

## ABSTRAK

### “ANALISIS PENGARUH KONSTRUKSI SUMUR GALI TERHADAP KUALITAS BAKTERIOLOGIS COLI TINJA DAN STRATEGI PENGENDALIAN KUALITAS BAKTERIOLOGIS COLI TINJA PADA AIR SUMUR GALI DI KOYA BARAT DISTRIK MUARA TAMI KOTA JAYAPURA TAHUN 2022”

Amiruddin\*, Novita Medyati\*, Auldry F Walukow\*

Sumur gali menyediakan air dari lapisan tanah yang relatif dekat dengan permukaan, karena itu mudah terkena kontaminasi melalui rembesan yang berasal dari kotoran manusia, hewan, akibat dari pembuatan sumur gali yang tidak memenuhi syarat. Tujuan penelitian ini adalah menganalisis pengaruh konstruksi sumur gali terhadap Kualitas Bakteriologis Coli Tinja dan menganalisis strategi pengendalian kualitas bakteriologis Coli Tinja pada Air Sumur gali. Penelitian ini adalah penelitian *Deskriptif Analitik* dimana dilakukan pengukuran jarak, kondisi fisik, menganalisis bakteriologis Coli Tinja menggunakan metode ( MPN), menganalisis pengaruh jarak dan kondisi fisik sumur gali terhadap kualitas bakteriologis Coli Tinja menggunakan SPSS dan menganalisis strategi pengendalian Kualitas Bakteriologis Coli Tinja pada air sumur gali menggunakan SWOT. Sampel diambil sebanyak 34 sumur gali. Hasil penelitian terdapat pengaruh jarak sumber pencemar , dinding, bibir terhadap kualitas bakteriologis Coli Tinja dengan nilai sig (0,000), terdapat pengaruh lantai terhadap kualitas bakteriologis Coli Tinja dengan nilai sig (0,003), terdapat pengaruh jarak dan konstruksi sumur gali terhadap kualitas bakteriologis Coli tinja secara simultan bernilai sig (0,000) dengan besaran korelasi pengaruh 72,4%, strategi yang digunakan dalam pengendalian kualitas bakteriologis Coli Tinja di Koya Barat adalah strategi ST yaitu meningkatkan kualitas air sumur gali seiring bertambahnya jumlah penduduk, meningkatkan pengelolaan limbah peternakan dengan baik, meningkatkan cara pembuatan septictank yang memenuhi syarat, meningkatkan informasi kepada masyarakat cara pembuatan sumur gali yang baik, meningkatkan informasi dan pengawasan kepada masyarakat tentang pentingnya menjaga kualitas air agar terhindar dari berbagai penyakit.

**Kata Kunci : Konstruksi, Bakteriologis Coli Tinja, Air Sumur gali**

## ABSTRACT

“ANALYSIS OF THE EFFECT OF DUG WELL CONSTRUCTION ON THE BACTERIOLOGICAL QUALITY OF FECAL COLI AND STRATEGIES FOR CONTROLLING THE BACTERIOLOGICAL QUALITY OF FECAL COLI ON DUG WELL WATER IN WEST KOYA, MUARA TAMI DISTRICT, JAYAPURA CITY IN 2022”

Amiruddin\*, Novita Medyati\*, Auldry F Walukow\*

Dug wells provide water from a layer of soil relatively close to the surface, because it is easily exposed to contamination through seepage derived from human, animal waste, as a result of the creation of unqualified dug wells. The purpose of this study is to analyze the effect of dug well construction on the bacteriological quality of fecal coli and analyze the bacteriological quality control strategy of fecal Coli on dug well water. This research is a Descriptive Analytical study where measuring distance, physical condition is carried out, analyzing bacteriological Coli Feces using the method (MPN), analyzing the influence of distance and physical condition of dug wells on the bacteriological quality of Coli Feces using SPSS and analyzing strategies for controlling bacteriological Quality of Coli Feces on dug well water using SWOT. Samples were taken as many as 34 dug wells. The results of the study there was an influence of the distance of the source of pollutants, walls, lips on the bacteriological quality of Coli Feces with a sig value (0.000), there was an influence of flooring on the bacteriological quality of Coli Feces with a sig value (0.003), there was an influence of distance and construction of dug wells on the bacteriological quality of Coli feces simultaneously worth sig (0.000) with a correlation magnitude of influence of 72.4%, the strategy used in the bacteriological quality control of Coli Feces in West Koya is the ST strategy, which is to improve the quality of dug well water as the population increases, improve the management of livestock waste properly, improve the way of making qualified septictanks, improve information to the community how to make good dug wells, increase information and supervision to the community about the importance of maintaining water quality to avoid various diseases.

**Keywords : Construction, Bacteriological ,Coli Feces, Dug Well Water**