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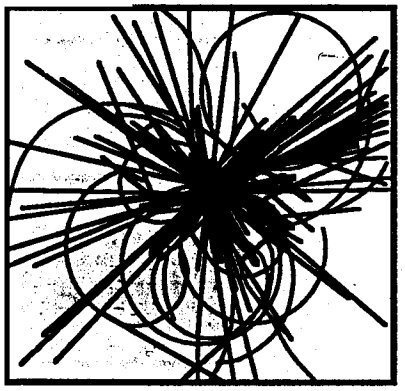
Project No. 87-888-0021

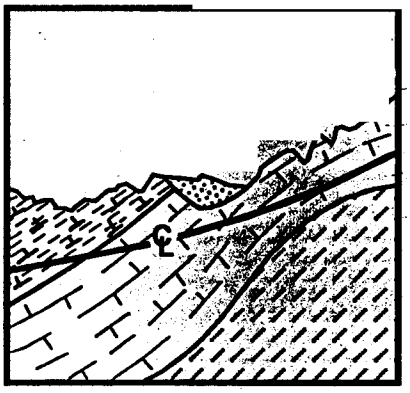
Report No. SSC-GR-70

November 1990

Rev. 1

Superconducting Super Collider
Project Specific
gINT Data Base and Manual





Prepared by: The Earth Technology Corporation
Long Beach, California

Prepared for: RTK a joint venture
Oakland, California

Project No. 87-888-0021
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Rev. 1

SUPERCONDUCTING SUPER COLLIDER

PROJECT SPECIFIC gINT DATA BASE AND MANUAL

Prepared by:
THE EARTH TECHNOLOGY CORPORATION
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Prepared for:
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wp/V84G/GR70

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1.0 INTRODUCTION

The purpose of this SSC project specific gINT™ data base manual is to outline how the information pertaining to the SSC project was entered into the gINT™ data base and how it can be retrieved. This manual should be used in conjunction with the following manual:

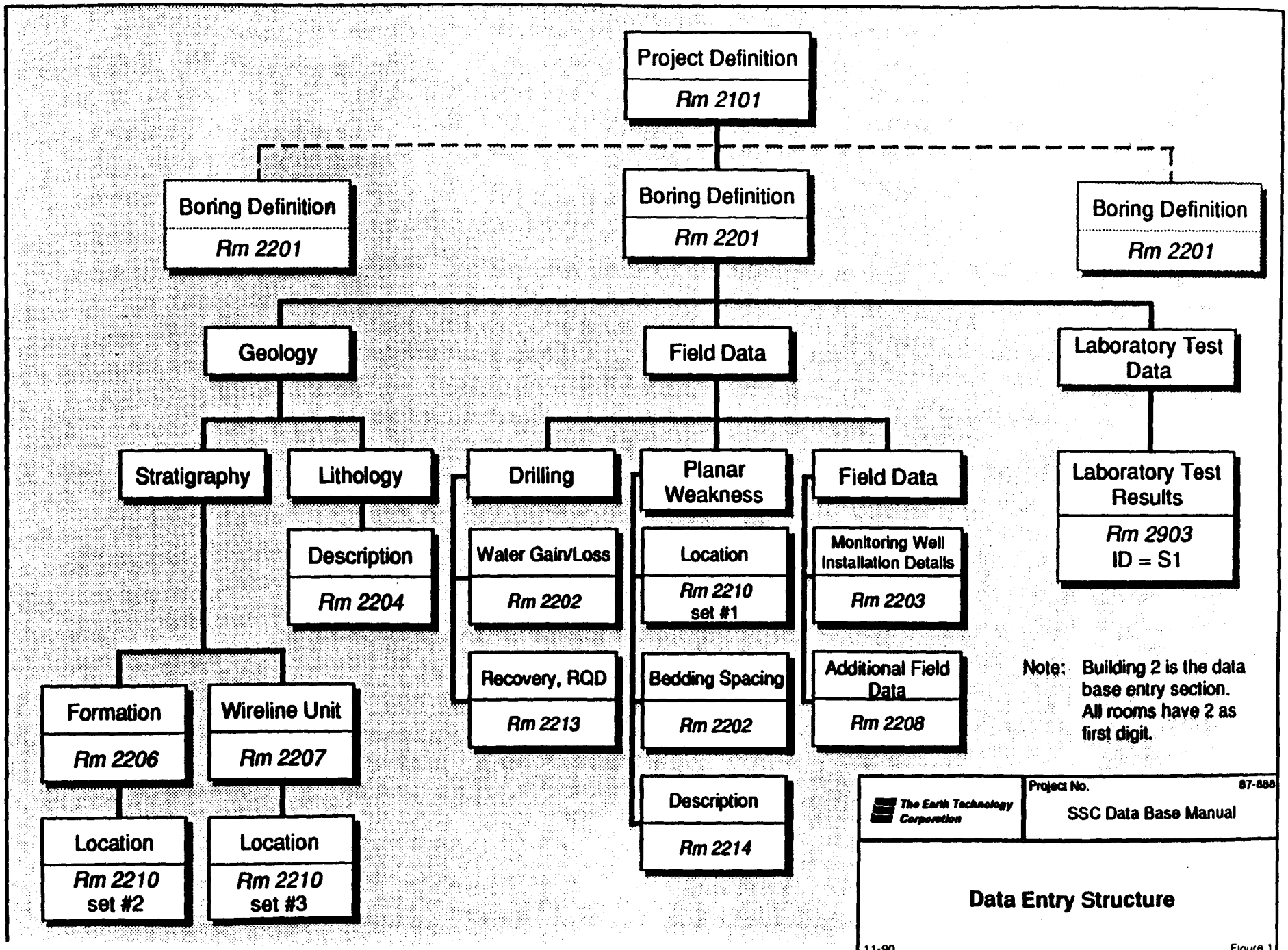
gINT™
The gEOTECHNICAL INTegrator
Version 3.1
DOCUMENTATION
16 March 1990
Copyright by: Salvatore Caronna

