

# ElementEye JSX-1000S

## Quick and Easy Analysis Solution - Soil Screening

X-ray fluorescence is an established method for both qualitative and quantitative elemental analysis from major to trace (ppm) levels. It is a non-destructive testing method that requires little to no sample preparation for a wide range of sample types (liquids, powders, solids). JEOL's benchtop energy dispersive X-ray fluorescence (EDXRF) spectrometer incorporates 'Quick and Easy Analysis' solutions for fast, high sensitivity, standardless analyses at the touch of a button.

**Soil Screening** is a solution designed specifically for analyzing contaminants in soil. Japan has a law that requires testing for pollutants in soil prior to any land trade. Regulated pollutants include cadmium, lead, selenium and arsenic... **Soil Screening** optimizes the acquisition conditions and results output allowing for fast analyses of soil samples.

| Regulated Concentration is Japan | For Arable Land |
|----------------------------------|-----------------|
| Cd: <150 ppm                     | As: <15 ppm     |
| Pb: <150 ppm                     | Cu: <1250 ppm   |
| Se: <150 ppm                     |                 |
| As: <150 ppm                     |                 |

| Element | Analysis value | 3σ      | Unit | Judgement |
|---------|----------------|---------|------|-----------|
| Cd      | 3.3300         | 2.8190  | ppm  | OK        |
| Pb      | 1.5100         | 3.4920  | ppm  | OK        |
| As      | 2.8500         | 3.6980  | ppm  | OK        |
| Se      | 0.4200         | 1.6010  | ppm  | OK        |
| Hg      | 0.0000         | 1.8870  | ppm  | OK        |
| Cr      | 350.0000       | 22.2300 | ppm  | GRAY      |
| Ni      | 134.0000       | 6.8640  | ppm  | -         |
| Cu      | 55.9000        | 3.9300  | ppm  | -         |
| Zn      | 72.3000        | 3.7590  | ppm  | -         |
| Ba      | 518.0000       | 42.8300 | ppm  | -         |
| K2O     | 1.1600         | 0.0355  | %    | -         |
| CaO     | 9.1800         | 0.0607  | %    | -         |
| TiO2    | 1.1000         | 0.1041  | %    | -         |
| MnO     | 0.0293         | 0.0191  | %    | -         |
| Fe2O3   | 9.2700         | 0.7196  | %    | -         |

Judgement values (Pass/Fail) and elements can be customized.