



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Taylor A. Herndon	Project Number J1119
Project Title How Well Is Your Water?	
Objectives/Goals To test and rate the quality of common sources of drinking water: bottled water, city or municipal water, Wegis mutual water system (24 users) and a private well. My objective was to prove or disprove my hypothesis suggesting the bottled water would show the best overall quality. This project was of special interest to my because one of the sources tested, the Wegis water system, services my home	
Abstract Methods/Materials Materials: water samples, testing glasses/bag, test strips, color charts Method: step 1- collect samples to be tested step 2- place in test glass, except bacteria sample in sealed bag step 3- dip test strip and compare with test chart step 4- record and evaluate results	
Results The data collected showed: a close ph range (7.0 to 8.0) among the samples tested, nitrates were detected in the municipal water with low level nitrites in the Wegis mutual water system and higher levels in the private well, which also recorded the only bacteria. No chlorine was detected in any sample and hardness showed a wide range- with the private well again scoring the highest.	
Conclusions/Discussion My hypothesis was proven accurate-the bottled water was the best quality as determined by the tests used. Wegis mutual system (my home water) also had very good results, followed by the municipal water supply. The private well performed the worst and had several tests with possible problems as mentioned: nitrites, hardness and bacteria. I would recommend retesting and close monitoring to confirm whether this is a continuing problem.	
Summary Statement I Compared the quality of common sources of drinking water.	
Help Received My dad purchased the test strips and helped read results. My Mom helped with board layout & pictures.	