**EN - 1 OB\_EN - 1 OB\_0\_0\_20210511-122126\_en (Obverse coin 1)**

* Significant peaks at:

|  |  |  |
| --- | --- | --- |
| **Wavenumber (cm-1)** | **Peak Height** | **Identity** |
| 550, 600-650 | 200-300 | CuO bonds |
| ~1000 | 700 | C=S |
| 1500-1700 | 700-800 | Various C=N, N=N, CNO3 bonds. |
| 2600 | 820 | S-H bonds |
| 2700 | 1150 | Artifact |
| 3000-3300 | Increasing | Artifact or C-H |
| 300 | 230 | Cu2O |

* As expected, significant peaks for Cu and Cu2O, but also traces of organic compounds, including alcohols and cyanides. Even some presence of nitrous compounds. Investigate for metallurgic processing techniques.

**EN - 5RE\_EN - 5 RE\_0\_0\_20210511-122448\_en**

* Significant Peaks:

|  |  |  |
| --- | --- | --- |
| **Wavenumber (cm-1)** | **Peak Height** | **Identity** |
| 1950 | 380 | CoC3 |
| 640 | 200 | CuO |
| 950 | 220 | C-O-C |
| 1150 | 250 | C=S |
| 300 | 230 | CuO2 |
| 1700-1810 | 220-260 | C=C, C=O |
| 2710-2950 | 260-350 | C-H |
| 3000 upwards | 500-600 | Either C-H or artifact |

* Peaks generally lower overall than on the Obverse for coin 1.
* Indicates some presence of CuO and Cu2O as expected, however also significant number of organic compounds – investigate further. Perhaps makes sense due to use by humans or manufacturing process.