

Environmental Consultancy & Laboratory

Lab. Gazetted by MoEF-Govt. of India [Recognized for period 02.06.2016 to 01.06.2021]

Lab. Accredited by NABL - ISO/IEC 17025:2005 [TC-5600, Valid Until 27.05.2019 in the field of Testing]

QCI-NABET Accredited EIA Consulting Organization

STP/ETP/WTP Project Management Consultants

 ISO 9001 : 2015
OHSAS 18001 : 2007

Laboratory : G V Brothers Building, Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601. Maharashtra, India
Tele : +91 22 2547 49 07/ +91 22 2547 62 17 **Email :** lab@ultratech.in **Visit us at :** www.ultratech.in

TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION

 Village -Shetphalgade, Taluka-Indapur
 District-Pune 413030.

REPORT NO. : UT/ELS/REPORT/1010/12-2018

ISSUE DATE : 05/12/2018

YOUR REF. : 4500077501

REF. DATE : 12/04/2017

SAMPLE PARTICULARS :
Sampling Plan Ref. No.: C-27/10-2018
Sample Registration Date : 16/10/2018
Date of Sampling : 14/10/2018 to 15/10/2018
Time of Sampling : 10:00 Hrs. to 10:00 Hrs.
Analysis Starting Date : 16/10/2018
Analysis Completion Date : 20/10/2018
Sample Lab Code : UT/ELS/C-173/10-2018
Ambient Air Temperature : 24.3 °C to 33.8°C

AMBIENT AIR QUALITY MONITORING
Location Code : 01
Sample Location : Near Main Gate
 Co-ordinates N18°27'04.68"; E74°67'06.31"
Collected By : ULTRA-TECH
Height of Sampler : 1.0 Meter
Sampling Duration : 24 Hours
Relative Humidity : 43.8 % to 83.8 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO ₂)	IS 5182 (Part 02) : 2001	17	µg/m ³
2.	Oxides of Nitrogen (NO _x)	IS 5182 (Part 06) : 2006	27	µg/m ³
3.	Particulate Matter (PM ₁₀)	EPA/625/R-96/010a Method 10-2.1	82	µg/m ³
4.	Particulate Matter (PM _{2.5})	UT/LQMS/SOP/AA05	46	µg/m ³
5.	Carbon Monoxide (CO) †	IS 5182 (Part 10): 1999	1.1	mg/m ³

†: Sampling Period 1 Hr.

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.
 (Turnover to find Annexure).

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - ENVIROTECH; Model -APM 460; Sr. No. RDS-02	Valid up to - 23/01/2019
Fine Dust Sampler	Make - NETEL; Model- NPM-FDS 2.5 A; Sr. No. 22114	Valid up to - 06/03/2019	

- Note:**
1. This test report refers only to the sample tested.
 2. Monitoring area coming under Residential areas and observed values are relevant to sample collected only.
 3. This test report may not be reproduced in part, without the permission of this laboratory.
 4. Any correction invalidates this test report.
 5. Weather was Sunny and Clear during sampling period.

- END OF REPORT -

For ULTRA-TECH,

Dr. Rahul Kolhapurkar
 (Authorized Signatory)

Page 1 of 1

H.O.: Unit No. 224,225,206, Jai Commercial Complex, Eastern Express Highway, Opp. Cadbury Factory, Khopat, Thane (W) 400 601.

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Pune : +91-20-27293043 - pune@ultratech.in **Kochi :** +91-484-4011173 / +91-9895200526 - kochi@ultratech.in

Kolkata : +91-33-40089145 / +91-9674488193 - kolkata@ultratech.in **Delhi :** +91-11-40158500 - delhi@ultratech.in

ANNEXURE-I**NATIONAL AMBIENT AIR QUALITY STANDARDS, PART III-SECTION IV**
The Gazette of India with Effect from Wednesday, November 18, 2009/KARTIKA 27, 1931

