



SHIVA TEST HOUSE

(Serving since 1983)



TC-10582

RECOGNISED AS ENVIRONMENTAL LABORATORY BY MoEFCC, GOVT. OF INDIA, UNDER ENVIRONMENT (PROTECTION) ACT 1986, DEPTT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD

TEST REPORT

Ref. No. STH/TR/22-23/7073	Dt: 17.03.2023	Your Work Order No. 8917	Dt : 17.01.2021
[a] Name and address of the Customer		Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103	
[b] Details of Sample		Monitoring of Stack Emission	
[c] Sample Collected by		SHIVA TEST HOUSE on 05.03.23	
[d] Sampling Location		Within Premises of Sugar Mill	
[e] Method of Sampling		IS 11255 (Part-1,2,3 & 7)	
[f] Sampling Environmental Condition		Temp. (°C)	27 Humidity (%) 69
[g] Details of Sample Container (No. & Type of Container)		Thimble & Glass Impinger	
[h] Instrument ID		VSS -1 PLS	
[i] Sample Quantity		60 ml	
[j] Sample Code		ST-7073	
[k] Sample Condition on Receipt		Fit for Analysis	
[l] Items required to be tested		As per contract	
[m] Whether any specific Method of Test has been suggested by the customer		No	
[n] Date of receiving the sample in Laboratory		06.03.23	
[o] Analysis Start Date / Analysis Completion Date		06.03.23 / 07.03.23	
Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack Connected to			Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia. of Stack at Top (as reported)	Meter		2.73 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		27.0
8. Flue Gas Temperature	°C		111.0
9. Velocity	m/sec.	IS 11255 (Part-3)	6.9
10. Volumetric flow rate	NM ³ /hr		113166.3
11. Sampling Point	Meter		24 m
			Limit as per E (P) Rules, Schedule I
12. Particulate Matter (PM)	mg / NM ³	IS 11255 (Part-1)	150 mg / NM ³
13. Sulphur Dioxide (SO ₂)	mg / NM ³	IS 11255 (Part-2)	Not Specified
14. Oxides of Nitrogen (NO _x)	mg / NM ³	IS 11255 (Part-7)	Not Specified

SHIBESHWAR PRASAD
Digitally signed by SHIBESHWAR PRASAD
Date: 2023.03.17 11:37:05 +05'30'

Verified by :
Technical Manager



Shreyasee Prasad

Digitally signed by Shreyasee Prasad
Date: 2023.03.17 11:58:47 +05'30'

Authorized Signatory
Quality Manager

-- END OF TEST REPORT --

1. This report applies only to sample tested as above.
2. Total Liability of our Laboratory is limited to invoiced amount.
3. Test Report endorsed only the tests and not the product certificate.
4. Test Report can not be reproduced partially or full for legal/court purpose without written permission of the Laboratory.

Contact us : 122-C, Aastha, Road No. 5A, Patliputra Colony, Patna - 800 013 (Bihar)

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TEST REPORT

Ref. No. STH/TR/22-23/7074	Dt: 17.03.2023	Your Work Order No. 8917	Dt: 17.01.2021
[a] Name and address of the Customer		Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103	
[b] Details of Sample		Monitoring of Stack Emission	
[c] Sample Collected by		SHIVA TEST HOUSE on 05.03.23	
[d] Sampling Location		Within Premises of Sugar Mill	
[e] Method of Sampling		IS 11255 (Part-1,2,3 & 7)	
[f] Sampling Environmental Condition		Temp. (°C)	27 Humidity (%) 69
[g] Details of Sample Container (No. & Type of Container)		Thimble & Glass Impinger	
[h] Instrument ID		VSS -1 PLS	
[i] Sample Quantity		60 ml	
[j] Sample Code		ST-7074	
[k] Sample Condition on Receipt		Fit for Analysis	
[l] Items required to be tested		As per contract	
[m] Whether any specific Method of Test has been suggested by the customer		No	
[n] Date of receiving the sample in Laboratory		06.03.23	
[o] Analysis Start Date / Analysis Completion Date		06.03.23 / 07.03.23	

Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack-Connected to			Boiler with ESP having Steam-generation capacity 78.0 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia of Stack at Top (as reported)	Meter		2.7 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		27.0
8. Flue Gas Temperature	°C		113.0
9. Velocity	m/sec.	IS 11255 (Part-3)	7.3
10. Volumetric flow rate	NM ³ /hr		116603.2
11. Sampling Point	Meter		21.50 M.
			Limit as per E (P) Rules, Schedule I
12. Particulate Matter (PM)	mg / NM ³	IS 11255 (Part-1)	150 mg / NM ³
13. Sulphur Dioxide (SO ₂)	mg / NM ³	IS 11255 (Part-2)	Not Specified
14. Oxides of Nitrogen (NOx)	mg / NM ³	IS 11255 (Part-7)	Not Specified

SHIBESHWAR PRASAD
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Date: 2023.03.17 11:37:20 +05'30'

Verified by:
Technical Manager



Shreyasee Prasad

Digitally signed by Shreyasee Prasad
Date: 2023.03.17 11:59:04 +05'30'
Authorized Signatory
Quality Manager

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TEST REPORT

Ref. No. STH/TR/22-23/6292	Dt: 22.02.2023	Your Work Order No. 8917	Dt: 17.01.2021
[a] Name and address of the Customer		Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103	
[b] Details of Sample		Monitoring of Stack Emission	
[c] Sample Collected by		SHIVA TEST HOUSE on 11.02.23	
[d] Sampling Location		Within Premises of Sugar Mill	
[e] Method of Sampling		IS 11255 (Part-1,2,3 & 7)	
[f] Sampling Environmental Condition		Temp. (°C)	24 Humidity (%) 68
[g] Details of Sample Container (No. & Type of Container)		Thimble & Glass Impinger	
[h] Instrument ID		VSS -1 PLS	
[i] Sample Quantity		60 ml	
[j] Sample Code		ST-6292	
[k] Sample Condition on Receipt		Fit for Analysis	
[l] Items required to be tested		As per contract	
[m] Whether any specific Method of Test has been suggested by the customer		No	
[n] Date of receiving the sample in Laboratory		13.02.23	
[o] Analysis Start Date / Analysis Completion Date		13.02.23 / 14.02.23	
Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack Connected to			Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia of Stack at Top (as reported)	Meter		2.73 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		24.0
8. Flue Gas Temperature	°C		102.0
9. Velocity	m/sec.	IS 11255 (Part-3)	7.9
10. Volumetric flow rate	NM ³ /hr		132957.2
11. Sampling Point	Meter		24 m
			Limit as per E (P) Rules, Schedule I
12. Particulate Matter (PM)	mg / NM ³	IS 11255 (Part-1)	150 mg / NM ³ 68.4
13. Sulphur Dioxide (SO ₂)	mg / NM ³	IS 11255 (Part-2)	Not Specified 13.3
14. Oxides of Nitrogen (NO _x)	mg / NM ³	IS 11255 (Part-7)	Not Specified 43.9

SHIBESHWAR PRASAD

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Date: 2023.02.22 11:28:44 +05'30'

Verified by :
Technical Manager



Shreyasee Prasad

Digitally signed by Shreyasee Prasad
Date: 2023.02.22 11:56:53 +05'30'

