

FACTS about DEQ'S STATE ENVIRONMENTAL LABORATORY

History – DEQ has been testing environmental samples for over 30 years. The State Environmental Laboratory (SEL) is a part of DEQ's Customer Services Division (CSD).

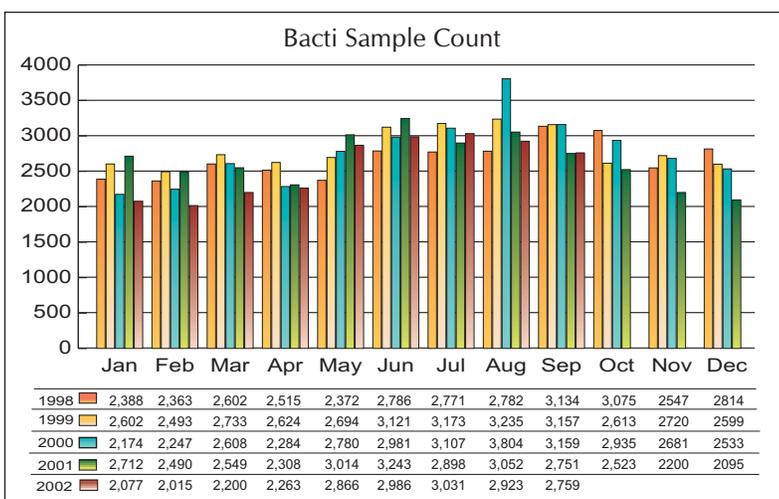
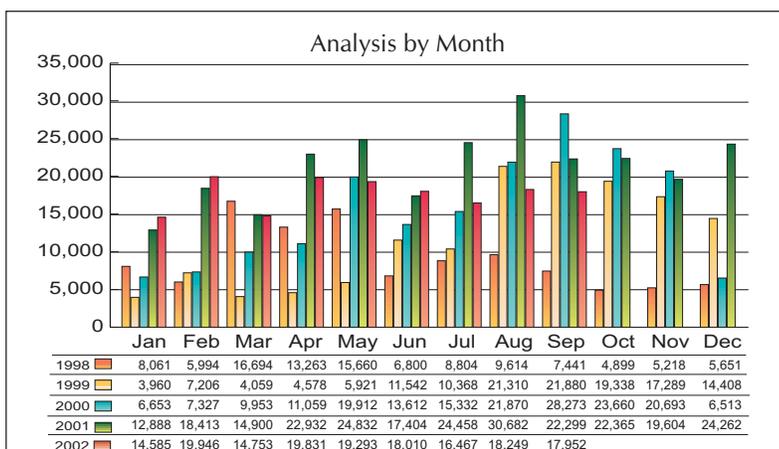
Staff - The SEL has 50 staff members. Forty-four of those staff (85%) possess at least a Bachelor's Degree in chemistry or biology. Four of the others are Laboratory Technicians and the other three provide clerical support.

Budget - The CSD annual budget is \$4.7 million. Approximately \$4.0 million of that supports the SEL.

SEL Customers – The SEL provides laboratory support to the other divisions of DEQ (air, water and land), Oklahoma's 1,400+ public water supplies, the Oklahoma Water Resources Board's BUMP program, the Corporation Commission's Pollution Abatement and Underground Storage Tank programs and to Private Citizens of the state who may be concerned about the quality of their private water wells.

Numbers of Samples and Numbers of Tests – As shown in the tables, the sample load to SEL has grown in recent years. In FY 2002 we tested for 250,088 different chemicals and compounds in 18,127 samples. The lab averaged 1,500 samples per month and approximately 15 analyses per sample. In addition we tested for bacteria in 29,026 other samples. A greater volume of samples allows us to be more efficient and keep costs lower than those usually found in private laboratories. DEQ's lab handles the largest volume of samples of any environmental laboratory (public or private) in the state.

Quality Assurance – Every sample tested by SEL is subject to the lab's rigorous quality assurance/quality control (QA/QC) procedures. Depending upon the type of analysis and volume of samples processed, between 15 percent and 60



percent of all samples shot on a given instrument are related to QA/QC. The action levels for some of the chemicals tested are measured in the tenths of a part per billion. Performance Evaluation and unknown samples are tested regularly and EPA audits the performance of the SEL. CSD also operates a Laboratory Certification program to audit and accredit other laboratories in the state that provide data to environmental programs.

Types of Analysis – SEL offers analysis in many areas including general chemistry, metals, microbiology, radiochemistry and organics analysis using technologies such as gas chromatography, high pressure liquid chromatography and gas chromatography/mass spectrometry.

Laboratory Instruments – The replacement value of laboratory instruments is over \$3.0 million. SEL spends at least \$300,000 each year to replace laboratory instruments. These figures do not include the cost of laboratory space or recurring costs of supplies such as chemicals and glassware.

