

ANALYSIS OF GROUND WATER SAMPLES OF

JAY SHREE SUGAR MILL ; PO & VILLAGE MAJHAULA ; DISTT. WEST CHAMPARAN

(Average Values for the period Oct.'2012 to March.'2013)

S. N.	Parameters	Limit as per IS 10500 : 1991		Method of Test	Results in mg/l. except colour, Odour, Taste, Turbidity, & pH
		Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source		
1	Colour	5.0 Hazen Limit	25	IS 3025 (Part-4)	< 5.00
2	Odour	Unobjectionable	---	IS 3025 (Part-5)	Odourless
3	Taste	Agreeable	---	IS 3025 (Part-7))	Agreeable
4	pH	6.5 to 8.5	--	IS 3025 (Part-11)	7.28
5	Turbidity on NTU	5.00	10 00	IS 3025 (Part-10)	< 1.00
6	Total Dissolved Solids (TDS)	500.00	2000.00	IS 3025 (Part-16)	362.0
7	Total Hardness as CaCO ₃	300.00	600.00	IS 3025 (Part-21)	232.0
8	Calcium as Ca	75.00	200.00	IS 3025 (Part-40)	44.0
9	Magnesium as Mg	30.00	---	IS 3025 (Part-46)	24.0
10	Iron as Fe	0.30	1.00	APHA 3500 (Fe-B)	0.15
11	Total Alkalinity as CaCO ₃	200.00	600.00	IS 3025 (Part-23)	216.0
12	Chloride as Cl	250.00	1000.00	APHA 4500 (Cl C)	44.0
13	Sulphate as SO ₄	200.00	400.00	IS 3025 (Part-24)	16.0
14	Nitrate as NO ₃	45.00	100.00	IS 3025 (Part-34)	6.2
15	Fluoride as F	1.00	1.50	APHA 4500 (F D)	0.20
16	Sodium as Na	--	--	IS 3025 (Part-45)	08.6
17	Potassium as K	--	--	IS 3025 (Part-45)	5.2
18	Boron as 'B'			APHA 4500 B B	< 0.2
19	Total Phosphate as P	--	--	IS 3025 (Part-31)	< 0.1
20	Total Kjeldahl Nitrogen	--	--	IS 3025 (Part-34)	< 0.1

N.B.: The above test has been conducted by Shiva Test House, Patna MoEF Recognised Environmental Laboratory.

**MONITORING OF AMBIENT AIR QUALITY WITHIN PREMISES OF
JAY SHREE SUGAR MILL ; PO & VILLAGE MAJHAULA ; DISTT. WEST CHAMPARAN**

(Average Concⁿ for the period Oct.'2012 to March.'2013)

Parameters	Concentration 24Hrs. Average value ($\mu\text{g} / \text{m}^3$)	Limit as per National Ambient Air Quality Standards (Nov.'2009) ($\mu\text{g} / \text{m}^3$)
Respirable Particulate Matter (PM ₁₀)	58.2	100.00
Particulate Matter (PM _{2.5})	24.0	60.00
Sulphur Dioxides as SO ₂	26.8	80.00
Oxides of Nitrogen as NOx	35.8	80.00

N.B.: The above test has been conducted by Shiva Test House, Patna MoEF Recognized Environmental Laboratory.

**MONITORING OF AMBIENT NOISE LEVEL WITHIN PREMISES OF
JAY SHREE SUGAR MILL ; PO & VILLAGE MAJHAULA ; DISTT. WEST CHAMPARAN**

(Average Values for the period Oct.'2012 to March.'2013)

Monitoring Location	Time Weighted Average (TWA) of Noise Level in dB(A)	
	Day Time (6:00 am to 9:00 pm)	Night Time (10:00 pm to 6:00 am)
1. Near Main Gate (East side)	63.5	42.8
2. Near ETP (South side)	54.2	40.4
3. Near Store (West side)	55.0	41.5
4. Near Boundary Wall (North side)	66.4	40.5

N.B. : The above test has been conducted by Shiva Test House, Patna MoEF Recognised Environmental Laboratory.

MONITORING OF STACK EMISSION OF
JAY SHREE SUGAR MILL ; PO & VILLAGE MAJHAULA ; DIST. WEST CHAMPARAN
(JAN.'2013)

Parameters	Stack No. 1	Stack No. 2	Stack No. 3
1. Type of Fuel	Bagasse	Bagasse	Bagasse
2. Stack Connected to	Boiler No. 9 having Steam generation capacity 32.0 T / hr.	Horse Shoe Type Boiler No. 10 having Steam generation capacity 40.0 T / hr.	Spreader Stoker Type Boiler No. 11 having Steam generation capacity 40.0 T / hr.
3. Height of Stack above ground level	30.00 M.	40.00 M.	40.00 M.
4. Dia of Stack at Top	1.55 M.	2.55 M.	2.50 M.
5. Material of Construction	M.S.	M.S.	R.C.C.
6. Ambient Temperature, °C	15.0	15.0	15.0
7. Flue Gas Temperature, °C	120.0	124.6	117.0
8. Velocity, m/sec.	08.4	9.2	10.2
9. Sampling Point	10.00 M.	16.00 M.	16.00 M.
1. Particulate Matter (P.M.)	132.9 mg / NM ³	124.6 mg / NM ³	118.0 mg / NM ³
2. Sulphur Dioxide (SO ₂)	12.6 mg / NM ³	11.2 mg / NM ³	14.2 mg / NM ³
3. Oxides of Nitrogen (NOx)	22.6 mg / NM ³	20.8 mg / NM ³	18.6 mg / NM ³

N.B.: The above test has been conducted by Shiva Test House, Patna MoEF Recognised Environmental Laboratory.