National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : ENVIRONMENTAL LABORATORY - CAIRN OIL & GAS, VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE: NAGANA, BARMER, RAJASTHAN, INDIA

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Ammonia (NH3)	IS 5182 (Part 25)
2	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Nitrogen Oxides (NOx)	IS : 5182 (Part 6)
3	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Ozone (O3)	IS : 5182 (Part 9)
4	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter (PM10)	IS : 5182 (Part 23)
5	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter (PM2.5)	IS 5182 (Part 24)
6	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Sulphur Dioxide (SO2)	IS : 5182 (Part 2)
7	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Noise	Noise	IS: 9989
8	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Rain Fall	SOP-RJON-RX-EML-PRO-0022 issue date 01/01/2021
9	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Relative Humidity	SOP-RJON-RX-EML-PRO-0022 issue date :01/01/2021
10	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Temperature	SOP-RJON-RX-EML-PRO-0022 issue date :01/01/2021
11	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Wind Direction	SOP-RJON-RX-EML-PRO-0022 issue date :01/01/2021
12	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Wind Speed	SOP-RJON-RX-EML-PRO-0022 issue date :01/01/2021
13	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Flue Gas Velocity	IS: 11255 (Part 3)
14	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Nitrogen Oxides (NO2)	IS : 11255 (Part 7)
15	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Particulate Matter (PM)	IS : 11255 (Part 1)
16	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Sulphur Dioxide (SO2)	IS : 11255 (Part 2)
17	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Acidity	IS : 3025 (Part 22)
18	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Bi-Carbonate Alkalinity	IS : 3025 (Part 51)

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19	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Biochemical Oxygen Demand (BOD)	IS : 3025 (Part 44)
20	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Calcium as Ca	IS : 3025 (Part 40)
21	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Carbonate Alkalinity	IS : 3025 (Part 51) - 2001
22	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Chemical Oxygen Demand (COD)	IS : 3025 (Part 58): 2006, RA
23	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Chloride as Cl-	IS : 3025 (Part 32) :1988, RA
24	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Chromium Hexavalent as Cr+6	IS : 3025 (Part 52): 2003
25	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Colour/Appearance	APHA (23rd Edition) 2120-C; 2017
26	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C; 2017
27	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Electrical Conductivity	IS : 3025 (Part 14) - 2013
28	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Fixed Solids	APHA (23rd Edition)2540-E; 2017
29	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Fluoride as F -	APHA (23rd Edition) 4500 F- D
30	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Iron as Fe	IS : 3025 (Part 53) - 2003
31	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Magnesium as Mg	IS : 3025 (Part 46) - 1994
32	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Nitrate (as NO3)	APHA (23rd Edition) 4500 NO3-B; 2017
33	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Oil & Grease	IS : 3025 (Part 39): 1991, RA
34	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	pH Value	IS : 3025 (Part 11): 1983, RA
35	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Phenolic compounds	IS : 3025 (Part 43) - 2003
36	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Phosphorus	APHA (23rd Edition) 4500 P-D; 2017
37	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Residual Free Chlorine	IS : 3025 (Part 26) - 1986

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38	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Silica as SiO2	APHA (23rd Edition) 4500 SiO2-C; 2017
39	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Sulphates as SO4-	APHA (23rd Edition) 4500 SO4-E
40	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Sulphide	IS : 3025 (Part 29): 1986, RA
41	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Temperature	IS : 3025 (Part 9): 1984, RA
42	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Alkalinity	IS : 3025 (Part 23) - 1986
43	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Dissolve Solid	IS : 3025 (Part 16): 1984, RA
44	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Hardness	IS : 3025 (Part 21) - 2009
45	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Solids	IS : 3025 (Part 15) - 1984
46	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Suspended Solid (TSS)	IS : 3025 (Part 17): 1984, RA
47	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Volatile Solids	APHA (23rd Edition) 4500 O-C; 2017
48	CHEMICAL- SOIL AND ROCK	Soil	Electrical Conductivity	IS 14767: 2000, RA
49	CHEMICAL- SOIL AND ROCK	Soil	pH Value	IS 2720 (Part 26):1987, RA
50	CHEMICAL- SOIL AND ROCK	Soil	Water Content	IS 2720(Part 2):1973, RA
51	CHEMICAL- WATER	Drinking Water	Acidity	IS : 3025 (Part 22) - 1986
52	CHEMICAL- WATER	Drinking Water	Bi-Carbonate Alkalinity	IS : 3025 (Part 51) - 2001
53	CHEMICAL- WATER	Drinking Water	Calcium	IS : 3025 (Part 40) - 1991
54	CHEMICAL- WATER	Drinking Water	Carbonate Alkalinity	IS : 3025 (Part 51) - 2001
55	CHEMICAL- WATER	Drinking Water	Chloride as Cl-	IS : 3025 (Part 32) - 1988
56	CHEMICAL- WATER	Drinking Water	Chromium Hexavalent	IS : 3025 (Part 52) - 2003
57	CHEMICAL- WATER	Drinking Water	Colour/Appearance	APHA (23rd Edition) 2120-C; 2017
58	CHEMICAL- WATER	Drinking Water	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C; 2017

