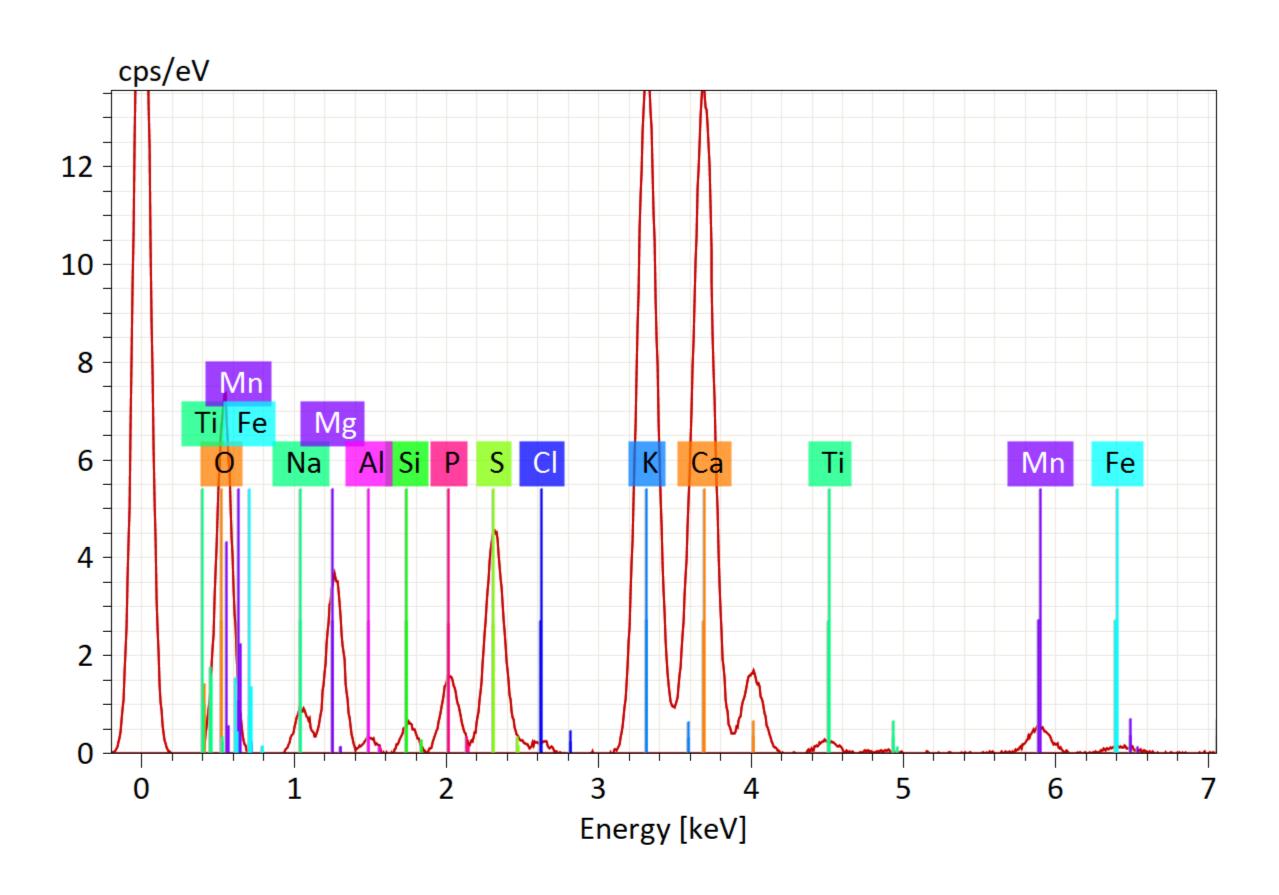
## **Application Note**





Holly ash - boric acid binder

| Element | At. No. | Netto  | Mass<br>[%] | Mass Norm.<br>[%] | Atom<br>[%] | Comp. | Sto.<br>[%] | Sto. Norm.<br>[%] | abs. error [%]<br>(1 sigma) | rel. error [%]<br>(1 sigma) |
|---------|---------|--------|-------------|-------------------|-------------|-------|-------------|-------------------|-----------------------------|-----------------------------|
| 0       | 8       | 85118  | 32.36       | 32.36             | 52.00       |       | 0.00        | 0.00              | 1.19                        | 3.67                        |
| Na      | 11      | 11390  | 2.03        | 2.03              | 2.26        | Na2O  | 2.73        | 2.73              | 0.04                        | 2.17                        |
| Mg      | 12      | 49708  | 5.57        | 5.57              | 5.89        | MgO   | 9.23        | 9.23              | 0.05                        | 0.90                        |
| P       | 15      | 23654  | 1.90        | 1.90              | 1.58        | P205  | 4.35        | 4.35              | 0.04                        | 1.97                        |
| S       | 16      | 71752  | 5.40        | 5.40              | 4.33        | SO3   | 13.48       | 13.48             | 0.05                        | 0.84                        |
| K       | 19      | 253683 | 21.20       | 21.20             | 13.94       | K20   | 25.53       | 25.53             | 0.07                        | 0.32                        |
| Ca      | 20      | 244066 | 26.73       | 26.73             | 17.15       | CaO   | 37.40       | 37.40             | 0.08                        | 0.30                        |
| Ti      | 22      | 4847   | 0.67        | 0.67              | 0.36        | TiO2  | 1.12        | 1.12              | 0.03                        | 5.17                        |
| Mn      | 25      | 11140  | 2.32        | 2.32              | 1.08        | MnO   | 2.99        | 2.99              | 0.05                        | 2.03                        |
| Cl      | 17      | 3338   | 0.27        | 0.27              | 0.19        |       | 0.27        | 0.27              | 0.03                        | 11.11                       |
| Si      | 14      | 8109   | 0.67        | 0.67              | 0.61        | SiO2  | 1.42        | 1.42              | 0.03                        | 4.87                        |
| Al      | 13      | 3992   | 0.40        | 0.40              | 0.38        | Al203 | 0.75        | 0.75              | 0.03                        | 7.88                        |
| Fe      | 26      | 2212   | 0.51        | 0.51              | 0.23        | Fe2O3 | 0.73        | 0.73              | 0.04                        | 7.05                        |
|         |         | Sum    | 100.00      | 100.00            | 100.00      |       | 100.00      | 100.00            |                             |                             |

4/8/2021 Page 1 / 1