Laboratory Torrent Power Limited - AMGEN, Analytical Laboratory, Sabarmati TPS,

Sabarmati, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Discipline Chemical Testing Issue Date 14.10.2015

Certificate Number T-2689 Valid Until 13.10.2017

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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
I.	WATER			
1.	Industrial Water	рН	APHA (22 nd Edition) 4500 H ⁺ B	3.0 to 12.0
		Conductivity at 25°C	APHA (22 nd Edition) 2510-B	$0.1~\mu S/cm$ to $10000~\mu S/cm$
		Total Hardness as CaCO ₃	APHA (22 nd Edition) 2340-C	1.0 mg/l to 500 mg/l
		Phosphate as PO4 ⁻³	LAB/SOP/04 Rev Dated. 01-08-2015	0.2 mg/l to 25 mg/l
		Silica as SiO ₂	APHA (22 nd Edition) 4500-SiO ₂ D	0.01 mg/l to 1.6 mg/l
II.	COAL, COKE ANI	D OTHER SOLID FUEL		
1.	Coal	Proximate Analysis Total Moisture (Received Basis)	IS 1350 (Part 1): 1984 (RA 2007) ASTM D-3302/D 3302M: 2015	1.0 % to 40 %
		Moisture (Air Dried Basis)	IS 1350 (Part 1): 1984 (RA 2007) ASTM D-7582: 2015	1.0 % to 20 %
		Volatile Matter (Air Dried Basis)	IS 1350 (Part 1): 1984 (RA 2007)	10 % to 35 %
		<i>D</i> 4313)	ASTM D-7582: 2015	10 % to 55 %
		Ash (Air Dried Basis)	IS 1350 (Part 1): 1984 (RA 2007)	10 % to 70 %
			ASTM D7582: 2015	1.0 % to 20.0 %
		Equilibrate Moisture at 40°C and 60 % Relative Humidity	IS 1350 (Part 1): 1984 (RA 2007)	1.0 % to 20 %

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	Coal	Gross Calorific Value (Air Dried Basis)	ASTM-D5865: 2013	3300 kcal/kg to 7000 kcal/kg
		Fixed Carbon (Air Dried Basis)	IS 1350 (Part 1): 1984 (RA 2007) ASTM D7582: 2015	By calculation
		Ultimate Analysis Carbon (Air Dried Basis)	ASTM D5373: 2014e1	20.0 % to 75.0 %
		Hydrogen (Air Dried Basis)	ASTM D5373: 2014e1	1 .0 % to 10.0 %
		Nitrogen (Air Dried Basis)	ASTM D5373: 2014e1	0.5 % to 10.0 %
		Sulphur (Air Dried Basis)	ASTM D4239: 2014e1	0.05 % to 20.0 %