Sr. No.	Pollutants	Time Weighted Average	National Ambient Air Quality Standards	
			Industrial, Residential, Rural and Other Area	Ecological Sensitive Area (Notified by Central Government)
01.	Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20
		24 Hours**	80	80
02.	Oxides of Nitrogen (NO _x), µg/m ³	Annual*	40	30
		24 Hours**	80	80
03	Particulate Matter (PM ₁₀), µg/m ³	Annual*	60	60
		24 Hours**	100	100
04.	Particulate Matter (PM _{2.5}), µg/m ³	Annual*	40	40
		24 Hours**	60	60
05.	Carbon Monoxide (CO), mg/m ³	08 Hours*	02	02
		01 Hours**	04	04

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

NOTE: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further

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TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION
 Village -Shetphalgade, Taluka-Indapur
 District-Pune 413030.

REPORT NO. : UT/ELS/REPORT/1011/12-2018
 ISSUE DATE : 05/12/2018
 YOUR REF. : 4500077501
 REF. DATE : 12/04/2017

SAMPLE PARTICULARS :

Sampling Plan Ref. No.: C-27/10-2018
 Sample Registration Date : 16/10/2018
 Date of Sampling : 14/10/2018 to 15/10/2018
 Time of Sampling : 11:00 Hrs. to 11:00 Hrs.
 Analysis Starting Date : 16/10/2018
 Analysis Completion Date : 20/10/2018
 Sample Lab Code : UT/ELS/C-174/10-2018
 Ambient Air Temperature : 24.6 °C to 33.7 °C

AMBIENT AIR QUALITY MONITORING

Location Code : 02
 Sample Location : Near Store Room
 Co-ordinates: N18°27'05.85"; E74°67'24.97"
 Collected By : ULTRA-TECH
 Height of Sampler : 1.0 Meter
 Sampling Duration : 24 Hours
 Relative Humidit : 45.6 % to 81.2%

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO ₂)	IS 5182 (Part 02) : 2001	14	µg/m ³
2.	Oxides of Nitrogen (NO _x)	IS 5182 (Part 06) : 2006	24	µg/m ³
3.	Particulate Matter (PM ₁₀)	EPA/625/R-96/010a Method IO-2.1	72	µg/m ³
4.	Particulate Matter (PM _{2.5})	UT/LQMS/SOP/AA05	37	µg/m ³
5.	Carbon Monoxide (CO) †	IS 5182 (Part 10): 1999	1.2	mg/m ³

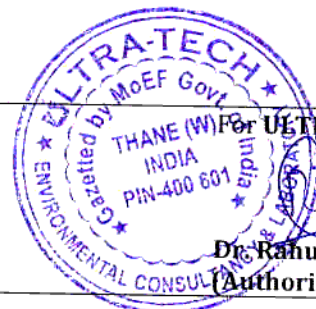
†: Sampling Period 1 Hr.

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.
 (Turnover to find Annexure).

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - ENVIROTECH; Model -APM 460; Sr. No. 180DTB98	Valid up to - 23/01/2019
Fine Dust Sampler	Make - NETEL; Model- NPM-FDS 2.5 A; Sr. No. FDS-02	Valid up to - 06/03/2019	

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 Dr. Rahul Kolhapurkar
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ANNEXURE-I**NATIONAL AMBIENT AIR QUALITY STANDARDS, PART III-SECTION IV**
The Gazette of India with Effect from Wednesday, November 18, 2009/KARTIKA 27, 1931

Sr. No.	Pollutants	Time Weighted Average	National Ambient Air Quality Standards	
			Industrial, Residential, Rural and Other Area	Ecological Sensitive Area (Notified by Central Government)
01.	Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20
		24 Hours**	80	80
02.	Oxides of Nitrogen (NO _x), µg/m ³	Annual*	40	30
		24 Hours**	80	80
03	Particulate Matter (PM ₁₀), µg/m ³	Annual*	60	60
		24 Hours**	100	100
04.	Particulate Matter (PM _{2.5}), µg/m ³	Annual*	40	40
		24 Hours**	60	60
05.	Carbon Monoxide (CO), mg/m ³	08 Hours*	02	02
		01 Hours**	04	04

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

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TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION

Village -Shetphalgade, Taluka-Indapur

District-Pune 413030.

