



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



SCOPE OF ACCREDITATION

Laboratory Name SOPHISTICATED ANALYTICAL INSTRUMENTS LABORATORIES SOCIETY,
THAPAR TECHNOLOGY CAMPUS, BHADSON ROAD, PATIALA, PUNJAB, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-5631 Page No. : 1 / 14

Validity 31/03/2019 to 30/03/2021 Last Amended on 04/05/2019

S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
Permanent Facility					
1	BIOLOGICAL- WATER	Drinking Water	E-coli	IS: 1622: 1981	Qualitative
2	BIOLOGICAL- WATER	Drinking Water	Faecal Coliform	IS: 1622 : 1981	Qualitative
3	BIOLOGICAL- WATER	Drinking Water	Total Coliform	IS: 1622: 1981	2 MPN/100ml to 1600 MPN/100ml
4	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient air	Lead	IS 5182 (Part 22): 2004	0.2 µg/m ³ to 10 µg/m ³
5	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Nitrogen oxides	IS 5182 (Part 6): 2006	4 µg/m ³ to 200 µg/m ³
6	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter (PM ₁₀)	IS:5182 (Part 23): 1999	20 µg/m ³ to 500 µg/m ³
7	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Sulphur dioxide	IS 5182 (Part 2): 2001	10 µg/m ³ to 200 µg/m ³
8	CHEMICAL- ATMOSPHERIC POLLUTION	Stack emission	Lead	SAI/SOP/02/03: 2013	0.2 µg/Nm ³ to 20 µg/Nm ³
9	CHEMICAL- ATMOSPHERIC POLLUTION	Stack emission	Particulate Matter (PM)	IS 11255 (Part 1): 1985	10 mg/Nm ³ to 2000 mg/Nm ³
10	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water	Phosphorous	IS 3025 (Part 31): 1988	1 mg/l to 20 mg/l
11	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Chemical Oxygen Demand	APHA 23rd Edn 5220 B: 2017	05 mg/l to 2000 mg/l



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12	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Chloride	IS 3025 (Part 32): 1988	5.0 mg/l to 500 mg/l
13	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Hexavalent Chromium	APHA 23rd Edn 3500Cr B: 2017	0.05 mg/l to 20 mg/l
14	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Hexavalent Chromium	IS 3025 (Part 52): 2003	0.05 mg/l to 20 mg/l
15	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	pH	APHA 23rd Edn 4500- H+B: 2017	2.0 to 12.0
16	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	pH	IS 3025 (Part 11): 1983	2.0 to 12.0
17	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Phosphorus	APHA 23rd Edn 4500- PC: 2017	1.0 mg/l to 20.0 mg/l
18	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Sulphate	IS 3025 (Part 24): 1986	10 to 1000 mg/l
19	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Total Chromium	APHA 23rd Edn 3500Cr B: 2017	0.05 mg/l to 20 mg/l
20	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Total Dissolved Solids	APHA 23rd Edn 2540- C: 2017	10 mg/l to 10000 mg/l
21	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Total Dissolved Solids	IS 3025 (Part 16): 1984	10 mg/l to 10000 mg/l



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22	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Total Suspended Solids	APHA 23rd Edn 2540-D: 2017	10 mg/l to 1000 mg/l
23	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluent/Sewage)	Total Suspended Solids	IS 3025 (Part 17): 1984	10 mg/l to 1000 mg/l
24	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Flouride	IS 3025 (Part 60): 2008	0.5 mg/l to 20 mg/l
25	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Alkalinity	IS 3025 (Part 23): 1986	5 mg/l to 1000 mg/l
26	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Ammoniacal Nitrogen as N	IS 3025 (Part 34): 1988	1 mg/l to 100 mg/l
27	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Arsenic	IS 3025 (Part 37): 1988	5.0 µg/l to 20.0 µg/l
28	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Arsenic	APHA 23rd Edn 3114 C: 2017	5.0 µg/l to 20.0 µg/l
29	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Biochemical Oxygen Demand (BOD) 3 days	IS 3025 (Part 44): 1993	5 mg/l to 200 mg/l
30	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Cadmium	APHA 23rd Edn 3111 B: 2017	0.1 mg/l to 2.0 mg/l
31	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Calcium	APHA 23rd Edn 3500 Ca B: 2017	2.0 mg/l to 250 mg/l



