

Microbe Inotech Laboratories, Inc.
Summary Report of Analysis
[GLYPH – 131]

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Description and Chain of Custody Record Information:

- Thursday, May 22, 2014 – 1:36PM: Received by USPS one(1) urine sample and one (1) water sample for Glyphosate detection by ELISA assay.
- MiL, Inc. REPORT and Invoice No.: GLYPH131

Sample Processing

To detect Glyphosate, an enzyme linked immunosorbent assay (ELISA) was used. The sample along with a glyphosate specific antibody is added to a well coated with goat anti-Rabbit antibody and incubated for 30 minutes. Then a glyphosate enzyme conjugate is added. A competition occurs between glyphosate that is present in the sample and the enzyme labeled glyphosate analog for the antibody binding sites in the well. The wells are washed and a color solution is added. The color solution causes a color change in the wells containing the enzyme labeled glyphosate analog. Since the labeled glyphosate was in competition with the unlabeled glyphosate in the sample the color development is inversely proportional to the concentration of glyphosate in the sample. The wells are read at 450nm to determine absorbance.

Results are calculated based on a standard curve. The results are then adjusted based on the extraction procedure and final dilution.

Results:

Sample Name	Dilution	Results in ppb
OEK Water	undiluted	.138 ppb
Dieter Harle Urine	1:100	8.4 ppb

Limit of Detection for glyphosate in urine: 7.5 ppb

Limit of Detection for glyphosate in water: 0.05 ppb

Thank you from the staff on project:

Benjamin M. Winkler
Research Laboratory Manager

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Laboratory Manager