

Job Card No: RDKL/2324/FW/J00007, RDKL/2324/FW/J00016

Sample Requisition No: BWTL/ABH/FW/2324/SR00008

Sample Code: RDKL/2324/FW/00045 (2324/RDKL/FW/FW/L00001)

RDKL/2324/FW/00046 (2324/RDKL/FW/FW/L00002)

RDKL/2324/FW/00070 (2324/RDKL/FW/FW/00003)

RDKL/2324/FW/00071 (2324/RDKL/FW/FW/00004)

RDKL/2324/FW/00072 (2324/RDKL/FW/FW/00005)

Allocation Date: 12/09/2023, 13/09/2023

Due Date: 22/09/2023, 28/09/2023

Test Start Date: 13/09/2023 Test End Date: 13/09/2023

Name of Supervisor: Md. A. Rafique.

3-09-2023 parameter = COD.

S.No.	Sample Code	Sample vol (ml)	Vol. of FAS consumed			Result (mg/L)
			IR (ml)	FR (ml)	DR (ml)	
01)	Blank (dt ₂ O)	20	0	23.4	23.4	Avg = 23.4 ml
	Blank (dt ₂ O)	20	23.4	46.8	23.4	
02)	RDKL/2324/FW/00045/2324/RDKL/FW/FW/L00001	→ 20	→ 23.5	44.9	21.4	= 8.47 = 8.0
03)	RDKL/2324/FW/00046/2324/RDKL/FW/FW/L00002	→ 20	→ 20.1	21.4	21.3	= 8.89 = 9.0
04)	RDKL/2324/FW/00070/2324/RDKL/FW/FW/L00003	→ 20	→ 21.4	42.9	21.5	= 8.04 = 8.0
05)	RDKL/2324/FW/00071/2324/RDKL/FW/FW/L00004	→ 20	→ 20.1	21.7	21.6	= 7.62 = 8.0
06)	RDKL/2324/FW/00072/2324/RDKL/FW/FW/L00005	→ 20	→ 21.7	43.8	22.1	= 5.51 = 6.0
07)	KHP (25 mg/L)	→ 20	→ 0	17.4	17.4	= 25.4 = 25.0

Calculation:

Dr. Rafique
13.09.23

Standardisation of FAS using 0.025(N) $K_2Cr_2O_7$:
 10 ml of 0.025(N) $K_2Cr_2O_7$ consumed 23.6 ml of FAS.
 (Refer to page no. 55)

$$\therefore \text{Strength of FAS} = \frac{10 \times 0.025}{23.6} = 0.0105932 \approx 0.01059(N)$$

$\therefore f = 4.236$

$$\text{COD (mg/L)} = \frac{(A-B) \times N \times 8000}{\text{sample vol (ml)}}$$

A = volume (ml) of FAS consumed for Blank
 B = " " " " " " " " " " sample
 N = normality of used FAS.

31/2/23

13/09/2023

31/2/23
 13/09/23

parameters Standardisation of Ferrous Ammonium Sulphate
using Standard $K_2Cr_2O_7$ (Potassium Dichromate)

Date: 13.09.2023

Name of Supervisor: Md A. Rafique.

S.No.	Vol. of Standard Potassium Dichromate ($K_2Cr_2O_7$) (0.025N)	Volume of FAS consumed (ml)			Concn (Normality)
		IR (ml)	FR (ml)	Diff (ml)	

01) 10 0 23.6 23.6 = 0.0105932

02) 10 23.6 47.2 23.6 = 0.0105923

∴ Average concentration of Ferrous Ammonium Sulphate = 0.0105932
≈ 0.01059 (N)

Signature

13.09.2023

Signature
13.09.23