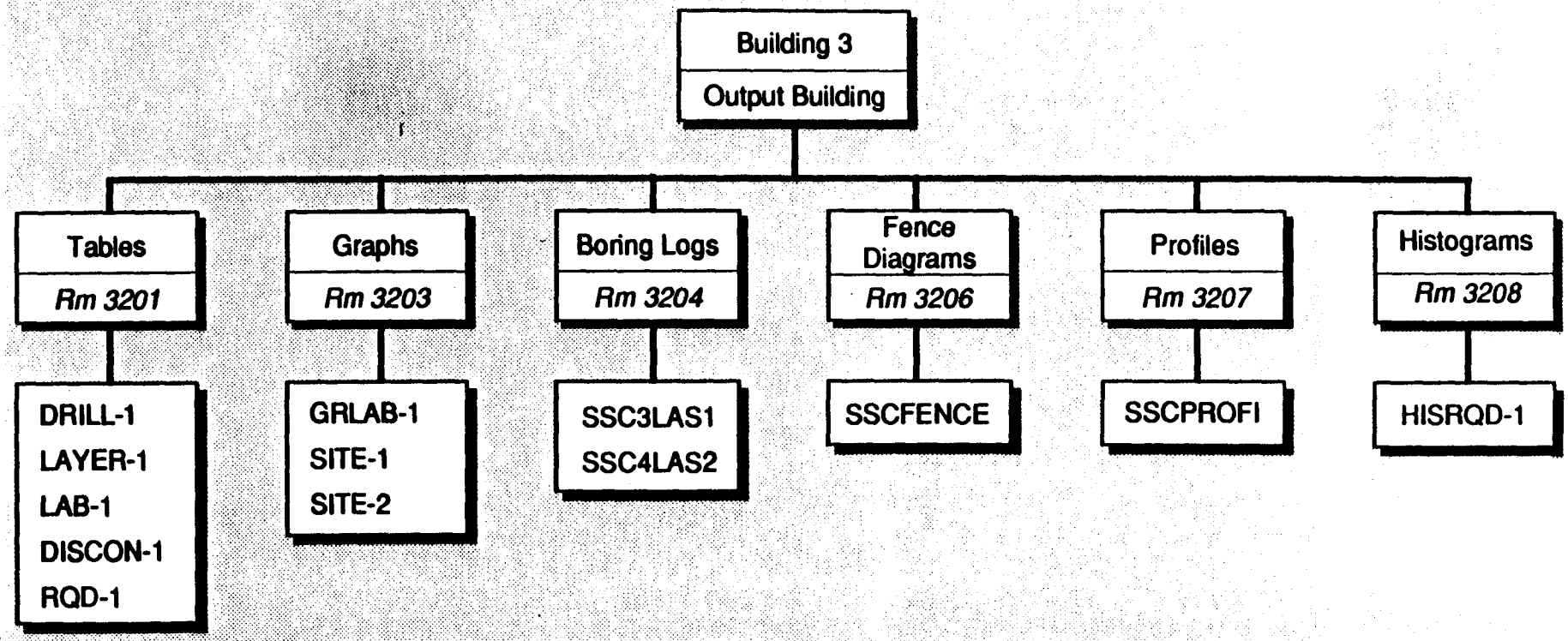
gINT™ is organized along the plan of a group of three buildings. Building 1 houses "Setup and Maintenance" and allows the user to customize gINT™ for the project's particular needs. Building 2 houses "Data Input" where all the information about the project is entered. Building 3 houses the "Data Output" where output templates are defined, and the information entered in Building 2 is output using these templates. Building 1 is not described in this manual; only Buildings 2 and 3 are discussed here.