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59	CHEMICAL- WATER	Drinking Water	Electrical Conductivity	IS : 3025 (Part 14)
60	CHEMICAL- WATER	Drinking Water	Fixed Solids	APHA (23rd Edition)2540-E; 2017
61	CHEMICAL- WATER	Drinking Water	Fluoride as F -	APHA (23rd Edition) 4500 F- D: 2017
62	CHEMICAL- WATER	Drinking Water	Iron as Fe	IS : 3025 (Part 53) - 2003
63	CHEMICAL- WATER	Drinking Water	Magnesium	IS : 3025 (Part 46) - 1994
64	CHEMICAL- WATER	Drinking Water	Nitrate (as NO3)	APHA (23rd Edition) 4500 NO3-B; 2017
65	CHEMICAL- WATER	Drinking Water	Odor	IS : 3025 (Part 5) - 2018
66	CHEMICAL- WATER	Drinking Water	Oil & Grease	IS : 3025 (Part 39) - 1991
67	CHEMICAL- WATER	Drinking Water	pH Value @ 25 °C	IS : 3025 (Part 11) - 1983
68	CHEMICAL- WATER	Drinking Water	Phenolic compounds	IS : 3025 (Part 43) - 2003
69	CHEMICAL- WATER	Drinking Water	Phosphorus	APHA (23rd Edition) 4500 P-D; 2017
70	CHEMICAL- WATER	Drinking Water	Residual Free Chlorine	IS : 3025 (Part 26) - 1986
71	CHEMICAL- WATER	Drinking Water	Silica as SiO2	APHA (23rd Edition) 4500 SiO2-C; 2017
72	CHEMICAL- WATER	Drinking Water	Sulphate as SO4-	APHA (23rd Edition) 4500 SO4-E; 2017
73	CHEMICAL- WATER	Drinking Water	Temperature	IS : 3025 (Part 9) - 1984
74	CHEMICAL- WATER	Drinking Water	Total Alkalinity	IS : 3025 (Part 23) - 1986
75	CHEMICAL- WATER	Drinking Water	Total Dissolved Solids	IS : 3025 (Part 16) - 1984
76	CHEMICAL- WATER	Drinking Water	Total Hardness	IS : 3025 (Part 21) - 2009
77	CHEMICAL- WATER	Drinking Water	Total Solids	IS : 3025 (Part 15) - 1984
78	CHEMICAL- WATER	Drinking Water	Total Suspended Solid (TSS)	IS : 3025 (Part 17) - 1984
79	CHEMICAL- WATER	Drinking Water	Volatile Solids	APHA (23rd Edition) 4500 O-C; 2017
80	CHEMICAL- WATER	Ground Water	Acidity	IS : 3025 (Part 22) - 1986
81	CHEMICAL- WATER	Ground Water	Bi-Carbonate Alkalinity	IS : 3025 (Part 51) - 2001
82	CHEMICAL- WATER	Ground Water	Calcium	IS : 3025 (Part 40) - 1991
83	CHEMICAL- WATER	Ground Water	Carbonate Alkalinity	IS : 3025 (Part 51) - 2001
84	CHEMICAL- WATER	Ground Water	Chloride as Cl-	IS : 3025 (Part 32) - 1988

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85	CHEMICAL- WATER	Ground Water	Chromium Hexavalent	IS : 3025 (Part 52) - 2003
86	CHEMICAL- WATER	Ground Water	Colour/Appearance	APHA (23rd Edition) 2120-C; 2017
87	CHEMICAL- WATER	Ground Water	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C; 2017
88	CHEMICAL- WATER	Ground Water	Electrical Conductivity	IS : 3025 (Part 14) - 2013
89	CHEMICAL- WATER	Ground Water	Fixed Solids	APHA (23rd Edition)2540-E; 2017
90	CHEMICAL- WATER	Ground Water	Fluoride as F -	APHA (23rd Edition) 4500 F- D: 2017
91	CHEMICAL- WATER	Ground Water	Iron as Fe	IS : 3025 (Part 53) - 2003
92	CHEMICAL- WATER	Ground Water	Magnesium	IS : 3025 (Part 46) - 1994
93	CHEMICAL- WATER	Ground Water	Nitrate (as NO3)	APHA (23rd Edition) 4500 NO3-B; 2017
94	CHEMICAL- WATER	Ground Water	Odor	IS : 3025 (Part 5) - 2018
95	CHEMICAL- WATER	Ground Water	Oil & Grease	IS : 3025 (Part 39) - 1991
96	CHEMICAL- WATER	Ground Water	pH Value @ 25 °C	IS : 3025 (Part 11) - 1983
97	CHEMICAL- WATER	Ground Water	Phenolic compounds	IS : 3025 (Part 43) - 2003
98	CHEMICAL- WATER	Ground Water	Phosphorus	APHA (23rd Edition) 4500 P-D; 2017
99	CHEMICAL- WATER	Ground Water	Residual Free Chlorine	IS : 3025 (Part 26) - 1986
100	CHEMICAL- WATER	Ground Water	Silica as SiO2	APHA (23rd Edition) 4500 SiO2-C; 2017
101	CHEMICAL- WATER	Ground Water	Sulphate as SO4-	APHA (23rd Edition) 4500 SO4-E; 2017
102	CHEMICAL- WATER	Ground Water	Sulphide	IS : 3025 (Part 29) - 1986
103	CHEMICAL- WATER	Ground Water	Temperature	IS : 3025 (Part 9) - 1984
104	CHEMICAL- WATER	Ground Water	Total Alkalinity	IS : 3025 (Part 23) - 1986
105	CHEMICAL- WATER	Ground Water	Total Dissolved Solids	IS : 3025 (Part 16) - 1984
106	CHEMICAL- WATER	Ground Water	Total Hardness	IS : 3025 (Part 21) - 2009
107	CHEMICAL- WATER	Ground Water	Total Solids	IS : 3025 (Part 15) - 1984
108	CHEMICAL- WATER	Ground Water	Total Suspended Solid (TSS)	IS : 3025 (Part 17) - 1984
109	CHEMICAL- WATER	Ground Water	Volatile Solids	APHA (23rd Edition) 4500 O-C; 2017

