# **Geolog Tutorial**

### **How to View Data:**

To start Geolog

- 1. Open Exceed and then open a new terminal by right clicking
- 2. 2. Type "geolog6"

Once in Geolog, choose the "ursa\_exp308" project

Click on the "Well" Button

Choose Well-> Open, select the well and choose OK

Well -> View -> New -> Text

Choose the set filter, then click on tabs to view the data, choose "Constants", "Log Headers", and "Log Values".

To view a Layout (or digital well data)

Well -> View -> Layout, choose one already created to start with (no need to reinvent the wheel). If you're starting in a new project, you can copy a layout over from one project to another. All layouts sit in the project directory

(/disk/staff/flemings/paradigm/ursa\_exp308/layouts)

Manipulate the tracks, choose a different scale, line weight, increment, or scale. Also change the color or the log that you would like to view. You can make a log wider or just show surfaces/events in a well. Click on each of the tabs to see the options available; "Common", "Grids", and "Track". You can edit each of the tracks, or delete them completely.

#### To Plot:

Layout -> Datum changes the scale of the whole well. Make sure to have this set.

Then Layout -> Plot, you have two choices here, you can either print to a .cgm file and bring that into Illustrator to manipulate and print. Or you can print the screen directly to a printer or plotter. Geolog should be set up to pirnt to the b/w printer in 2.116, the color printer down the hall and both plotters (one on the 2<sup>nd</sup> floor and one on the 3<sup>rd</sup>). You may use the second option to rough print something, but you'll usually save as a .cgm and bring into Illustrator. To do that:

Layout -> Plot, under "Files", choose .cgm, name your file, but be sure to start the file same WITH YOUR INITIALS. It will make it easier to find things in the directory. Then OK

On your PC, open Illustrator, then File -> Open. Navigate to /disk/staff/flemings/paradigm/ursa\_exp308/plots, and find the plot that you just saved.

## **How to Load Data:**

There may come a time when you need to load data into a Geolog well. You do this through the "Connect" button on the main Geolog menu bar. Before loading any data it is important to have it in the correct format. It's easiest to do this in Excel. The data should be space delimited or comma delimited (csv) and the first column must be depth in MBSF. If you're loading a large amount of data, or the same type of data for many wells, it will be easiest if you have the data in the same format. This way you'll only have to create one format loading file.

Click on "Connect"

Connect -> Load

Navigate through the files and find your data file.

Contractor Format = Flat Ascii

Flat Ascii Format = Choose "Define", you'll have to set this up according to your data file. This is not difficult, but it can not have mistakes, otherwise the data will load incorrectly, or not at all. Make sure the "name" does not have any capital letters. Your Default Set will depend on where you want the data to show up in the Well sets. Choose "Point" for checkshot data, most other data is "Continuous", including log curves and directional survey data. Choose "Comma" and make sure to include the "First line of data". If your data file is an Excel spreadsheet with header information in the first row, then you would type in "2" as the first line of data. Fill in the Sets according to the Default set. "Name" is the actual data (ie. Depth, GR, Resistivity). "Start" is the data column where the data is located in the file, and length is the number of characters associated with it. Once this is set-up, press "Save", then "Close" Choose this file in the Input window. Also in the input window make sure to click OFF

In the Connect screen, edit the Well Identifier to match the name of the well where you would like the data to be loaded. Also change the set to match the set you chose in the previous screen. Then "Start Load". You can view the data you just loaded by looking at Well -> View -> Text.

the "Unit Convert" button. And make sure the correct project is listed. Then OK.

Note: Geolog will not let you load any other well data until there is a "Reference Set"

### How to Manipulate Data:

You may need to take some raw data and do a calculation or otherwise manipulate it. You can do this through General -> Evaluate from the "Well" menu bar. Set the input and output set. All the information you will enter will be under the "Value" column. Let's say we have log in the wire set called "TVDSS" and we want "TVD". To calculate this we will have to subtract the Kelly-Bushing value from each of the log entries.

Expression is the calculation (ie. TVD-76)

Units is meters or feet (or whatever you're calculating)

Type = Real

Comment – this is your chance to explain the calculation in words (subtract KB to get TVD from TVDSS)

Log out – what you will call the new data log (TVD)

"Start", then view the new log in the Well -> View -> Text window