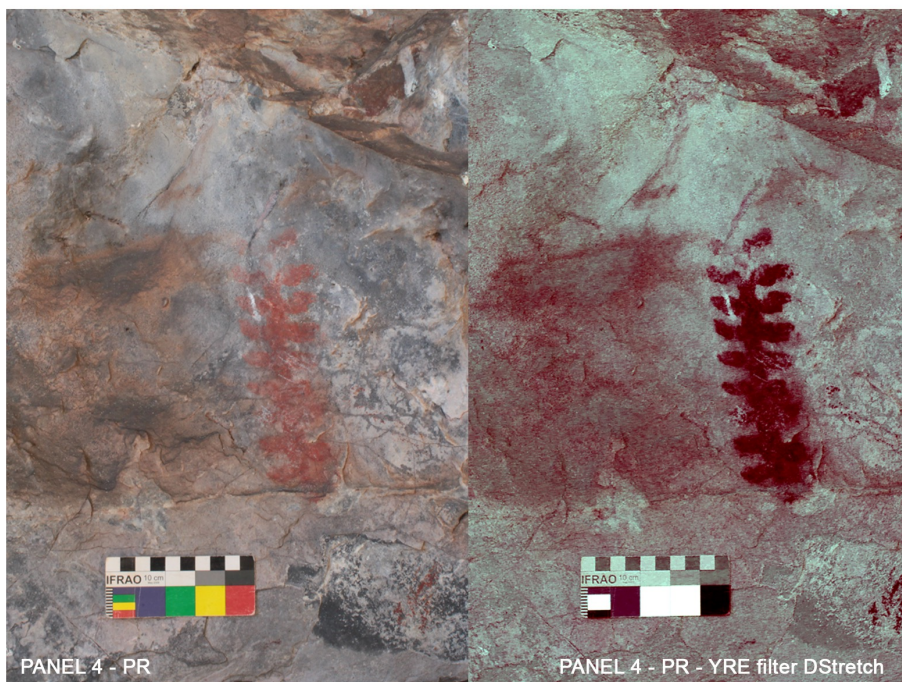
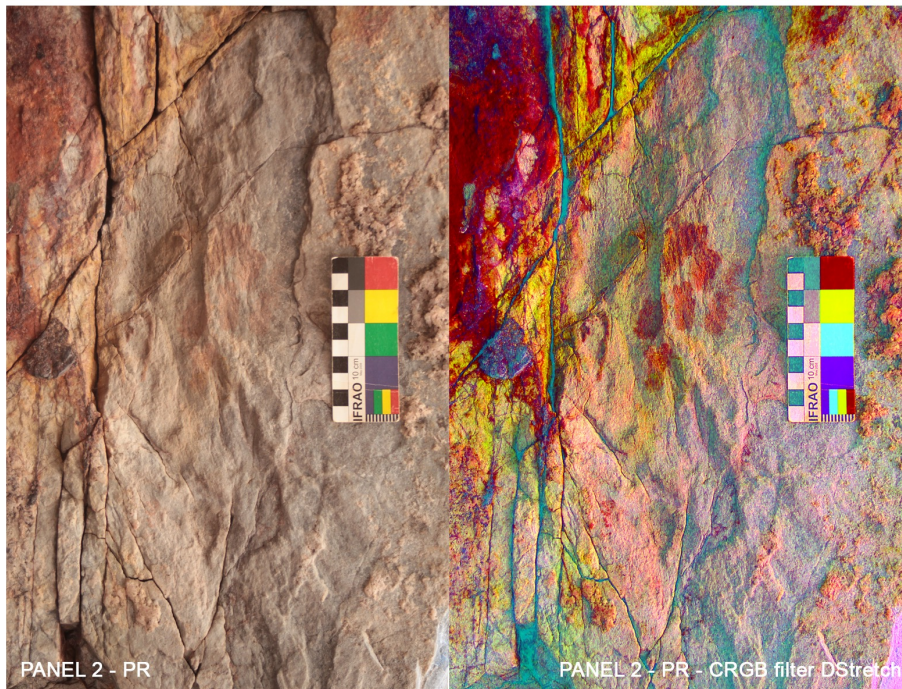




Puerto Roque

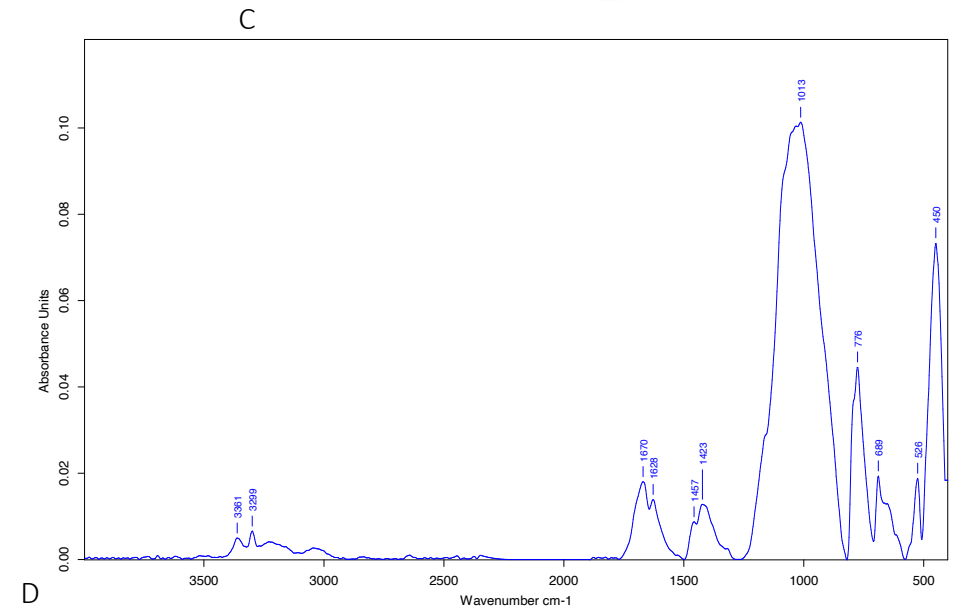
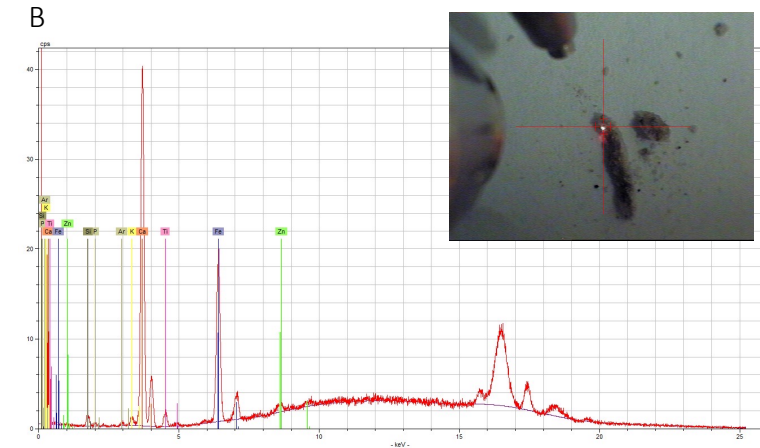
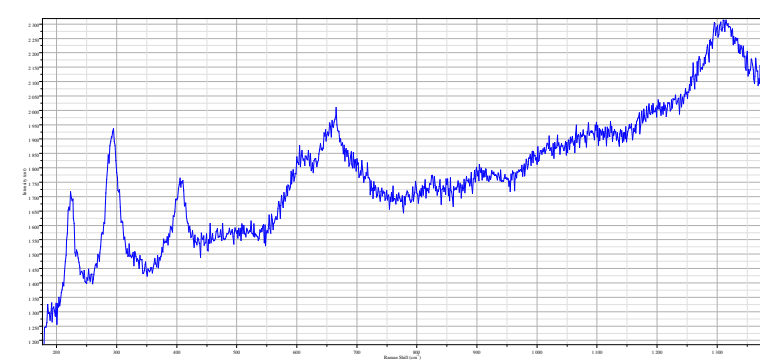
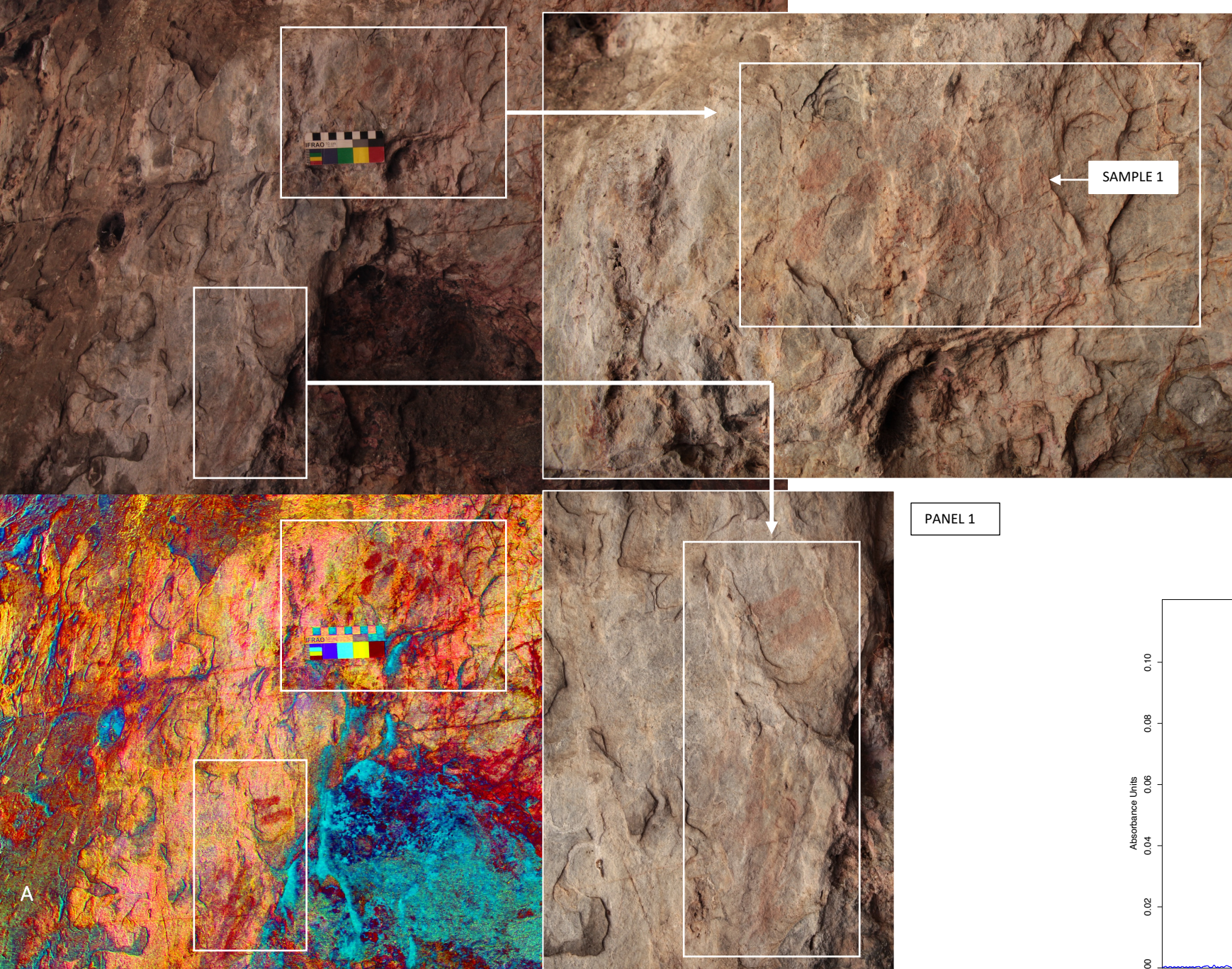
FIGURE S2: DISTRIBUTION OF THE ROCK ART PANELS IN THE PUERTO ROQUE SHELTER.





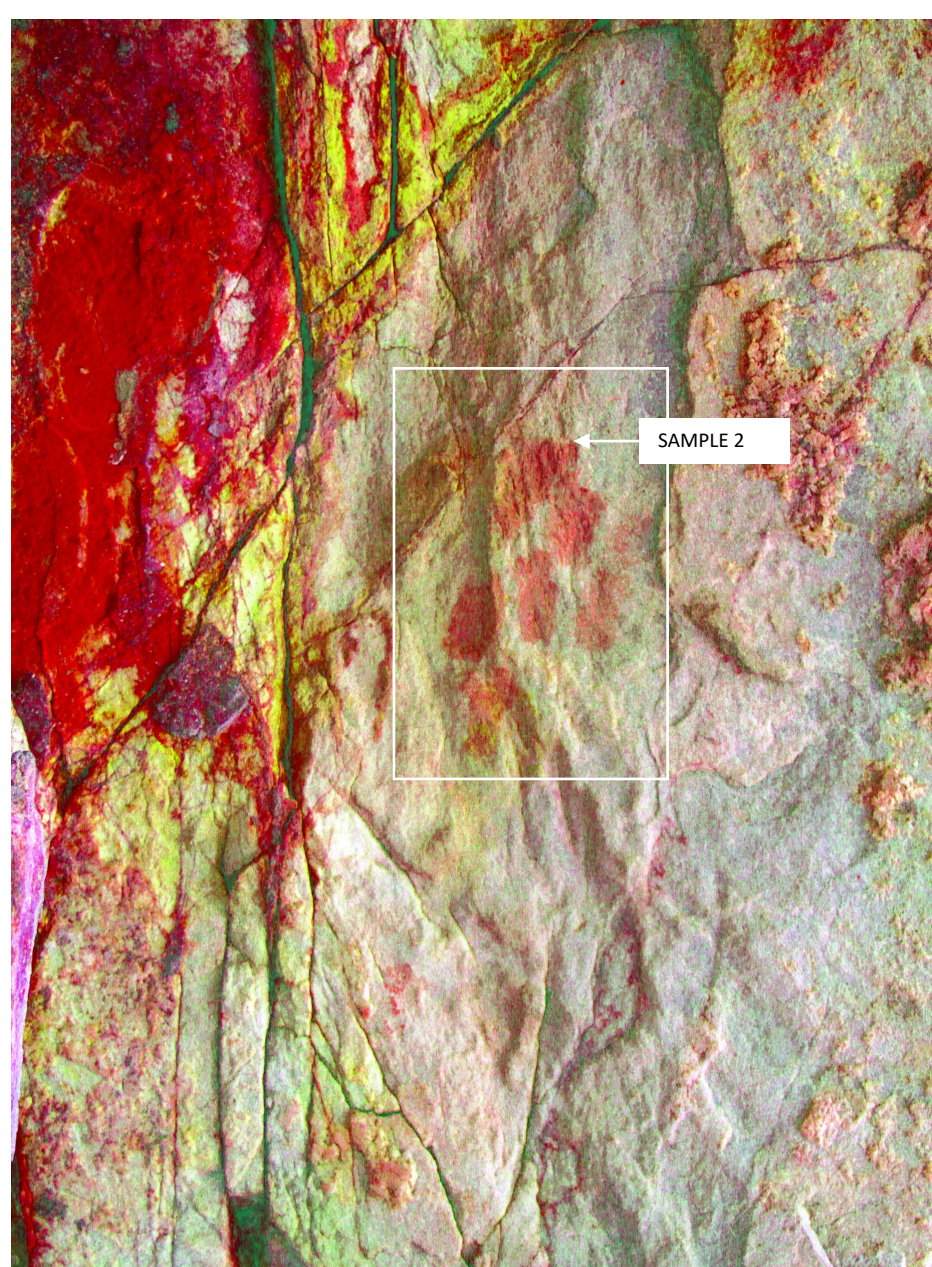
**FIGURE S3:** EXAMPLES OF FIGURES FROM PUERTO ROQUE SHELTER WITHIN THE SO-CALLED IBERIAN PENINSULA SCHEMATIC ROCK ART STYLE. A: PANEL 2 FROM PUERTO ROQUE ORIGINAL PICTURE AND WITH CRGB FILTER OF DSTRETCH; B: PANEL 9 OF PUERTO ROQUE ORIGINAL PICTURE AND LDS FILTER DSTRETCH; C: PANEL 4 FROM PUERTO ROQUE ORIGINAL PICTURE AND YRE FILTER FROM DSTRETCH.





**FIGURE S4:** SAMPLE PUERTO\_1 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B); EDXRF (C) AND ATR-FTIR (D) SPECTRA.