Authorized Signatory
Quality Manager

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TEST REPORT

Ref. No. STH/TR/22-23/6293		Dt: 22.02.2023		Your Work Order No. 8917		Dt : 17.01.2021	
[a] Name and address of the Customer				Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103			
[b] Details of Sample				Monitoring of Stack Emission			
[c] Sample Collected by				SHIVA TEST HOUSE on 11.02.23			
[d] Sampling Location				Within Premises of Sugar Mill			
[e] Method of Sampling				IS 11255 (Part-1,2,3 & 7)			
[f] Sampling Environmental Condition				Temp. (°C)	24	Humidity (%)	68
[g] Details of Sample Container (No. & Type of Container)				Thimble & Glass Impinger			
[h] Instrument ID				VSS -1 PLS			
[i] Sample Quantity				60 ml			
[j] Sample Code				ST-6293			
[k] Sample Condition on Receipt				Fit for Analysis			
[l] Items required to be tested				As per contract			
[m] Whether any specific Method of Test has been suggested by the customer				No			
[n] Date of receiving the sample in Laboratory				13.02.23			
[o] Analysis Start Date / Analysis Completion Date				13.02.23 / 14.02.23			
Parameters		Unit	Method of Test		Results		
1. Type of Fuel					Bagasse		
2. Stack Connected to					Boiler with ESP having Steam generation capacity 78.0 T / hr.		
3. Height of Stack (as reported)					40.0 m.		
4. Dia of Stack at Top (as reported)					2.7 m.		
5. Draft					ID Fan		
6. Material of Construction					MS		
7. Ambient Temperature					24..0		
8. Flue Gas Temperature					109.0		
9. Velocity		m/sec.	IS 11255 (Part-3)		8.1		
10. Volumetric flow rate		NM³/hr			130682.5		
11. Sampling Point		Meter			21.50 M.		
					Limit as per E (P) Rules, Schedule I		Concentration
12. Particulate Matter (PM)		mg / NM³	IS 11255 (Part-1)		150 mg / NM³		77.0
13. Sulphur Dioxide (SO₂)		mg / NM³	IS 11255 (Part-2)		Not Specified		14.5
14. Oxides of Nitrogen (NOx)		mg / NM³	IS 11255 (Part-7)		Not Specified		46.9

SHIBESHWAR PRASAD

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SHIBESHWAR PRASAD
Date: 2023.02.22
11:29:08 +05'30'

Verified by :
Technical Manager



Shreyasee Prasad

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Shreyasee Prasad
Date: 2023.02.22
11:57:12 +05'30'

Authorized Signatory
Quality Manager

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TEST REPORT

Ref. No. STH/TR/22-23/5507		Dt: 21.01.2023		Your Work Order No. 8917		Dt: 17.01.2021	
[a] Name and address of the Customer				Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103			
[b] Details of Sample				Monitoring of Stack Emission			
[c] Sample Collected by				SHIVA TEST HOUSE on 15.01.23			
[d] Sampling Location				Within Premises of Sugar Mill			
[e] Method of Sampling				IS 11255 (Part-1,2,3 & 7)			
[f] Sampling Environmental Condition				Temp. (°C)	17	Humidity (%)	70
[g] Details of Sample Container (No. & Type of Container)				Thimble & Glass Impinger			
[h] Instrument ID				VSS -1 PLS			
[i] Sample Quantity				60 ml			
[j] Sample Code				ST-5507			
[k] Sample Condition on Receipt				Fit for Analysis			
[l] Items required to be tested				As per contract			
[m] Whether any specific Method of Test has been suggested by the customer				No			
[n] Date of receiving the sample in Laboratory				16.01.23			
[o] Analysis Start Date / Analysis Completion Date				16.01.23 / 18.01.23			
Parameters		Unit	Method of Test		Results		
1. Type of Fuel					Bagasse		
2. Stack Connected to					Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr.		
3. Height of Stack (as reported)		Meter			40.0 m.		
4. Dia of Stack at Top (as reported)		Meter			2.73 m.		
5. Draft		---			ID Fan		
6. Material of Construction		---			MS		
7. Ambient Temperature		°C			17.0		
8. Flue Gas Temperature		°C			134.0		
9. Velocity		m/sec.	IS 11255 (Part-3)		7.3		
10. Volumetric flow rate		NM ³ /hr			112522.2		
11. Sampling Point		Meter			24 m		
					Limit as per E (P) Rules, Schedule I		Concentration
12. Particulate Matter (PM)		mg / NM ³	IS 11255 (Part-1)		150 mg / NM ³		70.4
13. Sulphur Dioxide (SO ₂)		mg / NM ³	IS 11255 (Part-2)		Not Specified		15.1
14. Oxides of Nitrogen (NOx)		mg / NM ³	IS 11255 (Part-7)		Not Specified		41.7

SHIBESHWAR PRASAD

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SHIBESHWAR PRASAD
Date: 2023.01.21
11:28:56 +05'30'

Verified by :
Technical Manager



Shreyasee Prasad

Digitally signed by
Shreyasee Prasad
Date: 2023.01.21
11:34:14 +05'30'

