



DatAssess – Scalable Tools for Independent Electronic Data Review and Assessment

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Presentation Outline



- What is DatAssess?
- DatAssess Key Components and Features
- Web-based Electronic Data Review
- How Does it Work?
- Why Use Web-based Electronic Data Review?
- Benefits and Successes

What is DatAssess?



- A set of standardized business processes, systems and web-based tools used to manage all aspects and stages of environmental measurement projects.
- DatAssess provides analytical data of known and documented quality to its customers in a cost-effective and efficient manner.

What is DatAssess (continued)?



- Developed for and currently used by EPA for environmental measurements.
 - Environmental Response Laboratory Network (ERLN) and Contract Laboratory Program (CLP)
- Can be applied to any large monitoring / measurement program that involves laboratory analyses (e.g., clinical, food, agricultural and forensic).

DatAssess Key Components



- Quality Assurance Project / Sampling Plan
- Logistics, Tracking and Communications
- Data Management
- Financial Management
- Performance Management
 - Project-level (electronic data review)
 - Program-level (business analytics)
- Access to qualified laboratories that can provide computer-readable electronic laboratory reports

DatAssess Key Features



- Processes and tools based on best practices for environmental project management.
- Scalable, modular design enables users to use as is or select a variety of features ala carte to support any size project.
- Easy-to-use centralized web-based tools that are data driven and roles based.
- Access to over 150 pre-qualified public and private laboratories with toxic industrial chemical, biological and radiological analytical capabilities.

Web-based Electronic Data Review



- DatAssess's main product for routine projects are Web-based Electronic Data Review results.
 - Most frequently used DatAssess component
 - All other DatAssess functions support the delivery of this product
- Web-based Electronic Data Review results are replacing the laboratory data package as the primary product to EPA DatAssess customers.

How Does Web-based Electronic Data Review Work?

