### Choksi Laboratories Limited

**Laboratory Facilities Guide - 2007** 

### **CLL** – Laboratory Facilities Guide - 2006

- CLL Company Profile
- Approvals
- Human Capital
- Instrumentation
- Quality System ISO/IEC 17025 : 2005

Mission

### CLL – Laboratory Facilities Guide - 2006

### CLL Company Profile

- CLL is public limited, BSE listed company.
- Established in 1982
- CLL came out with its IPO in 1993.
- Is completely independent contract (third-party) laboratory & research organization.

### Laboratory Network

Indore – Corporate Office and Primary Laboratory Setup. (Established 1982) Lab Area - 17,000sq. ft.

Labs - Pharmaceuticals, Agro, Building Materials, Calibration, Environment Lab Services

Panchkula – Branch Laboratory (Est. 2004) Lab Area - 8,000sq. ft.

Labs - Pharmaceuticals, Agro, Calibration

Vadodara – Branch Laboratory (Est. 1998) Lab Area - 8,000sq. ft. Labs – Pharmaceuticals, Calibration, Water Analysis

Vapi – Branch Laboratory (Est. 2001) Lab Area - 9000 + 12500 sq. ft. Labs – Pharmaceuticals, Calibration, Water Analysis, Clinical Research Center

Sample Collection Network

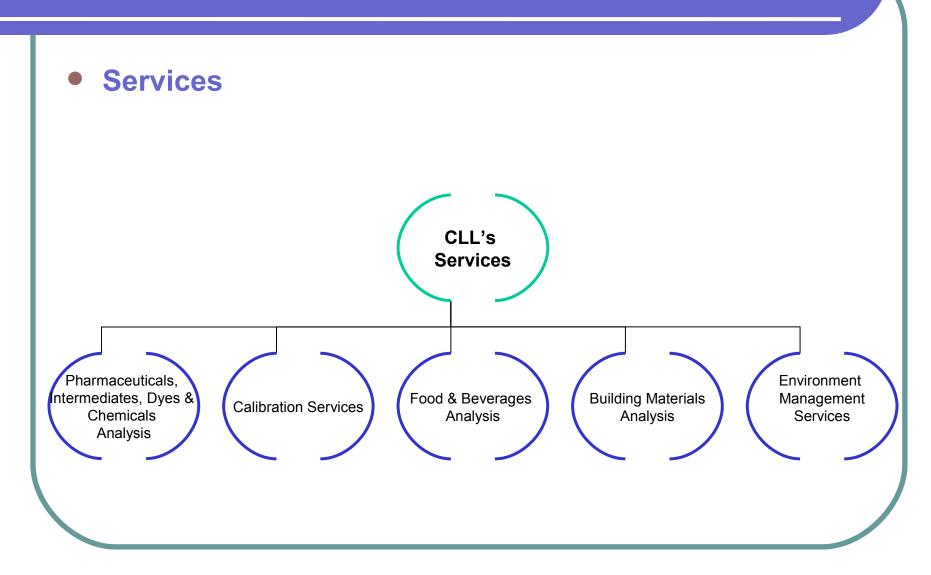
North - Delhi, Mohali (Chandigarh), Panchkula, Kanpur, Roorkee

**East** - Calcutta, Bhubaneshwar

West - Ahemadabad, Rajkot, Vadodara, Vapi, Jaipur, Pune, Mumbai, Surat, Nashik, Goa

South - Bangalore, Hyderabad, Cochin

**Central - Indore, Gwalior** 



- Drugs & Chemicals Analysis
  - Wet Labs
  - Automated Instrumentation Labs
  - Microbiology Labs
  - Animal Labs
  - Consultancy

- Drugs & Chemicals Analysis Services Offered
  - Routine Quality Control Testing
  - As per IP/BP/USP/EP
  - As per ISM (for herbals or ayurvedic products)
  - Certification (Form 39) FDA
  - Contaminant Residue Analysis
  - In-plant residue / bio-burden monitoring
  - Regulatory Affairs

Agro & Agro Derivatives Analysis – Products Analyzed

Agro-chemicals analysis (including bio-pesticides)

Fertilizers (including bio-fertilizers)

Food-grains

**Processed Food** 

Frozen / Dehydrated Fruits & Vegetables

Sea-food

**Dairy Products** 

**Meat & Poultry** 

**Organic Food (for exports)** 

**Essential Oils** 

Agro & Agro Derivatives Analysis – Services Offered

**Nutritional Labeling** 

**Proximate Analysis** 

**FAME** 

**Sugars** 

**Amino-acid analysis** 

**Microbiological Contamination** 

**Toxic Metal Contamination** 

**Shelf-Life Studies** 

**Preservative Efficacy** 

Migration Testing (Containers, LDPE Films, Ceramic ware)

