gINT SUPPORT
of the
Florida Department of
Environmental Protection
ROSS PROGRAM

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Getting Started

Introduction

The Florida Department of Environmental protection (FDEP) has created a database for offshore sand barrows called ROSS - Reconnaissance Offshore Sand Search. Site investigations for sand searches will be required to conform to the following:

- Perform calculations on the data to determine statistical parameters and other derived indices.
- Submit data and calculation results in a Microsoft ACCESS® database of a specified format.
- Generate paper reports.

gINT Software has configured a set of files that meet these requirements. This document describes the files and how to use them. These files are provided at no charge to all licensed gINT clients meeting the system requirements listed below. Additional information on ROSS can be found at http://ross.urs-tally.com.

System Requirements

Support of the gINT FDEP ROSS files requires gINT version 7 or later. If you wish to output report styles other than the log form, gINT Professional is required. gINT Logs and gINT Logs Plus do not support outputting graph, graphic table, graph, or fence reports.

If you are licensed for an earlier version of gINT, or have not purchased gINT Software, please contact our sales department for upgrade and purchase information.

Installation

If you have purchased gINT with the FL DEP ROSS files included, the files are automatically installed with the program, and you can skip this section of the document except for the notes below on the DLL.

The required files are contained in two files. FL_DEP_ROSS.ZIP contains the gINT files. These are described in the table below. If you are not sure where the referenced files are on your system, select the **File ▶ System Properties** menu option in gINT and click the File Location Defaults tab.

FL DEP ROSS.MSI is the installer program for the FL DEP ROSS.DLL. This contains the programming code necessary for the operation of the data validation and calculation used during Input. Run this file from any folder. Note that you MUST have the Microsoft .NET Framework installed on your system for the DLL to function. If you do not have the Framework installed, you can download and install it from:

www.microsoft.com/downloads/details.aspx?FamilyId=262D25E3-F589-4842-8157-034D1E7CF3A3&displaylang=en

To check for the installation of the Framework, click the Windows Start button and then select "Settings" and then "Control Panel". Then double click on "Add or Remove Programs." If it is installed, you will find it under "Microsoft .NET Framework."

If you have downloaded an update of the DLL from our Web site, on running the installation, the previous version will need to be uninstalled. The interface will either ask you to "Remove" or "Repair" the DLL (remove it in this case) or to use the Windows Control Panel Add or Remove Programs application. Once removed, install from the latest update.

File	Description	Save Location
FL DEP ROSS.GLB	This is the library file containing all the forms, symbols, lookup lists, input calculation, checking code, and so on.	You can save this file to any folder but we recommend saving it in the same folder as your standard library file. **DO NOT** merge this library into your existing library.
FL DEP ROSS.GDT	This is the data template file used to create new projects.	Same location as your data templates.
FL DEP ROSS.GCX	This is the export correspondence file used for exporting the gINT project data into a file required for submission to the FDEP.	Same location as your data templates.
FL DEP ROSS EXPORT TEMPLATE.MDB	This is an ACCESS® file in the format required by the FDEP. This is a base file used to generate the final data file.	The same location as your data templates.
FL DEP ROSS.GSC	This is a gINT script file for generating the sample output. See the *Sample Output* section of the *Supplied Forms* topic.	The same location as your data templates. If you are using gINT version 7 or later, place this file in the **Scripts** folder.
FL DEP ROSS.GPJ	This is a sample gINT project. This file is used to generate the sample output.	The same location as your projects.

You can extract these files and then move them to the appropriate folder locations; however, it is more convenient to use a feature that is built right into gINT. Select the UTILITIES application group and click the **Extract from ZIP** option.
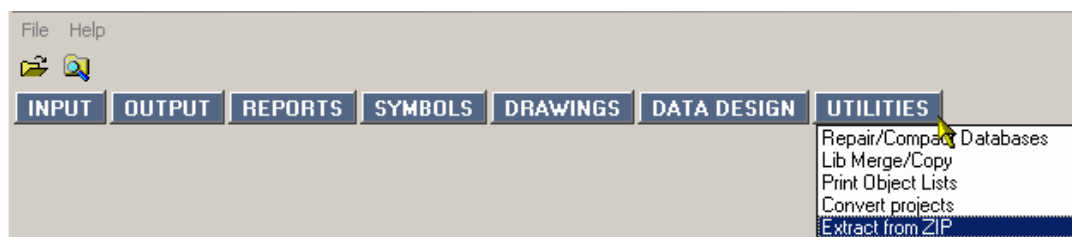
You see the following screen:
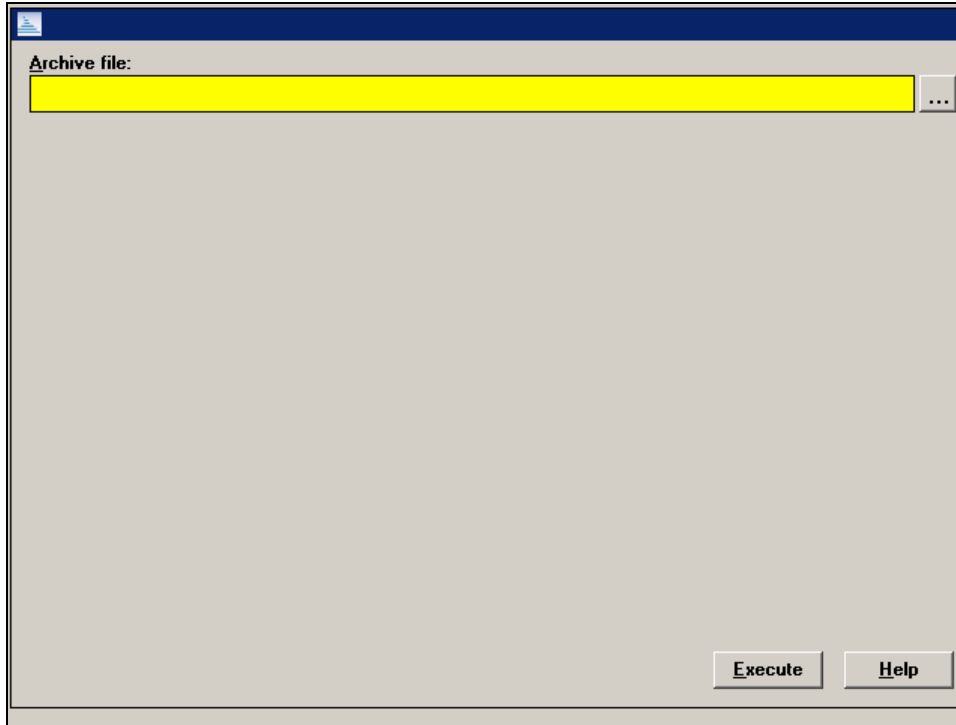
In the **Archive File** field, click the browse button [...] and navigate to the downloaded ZIP file. You should see a screen similar to the following:

The program checks your system properties and directs the files to the recommended folders, except perhaps for the .MDB file. If you are using version 7.1.027 or later, the dest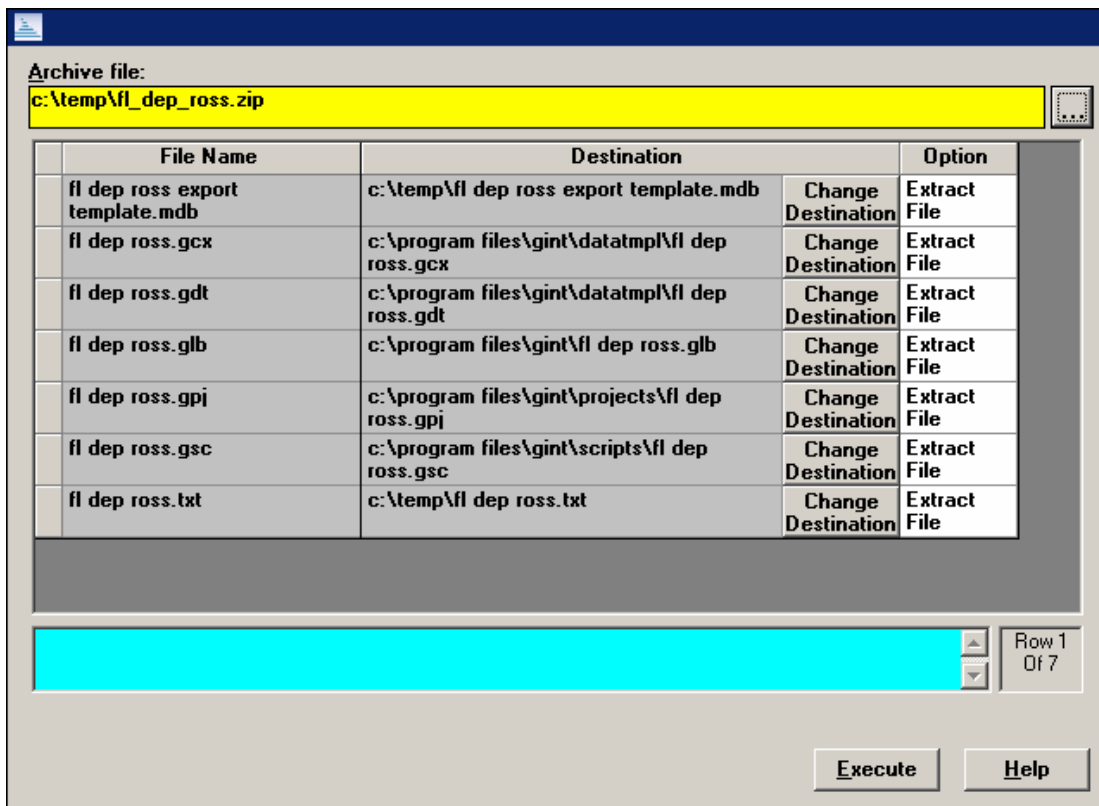ination will be correctly set to the data template folder. Otherwise, you must click the **Change Destination** button next to the file path to move it to the data template folder. You do not have to extract the .TXT file. To exclude it from the extracted file, change the **Extract File** option to **Skip File**. Click **Execute** when you are ready to extract the files.

To use the files, you must switch to the ROSS library. To switch libraries, select the **File ▶ Change Library** menu option. Use the same menu command to switch back to your standard library.

Quick Start

> **Note:** Before working with the ROSS files, verify that the current library is set to FL DEP ROSS.GLB.