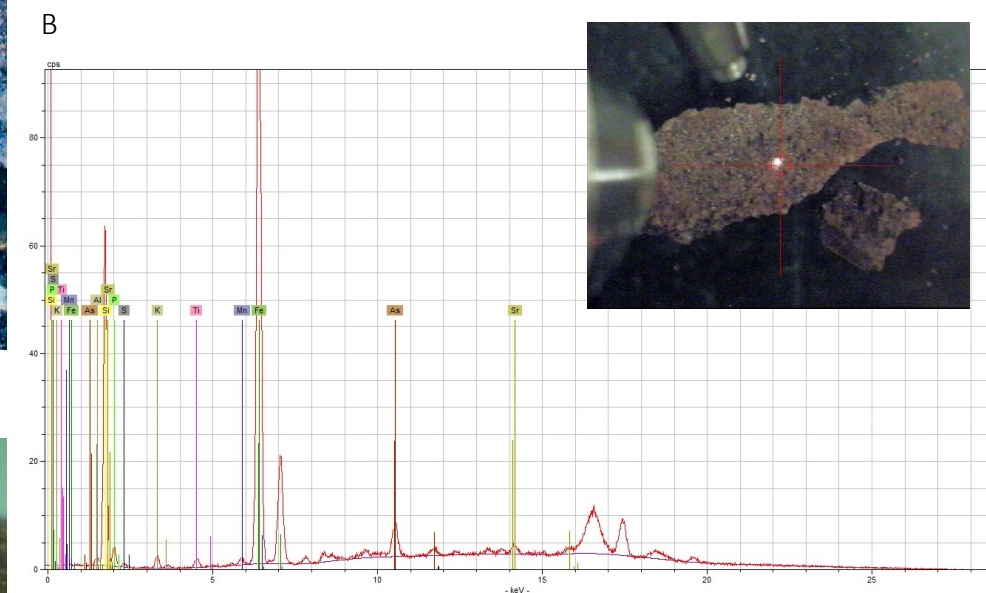
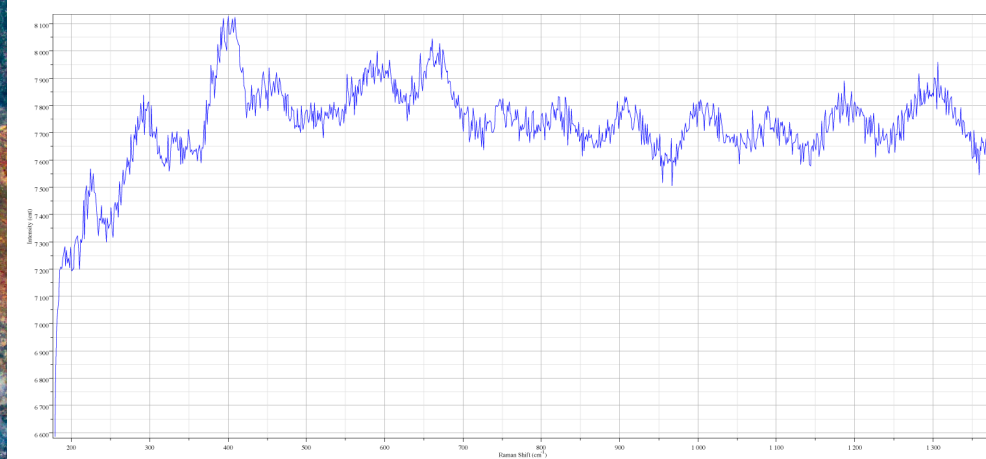
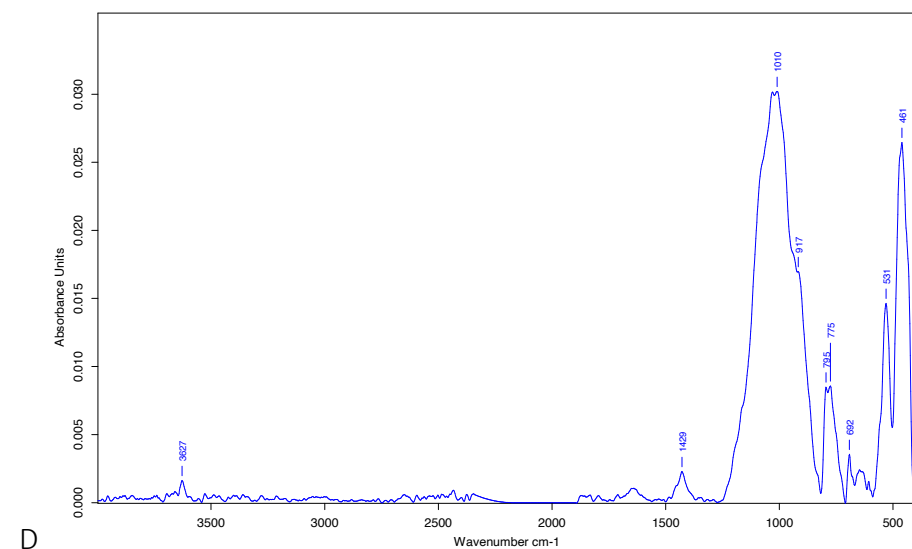
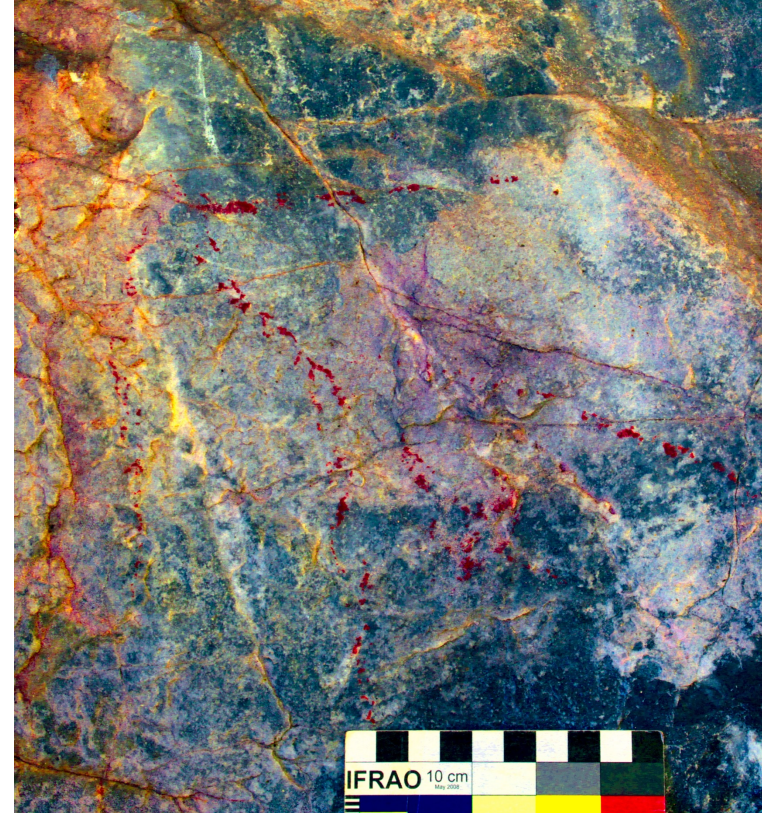
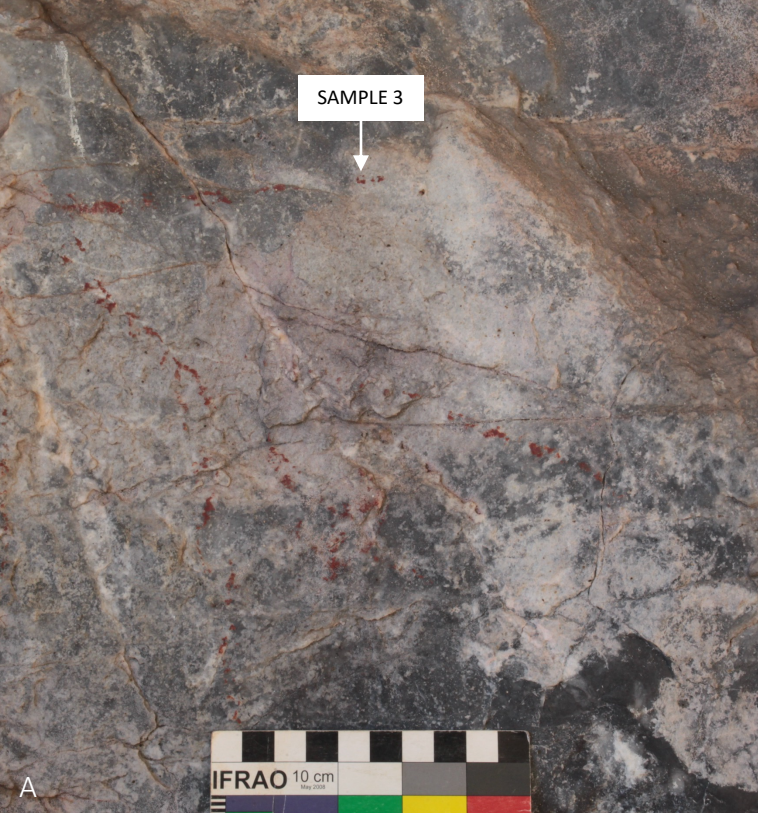




PANEL 2

FIGURE S5: SAMPLE PUERTO\_2 FIGURES AND SAMPLING LOCATION.

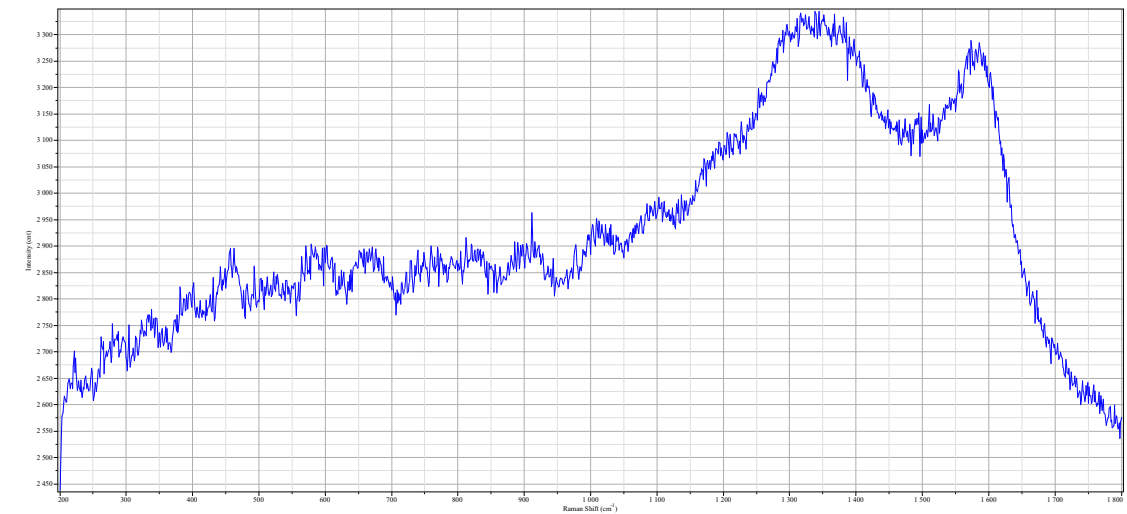




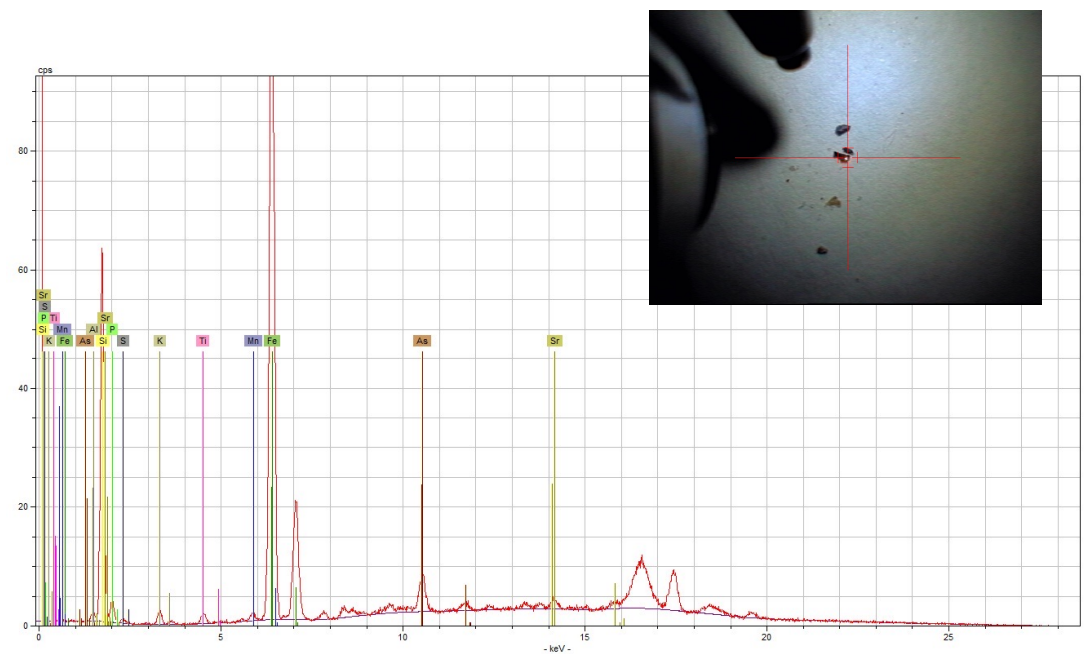
PANEL 3

**FIGURE S6:** SAMPLE PUERTO\_3 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B) EDXRF (C) AND ATR-FTIR (D) SPECTRA AND STEREO MICROSCOPE IMAGE (E).





B

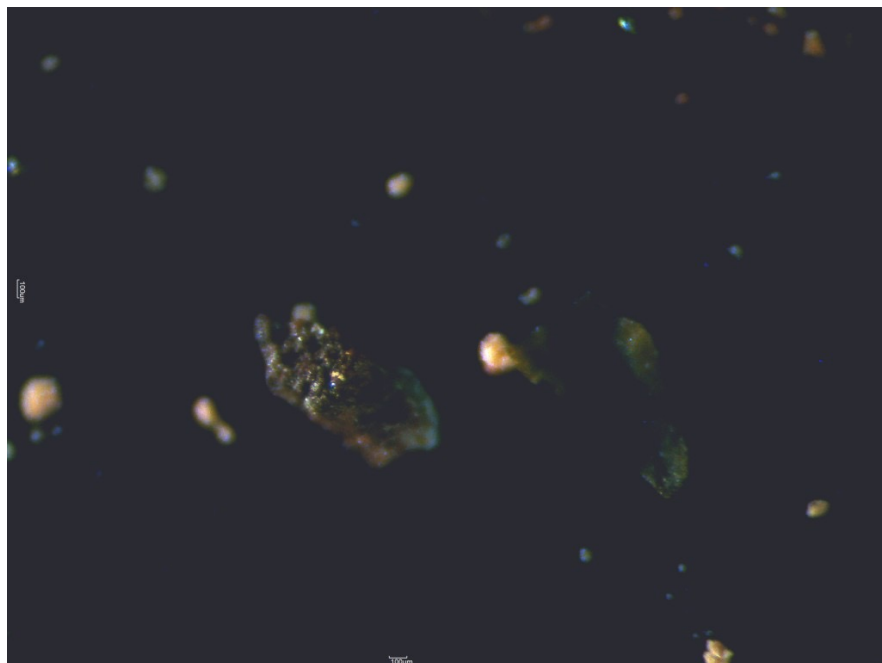


C

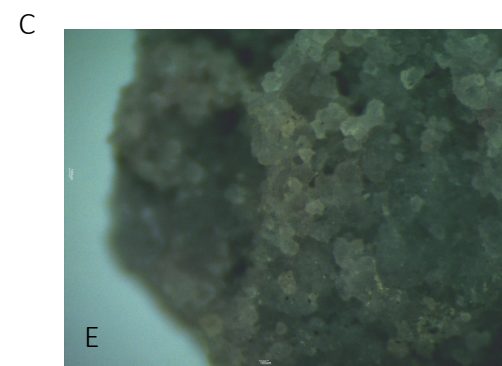
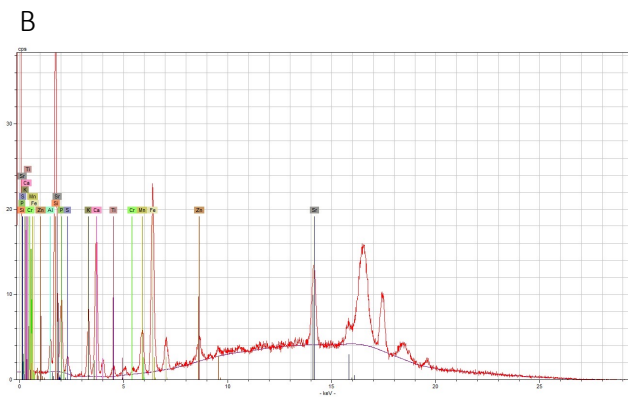
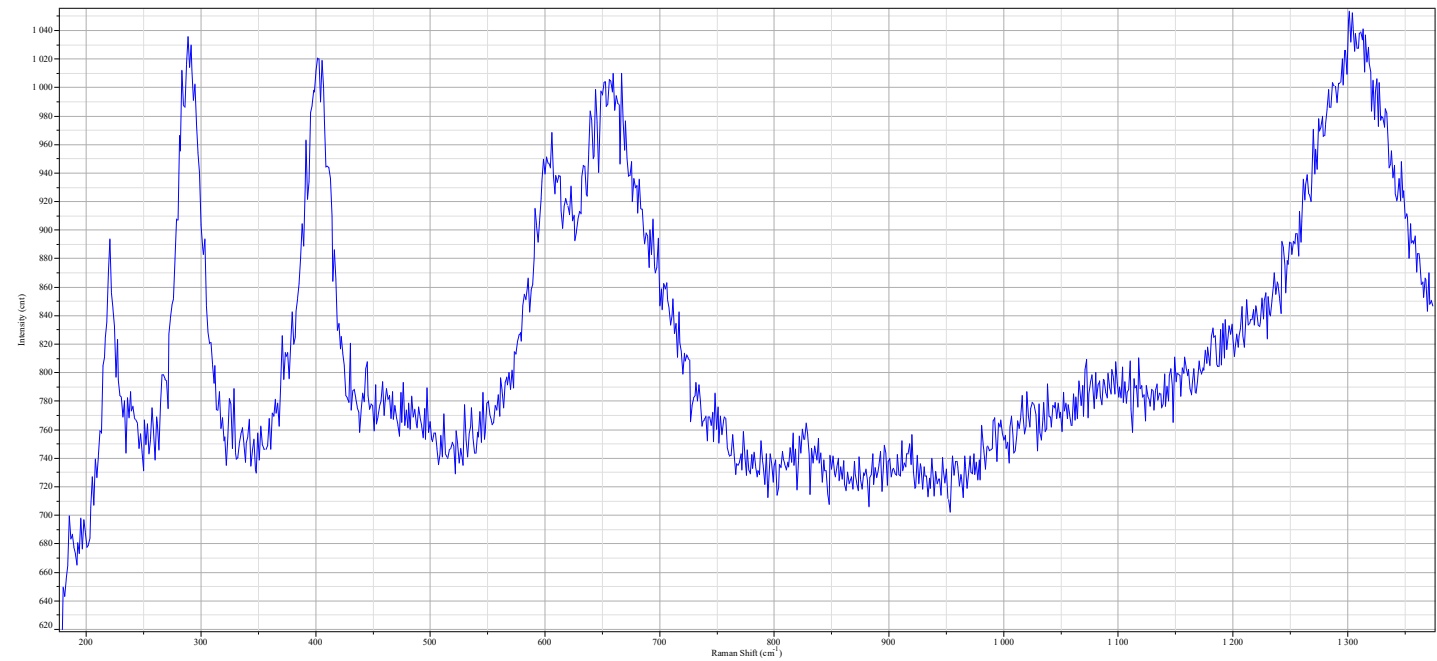
PANEL 4

**FIGURES7:** SAMPLE PUERTO\_4 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B) AND EDXRF (C) SPECTRA AND STEREO MICROSCOPE IMAGE (D).