**Bio-burden studies** 

**HACCP Training** 

Building Materials Analysis – Products Analyzed

Cement, Aggregate, Sand

Bricks, Tiles

PVC, HDPE, MDPE films, pipes & fittings

Plywood & Resins

**Paints** 

**Steel Rods for Construction** 

**Bitumen** 

Building Materials Analysis – Services Offered

**Mechanical Testing** 

Mixed Design (Concrete)

**Chemical Composition / Properties (Metals, Paints, Cement)** 

**Durability Tests, Keeping-Property, Fastness to Light (Paints)** 

#### Water Analysis

**Water for Construction Purpose** 

Water for Pharmaceutical Use

Water for Food Processing Industry

**Water for Industrial Boilers** 

Water for Drinking Purpose (Potable, Bottled, or Mineral Water)

Waste-water analysis

Analysis Methods from IS, EPA, USGS, IP/BP/USP, APHA, AOAC and CLL's own validated In-house methods database).

Environment Management Services

**Air & Stack Monitoring** 

ETP, STP design, construction and O&M

Soil Investigation (On-site / laboratory services)

**Environment Impact Assessment** 

Consultancy on:

**Industrial Waste Management** 

**Hazardous Waste Management** 

**ISO 14000** 

**OSHA / ISO 18000** 

#### Calibration Services

**Industrial Calibration** 

(Disciplines: Thermal, Electro-technical (Electrical, Speed, Timers), and Mechanical (Pressure, Force, Dimension))

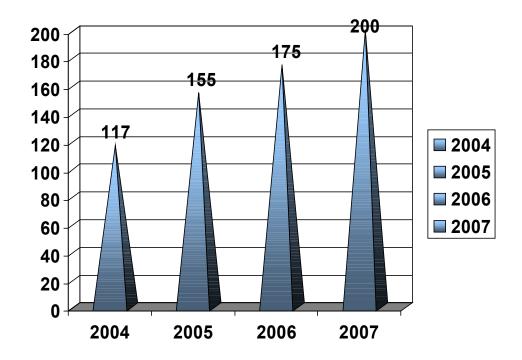
Analytical Instrument Validation (HPLC, GC, PSA, Auto-claves, Conductivity Meters, FTIRs, pH Meters, AAS, Dissolution Testers etc.)

On-site services as well as laboratory services.

Primary Standards traceable to NPL (INDIA) or NIST (USA).

### **Human Capital**

Staff Strength



Note: Does not include contract employees on EMS sites

## Approvals

### **CLL** is approved by:

Bureau of Indian Standards
DGS&D, AGMARK
FDCA (India) & USFDA
Ministry of Environment & Forests
Export Inspection Council

### Approvals

### **CLL** is a Quality Partner to:

**RITES** 

FCI

**SOPA, SEA** 

**Defense** (MES / GES)

EIL

**Customs** 

**ISRO** 

**CMO** 

**MPLUN** 

**ESI** 

Forensic Lab (Gol)

CAT (BARC)

### Instrumentation

Set-up ...1

35 HPLCs (MS/MS, PDA, ECD, FLD, RI, UV); Over 120 Columns

**Particle Size Analyzer – Melwarn, Germany (0.2 – 2000 microns)** 

20 GCs - Detectors: MS, ECD, TID, TCD, PID, FID; 7 with Headspace & Purge n' Trap

**Automated TOC Analyzer, Shimadzu Japan – Upto 4 ppb** 

**5 FTIRs - Perkin Elmer, Shimadzu (accessories for liquid cell)** 

**5 AAS, 1 XRF - Flame, Graphite Furnace, Cold-Vapour, Hydride** 

**9 USFDA Class 100 Clean Rooms** 

### Instrumentation

Set-up ...2

**LC-MS/MS - Waters, Ion Chromatograph (with Dialysis Unit)** 

**Balances from Mettler, Sartorious, Shimadzu or Precisia (20)** 

**KF Titrators (6) and Potentiometers (6) from Mettler and Metrohm** 

**Brookfield Viscometers (Digital, Small sample adapter)** 

**Dissolution App. (USP – NF design – 8 nos.)** 

**Laminar Flow (9), Bio-safety cabinet (2)** 

**Water Purifiers from Sartorious for all labs** 

### Instrumentation

Features

**Redundancy (Back-up for all major instruments)** 

Calibration by In-house ISO 17025 accredited lab or approved vendors

**Traceability to NPL, NIST, NML, UKAS** 

**Uncertainty calculations for all calibrations** 

**Validations as per ICH, USP norms** 

IQ / OQ / PQ for most major equipment

# Quality System

- Accredited by NABL (Department of Science & Technology) in 1999, and ISO 17025 in 2001 for Testing.
- Accredited on ISO 17025 for Calibration in 2002.
- Membership of APLAC & ILAC (through NABL)
- Access to 54 member economies

### Mission

We want to be a world-class
Quality Assurance
Solutions Provider