

<b>Laboratory</b>	<b>Indian Oil Corporation Limited, QC Laboratory, Bongaigaon Refinery, P. O. Dhaligaon , Dist. Chirang, Assam</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Chemical Testing</b>	<b>Issue Date</b>	<b>04.07.2014</b>
<b>Certificate Number</b>	<b>T-1715</b>	<b>Valid Until</b>	<b>03.07.2016</b>
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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
<b>I.</b>	<b>PETROLEUM</b>			
<b>1.</b>	<b>MS HSD SKO ATF LDO SRN</b>	Density	IS 1448 [P:16] : 1990 (Reaffirmed 2007)	700 – 800 kg/m <sup>3</sup> 800 – 900 kg/m <sup>3</sup> 750 – 850 kg/m <sup>3</sup> 750 – 850 kg/m <sup>3</sup> 850 – 950 kg/m <sup>3</sup> 650 – 750 kg/m <sup>3</sup>
<b>2.</b>	<b>MS HSD SKO ATF SRN</b>	Distillation	IS 1448 [P:18] : 1991 (Reaffirmed 2010)	30 – 215 °C 30 – 400 °C 30 – 300 °C 30 – 300 °C 30 – 300 °C
<b>3.</b>	<b>HSD SKO ATF</b>	Abel Flash Point, °C	IS 1448 [P:20] : 1998 (Reaffirmed 2008)	35 – 60 °C 35 – 60 °C 35 – 60 °C
<b>4.</b>	<b>LDO</b>	PMCC Flash Point	IS 1448 [P:21] : 1992 (Reaffirmed 2008)	50 – 105°C
<b>5.</b>	<b>MS</b>	Sulfur (UV)	ASTM D5453 - 09	50 – 250 mg/kg
		MON	IS 1448 [P:26] : 1960 (Reaffirmed 2007)	75 – 90 mg/kg
		RON	IS 1448 [P : 27] : 2013	85 –98 mg/kg

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
6.	HSD SKO LDO	Total Sulfur (ED-XRF)	ASTM D4294 - 10	150 – 500 mg/kg 50 – 500 mg/kg 500 – 15000 mg/kg
7.	MS HSD SKO	Total Sulfur (WD-XRF)	ASTM D2622 - 10	50 – 250 mg/kg 150 – 500 mg/kg 50 – 500 mg/kg
8.	HSD	Lubricity(HFRR)	ASTM D6079 - 11	200 – 500 micrometer
		Calculated Cetane Index (CCI)	ASTM D4737 – 10	40 –55
9.	Crude Oil	Water Content	IP 358-2003	0.05 – 5.0%Vol.
<b>II. WATER</b>				
1.	Water & Waste Water	pH	APHA, 22 <sup>nd</sup> edition 2012, 4500-H <sup>+</sup> B	4.0 – 14.0
		Conductivity	APHA, 22 <sup>nd</sup> edition 2012, 2510 B	1 – 300 micro mho/cm
		COD	APHA, 22 <sup>nd</sup> edition 2012, 5220 B	5 – 1000 mg/L
		BOD	BIS, 1993, 3025 (Part - 44)	0 – 350 mg/L
		Chloride	APHA, 22 <sup>nd</sup> edition 2012, 4500-Cl <sup>-</sup> B	1 – 100 mg/L

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