The overall process of performing the input and generating reports is as follows:

Open the INPUT application group, and select **File ▶ New Project ▶ Clone Data Template**.

Alternatively, you can select the New Project button and then **Clone Data Template.**

1. Select a data template from the Clone From… dialog box. A data template stores the structures needed to create a project database. Select the FL DEP ROSS.GDT data template.
2. The program prompts you for a project file name. The program automatically adds the .GPJ extension.
3. You see a series of tabbed screens, one tab for each section (called a "table") in the database. Enter information in the tabs as you would a standard Windows spreadsheet.

> **Note**: If you are unclear on the meaning of a field, help text may be displayed on the lower portion of the screen. Another resource is the **Table Help** button located on the upper right corner of the screen, which sometimes provides additional information.

4. After completing the data input, click the OUTPUT application group button.
5. Click the appropriate OUTPUT application (logs, fences, graphs, and so on) and select a report from the drop-down list in the upper left portion of the window.

6. Click the print button , and then click **OK** in the Print Specifications dialog box.

We have provided the sample project FL DEP ROSS.GPJ. The sample project was used to generate the sample output. You can open this project in the INPUT application, observe how the input was completed, and compare it to the sample output. For a quick introduction to the INPUT application, select **Help ▶ Contents** and click on the **Input Application** or **Grid** topics.

Data Entry Details

Introduction

This section discusses the tables and fields in the project structure. Each table lists all the fields, the lookup list associated with the field, whether the list can be edited or not, and field descriptions and usage.

When you save your data in a table that makes use of one of the code procedures called in the DLL file, there will be a noticeable delay in the save the first time you access the DLL in a gINT session. After that first save, you will no longer notice a delay.

There are four types of lookups used in this project structure:

- **Libtbl**: This is the Library Table lookup and is stored in the DATA DESIGN ▶ **Library Data** application.
- **Lookup**: This lookup is stored in the DATA DESIGN ▶ **Lookup Lists** application.
- **Graphic**: Only the "matl" graphic library is used. This lookup is stored in the SYMBOLS ▶ **Material** application.
- **Liblist**: This is a list of default reading lists used for establishing the sieve sizes used in gradation analysis testing.

If a lookup allows editing, you can use the following processes:

- Type an entry in the field that does not exist in the list. You will be prompted to add it to the list.
- Edit the list in its native application.

If a lookup does not allow editing, typing an unlisted entry is not allowed. Although you can edit the list in its native application, this is NOT an acceptable option. Lists that are not editable are setup in that manner per the FDEP specifications.

The descriptions in the following sections are also displayed at the bottom of the screen when the focus is on the field (as shown on the screen shot below; focus is on the "Depth Log Page" field).
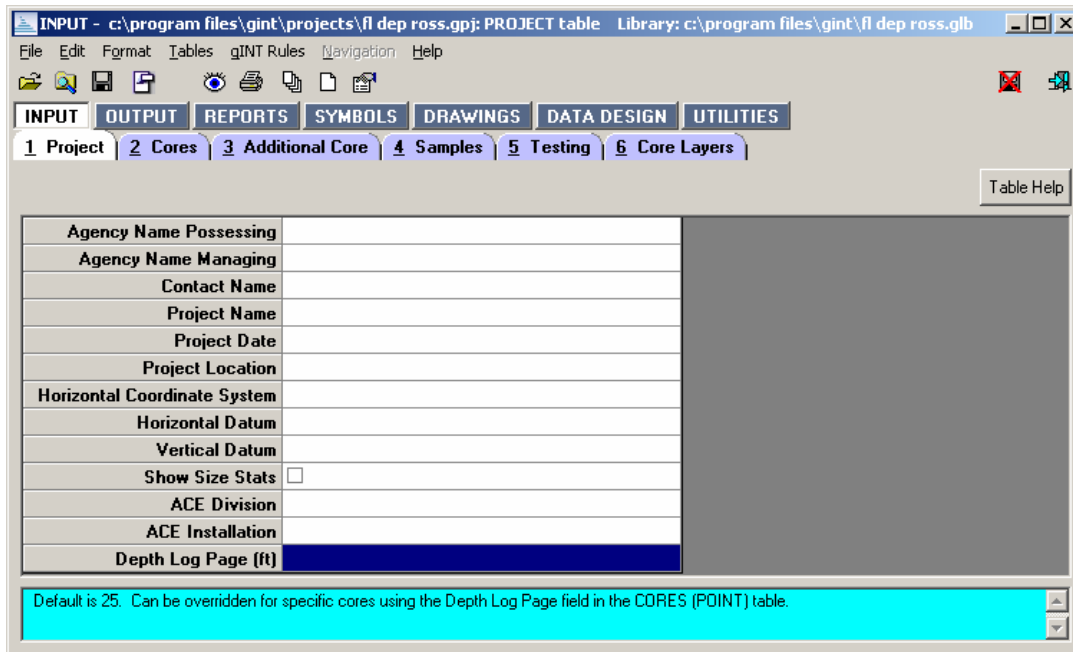
Relationships

gINT databases are relational, and we have defined relations based on the requirements of the data. The following diagram shows the structure of the table relationships:
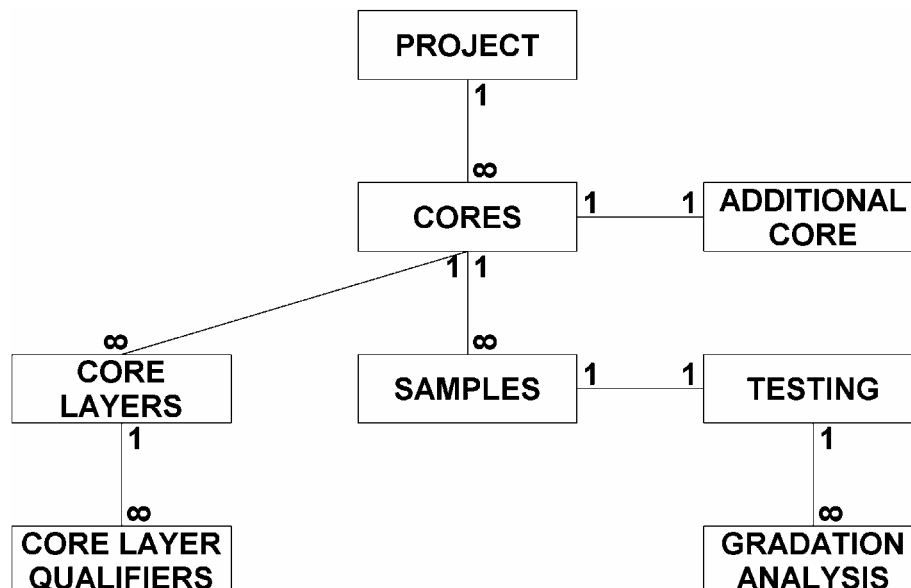
A one-to-one relationship indicates that the child table is an extension of the parent table. For example, the ADDITIONAL CORE and TESTING tables could be eliminated and their fields inserted into the parent tables (CORES and SAMPLES, respectively). These tables were created to make the data entry process easier.

A one-to-many relationship indicates that there can be multiple child records for each parent. Therefore, a project can have many CORES, and a CORE can have many SAMPLES.

Child records cannot be created without a parent. For example, you cannot move to the SAMPLES table if you have not defined any records in the CORES table. If you try to, the program takes you back to the CORES table. The exception to this rule is that you can define records in the CORES table without populating any fields in the PROJECT table.

If you need to rename a parent record, as a result of the relationships, you only need to rename the parent record and the child records are updated automatically when you save. For example, renaming a CORE renames the **Core** field in all the records associated with that CORE.
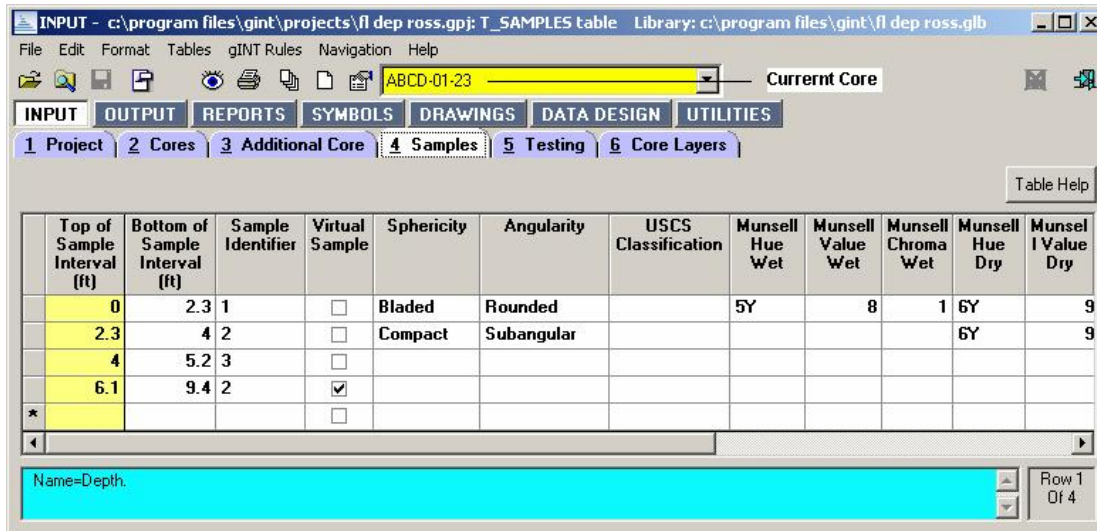
Deleting a parent record deletes all the child records associated with it. A warning message is displayed when you save, and you have the option to cancel the save. You can then restore the records by selecting the **File ▶ Cancel Changes** menu option or clicking on the Cancel Changes ![icon] icon. Note that both the save and cancel changes options and icons are disabled until a change is made.

For those familiar with the ROSS database structure, the table diagram appears to be missing many tables. The missing tables are lookup lists which, in gINT, are stored in the library file. The library is shared among all projects. The tables shown above are only those included in the gINT project database.