Authorized Signatory
Quality Manager

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TEST REPORT

Ref. No. STH/TR/22-23/5508	Dt: 21.01.2023	Your Work Order No. 8917	Dt: 17.01.2021
[a] Name and address of the Customer		Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103	
[b] Details of Sample		Monitoring of Stack Emission	
[c] Sample Collected by		SHIVA TEST HOUSE on 15.01.23	
[d] Sampling Location		Within Premises of Sugar Mill	
[e] Method of Sampling		IS 11255 (Part-1,2,3 & 7)	
[f] Sampling Environmental Condition		Temp. (°C)	17 Humidity (%) 70
[g] Details of Sample Container (No. & Type of Container)		Thimble & Glass Impinger	
[h] Instrument ID		VSS -1 PLS	
[i] Sample Quantity		60 ml	
[j] Sample Code		ST-5508	
[k] Sample Condition on Receipt		Fit for Analysis	
[l] Items required to be tested		As per contract	
[m] Whether any specific Method of Test has been suggested by the customer		No	
[n] Date of receiving the sample in Laboratory		16.01.23	
[o] Analysis Start Date / Analysis Completion Date		16.01.23 / 18.01.23	
Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack Connected to			Boiler with ESP having Steam generation capacity 78.0 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia of Stack at Top (as reported)	Meter		2.7 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		17.0
8. Flue Gas Temperature	°C		138.0
9. Velocity	m/sec.	IS 11255 (Part-3)	7.7
10. Volumetric flow rate	NM ³ /hr		114397.8
11. Sampling Point	Meter		21.50 M.
			Limit as per E (P) Rules, Schedule I
			Concentration
12. Particulate Matter (PM)	mg / NM ³	IS 11255 (Part-1)	150 mg / NM ³
13. Sulphur Dioxide (SO ₂)	mg / NM ³	IS 11255 (Part-2)	Not Specified
14. Oxides of Nitrogen (NO _x)	mg / NM ³	IS 11255 (Part-7)	Not Specified

SHIBESHWAR PRASAD

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SHIBESHWAR PRASAD
Date: 2023.01.21
11:29:11 +05'30'

Verified by :
Technical Manager



Shreyasee Prasad

Digitally signed by
Shreyasee Prasad
Date: 2023.01.21
11:34:31 +05'30'

Authorized Signatory
Quality Manager

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TEST REPORT

Ref. No. STH/TR/22-23/4944	Dt: 06.01.2023	Your Work Order No. 8917	Dt: 17.01.2021
[a] Name and address of the Customer		Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103	
[b] Details of Sample		Monitoring of Stack Emission	
[c] Sample Collected by		SHIVA TEST HOUSE on 25.12.22	
[d] Sampling Location		Within Premises of Sugar Mill	
[e] Method of Sampling		IS 11255 (Part-1,2,3 & 7)	
[f] Sampling Environmental Condition		Temp. (°C)	19 Humidity (%) 64
[g] Details of Sample Container (No. & Type of Container)		Thimble & Glass Impinger	
[h] Instrument ID		VSS -1 PLS	
[i] Sample Quantity		60 ml	
[j] Sample Code		ST-4944	
[k] Sample Condition on Receipt		Fit for Analysis	
[l] Items required to be tested		As per contract	
[m] Whether any specific Method of Test has been suggested by the customer		No	
[n] Date of receiving the sample in Laboratory		26.12.22	
[o] Analysis Start Date / Analysis Completion Date		26.12.22 / 28.12.22	
Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack Connected to			Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia of Stack at Top (as reported)	Meter		2.73 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		19.0
8. Flue Gas Temperature	°C		165.0
9. Velocity	m/sec.	IS 11255 (Part-3)	7.6
10. Volumetric flow rate	NM ³ /hr		108151.2
11. Sampling Point	Meter		24 m
			Limit as per E (P) Rules, Schedule I
			Concentration
12. Particulate Matter (PM)	mg / NM ³	IS 11255 (Part-1)	150 mg / NM ³ 88.3
13. Sulphur Dioxide (SO ₂)	mg / NM ³	IS 11255 (Part-2)	Not Specified 13.2
14. Oxides of Nitrogen (NOx)	mg / NM ³	IS 11255 (Part-7)	Not Specified 38.0

