

Navajo Preparatory School

Kyra Lee, Farmington, NM

Project ID#

Q1: Research Question/Engineering Goal

Does the place the water come make a notable difference on the water?

Q3: Data Analysis & Results

	Phoenix	Flagstaff	Tuba City	Farmington	Drinking Water	Filtered Water
Nitrate	0 ppm	0 ppm	20 ppm	0 ppm	0 ppm	0 ppm
Nitrite	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm
Hardness	300 ppm	300 ppm	75 ppm	150 ppm	25 ppm	150 ppm
Alkalinity	300 ppm	150 ppm	40 ppm	80 ppm	0 ppm	80 ppm
pH	7.8 ppm	7.2 ppm	6.8 ppm	7.2 ppm	6.8 ppm	7.2 ppm

Q2: Methodology/Project Design

I first started the idea of when I thought about the differences in the places, I used to live in. So, then I decided to try and see if the differences were all that great by using the water samples. I wanted to see if there were any remarkable differences.

Q4: Interpretation & Conclusions

I've found a few things that stuck out to me such as the differences between Phoenix, Flagstaff and Tuba City. The differences stuck out to me because Phoenix is much farther from Flagstaff than Tuba City, but Tuba City and Flagstaff have much greater differences. It's similar with Tuba City and Farmington as well as there is farther apart but the difference between Tuba City and Flagstaff is still much bigger. I believe it has less to do with the location of the city and more of the type of city/ town it is because of this. My biggest find was the levels of nitrate in Tuba City as well. The safe levels of nitrate are 10 ppm. As you can see the levels are much higher than that at 20 ppm (parts per million).