



**CALIFORNIA STATE SCIENCE FAIR  
2007 PROJECT SUMMARY**

<b>Name(s)</b> <b>Travis J. Killmer</b>	<b>Project Number</b> <b>S0710</b>
<b>Project Title</b> <b>Arsenic in Sherwood Valley Aquifers</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The goal of my project was to determine the arsenic content of water in Sherwood Valley, California. <b>Methods/Materials</b> Five different water samples were collected from the Sherwood Valley area. Each of the soils were tested to determine their arsenic content. 100 ml of water were tested during each test. Three spoonfuls of the first reagent were added to the sample and shaken for 15 seconds. Three spoonfuls of the second reagent were then added and the sample was once again shaken for 15 seconds. The sample was then allowed to sit for two minutes. Three spoonfuls of the third reagent were then added to the sample. The sample was then shaken for 5 seconds. After adding the third reagent a test strip was placed inside the reaction cap and the sample was allowed to sit for ten minutes. The test strip was then removed and matched to the color chart, which indicated the arsenic level of the sample. The process was repeated four times for each of the five different samples. <b>Results</b> None of the water samples collected had an arsenic level higher than 2 parts per billion. The arsenic content ranged from 0.5 parts per billion up to 2 parts per billion. <b>Conclusions/Discussion</b> My conclusion is that the arsenic content of aquifers in the Sherwood Valley are not high enough to pose a threat to public health. Although the arsenic levels are extremely low in the tested areas, there could be higher concentrations in some other areas.	
<b>Summary Statement</b> The goal of my project is to determine the arsenic content in the aquifers of Sherwood Valley, California.	
<b>Help Received</b> Mother took pictures of experimentation	