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32	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Calcium	IS 3025 (Part 40): 1991	2.0 mg/l to 250 mg/l
33	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Chemical Oxygen Demand	IS 3025 (Part 58): 2006	05 mg/l to 2000 mg/l
34	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Cobalt	APHA 23rd Edition 3111 B: 2017	0.3 mg/l to 20 mg/l
35	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Copper	IS 3025 (Part 42): 1992	0.05 mg/l to 20 mg/l
36	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Copper	APHA 23rd Edn 3111 B: 2017	0.05 mg/l to 20 mg/l
37	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Cyanide	APHA 23rd Edn 4500 CN F: 2017	0.2 mg/l to 20 mg/l
38	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Cyanide	IS: 3025 (Part 27): 1986	0.2 mg/l to 20 mg/l
39	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Fluoride	APHA 23rd Edn 4500F- C: 2017	0.5 mg/l to 20 mg/l
40	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Iron	IS 3025 (Part 53): 2003	0.20 mg/l to 50 mg/l
41	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Iron	APHA 23rd Edn 3111 B: 2017	0.20 mg/l to 50 mg/l



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42	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Kjeldahl Nitrogen as N	APHA 23rd Edn 4500 Norg B: 2017	1 mg/l to 100 mg/l
43	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Kjeldahl Nitrogen as N	IS: 3025 (Part 34): 1988	1 mg/l to 100 mg/l
44	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Lead	IS: 3025 (Part 47): 1994	0.05 mg/l to 20 mg/l
45	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Lead	APHA 23rd Edn 3111 B: 2017	0.05 mg/l to 20 mg/l
46	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Magnesium	APHA 23rd Edn 3111 B: 2017	2.0 mg/l to 200 mg/l
47	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Magnesium	IS 3025 (Part 46): 1994	2.0 mg/l to 200 mg/l
48	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Manganese	APHA 23rd Edition 3111 B: 2017	0.10 mg/l to 5.0 mg/l
49	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Mercury	APHA 23rd Edn 3112 B: 2017	1.0 µg/l to 10.0 µg/l
50	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Mercury	IS 3025 (Part 48): 1994	1.0 µg/l to 10.0 µg/l
51	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Nickel	IS 3025 (Part 54): 2003	1.0 mg/l to 20 mg/l



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52	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Nickel	APHA 23rd Edn 3111 B: 2017	0.3 mg/l to 20 mg/l
53	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Oil and Grease	APHA 23rd Edn 5520 B: 2017	5 mg/l to 100 mg/l
54	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Oil and Grease	IS 3025 (Part 39): 1991	5 mg/l to 100 mg/l
55	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Phenolic Compounds	IS 3025 (Part 43): 1992	0.1 mg/l to 5.0 mg/l
56	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Phenolic Compounds	APHA 23rd Edn 5530 D: 2017	0.1 mg/l to 5.0 mg/l
57	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Potassium	APHA 23rd Edn 3500 K B: 2017	1.0 mg/l to 200 mg/l
58	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Potassium	IS: 3025 (Part 45): 1993	1.0 mg/l to 200 mg/l
59	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Sodium	APHA 23rd Edn 3500 Na B: 2017	1.0 mg/l to 500 mg/l
60	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Sodium	IS 3025 (Part 45): 1993	1.0 mg/l to 200 mg/l
61	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Soluble Silica	APHA 23rd Edn 4500SiO2 C: 2017	0.4 mg/l to 25 mg/l



