COLIFORM ANALYSIS OF DEEPWELL WATER IN BARANGAY POBLACION IV-D, IMUS, CAVITE

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ABSTRACT

In this study, three sets of tubes for five sampling stations in Barangay Poblacion IV-D, Imus, Cavite, were inoculated with a ten fold difference in inoculum volume: one set of five tubes was inoculated with 10 ml per tube, one set was inoculated with 1 ml per tube, and the last set was inoculated with 0.1 ml per tube. After 24 hours incubation, all tubes were examined positive of lactosefermenting microorganisms. The three sets scored 5-5-5 for the number of positive presumptive tubes and were then used with the Most Probable Number Table that determined an index of 1600 numbers of organisms per 100 ml of water sample. As for the next phase, the Confirmed test, after appropriate incubation of inoculated Brilliant Green Lactose Bile Broth tubes, a positive result yielded presence of gas in all Durham tubes that indicated presence of the coliform group. In Completed test, after 24 hours incubation of inoculated Eosin Methylene Blue Agar plates with positive confirmed tubes, none of the plates was examined positive of green metallic sheen colonies that is characteristic of E. coli. However, the presence of gram-negative organisms that is typical of *Enterobacter aerogenes* in gram-stained slides. Therefore the drinking water in Barangay Poblacion IV-D, Imus, Cavite is not safe to drink.

TABLE OF CONTENTS

| Title Page | 1 |
|-------------------------------|----|
| Approval Sheet | 2 |
| Abstract | 3 |
| Acknowledgments | 4 |
| Table of Contents | 5 |
| List of Tables | 7 |
| CHAPTER 1 INTRODUCTION | |
| 1.1 Background of the Study | 8 |
| 1.2 Conceptual Framework | 9 |
| 1.3 Statement of the Problem | 10 |
| 1.4 Scope and Limitations | 10 |
| 1.5 Significance of the Study | 11 |
| 1.6 Definition of Terms | 12 |
| CHAPTER 2 LITERATURE REVIEW | |
| 2.1 Conceptual Literature | 13 |
| 2.2 Related Studies | 20 |
| CHAPTER 3 METHODOLOGY | |
| 3.1 Research Design | 24 |

| 3.2 Research Setting | 24 |
|--|-------|
| 3.3 Research Procedure | 25 |
| 3.4 Data Gathering | 29 |
| CHAPTER 4 RESULTS AND DISCUSSION | |
| 4.1 Results | 30 |
| 4.2 Discussion | 31 |
| CHAPTER 5 SUMMARY, CONCLUSION AND RECOMMENDA | TIONS |
| 5.1 Summary | 36 |
| 5.2 Conclusion | 37 |
| 5.3 Recommendations | 37 |
| Cited References | 38 |
| Appendices | |
| A. Site Map | 43 |
| B. MPN Determination from Multiple-Tube Test | 44 |
| C. Photo documentation | 46 |
| D. Curriculum Vitae | 51 |

LIST OF TABLES

| Table 4.1.1 Results of Presumptive test and their MPN indexes Table 4.1.2 Results of Confirmed test Table 4.1.3 Results of Completed Test | 30 | |
|---|----|--|
| | 30 | |
| | 31 | |