Figure 1 shows the Data Entry Structure (Building 2) and Figure 2 shows the Data Output Structure (Building 3). Each building has two or more floors with numerous work centers, termed "rooms." Rooms are composed of three areas: Task Corner, Key Identification Corner, and Data Entry Corner. Details of the buildings, floors and rooms are explained in the gINT™ documentation manual cited above. This manual describes the data base and the program use on a "room" basis. It should be noted that only the most immediate features available in the data base are described herewith. Figure 3 shows a boring log which is a compilation of discrete information sets pertaining to geology, field data, and laboratory test data that have been stored in the gINT™ data base. These information sets may also be accessed through tabulations, graphs, and profiles. A broader range of options are possible on an as-needed basis through an advanced knowledge of the gINT™ software capabilities.

This manual also provides an explanation of how the geological and geomechanical data were entered in the data base. It supplements the more extensive descriptions of the geologic features and geomechanical properties of the subsurface materials that have been addressed elsewhere, and should be used in conjunction with other relevant documents.

In subsequent sections, details of various rooms (name, number, title, contents, reserved words, how data are entered, how data can be retrieved, etc.) are outlined. The SSC project specific gINT™ data base is on five diskettes included in Section 6.0 at the end of the manual. gINT™ software, needed to utilize the SSC project data base, is furnished under a license agreement or nondisclosure agreement from Geotechnical Computer Applications, 1200 College Avenue, Santa Rosa, California 95404, Telephone number: (707) 575-8510.


Project Definition
Rm 2101
Boring Definition
Rm 2201
Boring Definition
Rm 2201
Boring Definition
Rm 2201
Geology
Field Data
Laboratory Test Data
Stratigraphy
Lithology
Drilling
Planar Weakness
Field Data
Laboratory Test Results
Rm 2903
ID = S1
Description
Rm 2204
Water Gain/Loss
Rm 2202
Location
Rm 2210
set #1
Monitoring Well Installation Details
Rm 2203
Recovery, RQD
Rm 2213
Bedding Spacing
Rm 2202
Additional Field Data
Rm 2208
Formation
Rm 2206
Wireline Unit
Rm 2207
Location
Rm 2210
set #2
Location
Rm 2210
set #3
Description
Rm 2214
Note: Building 2 is the data base entry section. All rooms have 2 as first digit.
The Earth Technology Corporation
Project No. 87-888
SSC Data Base Manual
Data Entry Structure
11-90
Figure 1



Note: Building 3 is the data base output section. All rooms have 3 as first digit.