REPORT NO. : UT/ELS/REPORT/1012/12-2018

ISSUE DATE : 05/12/2018

YOUR REF. : 4500077501

REF. DATE : 12/04/2017

SAMPLE PARTICULARS :

AMBIENT AIR QUALITY MONITORING

Sampling Plan Ref. No.: C-27/10-2018
Sample Registration Date : 16/10/2018
Date of Sampling : 14/10/2018 to 15/10/2018
Time of Sampling : 12:00 Hrs. to 12:00 Hrs.
Analysis Starting Date : 16/10/2018
Analysis Completion Date : 20/10/2018
Sample Lab Code : UT/ELS/C-175/10-2018
Ambient Air Temperature : 24.3 °C to 33.9°C

Location Code : 03
Sample Location : Near Distillery
 Co-ordinates: N18°27'21.43"; E74°67'48.48"
Collected By : ULTRA-TECH
Height of Sampler : 1.0 Meter
Sampling Duration : 24 Hours
Relative Humidity : 46.7 % to 81.8%

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO ₂)	IS 5182 (Part 02) : 2001	16	µg/m ³
2.	Oxides of Nitrogen (NO _x)	IS 5182 (Part 06) : 2006	28	µg/m ³
3.	Particulate Matter (PM ₁₀)	EPA/625/R-96/010a Method IO-2.1	70	µg/m ³
4.	Particulate Matter (PM _{2.5})	UT/LQMS/SOP/AA05	33	µg/m ³
5.	Carbon Monoxide (CO) †	IS 5182 (Part 10): 1999	1.4	mg/m ³

†: Sampling Period 1 Hr.

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.
 (Turnover to find Annexure)..

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model -PEM RDS 8NL; Sr. No. 1114	Valid up to - 23/01/2019
Fine Dust Sampler	Make - NETEL; Model- NPM-FDS 2.5 A; Sr. No. FDS-03	Valid up to - 06/03/2019	

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Sr. No.	Pollutants	Time Weighted Average	National Ambient Air Quality Standards	
			Industrial, Residential, Rural and Other Area	Ecological Sensitive Area (Notified by Central Government)
01.	Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20
		24 Hours**	80	80
02.	Oxides of Nitrogen (NO _x), µg/m ³	Annual*	40	30
		24 Hours**	80	80
03.	Particulate Matter (PM ₁₀), µg/m ³	Annual*	60	60
		24 Hours**	100	100
04.	Particulate Matter (PM _{2.5}), µg/m ³	Annual*	40	40
		24 Hours**	60	60
05.	Carbon Monoxide (CO), mg/m ³	08 Hours*	02	02
		01 Hours**	04	04

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

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TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION
Village - Shetphalgade, Taluka-Indapur
District-Pune 413030.

REPORT NO. : UT/ELS/REPORT/1013/12-2018
ISSUE DATE : 05/12/2018
YOUR REF. : 4500077501
REF. DATE : 12/04/2017

SAMPLE PARTICULARS :

NOISE LEVEL QUALITY MONITORING

Sampling Plan Ref. No. : C-27/10-2018
Date of Monitoring : 14/10/2018

Sample Lab Code : UT/ELS/C-176/10-2018
Survey Done By : ULTRA-TECH

Sr. No.	Location	Noise Level Reading in dB(A)			
		Time (Hrs)	Day dB(A)	Time (Hrs)	Night dB(A)
01.	Near Main Gate	12:30 to 12:35	68.2	22:10 to 22:15	50.2
02.	Near Store Room	12:45 to 12:50	64.9	22:20 to 22:25	48.6
03.	Near Distillery	13:05 to 13:10	70.2	22:35 to 22:40	47.2
04.	Near ETP	13:20 to 13:25	69.6	22:50 to 22:55	48.0