D

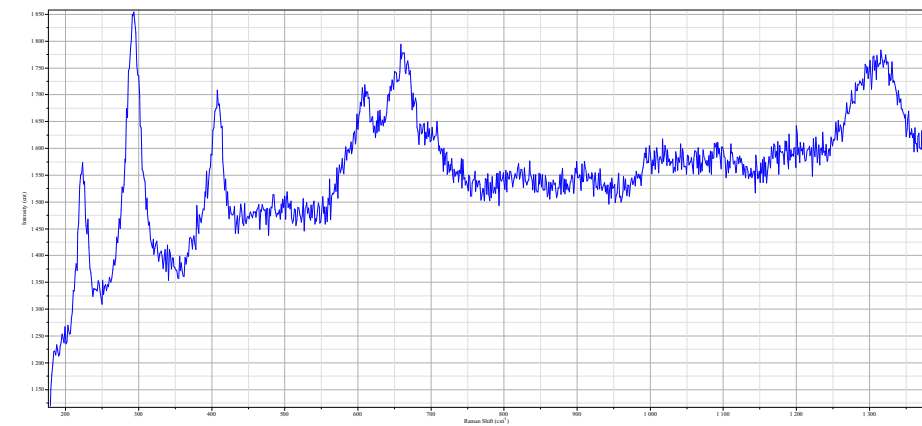
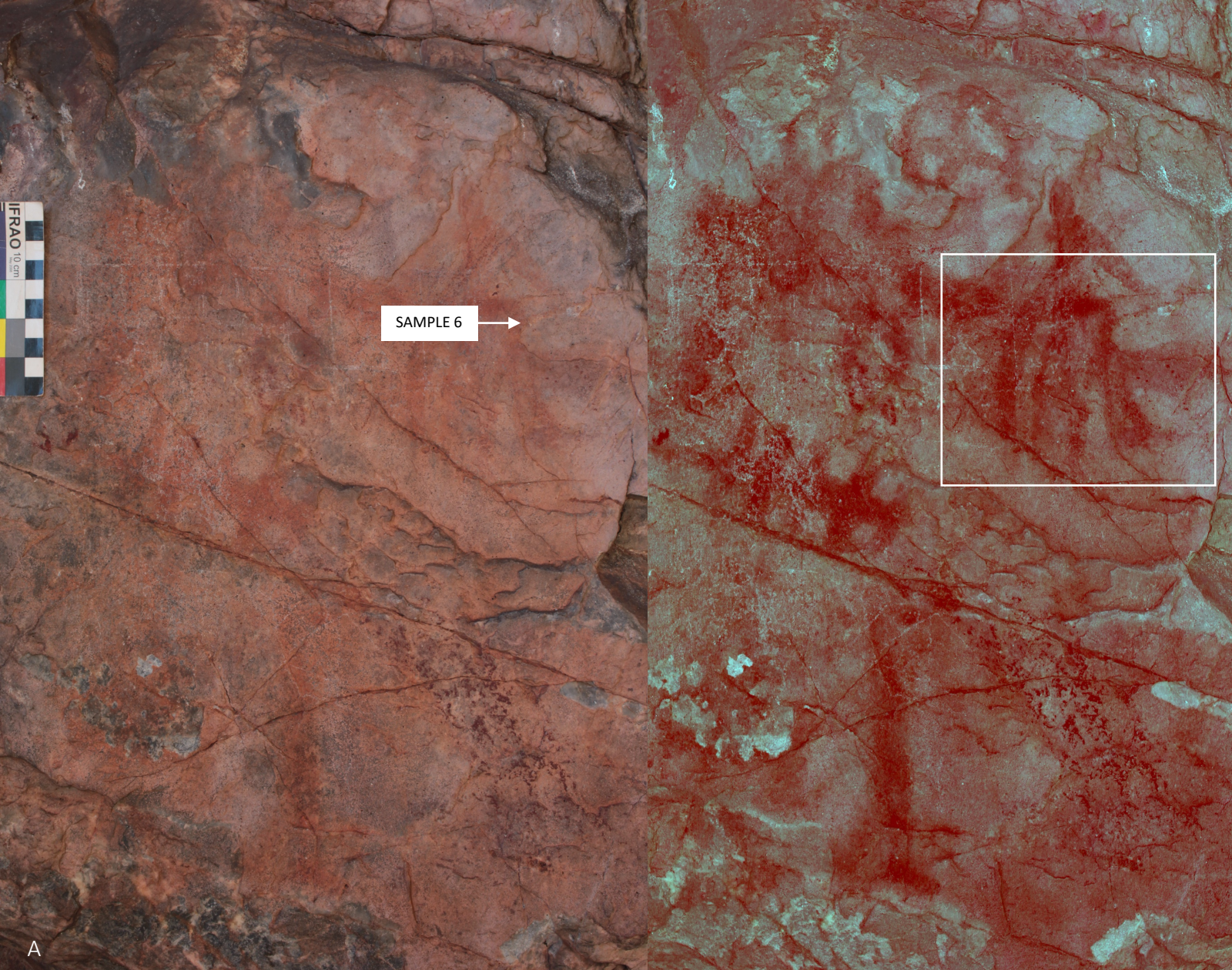




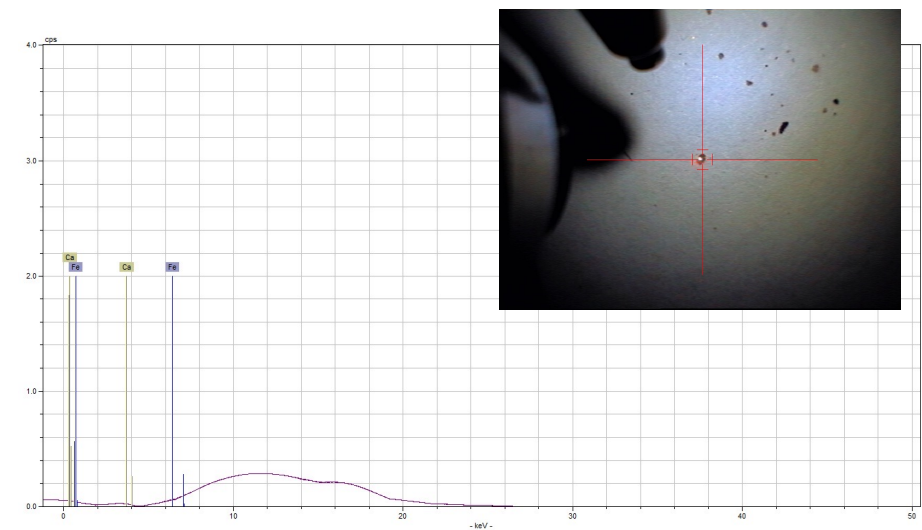


**FIGURE S8:** SAMPLE PUERTO\_5 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B), EDXRF (C) AND ATR-FTIR (D) SPECTRA AND STEREO MICROSCOPE IMAGE (E).





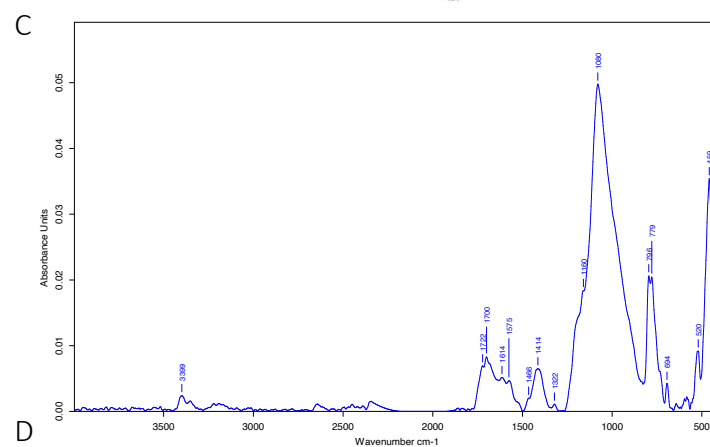
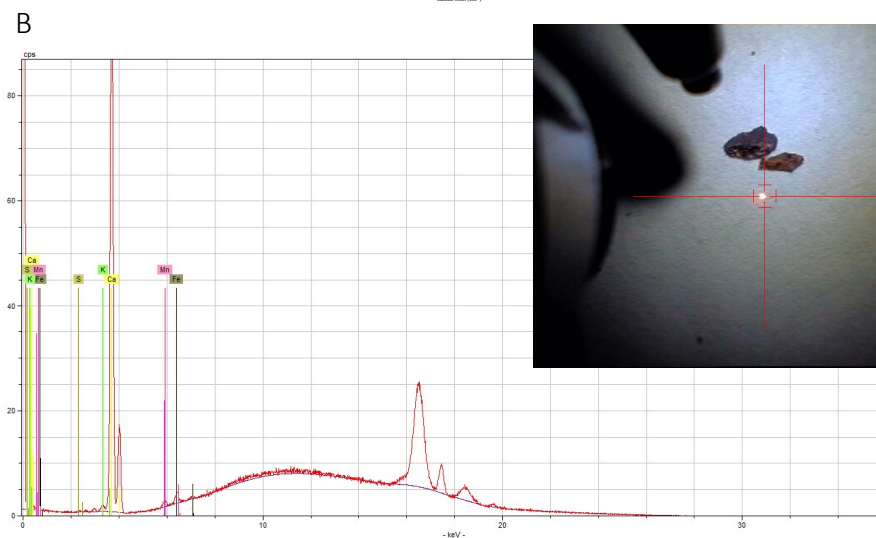
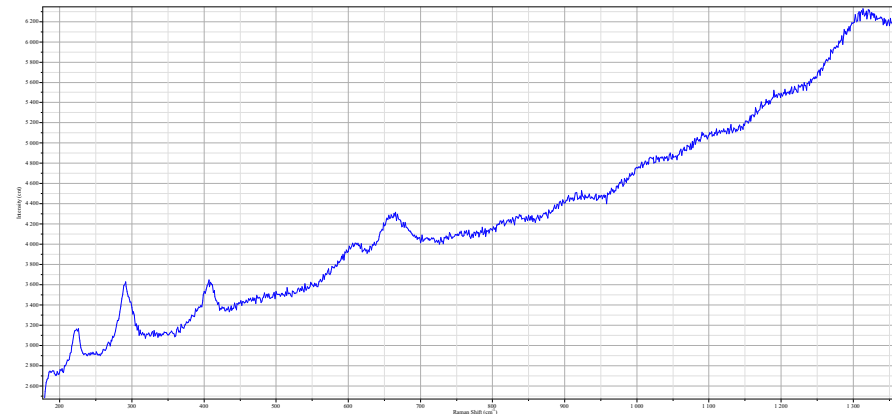
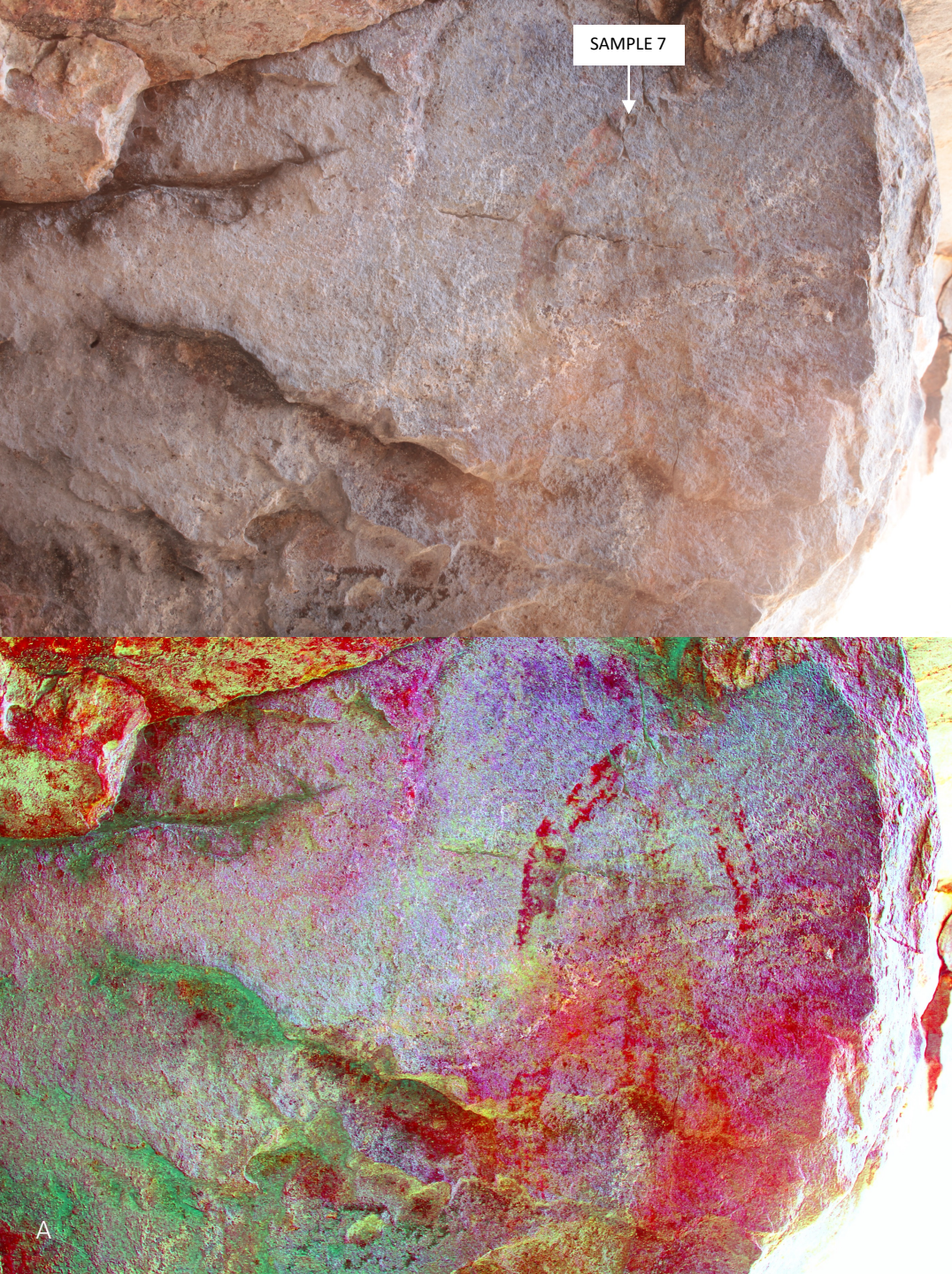
B



