



GADARK LAB PVT. LTD.

INDUSTRIAL ANALYSTS & CONSULTANTS

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525.

Tel. : (02362) 223519 • E-mail : info@gadark.in • Website : www.gadark.in

OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83.

Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

TEST REPORT

Doc.No : GLPL/QF/7.8/02

Test Report No.	GA/VEN/25/1118	Test Report Date	14/10/2025
Customer Name and Address	M/s. VEDANTA LIMITED WASTE HEAT RECOVERY PLANT I & II, COKE OVEN PLANT I & II SURVEY NO. 205, 206, 207, 31/1, 33, PART OF 177, 44, 43/1, 43/2, 42/1 & 74, SURVEY NO. 207 (PART) OF NVELIM VILLAGE AND SURVEY NO. 43/1, 44/4, & 44/5 OF AMONA VILLAGE, BICHOLIM - GOA.		
Letter Ref./Date	As per P.O. No. PO/2025/05/06288 (4920077644) date 07/05/2025.		
Sampling Done By	GLPL	Page No.	1 of 1
Sample Received on	10/10/2025	Analysis Period	10/10/2025 To 14/10/2025

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	WHRPP 2 Boiler 2
Date of Sample collection	10/10/2025
Stack Diameter [Meter]	2.00
Height From Ground Level [Meter]	50
Shape	Round
Temperature of flue gas [°C]	157
Average flue gas velocity [m/s]	12.9
Average volume of flue gas discharged [Nm ³ /hr]	101005

ANALYSIS REPORT :

Parameters	Unit	Results	Limits *	Methods
Total Particulate Matter (TPM)	mg/Nm ³	22.3	100	IS 11255 (Part I) 1985
Sulphur Dioxide	Kg/Hr	22.64	500	IS 11255 (Part II) 1985
Oxides of Nitrogen	mg/Nm ³	72.81	500	IS 11255 (Part VII) 2005

Limits*: Consent No.12/2024-PCB/2524810/R00017175

End

For GADARK LAB PVT. LTD.


AUTHORISED SIGNATORY
[JAGANNATH S PARAB]


CHECKED BY

Note :

1. The results relate only to the samples tested
2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Samples will be preserved for a period 15 days from the delivery of Test Report.
4. Test Results relate only to the conditions prevailing at the time of sampling
5. Customer complaint register is available at laboratory.
6. Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

CALIBRATION DETAILS OF EQUIPMENT USED FOR SAMPLING

Sr. No.	Instrument Type	Calibrated On	Calibration Due Date
1	Stack Kit No. Polltech – PEM- SMK10L	03/12/2024	03/12/2025
2	Analytical Balance – Sr. No. GL/EQ/BAL/02	10/06/2025	09/06/2026
3	Gas Chromatograph – Model Thermo-Fisher, Trace 1110	10/05/2025	09/05/2026
4	UV Spectrophotometer Model – UV - 3092, ID No. GL/EQ/UV2	04/08/2025	03/11/2025



GADARK LAB PVT. LTD.

INDUSTRIAL ANALYSTS & CONSULTANTS

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525.

Tel. : (02362) 223519 • E-mail : info@gadark.in • Website : www.gadark.in

OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83.

Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

TEST REPORT

Doc.No : GLPL/QF/7.8/02

Test Report No.	GA/VEN/25/1136	Test Report Date	15/10/2025
Customer Name and Address	M/s. VEDANTA LIMITED WASTE HEAT RECOVERY PLANT I & II, COKE OVEN PLANT I & II SURVEY NO. 205, 206, 207, 31/1, 33, PART OF 177, 44, 43/1, 43/2, 42/1 & 74, SURVEY NO. 207 (PART) OF NAVELIM VILLAGE AND SURVEY NO. 43/1, 44/4, & 44/5 OF AMONA VILLAGE, BICHOLIM - GOA.		
Letter Ref./Date	As per P.O. No. PO/2025/05/06288 (4920077644) date 07/05/2025.		
Sampling Done By	GLPL	Page No.	1 of 1
Sample Received on	11/10/2025	Analysis Period	11/10/2025 To 15/10/2025