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SSC Data Base Manual

Data Output Structure

11-90

Figure 2

Depth (ft)	Elevation (ft)	GEOLOGY: STRATIGRAPHY: Formation	GEOLOGY: STRATIGRAPHY: Unit	GEOLOGY: LITHOLOGY: Graphic	GEOLOGY: LITHOLOGY: DESCRIPTION	FIELD DATA: DRILLING: Water Gain/Loss	FIELD DATA: DRILLING: Core Recovery (%) 20 40 60 80	FIELD DATA: DRILLING: RQD (%) 20 40 60 80	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: Location of Planar Weakness	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: Bedding Spacing (ft) 0.2-0.8 0.8-3.0 3.0-10.0 >10.0	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: Type	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: Dip (Deg.)	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: JOINTS/ SHEARS ONLY: Separation	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: JOINTS/ SHEARS ONLY: Type of Filling	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: JOINTS/ SHEARS ONLY: Amount of Filling: None	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: JOINTS/ SHEARS ONLY: Amount of Filling: Partial	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: JOINTS/ SHEARS ONLY: Amount of Filling: Complete	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: JOINTS/ SHEARS ONLY: Alteration	FIELD DATA: DESCRIPTION OF PLANAR WEAKNESS: JOINTS/ SHEARS ONLY: Roughness	FIELD DATA: Monitoring Well Installation Details	LABORATORY TEST DATA: Moisture Content (%)	LABORATORY TEST DATA: Dry Density (pcf)	LABORATORY TEST DATA: Liquid Limit	LABORATORY TEST DATA: Plasticity Index	LABORATORY TEST DATA: Carbonate Content (%)	LABORATORY TEST DATA: Uniaxial Compressive Strength (psi)	LABORATORY TEST DATA: Tensile Strength (psi)	LABORATORY TEST DATA: TRIAXIAL TEST: Confining Stress (psi)	LABORATORY TEST DATA: TRIAXIAL TEST: Shear Strength (psi)	LABORATORY TEST DATA: TRIAXIAL TEST: Elastic Modulus (x10E5 psi)	Depth (ft)	Elevation (ft)	REMARKS
		Room 2206, Reserved Word: LOGNOTE2	Room 2207, Reserved Word: LOGNOTE3	Room 2204, Reserved Word: MATLGRFC	Room 2204, ID-S1 Reserved Word: MATLDESC	Room 2202, Reserved Word: SMP.DSC1	Vertically Drawn histogram Room 2213, Reserved Word: RDTPARM1	Vertically Drawn histogram Room 2215, Reserved Word: RDTPARM2	Room 2210 Set #1 Breaks Lines	Room 2202, Reserved Word: SMP.DSC3 and SMP.DSC4	Room 2214, Reserved Word: RJP.ORNT	Room 2214, Reserved Word: RJP.DIP	Room 2214, Reserved Word: RJP.SPAC	Room 2214, Reserved Word: RJP.FILL	Room 2214, Reserved Word: RJPCODE1	Room 2214, Reserved Word: RJPCODE2	Room 2214, Reserved Word: RJPCODE3	Room 2214, Reserved Word: RJPCODE4	Room 2214, Reserved Word: RJP.RUFF	Room 2203, Reserved Word: WELL	Room 2903, ID=S1 Reserved Word: $MC	Room 2903, ID=S1 Reserved Word: $DD	Room 2903, ID=S1 Reserved Word: $LL	Room 2903, ID=S1 Reserved Word: $PI	Room 2903, ID=S1 Reserved Word: $CC	Room 2903, ID=S1 Reserved Word: $CU	Room 2903, ID=S1 Reserved Word: $TENSILE	Room 2903, ID=S1 Reserved Word: $DATA2	Room 2903, ID=S1 Reserved Word: $DATA1	Room 2903, ID=S1 Reserved Word: $MODULUS			Room 2208, Reserved Word: LOGNOTE4
		Room 2210 Set #2 Strat. Graph. Lines	Room 2210 Set #3 Wire-line Units																															