Opinions / Interpretations: *The Noise Pollution (Regulation And Control) Rules, 2000: Is Provided as Annexure II for Your Reference. (Turnover to find Annexure).*


Note:
1. Monitoring area coming under Residential Area.
2. Noise level monitored is an average for period as stated above, the permissible sound pressure level is to be determined with respect to the total time a workman is being exposed (continuously or a number of short term exposures per day) in Hrs.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make - METRAVI; Model - SL-4015; Sr. no. 160200539	Valid up to - 06/03/2019

Note:
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- END OF REPORT -

For ULTRA-TECH,

Dr. Rahul Kolhapurkar
(Authorized Signatory)



ANNEXURE-II

THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000

(The Principal Rules were published in the Gazette of India, vide S.O. 123(E), dated 14.2.2000 and subsequently amended vide S.O. 1046(E), dated 22.11.2000, S.O. 1088(E), dated 11.10.2002, S.O. 1569 (E), dated 19.09.2006 and S.O. 50 (E) dated 11.01.2010 under the Environment (Protection) Act, 1986.)

• SCHEDULE

(See rule 3(1) and 4(1))

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area / Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

- Note:
1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
 3. Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
 4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

* dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq: It is energy mean of the noise level over a specified period.

• CONSTRUCTION ACTIVITIES

The maximum noise levels near the construction site should be limited to 75 dB(A) Leq(5 min.) in industrial areas and to 65 dB(A) Leq(5 min.) in other areas.

• THE PERMISSIBLE LEVELS FOR NOISE EXPOSURE FOR WORK ZONE

(The Model Rules Of The Factories Act, 1948)

Peak sound pressure level in dB	Permitted number of impulses or impact/day
140	100
135	315
130	1000
125	3160
120	10000

- Notes:
1. No exposure in excess of 140 dB peak sound pressure level is permitted.
 2. For any peak sound pressure level falling in between any figure and the next higher or lower figure as indicated in column 1, the permitted number of impulses or impacts per day is to be determined by extrapolation on a proportionate basis.

Total time exposure (continuous or a number of short term exposures per day) in Hrs	Sound Pressure Level in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/8	108
1/16	111
1/32 (2 minutes) or less	114

- Notes:
1. No exposure in excess of 115 dB(A) is to be permitted.
 2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column 1, the permissible sound pressure level is to be determined by extrapolation on a proportionate basis.

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TEST REPORT

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REPORT NO. : UT/ELS/REPORT/1014/12-2018

Village -Shetphalgade,Taluka-Indapur

ISSUE DATE : 05/12/2018

District-Pune 413030.

YOUR REF. : 4500077501

REF. DATE : 12/04/2017

SAMPLE PARTICULARS :
STACK EMISSIONS QUALITY MONITORING
Sampling Plan Ref. No. : C-27/10-2018

Analysis Starting Date : 16/10/2018

Sample Registration Date : 16/10/2018

Analysis Completion Date : 20/10/2018

Date of Sampling : 14/10/2018

Sample Lab Code : UT/ELS/C-177/10-2018

Time of Sampling : 15:30Hrs. to 16:30 Hrs.

Sample Collected By : ULTRA-TECH

STACK DETAILS
Stack ID : S-03

Stack Height : 23 Meter from Ground Level

Stack Attached To : D. G. Set (500 KVA)

Stack Diameter : 0.4998 Meter @ Sampling Point

Stack Shape : Round

Fuel Used : Diesel

Stack MOC : M.S.