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62	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Soluble Silica	IS 3025 (Part 35): 1988	0.4 mg/l to 25 mg/l
63	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Sulphate	APHA 23rd Edn 4500 SO4-2 C: 2017	10 mg/l to 1000 mg/l
64	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Total chromium	IS 3025 (Part 52): 2003	0.05 mg/l to 20 mg/l
65	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Total Hardness	IS 3025 (Part 21): 2009	5 mg/l to 1000 mg/l
66	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Total Hardness	APHA 23rd Edn 2340 C: 2017	5 mg/l to 1000 mg/l
67	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Zinc	APHA 23rd Edn 3111 B: 2017	0.05 mg/l to 20 mg/l
68	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)	Zinc	IS 3025 (Part 49): 1994	0.05 mg/l to 20 mg/l
69	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)v	Cadmium	IS 3025 (Part 41): 1992	0.1 mg/l to 2.0 mg/l
70	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Effluents/Sewage)Was te Water (Effluents/Sewage)	Alkalinity	APHA 23rd Edn 2320 B: 2017	5 mg/l to 1000 mg/l



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71	CHEMICAL- POLLUTION & ENVIRONMENT	Water Water (Effluents/Sewage)	Phosphorus	IS 3025 (Part 31): 1988	1.0 mg/l to 20.0 mg/l
72	CHEMICAL- SOLID FUELS	Coal	Ash	IS 1350 (Part 1): 1984	0.5 % to 70.0 %
73	CHEMICAL- SOLID FUELS	Coal	Calorific Value	IS 1350 (Part 2): 1970	2000 kcal/kg to 8500 kcal/kg
74	CHEMICAL- SOLID FUELS	Coal	Fixed Carbon	IS 1350 (Part 1): 1984	Qualitative((1.0%-99.0%))
75	CHEMICAL- SOLID FUELS	Coal	Moisture	IS 1350 (Part 1): 1984	0.5 % to 40.0 %
76	CHEMICAL- SOLID FUELS	Coal	Total Sulphur	IS 1350 (Part 3): 1969	0.2 % to 10.0 %
77	CHEMICAL- SOLID FUELS	Coal	Volatile Matter	IS 1350 (Part 1): 1984	1.0 % to 60.0 %
78	CHEMICAL- SOLID FUELS	Coke	Ash	IS 1350 (Part 1): 1984	0.5 % to 70.0 %
79	CHEMICAL- SOLID FUELS	Coke	Calorific Value	IS 1350 (Part 2): 1970	2000 kcal/kg to 8500 kcal/kg
80	CHEMICAL- SOLID FUELS	Coke	Fixed Carbon	IS 1350 (Part 1): 1984	Qualitative((1.0% - 99.0%))
81	CHEMICAL- SOLID FUELS	Coke	Moisture	IS 1350 (Part 1): 1984	0.5 % to 40.0
82	CHEMICAL- SOLID FUELS	Coke	Total Sulphur	IS 1350 (Part 3): 1969	0.2 % to 10 %
83	CHEMICAL- SOLID FUELS	Coke	Volatile Matter	IS 1350 (Part 1): 1984	1.0 % to 60.0 %
84	CHEMICAL- WATER	Drinking Water	Alkalinity	APHA 23rd Edn 2320 B: 2017	5 mg/l to 500 mg/l



