



Colorado Science and Engineering Fair

2024 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: Testing Minerals in Drinking Water

Finalist's Name: Ainsley Sauer

School and City: Wiggins Middle School

Sponsor's Name: Danielle Sauer

Category: Earth & Environmental Sciences (EAEV)

Division: Junior (6th - 8th grades)

Abstract (250 words or less):

The purpose of this project was to test how much minerals are in different types of drinking water. My samples included Arrowhead, Aquafina, Fiji, and Dasani bottled water along with filtered river water, and spring water. I hypothesized that spring water would contain the most minerals because research showed that spring water has the most nutrients and is best for the body, and I predicted minerals would in that part too.

This project involved taking three samples of each type of drinking water. To test each sample I filled a small test tube with the sample water and dipped a test strip in the water. After about a minute or so I observed my results for each individual sample and recorded my observations on my result graph.

The data collected did support my hypothesis of fresh spring water having the most minerals. Spring water tested to have an average total of 630.04. The water sample with the lowest amount of minerals was Dasani bottled water with an average total of 307.93 ppm.

These findings lead me to believe that fresh spring water has a higher mineral level because of its naturalness of flowing through different rocks such as mineral rock. This is good for me to know because if someone is low on minerals, spring water is the best water option to get the fulfillment of minerals to the body.

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: *Ainsley Sauer*

Date: *2-29-24*

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.