



INFORMATION BROCHURE



M.S Patel Department of Civil Engineering Chandubhai S. Patel Institute of Technology Charotar University of Science and Technology Changa, Anand- 388 421

About Us

Environmental Engineering Laboratory of Charotar University of Science and Technology (CHARUSAT), Changa has state of art infrastructure and facilitates for all types of the Environmental Analysis. The Laboratory has been accredited by National Accreditation Board for Calibration & Testing Laboratories (NABL), Quality Council of India for ISO/IEC 17025:2005.

The Laboratory is also recognised by the Gujarat Pollution Control Board (GPCB), Gandhinagar as a Schedule-I Environmental Auditors. The Laboratory is continuously engaged in providing best consultancy and analytical testing facilities to its customers. The customers of the laboratory include many PSUs, Government Enterprises and other private industries.

Quality Policy

"Environmental Engineering Laboratory of M. S. Patel Department of Civil Engineering, CSPIT, CHARUSAT is committed to achieve the objective of attaining excellence in the field of testing services by providing accurate and precise results to its customers by undertaking good professional practices, adopting continual improvement in personnel skills, maintaining confidentiality and proper documentation as per ISO/IEC 17025:2005 and complying with requirements of statutory and regulatory authorities in the field of Atmospheric Pollution, Pollution & Environment and Water".

Quality Objectives

Environmental Engineering Laboratory of M. S. Patel Department of Civil Engineering, CSPIT, CHARUSAT is committed to:

- Achieve more than 90% Customer Satisfaction
- Complying with the applicable quality standards, testing protocols & analytical skills
- Modernization of the laboratory testing facilities/ infrastructure
- Maintaining Honesty, Integrity and Transparency; effect prompt delivery of test results & enhancing credibility through continual improvements

These will be achieved through:

- Competent, Trained & Skilled Employees
- Time bound delivery of test results to customers
- Forming of framework for quality documentation leading to increasing customer satisfaction
- Regular training & development of employees to enhance their analytical skills
- Upgradation of facilities by incorporating latest advances in testing equipment & methods
- Adopting safe environment friendly practices & providing personal protection & appliances to laboratory personnel
- Reviewing adopted practices periodically

Environmental and Scientific Analysis Facility

Gujarat is a leading state in India and has made the prominent mark in the industrial, scientific and academic development. This phenomenal growth with rapid industrialization and urbanization also brings in varied type of challenges, especially, in the areas like human health and environmental degradation. Having realized these issues, the state of Gujarat has very proactively taken up these challenges. In matching with its acumen for achieving sustainable development, the Department of Civil Engineering, CSPIT, has developed an Environmental and Scientific Analysis Facility at CHARUSAT, Changa, right in the heart of Charotar, Gujarat.

The well-equipped **Environmental Engineering Laboratory** of the M. S. Patel Department of Civil Engineering is help industries, GPCB and researchers to understand the analytical results of all of the environmental parameters.

Salient Features:

- Analysis of variety of environmental samples, viz. water, sewage, industrial effluents, sludge, soil, air, plant and food based samples, etc.
- Technical assistance and capacity building
- Well-equipped and modern laboratory facility
- Accurate and inexpensive analysis
- Well experienced laboratory staff
- Environmental consciousness for sustainable development

Recognition & Accreditations:



Continuous Endeavour:

Environmental Engineering lab is in the process of obtaining following accreditation:

- MoEFCC Recognition
- NABET Accreditation

Field Sampling & Laboratory Analysis Services

Water Analysis

- ✓ All Physical, chemical and biological parameters of inland surface and drinking water as per IS:10500 and WHO guidelines
- Packaged drinking water and mineral water quality analysis as per IS:14543 and IS:13428
- Water quality analysis for use in construction, pharmaceutics and other industrial applications
- ✓ Organic and Inorganic analysis of boiler feed water





Wastewater Analysis

- All Physical, chemical and biological parameters of municipal sewage and industrial effluents
- ✓ Analysis pertaining to requirements of consents of GPCB, CPCB, MoEFCC and USEPA and consents to discharge to sewers
- ✓ Organic and Inorganic analysis of industrial effluent
- ✓ Analysis for detergents, waste oils, chemicals and wash waters

