

Quality And Accreditation Institute

Centre for International Accreditation



Certificate of Accreditation

Indian Oil Corporation Limited (M.D.)
Mughalsarai Terminal Laboratory

Alinagar, Mughalsarai- 232101
Chandauli, Uttar Pradesh, India

has been assessed and accredited in accordance with the Standard
ISO/IEC 17025:2017

“General Requirements for the Competence of Testing and Calibration Laboratories”
In the field of
Testing

*This certificate remains valid for the Scope of Accreditation as specified
in the annexure subject to continued compliance with the above standard
& any other requirements specified by QAI.*



QAI/CIA/TL/2026/0176

Valid from: 09 July 2026

Dr. Bhupendra Kumar Rana
Chief Executive Officer

Valid until: 08 July 2028

Prof. Vikram Kumar
Chair, CIA



Quality And Accreditation Institute

Centre for International Accreditation



Scope of Accreditation

Indian Oil Corporation Limited (M.D.)

Mughalsarai Terminal Laboratory

Alinagar, Mughalsarai - 232101

Chandauli, Uttar Pradesh, India

QAI/CIA/TL/2026/0176

Valid from: 09 July 2026

Valid until: 08 July 2028

Accreditation Standard: ISO/IEC 17025:2017

Chemical Testing			
Sl. No.	Product(s)/Material of Test	Specific Tests Performed	Test Method
	Petroleum & Products		
1.	Anhydrous Ethanol	Appearance (Visual)	ASTM D 4176: 2022
2.	Anhydrous Ethanol	Ethanol content	IS 15464: 2022 Annex B IS 2302
3.	Anhydrous Ethanol	Relative Density/Specific Gravity	IS 15464: 2022 Annex A
4.	Anhydrous Ethanol	Miscibility with water	IS 15464: 2022 Annex J
5.	Anhydrous Ethanol	Alkalinity	IS 15464: 2022 Annex D
6.	Anhydrous Ethanol	Acidity (As CH ₃ COOH)	IS 15464: 2022 Annex D
7.	Anhydrous Ethanol	Aldehyde (as CH ₃ CHO) content	IS 15464: 2022 Annex E
8.	Anhydrous Ethanol	Sulphur Content	ASTM D 5453: 2019
9.	Automotive Diesel Fuel (HSD), HSD with additive (Xtra Green HSD) & Biodiesel blended HSD (up to B20)	Appearance (Visual)	ASTM D 4176: 2022
10.		Abel Flash Point (Auto)	IS 1448 Part 20: 2024
11.		Abel Flash Point (Manual)	IS 1448 Part 20: 2024
12.		Density by Hydrometer	IS 1448 Part 16: 2014
13.		Density by Digital Density Meter	ASTM D 4052: 2022
14.		Distillation (Auto): 95% Recovery	ASTM D 86: 2023
15.		Distillation (Manual): 95% Recovery	IS 1448 Part 18: 2020

This is annexure to 'Certificate of Accreditation' and does not require any signature.

www.qai.org.in



1 of 4

Quality And Accreditation Institute

Centre for International Accreditation



Scope of Accreditation

Indian Oil Corporation Limited (M.D.)

Mughalsarai Terminal Laboratory

Alinagar, Mughalsarai - 232101

Chandauli, Uttar Pradesh, India

QAI/CIA/TL/2026/0176

Valid from: 09 July 2026

Valid until: 08 July 2028

Accreditation Standard: ISO/IEC 17025:2017

Chemical Testing			
Sl. No.	Product(s)/Material of Test	Specific Tests Performed	Test Method
	Petroleum & Products		
16.	Automotive Diesel Fuel (HSD), HSD with additive (Xtra Green HSD) & Biodiesel blended HSD (up to B20)	Calculated Cetane Index	ASTM D 4737: 2021
17.		Copper Strip Corrosion Test	IS 1448 Part 15: 2004 ASTM D 130: 2026
18.		Kinematic Viscosity at 40°C (Manual)	IS 1448 Part 25/Sec.1: 2018
19.		Kinematic Viscosity at 40°C	ASTM D 7042: 2025
20.		Pour Point	IS 1448 Part 10/Sec.2: 2021
21.		Total Sulphur	ASTM D 5453: 2025
22.	Bio Diesel (B100)	Appearance (Visual)	ASTM D 4176: 2022
23.	Bio Diesel (B100)	Acid Value (Manual)	ASTM D974: 2022
24.	Bio Diesel (B100)	Acid Value (Auto)	ASTM D664: 2018
25.	Bio Diesel (B100)	Colour (Visual)	QCD-7.2-WI-02
26.	Bio Diesel (B100)	CFPP (Cold Filter Plugging Point)	IS 1448 Part 110: 2023
27.	Bio Diesel (B100)	Copper Strip Corrosion Test	IS 1448 Part 15: 2004 ASTM D 130: 2026
28.	Bio Diesel (B100)	Density by Digital Density Meter	ASTM D 4052: 2022



