Technical Datasheet

**Analysis Name:** Detection of Shiga toxin-producing *E. coli* (STEC)

**Method Number:** ISO-TS-13136.2012

**Scope of Application:** Products intended for human consumption and feeding of animals; environmental samples

**Description:** This method is a qualitative PCR screening test for Shiga-toxin producing *Escherichia coli*. Samples are enriched in a non-selective or selective enrichment broth, depending on product type. An aliquot of the enrichment is lysed and analyzed using real-time PCR. Samples that screen positive for the Shiga-toxin genes (stx1 and/or stx2) are considered positive for STEC.

**Sample Weight Required:** 25g

**Analytical Platform:** PCR

**Special information:** Samples that screen presumptive for the stx genes will automatically undergo confirmation analyses (ISO-TS-13136.2012-B).

The isolation of STEC strains is required to confirm that the positive PCR signals are generated from genes present in the same live bacterial cell.

An STEC Final result of Detected (Presumptive) means that the stx gene was detected in the initial screen, but no isolate could be successfully cultured.

<table>
<thead>
<tr>
<th>Analyte Reported</th>
<th>Alias</th>
<th>Unit of Measure</th>
<th>Limit of Quantification</th>
<th>Reproducibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEC Final</td>
<td></td>
<td>/25g</td>
<td>0.592 – 1.100 CFU/25 g or ml of sample</td>
<td>Not Detected Detected Detected (Presumptive)</td>
</tr>
</tbody>
</table>