Project ID.:PRJ.ID,Rm 2201
Boring No.:PT.ID,Rm 2201
Ground.Elev.:PT.ELEV,Rm 220
North Cord.:PT.NORTH,Rm 22
East Cord.:PT.EAST,Rm 2201
Field Engr. Geologist:PT.SUPER,Rm 2201
Driller:PT.DRLLR,Rm 2201
Date Began:PT.STRT1,Rm 2201
Date of Completion:PT.END1,Rm 2201

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Boring Identifier
Room 2201
PT.ID (Reserved Word)

SHEET PG OF NPGS
BORING PT.ID, Rm 2201
Superconducting Super Collider
REV. 1
Boring Log Key
Figure 3

2.0 DATA ENTRY STRUCTURE

This section explains all the details pertaining to rooms in Building 2.

2.1 ROOM 2101 - PROJECT IDENTIFICATION

This room is displayed as "PROJECT DEFINITION - ADDRESS 2101" on the gINT™ screen. The only data stored in this room is the project number. This room is where projects are added and edited. The project ID identifies the project and allows the user to create a subdirectory carrying the project ID as a name (i.e., SSC project files are stored in subdirectory/SSC).

Reserved Word: PRJ.ID (= SSC)
Reserved Word: PRJ.NUM (= 87888; Earth Technology project number)

2.2 ROOM 2201 - BORING DEFINITION

This room is displayed as "EXPLORATION POINT DEFINITION - ADDRESS 2201" on the gINT™ screen. The data stored in this room are the details of the borings, such as number, ground surface elevation, coordinates, dates of drilling, etc.

The data are compiled from the lithologic logs and geologist's field book (as needed).

Explanation	gINT™ Screen	Reserved Word	Remarks
Date drilling commenced	STARTED	PT.STRT1	
Date borehole completed	ENDED	PT.END1	
Northing coordinates	NORTH	PT.NORTH	As surveyed by surveyors (feet)
Easting coordinates	EAST	PT.EAST	As surveyed by surveyors (feet)
Ground surface elevation	ELEVATION	PT.ELEV	As surveyed by surveyors (feet)
Inclination of the boreholes from horizontal	PLUNGE	PT.PLUNG	For all boreholes (inclined and vertical) the plunge is entered as -90.0 in order to keep elevation and depth scale compatible.
Drilling geologist	SUPERVISOR	PT.SUPER	
Contractor	DRILLER	PT.DRLLR	MJA or SWL
Vertical depth of borehole	DEPTH	PT.DEPTH	Feet

2.3 ROOM 2202 - SAMPLE DATA

This room is displayed as "SAMPLE DATA - ADDRESS 2202" on the gINT™ screen. The information pertaining to water gain/loss during drilling operations and details of bedding spacing in a given depth range are stored in this room.

The data are compiled from the lithologic logs and geologist's field book (as needed). The water gain/loss data appears on the log as Symbol W1 (or W2, W3, etc.) and an explanation in the "REMARKS" column. Bedding spacing details appear on the log in histogram format.

Explanation	gINT™ Screen	Reserved Word	Remarks
Top depth of data range	TOP DEPTH	SMP.TOPD	Feet
Length of data range (Top depth - Bottom depth)	LENGTH	SMP.LEN	Feet
Not used	TYPE BLOW COUNT N COMP.*+ REC % RQD % SCR %		
Water gain/loss in the depth range	SMP.DSC1+	SMP.DSC1	
Not used	SMP.DSC2+	SMP.DSC2	
Bedding Spacing (in feet)	SMP.DSC3+ SMP.DSC4+	SMP.DSC3 SMP.DSC4	Numeric codes for bedding spacing are indicated in the following table

Numeric Codes for Bedding Spacing		
Bedding Spacing (feet)	SMP.DSC1 Value	SMP.DSC2 Value
<0.2	0	1
0.2 to 0.9	1	2
1.0 to 2.9	2	3
3.0 to 10.0	3	4
>10.0	4	5

Bedding spacing is calculated for fresh Austin Chalk only.

