49. The unknown containing element Z was mixed with aliquots of a standard solution of Z as shown in the table. When analyzed, the mixtures gave the absorbance readings listed. When plotted, the graph to the right resulted. The equation for the line is $y = (8.00 \times 10^{-5}) x + 0.162$. The concentration of Z in the unknown is

mg of Standard/100 mL

Vol. of unknown	μg of standard	Total Vol.	Absorbance
10.00 mL	0 mg	100.0 mL	0.163
10.00 mL	1000 mg	100.0 mL	0.240
10.00 mL	2000 mg	100.0 mL	0.319
10.00 mL	3000 mg	100.0 mL	0.402
10.00 mL	4000 mg	100.0 mL	0.478

(A) 8×10^{-5} μg/mL

(B) 1.6 μg/mL

(C) 200 μg/mL

(D) 2000 μg/mL