Vapi, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-8238 Page 1 of 5

Validity 01.01.2019 to 31.12.2020 Last Amended on --

"In view of the transition for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020"

SI	Product / Material	Specific Test Performed	Test Method Specification	Range of Testing /	-1
, OI.	, i ioduct / material	, opecine restrictioniled	, rest method opecinication	, italige of resulig i	
1	of Tool	1	I amalmat webiah taata aya	Limite of Detection	- 1
1	of Test	1	against which tests are	· Limits of Detection	- 1
			1 3		

## **CHEMICAL TESTING**

l.	WATER			
1.	Drinking Water	Colour	IS 3025 (Part 4)	1 Co-Pt units to 50 Co-Pt units
· · · · · · · · · · · · · · ·		Turbidity	APHA 2130 B IS 3025 (Part 10)	1 NTU to 100 NTU
· · · · · · · · · · · · · ·		Total Dissolved Solids	APHA 2540 C IS 3025 (Part 16)	5 mg/l to 5000 mg/l
i !	 	Nitrite	IS 3025 (Part 34)	1 mg/l to 100 mg/l
! !	 	Sulphate	IS 3025 (Part 24)	5 mg/l to 500 mg/l
r ! !	 	Chloride	IS 3025 (Part 32)	5 mg/l to 2000 mg/l
! ! L	! ! L	!	APHA 4500Cl B	
! !	I I	Alkalinity	IS 3025 (Part 23)	2.0 mg/l to 1500 mg/l
! !	 	Calcium	IS 3025 (Part 40)	5 mg/l to 250 mg/l
! !	I I	Magnesium	IS 3025 (Part 46)	2.0 mg/l to 250 mg/l
! ! ! !		Total Hardness	IS 3025 (Part 21)	5.0 mg/l to 1500 mg/l
II.	RESIDUES IN WATI	ER		
1.	Drinking Water	<sup>L</sup> Zinc	IS 3025 (Part 49)	0.5 mg/l to 10.0 mg/l
! !	 	Iron	IS 3025 (Part 53)	1 mg/l to 50 mg/l
, ! !	   	Lead	IS 3025 (Part 47)	0.5 mg/l to 10.0 mg/l
, ! !	   	Arsenic	IS 3025 (Part 37)	0.1 mg/l to 10.0 mg/l
	   	Total Phenol	IS 3025 (Part 43)	0.5 mg/l to 50 mg/l
	 	Cyanide	IS 3025 (Part 27)	0.5 mg/l to 2 mg/l
 ! !		Fluoride	IS 3025 (Part 60)	0.5 mg/l to 10.0 mg/l

Deepak Kumar Sharma Convenor Anuja Anand Program Manager

Vapi, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-8238 Page 2 of 5

Validity 01.01.2019 to 31.12.2020 Last Amended on --

"In view of the transition for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020"

SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are	Range of Testing / Limits of Detection
		Cadmium	CPCB Guide Manual Water and waste water analysis 28.3 B	0.5 mg/l to 5.0 mg/l
!	! ! !	Boron	IS 3025 (Part 57)	1 mg/l to 10 mg/l
III.	POLLUTION & ENVIRONMENT			
1.	Waste Water/Industrial	pH	IS 3025 (Part 11) APHA 4500 H⁺	2 to 12
	Effluent Sewage	Temperature	IS 3025 (Part 9) APHA 2550 B	5 °C to 60 °C
		Colour	IS 3025 (Part 4)	2 Hazen to 99 Hazen
		Turbidity	IS 3025 (Part 10	0.1 NTU to 200 NTU
		Conductivity	IS 3025 (Part 14)	0.2 mS/cm to 200 mS/cm
		Chloride	IS 3025 (Part 32) APHA 4500 Cl B	5 mg/l to 30000 mg/l
         		Chemical Oxygen Demand	IS 3025 (Part 58) APHA 5220 B	5 mg/l to 95000 mg/l
     		Biochemical Oxygen Demand	IS 3025 (Part 44)	10 mg/l to 25000 mg/l
         		Total Dissolved Solids	IS 3025 (Part 16) APHA 2540 C	5 mg/l to 50000 mg/l
         		Total Suspended Solids	IS 3025 (Part 17) APHA 2540 D	5 mg/l to 25000 mg/l
         		Dissolved Oxygen	IS 3025 (Part 38) APHA 4500 O	0.5 mg/l to 10 mg/l
		Total Solids	IS 3025 (Part 15) APHA 2540 B	10 mg/l to 50000 mg/l
r 1 1 1 1 1 1 1		Ammonical Nitrogen	IS 3025 (Part 34) APHA 4500 NH <sub>3</sub> B & C	0.5 mg/l to 1000 mg/l

Vapi, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-8238 Page 3 of 5

Validity 01.01.2019 to 31.12.2020 Last Amended on --

"In view of the transition for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020"

