National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : INSULATING OIL TESTING LABORATORY (POWER GRID CORPORATION OF INDIA LTD.), 400/220 KV POWERGRID SUBSTATION, PARULIA, P.O- DHABANI, DURGAPUR, PASCHIM BARDHAMAN, WEST BENGAL, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 14/02/2023 to 13/02/2025 **Last Amended on** -

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	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	CARBON TYPE ANALYSIS - C-AROMATIC	IS 13155 : 1991
2	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	CARBON TYPE ANALYSIS - C-NAPHTHENIC	IS 13155 : 1991
3	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	CARBON TYPE ANALYSIS- C-PARAFFINIC	IS 13155 : 1991
4	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Density @ 20 °C	ASTM D4052
5	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Density @ 29.5 °C	ASTM D4052
6	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dielectric Dissipation Factor	IS 6262 : 1971
7	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dielectric Dissipation Factor	IEC 60247
8	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dielectric Strength	IEC 60156
9	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dielectric Strength	IS 6792
10	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H2	ASTM D3612 : 2002
11	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H2	IEC 60567
12	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H2	IS 9434
13	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H4	ASTM D3612 : 2002

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14	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H4	IEC 60567
15	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H4	IS 9434
16	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H6	ASTM D3612 : 2002
17	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H6	IEC 60567
18	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- C2H6	IS 9434
19	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CH4	ASTM D3612 : 2002
20	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CH4	IEC 60567
21	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CH4	IS 9434
22	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CO	ASTM D3612 : 2002
23	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CO	IEC 60567
24	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CO	IS 9434
25	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CO2	ASTM D3612 : 2002
26	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CO2	IEC 60567
27	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- CO2	IS 9434

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28	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- H2	ASTM D3612 : 2002
29	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- H2	IEC 60567
30	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- H2	IS 9434
31	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- O2	ASTM D3612 : 2002
32	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- O2	IEC 60567
33	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis- O2	IS 9434
34	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis-N2	ASTM D3612 : 2002
35	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis-N2	IEC 60567
36	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Dissolved Gas Analysis-N2	IS 9434
37	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Flash Point	ASTM D93
38	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Flash Point	IS1448 Part-21
39	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 2ACF	ASTM D5837
40	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 2ACF	IEC 61198
41	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 2FAL	ASTM D5837

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42	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 2FAL	IEC 61198
43	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 2FOL	ASTM D5837
44	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 2FOL	IEC 61198
45	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 5HMF	ASTM D5837
46	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 5HMF	IEC 61198
47	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 5MEF	ASTM D5837
48	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Furan Analysis- 5MEF	IEC 61198
49	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	INHIBIITOR CONTENT	ASTM D2668 : 2007
50	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	INHIBIITOR CONTENT	IEC 60666
51	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	INHIBIITOR CONTENT	IS 13631
52	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Inter Facial Tension @ 27 °C	ASTM D971
53	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Inter Facial Tension @ 27 °C	IS 6104:1971+ A1
54	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Kinematic Viscosity @ 27 °C	ASTM D7042
55	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating oil	Kinematic Viscosity @ 40°C	ASTM D7042

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56	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Neutralization Number	ASTM D664
57	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Neutralization Number	Withdrawn Standard IS 1448 (Part 1/Sec1):2002
58	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Pour Point	ASTM D5950
59	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Pour Point	ASTM D97
60	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Sediment & Sludge Content	IS 1866
61	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Specific Resistance	IEC-60247
62	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Specific Resistance	IS 6103,1971+A1
63	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Water Content	ASTM D1533
64	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Water Content	IEC 60814
65	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Electrical Insulating Oil	Water Content	IS 13567