EarthSoft

EQuIS Data Processor (EDP)

For years, EarthSoft's EQuIS Data Processor (EDP) has been the industry standard for checking laboratory analytical deliverables and electronic data deliverables (EDDs). Over 1,000 labs worldwide now have the EDP. Staff expertise, varying EDD formats, and the type and sophistication of LIMS systems within the laboratory community are all factors working against accurate and seamless delivery of EDDs. By assisting laboratories and data providers in preparing EDDs, EDP has increased accuracy and efficiency of data submissions while reducing costs.

EDP checks the following problematic data deliverable issues:

- Required Fields
- Field Lengths
- Data Type
- Valid Dates
- Reference Values
- Duplicate Rows
- Range Checking
- Relationship Checking
- Required Values

Comprehensive Format List

EDP supports formats for all facets of environmental data acquisition, both field and laboratory observation. From borehole drilling to comprehensive analytical results with QA/QC, data may be checked quickly and easily. EDP supports many EDD formats published by EarthSoft and others including the '4-File' format, the Geo3EDD, the EPA Region 5 EDD, SEDD, ERPIMS, NEDD, NEDTS, and the National/Multimedia EDD. Additional formats may be added, as needed in the XML format file structure.

Interactive Error Correction

Instead of simply checking an EDD and providing an error report, EDP allows you to correct errors on-the-fly without having to go into a separate text or document editor. Reference value errors are fixed by simply selecting the appropriate value from a dropdown list. Quality assurance concerns about editing of electronic files are satisfied with the edit tracking audit files. All edits to original files may be tracked and the original file, final file, error listing, and edit listing saved to a secure folder for archival and verification. Additionally, edit capability can be restricted to only selected users or disabled entirely when preferred.

Integration with EQuIS

Approved reference value (valid value, lookup) lists exported from EQuIS by data managers may be converted directly to the XML format used by EDP.

Custom Checking

As well as simple data integrity concerns such as parent/child relationships, reference values, and valid dates and data types, EDP supports custom checking algorithms. Custom checking may include complex or project-specific logic such as:
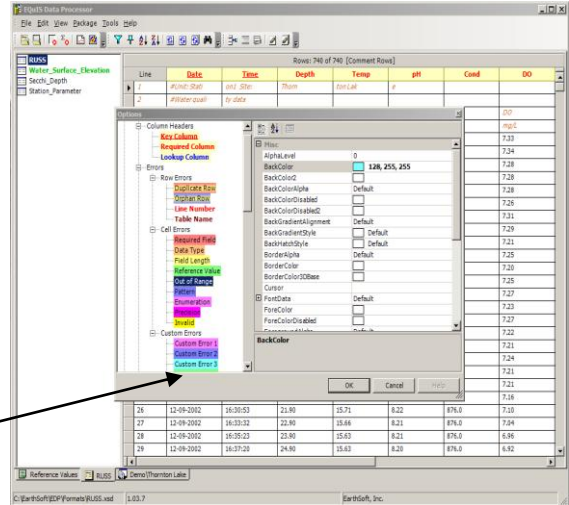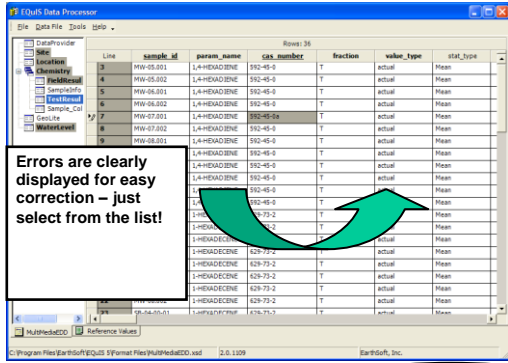- Non-detects: if detect_flag = N, the reporting_detection_limit field must be populated
- Populate the interpreted_qualifier field with the lab_qualifier field values
- Conditional checking (if the value of field 1 is "X" then the value of field2 must be "Y")

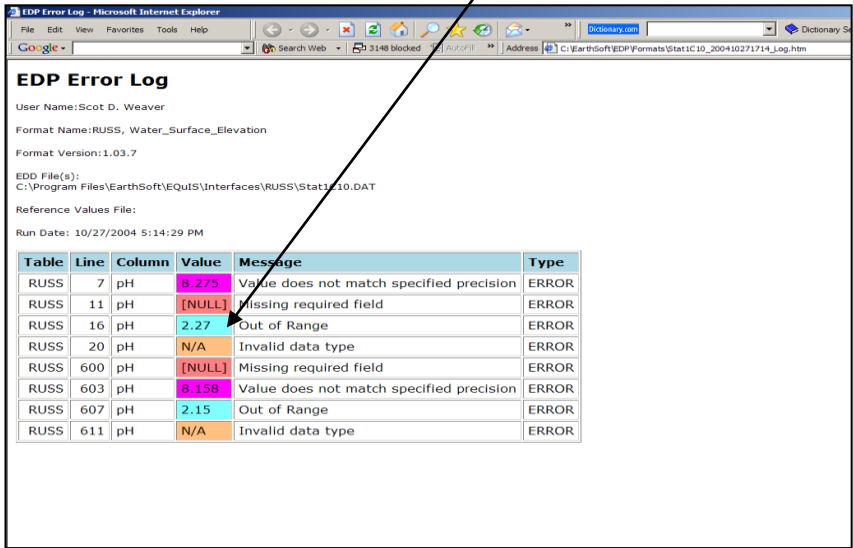### Check Multiple EDD files simultaneously

No longer are data submitters required to save all EDDs to tab or comma-delimited text files. EDP supports automated checking of complete Excel files. EDDs may include several different populated "formats" in a single Excel EDD, such as Location, Lithology, Geologic Sample, etc. Where tabs in the Excel workbook are named the same as the EDD format, the worksheets will be loaded and checked simultaneously. Alternatively, multiple text files may be organized together and managed as a single package for checking and processing.

EDD Submittals

The EDP will also provide for customized generation of the submittal package that will include the checked EDD data files, the required file tags and email formatting and will manage the submitter IDs for specific automated submittal file transfers. EDP also provides the functionality needed to manage data files directly in XML.

Errors are clearly displayed for easy correction – just select from the list!

EDP color codes errors so they stand out.

EDP Error Log

User Name: Scot D. Weaver

Format Name: RUSS, Water_Surface_Elevation

Format Version: 1.03.7

EDD File(s):
C:\Program Files\EarthSoft\EQuIS\Interfaces\RUSS\Stat1C10.DAT

Reference Values File:

Run Date: 10/27/2004 5:14:29 PM

Table	Line	Column	Value	Message	Type
RUSS	7	pH	8.275	Value does not match specified precision	ERROR
RUSS	11	pH	[NULL]	Missing required field	ERROR
RUSS	16	pH	2.27	Out of Range	ERROR
RUSS	20	pH	N/A	Invalid data type	ERROR
RUSS	600	pH	[NULL]	Missing required field	ERROR
RUSS	603	pH	8.158	Value does not match specified precision	ERROR
RUSS	607	pH	2.15	Out of Range	ERROR
RUSS	611	pH	N/A	Invalid data type	ERROR

Let EDP whip YOUR data into shape!