Air Pollution Monitoring & Analysis

- ✓ Analysis of gases from Stack and Process vents. Sampling, analysis and monitoring of SO_x, NO_x, CO₂, CO, EA, and any toxic flammable gases, fumes and vapors
- ✓ Ambient Air Quality for PM₁₀, PM_{2.5}, SO_x, NO_x, CO₂, CO and other gases as per NAAQS/CPCB guidelines
- ✓ Workplace / Indoor Air Quality monitoring and analysis





Field Sampling & Laboratory Analysis Services

Solid Waste Analysis

- Sampling and analysis of Municipal solid waste, industrial residue and hazardous waste
- ✓ Analysis of ETP/STP sludge and biomass
- ✓ Lechate characterization and contamination analysis in Groundwater





Soil Sampling & Analysis

- Sampling and analysis of soil parameters such as pH, moisture content, texture, organic matter, NPK, Nitrogen and phosphorous content, etc.
- ✓ Analysis of river sediments for general parameters and Heavy metals

Noise Monitoring and Analysis

- ✓ Determination of sound power level of noise sources
- ✓ Ambient and workplace noise monitoring and analysis.
- ✓ Noise monitoring for factories, road traffic/vehicles, airports and construction sites, etc.







Microbial and Ecological Analysis

- ✓ Total, aerobic and anaerobic plate count
- ✓ Generic *E. coli* and Coliforms
- Ecological Indices

Consulting Services

Feasibility & Treatability Study

- Treatability studies with experiment at laboratory scale, pilot scale plant for effluents and waste water
- ✓ Physico-chemical and coagulant dose optimizations
- ✓ Analysis of activated sludge and biomass
- ✓ Toxicity testing and bioassay





Performance and Efficiency Assessment

- ✓ Water Treatment Plants and ETP / STP
- ✓ Industrial Furnaces
- ✓ Air Pollution Control Devices
- ✓ Waste Management



✓ Rain Water Harvesting for Household and Offices



Research & Development

Rain Water Harvesting

✓ Storm Water Management

Water Audit

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- ✓ Municipal Solid Waste and Sewage Survey
- ✓ Waste and Effluent Treatment Methodologies
- ✓ Other Customized Research Projects

State of The Art

Environmental Engineering Laboratory is equipped with state of the art facility for physical, chemical, biological and complete environmental testing. The testing facility includes Gas Chromatography, UV-Visible Spectrophotometer, Flame Photometer, BOD Incubator, COD Digesters, Microscopes, Centrifuges, Shakers and other equipment for environmental analysis and treatability studies.



Our Team

- Mr. Gaurav V. Kapse, Quality Manager, B. E Civil (Mumbai) M. Tech Env. Engg. (IIT Dhanbad)
- Mr. Vijay Safaya, Technical Manager, B. Tech, M. Tech Chemical Engg. (BITS Pilani)
- Dr. Seema Amin, Microbiologist, PhD Microbiology (SPU)
- Dr. Bragadish Iyer, Microbiologist, PhD Microbiology (MSU)
- Mrs. Mitali Vedanti, Environmental Engineer, B. E. Civil, M. E. Env. Engg. (GTU)
- Mrs. Hemal Parekh, Environmental Engineer, B. E. Civil, M. E. Env. Engg. (GTU)
- Mr. Prakash Dabhi, Environmental Engineer, B. E. Civil, M. Tech. Env. Engg.
- Mr. Gaurav Patel, Chemical Engineer, B. E Chemical Engg. (SPU)
- Mr. Jinit R. Patel, Lab Chemist, B. Sc. Chemistry (Guj. Uni.)
- Mr. Trushit Patel, Lab Chemist, M Sc. Polymer Sc. & Technology (SPU)

Contact/ Call with Your Enquiries

Environmental Engineering Laboratory

Room No: 613, M. S. Patel Department of Civil Engineering Chandubhai S. Patel Institute of Technology, Charotar University of Science and Technology, CHARUSAT Campus-Changa Off. Nadiad-Petlad Highway, Gujarat (India) 388 421 - INDIA Contact No: 02697-265082, eel.cv@charusat.ac.in





Environmental Engineering Laboratory An ISO / IEC 17025 / NABL Accredited Laboratory **Gujarat Pollution Control Board (GPCB) Recognized Schedule-I Environment Auditor**



