STACK EMISSION MONITORING DATA RECORDING SHEET

1.	Sample ID:	SA/2105/0125	2.	Instrument ID:	DFD12

3.	Date & Time of Sampling:24/06/21
4.	Stack Identity:32
5.	Stack attached to:32
6.	Stack height (m):32
7.	Stack diameter/Duct Dimensions at sampling point (m):32
8.	Height of port hole from ground level (m²):55
9.	Are 8D and 2D Criteria met: Yes / No:True
10.	Material of Construction:323
11.	Stack shape at top:66
12.	Fuel used: i) Type:65	ii) Consumption: 66	kg/d or Ud
13.	Stack Area (A) (m²):77
14.	WhetherSampling port and platform exists? Yes / No:True
15.	Whether Air pollution control equipment exists? Yes /No (Specify)True
16.	Barometric Pressure (Ba): 323.000	mm Hg

17.	Fuel Gas composition:	CO_2%:22.000	O_2%:34.000	CO%:45.000	N_2%:56.000

18.	Moisture Content (M) = 323.000 %	ii) Bwo: (M /100) =23.0000

19.	Duration (h) / day of run of boiler/ process:77.00

20.	Ambient Temperature : 22.00	ºC + 273 = 56.00	ºK
21.	Stack Temperature(Ts) : 12.00	ºC + 273 = 23.00	ºK

22	Velocity of Stack Gas (V): 32.00 m/s	Pitot Tube factor (K):56.0000
		C = K x 0.2295 =45.00

Details	1	2	3	4	5	6	7	8	9	10
a) Traverse Point distance from the port, cm										
b) Differential Pressure (ΔP) mmH₂O										
c) Static Pressure (Ps)mmHg	Ps= 234.0000		mmH₂O/13.6 =			mmHg				
d) Absolute Stack Pressure (PA)	PA (Ba ± Ps) =			345.0000			mmHg			
e) Velocity V in m/s V=C√AP x Ts.°K	23									

f) Flue Gas Quantity (Dry) Nm³/h $Q = A \times V \times 3600 \times (298/Ts) \times (PA/760) \times (1-Bwo)$	456.0000

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Prepared By: TM		Issued By: QM	

Note =* Physical Details of Sack Provided by Customer

19. Sampling Rate for Isokinetic conditions:

a. Nozzle Constant: Area of Nozzle(mz) X 60 X 1000 = 32.0000											
b. Sampling Flow Rate (LPM) =Velocity x Nozzle constant x Ta/Ts x PA/ Ba-Pv	12.0000										
c. Sampling duration in Minutes	23.0000										
d. Vacuum PV in mm Hg	**Initial**	23.0000									
	Final	34.0000									
	Average	45.0000									
e. Sampling gas Temp(Tg) °K	**Initial**		34.0000	**Final**		56.0000	**Average**			67.0000
Thimble No:-323											

20. Total gas passed:(Flow Rate) x Duration= 323.0000 Liters

OR

Dry Gas Meter Reading: **Final** **Initial** **Diff .** m3

21. Gaseous Sampling Data:

Parameter	Flow Rate (LPM) (R)	Sampling time in minutes (T)	Gas Temp (°K)(Tg)	Barometric Pressure mm Hg (Ba)	Dry gas meter Reading (m^3)			Bottle No.	Absorbing solution used			Preservation Done Parameter (If Any)
					Initial	Final	Total		Solution	Conc.	Vol. (ml)	
Carbon Dioxide (CO_2)	5.000	4	5.000	4.000	5.00000	4.0000	5.0000	1	4	5.00	4.00	5

Vs (in liters at STP) = R x T x(Ba/760) x (298/ Tg) =y

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22. Sampling Data for NOx

$$Vsc = (Tstd/Pstd)(Vf-Va) (Pf/Tf - Pi/Ti)$$

Where,
Vs = 1 (Volume of flask & vdlve in ml)
Va = 2 (Volume of absorbing solution,25 ml)
Pf = 3 (Final absolute pressure of flask, mm Hg)
Pi = 4 (Initial absolute pressure of flask, mm Hg)
Pstd = 6 (Standard absolute pressure, 760 mm Hg(29.92 inch of Hg))
Tf = 8 (Final absolute temperature of flask, oK)
Ti = 6 (Initial absolute temperature of flask, 0K)
Tstd = 9 (Standard absolute temperature, 298.15 0K)
Vsc = Sample Volume at standard condition (dry basis), ml
Vsc = (-----) (-) (- - -) = 32.0000ml

$$= \underline{\quad\quad} \text{ ml}$$
$$1000$$

$$=\underline{\quad\quad} \text{ L}$$

Preservation Done (If Any) :

Sample received in lab by: **Sign:** _____ **Date:** 26/06/21

Probable date of report: 30/06/21

Sampling done by: Ram Lakshman   **Sign:** _____

Name and Address of Customer: Monica
                                        Nagpur   **Sample ID:** SA/2105/0125

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