Aarna-2 Tower, Kartarpura Industrial Area, 22 Godam, Jaipur,

Rajasthan

Accreditation Standard ISO/IEC 17025: 2005

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Validity 05.03.2018 to 04.03.2020 Last Amended on --

SI.	Product / Material	Specific Test	Test Method Specification	Range of Testing /	
	of Test	Performed	against which tests are	Limits of Detection	
			performed		

CHEMICAL TESTING

I.	WATER			
1.	Drinking Water, Ground Water & Surface Water	Colour	IS 3025 (Part 4): 1983 (RA 2017) Platinum Cobalt (Visual Compression) Method	5 Hazen to 500 Hazen
		Odour	IS 3025 (Part 5): 1983 (RA 2017)	Qualitative
		Turbidity	IS 3025 (Part 10): 1984 (RA 2017)	1 NTU to 1000 NTU
		рН	IS 3025 (Part 11): 1983 (RA 2017)	2 to12
		Total Hardness (as CaCO ₃)	IS 3025 (Part 21): 2009 (RA 2014) (EDTA Titrimetric Method)	2 mg/l to 1000 mg/l
		Iron (as Fe)	IS 3025 (Part 53): 2003 (RA 2014) (1,10 Phenanthroline Method)	0.1 mg/l to 10 mg/l
		Chloride (as Cl)	IS: 3025 (Part-32) :1988, (RA 2014) (Argentometric Method)	2 mg/l to 1000 mg/l
		Fluoride (as F ⁻)	APHA 4500F (D) 22 nd Edition- 2012 (SPANDS Method)	0.1 mg/l to 25 mg/l
		Total solid	IS 3025 (Part 15): 1984 (RA 2014)	5 mg/l to 10000 mg/l
		Conductivity at 25 °C	IS 3025 (Part 14): 2013	0.1 μS/cm to 1000 μS/cm
		Total suspended solids	IS 3025 (Part 17): 1984 (RA 2017)	1 mg/l to 10000 mg/l

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Sodium (as Na)	IS 3025 (Part 45): 1993 (RA 2014) (Flame Photometry Method)	1 mg/l to 100 mg/l
		Potassium (as K)	IS 3025 (Part 45): 1993 (RA 2014) (Flame Photometry Method)	1 mg/l to100 mg/l
		Total Dissolved Solids (TDS)	IS 3025 (Part 16): 1984 (RA 2017)	5 mg/l to 10,000 mg/l
		Calcium (as Ca)	IS 3025 (Part 40): 1991 (RA 2014) (EDTA Titrimetric Method)	2 mg/l to 1000 mg/l
		Magnesium (as Mg)	IS 3025 (Part 46): 1994 (RA 2014) (Volumetric Method Using EDTA)	2 mg/l to 1000 mg/l
		Sulphate (as SO ₄)	IS 3025 (Part 24): 1986 (RA 2014) (Turbidity Method)	2 mg/l to 200 mg/l
		Nitrate (as NO ₃)	IS 3025 (Part 34): 1988 (RA 2014) (Chromotropic Acid Method)	2 mg/l to100 mg/l
		Alkalinity (as HCO₃)	IS 3025 (Part 23): 1986 (RA 2014)	2 mg/l to 1000 mg/l
		Phosphorus (as PO4)	IS 3025 (Part 31): 1988 (RA 2014) (Vanadomolybdo- Phosphoric Acid Method)	0.4 mg/l to100 mg/l
II.	POLLUTION & ENV	IRONMENT		
1.	Soil	Potassium	GVTES/STP/SL/01/3.9 Issue No01 Issue Dated-05/04/2014	1 mg/kg to 1000 mg/kg

