



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/25/0763	Test Report Date	19/07/2025
Customer Name and Address	M/S. VEDANTA LIMITED PIG IRON PLANT SURVEY NOS. 29/1, 31/1,27,39,41,44/3,42/1, 43/1,54,56/17, AMONA, 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	16/07/2025	Analysis Period	16/07/2025 To 19/07/2025

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	Bag house of Ladle dumping chamber of Blast Furnace 1 & 2
Date of Sample collection	16/07/2025
Stack Diameter [Meter]	1.4
Height From Ground Level [Meter]	30.0
Shape	Round
Temperature of flue gas [°C]	50
Average flue gas velocity [m/s]	4.7
Average volume of flue gas discharged [Nm ³ /hr]	24059

ANALYSIS REPORT :

Parameters	Unit	Results	Limits*	Methods
Total Particulate Matter (TPM)	mg/Nm ³	4.3	30	IS 11255 (Part I) 1985

Limits*: GSPCB Consent No.12/2024-PCB/2197149/R00015270

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	03/05/2025	02/08/2025



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/25/0764		Test Report Date	19/07/2025
Customer Name and Address	M/s. VEDANTA LIMITED PIG IRON PLANT SURVEY NOS. 29/1, 31/1,27,39,41,44/3,42/1, 43/1,54,56/17, AMONA, 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	16/07/2025	Analysis Period	16/07/2025 To 19/07/2025	

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	Bag House of Blast Furnace 1
Date of Sample collection	16/07/2025
Stack Diameter [Meter]	1.65
Height From Ground Level [Meter]	30.0
Shape	Round
Temperature of flue gas [°C]	55
Average flue gas velocity [m/s]	10.3
Average volume of flue gas discharged [Nm ³ /hr]	72219

ANALYSIS REPORT :

Parameters	Unit	Results	Limits*	Methods
Total Particulate Matter (TPM)	mg/Nm ³	5.1	30	IS 11255 (Part I) 1985

Limits*: GSPCB Consent No.12/2024-PCB/2197149/R00015270

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	03/05/2025	02/08/2025



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 : GPL/QF/7.8/02

Test Report No.	GA/VEN/25/0761	Test Report Date	19/07/2025
Customer Name and Address	M/S. VEDANTA LIMITED PIG IRON PLANT SURVEY NOS. 29/1, 31/1, 27, 39, 41, 44/3, 42/1, 43/1, 54, 56/17, AMONA, BICHOLIM-GOA		
Letter Ref./Date	As per P.O. No. PO/2025/05/06288 (4920077644) date 07/05/2025.		
Sampling Done By	GPL	Page No.	1 of 1
Sample Received on	16/07/2025	Analysis Period	16/07/2025 To 19/07/2025

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	Hot blast Stove of Blast Furnace 1
Date of Sample collection	16/07/2025
Stack Diameter [Meter]	1.94
Height From Ground Level [Meter]	45
Shape	Round
Temperature of flue gas [°C]	155
Average flue gas velocity [m/s]	9.1
Average volume of flue gas discharged [Nm ³ /hr]	96529

ANALYSIS REPORT :

Parameters	Unit	Results	Limits *	Methods
Total Particulate Matter (TPM)	mg/Nm ³	16.2	30	IS 11255 (Part I) 1985
Sulphur Dioxide	mg/Nm ³	24.77	250	IS 11255 (Part II) 1985
Oxides of Nitrogen	mg/Nm ³	19.73	150	IS 11255 (Part VII) 2005

Limits*: Consent No.12/2024-PCB/2197149/R00015270.

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. Politech – 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	03/05/2025	02/08/2025



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/25/0765		Test Report Date	19/07/2025
Customer Name and Address	M/s. VEDANTA LIMITED PIG IRON PLANT SURVEY NOS. 29/1, 31/1,27,39,41,44/3,42/1, 43/1,54,56/17, AMONA, BICHOLIM-GOA			
Letter Ref./Date	As per P.O. No. PO/2025/05/06288 (4920077644) date 07/05/2025.			
Sampling Done By	GPL	Page No.	1 of 1	
Sample Received on	16/07/2025	Analysis Period	16/07/2025 To 19/07/2025	

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	Bag House of Blast Furnace 2
Date of Sample collection	16/07/2025
Stack Diameter [Meter]	2.0
Height From Ground Level [Meter]	30.0
Shape	Round
Temperature of flue gas [°C]	50
Average flue gas velocity [m/s]	10.8
Average volume of flue gas discharged [Nm ³ /hr]	122613

ANALYSIS REPORT :

Parameters	Unit	Results	Limits*	Methods
Total Particulate Matter (TPM)	mg/Nm ³	4.6	30	IS 11255 (Part I) 1985

Limits*: GSPCB Consent No.12/2024-PCB/2197149/R00015270.

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	03/05/2025	02/08/2025



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 : GPL/QF/7.8/02

Test Report No.	GA/VEN/25/0762		Test Report Date	19/07/2025
Customer Name and Address	M/S. VEDANTA LIMITED PIG IRON PLANT SURVEY NOS. 29/1, 31/1,27,39,41,44/3,42/1, 43/1,54,56/17, AMONA, BICHOLIM-GOA			
Letter Ref./Date	As per P.O. No. PO/2025/05/06288 (4920077644) date 07/05/2025.			
Sampling Done By	GPL	Page No.	1 of 1	
Sample Received on	16/07/2025	Analysis Period	16/07/2025 To 19/07/2025	

SAMPLING DETAILS - STACK EMISSION

Stack Attached to	Hot blast Stove of Blast Furnace 2
Date of Sample collection	16/07/2025
Stack Diameter [Meter]	1.77
Height From Ground Level [Meter]	45
Shape	Round
Temperature of flue gas [°C]	163
Average flue gas velocity [m/s]	9.1
Average volume of flue gas discharged [Nm ³ /hr]	54860

ANALYSIS REPORT :

Parameters	Unit	Results	Limits *	Methods
Total Particulate Matter (TPM)	mg/Nm ³	16.5	30	IS 11255 (Part I) 1985
Sulphur Dioxide	mg/Nm ³	33.13	250	IS 11255 (Part II) 1985
Oxides of Nitrogen	mg/Nm ³	26.31	150	IS 11255 (Part VII) 2005

Limits*: Consent No.12/2024-PCB/2197149/R00015270.

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. Politech – 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	03/05/2025	02/08/2025