2.4 ROOM 2203 - MONITORING WELL INSTALLATION DETAILS

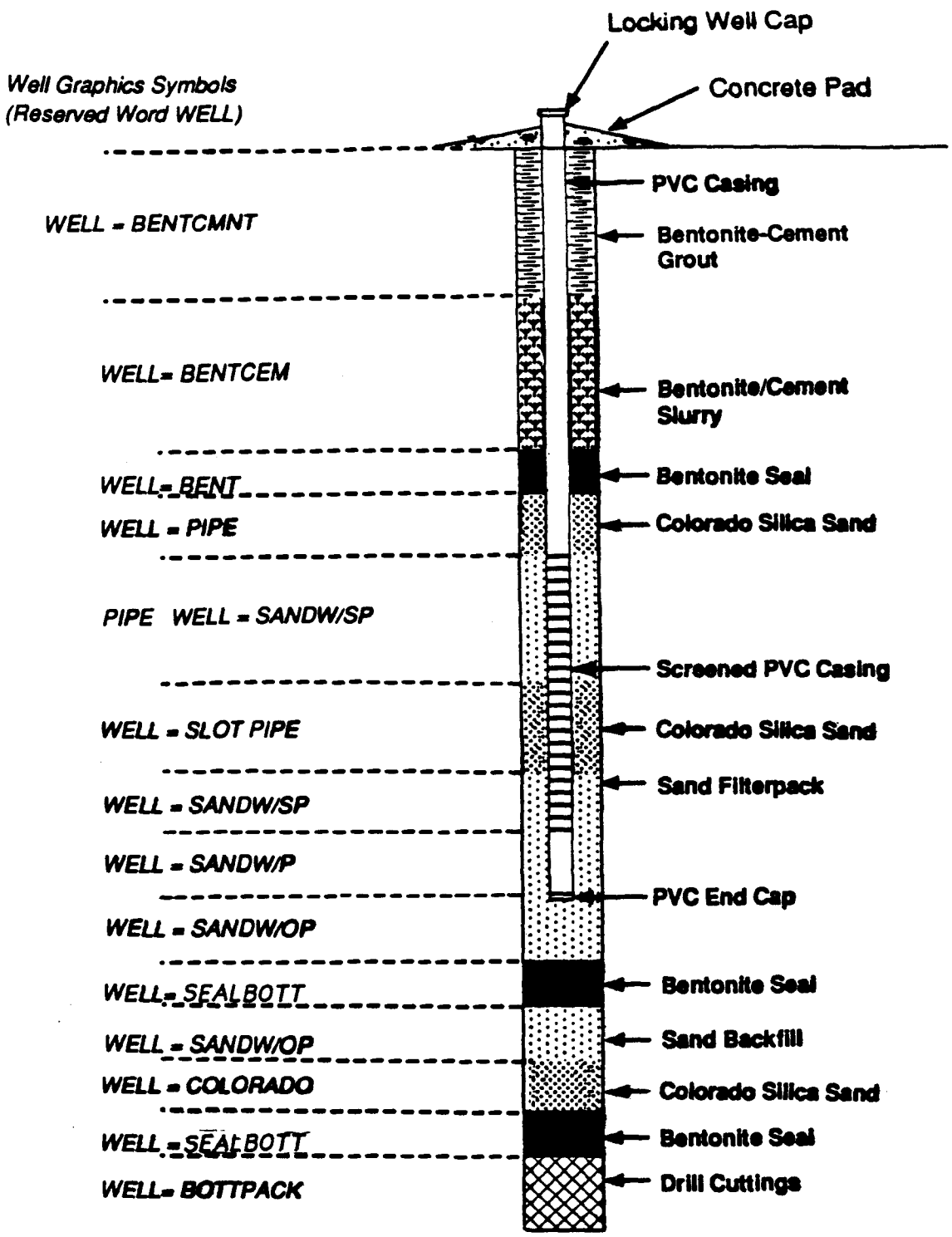
This room is displayed as "WELL LOG - ADDRESS 2203" on the gINT™ screen. The room is used to enter well graphic logs. Data are compiled from "As Built" well installation diagrams. Each section of a well is defined by its bottom depth and symbol code. Figure 4 shows the well symbol codes used in the SSC project for a typical monitoring well diagram.