Notes on Data Entry Structure

In the PROJECT, CORES, and ADDITIONAL CORE tables, all the data are accessible from one screen. For the other tables, you see only the data associated with one core at a time:

You can switch between existing cores using the drop-down list near the top of the screen. The following function keys provide shortcuts for scrolling through the drop-down list:

        <F6> - Moves to next core in the list.
        <Shift+F6> - Moves to previous core in the list.
        <Ctrl+F6> - Moves to last core in the list.
        <Ctrl+Shift+F6> - Moves to the first core in the list.

Notice the yellow background on the first field of the **Top of Sample Interval (ft)** column. In gINT, a yellow background indicates that the field is required. You cannot save your work until you have supplied a value for all required fields. Two of the tabs in INPUT (Testing and Core Layers) consist of two tables each.

The following screen shot is of the Core Layers tab:
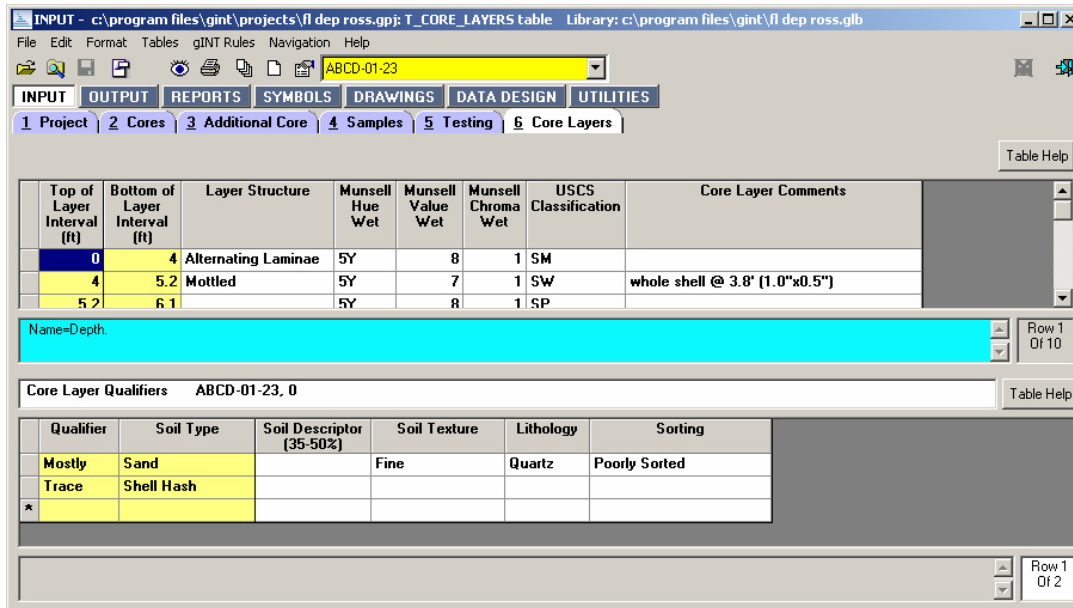
The parent table (top grid) is Core Layers, and the child table (bottom grid) is Core Layer Qualifiers. The child table shows the data for the current core (in the drop-down list box at the top of the screen) at the depth whose record has focus in the parent grid.

PROJECT Table

The PROJECT table is unique because there is only one record for each project. The data are only entered once for each project.

Field	Lookup	Edit Lookup	Description
Agency Name Possessing	Libtbl!t_agencies	Yes	
Agency Name Managing	Libtbl!t_agencies	Yes	
Contact Name	Libtbl!t_contacts	Yes	
Project Name			
Project Date			
Project Location			
Horizontal Coordinate System	Libtbl!horizontal coordinate system	Yes	
Horizontal Datum	Libtbl!horizontal datum	Yes	
Vertical Datum	Libtbl!vertical datum	Yes	
Show Size Stats			If marked, Mean, Phi Sorting, Shell, Silt, and USCS appear under the REMARKS column on the log for each test.
ACE Division			Used only for submission to the Army Corps of Engineers.
ACE Installation			Used only for submission to the Army Corps of Engineers.
Depth Log Page			Default is 25. Can be overridden for specific cores using the **Depth Log Page** field in the CORES (POINT) table.

CORES (POINT) Table

The CORES table records information on the overall characteristics of each borehole. For all practical purposes, you can have as many cores as desired within a project. Notice that this table is one of the two tables (PROJECT being the other) required by gINT. The actual name for this table is the POINT table, but we have captioned it CORES for this application.

Field	Lookup	Edit Lookup	Description
Core Identifier			REQUIRED. Must be unique within a project. Identifiers can be duplicated in complete database. For Grab samples, this is the Grab Sample identifier.
Collection Method	Libtbl! T_collection_methods	Yes	
X Coord			
Y Coord			
Driller Name	Libtbl!t_drillers	Yes	
Depth Drilled into Rock			
Penetration Depth			
Core Diameter			
Number Core Boxes			
Groundwater Elevation			
Collection Date			
Start Time			
End Time			
Core Top Elevation			
Recovered Length			
Geologist			
Core Length			Physical length of the core.
Range Monument			
RM Transect Location			

Field	Lookup	Edit Lookup	Description
Depth Correction based on Recovery			If you corrected the measured depths based on compression or expansion of core soils, mark this field. Otherwise, if you used the unaltered measured values, leave this blank.
Depth Log Page			Overrides the **Depth Log Page** field in the PROJECT table for the current core. If both are blank, 25 is used.
Plunge			Hole angle from horizontal, -90 to 90. -90 = vertical down. Default is -90.

Note: In regards to the **Depth Correction based on Recovery** field, to accommodate core recovered lengths greater than penetration depths, the check of data depths was modified so that you can have depths up to the maximum of the penetration depth and recovered length. If this field is selected, the note "Depths and elevations corrected for either expansion or compaction based on judgment" is printed on all reports. If unchecked, the note "Depths and elevations based on measured values" is printed.

Additional CORE Table

The log form was based on the Army Corps form 1836. Some of the fields in the header of that form would rarely--if ever--be used in a sand survey project. Those fields were placed in a separate table to make the CORES table less populated. This table is a one-to-one child of the CORES table.

Field	Lookup	Edit Lookup	Description
Core Identifier			
Contractor File Number			
Hammer Type	Lookup!hammer type	No	
Number Disturbed Samples			
Number Undisturbed Samples			

Samples Table

You can input as many samples as required for each core in this table.

Field	Lookup	Edit Lookup	Description
Core Identifier			
Top of Sample Interval			
Bottom of Sample Interval			
Sample Identifier			Non-unique ID for a sample, relative to the individual project. Leave blank for Grab samples. Required for all other types. Can have virtual samples, that is, sample identifiers that are repeated within a borehole that indicate similar properties.
Virtual Sample			Repeat of another **Sample Identifier** to represent soil characteristics within another layer. No testing or other sample attributes can be input for a virtual sample. Only Top and Bottom depth and the sample identifier.
Sphericity	Libtbl!t_sphericity_lu	No	
Angularity	Libtbl!t_angularity_lu	No	
USCS Classification	Graphic!matl	No	Not used if a USCS classification is determined by testing. That value stored in the TESTING table. This field is only for visual determination.
Munsell Hue Wet			Recognized Munsell value (ex: 5Y, 10YR, and so on)
Munsell Value Wet			Non Specific Numeric Value Ranging from 0 to 10
Munsell Chroma Wet			Non Specific Numeric Value Ranging from 0 to @ 20
Munsell Hue Dry			Recognized Munsell value (ex: 5Y, 10YR, and so on)
Munsell Value Dry			Non Specific Numeric Value Ranging from 0 to 10

Field	Lookup	Edit Lookup	Description
Munsell Chroma Dry			Non Specific Numeric Value Ranging from 0 to @ 20
Munsell Hue Washed			Recognized Munsell value (ex: 5Y, 10YR, and so on)
Munsell Value Washed			Non Specific Numeric Value Ranging from 0 to 10
Munsell Chroma Washed			Non Specific Numeric Value Ranging from 0 to @ 20
Sample Comments			

Note: The **Sample Identification** field in the SAMPLES table is not required if the "core" is a grab sample. The program clears that field if it is a grab sample. The core identifier is used as the grab sample identifier. No more than one record is allowed in the SAMPLES table if it is a grab sample.

Note: Mark the **Virtual Samples** checkbox for all virtual samples. Virtual samples are the only ones that allow a duplicated **Sample Identifier**.

Testing Table

Each sample can have one test associated with it. This table lays out the overall characteristics of each test and stores calculated indices. Calculations are performed by the program when you save. The calculations are done using the gINT Rules code that we have written to the FDEP specifications. This code is stored in the DLL. If you discover problems with these calculations, please contact gINT Software. Calculated fields are read-only and cannot be edited. Read-only fields are indicated by a gray background.

Field	Lookup	Edit Lookup	Description
Core Identifier			
Sample Top Depth			
Collection Depth			Not a ROSS data field. Used to show actual depth test specimen was collected within a sample.
Name of Laboratory	Libtbl!t_labs	Yes	
Date of Sample Analysis			
Sieve Set	Liblist!dftrdg	Yes	If blank, STANDARD SET is used.
Weighing Method	Lookup!sieve weighing method	No	If blank, Incremental is used.
Weighing Tare Weight			If a value is supplied, it is subtracted from the Weight Retained values in the test.
Dry Weight + Tare			Only needed if inputting weight retained on sieves.
Wash Weight + Tare			Only used to calculate **Sieve Loss**.
Pan Weight + Tare			Only used to calculate **Sieve Loss**.
Analyzed By			
Plasticity	Libtbl!plasticity	No	Required for USCS classification if % < #200 sieve is 5 or greater.
Organic			Used to determine the USCS classification.

Field	Lookup	Edit Lookup	Description
USCS Classification			Determined from the testing results. Use the **USCS Classification** field in the SAMPLES table for visual classification when there is no testing for a sample. NOTE: SP, SW, GP, and GW are classified using sorting, and <u>not</u> the method specified by ASTM D2487.
Sieve Loss			
Pan Fraction			
Fines			
Shell Fragments			
Mean			Moment method
Median			
Std			Moment method
Skewness			Moment method
Kurtosis			Moment method
Carbonate			
Heavy Minerals			
Organics			
Carbonate Dissolved			
Heavy Minerals Dissolved			
Organics Removed			
Shell Fragments Removed			
Lab Remarks			

Note: For the **Organic** field, if the checkbox is marked, the USCS classification is modified to the organic classification. This field is only used if the soil classifies as an ML or CL (converted to OL) or MH or CH (converted to OH), otherwise it is ignored.