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110	CHEMICAL- WATER	Potable Water	Acidity	IS : 3025 (Part 22) - 1986
111	CHEMICAL- WATER	Potable Water	Bi-Carbonate Alkalinity	IS : 3025 (Part 51) - 2001
112	CHEMICAL- WATER	Potable Water	Calcium	IS : 3025 (Part 40) - 1991
113	CHEMICAL- WATER	Potable Water	Carbonate Alkalinity	IS : 3025 (Part 51) - 2001
114	CHEMICAL- WATER	Potable Water	Chloride as Cl-	IS : 3025 (Part 32) - 1988
115	CHEMICAL- WATER	Potable Water	Chromium Hexavalent	IS : 3025 (Part 52) - 2003
116	CHEMICAL- WATER	Potable Water	Colour/Appearance	APHA (23rd Edition) 2120-C; 2017
117	CHEMICAL- WATER	Potable Water	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C; 2017
118	CHEMICAL- WATER	Potable Water	Electrical Conductivity	IS : 3025 (Part 14) - 2013
119	CHEMICAL- WATER	Potable Water	Fixed Solids	APHA (23rd Edition)2540-E; 2017
120	CHEMICAL- WATER	Potable Water	Fluoride as F -	APHA (23rd Edition) 4500 F- D: 2017
121	CHEMICAL- WATER	Potable Water	Iron as Fe	IS : 3025 (Part 53) - 2003
122	CHEMICAL- WATER	Potable Water	Magnesium	IS : 3025 (Part 46) - 1994
123	CHEMICAL- WATER	Potable Water	Nitrate (as NO3)	APHA (23rd Edition) 4500 NO3-B; 2017
124	CHEMICAL- WATER	Potable Water	Odor	IS : 3025 (Part 5) - 2018
125	CHEMICAL- WATER	Potable Water	Oil & Grease	IS : 3025 (Part 39) - 1991
126	CHEMICAL- WATER	Potable Water	pH Value @ 25 °C	IS : 3025 (Part 11) - 1983
127	CHEMICAL- WATER	Potable Water	Phenolic compounds	IS : 3025 (Part 43) - 2003
128	CHEMICAL- WATER	Potable Water	Phosphorus	APHA (23rd Edition) 4500 P-D; 2017
129	CHEMICAL- WATER	Potable Water	Residual Free Chlorine	IS : 3025 (Part 26) - 1986
130	CHEMICAL- WATER	Potable Water	Silica as SiO2	APHA (23rd Edition) 4500 SiO2-C; 2017
131	CHEMICAL- WATER	Potable Water	Sulphate as SO4-	APHA (23rd Edition) 4500 SO4-E; 2017
132	CHEMICAL- WATER	Potable Water	Sulphide	IS : 3025 (Part 29) - 1986
133	CHEMICAL- WATER	Potable Water	Temperature	IS : 3025 (Part 9) - 1984
134	CHEMICAL- WATER	Potable Water	Total Alkalinity	IS : 3025 (Part 23) - 1986
135	CHEMICAL- WATER	Potable Water	Total Dissolved Solids	IS : 3025 (Part 16) - 1984

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136	CHEMICAL- WATER	Potable Water	Total Hardness	IS : 3025 (Part 21) - 2009
137	CHEMICAL- WATER	Potable Water	Total Solids	IS : 3025 (Part 15) - 1984
138	CHEMICAL- WATER	Potable Water	Total Suspended Solid (TSS)	IS : 3025 (Part 17) - 1984
139	CHEMICAL- WATER	Potable Water	Volatile Solids	APHA (23rd Edition) 4500 O-C; 2017