SI.	Product / Material	Specific Test Performed	Test Method Specification	
! ! !	of Test		against which tests are	Limits of Detection
		Acidity	IS 3025 (Part 22)	0·5 mg/l to 500 mg/l
! !		Alkalinity	IS 3025 (Part 23)	5 mg/l to 2000 mg/l
i !		Total Hardness	IS 3025 (Part 21)	5.0 mg/l to 2000 mg/l
I I L	   	Calcium Hardness	IS 3025 (Part 40)	4.0 mg/l to 1000 mg/l
! ! 	   	Magnesium Hardness	IS 3025 (Part 21)	4.0 mg/l to 1000 mg/l
! ! 	   	Calcium		2 mg/l to 500 mg/l
! ! 	   	Magnesium	IS 3025 (Part 46)	2.0 mg/l to 500 mg/l
! ! 	   	Total Phenol		0.5 mg/l to 100 mg/l
! ! 	   			0.5 mg/l to 50 mg/l
! ! b = = = = = :	   	*		0.5 mg/l to 20.0 mg/l
! ! • :	   		IS 3025 (Part 24)	1 mg/l to 25000 mg/l
! ! <b>!</b>	   	A		1 mg/l to 1000 mg/l
! ! <b>!</b>	   	<b></b>		1 mg/l to 100 mg/l
! ! <b>!</b>	   			1.0 mg/l to 100 mg/l
! ! 	   	A		0.5 mg/l to 10.0 mg/l
! ! b	   	**		0.1 mg/l to 100.0 mg/l
1 1 h	   	Arsenic	IS 3025 (Part 37)	0.1 mg/l to 10.0 mg/l
		Nickel	IS 3025 (Part 54)	1.0 mg/l to 150 mg/l
; }	   	! #	APHA 3111 B	
		Cadmium	IS 3025 (Part 41)	0.5 mg/l to 10.0 mg/l
		i +	APHA 3111 B	
		<b></b>	IS 3025 (Part 47)	0.5 mg/l to 10.0 mg/L
		Zinc	IS 3025 (Part 49)	0.5 mg/l to 10.0 mg/l
		*		1 mg/l to 100 mg/l
: : :		*		1 mg/l to 100 mg/l
i ! :			IS 3025 (Part 35)	0.5 mg/l to 10.0 mg/l
	 	Aluminum	IS 3025 (Part 55)	1 mg/l to 100 mg/l
		Nitrate	IS 3025 (Part 34)	0.1 mg/l to 250 mg/l
IV.	ATMOSPHERIC POI	LUTION	L	

Deepak Kumar Sharma Convenor

Vapi, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-8238 Page 4 of 5

Validity 01.01.2019 to 31.12.2020 Last Amended on --

"In view of the transition for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020"

SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are	Range of Testing / Limits of Detection
	¦ UI 1621	i	against which tests are	Limits of Detection
		I D. 4		
1.	Ambient Air	PM <sub>10</sub>	IS 5182 (Part 23)	12 μg/m³ to 800 μg/m³
	i !	PM <sub>2.5</sub>	Guidelines for Manual	12 μg/m³ to 400 μg/m³
	! ! !	! !	Sampling & Analysis Vol. I	
	1 1 1	1	(May-2011):CPCB	
	i *	i	Page No.:15-30	
	 	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part 2)	9 μg/m³ to 200 μg/m³
	: :		IS 5182 (Part 5 & 6)	6 μg/m³ to 300 μg/m³
! ! •	: ! *	*	IS 5182 (Part 19)	20 μg/m³ to 2000 μg/m³
   	! ! *	Hydrogen Sulphide	IS 5182 (Part 7)	10 μg/m³ to 50 μg/m³
	1 1 1	Ammonia	Guidelines for Manual	2 μg/m³ to 600 μg/m³
	! !		Sampling & Analysis Vol.I	
	! !	i i	(May-2011):CPCB	
   	! ! *	1 1 4	Page No.:35-38	! ! *
   	! ! &	LCS₂	IS 5182 (Part 20)	600 μg/m³ to 2100 μg/m³
   	1 1 <b>+</b>	Ozone	IS 5182 (Part 9)	20 μg/m³ to 200 μg/m³
2.	Stack Emissions	PM	IS 11255 (Part 1)	10 mg/Nm³ to
! ! !	1 1 <b>4</b>	1 1		500 mg/Nm³
	! ! !	SO <sub>2</sub>	IS 11255 (Part 2)	5 mg/Nm <sup>3</sup> to
	! ! 	1		1000 mg/Nm <sup>3</sup>
	! ! !	NO <sub>x</sub>	IS 11255 (Part 7)	5 mg/Nm <sup>3</sup> to
   	! ! 	1		400 mg/Nm³
	! ! !	Ammonia	IS 11255 (Part 6)	5 mg/Nm <sup>3</sup> to
   	! ! 	1		500 mg/Nm³
   	I I	¦ H₂S	IS 11255 (Part 4)	5 mg/Nm <sup>3</sup> to 50 mg/Nm <sup>3</sup>
	I I	CS₂	IS 11255 (Part 4)	5 mg/Nm <sup>3</sup> to 50 mg/Nm <sup>3</sup>
		CO <sub>2</sub>	IS 13270 (Part 26)	0.1 % to 20 %
   	 	!	USEPA Method 3A 1999	
<b></b>	T	Carbon Monoxide	IS 13270 (Part 26)	10 mg/Nm³ to
   	! ! **		USEPA Method 10:1996	10000 mg/Nm³

Deepak Kumar Sharma Convenor

Vapi, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-8238 Page 5 of 5

Validity 01.01.2019 to 31.12.2020 Last Amended on --

"In view of the transition for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020"

SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are	Range of Testing / Limits of Detection
	I I	 		0.001 % to 1 %
	I I	Bromine	AE/WP/AIR/16	0.1 mg/Nm³ to 4 mg/Nm³
	 	Hydrogen chloride	AE/WP/AIR/17	0.2 mg/Nm³ to 50 mg/Nm³
	 	Hydrogen bromide	AE/WP/AIR/18	0.3 mg/Nm³ to 50 mg/Nm³
	   	Chlorine	AE/WP/AIR/19	0.5 mg/Nm³ to 5 mg/Nm³