National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : INDIAN OIL CORPORATION LIMITED, RESEARCH AND DEVELOPMENT CENTRE, SECTOR-13, FARIDABAD, HARYANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-8417 **Page No** 1 of 4

Validity 28/03/2022 to 27/03/2024 **Last Amended on** 27/05/2022

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- LUBRICANTS	AD-Engine Oil	Nitration (Diff Trend)	ASTM D7624 (Proc B)
2	CHEMICAL- LUBRICANTS	AD-Engine Oil	Nitration (Direct Trend)	ASTM D7624 (Proc A)
3	CHEMICAL- LUBRICANTS	AD-Engine Oil	Oxidation (Diff Trend)	ASTM D7414 (Proc B)
4	CHEMICAL- LUBRICANTS	AD-Engine Oil	Oxidation (Direct Trend)	ASTM D7414 (Proc A)
5	CHEMICAL- LUBRICANTS	AD-Engine Oil	Phosphate Anti-wear (Diff Trend)	ASTM D7412 (Proc B)
6	CHEMICAL- LUBRICANTS	AD-Engine Oil	Phosphate Anti-wear (Direct Trend)	ASTM D7412 (Proc A)
7	CHEMICAL- LUBRICANTS	AD-Engine Oil	Sulfate by-products (Diff Trend)	ASTM D7415 (Proc B)
8	CHEMICAL- LUBRICANTS	AD-Engine Oil	Sulfate by-products (Direct Trend)	ASTM D7415 (Proc A)
9	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Additive Element - Calcium	ASTM D5185
10	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Additive Element - Magnesium	ASTM D5185
11	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Additive Element - Molybdenum	ASTM 5185
12	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Additive Element - Phosphorous	ASTM D5185
13	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Additive Element - Zinc	ASTM D5185
14	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Total Sulfur	ASTM D2622
15	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Wear Element - Chromium	ASTM D5185
16	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Wear Element - Copper	ASTM D5185
17	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Wear Element - Iron	ASTM D5185
18	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Wear Element - Lead	ASTM D5185
19	CHEMICAL- LUBRICANTS	AD-Engine Oil & Gear Oil	Wear Element - Nickel	ASTM D5185
20	CHEMICAL- LUBRICANTS	ALTF-Engine Oil & Gear Oil	KV at 100°C	ASTM D445
21	CHEMICAL- LUBRICANTS	ALTF-Engine Oil & Gear Oil	KV at 40°C	ASTM D445
22	CHEMICAL- LUBRICANTS	ALTF-Engine Oil & Gear Oil	Total Acid Number	ASTM D664 (Test Method A)
23	CHEMICAL- LUBRICANTS	ALTF-Engine Oil & Gear Oil	Total Base Number	ASTM D2896 (Proc B 60ml)
24	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	Copper Strip Corrosion	ASTM D130
25	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	Foaming Characteristics	ASTM D892
26	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	KV at 100°C	ASTM D445

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Certificate Number	TC-8417	**Page No**	2 of 4
Validity	28/03/2022 to 27/03/2024	**Last Amended on**	27/05/2022