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
["	Sodium	GVTES/STP/SL/01/3.10	1 mg/kg to1000 mg/kg
			Issue No01	
		<u> </u>	Issue Dated-05/04/2014	
		Calcium	GVTES/STP/SL/01/3.11	4 mg/kg to 10000 mg/kg
			Issue No01	
		<u> </u>	Issue Dated-05/04/2014	<u></u>
		Magnesium	GVTES/STP/SL/01/3.11	4 mg/kg to 5000 mg/kg
			Issue No01	
		<u> </u>	Issue Dated-05/04/2014	
		Chloride	GVTES/STP/SL/01/3.8	20 mg/kg to10000 mg/kg
			Issue No01	
			Issue Dated-05/04/2014	<u> </u>
		Organic Matter	IS 2720 (Part 22): 1972	0.05 % to 4 %
		<u> </u>	(RA 2015)	
		Moisture	IS 2720 (Part 2): 2010	1 % to 70 %
			(RA 2015)	
		рН	IS 2720 (Part 26): 1987	2 to 12
		<u> </u>	(RA 2011)	
		Conductivity	IS 2720 (Part 21): 1977	0.1 μS/cm to 10000 μS/cm
			(RA 2016)	
		Specific Gravity	IS 2720 (Part 3): 1980	1 to 3
		(for Fine Sand)	(RA 2011)	
		Specific Gravity (for	IS 2720 (Part-3) :1980	1 to 3
		Course & Medium Sand)	(RA2011)	
		Bulk Density	IS 1462:1985 (RA2006)	0.5 gm/ml to 2 gm/ml
		Total Nitrogen	IS 14684:1999 (RA2014)	50 mg/kg to 5000 mg/kg
		Phosphorous	GVTES/STP/SL/01/3.12	5 mg/kg to 5000 mg/kg
			Issue No01	
			Issue Dated-05/04/2014	
		Grain Size Analysis	IS 2720 (Part 4): 1985	Silt:0 to100 %
		(Texture)	(RA 2015)	Clay:0 to100 %
		<u> </u>	,	Sand:0 to100 %

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2.	Waste Water (Effluent/ Sewage)	рН	IS 3025 (Part 11): 1983 (RA 2017)	2 to 12
		BOD at 27°C for 3 days	IS 3025 (Part 44): 1993 (RA 2014)	2 mg/l to 1000 mg/l
		COD	IS 3025 (Part 58): 2006 (RA 2017)	4 mg/l to 2000 mg/l
		DO	IS 3025 (Part 38): 1989 (RA 2014) (Titrimetric Method)	1 mg/l to 10 mg/l
		Oil & Grease	IS 3025 (Part 39): 1991 (RA 2014) (Gravimetric Method)	1 mg/l to 100 mg/l
III.	ATMOSPHERIC PO	LLUTION		
1.	Ambient Air	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6): 2006 (RA 2017) Modified Jacob & Hochheiser (Na-Arsenite)	5 μg/m³ to 250 μg/m³
		Sulphur dioxide as SO ₂	IS 5182 (Part 2): 2001 (RA 2017) (West and Gaeke Method)	5 μg/m³ to 250 μg/m³
		Particulate Matter (PM 10)	IS 5182 (Part 23): 2006 (RA 2017) (Gravimetric Method)	10 μg/m³ to 1000 μg/m³
		Particulate Matter (PM 2.5)	Lab SOP No-GVTES/ STP/ AIR/01/4.1 Issue No01 Issue Dated-05/04/2014 CPCB, NAAQMS (Vol- I) 2011	10 μg/m³ to 500 μg/m³

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2.	Ambient Noise Levels (Excluding Vibration)	Ambient Noise Level dB (A)	IS 9989:1981	30 dB(A) to 130 dB(A)
3.	Stack Emission	Particulate Matter	IS 11255 (Part 1): 1985 (RA 2014)	1 mg/Nm³ to1000 mg/Nm³
		Sulphur dioxide	IS 11255 (Part 2): 1985 (RA 2014)	3 mg/Nm³ to1000 mg/Nm³
		Oxides of Nitrogen	IS 11255 (Part 7): 2005 (RA 2017)	2 mg/Nm³ to 500 mg/Nm³