Quality And Accreditation Institute

Centre for International Accreditation



Scope of Accreditation
Indian Oil Corporation Limited (M.D.)
Mughalsarai Terminal Laboratory
 Alinagar, Mughalsarai - 232101
 Chandauli, Uttar Pradesh, India

QAI/CIA/TL/2026/0176

Valid from: **09 July 2026**

Valid until: **08 July 2028**

Accreditation Standard: ISO/IEC 17025:2017

Chemical Testing			
Sl. No.	Product(s)/Material of Test	Specific Tests Performed	Test Method
	Petroleum & Products		
29.	Bio Diesel (B100)	Density by Hydrometer	IS 1448 Part 16: 2014
30.	Bio Diesel (B100)	Flash Point (Pensky-Martens Closed Cup)	IS 1448 Part 21: 2019
31.	Bio Diesel (B100)	Kinematic Viscosity at 40°C (Manual)	IS 1448 Part 25/Sec.1: 2018
32.	Bio Diesel (B100)	Kinematic Viscosity at 40°C	ASTM D 7042: 2025
33.	Bio Diesel (B100)	Total Sulphur	ASTM D 5453: 2025
34.	Bio Diesel (B100)	Water content	IS 1448 Part 175: 2020 ASTM D 7923: 2025
35.	Motor Gasoline (MG), MG with Additive, Ethanol blended MG and Ethanol blended MG with Additive	Appearance (Visual)	ASTM D 4176: 2022
36.		Colour (Visual)	QCD-7.2-WI-02
37.		Copper Strip Corrosion Test	IS 1448 Part 15: 2004 ASTM D 130: 2026
38.		Density by Digital Density Meter	ASTM D 4052: 2022
39.		Density by Hydrometer	IS 1448 Part 16: 2014
40.		Distillation: % Evaporated at 70°C	IS 1448 Part 18: 2020
41.		Distillation: % Evaporated at 70°C	ASTM D 86: 2023
42.		Distillation: % Evaporated at 100°C	IS 1448 Part 18: 2020

This is annexure to 'Certificate of Accreditation' and does not require any signature.

www.qai.org.in



3 of 4

Quality And Accreditation Institute

Centre for International Accreditation



Scope of Accreditation

Indian Oil Corporation Limited (M.D.)

Mughalsarai Terminal Laboratory

Alinagar, Mughalsarai - 232101

Chandauli, Uttar Pradesh, India

QAI/CIA/TL/2026/0176

Valid from: **09 July 2026**

Valid until: **08 July 2028**

Accreditation Standard: ISO/IEC 17025:2017

Chemical Testing			
Sl. No.	Product(s)/Material of Test	Specific Tests Performed	Test Method
	Petroleum & Products		
43.	Motor Gasoline (MG), MG with Additive, Ethanol blended MG and Ethanol blended MG with Additive	Distillation: % Evaporated at 100°C	ASTM D 86: 2023
44.		Distillation: % Evaporated at 150°C	IS 1448 Part 18: 2020
45.		Distillation: % Evaporated at 150°C	ASTM D 86: 2023
46.		Distillation: Final Boiling Point (FBP)	IS 1448 Part 18: 2020
47.		Distillation: Final Boiling Point (FBP)	ASTM D 86: 2023
48.		Distillation: Residue	IS 1448 Part 18: 2020
49.		Distillation: Residue	ASTM D 86: 2023
50.		Existent Gum Content	IS 1448 Part 29: 2021
51.		Total Sulphur	ASTM D 5453: 2025
52.		Ethanol content	IS 2796 Annex-C: 2017
53.	Admixture of Anhydrous Ethanol and Motor Gasoline (E20)	Ethanol content	IS 17021 Annex-C: 2018
54.	Admixture of Anhydrous Ethanol and Motor Gasoline (E12 & E15)	Ethanol content	IS 17586 Annex-C: 2021

This is annexure to 'Certificate of Accreditation' and does not require any signature.

www.qai.org.in



4 of 4