

## MISSION-CRITICAL PROFILE

**Name:** Robert Scott

**Organization:** Santa Clara Valley Water District



**Job Category (Check one below):**

- Water Treatment
- Water Distribution
- Wastewater Treatment
- Wastewater Distribution
- Electronic Maintenance Technician/ Instrument Technician
- Electrician/Electrical Line Worker
- Machinist/Mechanic
- Other

1. Please describe the work you do:

In short, it is my responsibility to ensure that all instrumentation devices and systems functions properly. In doing so, I install, maintain, calibrate, and repair electronic devices that measure, monitor and control the water treatment and distribution processes. Some examples of these devices are turbidity meters, pH analyzers, chlorine analyzers, flow meters, and pressure and level transmitters. Also, I verify and maintain the integrity of the analog and digital signals coming from and going to the process equipment.

2. What combination of education, vocational training, apprenticeship, experience, and/or skill did you obtain in order to be qualified and selected for your job?

I graduated from a State of California approved apprenticeship program that qualified me as an electrician/maintenance mechanic. During this over four year program, I received classroom and hands-on electrical, electronic, and mechanical training. After graduation I spent over fifteen years working in an industrial automotive plant. These experiences allowed me to learn how to maintain, repair, and troubleshoot control systems and mechanical equipment, including programmable logic controllers (PLC's).

3. What do you like best about your job?

What I like best about my job is that I play an integral role in providing one of the most important resources to the public; water. As to the specifics of what I do, I mostly like calibrating equipment so that it reads accurately. This gives me a great sense of fulfillment. It is like the feeling of solving a math problem then verifying that your answer is correct. Yes!!!

4. Please tell us about the projects and activities you have enjoyed most in your work in the water/wastewater field, and what made them rewarding.

There are two things that come to mind when I think about what I have enjoyed most in my work in the water/wastewater field. First, I enjoyed upgrading the turbidity meters in our water quality room. This was rewarding because I was given plenty creative freedom with the design of the new setup. Also, I learned a lot in the process.

Second, I have enjoyed being part of the implementation of our new advance water purification center. Seeing the construction of a new facility and learning about new treatment processes has been very exciting. I am particularly enjoying the growing familiarity I am gaining with the equipment and processes and I am looking forward to training my coworkers. It is an encouraging time for our company.

5. What qualities and capabilities are needed in order for a person in your area of expertise to be successful in the water/wastewater industry?

In order to be a successful Control Systems Technician in the water/waste water industry, I believe a person needs to be able to absorb electronic and electrical theories and apply their principles. Also, he or she needs to be able to learn new technologies and have decent math skills up to basic trigonometry. In addition, a person should be patient, detailed, and have good recordkeeping skills. But when it comes down to it, a diligent hardworking person can learn and do the job.

6. Do you have any advice for an individual who is considering pursuing a career in your field in the water/wastewater industry?

My advice to an individual who may be considering pursuing a career as a Control Systems Technician in the water/ wastewater industry is to first read about the field and industry, so that you will get a better understanding of what it entails. Once you have done that and you are still interested, enroll in some classes at your local community college that relate to electronic and electrical theories. Also, there are vocational training programs and institutions that can really prepare you for the field. These programs and institutions sometimes provide certifications or degrees once you have completed the required training. A couple examples are the International Society of Automation (ISA) and the Cleveland Institute of Electronics (CIE). I will also recommend that you apply for admission into an electrical or electronics apprenticeship program. This will really help because you will get good hands-on, practical experience.