CPT Data Files (COR Extension)

ConeTec CPT data files are stored in ASCII text files that are readable by almost any text editor. ConeTec file names start with the job number (which includes the two digit year number) an underscore as a separating character, followed by two letters based on the type of test and the sounding ID. The last character position is reserved for an identifier letter (such as b, c, d etc) used to uniquely distinguish multiple soundings at the same location. The CPT sounding file has the extension COR. As an example, for job number 14-02001 the first CPT sounding will have file name 14-02001_CP01.COR

The sounding (COR) file consists of the following components:

1. Two lines of header information
2. Data records
3. End of data marker
4. Units information

Header Lines

Line 1: Columns 1-6 may be blank or may indicate the version number of the recording software
Columns 7-21 contain the sounding Date and Time
Columns 23-38 contain the sounding Operator
Columns 51-100 contain extended Job Location information

Line 2: Columns 1-16 contain the Job Location
Columns 17-32 contain the Cone ID
Columns 33-47 contain the sounding number
Columns 51-100 may contain extended sounding ID information

Data Records

The data records contain 4 or more columns of data in floating point format. A comma and spaces separate each data item:

Column 1: Sounding Depth (meters)
Column 2: Tip (q_c), recorded in units selected by the operator
Column 3: Sleeve (f_s), recorded in units selected by the operator
Column 4: Dynamic pore pressure (u), recorded in units selected by the operator
Column 5: Empty or may contain other requested data such as Gamma, Resistivity or UVIF data

End of Data Marker

After the last line of data there is a line containing an ASCII 26 (CTL-Z) character (small rectangular shaped character) followed by a newline (carriage return / line feed). This is used to mark the end of data.

Units Information

The last section of the file contains information about the units that were selected for the sounding. A separator bar makes up the first line. The second line contains the type of units used for depth, q_c, f_s and u. The third line contains the conversion values required for ConeTec's software to convert the recorded data to an internal set of base units (bar for q_c, bar for f_s and meters for u). Additional lines used for internal ConeTec use may appear following the conversion values.

CPT Data Files (XLS Extension)

Excel format files of ConeTec CPT data are also generated from corresponding COR files. The XLS files have the same base file name as the COR file with a -BSC suffix. The information in the file is presented in table format and contains additional information about the sounding such as coordinate information, tip net area ratio and averaging interval.

The BSCI suffix are given to xls files which are enhanced versions of the BSC files and include the same data records in addition to inclination data collected for each sounding.

CPT Standard Interpretations (TBL XLS Extension)

ConeTec's standard CPT interpretation output files are generally delivered in XLS files with a TBL suffix. The root file name is the same as the COR files. A number of calculated geotechnical parameters are presented in these files and are presented in a table. These files are not distributed if the enhanced interpretation files are provided.

A more enhanced version of the TBL files are the ETBL files which contain all of the parameters available in the TBL as well as additional geotechnical interpretation data involving the normalized soil behavior type (SBTn).

CPT Enhanced Interpretations (XLS Extension)

ConeTec's enhanced CPT interpretation output files are delivered in XLS format. The base file names are the same as COR files with additional suffixes. The files typically have any of the following suffixes:

1. IFI — A file containing approximately 46 data columns of geotechnical interpretation. The file contains two tables. One table contains information about the project and the sounding and the interpretation options used. The geotechnical parameters are reported in a separate table below the one previously described. A companion document describes the techniques used for the interpretations

2. NLI — A file containing approximately 37 columns of geotechnical interpretation. The file is similar in format to the IFI file and contains most of the same parameters except those pertaining to liquefaction.

In each case root file name is the same as the COR files.

CPT Dissipation Files (XLS Extension)

Pore pressure dissipation files are provided in Excel format and contain each dissipation trace that exceeds a minimum duration (selected during post-processing) formatted column wise within the spreadsheet. The first column (Column A) contains the time in seconds and the second column (Column B) contains the time in minutes. Subsequent columns contain the dissipation trace data. The columns extend to the longest trace of the data set.

Detailed header information is provided at the top of the worksheet. The test depth in meters and feet, the number of points in the trace and the particular units are all presented at the top of each trace column.

CPT Dissipation files have the same naming convention as the CPT sounding files with a "–PPD" suffix.

Data Records

Each file will contain dissipation traces that exceed a minimum duration (selected during post-processing) in a particular column. The dissipation pore pressure values are typically stored at 5 second intervals. The test depth in meters and feet, the number of points in the trace and the trace number are identified at the top of each trace column.