C

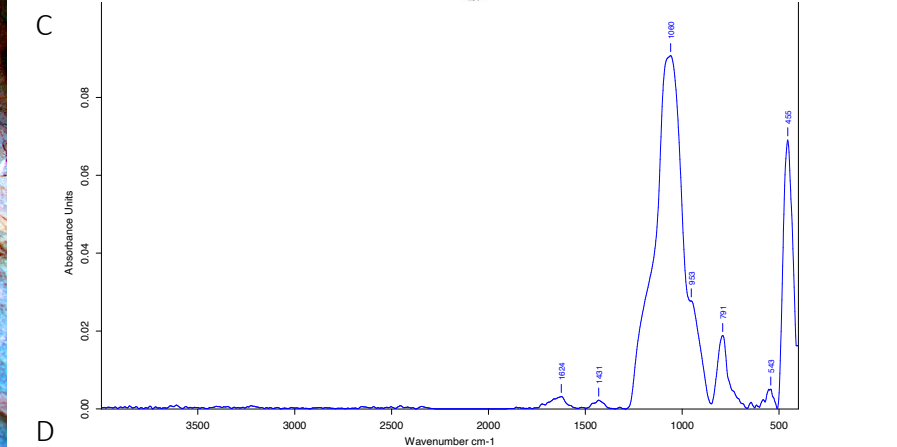
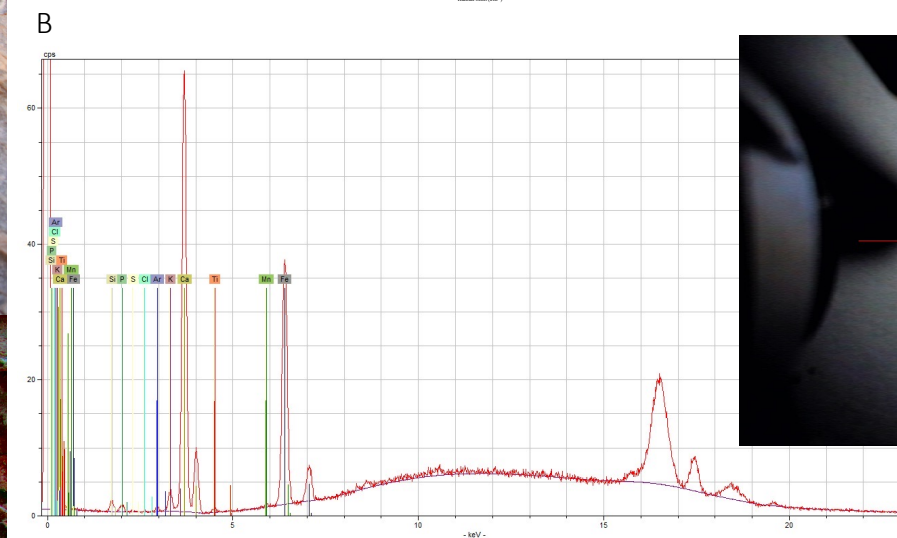
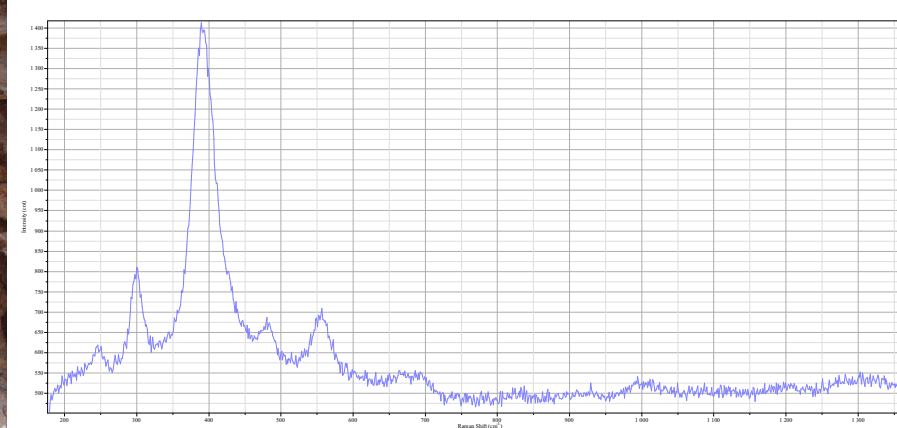
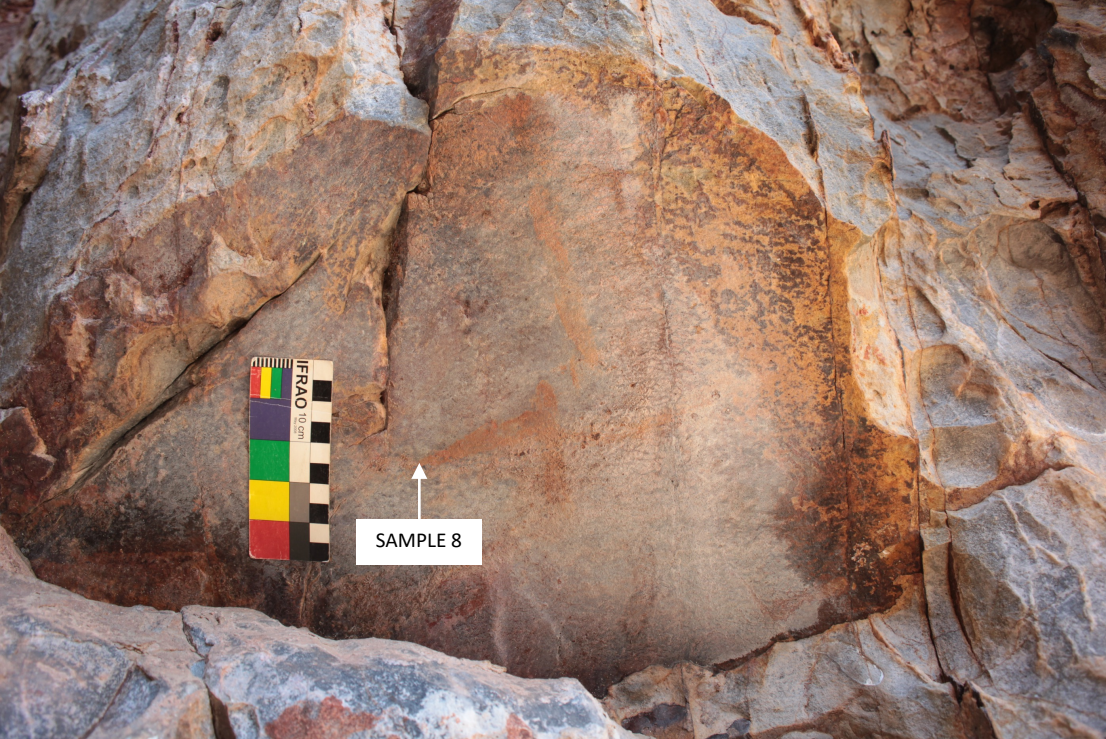
**FIGURE S9: SAMPLE PUERTO\_6 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B) AND EDXRF (C) SPECTRA.**





**FIGURE S10:** SAMPLE PUERTO\_7  
FIGURES AND SAMPLING LOCATION (A);  
MICRO-RAMAN (B), EDXRF (C) AND ATR-  
FTIR (D) SPECTRA AND STEREO  
MICROSCOPE IMAGE (E).

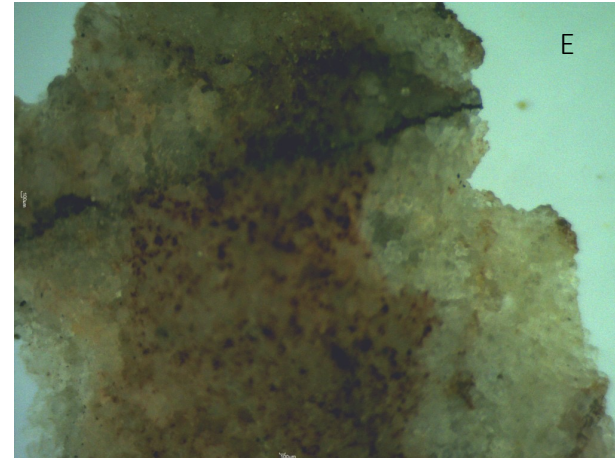
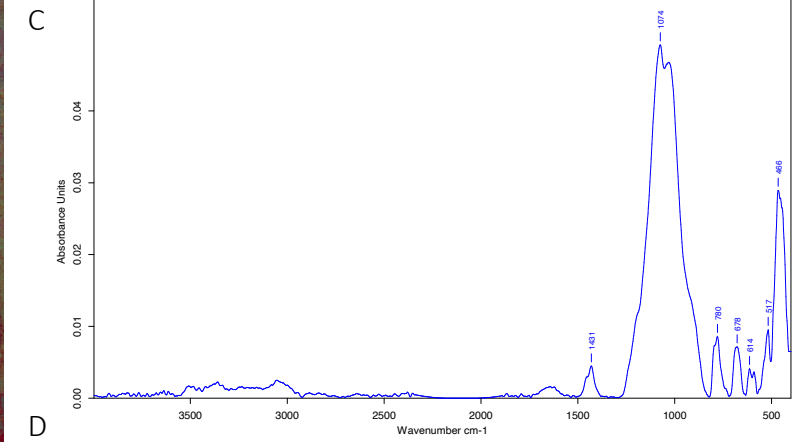
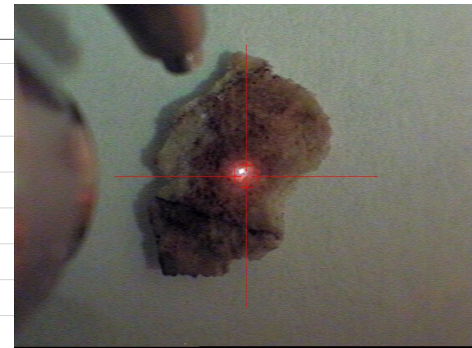
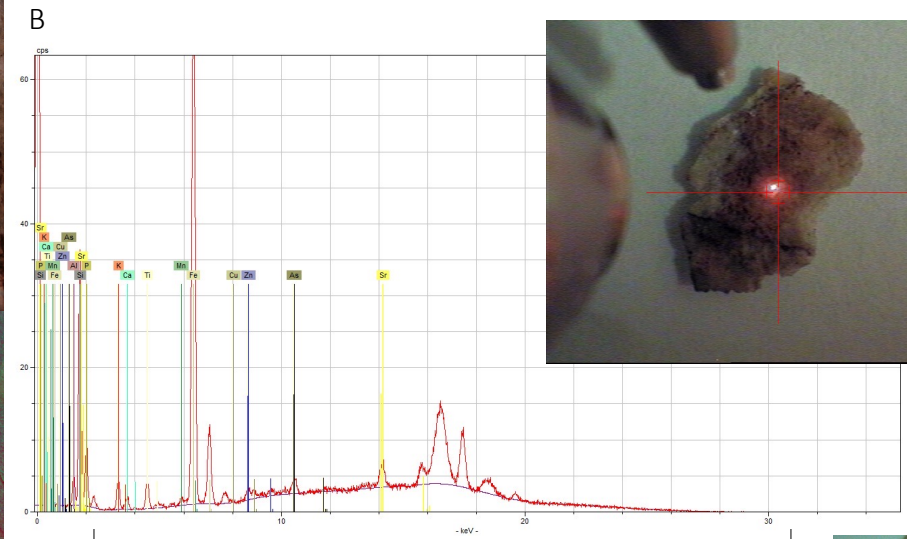
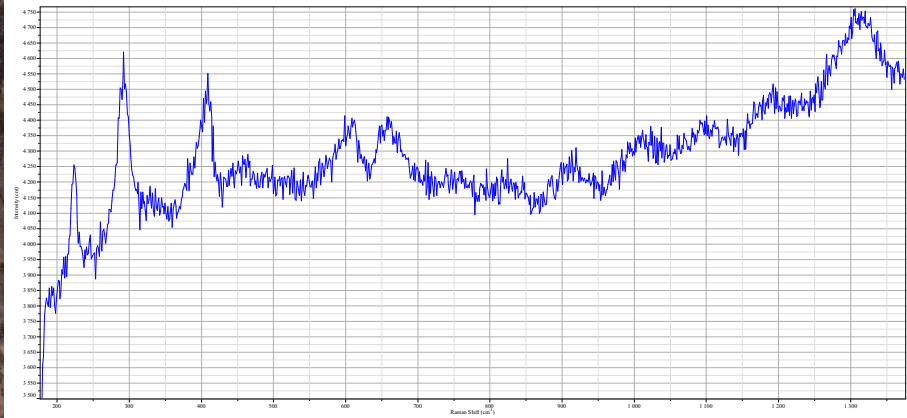




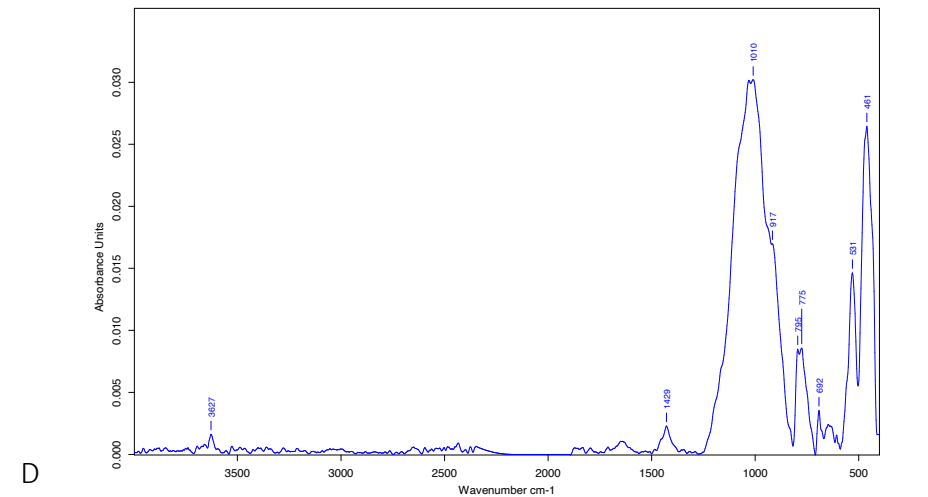
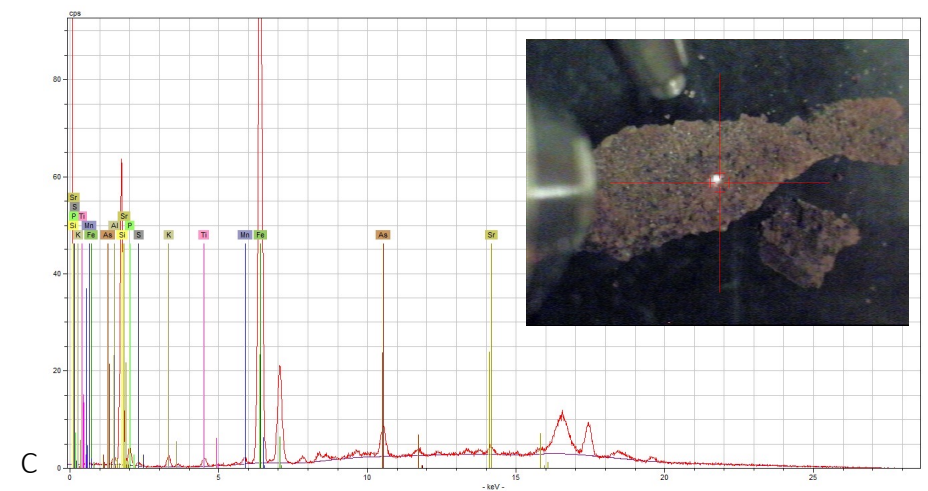
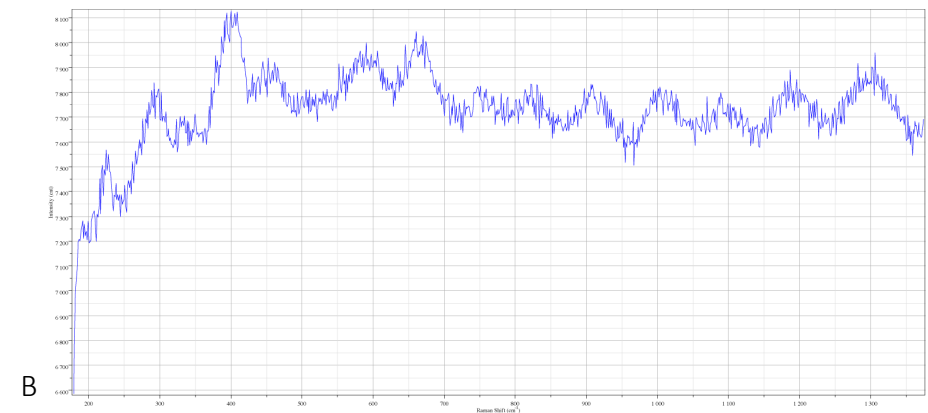
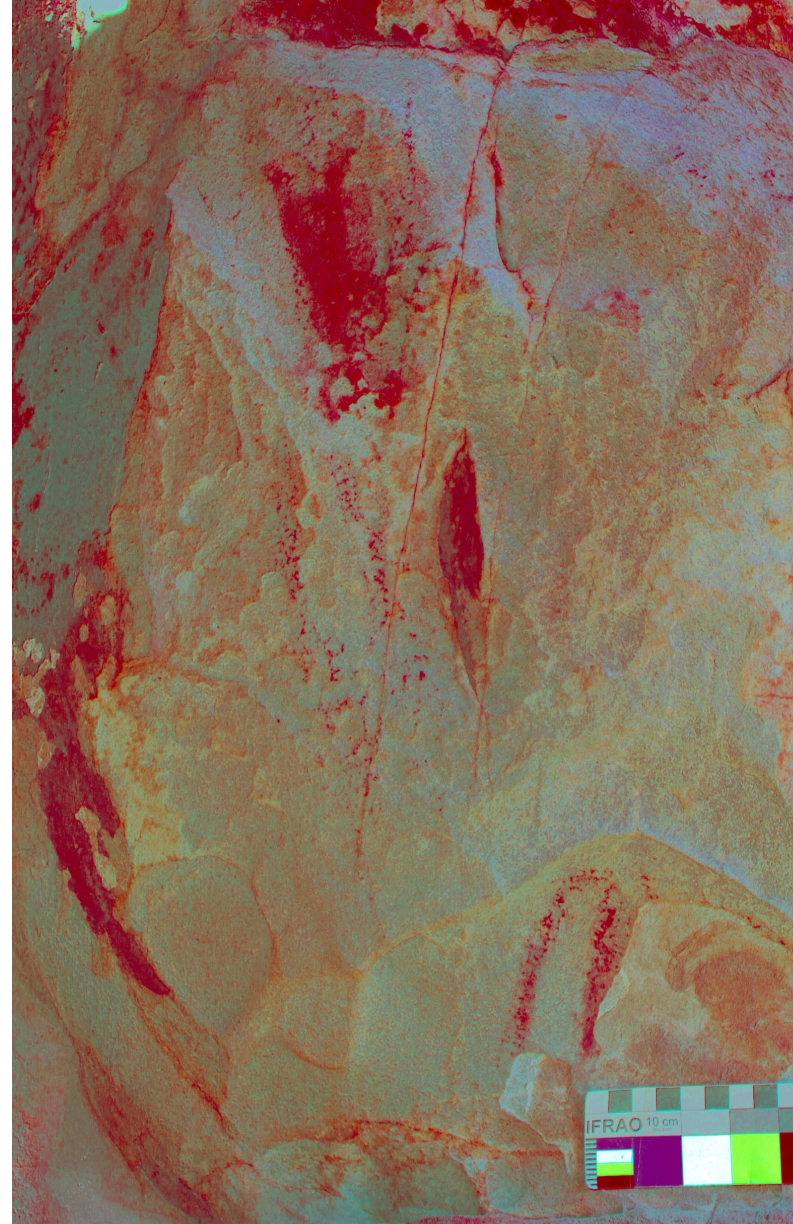
**FIGURE S11:** SAMPLE PUERTO\_8  
FIGURES AND SAMPLING LOCATION (A);  
MICRO-RAMAN (B) AND EDXRF (C), AND  
ATR-FTIR (D) SPECTRA.