SHIBESHWAR PRASAD
Digitally signed by SHIBESHWAR PRASAD
Date: 2023.01.06 14:22:16 +05'30'

Verified by :
Technical Manager

Shreyase Prasad
Digitally signed by Shreyasee Prasad
Date: 2023.01.06 14:25:49 +05'30'
Authorized Signatory
Quality Manager

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TEST REPORT

Ref. No. <i>STH/TR/22-23/4945</i>	Dt: <i>06.01.2023</i>	Your Work Order No. <i>8917</i>	Dt: <i>17.01.2021</i>
[a] Name and address of the Customer		Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103	
[b] Details of Sample		<i>Monitoring of Stack Emission</i>	
[c] Sample Collected by		SHIVA TEST HOUSE on 25.12.22	
[d] Sampling Location		<i>Within Premises of Sugar Mill</i>	
[e] Method of Sampling		IS 11255 (Part-1, 2, 3 & 7)	
[f] Sampling Environmental Condition		Temp. (°C)	19 Humidity (%) 64
[g] Details of Sample Container (No. & Type of Container)		Thimble & Glass Impinger	
[h] Instrument ID		VSS -1 PLS	
[i] Sample Quantity		60 ml	
[j] Sample Code		ST-4945	
[k] Sample Condition on Receipt		Fit for Analysis	
[l] Items required to be tested		As per contract	
[m] Whether any specific Method of Test has been suggested by the customer		No	
[n] Date of receiving the sample in Laboratory		26.12.22	
[o] Analysis Start Date / Analysis Completion Date		26.12.22 / 28.12.22	
Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack Connected to			Boiler with ESP having Steam generation capacity 78.0 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia of Stack at Top (as reported)	Meter		2.7 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		19..0
8. Flue Gas Temperature	°C		130.0
9. Velocity	m/sec.	IS 11255 (Part-3)	7.6
10. Volumetric flow rate	NM ³ /hr		114450.4
11. Sampling Point	Meter		21.50 M.
			Limit as per E (P) Rules, Schedule I
			Concentration
12. Particulate Matter (PM)	mg / NM ³	IS 11255 (Part-1)	150 mg / NM ³ 85.2
13. Sulphur Dioxide (SO ₂)	mg / NM ³	IS 11255 (Part-2)	Not Specified 17.1
14. Oxides of Nitrogen (NO _x)	mg / NM ³	IS 11255 (Part-7)	Not Specified 45.6

SHIBESHWAR PRASAD
 Digitally signed by SHIBESHWAR PRASAD
 Date: 2023.01.06 14:22:28 +05'30'

Verified by :
 Technical Manager

Shreyasee Prasad
 Digitally signed by Shreyasee Prasad
 Date: 2023.01.06 14:26:04 +05'30'
 Authorized Signatory
 Quality Manager

— END OF TEST REPORT —

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Contact us : 122-C, Aastha, Road No. 5A, Patliputra Colony, Patna – 800 013 (Bihar)

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Page 1 of 1



SHIVA TEST HOUSE

(Serving since 1988)



