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Department of Education

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**Batasan Hills National High School**

IBP Road Batasan Hills, Quezon City

**An Individual Science Investigatory Project Entitled:**

A Study on the Nitrate Content of Water Samples from Different Water Bodies in Barangay Montalban, Rizal

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**Research Title:** A Study on the Nitrate Content of Water Samples from Different Water Bodies in Barangay Montalban, Rizal

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**ABSTRACT**

*Keywords:*

**INTRODUCTION**

Nitrate is one of the most well-known groundwater contaminants in provincial territories. It is managed in drinking water basically on the grounds that overabundance levels can cause methemoglobinemia, or "blue baby" diseases. In spite of the fact that nitrate levels that influence newborn children don't represent an immediate risk to more seasoned youngsters and grown-ups, they do show the conceivable nearness of other increasingly genuine private or agrarian contaminants, for example, microscopic organisms or pesticides (McCasland,Trautmann, Porter & Wagenet, 2012)

According to Conard, Carey, Webb, Dinger, and McCourt (ND), nitrate (NO3-) is made out of the components oxygen and nitrogen, and is a significant wellspring of nitrogen for plant and creature life; yet an excess of nitrate in drinking water can be destructive to human health. Basic wellsprings of nitrate in water incorporate plant and creature matter, human and creature squander, family septic frameworks, and composts. Since it breaks down promptly in water, nitrate from these sources is normally present at any rate in low focuses in drinking-water supplies, paying little heed to the water source.

As stated by Oram (2014), nitrate in groundwater begins principally from composts, septic frameworks, and excrement stockpiling. Manure nitrogen that isn't taken up by plants, volatilized, or diverted by surface spillover drains to the groundwater as nitrate. This makes the nitrogen inaccessible to crops, yet additionally can lift the focus in groundwater over the levels satisfactory for drinking water quality. Nitrogen from compost also can be lost from fields, farms, or capacity areas. Septic frameworks likewise can hoist groundwater nitrate fixations since they evacuate just 50% of the nitrogen in wastewater, leaving the staying half to permeate to groundwater.

Frankly speaking, nitrate is a proliferating dangerous water contaminant. Because of this, the researcher conducted a study on the nitrate content of water samples from different bodies of water in Brgy. Montalban, Rizal. This is to know if the bodies of water are contaminated by too much nitrates.

Due to this reasons, the researcher is inclined to identify how much nitrates are present in multiple bodies of water around the vicinity in the said barangay, and specifically, are there different concentrations from water obtained from different locations, and are the nitrate levels in said water samples acceptable or too much

How much nitrates are present in the Vicinity of the said Barangay

Are there different nitrate concentrations in different locations in said barangay

Are the nitrate levels in the water bodies acceptable or too much