National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : INDIAN OIL CORPORATION LIMITED, RATLAM SMART LABORATORY, INDIAN OIL CORPORATION LIMITED, RATLAM, MADHYA PRADESH, INDIA

Accreditation Standard ISO/IEC 17025:2017

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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- PETROLEUM AND PRODUCTS	ATF Jet A-1	Appearance	IS 1571
2	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Aromatics	ASTM D1319
3	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Aromatics	IP 156
4	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Aromatics	IS 1448 (Part 23)
5	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Colour (Saybolt)	ASTM D156
6	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Colour (Saybolt)	IS 1448 (Part 14)
7	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Copper Strip Corrosion	ASTM D130
8	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Copper Strip Corrosion	IP 154
9	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Copper Strip Corrosion	IS 1448 (Part 15)
10	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Density by Hydrometer	ASTM D1298
11	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Density by Hydrometer	IP 160
12	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Density by Hydrometer	IS 1448 (Part 16)
13	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Density Hydrometer	ASTM D4052
14	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Distillation	ASTM D86
15	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Distillation	IP 123
16	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Distillation	IS 1448 (Part 18)
17	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Doctor Test	ASTM D4952
18	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Doctor Test	IP 30

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19	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Doctor Test	IS 1448 (Part 19)
20	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Electrical Conductivity	ASTM D2624
21	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Electrical Conductivity	IP 274
22	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Electrical Conductivity	ISO 6297
23	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Existent Gum	ASTM D381
24	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Existent Gum	IP 540
25	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Existent Gum	IS 1448 (Part 29)
26	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Flash Point (Abel)	IP 170
27	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Flash Point (Abel)	IS 1448 (Part 20)
28	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Flash Point (Abel)	ISO 13736
29	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Freezing Point	ASTM D2386
30	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Freezing Point	IP 16
31	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Freezing Point	IS 1448 (Part 11)
32	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Kinematic Viscosity @ -20°C	IS 1448 (Part 25)
33	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Kinematic Viscosity @ -20 °C	ASTM D445
34	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Kinematic Viscosity @ -20 °C	ASTM D7042
35	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Kinematic Viscosity @ -20 °C	IP 71(Section 1)
36	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Naphthalene	IS 1448 (Part 118)
37	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Naphthalenes	ASTM D1840

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38	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Silver Strip Corrosion	IS 1571 (Annex B)
39	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Silver Strip Corrosion	IP 227
40	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Smoke Point	ASTM D1322
41	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Smoke Point	IP 598
42	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Smoke Point	IS 1448 (Part 31)
43	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Specific Energy	ASTM D3338
44	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Sulphur Content by XRF	ASTM D4294
45	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Sulphur Mercaptan	ASTM D3227
46	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Sulphur Mercaptan	IP 342
47	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Sulphur Mercaptan	IS 1448 (Part 109)
48	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Total Acidity	ASTM D3242
49	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Total Acidity	IP 354
50	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Total Acidity	IS 1448 (Part 113)
51	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Total Sulphur	ASTM D5453
52	CHEMICAL- PETROLEUM AND PRODUCTS	ATF Jet A-1	Water Reaction	IS 1448 (Part 42)
53	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Appearance	IS 1460
54	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Cetane Index	ASTM D4737
55	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Copper Strip Corrosion	ASTM D130
56	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Copper Strip Corrosion	IS 1448 (Part 15)

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57	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Density by Hydrometer	ASTM D1298
58	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Density by Hydrometer	IS 1448 (Part 16)
59	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Determination of the Ignition Quality of Diesel Fuels - Cetane Engine Method (Cetane Index)	IS 1448 (Part 9)
60	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Distillation	ASTM D86
61	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Distillation	IS 1448 (Part 18)
62	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Flash point (Abel)	IP170
63	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Flash Point (Abel)	IS 1448 (Part 20)
64	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Flash point (Abel) Auto	ISO 13736
65	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Kinematic Viscosity @ 40°C	IS 1448 (Part 25)
66	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Kinematic Viscosity @ 40 °C	ASTM D445
67	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Kinematic Viscosity @ 40 °C	ASTM D7042
68	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Pour Point	ASTM D97
69	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Pour Point	IS 1448 (Part 10/Section 2)
70	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Total Sulphur	ASTM D5453
71	CHEMICAL- PETROLEUM AND PRODUCTS	Automotive Diesel Fuel (HSD & It's Varient)	Water Content by Karl Fischer	ISO 6296
72	CHEMICAL- PETROLEUM AND PRODUCTS	Ethanol	Acidity	IS 15464 (Annex D)
73	CHEMICAL- PETROLEUM AND PRODUCTS	Ethanol	Alkalinity	IS 15464 (Annex D)
74	CHEMICAL- PETROLEUM AND PRODUCTS	Ethanol	Appearance	IS 15464