Reserved Word: WLL.BDPH and WELL.

Notes:

1. This room uses a horizontally scrolling screen, so there are more data sets than are shown on the screen.

2. Centralizers were installed in some wells but are not shown on the details column on the boring log.



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Typical Monitoring Well Diagram

11-90

Figure

2.5 ROOM 2204 - LITHOLOGY DESCRIPTION

This room is displayed as "logWRITER - ADDRESS 2204" on the gINT™ screen. The data stored in this room are material descriptions, depth and graphic commands for the use of symbols in the graphics column. The information appears on the log in the form of graphics and a corresponding description.

2.5.1 Material Description

This includes typed descriptions of lithology encountered and depths at which it occurs. Data are compiled from lithologic logs. The lithologic units mentioned in the material descriptions are further described in the SSC Site Reference Stratigraphic Column (The Earth Technology Corporation, 1990).

Reserved Word: MATLDESC

2.5.2 Depth

This refers to the actual depth line in the template to which text is entered. It should be noted that the gINT™ template has a maximum capability of 40 feet per page (vertical scale of approximately 1" = 5').

2.5.3 Graphic Command

This is entered in the material description column but not printed on the log during printout, as indicated by the period as the first character of the line.

Appears as: .T=X M=XXXXXXXX G=X

For each stratigraphic unit and condition, a corresponding symbol has been assigned.

T=X Draws a horizontal line between the material description (text)
Possible values for X are:

- 0 Draws no horizontal line
- 1 Draws solid horizontal line
- 5 Draws dashed horizontal line

M=XXXXXXXX Draws a pattern above the line in the graphics column. (See Figure 5 for available graphic symbols).

G=X Draws a horizontal line in the graphics column.
Possible values for X are:

0 No line
1 Solid horizontal line
5 Dashed horizontal line

Graphic Symbols	Lithologic Descriptions	Stratigraphic Formations
	Clay (M = CL) *Silty Clay (M = CLML)*	**Residual Soils and Alluvial Deposits**
	Weathered Taylor Marl (M = WEAMARL) *Unweathered Taylor Marl (M = MARL)*	**Taylor Marl (Ozan Formation)**
	Weathered Austin Chalk, Limestone (M = WEALIMES) *Unweathered Austin Chalk, Limestone (M = LIMESTON)* *Argillaceous, Shaly Austin Chalk, Limestone (M = LIMESHAL)* *Bentonitic Shale (M = BENS)* *Bentonite (M = BENT)*	**Austin Chalk, Limestone**
	Eagle Ford Shale (M = SHALE)	**Eagle Ford Shale, Calcareous Shale**

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SSC Data Base Manual

Soil/Rock Symbols for Boring Logs

11-90

Figure 5

2.6 ROOM 2206 - STRATIGRAPHIC FORMATION

This room is displayed as "LOG NOTES II - ADDRESS 2206" on the gINT™ screen. It stores the information in the form of an abbreviated designation about the stratigraphy of the formation. Data are compiled from the lithologic log. Stratigraphic formations are also described in the SSC Site Reference Stratigraphic Column (The Earth Technology Corporation, 1990).

Stratigraphic Formation	Explanation	Abbreviated Designation on Log
Alluvial Deposit	Light brown to tan, sandy clay, may contain limestone fragments with organic debris in upper horizons. Deposited by stream or running water.	Qal
Residual Soils	Clay, slightly silty to silty, dark brown to gray, calcareous. Containing residual material from underlying bedrock.	Qres
Terrace Deposit	Calcareous silty clay, sand, and gravel, mottled tan, orange, and/or gray. Represents ancient (Pleistocene) alluvial deposits.	Qt
Taylor Marl (Ozan Formation)	Medium gray to bluish black shale, firm, fissile, occasional fossil fragments and calcite seams.	Ko
Austin Chalk	Limestone, moderately to medium hard, fresh, gray to light gray, slightly to moderately argillaceous and shaly interbeds, occasional pyrite inclusions and shell fragments.	Kau
Eagle Ford Shale	Dark gray to black, soft to medium hard shale, may contain thin calcite layers and concretions as well as pyrite nodules.	Ksb

DEPTH - refers to the actual depth line in the template to which the abbreviated stratigraphic formation designation is entered.