**FIGURE S12:** SAMPLE PUERTO\_9  
FIGURES AND SAMPLING LOCATION (A);  
MICRO-RAMAN (B) EDXRF (C) AND ATR-  
FTIR (D) SPECTRA AND STEREO  
MICROSCOPE IMAGE (E).



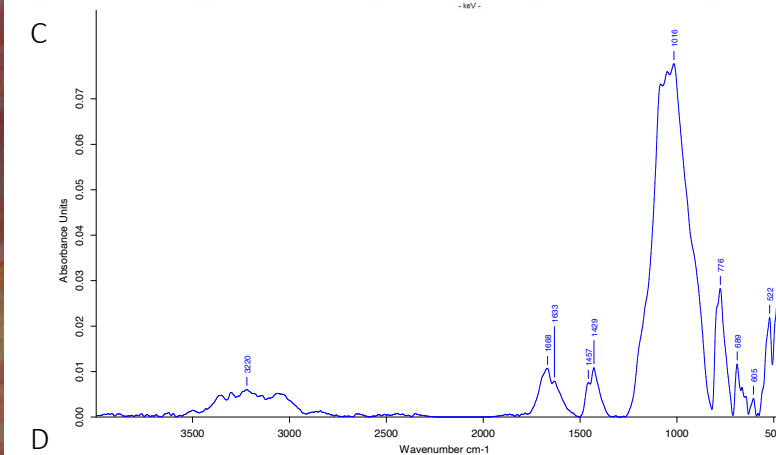
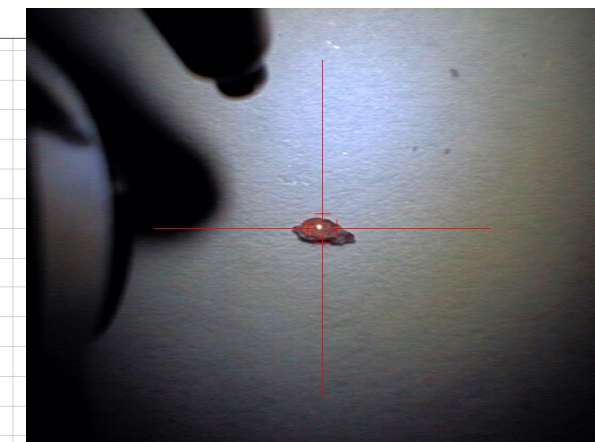
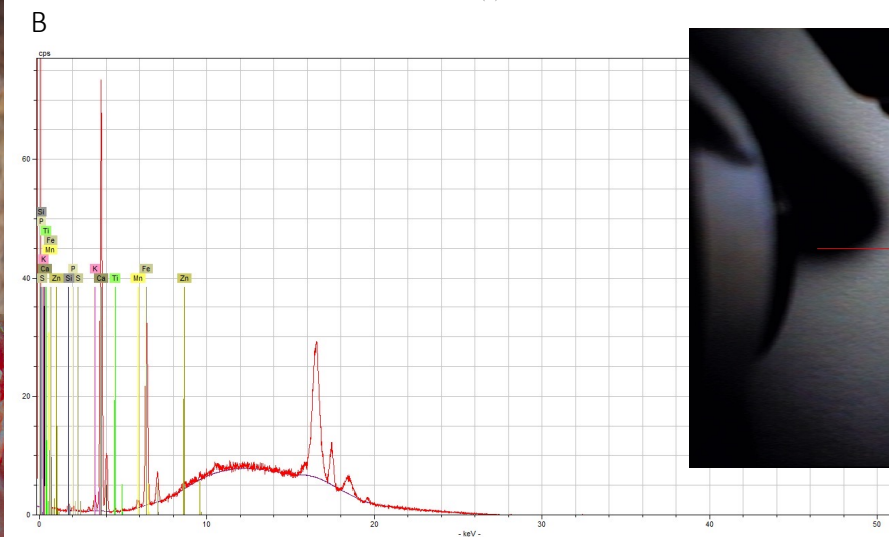
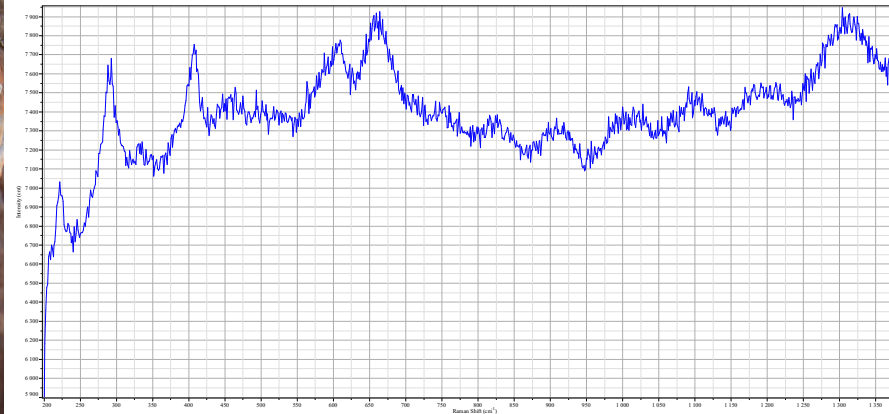




**PANEL 10**

**FIGURE S13:** SAMPLE PUERTO\_10 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B) AND EDXRF (C) AND ATR-FTIR (D) SPECTRA.



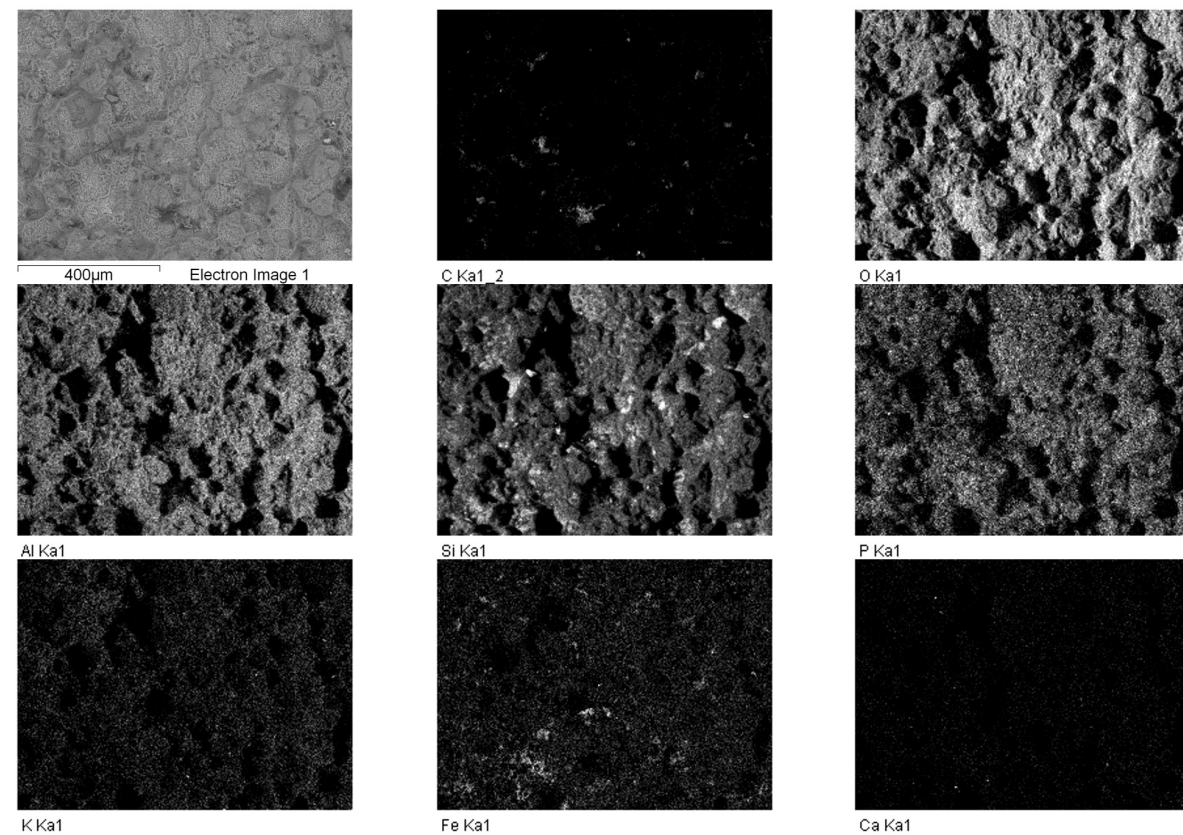
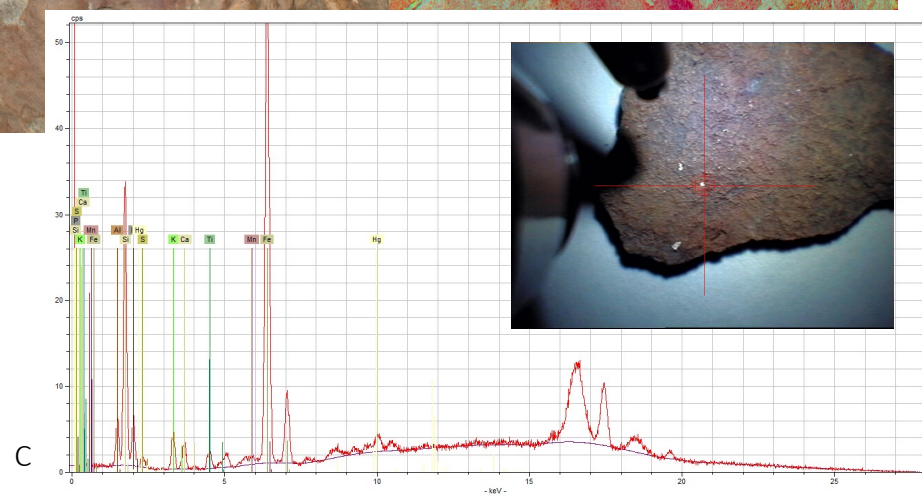
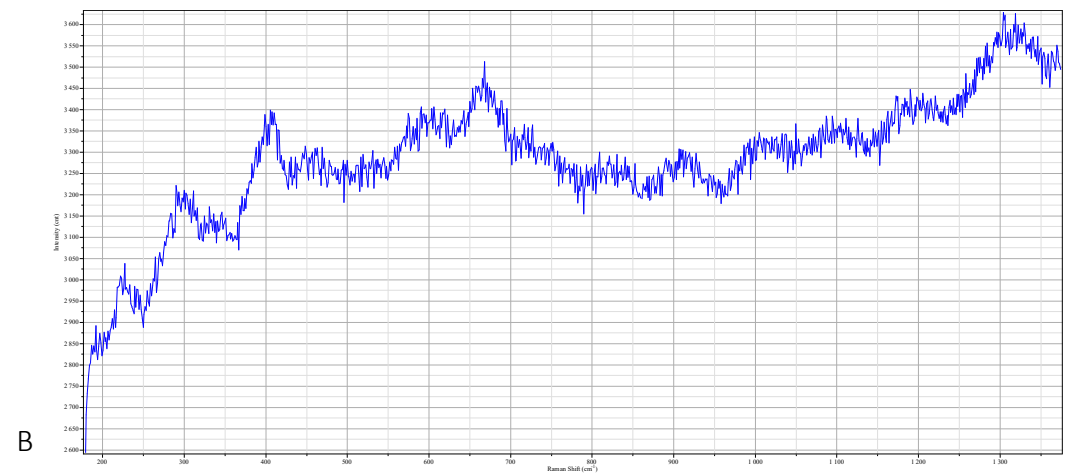
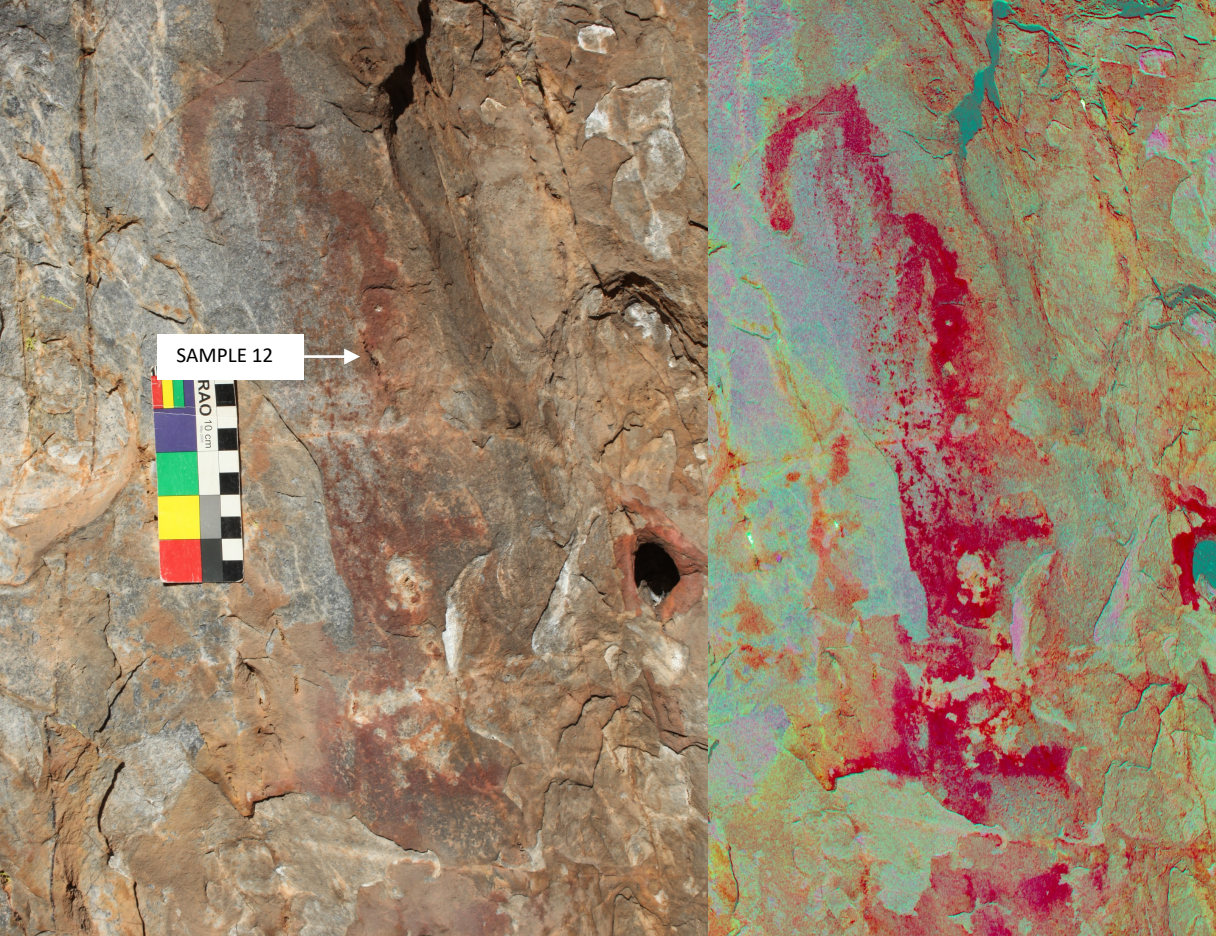


**FIGURE S14:** SAMPLE PUERTO\_11  
FIGURES AND SAMPLING LOCATION  
(A); MICRO-RAMAN (B) AND EDXRF  
(C) AND ATR-FTIR (D) SPECTRA.

