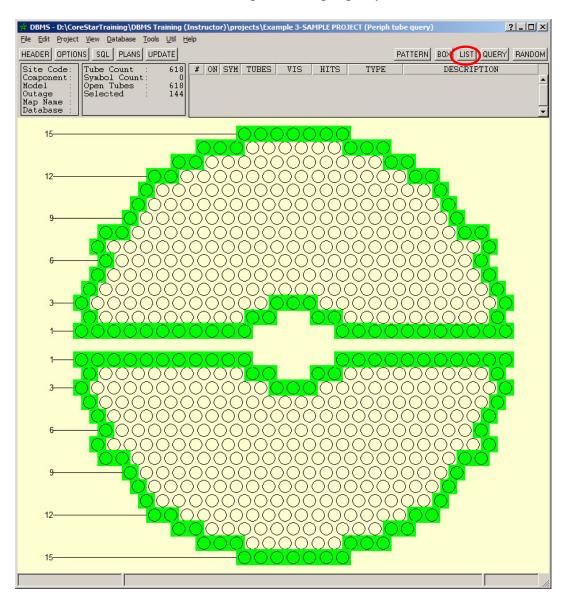# Using Tubesets in DBMS

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Purpose

Tubesets are lists of select tubes that get stored within a database. Examples include periphery tubes, special interest sections, and tubes of different wall thickness/material. Once a tubeset has been uploaded to the database, queries can be written to extract information from the tubes within the tubeset.
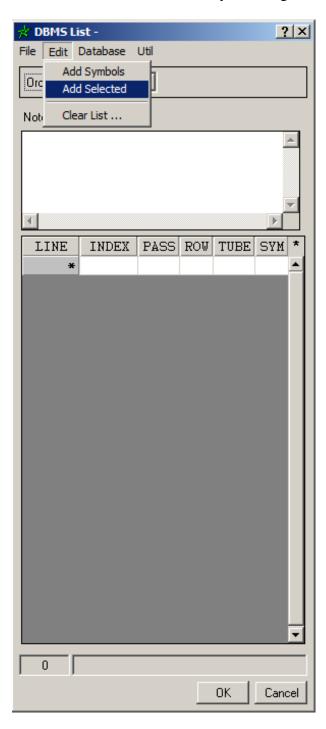
Procedure

The first step in creating a tubeset is to select all tubes of interest in the DBMS software. Multiple tubes can be selected by holding down the SHIFT key and left clicking on each tube. Once tubes have been selected, click on LIST. In the example below, periphery tubes have been selected.
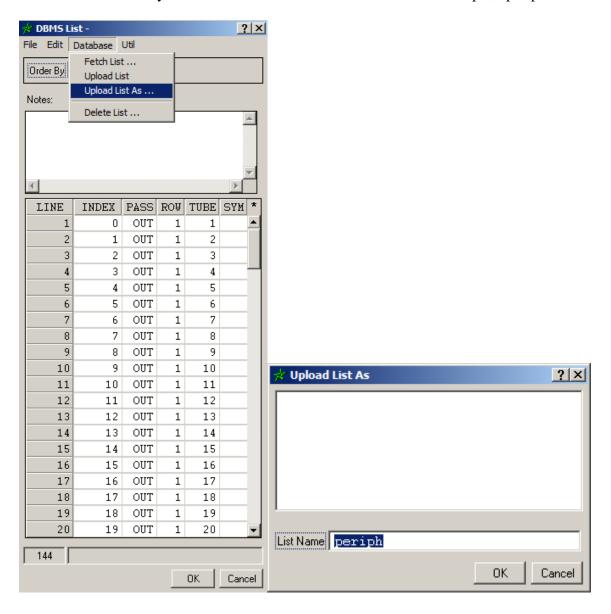
Next, add selected tubes to list by selecting *Edit > Add Selected*. A list of selected tube will appear.

Upload the list of tubes to the database by selecting *Database > Upload List As*. When prompted, type in the name in which you would like to label this tubeset. In this example, "periph" was used.

Once the tubeset has been created, nested queries can be written to extract information from specific tubesets. Below is an example of a query that finds all percent calls within the "periph" tubeset during the current outage.

```
SELECT outage, sec, row, col, volts, phase, defect, pcnt, chan,
loc_land, loc_off, BEG_TEST, END_TEST, CAL_NUM
FROM report
WHERE pcnt > 0
AND outage = [OUTAGE NAME]

AND EXISTS
    (SELECT *
    FROM  TUBE_SET_ENTRY
    WHERE report.sec = TUBE_SET_ENTRY.sec
    AND report.row = TUBE_SET_ENTRY.row
    AND report.col = TUBE_SET_ENTRY.col
    AND TUBE_SET_ENTRY.NAME = 'periph')

ORDER BY sec, row, col;
```