Soil Classification Grading

The criterion for classifying a sand or gravel as "well" or "poorly" graded is based on the following:

- If the sorting is greater than or equal to 0.855 it is classified as well graded.
- If the sorting is below 0.855, the soils are classified as poorly graded.

This is very different from the standard USCS method which is based on the coefficient of uniformity (Cu) and of curvature (Cc). *Therefore a "SW" classification, for example, using the above algorithm would most likely not classify as an "SW" using the USCS method.*

Notes on Gradation Calculations

The following fields in the TESTING table impact the calculated results of the gradation analysis.

Sieve Set: This field populates the sieve sizes automatically once focus is placed in the child grid (GRADATION ANALYSIS table) on a new test. If left blank, the "STANDARD SET" is used. The shipped product files also contain a "FULL" list. You can add your own sets in the DATA DESIGN ▶ **Readings Lists** application.

The easiest way to create a new set is to set the current record to "FULL" (there are more entries than shown on one screen), and select the **File ▶ Copy Page** menu option. Specify a new name in the subsequent dialog box, click **OK**, and then delete the rows that you do not want.

All lists built in this application are displayed in the **Sieve Set** field drop-down list in INPUT. The **Reading** field is used to populate the "PHI Size" column and the **Name** field is used to populate the "Std Sieve Size" column in the child grid.

When you save, the program removes all records in the child with empty fields except for "PHI Size" and "Std Sieve Size".

File   Edit   Navigation   Help

FULL

INPUT   OUTPUT   REPORTS   SYMBOLS   DRAWINGS   DATA DESIGN   UTILITIES

1 Project Database | 2 Library Tables | 3 Library Data | 4 Lookup Lists | 5 User System Data | 6 Readings Lists | 7 Correspondence Files

Reading	Name
-12	160"
-10	40"
-8	10"
-7	5"
-6.75	4.24"
-6.5	3.5"
-6.25	3"
-6	2.5"
-5.75	2"
-5.5	1.75"
-5.25	1.5"
-5	1.25"
-4.75	1"
-4.5	7/8"
-4.25	3/4"
-4	5/8"
-3.75	1/2"
-3.5	11/16"
-3.25	3/8"
-3	5/16"
-2.75	0.265
-2.5	3.5
-2.25	4
-2	5
-1.75	6
-1.5	7
-1.25	8
-1	10
-0.75	12
-0.5	14
-0.25	16
0	18
0.25	20
0.5	25

Weighing Method: The program needs to know which method is used to record **Wt Retained + Tare** field in the child grid. Some labs record weights retained on each sieve (Incremental) and others weight the total weight up to the current sieve (Cumulative). If left blank, Incremental is used as the default. If you will be inputting or importing the final results and not the raw data, this field is not used.

Weighing Tare Weight: This is the weight of the tare used in the next three fields and in the **Wt Retained + Tare** field in the child grid.

Dry Weight + Tare: This is the total dry weight plus the tare of the sieved specimen. This field is not used if inputting or importing final results.

Wash Weight + Tare: This is the total dry washed weight plus tare. This field is only used to calculate sieve loss.

Pan Weight + Tare: This is the total cumulative dry weight plus tare recorded on the pan. This field is only used to calculate sieve loss.

Plasticity, Organic: These two fields are used to modify the USCS classification.

Gradation Analysis Table

This is the child table of TESTING and stores the gradation raw lab data, final grain size, and percent passing/retained information.

Field	Lookup	Edit Lookup	Description
Core Identifier			
Depth			
PHI Size			
Weight Retained + Tare			Incremental (default) or Cumulative, based on the setting in the **Weighing Method** field in the parent grid.
Incremental Retained			
Cumulative Passing			
Incremental Shells Retained			Visual observation. % of total retained on sieve that are shells. If supplied, the total % Shells will be calculated in the TESTING table from these values. Blank values imply 0%. If all values are blank, the % Shells in the TESTING table is not altered.
Std Sieve Size			

The **PHI Size** and **Std Sieve Size** fields are automatically populated from the Readings Lists specified in the **Sieve Set** field in the parent grid (see the prior notes for that field).

The **Incremental Retained** and **Cumulative Passing** fields are calculated from the **Weight Retained + Tare field**. You can input the **Incremental Retained** or the **Cumulative Passing** values directly without the **Weight Retained + Tare** values if you are just inputting or importing the final results.

The **Incremental Shells Retained** field is optional and used to calculate the overall shell percentage in the specimen. If you leave this column blank, you can input this overall value in the **Shell Fragments** field in the parent grid. If there are values in this column, the **Shell Fragments** value is recalculated based on the values in the child grid.

Core Layers Table

This table and its child table (Core Layer Qualifiers) store the visual descriptions of each layer.

Field	Lookup	Edit Lookup	Description
Core Identifier			
Top of Layer Interval			
Bottom of Layer Interval			
Layer Structure	Libtbl!t_layer_structures	Yes	
Munsell Hue Wet			
Munsell Value Wet			
Munsell Chroma Wet			
USCS Classification	Graphic!matl	No	
Core Layer Comments			

Core Layer Qualifiers Table

The description qualifiers allow you to build a description based on as many components as desired. The **Soil Descriptor** field is used to describe the portion of the soil that roughly accounts for 35 to 50% of the material.

Field	Lookup	Edit Lookup	Description
Core Identifier			
Depth			
Qualifier	Libtbl!soil qualifiers	No	
Soil Type	Libtbl!t_soil_types	No	
Soil Descriptor (35-50%)	Libtbl!t_soil_descriptors	No	
Soil Texture	Libtbl!t_soil_textures	No	
Lithology	Libtbl!t_lithology	No	
Sorting	Libtbl!t_sorting	No	

T_Samples_X_CoreLayers Table

This is a hidden table used only by a gINT Rules code procedure that populates it during the save operation in certain tables. The data in this table is needed for final export to the ROSS ACCESS® file.

The table is used to generate data for sample to layer correlations needed to populate the ROSS database and to ultimately perform composite gradation analysis. This table (which you should not alter), is included for the sole purpose of completeness, and in case you view it in the DATA DESIGN application.

Creating the ROSS ACCESS® File

When the project data entry is completed and checked, and the final reports printed, the last step is to submit your data to the FDEP in the official ACCESS® file format. Although gINT projects are also in ACCESS® format, we have set up a very different structure to make data entry easier and support our internal calculations and error checking.

With the project you wish to export open in the Input application, select the **File ▶ Import/Export ▶ Export to Database** menu option. You see the Export to Database dialog box:
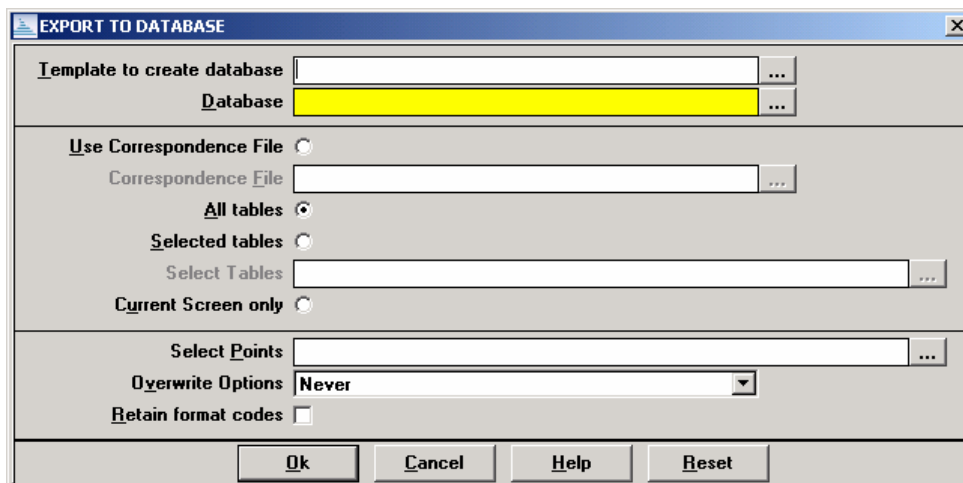
You will be creating a new file, so a base template of the target structure is required (the **Template to create database** field). Click the browse button to the right of field.

You see the Choose a Database Template File dialog box:

