Excel Practices in Petroleum Engineering

INITIAL SETUP FOR ENGINEERING CALCULATIONS:

- Change trust settings for running VBA macros
- o Enable circular references
- o Enable automatic calculation
- o Enable solver add-in
- o Enable data analysis add-in

Excel etiquette

- o ID sheet: author, date, title
- o Color convention for cell info
- Location of figures in an individual sheet
- o For each column and variable: header in bold, unit, symbol.

Built-in functions and utilities:

- o Fill
- o GoalSeek
- o Solver
- o Making frequency tables
- o Paste data from text file
- Linear regression tool
- o Sorting many cells

Plotting

- o Appearance: Font size, point size, line, background, tick marks, axis color, legend, axis title, vertical grid, data range, secondary vertical axis, log scale.
- o Types: scatter and bar.
- o Trendline.

Programming

- o Accessing the VBA environment.
- o User defined function (UDF). No declaration of variable type. Comments.

Key shortcuts

- o Ctrl+shft+Enter: apply matricial functions.
- o Ctrl+shft+down(up,right,left) bring to the end of the row/column
- o F4 Lock cell (C+R, R, C)
- o F2 Display equation inputs