PANEL 11

A

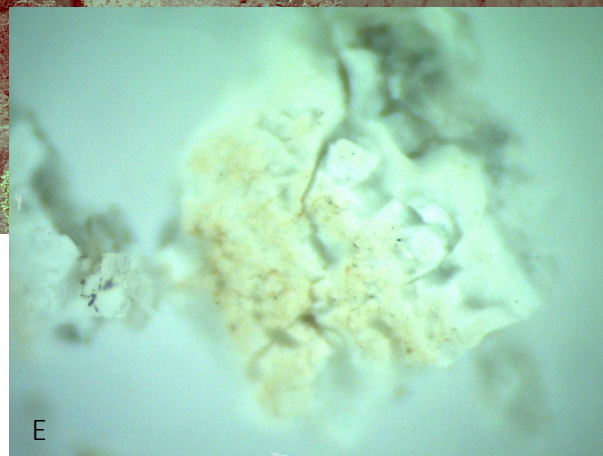
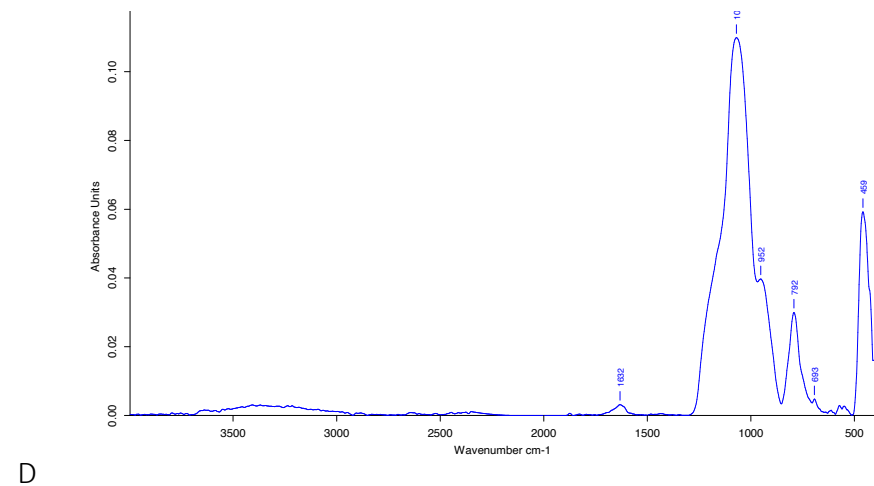
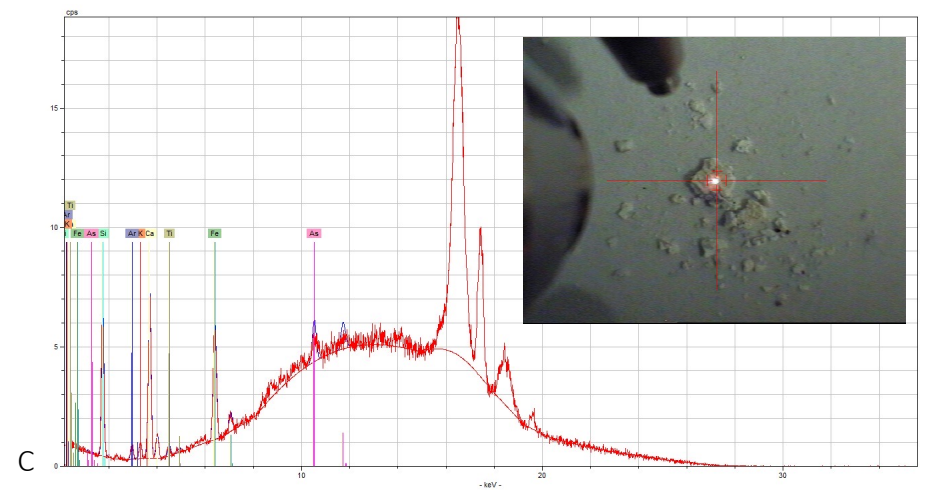
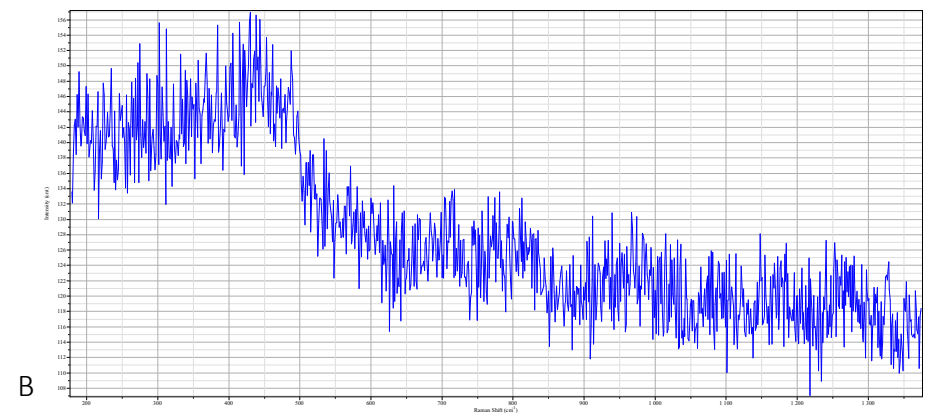
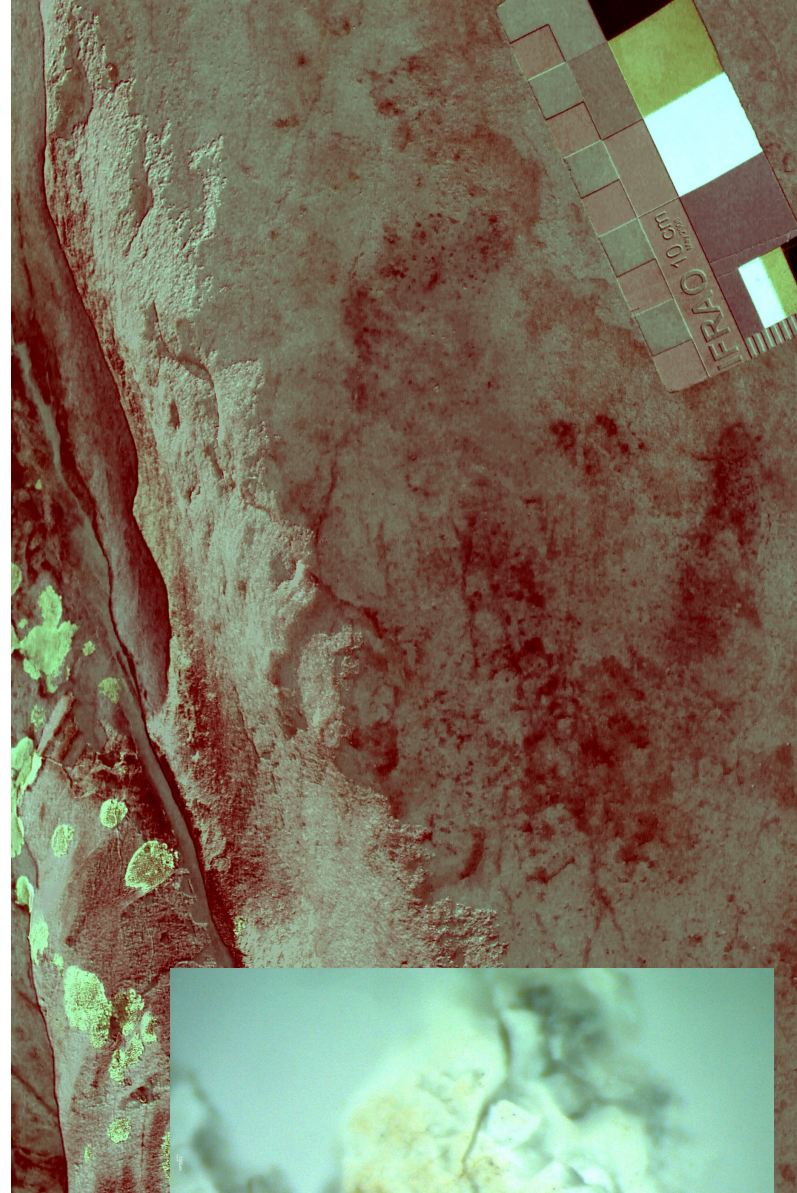




D

**FIGURE S15: SAMPLE PUERTO\_12 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B) AND EDXRF (C) SPECTRA AND SEM-EDS ELEMENTAL MAPPING (D).**

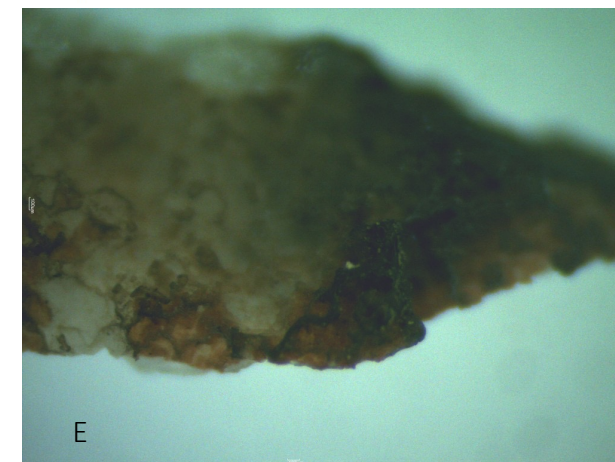
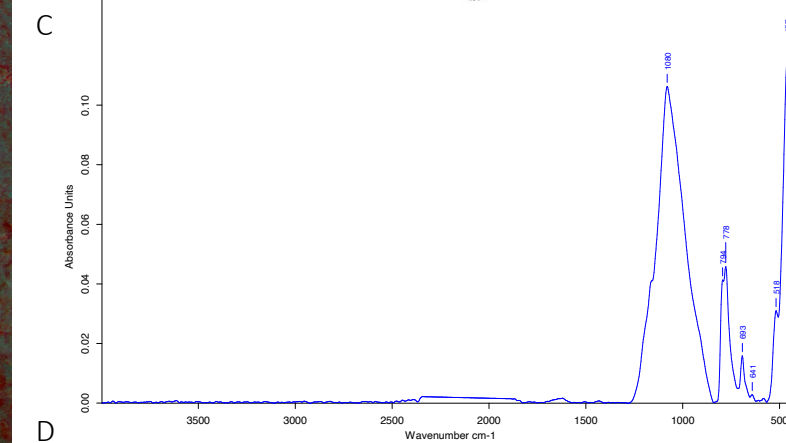
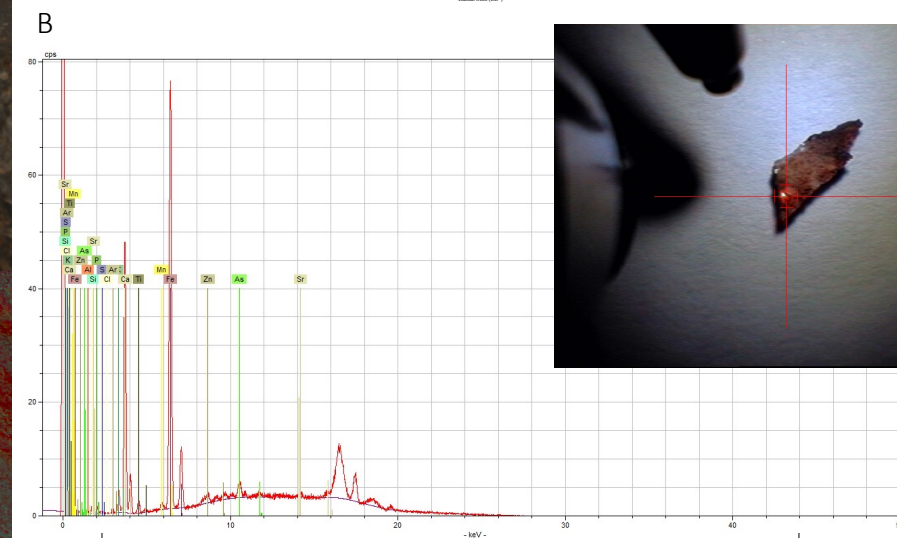
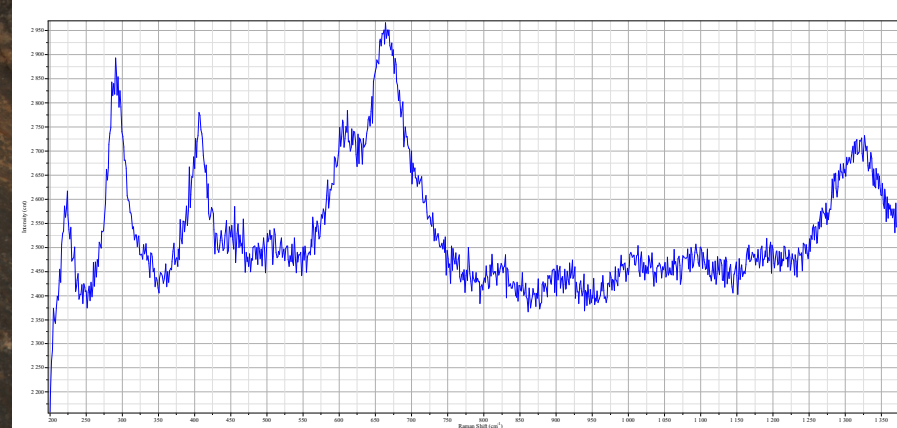
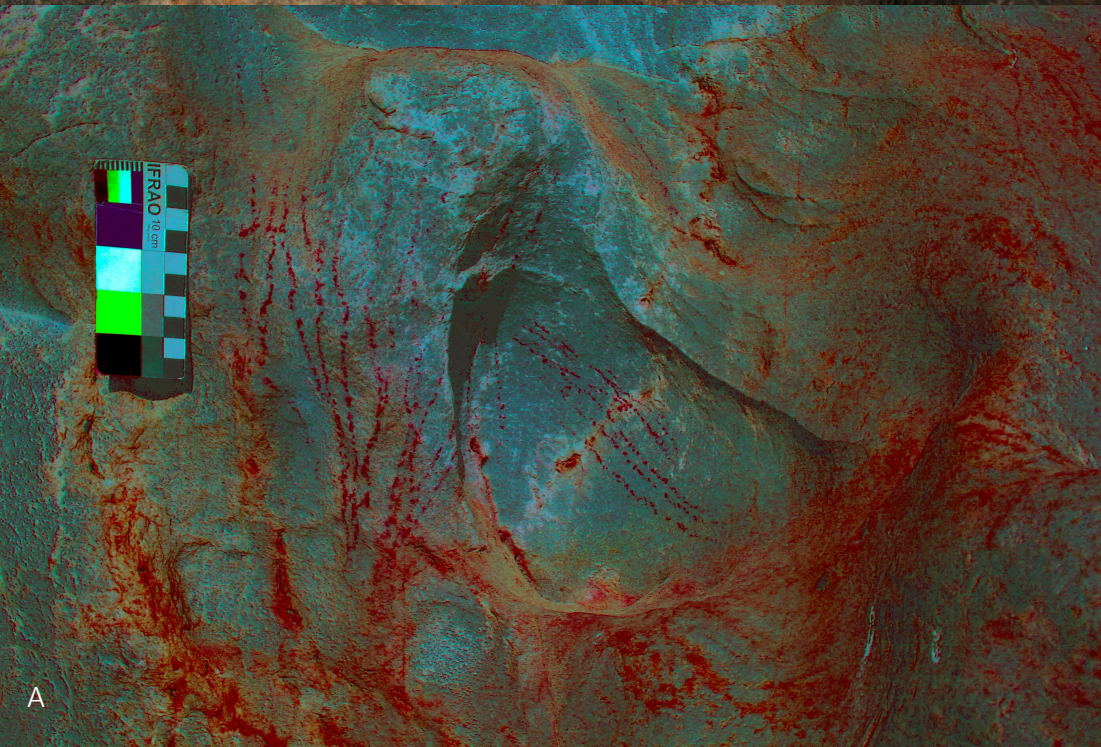