Feasibility & **Treatability** Studies

ETP Performance Assessment

> Rain Water









Environment Management Consultancy Services







M. S. Patel Department of Civil Engineering Chandubhai S. Patel Institute of Technology (CSPIT) Character IIniversity of Coince & Technology (CUADICAT) Change 200 191





Environmental Testing Monitoring Services







Noise

Water &

Testing

Air

Pollution

Solid &

Hazardous

Soil Testing



CERTIFICATE OF ACCREDITATION

ENVIRONMENTAL ENGINEERING LABORATORY, M. S. PATEL DEPARTMENT OF CIVIL ENGINEERING, CSPIT, **CHARUSAT**

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & **Calibration Laboratories''**

for its facilities at

CHARUSAT CAMPUS, CHANGA, ANAND, GUJARAT, INDIA

in the field of

TESTING NOTION

· INDIA · S3

Certificate Number:

TC-9722

Issue Date:

02/08/2021

Valid Until:

01/08/2023

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL. (To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Identity : Shri Charotar Moti Sattavis Patidar Kelavani Mandal, Vallabhvidyanagar

Signed for and on behalf of NABL



N. Venkateswaran **Chief Executive Officer**



GUJARAT POLLUTION CONTROL BOARD Paryavaran Bhavan Sector - 10 A, Gandhinagar - 382 010. Environment Audit Cell

NO. GPCB/EA-313/ 55-1+36

20 JAN 2020

RPAD

To,

Charotar University of Science and Technology (CHARUSAT) Charusat Campus, Changa District: Anand Gujarat – 388 421

Sub:- Recognition as Schedule-1 Environmental Auditor

Sir,

This refers to your application for the recognition as Environmental Auditor, subsequent interview and visit of your Laboratory by Environment Audit Committee members. It is recommended by the Environment Audit Committee members, to recognize your firm as Schedule-I Environmental Auditor for carrying out the Environmental Audit under Environment Audit Scheme with following conditions.

- 1) Recognition is valid up to 31/12/2021.
- 2) You shall have maximum One team for the Environment Audit.
- 3) You shall carry out maximum 15 nos. of Environment Audit.
- 4) Team members shall be as under :

Sr. No.	Name	Designation
1	Gaurav Kapse	Environment Engineer
2	Gaurav Patel	Chemical Engineer
3	Jinit Patel	Chemist
4	Seema Amin	Microbiologist

- 5) You shall prepare and submit the Environment Audit report and to comply the conditions for Environment Auditors as per the Hon'ble High Court order dated 20/12/1996, 13/03/1997, 16/09/1999, and also the Guidelines prepared by Gujarat Pollution Control Board in this regard, for the Environment Audit Scheme along with the Adequacy and Efficacy certificates as per prescribed format.
- 6) Environment Audit Report shall be submitted in prescribed format.
- 7) You shall apply for renewal of Environmental Auditor 3 months before expiry of the recognition with the scrutiny fees to this Board.
- 8) This recognition is subject to periodic evaluation of your facility and subject to change based on performance.

Clean Gujarat Green Gujarat An ISO 9001: 2008 & ISO 14001: 2004 Certified Organization

9) Any change in man power, team members, laboratory infrastructure, laboratory address etc., without prior appraisal of Environment Audit Committee and prior approval of Board, this recognition will automatically stands cancelled.

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This letter is issued with the permission of competent authority.

For and on behalf of GPCB,

in a substantiation

Bucerval (G.B.Vasavada)

Scientific Officer





SCOPE OF ACCREDITATION

Laboratory Name :

Accreditation Standard Certificate Number Validity ENVIRONMENTAL ENGINEERING LABORATORY, M. S. PATEL DEPARTMENT OF CIVIL ENGINEERING, CSPIT, CHARUSAT, CHARUSAT CAMPUS, CHANGA, ANAND, GUJARAT, INDIA

