**NWIS Uploader for R v1.0**

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This is a n R function and script to help the upload of 3rd party data into NWIS.

There are 3 input files necessary:

1. A file of pcodes and metadata (pcodedata)
2. A file of your lab data (LabData)
3. A qwsample file

The first two files are generated by the user following the format templates included in this package. Comments on header cells in the excel files will guide the user. Please see NWIS documentation for definitions of parameters and required codes. After files are appropriately formatted in excel, **THEY MUST BE SAVED AS .CSV FILES FOR USE IN R**. The QWSAMPLE file is the same file that is generated by NWIS when you do a batch processing of record numbers (see appendix 1 for instructions). **DO NOT OPEN OR ALTER THE QWSAMPLE FILE AFTER IT HAS BEEN GENERATED BY NWIS.**

After the required input files have been generated, open R and compile the function at the bottom of the script (just run the lines of code at the bottom of the script indicated as the function). Type in the paths to your input files as indicated in the script. Run the function. Qwresult and qwsample files will be generated in your output directory and ready for upload into NWIS. **IF YOU OPEN THESE IN EXCELL PRIOR TO UPLOAD INTO NWIS IT WILL CAUSE ERRORS DUE TO DELETION OF PCODE LEADING ZEROS.**

**Appendix 1. qwsample batch file creation in NWIS**

Batch File creation

1. Obtain a list of record numbers for all sites you want to upload data for and place the list in your QWdata folder.
2. Start QWData.
3. Select option 8 “Batch Processing” -> option 7 “Produce Tab delimited batch files” -> select “n”, you do not want to enter records numbers from the terminal -> select option 1 “Record Number” -> press enter twice to accept default -> Select “n”, you do not want to retrieve only selected parameters.
4. Navigate to your QWData folder.
5. There will now be 2 files in your QWData folder called qwsample and qwresult. Delete the **qwresult** file The qwsample file is a list of all the sites that match the record numbers you provided. This file will be used later to match an analyte result to the correct site.