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7710 Bell Road   Windsor, CA 95492   Phone 707.838.1271   Fax 707.838.1274
support@gintsoftware.com   sales@gintsoftware.com   www. gintsoftware.com
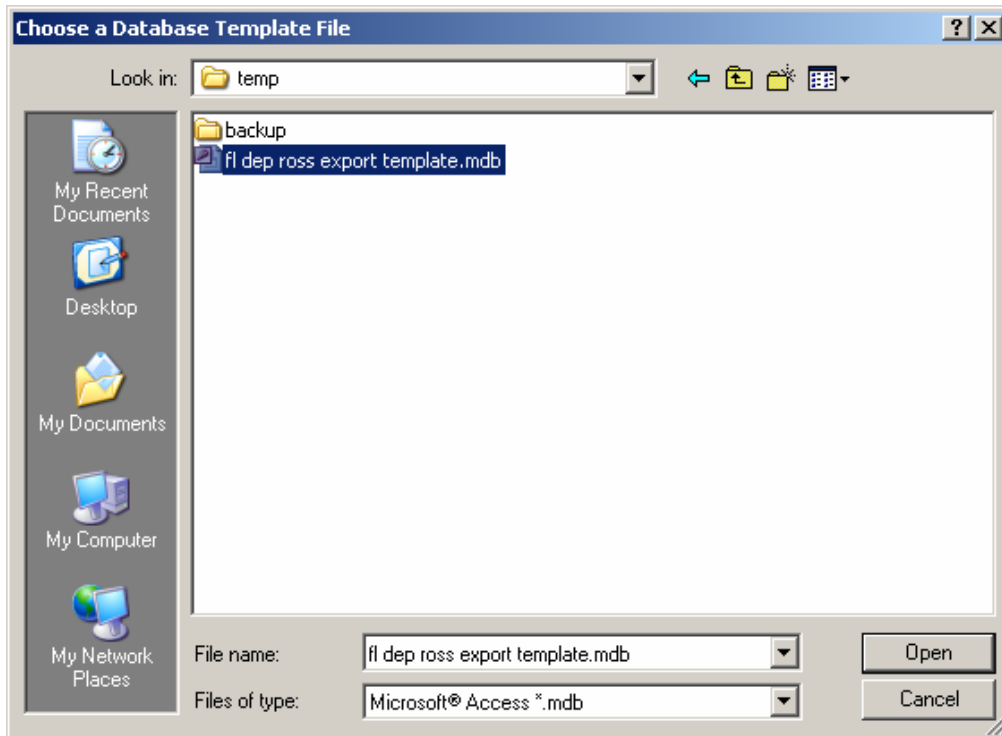
By default, the program looks for a gINT data template file (*.GDT). In this case, the template is an empty ACCESS® file that was provided with the distribution files. To view the file, you must change the **Files of type** field to "Microsoft ACCESS® *.mdb". Select the file and specify any final database file name (as long it has an *.mdb file extension) in the **Database** field:
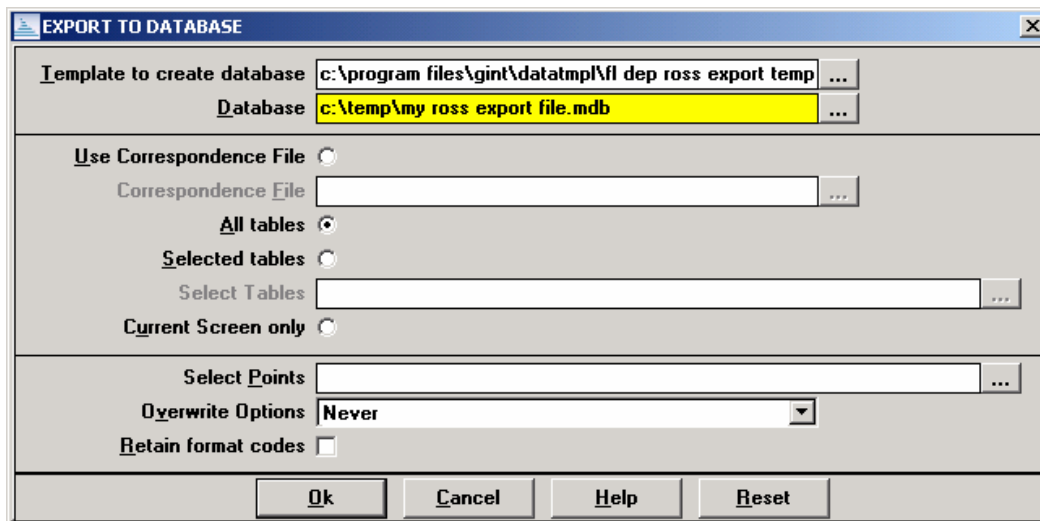
The last steps are to mark the **Use Correspondence File** option and select the gINT Export Correspondence file included with the distribution files. This file maps between the gINT structure and the structure required by the FDEP. Click the **OK** when finished.
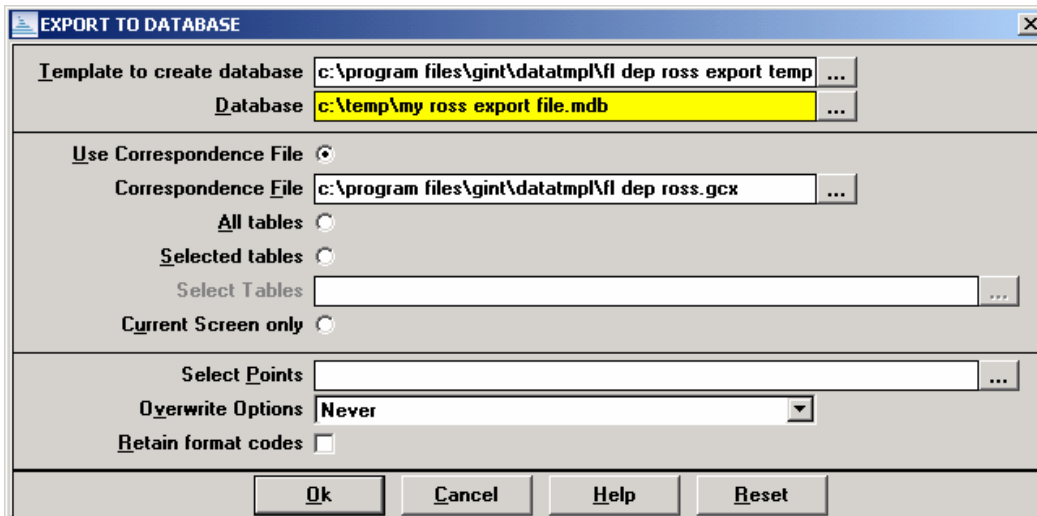
At the end of the export a dialog box displays showing a summary of the process. Any errors are listed in this screen. If you encounter errors that you cannot resolve, please call gINT Technical Support.

Modifications

All the forms (except for the fence forms), database structure, symbols, rules for calculating and checking results have been tested and approved for release by the FDEP. Any desired changes must be first approved by the FDEP. Please submit change requests to the FDEP.

Exceptions to the "do not modify" rule are as follows:

- The format of the fence forms is not specified by the FDEP. You are free to modify them as you wish.
- Many fields have lookup lists associated with them that you can add to and modify. During data entry, if you type the value you require and it is not in the list, you are prompted to add it. For lookup lists that are fixed, you are not prompted, and must pick from the supplied list. To edit the lists that are modifiable, go to DATA DESIGN ▶ **Library Data** and change to the desired lookup using the drop-down box above the application group buttons.
- You can insert additional tables and fields into the database structure.
- You can add any custom reports you want.

One potential concern with making modifications is updating the base files. If problems are found, or the DEP directs us to make additions or modifications, we will post updated versions of the files. If your files are overwritten with the updated files, your modifications will be lost. Instructions for dealing with this condition depend on the changes that were made in the update.

We will include instructions to deal with updating modified files in the posted updates. The process may be simple or complex, depending on the modifications. As long as you only add new items (forms, tables, fields, lookups lists, and so on) to the files, excluding the exceptions list above, resolving the update should not be a time-consuming process.

gINT Software offers an extensive range of consulting services to support gINT clients. We can assist you with just about any type of project, spanning the entire spectrum of geotechnical and geo-environmental needs, from simple to complex. Our development and support professionals are at your service to provide everything from custom-designed reports and special project consulting, to helping with translation issues.

Setting up the Printer

With gINT, each report stores the printer it will output to. Initially, the forms have been configured to work with the following printers:

- 8½x11" forms work with an HP LaserJet (most models)
- 11x17" forms work with an HP DeskJet 1220C

When you use these forms for the first time, and do not have these printers installed, the program automatically substitutes your default Windows printer. If you wish to output the forms to your default printer, you do not need to make any changes. If not, you must change the printer associated with one or more forms.

To change your default printer:

1. Open gINT and go to the REPORTS application group. Select the appropriate report tab (Logs, Fences, and so on).

2. Select the **File ▶ Print ▶ Printer Setup** menu option. You see the Printer Setup dialog box:
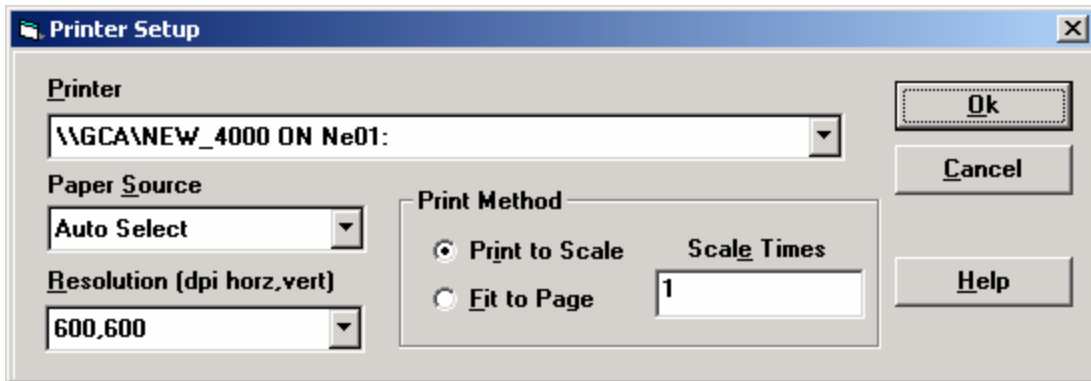
3. Select the appropriate printer and click **OK**. If you have multiple forms in a report style, change the current report by clicking the drop-down "object selector" text box at the top of the window, selecting another report, and repeating the above steps.
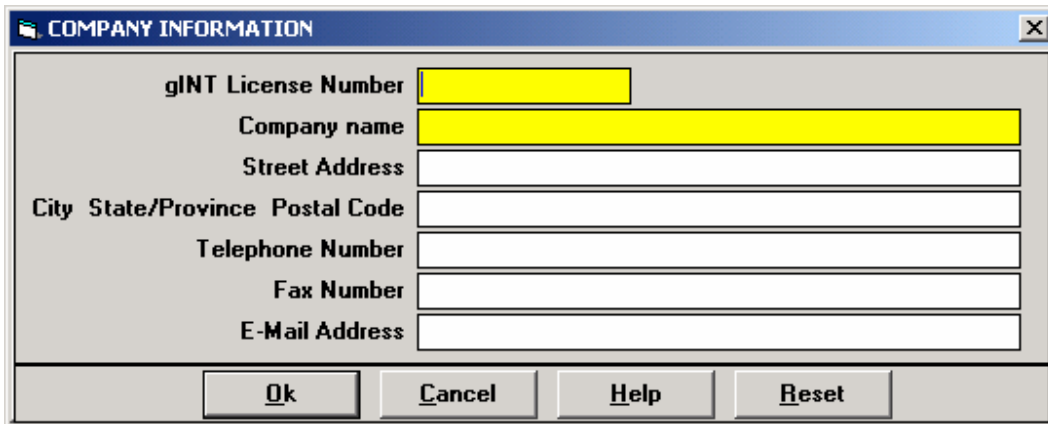

Changing the printer in the REPORTS application stores the setting. You can also change the printer at output time using the same steps, but any changes made during output time are only in effect for the currently selected report and revert back to the value set in REPORTS when the current report is closed.