Fuel Consumption : 80 Liters/hr

FLUE GAS CHARACTERISTICS
Flue Gas Temperature : 400.7 °K

Volumetric Flow Rate : 2623 Nm³/hr

Flue Gas Velocity : 5.7 m/sec

Total Volume of Flue Gas : 1.000 Nm³ (@ STP)

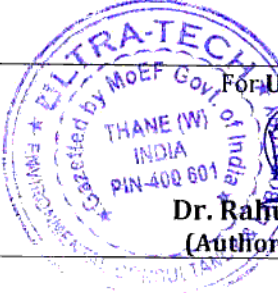
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	13	mg/Nm ³
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part 02) : 1985	10	mg/Nm ³

Opinions / Interpretations: Nil.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model PEM - SMS 4; Sr. No. 2613	Valid up to - 13/02/2019

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 For: ULTRA-TECH,
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TEST REPORT

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District-Pune 413030.**REPORT NO. :** UT/ELS/REPORT/1015/12-2018
ISSUE DATE : 05/12/2018
YOUR REF. : 4500077501
REF. DATE : 12/04/2017**SAMPLE PARTICULARS :****Sampling Plan Ref. No. :** C-27/10-2018
Sample Registration Date : 16/10/2018
Date of Sampling : 15/10/2018
Time of Sampling : 10:10Hrs. to 11:10 Hrs.**STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date :** 16/10/2018
Analysis Completion Date : 20/10/2018
Sample Lab Code : UT/ELS/C-178/10-2018
Sample Collected By : ULTRA-TECH**STACK DETAILS****Stack ID :** S-01
Stack Attached To : Boiler (110 TPH)
Stack Shape : Round
Stack MOC : RCC
Stack Height : 65 Meter from Ground Level
Stack Diameter : 3.9279 Meter @ Sampling Point
Fuel Used : Bagasse
Fuel Consumption : 1080MT/Day**FLUE GAS CHARACTERISTICS****Flue Gas Temperature :** 383 °K
Flue Gas Velocity : 6.4 m/sec
Volumetric Flow Rate : 198305 Nm³/hr
Total Volume of Flue Gas : 1.000 Nm³ (@ STP)

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	15	mg/Nm ³
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part 02) : 1985	35	mg/Nm ³

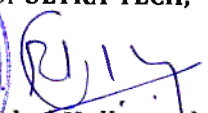
Opinions / Interpretations: Nil

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model PEM - SMS 4; Sr. No. 2613	Valid up to - 13/02/2019

- Note:**
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For ULTRA-TECH,


Dr. Rahul Kolhapurkar
(Authorized Signatory)

Environmental Consultancy & Laboratory

Lab. Gazetted by MoEF-Govt. of India [Recognized for period 02.06.2016 to 01.06.2021]

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TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION Village - Shetphalgade, Taluka-Indapur District-Pune 413030.	REPORT NO. : UT/ELS/REPORT/1016/12-2018 ISSUE DATE : 05/12/2018 YOUR REF. : 4500077501 REF. DATE : 12/04/2017
--	--

SAMPLE PARTICULARS :		STACK EMISSIONS QUALITY MONITORING	
Sampling Plan Ref. No.	: C-27/10-2018	Analysis Starting Date	: 16/10/2018
Sample Registration Date	: 16/10/2018	Analysis Completion Date	: 20/10/2018
Date of Sampling	: 15/10/2018	Sample Lab Code	: UT/ELS/C-179/10-2018
Time of Sampling	: 12:00Hrs. to 13:00 Hrs.	Sample Collected By	: ULTRA-TECH

STACK DETAILS			
Stack ID	: S-02	Stack Height	: 49 Meter from Ground Level
Stack Attached To	: Boiler (40 TPH)	Stack Diameter	: 1.8 Meter @ Sampling Point
Stack Shape	: Round	Fuel Used	: Bagasse
Stack MOC	: RCC	Fuel Consumption	: 62.4 Kg/Hr

FLUE GAS CHARACTERISTICS			
Flue Gas Temperature	: 382	^o K	Volumetric Flow Rate : 31976 Nm ³ /hr
Flue Gas Velocity	: 4.9	m/sec	Total Volume of Flue Gas : 1.000 Nm ³ (@ STP)

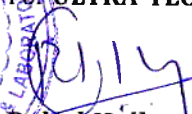
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	14	mg/Nm ³
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part 02) : 1985	29	mg/Nm ³


Opinions / Interpretations: Nil.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model PEM - SMS 4; Sr. No. 2613	Valid up to - 13/02/2019

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For ULTRA-TECH,

Dr. Rahul Kolhapurkar
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TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION
 Village -Shetphalgade,Taluka-Indapur
 District-Pune 413030.