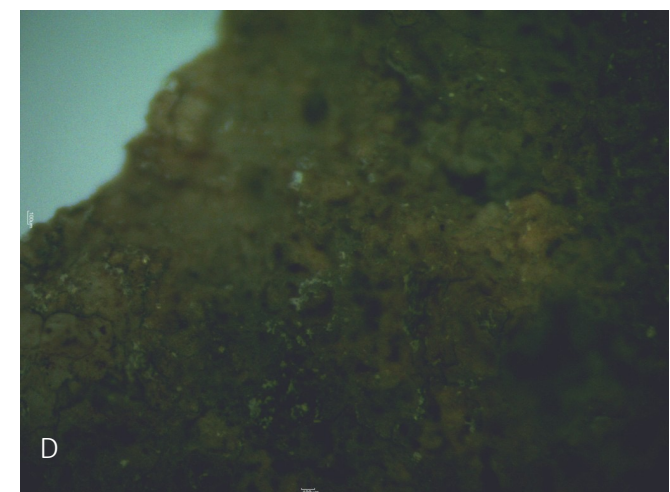
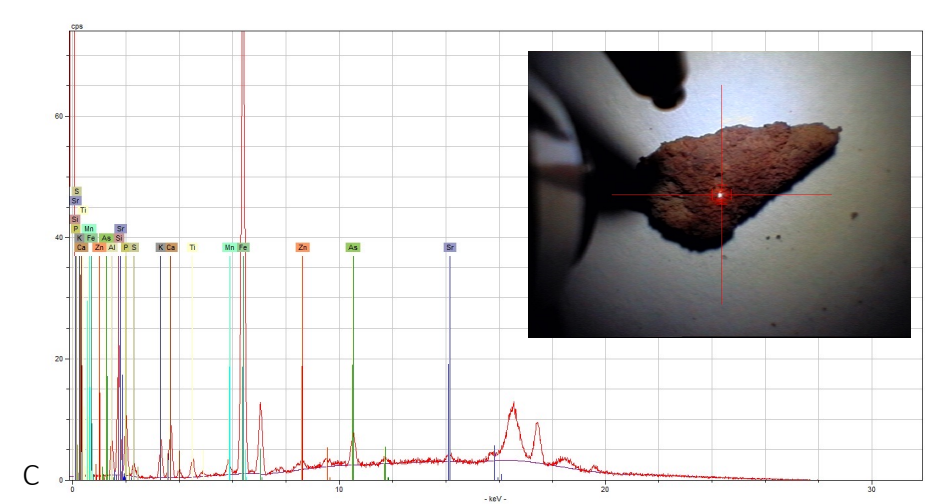
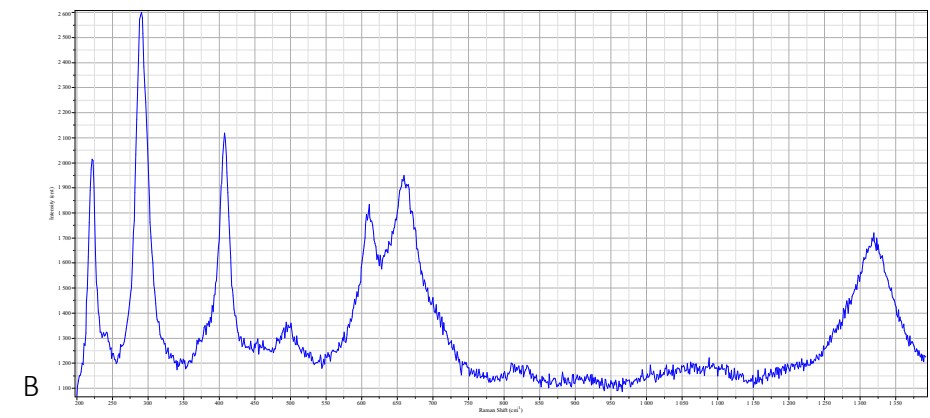
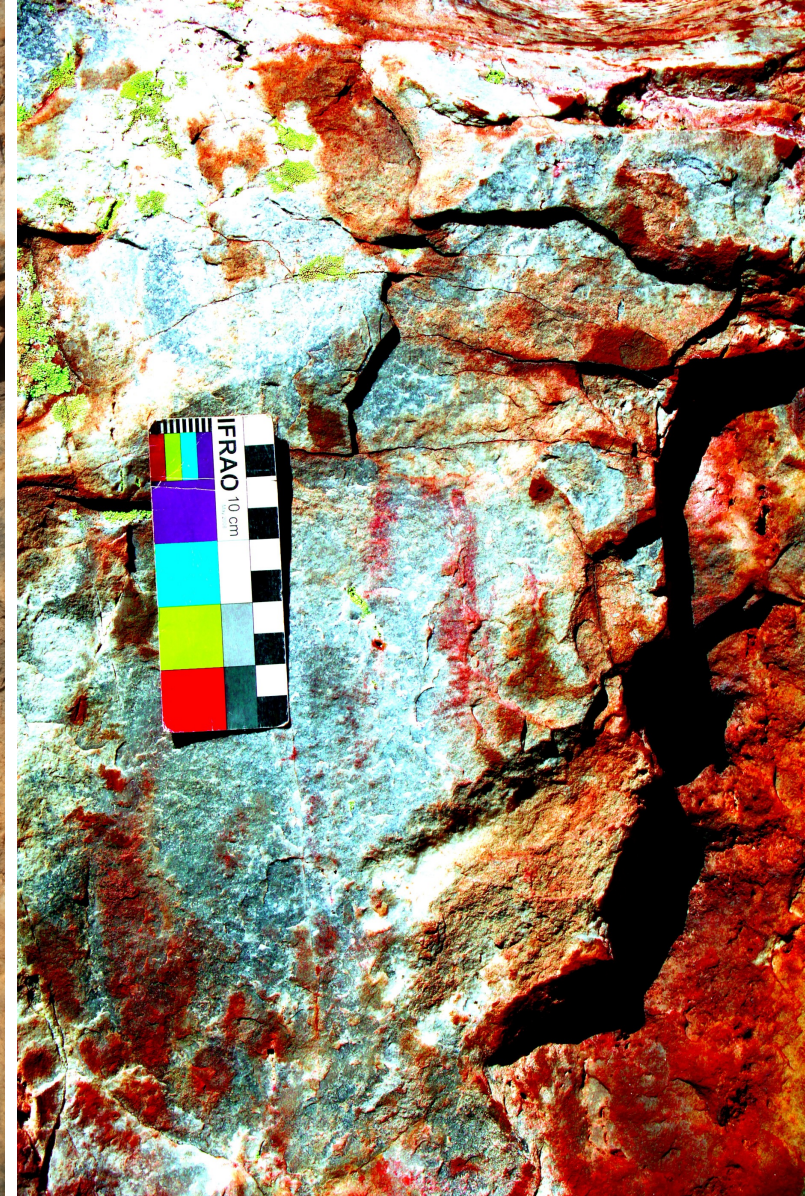
**FIGURE S16:** SAMPLE PUERTO\_13 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B), EDXRF (C) AND ATR-FTIR (D) SPECTRA AND STEREO MICROSCOPE IMAGE (E).



**FIGURE S17:** SAMPLE PUERTO\_14  
FIGURES AND SAMPLING LOCATION (A);  
MICRO-RAMAN (B), EDXRF (C), AND ATR-  
FTIR (D) SPECTRA AND STEREO  
MICROSCOPE IMAGE (E).

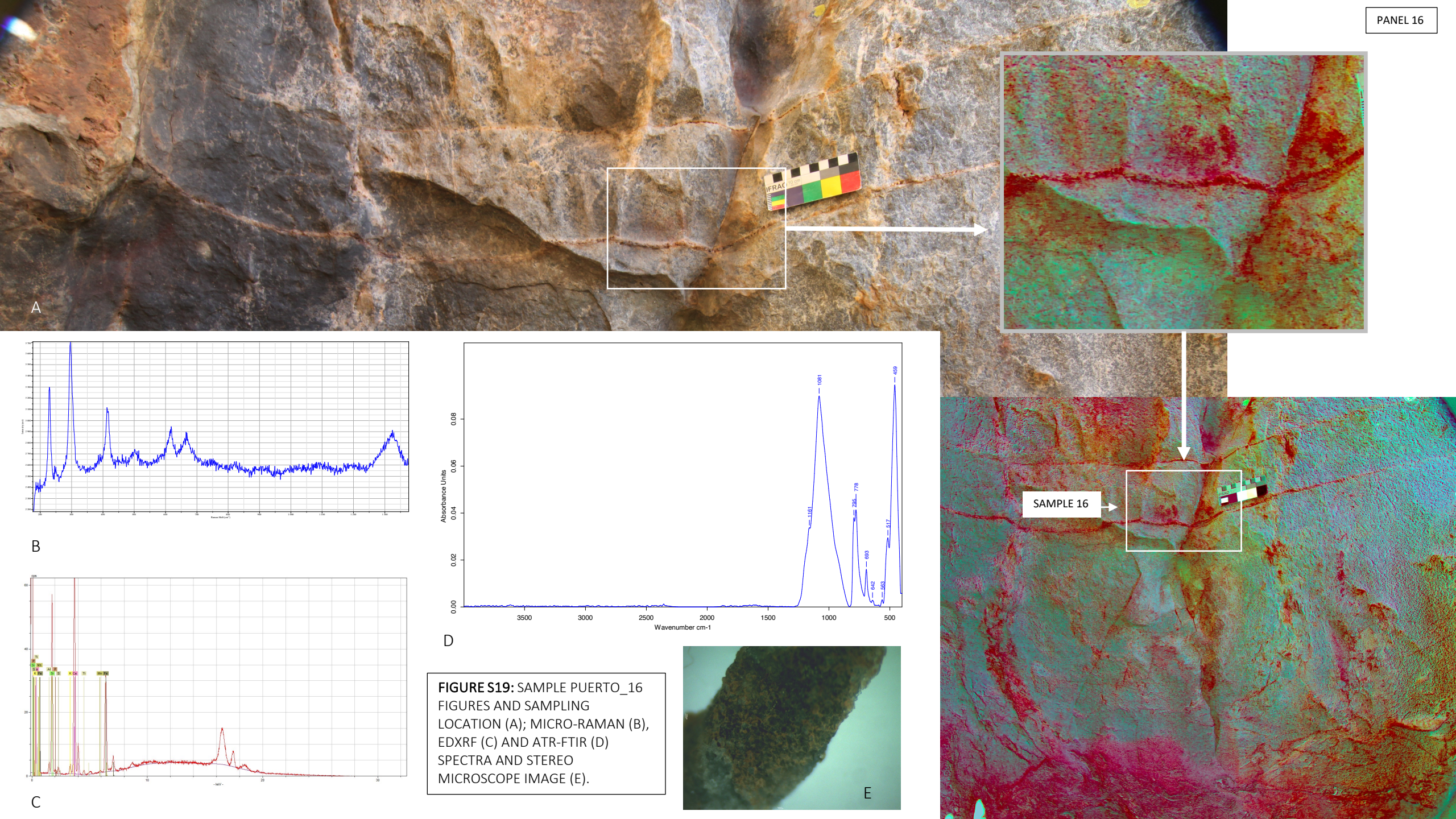




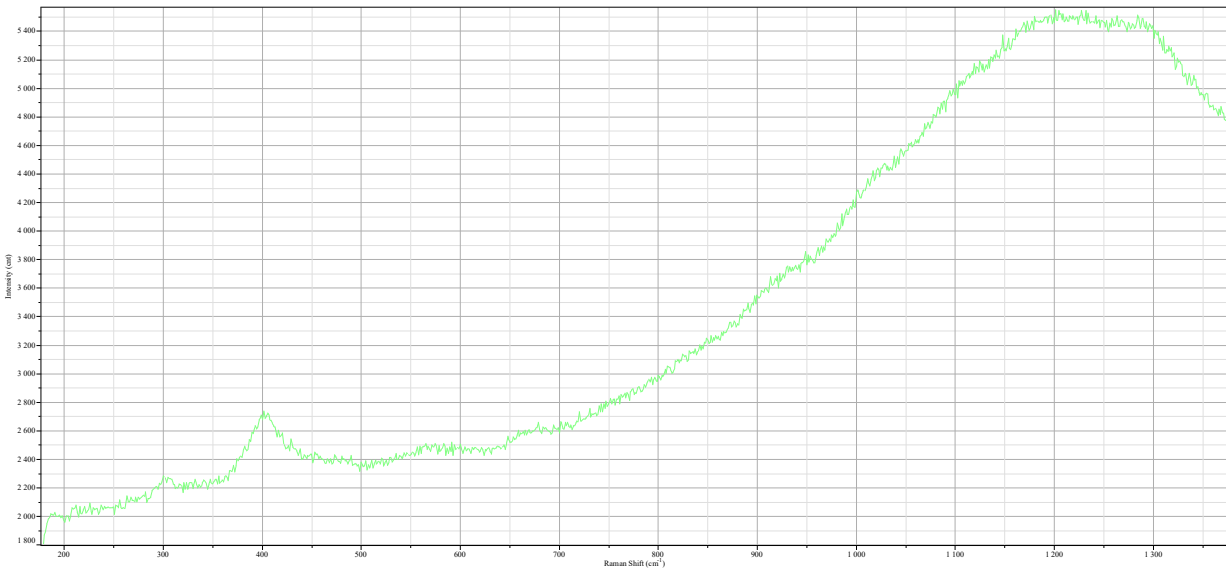


**FIGURE S18:** SAMPLE PUERTO\_15 FIGURES AND SAMPLING LOCATION (A); MICRO-RAMAN (B) AND EDXRF (C) SPECTRA AND STEREO MICROSCOPE IMAGE (D).

