



ACCREDITATION DOCUMENT

F-06/02
Issue Date: 26/05/08
Rev. No: 05
LAB 023

Testing Laboratory.

Accreditation Scope of Chemical & Environmental Lab., SGS Pakistan (Pvt.) Ltd.
 Karachi, Pakistan.

Permanent laboratory premises

Materials/ products tested	Types of test/propertie s measured	Range of measurement	Minimum detection limit	Uncertainty of measurement (where applicable) MU (±)	Standard specs/techniques/equipment used
Chrome Ore	Chromium in Chrome Ore	> 7 % (w/w)	7 % (w/w)	0.13 % (w/w)	Non standard method, based on ISO 6331-1983 (E)
	Aluminum in Chrome Ore	0.1% - 15 % (w/w)	0.1 % (w/w)	0.18 % (w/w)	Non standard method, based on ISO 6331-1983 (E)
	Silica in Chrome Ore	0.5% -15 % (w/w)	0.5 % (w/w)	0.21% (w/w)	Non Standard method, based on ISO 5997-1984 (E)
	Iron in Chrome Ore	0.5% -32 % (w/w)	0.5 % (m/m)	0.21 % (w/w)	Non Standard method, based on ISO 6130-1985 (E) micrometric) & Non Standard method (on
Iron Ore	Iron in iron Ore	5% -72 % (w/w)	5 % (w/w)	0.13 % (w/w)	Non Standard method, based on ISO 2597-1 Second edition 2006- 05-01
	Silica in Iron Ore	0.5-15 % (w/w)	0.5 % (m/m)	0.09 % (w/w)	Non Standard method, based on ISO 2598-1 1992-12-15 (E)
	Aluminum in Iron Ore	0.5% -5 % (w/w)	0.5 % (m/m)	0.18 % (w/w)	Non Standard method, based on ISO 4688-1 second edition 2006-
Water	Aluminum in water	0.5 mg/L - 10000 mg/L	0.5 % (m/m)	0.18 % (w/w)	Non Standard method, based on ASTM -D857-95
	Manganese in water	0.1 mg/L -10000 mg/L	0.1 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D858-95
	Iron in water	0.1 mg/L -10000 mg/L	0.1 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D1068-96
	Chromium in water	0.1 mg/L -10000 mg/L	0.1 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D1687-92 (Re-approved
	Copper in water	0.05 mg/L - 10000 mg/L	0.05 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D1688-95
	Zinc in water	0.05 mg/L - 10000 mg/L	0.05 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D1691-95
	Nickel in water	0.1 mg/L -10000 mg/L	0.1 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D1886-94
	Cadmium in water	0.05 mg/L - 10000 mg/L	0.05 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D3557-95
	Lead in water	0.2 mg/L -10000 mg/L	0.2 mg/L	0.18 mg/L	Non Standard method, based on ASTM -D3559-96
Fertilizer	Nitrogen in Fertilizer	0.5 % - 60 %	0.5 %	0.19 %	Non Standard method, based on AOAC.2057 13 Ed 1980

Date

Director



ACCREDITATION DOCUMENT

F-06/02
Issue Date: 26/05/08
Rev. No: 05
LAB 023

Materials/ products tested	Types of test/propertie s measured	Range of measurement	Minimum detection limit	Uncertainty of measurement (where applicable) MU (±)	Standard specs/techniques/equipment used
Fertilizer	Total Phosphate in	0.5 % - 75 %	0.5 %	0.20%	Non Standard method, based on AOAC.2019, 2020, 2026-2028,
	Water soluble Phosphate in	0.5% - 75%	0.5%	0.20%	Non Standard method, based on AOAC.2040, 2026-2028, 13 Ed
Coal and Coke	Ash Content in Coal and Coke	4.5% - 30%	4.5%	0.19%	Non Standard method, based on ASTM -D3174-00 And ISO
	Total Moisture in Coal	0.1% >20%	0.1 %	0.20 %	Non Standard method, based on ASTM -D3302-00a and ISO 589-
	Total Sulfur in Coal and Coke	0.1% >15%	0.1%	0.18 %	Non Standard method, based on ASTM -D3177-89
	Total Moisture in Coke	0.1% >20%	0.1%	0.20 %	Non Standard method, based on ASTM -D3173- & ISO
Water	Alkalinity in Water	0.5 mg/L -1000 mg/L	0.5 mg/L	0.19 mg/L	Non Standard method, based on APHA – 2320B
	Biochemical Oxygen	5.0 – 4000 (mg/L)	5.0 mg/L	1.11 mg/L	Non Standard method, based on ASTM – D5210
	Chlorides in Water	(0.5-5000) mg/L	0.5 mg/L	0.22 mg/L	Non Standard method, based on APHA – 4500 B & Cl ⁻
	Chemical Oxygen	(5.0 – 1500) mg/L	5.0 mg/L	0.64 mg/L	Non Standard method, based on APHA – 5220 B & Hach
	Ca and Mg in Water	(0.02 – 10000) mg/L	Cs: 0.02 mg/L	0.20 mg/L	Non Standard method, based on APHA – 3550B Ca & Mg
	pH Value in Water	1– 14	0.1	0.5	Non Standard method, based on APHA – 4500B
	Total Dissolved	5.0 mg/L – 5000 mg/L	5.0 mg/L	1.54 mg/L	Non Standard method, based on APHA – 2540C
	Total Hardness in Water	0.5 mg/L – 1000 mg/L	0.5 mg/L	0.21 mg/L	Non Standard method, based on APHA – 2340B & C
	Total Suspended	5.0 mg/L – 5000 mg/L	5.0 mg/L	1.89 mg/L	Non Standard method, based on APHA – 2540D
	Sulphate in Water	5.0 mg/L – 5000 mg/L	5.0 mg/L	0.19 mg/L	Non Standard method, based on APHA – 4500 C SO ₄ ⁻²
Lead	Ores, Rocks and Minerals	5.0 mg/L – 10,000 ppm	5.0 ppm	3.0 ppm	Non Standard method, based on analysis of ores, rocks & minerals
Copper	Ores, Rocks and Minerals	5.0 ppm – 10,000 ppm	5.0 ppm	3.0 ppm	Non Standard method, based on analysis of ores, rocks & minerals
Zinc	Ores, Rocks and Minerals	5.0 ppm– 10,000 ppm	5.0 ppm	3.0 ppm	Non Standard method, based on analysis of ores, rocks & minerals
Cobalt	Ores, Rocks and Minerals	5.0 ppm– 10,000 ppm	5.0 ppm	3.0 ppm	Non Standard method, based on analysis of ores, rocks & minerals
Nickel	Ores, Rocks and Minerals	5.0 ppm – 10,000 ppm	5.0 ppm	3.0 ppm	Non Standard method, based on analysis of ores, rocks & minerals

Date

Director



ACCREDITATION DOCUMENT

F-06/02
Issue Date: 26/05/08
Rev. No: 05
LAB 023

Materials/ products tested	Types of test/propertie s measured	Range of measurement	Minimum detection limit	Uncertainty of measurement (where applicable) MU (\pm)	Standard specs/techniques/equipment used
Silver	Ores, Rocks and Minerals	0.2 ppm – 10,000 ppm	0.2 ppm	0.1 ppm	Non Standard method, based on analysis of ores, rocks & minerals
Sample Preparation	Ores, Rocks and Minerals	Not applicable	Not applicable	Not applicable	Non Standard method, based on SGS Mineral sampling Manual

Note: Water can be potable, effluent, ground & process

Date

Director