



## Colorado Science and Engineering Fair

## 2025 Individual Project Abstract Form

**Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.**

Title of Project: What's In That Water

Finalist's Name: Paisley Wiersma

School and City: Genoa-Hugo School, Hugo

Sponsor's Name: Casey Wiersma

Category: Micro & Molecular Biology

Division: Junior (grades 6 - 8)

Abstract (250 words or less):

The purpose of this project is to see which water source is most suitable to encourage a healthy diet when consumed by cattle. We might just think that water is always healthy but some factors in water might not be as fit for cattle consumption as we think. This is important because water is a necessity to millions of cattle everyday and can affect how they make it from the field to our tables. Water is the single most important nutrient for livestock. Poor-quality water can negatively impact both animal health and performance, just like the grain or forage they consume. Based on this information, the hypothesis for this experiment is that the water sampled out of the natural pond source will be the healthiest for cattle consumption. The tables and graphs show that the pond water nitrates tested 0.1 and sulfates tested 2. The data also shows that the corral tank water nitrates tested 0.1 and sulfates tested 104. Finally, the graph displaying the windmill tank water shows nitrates tested 0.1, sulfates tested 90, and copper tested 0.02.

*I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.*

Finalist's Signature:

Date:

In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with you Finalist Verification/Permission Form. **A signed copy of this form must be included in your notebook.**