

Table 1: 100-fold Serial Dilutions Results

Dilution	Agar Type	# Colonies on Plate	Conversion Factor	Colonies/mL
10^{-5}	Nutrient	120	$\times 10^5$	12×10^5
10^{-7}	Nutrient	3	$\times 10^7$	3×10^7
10^{-5}	Nutrient + tet	16	$\times 10^5$	16×10^5
10^{-7}	Nutrient + tet	0	$\times 10^7$	0

Table 2: Bacteria Characterization

Colony Label	Plate Type	Colony Description (diameter, color, shape, texture)	Cell Description (motility, shape, arrangement)	Gram + or Gram -	Additional Notes
10^{-5} tet (-)	Agar	75 microliters, purple, L-shaped, rough	Non-motile, coccus, 1.25 microliters	Gram +	Gram stain; 40x
10^{-5} tet (+)	Agar	62.5 microliters, pink, squared, rough	Non-motile, coccus, 5 microliters	Gram -	Gram stain; 40x
10^{-7} tet (-)	Agar	5 microliters, clear, round, smoother	Non-motile, coccus 1.25 microliters	Inconclusive	Dye did not show up; 40x
10^{-7} tet (+)	Agar	15 microliters, pink, round, fuzzy	Non-motile, Bacillus, 2.5 microliters	Gram -	Gram stain; 40x