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	WHRPP 1 Boiler 1
Date of Sample collection	11/10/2025
Stack Diameter [Meter]	2.00
Height From Ground Level [Meter]	43
Shape	Round
Temperature of flue gas [°C]	153
Average flue gas velocity [m/s]	11.1
Average volume of flue gas discharged [Nm ³ /hr]	87750

ANALYSIS REPORT :

Parameters	Unit	Results	Limits *	Methods
Total Particulate Matter (TPM)	mg/Nm ³	24.2	100	IS 11255 (Part I) 1985
Sulphur Dioxide	Kg/Hr	26.12	500	IS 11255 (Part II) 1985
Oxides of Nitrogen	mg/Nm ³	41.61	500	IS 11255 (Part VII) 2005

Limits*: Consent No.12/2024-PCB/2524810/R00017175

End

For GADARK LAB PVT. LTD.


AUTHORISED SIGNATORY
[JAGANNATH S PARAB]


CHECKED BY

Note :

1. The results relate only to the samples tested
2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Samples will be preserved for a period 15 days from the delivery of Test Report.
4. Test Results relate only to the conditions prevailing at the time of sampling
5. Customer complaint register is available at laboratory.
6. Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

CALIBRATION DETAILS OF EQUIPMENT USED FOR SAMPLING

Sr. No.	Instrument Type	Calibrated On	Calibration Due Date
1	Stack Kit No. Polltech – PEM- SMK10L	03/12/2024	03/12/2025
2	Analytical Balance – Sr. No. GL/EQ/BAL/02	10/06/2025	09/06/2026
3	Gas Chromatograph – Model Thermo-Fisher, Trace 1110	10/05/2025	09/05/2026
4	UV Spectrophotometer Model – UV - 3092, ID No. GL/EQ/UV2	04/08/2025	03/11/2025



GADARK LAB PVT. LTD.

INDUSTRIAL ANALYSTS & CONSULTANTS

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525.
Tel. : (02362) 223519 • E-mail : info@gadark.in • Website : www.gadark.in

OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83.
Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

TEST REPORT

Doc.No : GLPL/QF/7.8/02

Test Report No.	GA/VEN/25/1137	Test Report Date	15/10/2025
Customer Name and Address	M/s. VEDANTA LIMITED WASTE HEAT RECOVERY PLANT I & II, COKE OVEN PLANT I & II SURVEY NO. 205, 206, 207, 31/1, 33, PART OF 177, 44, 43/1, 43/2, 42/1 & 74, SURVEY NO. 207 (PART) OF NAVELIM VILLAGE AND SURVEY NO. 43/1, 44/4, & 44/5 OF AMONA VILLAGE, BICHOLIM - GOA.		
Letter Ref./Date	As per P.O. No. PO/2025/05/06288 (4920077644) date 07/05/2025.		
Sampling Done By	GLPL	Page No.	1 of 1
Sample Received on	11/10/2025	Analysis Period	11/10/2025 To 15/10/2025

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	WHRPP 1 Boiler 2
Date of Sample collection	11/10/2025
Stack Diameter [Meter]	2.00
Height From Ground Level [Meter]	43
Shape	Round
Temperature of flue gas [°C]	158
Average flue gas velocity [m/s]	12.6
Average volume of flue gas discharged [Nm ³ /hr]	98541

ANALYSIS REPORT :

Parameters	Unit	Results	Limits *	Methods
Total Particulate Matter (TPM)	mg/Nm ³	21.4	100	IS 11255 (Part I) 1985
Sulphur Dioxide	Kg/Hr	24.46	500	IS 11255 (Part II) 1985
Oxides of Nitrogen	mg/Nm ³	49.92	500	IS 11255 (Part VII) 2005

Limits*: Consent No.12/2024-PCB/2524810/R00017175

End

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY
[JAGANNATH S PARAB]