Company Information

When you first open gINT, you see the COMPANY INFORMATION dialog box:

The first two fields are required (required fields are indicated by a yellow background), but all the fields (except for **gINT License Number** and **E-Mail Address**) are used on the provided forms, so please fill them out appropriately. For details on using these fields, select **Help ▶ Search for Help On…** and enter "Company Information" in the text box.

This dialog box only appears the very first time you open gINT, but you can access it at any time by selecting the **Help ▶ Company Information** menu option. In addition, if any of your company information changes, just modify the fields in this dialog box, and your forms are updated accordingly.

Placing Your Logo

Introduction

We have set up the supplied forms so that all obtain the logo from a block (except for the log form which has no logo). Blocks in gINT work the same as in other drawing applications. They are drawings that are referenced by other drawings. Any change made to a block is reflected in all the drawings that reference it. Therefore, you will only need to place your logo in one drawing for it to appear on all the forms. If you encounter any problems please contact us.

Importing Your Logo

The first step is to store your logo in your gINT library. The logo can be stored either as a vector image in **SYMBOLS ▶ Discrete Graphics**, or as a raster image in **SYMBOLS ▶ Bitmap Symbols** (not Bitmap Fills). You could draw your logo in gINT in either location, but it probably already exists in electronic format.

If you have the option, we recommend using a vector image to store your logo, since this can be exported to DXF format and bitmaps cannot. Vector images are created in applications such as AutoCAD. gINT supports AutoCAD version 12 DXF format. If you have a later version of AutoCAD, save the file as a version 12 DXF.

To import your logo:

1. Go to **SYMBOLS ▶ Discrete Graphics** and select **File ▶ New** or click the New button.
2. In the dialog box that displays, enter a **Name** and if desired, a **Description**. Accept the defaults for the remaining fields and click **OK**.

3. Select **File ▸ Import/Export ▸ DXF Import**. Navigate to your DXF logo file and click **Open**.

4. The program imports the file and displays it on the screen. You will control the size and placement properties of the logo when you place the logo.

5. If you are importing a raster image file for your logo, go to **SYMBOLS ▸ Bitmap Symbols** and select **File ▸ New** or click the New button.

6. In the dialog box that displays, enter a **Name** and if desired, a **Description**. Click the browse button [...] next to the **Load Raster File** field and navigate to your logo file. You can import any of the following image formats: JPG, BMP, TIF, PCX, PNG, PPM, or TGA.

7. Click **OK** to import the file.

Using Your Logo

To place your logo:

1. Open the **DRAWINGS ▸ Drawing Library** application and select COMPANY INFORMATION from the drop-down list, if it does not appear by default. You see a screen similar to the following:
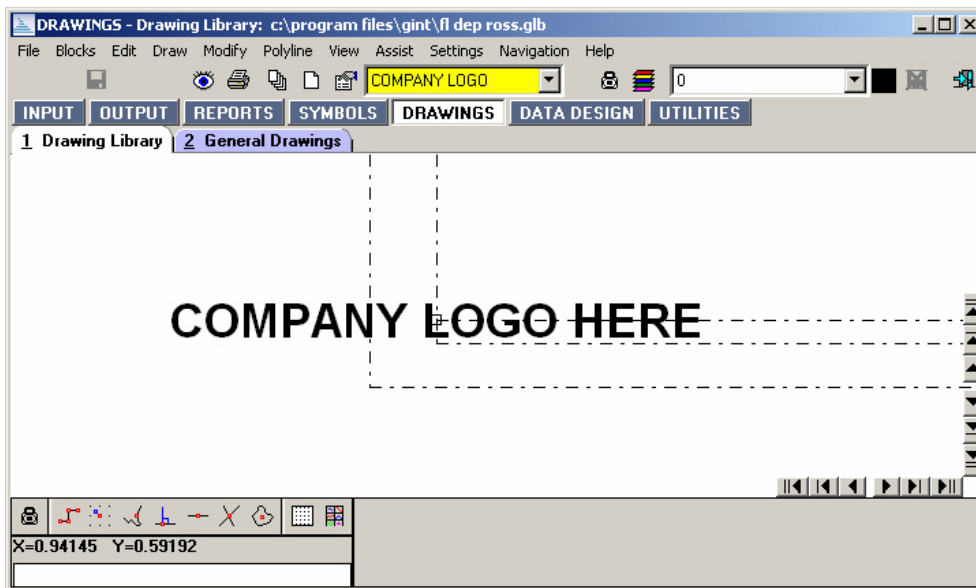
Note: If you have gINT Logs, the General Drawings tab does not appear.

2. Click on the "Company Logo Here" text.
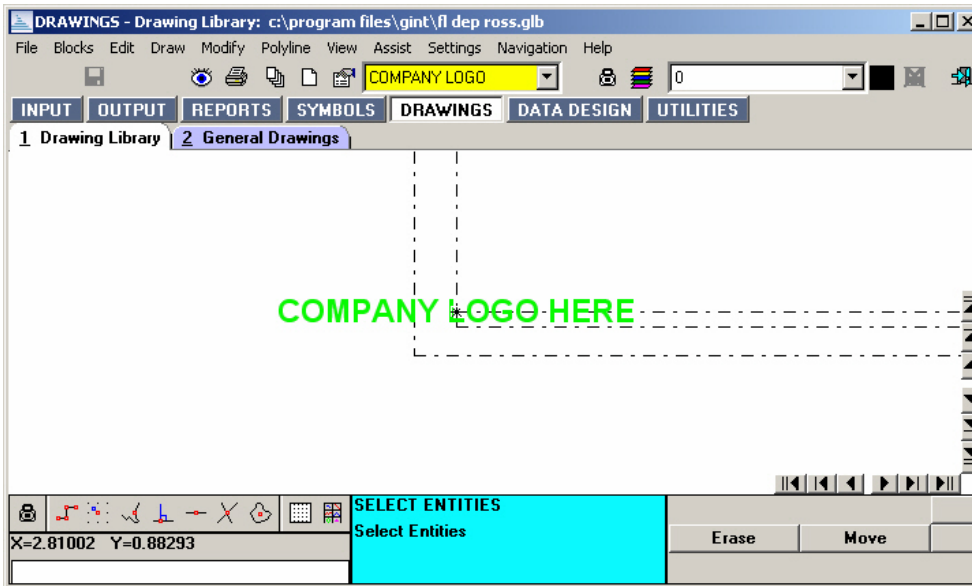
3. When selected, the text will turn green and a green border appears around the box. From the options that appear on the lower left section of the screen, click **Erase**.

4. Select either the **Draw ▶ Discrete Graphic** or **Draw ▶ Bitmap Symbol** option, as appropriate:
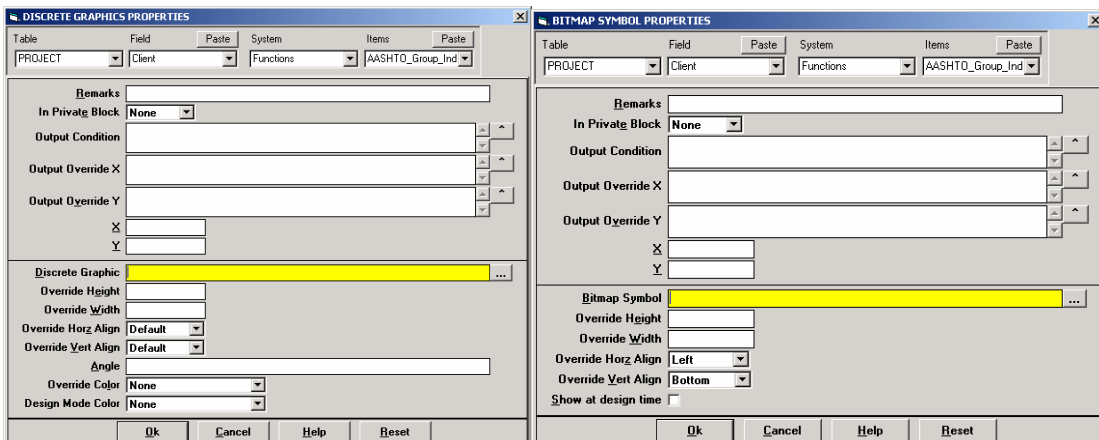
5. Define the entity properties using the following guidelines:

   a. Set the **X** and **Y** fields (not the **Output Override X/Y**) to "0". Click the browse button ⋯ next to the **Discrete Graphic** or **Bitmap Symbol** field and select your logo.

   b. Set **Override Height** to 0.65 and set the **Override Width** to 3.6. Set **Override Horz Align** to "Center" and **Override Vert Align** to "Middle".

   c. For the Discrete Graphic, set the **Design Mode Color** (this setting does not affect the final output color) to "Very Light Blue" (this is a gINT standard; please feel free to use any color you wish).

   d. For the Bitmap Symbol, check **Show at design time**. If unchecked, the logo is only displayed on the form when it is previewed or printed. Click **OK**.

The dimensions supplied here will work with all the forms provided; however, may wish to adjust the size. To view entity properties, double-click the logo. Notice that the program does not distort the symbol, using on the controlling dimension. Which dimension is used depends on the aspect ration (height to width) of your logo.

If You Do Not Have a Logo

If you do not have a logo, double-click the "COMPANY LOGO HERE" text and change the text to your company name, or use the system field <<CompName>> to read the company name from the **Help ▶ Company Informatio**n dialog box.

Appendix

Supplied Forms

The following report forms are included with your files:

Type	Name	Description
Log	FLORIDA DEP ROSS	Based on the Army Corps 1836 form but modified for FDEP use.
Fence	CORE FENCE POSTS - A SIZE	Material Graphics Column: 8½x11" paper.
	CORE FENCE POSTS - B SIZE	Material Graphics Column: 11x17" paper.
Graph	SIEVE ANALYSIS	Grain size distribution. One plot per page.
Graphic Table	GRANULARMETRIC REPORT	Tabular summary for each sieve analysis

gINT Professional has access to all of the reports forms. gINT Logs and gINT Logs Plus can access the Log form only. The Fence reports are included for completeness but are not required by the FDEP. To help distinguish the forms, and for quality assurance and maintenance purposes, we have included tracking codes, at a 90° angle in the lower left margin of all the report forms.