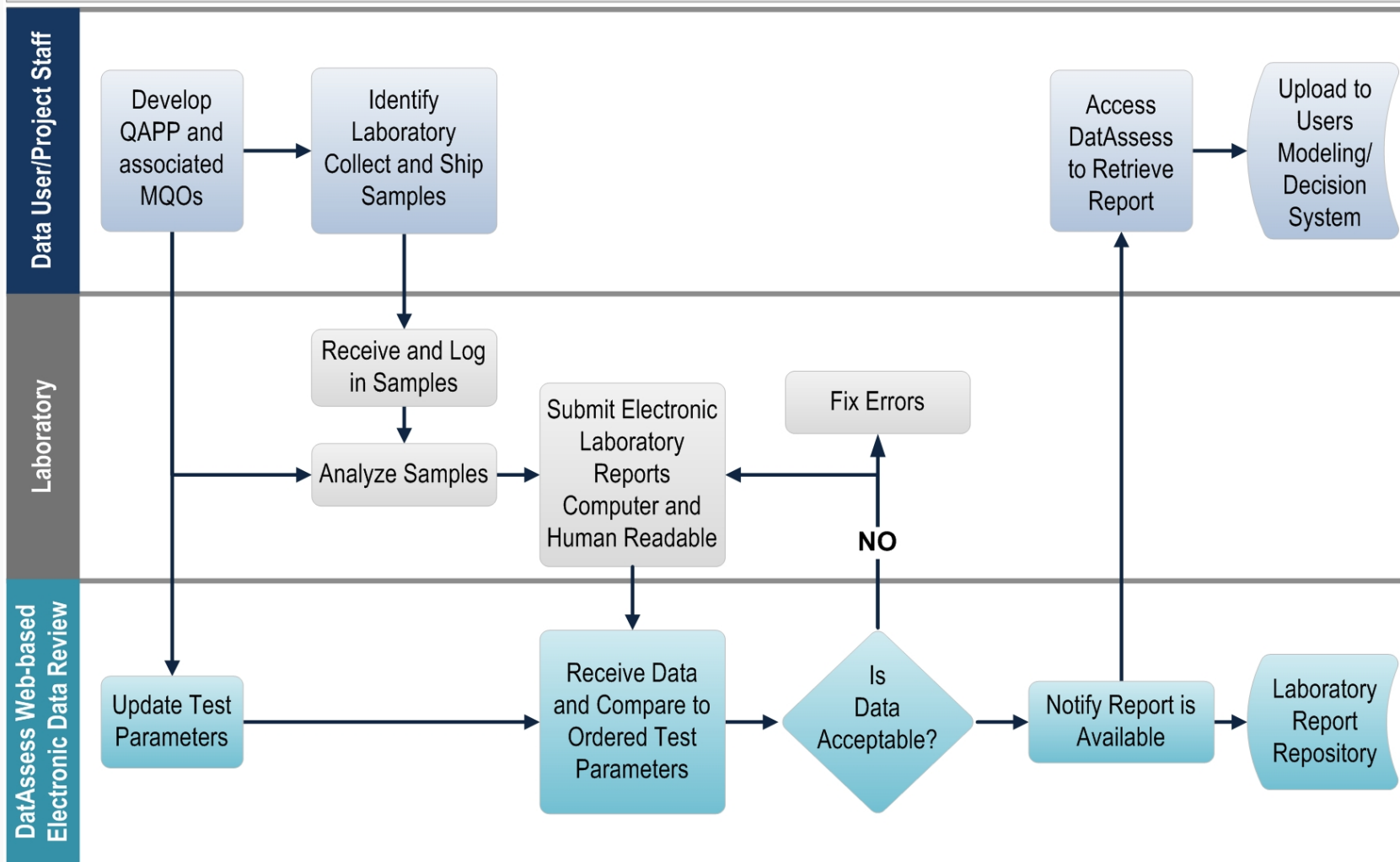


- Users select an existing set of measurement quality objectives (MQO) from the system or create their own.
- MQOs are sent to the laboratory and include all data quality indicators (DQI) used to interpret the degree of acceptability or utility of data to the user.
- Electronic data reporting requirements are also sent to the laboratory for both computer-readable and human-readable (e.g., PDF) data.
- Laboratory receives and analyzes samples and uploads data to DatAssess's Web-based Electronic Data Review module.
- User informed that results are available.

Web-based Electronic Review Process



DatAssess's Web Based – Electronic Data Review Process



Why Web-based Electronic Data Review?



- Web-based Electronic Data Review **automates data** quality assessment by replacing most manual assessment processes saving time, money and ensuring data are of known and documented quality.
- This enables users to:
 - Refocus human interactions on interpreting and using results
 - Leverage technology to reduce costs and improve quality
 - Receive assessed laboratory measurement data in a more timely manner with greater confidence in the results
 - Easily import qualified laboratory data into project-specific modeling and decision tools

Why Web-based Electronic Data Review?



Quality Assessment is Expensive

- The collection of environmental measurements costs agencies and organizations millions of dollars each year.
- Verifying the quality of environmental measurements in order to make informed decisions incurs additional costs through the process of data review.

Why Web-based Electronic Data Review?



Quality Assessment is Time Consuming

- Accurate and useful quality assessment requires extensive time to verify and validate analytical information.
- Complexity and volume of information directly affect the time required to validate data.
- Manual quality assessment practices introduce additional opportunities for error.

Why Web-based Electronic Data Review?



Poor Data Quality is Costly

- Data related delays when making remedial, regulatory, removal or emergency response decisions increases overall cost.
- Making inaccurate or poorly informed decisions, increases legal costs and reduces public trust.
- Without a standardized process for collecting, assessing and reviewing data, making accurate comparisons across multiple data sources becomes increasingly difficult.



Manual Validation



1 - 3 Weeks*



Result	Units	Flag
0.73	ug/L	
0.76	ug/L	
1.21	ug/L	J
6.33	ug/L	R

Web-based Electronic Data Review

< 30 Seconds



Result	Units	Flag
0.73	ug/L	
0.76	ug/L	
1.21	ug/L	J
6.33	ug/L	R

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