CHECKED BY

Note :

1. The results relate only to the samples tested
2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Samples will be preserved for a period 15 days from the delivery of Test Report.
4. Test Results relate only to the conditions prevailing at the time of sampling
5. Customer complaint register is available at laboratory.
6. Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

CALIBRATION DETAILS OF EQUIPMENT USED FOR SAMPLING

Sr. No.	Instrument Type	Calibrated On	Calibration Due Date
1	Stack Kit No. Polltech – PEM- SMK10L	03/12/2024	03/12/2025
2	Analytical Balance – Sr. No. GL/EQ/BAL/02	10/06/2025	09/06/2026
3	Gas Chromatograph – Model Thermo-Fisher, Trace 1110	10/05/2025	09/05/2026
4	UV Spectrophotometer Model – UV - 3092, ID No. GL/EQ/UV2	04/08/2025	03/11/2025



GADARK LAB PVT. LTD.

INDUSTRIAL ANALYSTS & CONSULTANTS

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525.
Tel. : (02362) 223519 • E-mail : info@gadark.in • Website : www.gadark.in

OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83.
Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

TEST REPORT

Doc.No : GLPL/QF/7.8/02

Test Report No.	GA/VEN/25/1117	Test Report Date	14/10/2025
Customer Name and Address	M/s. VEDANTA LIMITED WASTE HEAT RECOVERY PLANT I & II, COKE OVEN PLANT I & II SURVEY NO. 205, 206, 207, 31/1, 33, PART OF 177, 44, 43/1, 43/2, 42/1 & 74, SURVEY NO. 207 (PART) OF NAVELIM VILLAGE AND SURVEY NO. 43/1, 44/4, & 44/5 OF AMONA VILLAGE, BICHOLIM - GOA.		
Letter Ref./Date	As per P.O. No. PO/2025/05/06288 (4920077644) date 07/05/2025.		
Sampling Done By	GLPL	Page No.	1 of 1
Sample Received on	10/10/2025	Analysis Period	10/10/2025 To 14/10/2025

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	WHRPP 2 Boiler 1
Date of Sample collection	10/10/2025
Stack Diameter [Meter]	2.00
Height From Ground Level [Meter]	50
Shape	Round
Temperature of flue gas [°C]	161
Average flue gas velocity [m/s]	11.5
Average volume of flue gas discharged [Nm ³ /hr]	89006


ANALYSIS REPORT :

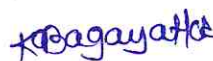
Parameters	Unit	Results	Limits *	Methods
Total Particulate Matter (TPM)	mg/Nm ³	19.5	100	IS 11255 (Part I) 1985
Sulphur Dioxide	Kg/Hr	18.47	500	IS 11255 (Part II) 1985
Oxides of Nitrogen	mg/Nm ³	55.85	500	IS 11255 (Part VII) 2005

Limits*: Consent No.12/2024-PCB/2524810/R00017175

End

For GADARK LAB PVT. LTD.


AUTHORISED SIGNATORY
[JAGANNATH S PARAB]


CHECKED BY

Note :

1. The results relate only to the samples tested
2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Samples will be preserved for a period 15 days from the delivery of Test Report.
4. Test Results relate only to the conditions prevailing at the time of sampling
5. Customer complaint register is available at laboratory.
6. Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

CALIBRATION DETAILS OF EQUIPMENT USED FOR SAMPLING

Sr. No.	Instrument Type	Calibrated On	Calibration Due Date
1	Stack Kit No. Polltech – PEM- SMK10L	03/12/2024	03/12/2025
2	Analytical Balance – Sr. No. GL/EQ/BAL/02	10/06/2025	09/06/2026
3	Gas Chromatograph – Model Thermo-Fisher, Trace 1110	10/05/2025	09/05/2026
4	UV Spectrophotometer Model – UV - 3092, ID No. GL/EQ/UV2	04/08/2025	03/11/2025