

Parameter = $\text{NH}_3\text{-N}$

No. of Sample = 12

Date of collection = 19/02/2024, 21/02/2024, 23/02/2024

Date of analysis = 21/02/2024, 26/02/2024

Name of Supervisor = Md. A. Fatique

S.No	Sample Code	Vol of Sample	I.R. (mL)	F.R. (mL)	Difference (mL)	A-B (mL)	$\text{NH}_3\text{-N}$ (mg/L)
01	L00412	100 ml	0	4.5	4.5	4.5	$13.3 \approx 13$
02	L00413	"	4.5	7.9	3.4	3.4	10
03	L00408	"	8.0	12.0	4.0	4.0	$11.8 \approx 12$
04	L00409	"	12.0	16.9	4.9	4.9	$14.5 \approx 14$
05	L00410	"	17.0	20.5	3.5	3.5	$10.3 \approx 10$
06	L00414	"	0	5.0	5.0	5.0	$14.8 \approx 15$
07	L00415	"	5.0	9.9	4.9	4.9	$14.5 \approx 14$
08	L00416	"	10.0	14.9	4.9	4.9	$14.5 \approx 14$
09	L00421	"	15.0	16.9	1.9	1.9	$5.6 \approx 6$
10	L00423	"	17.0	18.2	1.2	1.2	$3.5 \approx 3$
11	L00424	"	18.5	20.6	2.1	2.1	$6.2 \approx 6$
12	L00425	"	20.6	21.8	1.2	1.2	$3.5 \approx 3$
13	Blank	200 ml	0	0	0	0	-
14	Std (20 mg/L)	100 ml	0	6.7	6.7	6.7	19.8

Calculation

$$\text{NH}_3\text{-N (mg/L)} = \frac{(A-B) \times 14 \times 1000 \times N}{\text{Volume of Sample}}$$

A = Volume of H_2SO_4 titrated for Sample

B = " " " " " Blank

23.5 mL of H_2SO_4 consumed by 10 mL of 0.05 N Na_2CO_3

$$\text{Strength} = \frac{0.05 \times 10}{23.5} = 0.0212 \text{ N}$$

35/2/2024