REPORT NO. : UT/ELS/REPORT/1017/12-2018
ISSUE DATE : 05/12/2018
YOUR REF. : 4500077501
REF. DATE : 12/04/2017

SAMPLE PARTICULARS :
Sampling Plan Ref. No. : C-28/10-2018
Sample Registration Date : 16/10/2018
Date & Time of Sampling : 15/10/2018 at 14:40Hrs
Analysis Starting Date : 16/10/2018
Analysis Completion Date : 31/10/2018
Sample Collected By : ULTRA-TECH
Sample Lab Code : UT/ELS/C-180/10-2018

WATER SAMPLE ANALYSIS
Sample Type : RO WaterOutlet
Sample Location : Near Store Room
Sample Quantity & Packing Details : 2 L in Plastic Container and 100ml in Sterile Corning Bottle.

Sr. No.	Test Parameter	Test Method	Test Result	Unit	Standard Limits [IS 10500 : 2012]
PHYSICAL PARAMETERS:-					
1.	Turbidity*	IS 3025 (Part 10) 1984	BDL[DL=0.1]	NTU	1
CHEMICAL PARAMETERS:-					
2.	pH	IS 3025 (Part 11) 1983	7.2	-	6.5 - 8.5
3.	Electrical Conductivity*	IS 3025 (Part 14) 1984	154	µS/cm	-
4.	Total Dissolved Solids	IS 3025 (Part 16) 1984	100	mg/L	500
5.	Total Hardness as CaCO ₃	IS 3025 (Part 21) 2009	49	mg/L	200
6.	Total Alkalinity as CaCO ₃	IS 3025 (Part 23) 1986	44	mg/L	200
7.	Phenolphthalein Alkalinity as CaCO ₃	IS 3025 (Part 23) 1986	BDL[DL=1]	mg/L	--
8.	Sulphate as SO ₄ ²⁻	APHA 4500- SO ₄ ²⁻ -E	16	mg/L	200
9.	Phosphate as PO ₄ ³⁻ *	APHA 4500 P E	BDL[DL=0.03]	mg/L	--
10.	Chlorides as Cl ⁻	IS 3025 (Part 32) 1988	22	mg/L	250
11.	Ammonical Nitrogen as NH ₃ -N	IS 3025 (Part 34) 1988	BDL [DL=0.1]	mg/L	0.5
12.	Nitrates as NO ₃ ⁻	IS 3025 (Part 34) 1988	2.08	mg/L	45
13.	Calcium Hardness as CaCO ₃	IS 3025 (Part 40) 1991	29	mg/L	--
14.	Calcium as Ca	IS 3025 (Part 40) 1991	12	mg/L	75
15.	Potassium as K*	IS 3025 (Part 45) 1993	1.3	mg/L	--
16.	Sodium as Na*	IS 3025 (Part 45) 1993	15	mg/L	--
17.	Magnesium as Mg	IS 3025 (Part 46) 1994	5	mg/L	30
18.	Lead as Pb	IS 3025 (Part 47) 1994	BDL [DL=0.01]	mg/L	0.01
19.	Iron as Fe	IS 3025 (Part 53) 2003	BDL [DL=0.06]	mg/L	0.3
20.	Fluoride as F ⁻	APHA 4500-F-D	BDL[DL=0.2]	mg/L	1.0
BACTERIOLOGICAL PARAMETERS:					
21.	Total Coliform*	IS 1622 : 1981	BDL[DL=2]	MPN/100 ml	0
22.	F.Coli*	IS 1622 : 1981	BDL[DL=2]	MPN/100 ml	0
23.	E.Coli*	IS 1622 : 1981	Absent	-	Absent

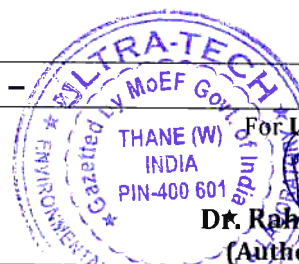
DL - Detection Limit

BDL - Below Detection Limit

Opinions / Interpretations: The given sample confirms with standard specifications as per IS 10500:2012 for above analyzed parameters.