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75	CHEMICAL- PETROLEUM AND PRODUCTS	Ethanol	Ethanol Content (% Volume @ 15.6 °C)	IS 2302
76	CHEMICAL- PETROLEUM AND PRODUCTS	Ethanol	Miscibility with Water	IS 15464 (Annex J)
77	CHEMICAL- PETROLEUM AND PRODUCTS	Ethanol	Relative Density at 15°C	IS 15464 (Annex A)
78	CHEMICAL- PETROLEUM AND PRODUCTS	Ethanol	Residue on Evaporation	IS 15464 (Annex C)
79	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Density by Hydrometer	IS 1448 (Part 16)
80	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Density by Hydrometer	ASTM D1298
81	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Flash point (PMCC)	ASTM D93
82	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Flash Point (PMCC)	IS 1448 (Part 21)
83	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Kinematic Viscosity @ 50°C	IS 1448 (Part 25)
84	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Kinematic Viscosity @ 50°C	ASTM D445
85	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Sediment by Extraction	IS 1448 (Part 30)
86	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Sediment by Extraction	ASTM D473
87	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Total Sulphur	ASTM D4294
88	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Water Content	ASTM D95
89	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel Oil	Water Content	IS 1448 (Part 40)
90	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Appearance	IS 1459
91	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Colour (Saybolt)	ASTM D156
92	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Colour (Saybolt)	IS 1448 (Part 14)
93	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Colour (Visual)	IS 1459

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94	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Copper Strip Corrosion	ASTM D130
95	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Copper Strip Corrosion	IS 1448 (Part 15)
96	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Density by Digital Density Meter	ASTM D4052
97	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Density by Hydrometer	ASTM D1298
98	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Density by Hydrometer	IS 1448 (Part 16)
99	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Distillation	ASTM D86
100	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Distillation	IS 1448 (Part 18)
101	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Flash Point (Abel)	IP 170
102	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Flash Point (Abel)	IS 1448 (Part 20)
103	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Flash Point (Abel)	ISO 13736
104	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Smoke Point	ASTM D1322
105	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Smoke Point	IS 1448 (Part 31)
106	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Smoke Point	ISO 3014
107	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Total Sulphur	ASTM D5453
108	CHEMICAL- PETROLEUM AND PRODUCTS	Kerosene	Total Sulphur Content	ASTM D4294
109	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Density by Hydrometer	ASTM D1298
110	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Density by Hydrometer	IS 1448 (Part 16)
111	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Flash Point (PMCC)	ASTM D93
112	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Flash Point (PMCC)	IS 1448 (Part 21)

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113	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Flash Point (PMCC)	ISO 2719
114	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Kinematic Viscosity @ 40 °C	IS 1448 (Part 25)
115	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Kinematic Viscosity @ 40°C	ASTM D445
116	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Kinematic Viscosity @ 40°C	ASTM D7042
117	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Pour Point	ASTM D97
118	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Pour Point	IS 1448 (Part 10 /Section 2)
119	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Total Sulphur	ASTM D4294
120	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Water Content	IS 1448 (Part 40)
121	CHEMICAL- PETROLEUM AND PRODUCTS	Light Diesel Oil(LDO)	Water Content	ASTM D95
122	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Appearance	IS 2796
123	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Colour	IS 2796
124	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Copper Strip Corrosion	IS 1448 (Part 15)
125	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Copper Strip Corrosion	ASTM D130
126	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Density by Digital Density Meter	ASTM D4052
127	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Density by Hydrometer	ASTM D1298
128	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Density by Hydrometer	IS 1448 (Part 16)
129	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Distillation	ASTM D86
130	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Gum Content (Solvent Washed)	ASTM D381
131	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Distillation	IS 1448 (Part 18)

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132	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Gum Content (Solvent Washed)	IS 1448 (Part 29)
133	CHEMICAL- PETROLEUM AND PRODUCTS	Motor Gasoline & its Variants	Total Sulphur	ASTM D5453