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
		Permanent Facility		
1	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Oxides of Nitrogen	IS 5182 (Part 6)
2	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter PM 2.5	IS 5182 Part 24
3	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter PM10	IS 5182 (Part 23) Gravimetric Method
4	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Sulphur Dioxide	IS 5182 (Part 2)
5	CHEMICAL- ATMOSPHERIC POLLUTION	Flue Gases/ Stack emission	Particulate Matter	IS 11255 (Part 1)
6	CHEMICAL- ATMOSPHERIC POLLUTION	Flue Gases/ Stack emission	Oxides of Nitrogen	IS 11255 (Part 7)
7	CHEMICAL- ATMOSPHERIC POLLUTION	Flue Gases/ Stack emission	Sulphur Dioxide	IS 11255(Part 2)
8	CHEMICAL- POLLUTION & ENVIRONMENT	Domestic Sewage/ Hazardous Waste/ Industrial Residue	рН	EPA SW 846 Method 9045 C
9	CHEMICAL- POLLUTION & ENVIRONMENT	Domestic Waste/ Hazardous Waste/ Industrial Residue	Loss on Ignition @ 550 °C	SOP- 43 (Based on APHA 23rd Edition 2540 G) Issue No/Date : 01 / 01.01.
10	CHEMICAL- POLLUTION & ENVIRONMENT	Domestic Waste/ Hazardous Waste/ Industrial Waste	Loss on Drying @ 105 °C	SOP- 42 (Based on APHA (23rd Edition) 2540 G) Issue No/Date : 01 / 01.01.
11	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Acidity	APHA (23rd Edition) 2310 B
12	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Alkalinity	APHA (23rd Edition) 2320 B
13	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Biochemical Oxygen Demand @20"C for 5days.	APHA (23rd Edition) 5210 B
14	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Color	APHA (23rd Edition) 2120 C
15	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Dissolved Oxygen	APHA (23rd Edition) 4500 O C
16	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Electric Conductivity	APHA (23rd Edition) 2510 B
17	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Free Residual Chlorine	APHA (23rd Edition) 4500 Cl





SCOPE OF ACCREDITATION

Laboratory Name :

Accreditation Standard Certificate Number Validity

ENVIRONMENTAL ENGINEERING LABORATORY, M. S. PATEL DEPARTMENT OF CIVIL ENGINEERING, CSPIT, CHARUSAT, CHARUSAT CAMPUS, CHANGA, ANAND, GUJARAT, INDIA

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
18	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Mixed liquor suspended solids (MLSS)	APHA (23rd Edition) 2540 D
19	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Mixed liquor volatile suspended solids (MLVSS)	APHA (23rd Edition) 2540 E
20	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Nitrate Nitrogen	APHA (23rd Edition) 4500 NO3,- B
21	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Oil & Grease	APHA (23rd Edition) 5520 B
22	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	pH @ 25'C	APHA (23rd Edition) 4500 H+ B
23	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Phenolic Compound	APHA (23rd Edition) 5530 D
24	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Phosphate	APHA (23rd Edition) 4500 P D
25	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Sulphate	APHA (23rd Edition) 4500- SO42- E
26	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Sulphide	APHA (23rd Edition) 4500 S2- F
27	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Temperature	APHA (23rd Edition) 2550 B
28	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Total Dissolved Solids	APHA (23rd Edition) 2540 C
29	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Total Solids	APHA (23rd Edition) 2540 B
30	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Total Suspended Solids	APHA (23rd Edition) 2540 D
31	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Turbidity	APHA (23rd Edition) 2130 B
32	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Volatile & Fixed Solids	APHA (23rd Edition) 2540 E
33	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Chemical Oxygen Demand (Closed Reflux)	APHA (23rd Edition) 5220 C
34	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Chemical Oxygen Demand (Open Reflux)	APHA (23rd Edition) 5220 B
35	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Chloride	APHA (23rd Edition) 4500 Cl- B
36	CHEMICAL- WATER	Drinking Water	Acidity	APHA (23rd Edition) 2310 B
37	CHEMICAL- WATER	Drinking Water	Alkalinity	APHA (23rd Edition) 2320 B





SCOPE OF ACCREDITATION

Laboratory Name :

CHEMICAL- WATER

Ground Water

Accreditation Standard Certificate Number Validity

ENVIRONMENTAL ENGINEERING LABORATORY, M. S. PATEL DEPARTMENT OF CIVIL ENGINEERING, CSPIT, CHARUSAT, CHARUSAT CAMPUS, CHANGA, ANAND, GUJARAT, INDIA

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APHA (23rd Edition) 3500 Mg B

