17.11.2023

JOB CARD NO. RDKL/2324/WW/J00181, J00191
Sample Requisition No. RDKL/WW/2324/SR00036, SR00037
Allocation Dt. 7.11.2023 Due Dt. 22.11.2023 Parameter: COD
Name of Supervisor: Mr. A. Rafique

Standardization of FAS

Normality of $K_2Cr_2O_7$	Vol. of $K_2Cr_2O_2$	Vol. of FAS	Normality of FAS
0.25 (N)	10 ml	25.9 ml	0.0965
0.25 (N)	10 ml	25.9 ml	0.0965
0.25 (N)	10 ml	25.9 ml	0.0965
0.25 (N)	10 ml	25.9 ml	0.0965 ≅ 0.097 (N)

Sample code	Dilution	Vol. (ml)	FAS consumed (final - Initial) ml	Conc. mg/l
Blank	Direct	20ml	25.7 − 0 = 25.7	—
WW/ L00063	Direct	20ml	24.9 − 0 = 24.9	31.04 ≅ 31 mg/l
WW/ L00064	Direct	20ml	50.0 − 24.9 = 25.1	23.3 ≅ 23 mg/l
WW/ L00065	Direct	20ml	25.1 − 0 = 25.1	23.3 ≅ 23 mg/l
WW/ L00066	Direct	20ml	22.3 − 0 = 22.3	131.9 ≅ 132 mg/l
WW/ L00068	Direct	20ml	46.4 − 22.3 = 24.1	62.1 ≅ 62 mg/l
WW/ L00069	Direct	20ml	24.3 − 0 = 24.3	54.3 ≅ 54 mg/l

Calculation: $\frac{(B - A) \times N \times 8000}{\text{ml of sample}}$

B = FAS consumed by Blank
A = FAS consumed by Sample
N = Normality of FAS

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22.11.23

7.11 - 10.11.23

JOB CARD NO. RDKL/2324/WW/J00181, J00191
Sample Requisition No. RDKL/WW/2324/SR00036, SR00037
Allocation Dt. 7.11.2023 Due Dt. 22.11.2023 Parameter: BOD
Name of Supervisor: Mr. A. Rafique

Initial standardization of ~~KIO3~~ $Na_2S_2O_3$

Normality of KIO_3	Vol. of KIO_3	Vol. of $Na_2S_2O_3$	Normality of $Na_2S_2O_3$
0.0125 (N)	10 ml	5 ml	0.025 (N)
0.0125 (N)	10 ml	5 ml	0.025 (N)
0.0125 (N)	10 ml	5 ml	0.025 (N)
0.0125 (N)	10 ml	5 ml	0.025 (N)

Sample code	Dilution	Initial DO mg/L	Final DO mg/L	Avg. Final DO mg/L
WW/L00063	20 D 60 → 1200 ml	(A) 7.2 - 0 = 7.2 ≅ 7.2 mg/L	(B) 6.5 - 0 = 6.5 ≅ 6.5 mg/L (C) 6.5 - 0 = 6.5 ≅ 6.5 mg/L	6.5 mg/L

Result. (7.2 - 6.5) × 20 = 14 mg/L

WW/L00064	8 D 150 → 1200 ml	(A) 14.7 - 7.2 = 7.5 ≅ 7.5 mg/L	(B) 13.5 - 6.5 = 7.0 ≅ 7.0 mg/L (C) 13.5 - 6.5 = 7.0 ≅ 7.0 mg/L	7.0 mg/L

Result. (7.5 - 7.0) × 8 = 4.0 mg/L

WW/L00065	6 D 200 → 1200 ml	(A) 22.3 - 14.7 = 7.6 ≅ 7.6 mg/L	(B) 20.4 - 13.5 = 6.9 ≅ 6.9 mg/L (C) 20.6 - 13.5 = 7.1 ≅ 7.1 mg/L	7.0 mg/L

Result. (7.6 - 7.0) × 6 = 3.6 ≅ 4 mg/L

Bi. 23.11.23

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Sample code	Dilution	Initial DO mg/L	Final DO mg/L	Avg Final DO mg/L
WW/L00066	40 D 30 → 1200ml	(A) 29.8 − 22.3 = 7.5 ≅ 7.5 mg/L	(B) 27.0 − 20.4 = 6.6 ≅ 6.6 mg/L (C) 26.8 − 20.6 = 6.2 ≅ 6.2 mg/L	6.4 mg/L

Result. (7.5 − 6.4) × 40 = 44 mg/L

WW/L00068	12 D 100 → 1200ml	(A) 37.0 − 29.8 = 7.2 ≅ 7.2 mg/L	(B) 32.4 − 27.0 = 5.4 ≅ 5.4 mg/L (C) 32.2 − 26.8 = 5.4 ≅ 5.4 mg/L	5.4 mg/L

Result: (7.2 − 5.4) × 12 = 21.6 = 22 mg/L

WW/L00069	6 D 200 → 1200ml	(A) 43.6 − 37.0 = 6.6 ≅ 6.6 mg/L	(B) 34.9 − 32.4 = 2.5 ≅ 2.5 mg/L (C) 34.5 − 32.2 = 2.3 ≅ 2.3 mg/L	2.4 mg/L

Result: (6.6 − 2.4) × 6 = 25.2 ≅ 25 mg/L

Final standardization of Sodium Thiosulphate

Normality of KIO_3 (N)	Vol. of KIO_3 (ml)	Vol. of $Na_2S_2O_3$ (ml)	Normality of $Na_2S_2O_3$ (N)
0.0125 (N)	10 ml	5 ml	0.025 (N)
0.0125 (N)	10 ml	5 ml	0.025 (N)
0.0125 (N)	10 ml	5 ml	0.025 (N)
0.0125 (N)	10 ml	5 ml	0.025 (N)