TC-10582

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TEST REPORT

Ref. No. <i>STH/TR/22-23/4098</i>	Dt: <i>08.12.2022</i>	Your Work Order No. <i>8917</i>	Dt: <i>17.01.2021</i>
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103		
[b] Details of Sample	<i>Monitoring of Stack Emission</i>		
[c] Sample Collected by	SHIVA TEST HOUSE on <i>20.11.22</i>		
[d] Sampling Location	<i>Within Premises of Sugar Mill</i>		
[e] Method of Sampling	IS 11255 (Part-1,2,3 & 7)		
[f] Sampling Environmental Condition	Temp. (°C)	<i>28</i>	Humidity (%) <i>69</i>
[g] Details of Sample Container (No. & Type of Container)	Thimble & Glass Impinger		
[h] Instrument ID	VSS -1 PLS		
[i] Sample Quantity	60 ml		
[j] Sample Code	ST-4098		
[k] Sample Condition on Receipt	Fit for Analysis		
[l] Items required to be tested	As per contract		
[m] Whether any specific Method of Test has been suggested by the customer	No		
[n] Date of receiving the sample in Laboratory	<i>21.11.22</i>		
[o] Analysis Start Date / Analysis Completion Date	<i>21.11.22 / 23.11.22</i>		
Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack Connected to			Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia of Stack at Top (as reported)	Meter		2.73 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		28.0
8. Flue Gas Temperature	°C		84.0
9. Velocity	m/sec.	IS 11255 (Part-3)	8.1
10. Volumetric flow rate	NM³/hr		141995.3
11. Sampling Point	Meter		24 m
			Limit as per E (P) Rules, Schedule I
			Concentration
12. Particulate Matter (PM)	mg / NM³	IS 11255 (Part-1)	150 mg / NM³
13. Sulphur Dioxide (SO₂)	mg / NM³	IS 11255 (Part-2)	Not Specified
14. Oxides of Nitrogen (NOx)	mg / NM³	IS 11255 (Part-7)	Not Specified

SHIBESHWAR PRASAD

Digitally signed by SHIBESHWAR PRASAD
Date: 2022.12.17 11:13:10 +05'30'

Verified by :
Technical Manager



-- END OF TEST REPORT --

Shreyasee Prasad

Digitally signed by Shreyasee Prasad
Date: 2022.12.17 11:20:25 +05'30'

Authorized Signatory
Quality Manager

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SHIVA TEST HOUSE

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TEST REPORT

Ref. No. STH/TR/22-23/4099	Dt: 08.12.2022	Your Work Order No. 8917	Dt: 17.01.2021
[a] Name and address of the Customer		Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103	
[b] Details of Sample		Monitoring of Stack Emission	
[c] Sample Collected by		SHIVA TEST HOUSE on 20.11.22	
[d] Sampling Location		Within Premises of Sugar Mill	
[e] Method of Sampling		IS 11255 (Part-1,2,3 & 7)	
[f] Sampling Environmental Condition		Temp. (°C)	28 Humidity (%) 69
[g] Details of Sample Container (No. & Type of Container)		Thimble & Glass Impinger	
[h] Instrument ID		VSS -1 PLS	
[i] Sample Quantity		60 ml	
[j] Sample Code		ST-4099	
[k] Sample Condition on Receipt		Fit for Analysis	
[l] Items required to be tested		As per contract	
[m] Whether any specific Method of Test has been suggested by the customer		No	
[n] Date of receiving the sample in Laboratory		21.11.22	
[o] Analysis Start Date / Analysis Completion Date		21.11.22 / 23.11.22	
Parameters	Unit	Method of Test	Results
1. Type of Fuel			Bagasse
2. Stack Connected to			Boiler with ESP having Steam generation capacity 78.0 T / hr.
3. Height of Stack (as reported)	Meter		40.0 m.
4. Dia of Stack at Top (as reported)	Meter		2.7 m.
5. Draft	---		ID Fan
6. Material of Construction	---		MS
7. Ambient Temperature	°C		28.0
8. Flue Gas Temperature	°C		118.0
9. Velocity	m/sec.	IS 11255 (Part-3)	7.9
10. Volumetric flow rate	NM ³ /hr		141995.3
11. Sampling Point	Meter		21.50 M.
			Limit as per E (P) Rules, Schedule I
			Concentration
12. Particulate Matter (PM)	mg / NM ³	IS 11255 (Part-1)	150 mg / NM ³ 76.5
13. Sulphur Dioxide (SO ₂)	mg / NM ³	IS 11255 (Part-2)	Not Specified 15.0
14. Oxides of Nitrogen (NO _x)	mg / NM ³	IS 11255 (Part-7)	Not Specified 43.8

SHIBESHW
AR PRASAD

Digitally signed by
SHIBESHWAR PRASAD
Date: 2022.12.17
11:13:24 +05'30'

Verified by :
Technical Manager

Shreyasee
Prasad

Digitally signed by
Shreyasee Prasad
Date: 2022.12.17
11:20:46 +05'30'

Authorized Signatory
Quality Manager

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