



## Typical Limits of Detection for OVA and PDV

| Metal            | Metal Name     | PDV ( Portable analyser) | OVA (on-line analyser) |
|------------------|----------------|--------------------------|------------------------|
| <b>Ag</b>        | Silver         | 0.5 µg/l                 | 2 µg/l                 |
| <b>As(III)</b>   | Arsenic (III)  | 0.5 µg/l                 | 1.5 µg/l               |
| <b>As(total)</b> | Arsenic        | 0.5 µg/l                 | 2 µg/l                 |
| <b>Au</b>        | Gold           | 2 µg/l                   | 5 µg/l                 |
| <b>Bi</b>        | Bismuth        | 2 µg/l                   | --                     |
| <b>Cd</b>        | Cadmium        | 0.5 µg/l                 | 0.3 µg/l               |
| <b>Co</b>        | Cobalt         | 10 µg/l ( 1 µg/l *)      | 10 µg/l                |
| <b>Cr(VI)</b>    | Chromium (VI)  | 5µg/l ( 1µg/l *)         | 10 µg/l                |
| <b>Cr(total)</b> | Chromium       | 10 µg/l                  | 10 µg/l**              |
| <b>Cu</b>        | Copper         | 0.5 µg/l                 | 0.5 µg/l               |
| <b>Fe</b>        | Iron           | 5 µg/l                   | 10 µg/l                |
| <b>Hg</b>        | Mercury        | 0.1 µg/l                 | 0.1 µg/l               |
| <b>Mn</b>        | Manganese      | 2 µg/l                   | 10 µg/l                |
| <b>Mo</b>        | Molybdenum     | 1 µg/l*                  | 1 µg/l                 |
| <b>Ni</b>        | Nickel         | 5 µg/l                   | 7 µg/l                 |
| <b>Pb</b>        | Lead           | 0.5 µg/l                 | 0.7 µg/l               |
| <b>Pd</b>        | Palladium      | 5 µg/l                   | 5 µg/l                 |
| <b>Sb(III)</b>   | Antimony (III) | 5 µg/l                   | 5 µg/l                 |
| <b>Se(IV)</b>    | Selenium (IV)  | 5 µg/l                   | 10 µg/l                |
| <b>Sn</b>        | Tin            | 5 µg/l                   | 5 µg/l                 |
| <b>Te</b>        | Tellurium      | 10 µg/l                  | 10 µg/l                |
| <b>Tl</b>        | Thallium       | 2 µg/l                   | 0.5 µg/l               |
| <b>U</b>         | Uranium        | 1 µg/l*                  | 5 µg/l                 |
| <b>Zn</b>        | Zinc           | 0.5 µg/l                 | 10 µg/l                |

**Notes:** Limits vary with sample type. Typical clean water values are shown.

This is a working document that changes as methods are improved and new developed. Contact Modern Water to discuss applications.

**Values are current as of May 2018** - \* using the LabCell method. \*\* Cr(tot) on OVA works best if run on its own, not together with other metals. Methods are available for the determination of metals from USEPA, NIOSH, ASTM, DIN and AOAC.

Instrument performance is only one factor in detection limits, which will vary with the application. Environmental contamination, reagent purity and other factors also affect detection limits at low levels.

The values given above are typical, assuming relatively clean samples such as drinking or natural waters. Dirty or industrial waters may have higher detection limits.

The OVA7100 is often capable of lower detection limits under certain conditions. Please contact Modern Water if lower detection limits are required.