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85	CHEMICAL- WATER	Drinking Water	Alkalinity	IS 3025 (Part 23): 1986	5 mg/l to 500 mg/l
86	CHEMICAL- WATER	Drinking Water	Arsenic	IS 3025 (Part 37): 1988	5.0 µg/l to 20 µg/l
87	CHEMICAL- WATER	Drinking Water	Arsenic	APHA 23rd Edn 3114 C: 2017	5.0 µg/l to 20 µg/l
88	CHEMICAL- WATER	Drinking Water	Calcium	APHA 23rd Edn 3500 Ca B: 2017	2 mg/l to 250 mg/l
89	CHEMICAL- WATER	Drinking Water	Calcium	IS 3025 (Part 40): 1991	2.0 mg/l to 250 mg/l
90	CHEMICAL- WATER	Drinking Water	Chloride	IS 3025 (Part 32): 1998	5 mg/l to 500 mg/l
91	CHEMICAL- WATER	Drinking Water	Colour	IS 3025 (Part 4): 1983	1 Pt-Co to 20 Pt-Co
92	CHEMICAL- WATER	Drinking Water	Copper	IS 3025 (Part 42): 1992	0.05 mg/l to 5.0 mg/l
93	CHEMICAL- WATER	Drinking Water	Copper	APHA 23rd Edn 3111 B: 2017	0.05 mg/l to 5.0 mg/l
94	CHEMICAL- WATER	Drinking Water	Cyanide	IS 3025 (Part 27): 1986	0.05 mg/l to 5 mg/l
95	CHEMICAL- WATER	Drinking Water	Cyanide	APHA 23rd Edn 4500 CN F: 2017	0.05 mg/l to 5 mg/l
96	CHEMICAL- WATER	Drinking Water	Fluoride	IS 3025 (Part 60): 2008	0.5 mg/l to 20 mg/l
97	CHEMICAL- WATER	Drinking Water	Fluoride	APHA 23rd Edn 4500F-C: 2017	0.5 mg/l to 20 mg/l
98	CHEMICAL- WATER	Drinking Water	Hexavalent Chromium	APHA 23rd Edn 3500Cr B: 2017	0.05 mg/l to 2.0 mg/l
99	CHEMICAL- WATER	Drinking Water	Hexavalent Chromium	IS 3025 (Part 52): 2003	0.05 mg/l to 2.0 mg/l
100	CHEMICAL- WATER	Drinking Water	Iron	APHA 23rd Edn 3111 B: 2017	0.20 mg/l to 5.0 mg/l
101	CHEMICAL- WATER	Drinking Water	Iron	IS 3025 (Part 53): 2003	0.20 mg/l to 5.0 mg/l
102	CHEMICAL- WATER	Drinking Water	Magnesium	IS 3025 (Part 46): 1994	2.0 mg/l to 200 mg/l



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103	CHEMICAL- WATER	Drinking Water	Magnesium	APHA 23rd. Edn.3111 B & 3500 Mg B: 2017	2 mg/l to 200 mg/l
104	CHEMICAL- WATER	Drinking Water	Manganese	APHA 23rd Edn 3111 B: 2017	0.10 mg/l to 1.0 mg/l
105	CHEMICAL- WATER	Drinking Water	Mercury	APHA 23rd Edn 3112 B: 2017	1.0 µg/l to 10 µg/l
106	CHEMICAL- WATER	Drinking Water	Mercury	IS 3025 (Part 48): 1994	1.0 µg/l to 10 µg/l
107	CHEMICAL- WATER	Drinking Water	Nitrate	APHA 23rd Edn 4500 NO3 B: 2017	1 mg/l to 50 mg/l
108	CHEMICAL- WATER	Drinking Water	pH	APHA 23rd. Edn. 4500-H+B: 2017	4.0 to 10.0
109	CHEMICAL- WATER	Drinking Water	pH	IS 3025 (Part 11): 1983	4.0 to 10.0
110	CHEMICAL- WATER	Drinking Water	Sulphate	IS 3025 (Part 24): 1986	10 mg/l to 500 mg/l
111	CHEMICAL- WATER	Drinking Water	Sulphate	APHA 23rd Edn 4500SO4 -2 C: 2017	10 mg/l to 500 mg/l
112	CHEMICAL- WATER	Drinking Water	Total Chromium	IS 3025 (Part 52): 2003	0.05 mg/l to 2.0 mg/l
113	CHEMICAL- WATER	Drinking Water	Total Chromium	APHA 23rd Edn 3500Cr B: 2017	0.05 mg/l to 2.0 mg/l
114	CHEMICAL- WATER	Drinking Water	Total Dissolved Solids	IS 3025 (Part 16): 1984	10 mg/l to 5000 mg/l
115	CHEMICAL- WATER	Drinking Water	Total Dissolved Solids	APHA 23rd Edn 2540 C: 2017	10 mg/l to 5000 mg/l
116	CHEMICAL- WATER	Drinking Water	Total Hardness	IS 3025 (Part 21): 2009	5 mg/l to 1000 mg/l
117	CHEMICAL- WATER	Drinking Water	Total Hardness	APHA 23rd Edn 2340 C: 2017	5 mg/l to 1000 mg/l
118	CHEMICAL- WATER	Drinking Water	Turbidity	APHA 23rd Edn 2130 B: 2017	1 NTU to 20 NTU
119	CHEMICAL- WATER	Drinking Water	Turbidity	IS 3025 (Part 10): 1984	1 NTU to 20 NTU