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
38	CHEMICAL- WATER	Drinking Water	Calcium	APHA (23rd Edition) 3500 Ca E
39	CHEMICAL- WATER	Drinking Water	Calcium Hardness as CaCO3	APHA (23rd Edition) 3500 B:
10	CHEMICAL- WATER	Drinking Water	Chloride	APHA (23rd Edition) 4500 Cl- E
11	CHEMICAL- WATER	Drinking Water	Color	Color APHA (23rd Edition) 212 C
12	CHEMICAL- WATER	Drinking Water	Dissolved Oxygen	APHA (23rd Edition) 4500 O C
13	CHEMICAL- WATER	Drinking Water	Electric Conductivity	APHA (23rd Edition) 2510 B
14	CHEMICAL- WATER	Drinking Water	Free Residual Chlorine	APHA (23rd Edition) 4500 Cl
15	CHEMICAL- WATER	Drinking Water	Magnesium	APHA (23rd Edition) 3500 Mg I
16	CHEMICAL- WATER	Drinking Water	Nitrate Nitrogen	APHA (23rd Edition) 4500 NO3,- B:
17	CHEMICAL- WATER	Drinking Water	pН	APHA (23rd Edition) 4500 H+
18	CHEMICAL- WATER	Drinking Water	Phosphate	APHA (23rd Edition) 4500 P D
19	CHEMICAL- WATER	Drinking Water	Potassium	APHA (23rd Edition) 3500 K B
50	CHEMICAL- WATER	Drinking Water	Sodium	APHA (23rd Edition) 3500 K B
51	CHEMICAL- WATER	Drinking Water	Sulphate	APHA (23rd Edition) 4500-4500-SO42- E
52	CHEMICAL- WATER	Drinking Water	Sulphide	APHA (23rd Edition) 4500 S2-
53	CHEMICAL- WATER	Drinking Water	Total Dissolved Solids	APHA (23rd Edition) 2540 C
54	CHEMICAL- WATER	Drinking Water	Total Hardness	APHA (23rd Edition) 2340 C
55	CHEMICAL- WATER	Drinking Water	Total Solids	APHA (23rd Edition) 2540 B
56	CHEMICAL- WATER	Drinking Water	Total Suspended Solids	APHA (23rd Edition) 2540 D
57	CHEMICAL- WATER	Drinking Water	Turbidity	APHA (23rd Edition) 2130 B
58	CHEMICAL- WATER	Ground Water	Acidity	APHA (23rd Edition) 2310 B:
59	CHEMICAL- WATER	Ground Water	Alkalinity	APHA (23rd Edition) 2320 B
50	CHEMICAL- WATER	Ground Water	Calcium	APHA (23rd Edition) 3500 Ca E
51	CHEMICAL- WATER	Ground Water	Calcium Hardness as CaCO3	APHA (23rd Edition) 3500 B
52	CHEMICAL- WATER	Ground Water	Chloride	APHA (23rd Edition) 4500 Cl- E
53	CHEMICAL- WATER	Ground Water	Color	APHA (23rd Edition) 2120 C
54	CHEMICAL- WATER	Ground Water	Electric Conductivity	APHA (23rd Edition) 2510 B

Magnesium





SCOPE OF ACCREDITATION

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ENVIRONMENTAL ENGINEERING LABORATORY, M. S. PATEL DEPARTMENT OF CIVIL ENGINEERING, CSPIT, CHARUSAT, CHARUSAT CAMPUS, CHANGA, ANAND, GUJARAT, INDIA

