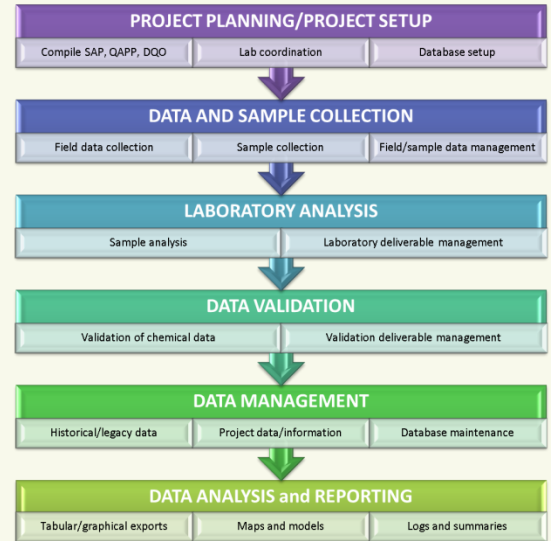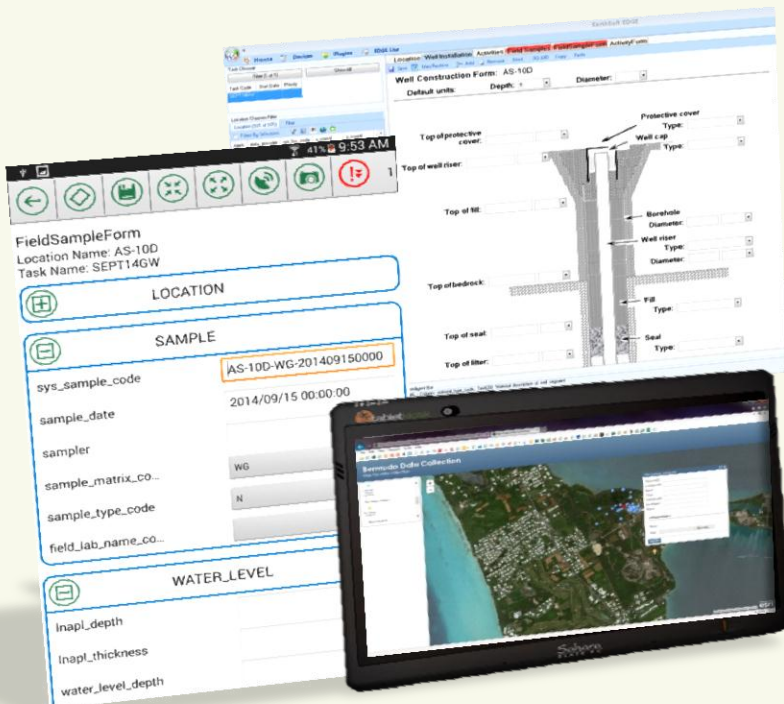# LANGAN

Database Design, Management and Solutions

The Data Solutions Team works collaboratively with Langan's other technology groups to develop and deliver advanced tools to facilitate informed decision-making and data-sharing. These tools help remove workflow redundancies and ensure that our client's objectives are met in the most cost-effective manner while maintaining data of the greatest quality. Langan's standardized process for data management includes project setup and laboratory coordination, data validation and usability evaluation, warehousing, and presentation. We integrate these critical steps using industry-leading applications including advanced SQL relational databases and web-based project portals.

PROJECT PLANNING/PROJECT SETUP
Compile SAP, QAPP, DQO | Lab coordination | Database setup

DATA AND SAMPLE COLLECTION
Field data collection | Sample collection | Field/sample data management

LABORATORY ANALYSIS
Sample analysis | Laboratory deliverable management

DATA VALIDATION
Validation of chemical data | Validation deliverable management

DATA MANAGEMENT
Historical/legacy data | Project data/information | Database maintenance