FLORIDA DEP ROSS FL DEP ROSS.GPJ FL DEP ROSS.GDT 7/14/2005

gINT tracking codes include the report form name, the project file, the data template used in the design of the form, and the print date. The format of the print date is determined by the **Order of Named Date Formats** and **Pad 1 digit dates with 0** fields of the General tab of the System Properties dialog box (**File ▶ System Properties**).

You can print sample output of all of the forms we have provided using the following procedure:

1. If you have purchased gINT Logs or gINT Logs Plus, you must first switch to gINT Professional in demonstration mode using the **Help ▶ License Level ▶ gINT Professional** menu option. This mode prints "gINT Demonstration" across the output, but the sample forms are readable and clear.
2. Open the **OUTPUT** application group and select **File ▶ Command Script ▶ Execute Script**, or click the Command Script 🖳 button and select **Execute Script**.
3. Click the browse button ⸺ to right of the **Script File** field. When the Read Command Script dialog box displays, select **FL DEP ROSS.GSC** and click **OK** to execute the script. For more information on scripts, go to **Help ▶ Search for Help On…** and type "Command Scripting" in the search text box.

Boring Designation ABCD-01-23

DRILLING LOG	DIVISION		INSTALLATION		SHEET 1
					OF 1 SHEETS

1. PROJECT	9. SIZE AND TYPE OF BIT 6.0 In.

gINT Test Project
Santa Rosa, California

10. COORDINATE SYSTEM/DATUM	HORIZONTAL	VERTICAL
Florida State Plane East	HARN	NAVD 29

2. BORING DESIGNATION	LOCATION COORDINATES	11. MANUFACTURER'S DESIGNATION OF DRILL	☐ AUTO HAMMER
ABCD-01-23	X = 406,020 Y = 1,162,598		☐ MANUAL HAMMER

3. DRILLING AGENCY	CONTRACTOR FILE NO.	12. TOTAL SAMPLES	DISTURBED	UNDISTURBED (UD)

4. NAME OF DRILLER SC	13. TOTAL NUMBER CORE BOXES

5. DIRECTION OF BORING	DEG. FROM VERTICAL	BEARING	14. ELEVATION GROUND WATER
☒ VERTICAL			
☐ INCLINED			15. DATE BORING — STARTED 04-26-04 09:15 — COMPLETED 04-26-04 11:28

6. THICKNESS OF OVERBURDEN 0.0 Ft.	16. ELEVATION TOP OF BORING -14.1 Ft.

7. DEPTH DRILLED INTO ROCK 0.0 Ft.	17. TOTAL RECOVERY FOR BORING 14.5 Ft.

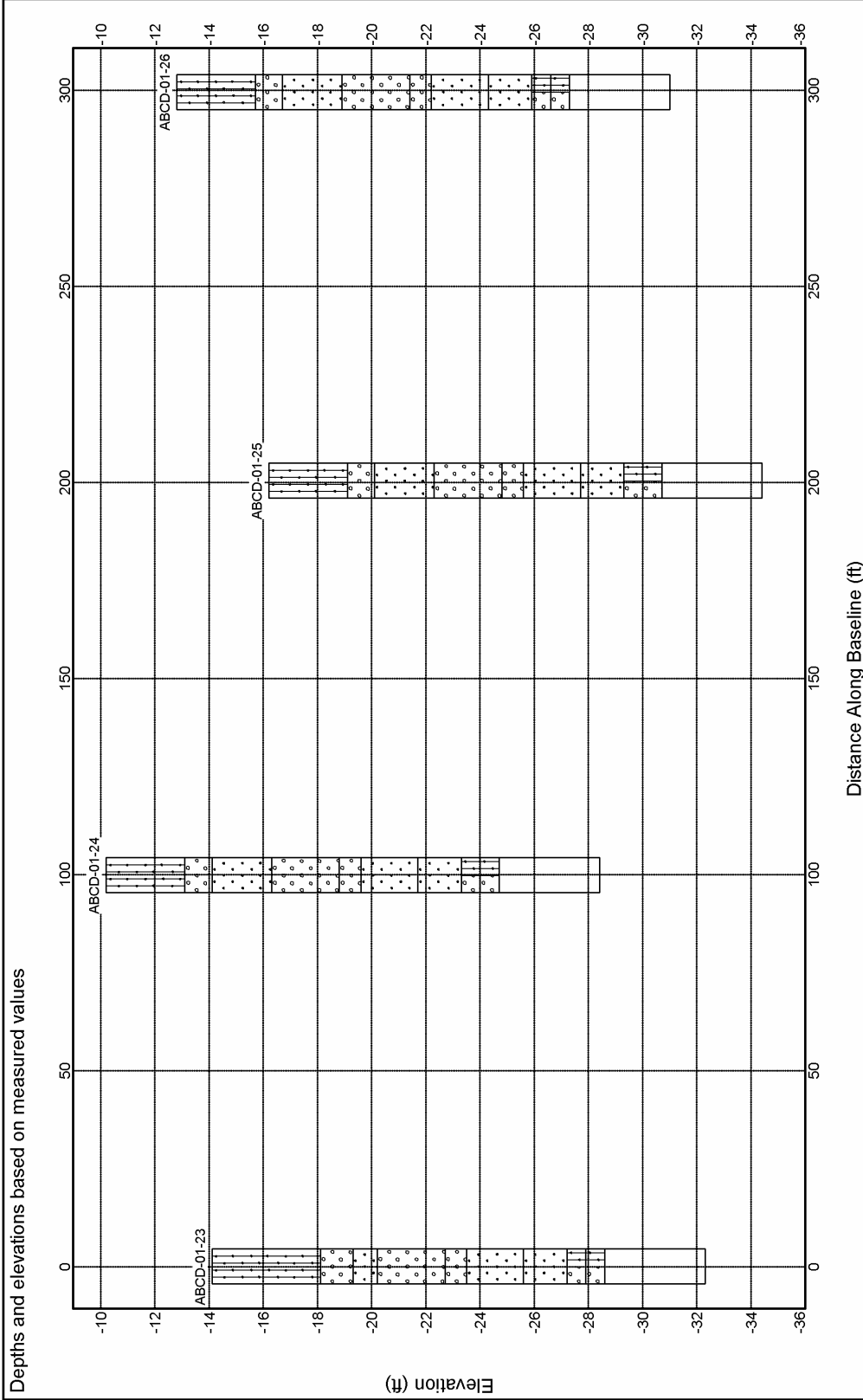| 8. TOTAL DEPTH OF BORING 18.2 Ft.	18. SIGNATURE AND TITLE OF INSPECTOR A. Bore

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-14.1	0.0					
			SAND, fine grained, quartz, poorly sorted, trace shell hash, alternating laminae, white (5Y-8/1), (SM).		1	Sample #1, Depth = 1.0' Mean (mm): 0.17, Phi Sorting: 0.38 Shell: 32%, Fines (230): 1.30% (SP) sample comments
-18.1	4.0				2	Sample #2, Depth = 2.3' - 4.0' Mean (mm): 0.20, Phi Sorting: 1.51 Fines (230): 8.71% (SW-SM)
-19.3	5.2		Silty SAND, fine grained, quartz, some shell hash, mottled, whole shell @ 3.8' (1.0"x0.5"), light gray (5Y-7/1), (SW).		3	Sample #3, Depth = 4.0' - 5.2' Mean (mm): 0.19, Phi Sorting: 1.51 Fines (230): 4.41% (SW-SC)
-20.2	6.1		SAND, fine grained, quartz, trace shell hash, white (5Y-8/1), (SP).			
-22.7	8.6		SAND, fine grained, quartz, trace shell hash, white (5Y-8/1), (SW).		2	
-23.5	9.4		SAND, fine grained, quartz, some shell hash, trace shell fragments, trace silt, light gray (5Y-7/1), (SW).			
-25.6	11.5		SAND, fine grained, quartz, white (5Y-8/1), (SP).			
-27.2	13.1		SAND, fine grained, quartz, trace silt, light gray (5Y-7/1), (SP).			
-27.9	13.8		SAND, fine grained, quartz, little shell fragments, little shell hash, little silt, whole shells @ 13.4' & 13.5' (0.5"x0.5"), gray (5Y-6/1), (SW-SM).			
-28.6	14.5		SAND, fine grained, quartz, trace shell hash, trace silt, gray (5Y-6/1), (SW-SM).			
			No Recovery.			
-32.3	18.2					
			End of Boring			

SAJ FORM 1836   MODIFIED FOR THE FLORIDA DEP
JUN 02   JUN 04

FLORIDA DEP ROSS FL DEP ROSS.GPJ FL DEP ROSS.GDT 1/29/05

7710 Bell Road   Windsor, CA 95492   Phone 707.838.1271   Fax 707.838.1274
support@gintsoftware.com   sales@gintsoftware.com   www. gintsoftware.com

Fence: CORE FENCE POSTS – A SIZE (2D view; requires gINT Professional)

Depths and elevations based on measured values

Distance Along Baseline (ft)

Elevation (ft)

gINT Test Project
Santa Rosa, California

ACME Coastal Consultants
1234 Main Street
Sunny Place, Florida 32999
ph (000) 555-1234
fax (000) 555-4321

COMPANY LOGO HERE

CORE FENCE POSTS - A SIZE.FL DEP ROSS.GPJ FL DEP ROSS.GDT 1/29/05

Fence: CORE FENCE POSTS – A SIZE (3D view; requires gINT Professional)

Depths and elevations based on measured values

Distance Along Baseline (ft)

Elevation (ft)