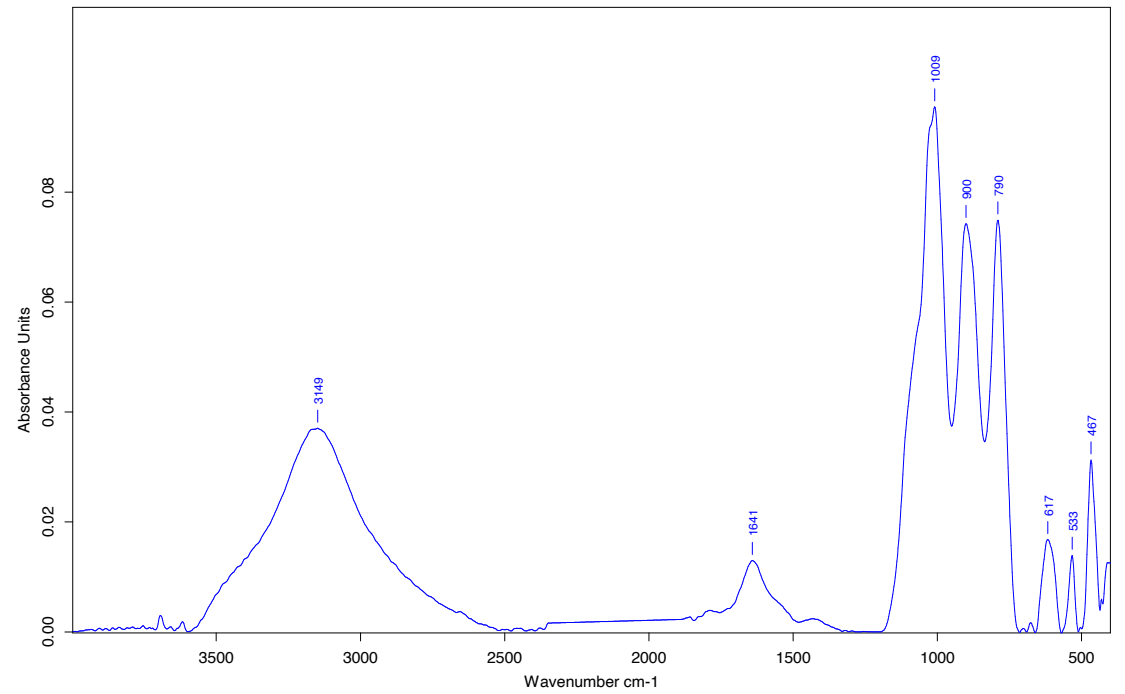




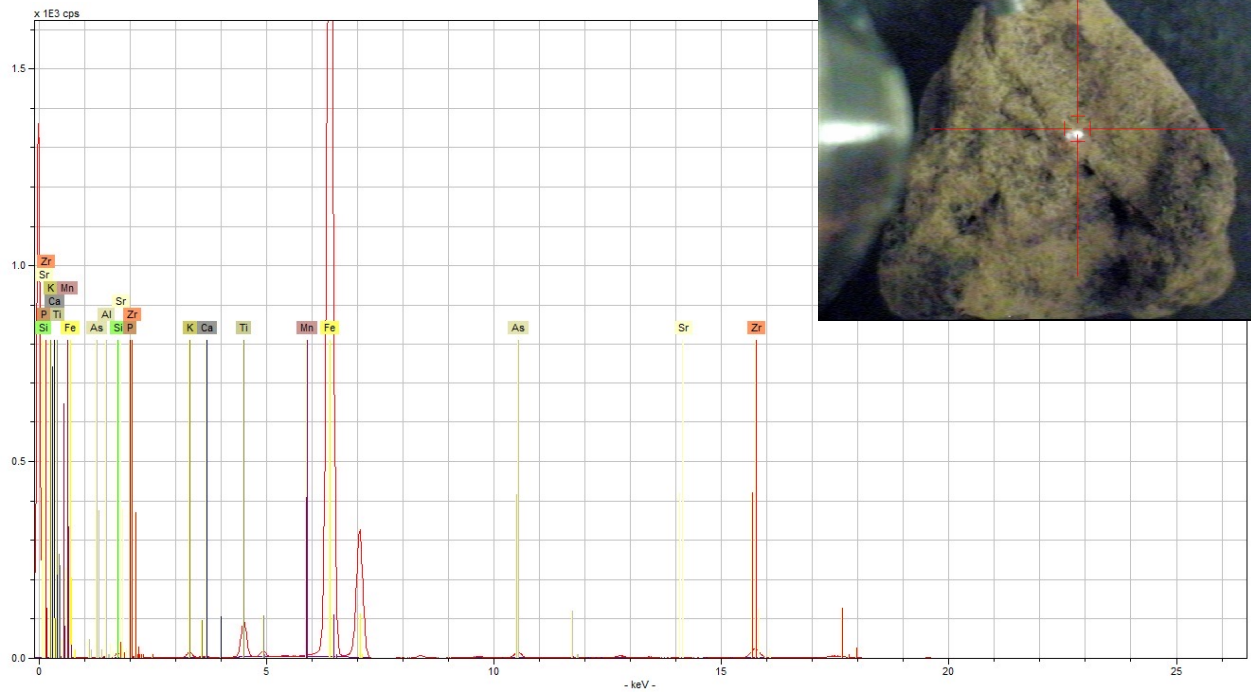




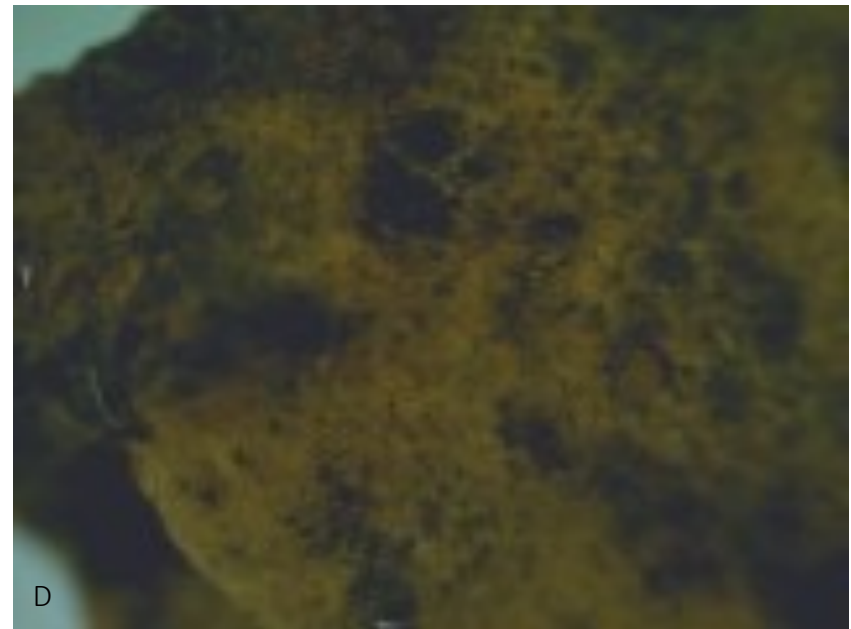
A



C



B

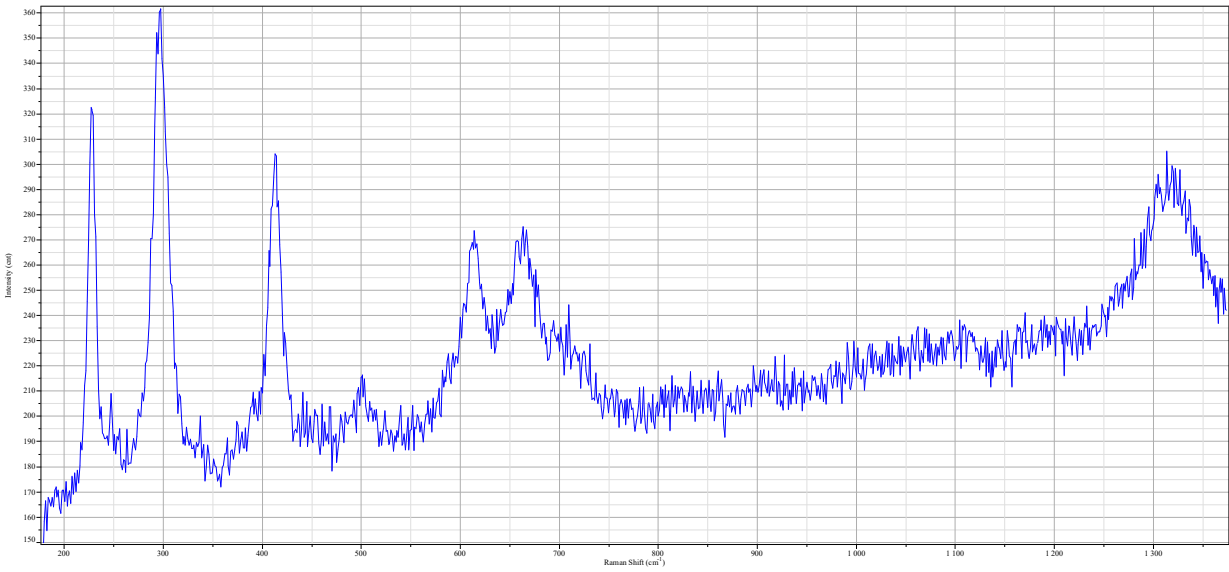


D

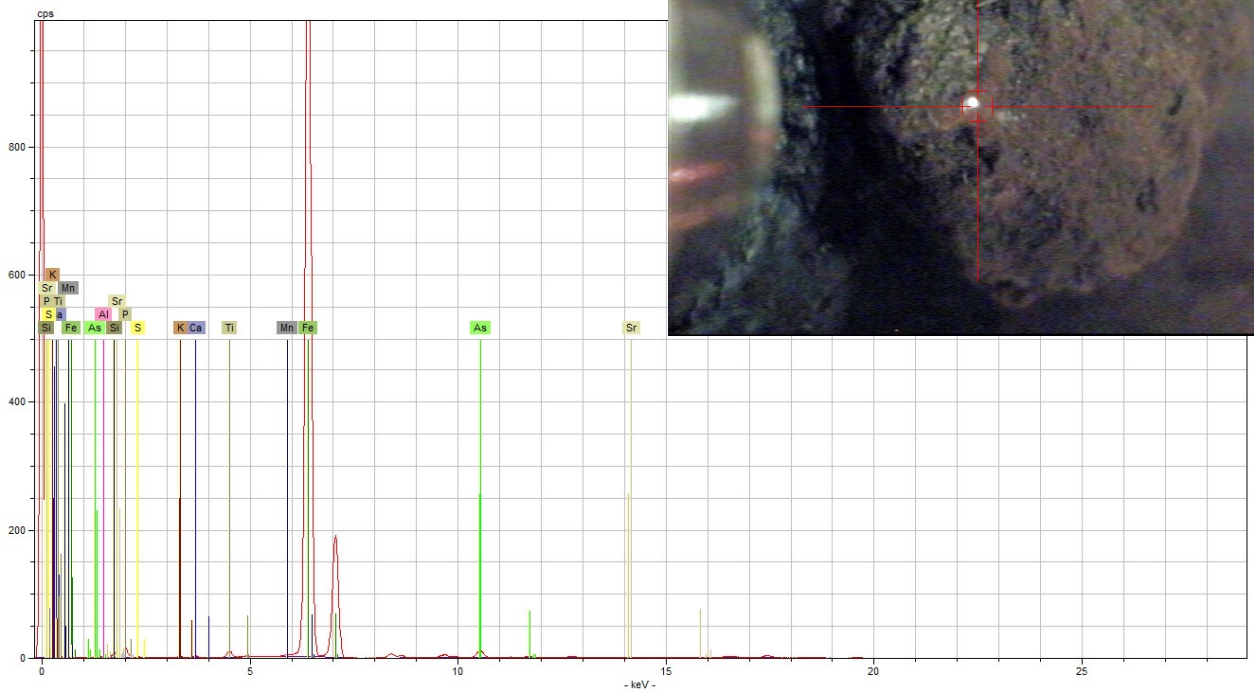
SAMPLE 17

**FIGURE S20:** SAMPLE PUERTO\_17 MICRO-RAMAN (A), EDXRF (B) AND ATR-FTIR (C) SPECTRA AND STEREO MICROSCOPE IMAGE (D).

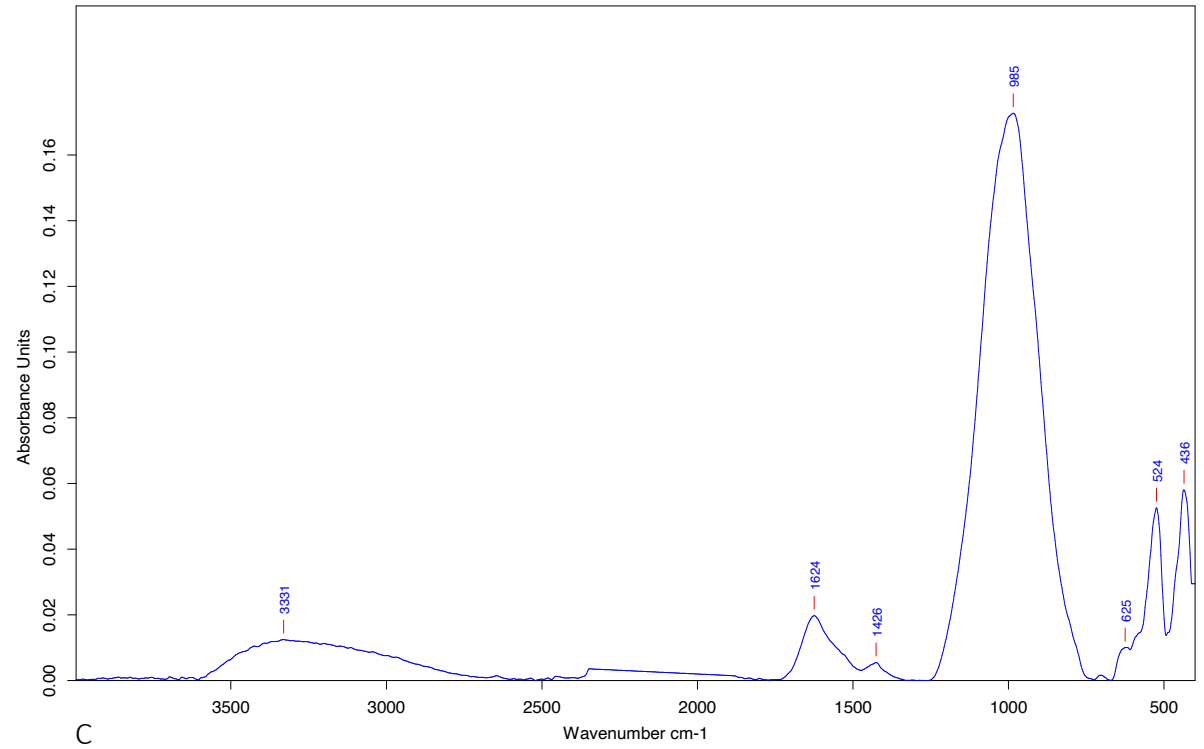




A



B

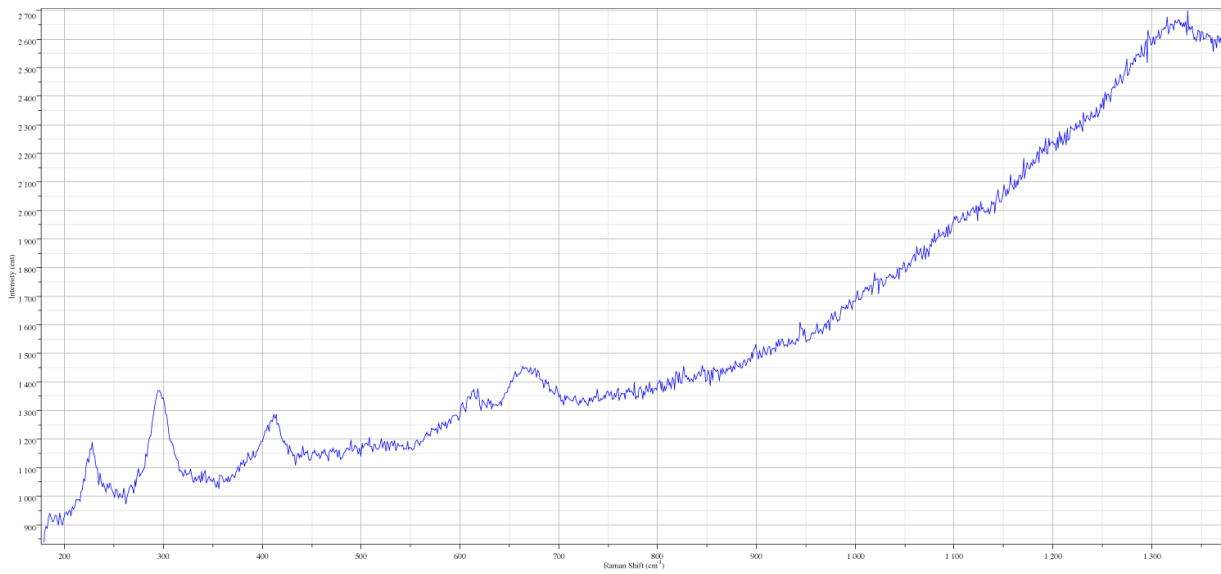


C

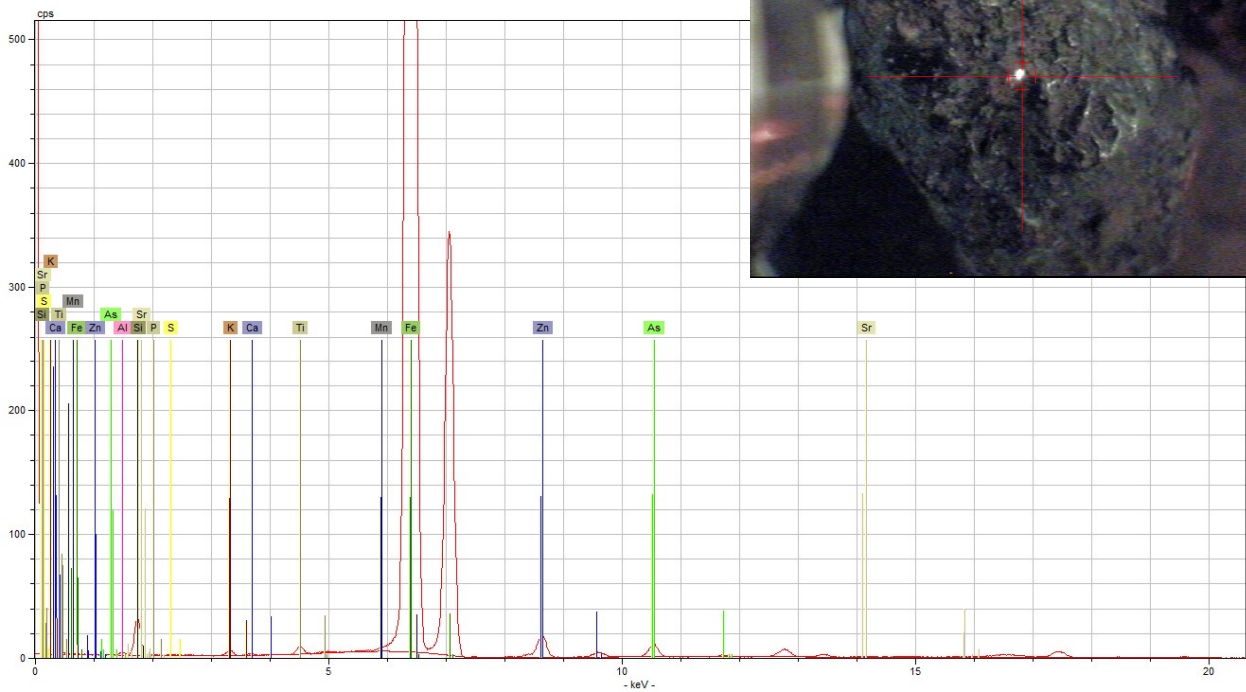
SAMPLE 18

**FIGURE S21:** SAMPLE PUERTO\_18 MICRO-RAMAN (A) AND EDXRF (B) AND ATR-FTIR (C) SPECTRA.

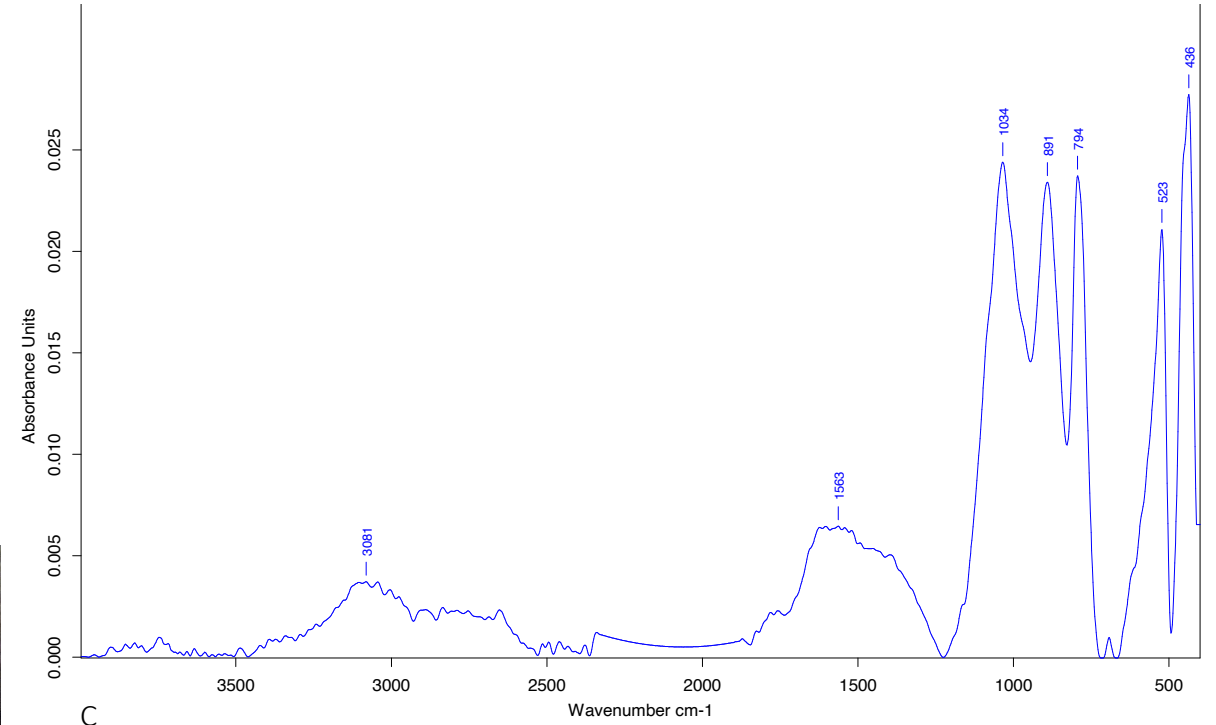




A



B



C

SAMPLE 19

**FIGURE S22:** SAMPLE PUERTO\_19 MICRO-RAMAN (A) AND EDXRF (B) AND ATR-FTIR (C) SPECTRA.