

Laboratory Customer Analytical Laboratory, Nalco Water India Limited,
S.No. 238/239, Quadra 1, Panchshil Building, 1st Floor, Magarpatta
Road, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Discipline Chemical Testing **Issue Date** 14.11.2014

Certificate Number T-3190 **Valid Until** 13.11.2016

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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. POLLUTION & ENVIRONMENT				
1.	Industrial Water	Aluminium (as Al)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 15 µg/l to 1000 µg/l
		Arsenic (as As)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 50 mg/l 10 µg/l to 1000 µg/l
		Antimony (as Sb)	APHA (22 nd Edition) 3120 B: 2012	0.4 mg/l to 100 mg/l
		Barium (as Ba)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 5 µg/l to 1000 µg/l
		Beryllium (as Be)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 10 mg/l 5 µg/l to 1000 µg/l
		Boron (as B)	APHA (22 nd Edition) 3120 B: 2012	0.25 mg/l to 100 mg/l 10 µg/l to 1000 µg/l
		Cadmium (as Cd)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 20 mg/l 5 µg/l to 1000 µg/l
		Calcium (as Ca)	APHA (22 nd Edition) 3120 B: 2012	0.5 mg/l to 1000 mg/l
		Calcium (as CaCO ₃)	APHA (22 nd Edition) 3120 B: 2012	50 µg/l to 100000 µg/l 125 µg/l to 250000 µg/l
		Chromium (as Cr)	APHA (22 nd Edition) 3120 B: 2012	0.2 mg/l to 100 mg/l 5 µg/l to 1000 µg/l

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	Industrial Water	Cobalt (as Co)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 5 µg/l to 1000 µg/l
		Copper (as Cu)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 5 µg/l to 1000 µg/l
		Iron (as Fe)	APHA (22 nd Edition) 3120 B: 2012	0.2 mg/l to 100 mg/l 5 µg/l to 2000 µg/l
		Lead (as Pb)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 20 µg/l to 1000 µg/l
		Lithium (as Li)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 10 µg/l to 1000 µg/l
		Magnesium (as Mg)	APHA (22 nd Edition) 3120 B: 2012	0.5 mg/l to 1000 mg/l 50 µg/l to 100000 µg/l
		Magnesium (as CaCO ₃)	APHA (22 nd Edition) 3120 B: 2012	2.1 mg/l to 4200 mg/l 210 µg/l to 420000 µg/l
		Manganese (as Mn)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 5 µg/l to 2000 µg/l
		Molybdenum (as Mo)	APHA (22 nd Edition) 3120 B: 2012	0.2 mg/l to 100 mg/l 100 µg/l to 1000 µg/l
		Nickel (as Ni)	APHA (22 nd Edition) 3120 B: 2012	0.02 mg/l to 100 mg/l 5 µg/l to 1000 µg/l
		Phosphorus (as P)	APHA (22 nd Edition) 3120 B: 2012	0.25 mg/l to 100 mg/l 50 µg/l to 1000 µg/l

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	Industrial Water	Potassium (as K)	APHA (22 nd Edition) 3120 B: 2012	0.5 mg/l to 1000 mg/l 50 µg/l to 10000 µg/l
		Selenium (as Se)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 10 µg/l to 1000 µg/l
		Silicon (as Si)	APHA (22 nd Edition) 3120 B: 2012	0.1 mg/l to 100 mg/l 15 µg/l to 10000 µg/l
		Silica (as SiO ₂)	APHA (22 nd Edition) 3120 B: 2012	0.21 mg/l to 214 mg/l 32 µg/l to 21000 µg/l
		Silver (as Ag)	APHA (22 nd Edition) 3120 B: 2012	0.2 mg/l to 100 mg/l 20 µg/l to 1000 µg/l
		Sodium (as Na)	APHA (22 nd Edition) 3120 B: 2012	0.5 mg/l to 2000 mg/l 10 µg/l to 100000 µg/l
		Strontium (as Sr)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 50 mg/l 5 µg/l to 1000 µg/l
		Titanium (as Ti)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 100 mg/l 20 µg/l to 1000 µg/l
		Vanadium (as V)	APHA (22 nd Edition) 3120 B: 2012	0.2 mg/l to 100 mg/l 5 µg/l to 1000 µg/l
		Zinc (as Zn)	APHA (22 nd Edition) 3120 B: 2012	0.05 mg/l to 50 mg/l 20 µg/l to 2000 µg/l
		Bromide	APHA (22 nd Edition) 4110 B: 2012	0.5 mg/l to 20 mg/l

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	Industrial Water	Chloride	APHA (22 nd Edition) 4110 B: 2012	0.02 mg/l to 20 mg/l
		Fluoride	APHA (22 nd Edition) 4110 B: 2012	0.1 mg/l to 20 mg/l
		Nitrate	APHA (22 nd Edition) 4110 B: 2012	0.05 mg/l to 20 mg/l
		Nitrite	APHA (22 nd Edition) 4110 B: 2012	0.05 mg/l to 20 mg/l
		Sulfate	APHA (22 nd Edition) 4110 B: 2012	0.1 mg/l to 20 mg/l
		Phosphate	APHA (22 nd Edition) 4110 B: 2012	0.5 mg/l to 20 mg/l
		Total Organic Carbon	APHA (22 nd Edition) 5310 B: 2012	4 mg/l to 500 mg/l
		Non Purgable Organic Carbon	APHA (22 nd Edition) 5310 B: 2012	1 mg/l to 64 mg/l
		Orthophosphate	APHA (22 nd Edition) 4500 P C: 2012	0.3 mg/l to 45 mg/l
		Reactive Silica	APHA (22 nd Edition) 4500 SiO ₂ C: 2012	1 mg/l to 100 mg/l
		Reactive Silica (Low Level)	APHA (22 nd Edition) 4500 SiO ₂ C: 2012	0.01 mg/l to 1.6 mg/l

Battal Singh
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	Industrial Water	Color (Pt-Co Units)	APHA (22 nd Edition) 2120 C: 2012	15 Pt-Co Unit to 500 Pt-Co Unit
		Chemical Oxygen Demand (Low Level)	APHA (22 nd Edition) 5220 D: 2012	3 mg/l to 150 mg/l
		Chemical Oxygen Demand (High Level)	APHA (22 nd Edition) 5220 D: 2012	20 mg/l to 1500 mg/l
		Ammonia (as NH ₃ -N)	HACH 10031 (22 nd Edition): 2012	0.4 mg/l to 50 mg/l
		Total phosphate	APHA (22 nd Edition) 4500 P J: 2012	1 mg/l to 100 mg/l
		Turbidity (as NTU)	APHA (22 nd Edition) 2130 B: 2012	0.1 NTU to 800 NTU
		pH	APHA (22 nd Edition) 4500-H-B : 2012	0 to 14
		Conductivity	APHA (22 nd Edition) 2510 B: 2012	1 µS/cm to 200000 µS/cm
		Alkalinity (as CaCO ₃)	APHA (22 nd Edition) 2320 B: 2012	25 mg/l to 20000 mg/l
		Total Dissolved Solids	APHA (22 nd Edition) 2540 B: 2012	630 mg/l to 10000 mg/l
		Total Suspended Solids	IO (22 nd Edition): 2012	10 mg/l to 200000 mg/l
		Total Hardness (Calculated)	APHA (22 nd Edition) 2340 B: 2012	0.6 mg/l to 5000 mg/l 45 mg/l to 200000 µg/l

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