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120	CHEMICAL- WATER	Drinking Water	Zinc	APHA 23rd Edn 3111 B: 2017	0.05 mg/l to 20 mg/l
121	CHEMICAL- WATER	Drinking Water	Zinc	IS 3025 (Part 49): 1994	0.05 mg/l to 20 mg/l
122	CHEMICAL- WATER	Ground Water	Alkalinity	IS 3025 (Part 23): 1986	5 mg/l to 500 mg/l
123	CHEMICAL- WATER	Ground Water	Alkalinity	APHA 23rd Edn 2320 B: 2017	5 mg/l to 500 mg/l
124	CHEMICAL- WATER	Ground Water	Arsenic	IS 3025 (Part 37): 1988	5.0 µg/l to 20 µg/l
125	CHEMICAL- WATER	Ground Water	Arsenic	APHA 23rd Edn 3114 C: 2017	5.0 µg/l to 20 µg/l
126	CHEMICAL- WATER	Ground Water	Calcium	APHA 23rd Edn 3500 Ca B: 2017	2.0 mg/l to 250 mg/l
127	CHEMICAL- WATER	Ground Water	Calcium	IS 3025 (Part 40): 1991	2.0 mg/l to 250 mg/l
128	CHEMICAL- WATER	Ground Water	Chloride	IS 3025 (Part 32): 1988	5 mg/l to 500 mg/l
129	CHEMICAL- WATER	Ground Water	Colour	IS 3025 (Part 4): 1983	1 Pt-Co unit to 20 Pt-Co unit
130	CHEMICAL- WATER	Ground Water	Copper	IS 3025 (Part 42): 1992	0.05 mg/l to 5.0 mg/l
131	CHEMICAL- WATER	Ground Water	Copper	APHA 23rd Edn 3111 B: 2017	0.05 mg/l to 5.0 mg/l
132	CHEMICAL- WATER	Ground Water	Cyanide	IS 3025 (Part 27): 1986	0.05 mg/l to 5 mg/l
133	CHEMICAL- WATER	Ground Water	Cyanide	APHA 23rd Edn 4500 CN F: 2017	0.05 mg/l to 5 mg/l
134	CHEMICAL- WATER	Ground Water	Fluoride	IS 3025 (Part 60): 2008	0.5 mg/l to 20 mg/l
135	CHEMICAL- WATER	Ground Water	Fluoride	APHA 23rd Edn 4500F-C: 2017	0.5 mg/l to 20 mg/l
136	CHEMICAL- WATER	Ground Water	Hexavalent Chromium	IS 3025 (Part 52): 2003	0.05 mg/l to 2.0 mg/l
137	CHEMICAL- WATER	Ground Water	Hexavalent Chromium	APHA 23rd Edn 3500Cr B: 2017	0.05 mg/l to 2.0 mg/l



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Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-5631 Page No. : 12 / 14

