

## USDA NRCS CONSERVATION EVALUATION & MONITORING ACTIVITY

### CEMA 216 - SOIL HEALTH TESTING

With the launch of the USDA NRCS Regenerative Pilot Program, quantitative soil health testing is now a formal requirement for participating growers. CEMA 216 defines that requirement, calling for measurement of five core soil processes to evaluate overall soil ecosystem health. Ward Laboratories is a qualified laboratory capable of fulfilling the complete CEMA 216 testing requirements. All three packages below meet those standards — advanced options add deeper microbial insights for Regenerative Pilot Program participants or growers seeking more detailed management data.

### WARD TESTING PACKAGES THAT MEET CEMA 216 REQUIREMENTS:

CEMA 216 - FOUNDATION	CEMA 216 - ADVANCED MICROBIAL COMMUNITY	CEMA 216 - ADVANCED NUTRIENT CYCLING
<p><b>CORE PANEL</b></p> <p>Fulfills all 5 required soil processes. Standard choice for most NRCS programs participants.</p>	<p><b>CORE + PLFA ANALYSIS</b></p> <p>Full microbial community fingerprint. Ideal for tracking biological diversity shifts over time.</p>	<p><b>CORE + ENZYME PANEL</b></p> <p>Target specific nutrient cycles with enzyme activity assays. Choose 3 of 5 available enzymes.</p>
<p><b>5 REQUIRED SOIL PROCESSES</b></p> <p><b>Wet Aggregate Stability</b> <i>Wet Sieving</i></p> <p><b>Soil Organic Carbon</b> <i>Dry Combustion</i></p> <p><b>Soil Respiration</b> <i>24 hour CO<sub>2</sub> Burst</i></p> <p><b>Active Carbon (Labile Carbon)</b> <i>Permanganate Oxidation (POXC)</i></p> <p><b>Bioavailable Nitrogen</b> <i>ACE Protein</i></p>	<p><b>Includes all Core Panel analysis</b> <i>5 Soil Processes + Interpretive Characteristics</i></p>	<p><b>Includes all Core Panel analysis</b> <i>5 Soil Processes + Interpretive Characteristics</i></p>
<p><b>INTERPRETIVE CHARACTERISTICS</b></p> <p><b>Soil pH + Texture</b> <i>Hydrometer Analysis &amp; 1:1 Water</i></p>	<p><b>ADDED: MICROBIAL DIVERSITY</b></p> <p><b>Phospholipid Fatty Acid (PLFA)</b> <i>Buyer &amp; Sasser</i></p> <p>PLFA analysis identifies and quantifies microbial community groups including: bacteria (gram+, gram-), fungi, actinomycetes, and protozoa, giving a broad picture of who is doing the work in your soil.</p> <p><i>Sampling Note: PLFA requires special handling. Keep samples on ice, store cold immediately after field collection, and ship on ice.</i></p>	<p><b>ADDED: ENZYME PANEL</b></p> <p><b>β-Glucosidase (BG)</b> <i>Carbon Cycling</i></p> <p><b>N-acetyl-β-D-glucosaminidase (NAG)</b> <i>Carbon &amp; Nitrogen Cycling</i></p> <p><b>Acid Phosphatase (AcP)</b> <i>Phosphorus Cycling</i></p> <p><b>Alkaline Phosphatase (AlkP)</b> <i>Phosphorus Cycling</i></p> <p><b>Arylsulfatase (ARS)</b> <i>Sulfur Cycling</i></p>
<p><b>S-1957 - \$149.40</b></p>	<p><b>S-1957 + PLFA - \$250.35</b></p>	<p><b>S-1957 + 3 ENZYMES - \$238.50</b></p>

### READY TO GET STARTED?

CEMA 216-specific submission sheets are available directly from Ward Laboratories.

Contact your account representative, call (308) 234-2418, or visit wardlab.com.