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27	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	KV at 100°C	ASTM D7042
28	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	KV at 40°C	ASTM D445
29	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	KV at 40°C	ASTM D7042
30	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	Low Temp Brookfield Viscosity	ASTM D2983 (Proc B)
31	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	Low Temp Cold-Cranking Simulator	ASTM D5293
32	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	Noack Volatility	ASTM D5800 (Proc B)
33	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	Pour Point	ASTM D97
34	CHEMICAL- LUBRICANTS	AO-Engine Oil & Gear Oil	Rust Characteristics	ASTM D665
35	CHEMICAL- LUBRICANTS	AO-Engine Oil &Gear Oil	Apparent Visc	ASTM D4684 (Proc A)
36	CHEMICAL- LUBRICANTS	GR-Lubricant Grease	Cone Penetration	ASTM D1403
37	CHEMICAL- LUBRICANTS	GR-Lubricant Grease	Cone Penetration at 25degC	ASTM D217
38	CHEMICAL- LUBRICANTS	GR-Lubricant Grease	Dropping Point	ASTM D2265
39	CHEMICAL- LUBRICANTS	GR-Lubricant Grease	Dropping Point	ASTM D566
40	CHEMICAL- LUBRICANTS	GR-Lubricant Grease	Oxidation Stability	ASTM D942
41	CHEMICAL- LUBRICANTS	GR-Lubricant Grease	Roll Stability	ASTM D1831
42	CHEMICAL- LUBRICANTS	IL-Turbine Oil Condition Monitoring	Air Release Value	ASTM D3427
43	CHEMICAL- LUBRICANTS	IL-Turbine Oil Condition Monitoring	Copper Strip Corrosion	ASTM D130
44	CHEMICAL- LUBRICANTS	IL-Turbine Oil Condition Monitoring	Oxidation Stability	ASTM D2272
45	CHEMICAL- LUBRICANTS	IL-Turbine Oil Condition Monitoring	Rust Prevention - A/B	ASTM D665 (Proc A & B)
46	CHEMICAL- LUBRICANTS	Trib-Engine Oil & Gear Oil	Extreme Pressure	IP 239
47	CHEMICAL- LUBRICANTS	Trib-Engine Oil & Gear Oil	Wear Preventive Characteristics	ASTM D4172 (Proc B)
48	CHEMICAL- LUBRICANTS	Trib-Engine Oil & Gear Oil	Wear Preventive Characteristics	ASTM D4172 (Procedure A)
49	CHEMICAL- LUBRICANTS	Trib-Grease	Extreme Pressure	IP 239
50	CHEMICAL- LUBRICANTS	Trib-Grease	Wear Preventive Characteristics	ASTM D2266
51	CHEMICAL- PETROLEUM AND PRODUCTS	AD-ATF	Total Sulfur	ASTM D2622
52	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Aldehyde	ISO 2241-2 (Annex F)

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Certificate Number TC-8417 **Page No** 3 of 4

Validity 28/03/2022 to 27/03/2024 **Last Amended on** 27/05/2022

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53	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Biuret	ISO 2241-2 (Annex E)
54	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Identity by FT-IR	ISO 2241-2 (Annex J)
55	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Phosphate	ISO 22241-2 (Annex H)
56	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Trace Element - Calcium	ISO 22241-2 (Annex 1)
57	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Trace element - Copper	ISO 2241-2 (Annex I)
58	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Trace element - Iron	ISO 2241-2 (Annex I)
59	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Trace element - Magnesium	ISO 2241-2 (Annex I)
60	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Trace element - Zinc	ISO 2241-2 (Annex I)
61	CHEMICAL- PETROLEUM AND PRODUCTS	AD-DEF or AUS32	Urea by Total Nitorogen	ISO 2241-2 (Annex B)
62	CHEMICAL- PETROLEUM AND PRODUCTS	AD-HSD	Total Suflur	ASTM D5453
63	CHEMICAL- PETROLEUM AND PRODUCTS	AD-HSD	Total Sulfur	ASTM D2622
64	CHEMICAL- PETROLEUM AND PRODUCTS	AD-Motor Spirit	Total Sulfur	ASTM D2622
65	CHEMICAL- PETROLEUM AND PRODUCTS	AD-Motor Spirit	Total Sulfur	ASTM D5453
66	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-ATF	Copper Strip Corrosion	ASTM D130
67	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-ATF	Density	ASTM D4052
68	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-ATF	Flash Point	IP 170
69	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-HSD	Copper Strip Corrosion	ASTM D130
70	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-HSD	Density	ASTM D4052
71	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-HSD	Flash Point	IP 170

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Certificate Number	TC-8417	**Page No**	4 of 4
Validity	28/03/2022 to 27/03/2024	**Last Amended on**	27/05/2022

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72	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-HSD	KV at 40°C	ASTM D445
73	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-Motor Spirit	Copper Strip Corrosion	ASTM D130
74	CHEMICAL- PETROLEUM AND PRODUCTS	Fuel-Motor Spirit	Density	ASTM D4052