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
66	CHEMICAL- WATER	Ground Water	Nitrate Nitrogen	APHA (23rd Edition) 4500 NO3,- B
67	CHEMICAL- WATER	Ground Water	рН	APHA (23rd Edition) 4500 H+ B
68	CHEMICAL- WATER	Ground Water	Phosphate	APHA (23rd Edition) 4500 P D
69	CHEMICAL- WATER	Ground Water	Potassium	APHA (23rd Edition) 3500 K B
70	CHEMICAL- WATER	Ground Water	Sodium	APHA (23rd Edition) 3500 K B
71	CHEMICAL- WATER	Ground Water	Sulphate	APHA (23rd Edition) 4500-4500-SO42- E
72	CHEMICAL- WATER	Ground Water	Sulphide	APHA (23rd Edition) 4500 S2- F
73	CHEMICAL- WATER	Ground Water	Total Dissolved Solids	APHA (23rd Edition) 2540 C
74	CHEMICAL- WATER	Ground Water	Total Hardness	APHA (23rd Edition) 2340 C
75	CHEMICAL- WATER	Ground Water	Total Solids	APHA (23rd Edition) 2540 B
76	CHEMICAL- WATER	Ground Water	Total Suspended Solids	APHA (23rd Edition) 2540 D
77	CHEMICAL- WATER	Ground Water	Turbidity	APHA (23rd Edition) 2130 B
78	CHEMICAL- WATER	Surface Water	Acidity	APHA (23rd Edition) 2310 B
79	CHEMICAL- WATER	Surface Water	Alkalinity	APHA (23rd Edition) 2320 B
80	CHEMICAL- WATER	Surface Water	Calcium	APHA (23rd Edition) 3500 Ca B
81	CHEMICAL- WATER	Surface Water	Calcium Hardness as CaCO3	APHA (23rd Edition) 3500 B
82	CHEMICAL- WATER	Surface Water	Chloride	APHA (23rd Edition) 4500 Cl- B
83	CHEMICAL- WATER	Surface Water	Color	APHA (23rd Edition) 2120 C
84	CHEMICAL- WATER	Surface Water	Dissolved Oxygen	APHA (23rd Edition) 4500 O C
85	CHEMICAL- WATER	Surface Water	Electric Conductivity	APHA (23rd Edition) 2510 B
86	CHEMICAL- WATER	Surface Water	Magnesium	APHA (23rd Edition) 3500 Mg B
87	CHEMICAL- WATER	Surface Water	Nitrate Nitrogen	APHA (23rd Edition) 4500 NO3,- B
88	CHEMICAL- WATER	Surface Water	рН	APHA (23rd Edition) 4500 H+ B
89	CHEMICAL- WATER	Surface Water	Phosphate	APHA (23rd Edition) 4500 P D
90	CHEMICAL- WATER	Surface Water	Potassium	APHA (23rd Edition) 3500 K B
91	CHEMICAL- WATER	Surface Water	Sodium	APHA (23rd Edition) 3500 K B
92	CHEMICAL- WATER	Surface Water	Sulphate	APHA (23rd Edition) 4500-4500-SO42- E
93	CHEMICAL- WATER	Surface Water	Sulphide	APHA (23rd Edition) 4500 S2- F





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Laboratory Name :

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Component, parameter or Test Method Specification characteristic tested / against which tests are S.No **Discipline / Group** Materials or Products tested Specific Test Performed / performed and / or the Tests or type of tests techniques / equipment used performed 94 CHEMICAL- WATER Surface Water Total Dissolved Solids APHA (23rd Edition) 2540 C 95 CHEMICAL- WATER Surface Water Total Hardness APHA (23rd Edition) 2340 C 96 CHEMICAL- WATER Surface Water Total Solids APHA (23rd Edition) 2540 B 97 CHEMICAL- WATER Surface Water Total Suspended Solids APHA (23rd Edition) 2540 D 98 CHEMICAL- WATER Surface Water Turbidity APHA (23rd Edition) 2130 B







SCOPE OF ACCREDITATION

Laboratory Name :

Accreditation Standard Certificate Number Validity

ENVIRONMENTAL ENGINEERING LABORATORY, M. S. PATEL DEPARTMENT OF CIVIL ENGINEERING, CSPIT, CHARUSAT, CHARUSAT CAMPUS, CHANGA, ANAND, GUJARAT, INDIA

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
	•	Site Facility		
1	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter PM 2.5	IS 5182 Part 24
2	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Sulphur Dioxide	IS 5182 (Part 2)
3	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Noise	Noise Level	IS 9989
4	CHEMICAL- ATMOSPHERIC POLLUTION	DG Set	Noise Level	IS 4758
5	CHEMICAL- ATMOSPHERIC POLLUTION	Flue Gases/ Stack emission	Particulate Matter	IS 11255 (Part 1)
6	CHEMICAL- ATMOSPHERIC POLLUTION	Flue Gases/ Stack emission	Oxides of Nitrogen	IS 11255 (Part 7)
7	CHEMICAL- POLLUTION & ENVIRONMENT	Industrial Effluent & Domestic Sewage	Temperature	APHA (23rd Edition) 2550 B
8	CHEMICAL- WATER	Drinking Water	рН	APHA (23rd Edition) 4500 H+ B
9	CHEMICAL- WATER	Surface Water	рН	APHA (23rd Edition) 4500 H+ B

