



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Kyle Aggarwal; Christopher Ray; Thomas Schmaeling	Project Number 31640
Project Title Oasis	
Objectives/Goals Abstract The apparatus filters water through the use of a semi-permeable substance, which removes any large debris from the water sample. Following filtration, the bacteria are electrocuted by way of electric current from a 12 volt battery passing through copper plating. Nine tests were run using standing water to determine which materials, such as shirts, coffee filters, printer paper, etc., would make adequate filters while still allowing a considerable amount of water to run through the system based on the clarity of the water collected and the rate at which it passed through the filter. The apparatus itself was tested on two criteria: the clarity of the water and the results of several microbiological cultures.	
Summary Statement Grandfather provided microscope and expert advise.	
Help Received My grandfather oversaw the use of electricity.	