

\* Job Card No. : RDKL/2324/APP/J00241

Requisition No. : RDKL/APP/2324/SR00095

Parameter : NO<sub>2</sub> (Amb), PM<sub>2.5</sub>, PM<sub>10</sub>

Allocation Date : 12.01.2024 • Total No. of Sample : 3+1+3

Due Date : 19.01.2024 • Date of Analysis : 12.01.2024

• Name of Supervisor : Md. A. Rafique

NO<sub>2</sub> (Amb)

S/No.	Sample Code	Vol of Total Sample (ml)	Vol of Sample Analysed (ml)	Vol of Air (l)	Abs <sup>n</sup> at (540nm)	Conc <sup>n</sup> (ug/m <sup>3</sup> )
01.	Blk	-	10	-	0.003	-
02.	2324/RDKL/APP/GN2/L00401	30	10	220	0.066	49
03.	" L00402	30	10	224	0.054	39
04.	" L00403	30	10	269	0.064	39
05.	Std (1ppm)	-	10	-	0.023	1.0

\* Calculation :

$$\text{NO}_2 (\text{ug/m}^3) = \frac{\text{Abs}^n - \text{Int}^n}{\text{Slope}} \times \frac{\text{Total Vol of Sample (ml)}}{\text{Vol of Sample Analysed (ml)}} \times \frac{1000}{\text{Vol of Air (l)} \times 0.82}$$

Slope : 0.0215

Intercept : 0.0024

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15.01.24

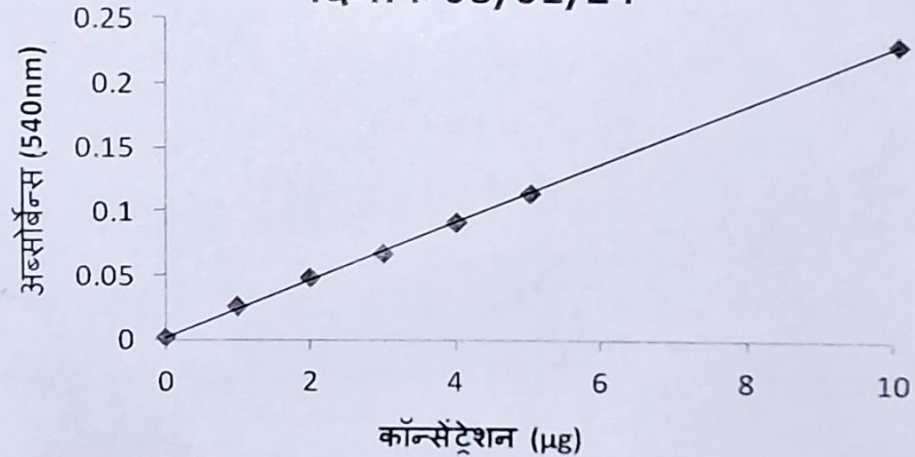
15.01.24

\*

कॉन्सेंट्रेशन ( $\mu\text{g}$ )	अब्सोर्बेन्स (540 nm)
0.00	0.003
1.00	0.025
2.00	0.045
3.00	0.066
4.00	0.087
5.00	0.110
10.00	0.218
स्लोप	0.0215
इंटरसेप्ट	0.0024
कोरिलेशन	0.9999

## NO<sub>2</sub> की स्टैंडर्ड कैलिब्रेशन कर्व

दिनांक 08/01/24



श्री सुकान्त हालदार द्वारा तैयार किया गया



PM<sub>2.5</sub>

<u>S/No.</u>	<u>Sample Code</u>	<u>Vol of Air</u> <u>(m<sup>3</sup>)</u>	<u>Final Wt of</u> <u>F/Paper (g)</u>	<u>Ini' Wt of</u> <u>F/Paper (g)</u>	<u>Conc<sup>n</sup></u> <u>(ug/m<sup>3</sup>)</u>
01.	2324/RDKL/APP/PM/L00360	16.89	0.14570	0.14329	142.68 ≈ 143

\* Calculation:

$$PM_{2.5} (\mu g/m^3) = \frac{\text{final Wt of F/Paper (g)} - \text{Ini' Wt of F/Paper (g)}}{\text{Vol of Air (m}^3\text{)}} \times 10^6$$

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PM<sub>10</sub>

<u>S/No.</u>	<u>Sample Code</u>	<u>Vol of Air</u> <u>(m<sup>3</sup>)</u>	<u>final Wt of</u> <u>F/Paper (g)</u>	<u>Ini' Wt of</u> <u>F/Paper (g)</u>	<u>Conc<sup>n</sup></u> <u>(ug/m<sup>3</sup>)</u>
01.	2324/RDKL/APP/PM/L00361	501.6	2.82642	2.73149	189.2 ≈ 189
02.	L00362	519.68	2.82388	2.73334	174.2 ≈ 174
03.	L00363	624.08	2.85046	2.74722	165.4 ≈ 165

\* Calculation:

$$PM_{10} (\mu g/m^3) = \frac{\text{final Wt of F/Paper (g)} - \text{Ini' Wt of F/Paper (g)}}{\text{Vol of Air (m}^3\text{)}} \times 10^6$$

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15.01.2024

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