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 3. Any correction invalidates this test report.
 - 4.*Parameters are not covered under NABL Scope.

- END OF REPORT -


 For ULTRA-TECH
 THANE (W)
 INDIA
 PIN-400 601
Dr. Rahul Kolhapurkar
 (Authorized Signatory)

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Kolkata : +91-33-40089145 / +91-9674488193 - kolkata@ultratech.in **Delhi :** +91-11-40158500 - delhi@ultratech.in

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Tele : +91 22 2547 49 07/ +91 22 2547 62 17 **Email :** lab@ultratech.in **Visit us at :** www.ultratech.in**TEST REPORT****ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION**
Village -Shetphalgade, Taluka-Indapur
District-Pune 413030.**REPORT NO. :** UT/ELS/REPORT/1018/12-2018
ISSUE DATE : 05/12/2018
YOUR REF. : 4500077501
REF. DATE : 12/04/2017**SAMPLE PARTICULARS****Sampling Plan Reference No. :** C-28/10-2018
Date & Time of Sampling : 15/10/2018 at 15:00Hrs
Analysis Starting Date : 16/10/2018
Analysis Completion Date : 23/10/2018
Sample Collected By : ULTRA-TECH
Sample Lab Code : UT/ELS/C-181/10-2018**WASTE WATER SAMPLE ANALYSIS****Sample Type :** Untreated Effluent
Sample Location : ETP Inlet
Sample Quantity & Packing Details : 1L In Plastic Container for all parameters

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	pH	IS 3025 (Part 11) : 1983	6.8	-
2.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	820	mg/L
3.	Total Suspended Solids	IS 3025 (Part 17) : 1984	108	mg/L
4.	Sulphate as SO ₄ ²⁻	APHA 22 nd Ed. 4500- SO ₄ ²⁻ E	240	mg/L
5.	Chlorides as Cl ⁻	IS 3025 (Part 32) : 1988	188	mg/L
6.	Oil & Grease	IS: 3025 (Part 39) : 1991	16	mg/L
7.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 44) : 1993	285	mg/L
8.	Chemical Oxygen Demand	IS 3025 (Part 58) : 2006	984	mg/L

BDL: Below Detection Limit**DL: Detection Limit****Opinions / Interpretations:** NIL**Note:**
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For ULTRA-TECH

THANE (W)
INDIA
PIN-400 601

Dr. Rahul Kolhapurkar
(Authorized Signatory)

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TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION

Village -Shetphalgade, Taluka-Indapur

District-Pune 413030.

REPORT NO. : UT/ELS/REPORT/1019/12-2018**ISSUE DATE :** 05/12/2018**YOUR REF. :** 4500077501**REF. DATE :** 12/04/2017**SAMPLE PARTICULARS****Sampling Plan Reference No. :** C-28/10-2018
Date & Time of Sampling : 15/10/2018 at 14:55Hrs
Analysis Starting Date : 16/10/2018
Analysis Completion Date : 23/10/2018
Sample Collected By : ULTRA-TECH
Sample Lab Code : UT/ELS/C-182/10-2018**WASTE WATER SAMPLE ANALYSIS****Sample Type :** Treated Effluent
Sample Location : ETP Outlet
Sample Quantity & Packing Details : 1L In Plastic Container for all parameters

