

Instructions for placing gINT drillhole graphics into Geotech Data sheets.

1. Make a copy of the projects existing or design file; (KEYNUe.dgn for existing or KEYNUd.dgn for design). Rename the copy to KEYNUgeo.dgn. This will be your Geotech working file.
2. In KEYNUgeo.dgn locate each hole by its Northing and Easting (Northing and Easting can be found on the hard copy of the drill logs or near the top of each drill hole graphic in the .dxf file). Place the cell DET_TARGET from the Geo.cel library at each location.
3. Determine the Station/Offset for each hole and label them near the target symbol in the KEYNUgeo.dgn. Each label should appear as follows:
Drill Hole Number
STA 0+000.00
@ 00.00' Lt (or Rt)

Lt = Left of center line looking down station, from beginning to end.
Rt = Right of center line etc.
4. Make a copy of the plan sheet file/files, KEYNU.pl1. Rename the copy to KEYNU.gd1 (gd = Geotech Data). In the Reference pop-up pick one file for sheet 1 and copy, pay attention to what the command line asks you to do. You now have a copy of that reference, the reference file is the same and the Logical name is the same except it has a -1 at the end of it. Double click that reference and browse for a different file name. Pick KEYNUgeo.dgn and then choose a new logical name. For instance: geo v1. Then say OK.
5. Reference the Profile and/or Cross sections into KEYNU.gd1. Clip bound the portion you need and scale it to fit on the sheet with the corresponding plan or to fit on a separate sheet. Move this reference to its new location within the sheet and proceed with other sheets if necessary. Generally the profile/cross sections need to have an exaggerated vertical scale for the drillhole graphics to show properly.
6. Attach, by reference, the .dxf file containing the drillhole graphics. The .dxf will appear in the center of the design plane (normally to the top right of the sheet layout and quite a distance from it). Fence and copy these drillhole graphics and then move them closer to the sheets.

7. Determine where the first drill hole will be on the profile or cross section by placing a horizontal line at the elevation of the top of the hole. (This elevation is noted near the top of the drill hole graphic). Place another horizontal line at the elevation of the bottom of the hole.
8. Determine the vertical location of the hole by placing a vertical line at the correct station.
9. Mathematically determine the scale factor by taking a measurement from the top line to the bottom line and divide that by the measurement from the top of the drill hole graphic to the bottom of same.

(Note that each individual drillhole graphic is on a separate level, beginning with level 1, and all can be turned off except the one you are scaling.)

10. Fence the first drillhole graphic and scale it using the ACTIVE SCALE METHOD. Type in the predetermined scale factor for both the X and the Y directions.
11. Move the graphic from the center of its top to the intersection of the **top elevation line and the vertical location line** previously placed in the profile/cross section. Check that the bottom of the graphic lies on the bottom elevation line previously placed.
12. If the hatched layers within the holes look too muddy when printed, fence and scale the graphic, from the mid point at the top of the drill hole, using the ACTIVE SCALE METHOD. In the X direction type in a number higher than 1 and in the Y direction type in 1. This will scale up the width of the hole while leaving the length as it is. Usually a scale of 1.5 or 2 in the X direction is enough to clarify the graphics.

Note if the hatched layers within the holes look too muddy due to the length of the hole than a more exaggerated vertical scale of the profile/cross section may be needed.

13. Refer to the Geo/Hydro web site below for more information and samples of Geotech Data sheets.
http://intranet.odot.state.or.us/techserv/geohydro/TP_Manual/2_Operational_Practices/Operational_Practices_Home.htm