DATA ANALYSIS and REPORTING
Tabular/graphical exports | Maps and models | Logs and summaries
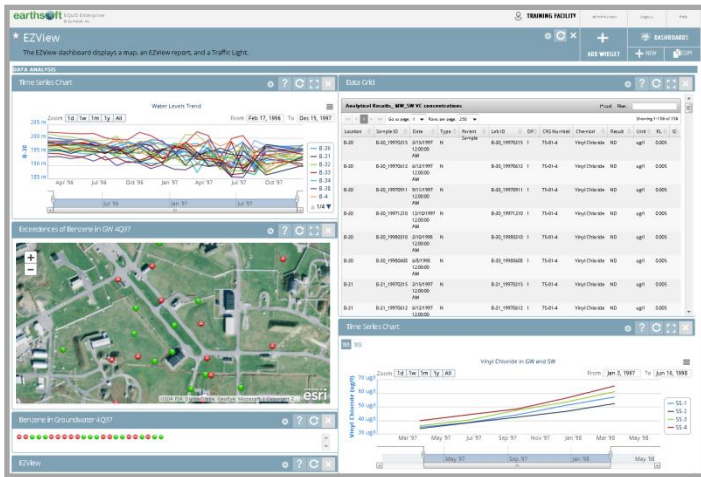
DATA AND SAMPLE COLLECTION

Langan understands that capturing data efficiently and accurately is paramount to the successful completion of a project. As such, our Data Solutions Team develops and supports a variety of off-the-shelf tools to capture data. Langan's strategy for data acquisition employs field mobile technology and software applications that eliminate redundancies and potential errors associated with transcribing field data sheets and increases the speed with which data becomes available.

DATA VALIDATION

Langan's data validation and verification process assures that analytical data is compliant with technical and scientific requirements as well as withstands rigorous litigation proceedings and agency scrutiny.
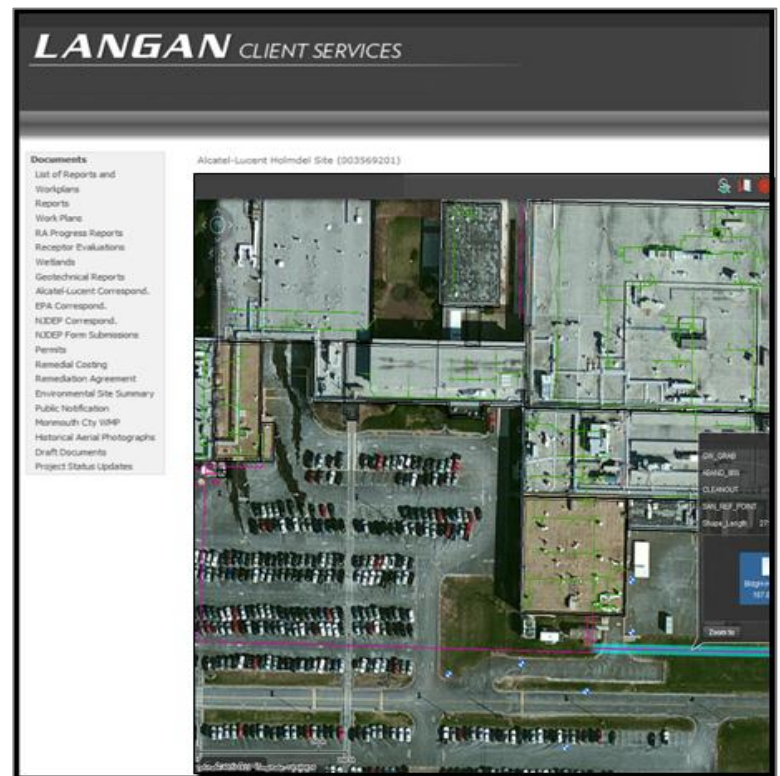
DATA MANAGEMENT

From a data management standpoint, Langan utilizes centralized, enterprise-level, relational databases, which are based on Microsoft's® SQL Server® and includes EarthSoft's EQuIS™ products for environmental data. Our databases are optimized for rapid data access from a variety of sources or tools (e.g., modeling applications or GIS). Project stakeholders are provided access to their data using web-based project portals that provide complete portfolio management readily available in one intuitive site.

DATA ANALYSIS and REPORTING

With the use of SQL server based relational databases, Langan is able to provide our clients the ability to seamlessly evaluate data in graphical, tabular, and spatial form using industry leading applications. We frequently develop client portals, which can be used for a wide variety of purposes such as querying data (spatial and tabular), analyzing relationships, redlining activities, printing maps, managing project status, and receiving user input.

Langan's Data Solutions Services:

- Acquisition
- Validation and usability assessments
- Management
- Integration
- Analysis, reporting and presentation
- Development and support of client services sites
- Litigation support

For more information about Data Solutions:
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