Sr. No.	Test Parameter	Test Method	Test Result	Unit
9.	pH	IS 3025 (Part 11) : 1983	7.4	-
10.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	420	mg/L
11.	Total Suspended Solids	IS 3025 (Part 17) : 1984	10	mg/L
12.	Sulphate as SO ₄ ²⁻	APHA 22 nd Ed. 4500- SO ₄ ²⁻ -E	92	mg/L
13.	Chlorides as Cl ⁻	IS 3025 (Part 32) : 1988	69	mg/L
14.	Oil & Grease	IS: 3025 (Part 39) : 1991	BDL [DL=10]	mg/L
15.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 44) : 1993	7.2	mg/L
16.	Chemical Oxygen Demand	IS 3025 (Part 58) : 2006	24	mg/L

BDL: Below Detection Limit **DL: Detection Limit**

Opinions / Interpretations: NIL**Note:**
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TEST REPORT

ISSUED TO: M/s. BARAMATI AGRO LTD SUGAR DIVISION
Village -Shetphalgade, Taluka-Indapur
District-Pune 413030.

REPORT NO. : UT/ELS/REPORT/1020/12-2018
ISSUE DATE : 05/12/2018
YOUR REF. : 4500077501
REF. DATE : 12/04/2017

SAMPLE PARTICULARS :

Sampling Plan Ref. No. : C-28/10-2018
Sample Registration Date : 16/10/2018
Date & Time of Sampling : 15/10/2018 at 15:15 Hrs.
Analysis Starting Date : 16/10/2018
Analysis Completion Date : 03/11/2018
Sample Collected By : ULTRA-TECH
Sample Lab Code : UT/ELS/C-183/10-2018

SOIL QUALITY MONITORING

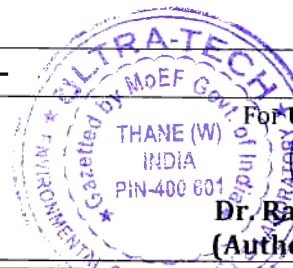
Sample Type : Surface Soil (at 15cm depth)
Sample Location : Near Main Gate
Sample Quantity & Packing Details : 1kg In Plastic Bag Contained in Zip Lock Bag

Sr. No.	Test Parameter	Test Methods	Test Result	Unit
1.	Colour*	-	Brown	-
2.	Moisture Content	IS:2720 (Part 2) : 1973	7.8	%
3.	Bulk Density	UT/LQMS/SOP/S03	1144	kg/m ³
4.	Organic Matter	IS:2720 (Part 22) : 1972	1.1	%
5.	Total Organic Carbon	IS:2720 (Part 22) : 1972	0.6	%
6.	pH	IS:2720 (Part 26) : 1987	7.2	-
7.	Conductivity(1:2soil:Water Extract)	IS:14767- 2000	0.908	mS/cm
8.	Salinity (1:2 soil: Water Extract)*	Calculated in terms of Total Dissolved Solids	563	mg/L
9.	Sodium as Na (Water Extractable)*	UT/LQMS/SOP/S19	246	mg/kg
10.	Magnesium as Mg (Water Extractable)*	UT/LQMS/SOP/S22	72	mg/kg
11.	Chlorides as Cl (Water Extractable)*	UT/LQMS/SOP/S23	87	mg/kg
12.	Sulphate as SO ₄ ²⁻ (Water Extractable)*	UT/LQMS/SOP/S24	169	mg/kg
13.	Sodium Adsorption Ratio*	UT/LQMS/SOP/S26	1.2	(meq/kg) ^{1/2}
14.	Cation Exchange Capacity	USEPA 846 9080	28.6	meq/100g
15.	Water Holding Capacity	ASTM- T7367-07	58.3	%
16.	Available Boron as B (Available)	UT/LQMS/SOP/S27	0.6	mg/kg
17.	Phosphorous as P ₂ O ₅ (Available)	UT/LQMS/SOP/S28	81	kg/ha
18.	Potassium as K ₂ O (Available)	UT/LQMS/SOP/S29	378	kg/ha
19.	Nitrogen as N (Available)	UT/LQMS/SOP/S30	260	Kg/ha
20.	Iron as Fe	USEPA SW846 7380	53168	mg/kg
21.	Zinc as Zn	USEPA SW846 7950	78	mg/kg

Opinions / Interpretations: NIL

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