ABCD-01-23
ABCD-01-24
ABCD-01-25
ABCD-01-26

gINT Test Project
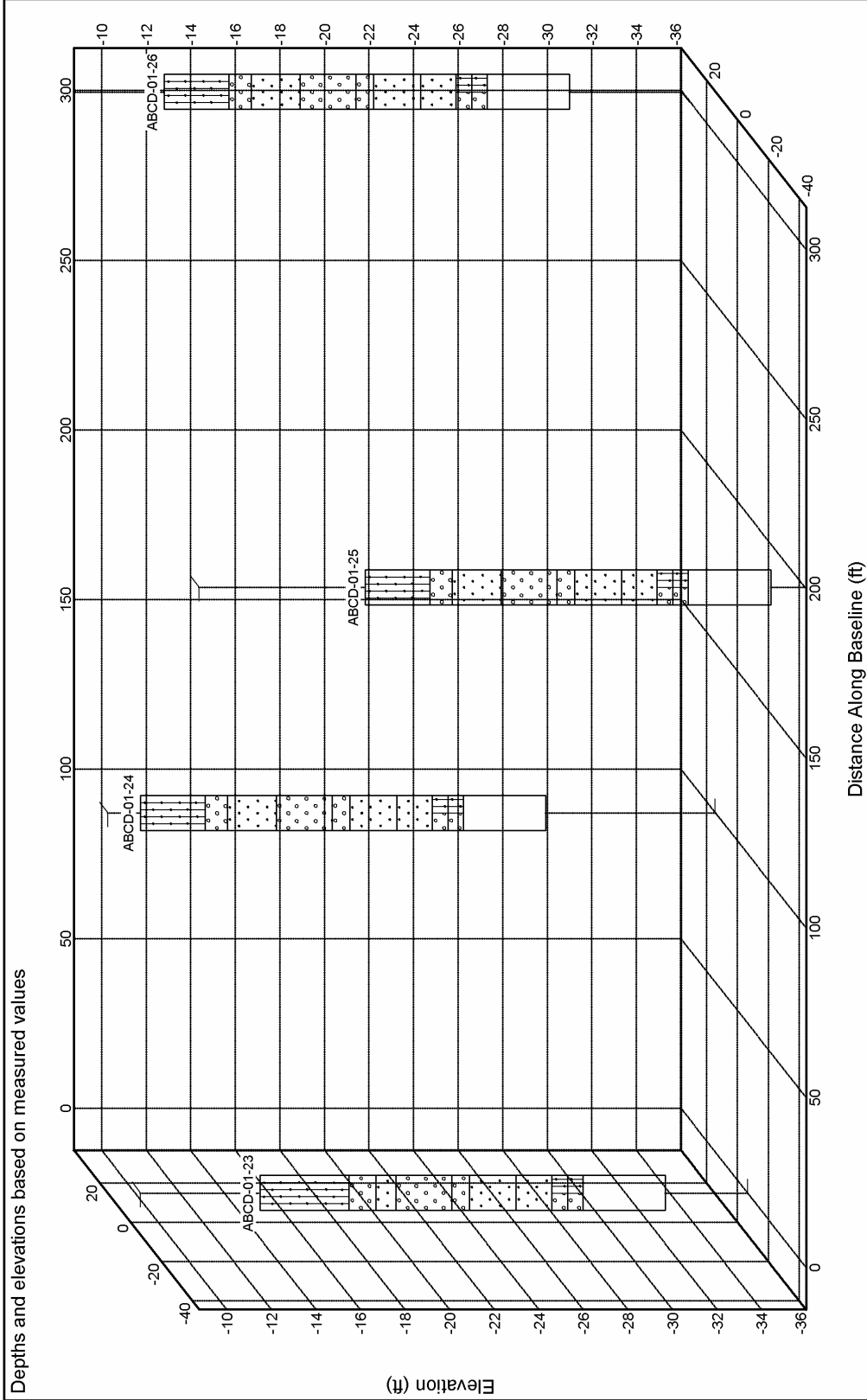Santa Rosa, California

ACME Coastal Consultants
1234 Main Street
Sunny Place, Florida 32999
ph (000) 555-1234
fax (000) 555-4321

COMPANY LOGO HERE

CORE FENCE POSTS - A SIZE FL DEP ROSS.GPJ FL DEP ROSS.GDT 1/29/05

7710 Bell Road   Windsor, CA 95492   Phone 707.838.1271   Fax 707.838.1274
support@gintsoftware.com   sales@gintsoftware.com   www. gintsoftware.com

Percent Coarser By Weight

Percent Finer By Weight

Hydrometer

Silt and Clay

Sand — Fine | Medium | Coarse

Gravel — Fine | Coarse

PHI Sieve Sizes
Standard Sieve Sizes

Millimeters

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
ABCD-01-23 #1		-15.1	SP	#200 - 1.31 / #230 - 1.30	1.00	25.00	2.64	2.57	-1.97	13.22	0.38

Comments: lab remarks

Depths and elevations based on measured values

COMPANY LOGO HERE
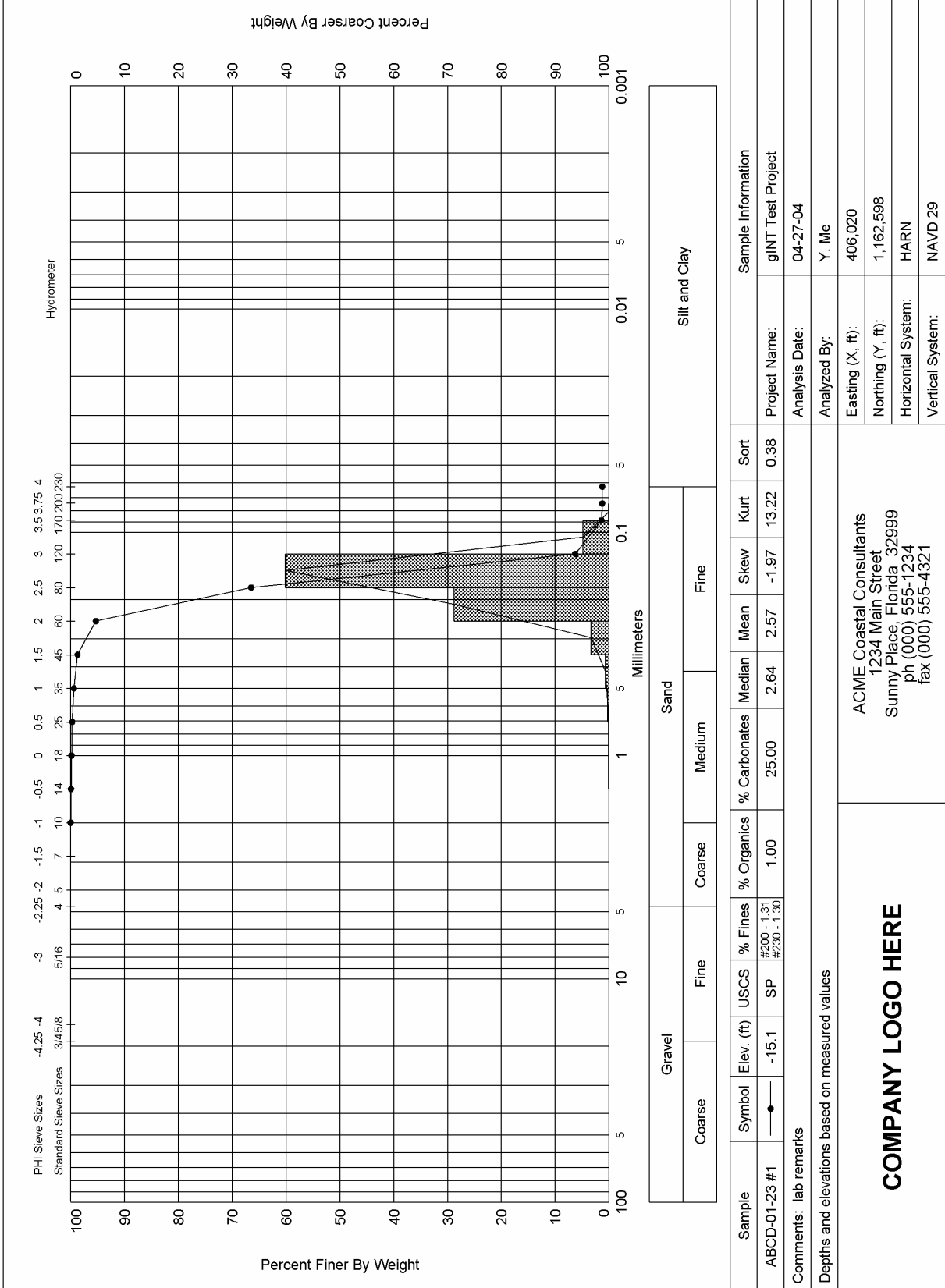
ACME Coastal Consultants
1234 Main Street
Sunny Place, Florida 32999
ph (000) 555-1234
fax (000) 555-4321

Sample Information	
Project Name:	gINT Test Project
Analysis Date:	04-27-04
Analyzed By:	Y. Me
Easting (X, ft):	406,020
Northing (Y, ft):	1,162,598
Horizontal System:	HARN
Vertical System:	NAVD 29

Granularmetric Report
Depths and elevations based on measured values

Project Name: gINT Test Project

Sample Name: ABCD-01-23 #1

Analysis Date: 04-27-04

Analyzed By: Y. Me

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):
406,020	1,162,598	Florida State Plane East	-15.1 NAVD 29

USCS:	Munsell: Wet - 5Y-8/1 Dry - 6Y-9/2 Washed - 7Y-10/3	Comments:
SP		lab remarks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.31 #230 - 1.30	Organics (%):	Carbonates (%):	Shells (%):
88.57	87.43	1.14	-1.28		1.00	25.00	31.56

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.06	0.07	0.06	0.07
18	0.00	1.00	0.07	0.08	0.13	0.15
25	0.50	0.71	0.14	0.16	0.27	0.30
35	1.00	0.50	0.27	0.30	0.54	0.61
45	1.50	0.35	0.61	0.69	1.15	1.30
60	2.00	0.25	3.01	3.40	4.16	4.70
80	2.50	0.18	25.51	28.80	29.67	33.50
120	3.00	0.13	53.30	60.18	82.97	93.68
170	3.50	0.09	4.33	4.89	87.30	98.57
200	3.75	0.07	0.11	0.12	87.41	98.69
230	4.00	0.06	0.01	0.01	87.42	98.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.13	2.92	2.84	2.64	2.35	2.20	2.01

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.57	0.17	0.38	-1.97	13.22

GRANULARMETRIC REPORT FL DEP ROSS.GPJ FL DEP ROSS.GDT 1/29/05

Material Symbols

The following material symbols are included in the library. These symbols have been approved by the FDEP. DO NOT modify, delete, or add new ones. If you feel changes are necessary, please contact the FDEP and submit a request for modifications.

CH	CL	GC	GC-H	GM	GM-GC	GM-H	GP	GP-GC	GP-GM

GW	GW-GC	GW-GM	MH	ML	ML-CL	OH	OL	PT	SC

SC-H	SM	SM-H	SM-SC	SP	SP-SC	SP-SM	SW	SW-SC	SW-SM