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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
138	CHEMICAL- WATER	Ground Water	Iron	IS 3025 (Part 53): 2003	0.20 mg/l to 5.0 mg/l
139	CHEMICAL- WATER	Ground Water	Iron	APHA 23rd Edn 3111 B: 2017	0.20 mg/l to 5.0 mg/l
140	CHEMICAL- WATER	Ground Water	Magnesium	APHA 23rd. Edn.3111 B & 3500 Mg B: 2017	2 mg/l to 200 mg/l
141	CHEMICAL- WATER	Ground Water	Magnesium	IS 3025 (Part 46): 1994	2.0 mg/l to 200 mg/l
142	CHEMICAL- WATER	Ground Water	Manganese	APHA 23rd Edn 3111 B: 2017	0.1 mg/l to 1.0 mg/l
143	CHEMICAL- WATER	Ground Water	Mercury	IS 3025 (Part 48): 1994	1.0 µg/l to 10 µg/l
144	CHEMICAL- WATER	Ground Water	Mercury	APHA 23rd Edn 3112 B: 2017	1.0 µg/l to 10 µg/l
145	CHEMICAL- WATER	Ground Water	Nitrate	APHA 23rd Edn 4500 NO3 B: 2017	1 mg/l to 50 mg/l
146	CHEMICAL- WATER	Ground Water	pH	IS 3025 (Part 11): 1983	4.0 to 10.0
147	CHEMICAL- WATER	Ground Water	pH	APHA 23rd. Edn. 4500-H+B: 2017	4.0 to 10.0
148	CHEMICAL- WATER	Ground Water	Sulphate	APHA 23rd Edn 4500SO4 -2 C: 2017	10 mg/l to 500 mg/l
149	CHEMICAL- WATER	Ground Water	Sulphate	IS 3025 (Part 24): 1986	10 mg/l to 500 mg/l
150	CHEMICAL- WATER	Ground Water	Total Chromium	APHA 23rd Edn 3500Cr B: 2017	0.05 mg/l to 2.0 mg/l
151	CHEMICAL- WATER	Ground Water	Total Chromium	IS 3025 (Part 52): 2003	0.05 mg/l to 2.0 mg/l
152	CHEMICAL- WATER	Ground Water	Total Dissolved Solids	APHA 23rd Edn 2540 C: 2017	10 mg/l to 5000 mg/l
153	CHEMICAL- WATER	Ground Water	Total Dissolved Solids	IS 3025 (Part 16): 1984	10 mg/l to 5000 mg/l
154	CHEMICAL- WATER	Ground Water	Total Hardness	APHA 23rd Edn 2340 C: 2017	5 mg/l to 1000 mg/l



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
155	CHEMICAL- WATER	Ground Water	Total Hardness	IS 3025 (Part 21): 2009	5 mg/l to 1000 mg/l
156	CHEMICAL- WATER	Ground Water	Turbidity	APHA 23rd Edn 2130 B: 2017	1 NTU to 20 NTU
157	CHEMICAL- WATER	Ground Water	Turbidity	IS 3025 (Part 10): 1984	1 NTU to 20 NTU
158	CHEMICAL- WATER	Ground Water	Zinc	IS 3025 (Part 49): 1994	0.05 mg/l to 20 mg/l
159	CHEMICAL- WATER	Ground Water	Zinc	APHA 23rd Edn 3111 B: 2017	0.05 mg/l to 20 mg/l



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
Site Facility					
1	CHEMICAL-ATMOSPHERIC POLLUTION	Stack emission	Carbon monoxide	SAI/SOP/02/02: 2013	1 mg/Nm ³ to 2290 mg/Nm ³
2	CHEMICAL-ATMOSPHERIC POLLUTION	Stack emission	Carbon-di-oxide	SAI/SOP/02/02: 2013	1 % to 20 %
3	CHEMICAL-ATMOSPHERIC POLLUTION	Stack emission	Oxides of Nitrogen	SAI/SOP/02/02: 2013	1 mg/Nm ³ to 1800 mg/Nm ³
4	CHEMICAL-ATMOSPHERIC POLLUTION	Stack emission	Oxygen	SAI/SOP/02/02: 2013	1 % to 20 %
5	CHEMICAL-ATMOSPHERIC POLLUTION	Stack emission	Sulphur dioxide	SAI/SOP/02/02: 2013	1 mg/Nm ³ to 7850 mg/Nm ³