

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

Cody D. Preis

Project Number

J0218

Project Title

Comparing the Effects of Vaporized Gasoline to Liquid Gasoline in an Engine

Objectives/Goals

Abstract

The objective of my project is to determine if a four-stroke engine will run longer on vaporized gasoline than it would on liquid gasoline. I believe the engine will run longer on the vaporized gasoline.

Methods/Materials

One half a cup of gasoline was vaporized in a pressurized pot and flowed to the carburetion system of the engine through an air line. The engine was started and set to an idle. The engine ran until it stopped, and the time was recorded, the process was repeated several times. Then, a half a cup of gasoline was poured in the gasoline tank of the engine and the engine was set to an idle and the time it ran for was recorded, and the two were compared.

Results

The engine ran off of vaporized gasoline averaged a time of 39.61 and .7 seconds longer than the liquid gasoline engine which averaged a time of 25.14 and 31.7 seconds.

Conclusions/Discussion

My results tell me that my hypothesis was correct and I now know how I can make an engine run longer on vaporized gas. Doing this project also helped me to understand how I can expand on this project by using a car engine and looking for the best mileage.

Summary Statement

Showing how an engine can run longer with vaporized gasoline and be more cost effecient.

Help Received

My father helped me get the materials to conduct the experiments.