Reserved Word: LOGNOTE2

2.7 ROOM 2207 - STRATIGRAPHIC UNIT

This room is displayed as "LOG NOTES III - ADDRESS 2207" on the gINT™ Screen. It stores the information in the form of abbreviated designations about stratigraphic wireline units.

Wireline units are a geophysical signature for a particular stratigraphic unit that is correlated between different borings. In this case, Single Point Resistance and Natural Gamma wireline logs and their corresponding lithologic logs were compared to further define contacts, marker beds and other distinct aspects of subsurface bedrock. For some of the site formations, particularly Austin Chalk, the wireline units are more distinctive and traceable than the visible lithology.

Taylor Marl has been divided into three wireline stratigraphic units, Austin Chalk has been divided into 13 wireline stratigraphic units, and Eagle Ford Shale has been divided into three wireline stratigraphic units. The wireline units for Taylor Marl, Austin Chalk, and Eagle Ford Shale are assigned alphabetic prefixes of T, A, and E, respectively, followed by a numeric suffix that increases with increasing geologic age. The wireline stratigraphic units at the SSC site are defined in The Earth Technology Corporation, 1990, and are tabulated below:

Abbreviated Designation on Log	Corresponding Stratigraphic Formation
T21	Taylor Marl
T22	Taylor Marl
T23	Taylor Marl
A15	Austin Chalk
A16	Austin Chalk
A17	Austin Chalk
A18	Austin Chalk
A19	Austin Chalk
A20	Austin Chalk
A21	Austin Chalk
A22	Austin Chalk
A23	Austin Chalk
A24	Austin Chalk
A25	Austin Chalk
BM	Bentonite (Marker bed) in A25
A26	Austin Chalk
A27	Austin Chalk
FB	Transition Zone (Fish bed, Shaly l.s) in A27
E20	Eagle Ford Shale
E21	Eagle Ford Shale
E22	Eagle Ford Shale

DEPTH - refers to the actual depth line in the template to which the abbreviated wireline unit designation is entered.

Reserved Word: LOGNOTE3

2.8 ROOM 2208 - REMARKS

This room is displayed as "LOG NOTES IV - ADDRESS 2208" on the gINT™ screen. It stores miscellaneous data pertaining to the boring. Field-related information not reported elsewhere are compiled from the lithologic log. These include data from additional field tests (such as conductivity and water level measurements), fracture orientations and other general information.

DEPTH - refers to the actual depth line at which the remark is entered.

Reserved Word: LOGNOTE4

2.9 ROOM 2210 - HORIZONTAL LINES ON LOG

This room is displayed as "HORIZONTAL LINES ON LOGS - ADDRESS 2210" on the gINT™ screen. See Figure 3 for location of the lines.

Location of Planar Weakness: (Set #1)	Horizontal lines drawn in this column of the log identify the location of naturally occurring planar weaknesses (i.e., bedding, joints, and shears). It should be noted that mechanical (drilling-caused) breaks are not included. In the chalk, bedding is defined by variable content of clay minerals in the otherwise monotonus chalk. Planar weaknesses due to bedding are interpreted in the chalk for the following descriptions on the lithology log: - bentonite or bentonitic shale - shale - shaly chalk - very argillaceous chalk - moderately argillaceous chalk beds that are soft, or have a sharp (not gradational) contact with adjacent clean chalk. In these instances, bedding breaks are identified at the average depth. In Taylor Marl and Eagle Ford Shale, bedding is a pervasive planar weakness and is not described explicitly in this column.
Stratigraphic Formation: (Set #2)	Horizontal lines drawn in this column of the log identify the contact between stratigraphic formations.
Stratigraphic Unit: (Set #3)	Horizontal lines drawn in this column of the log differentiate between wireline units.

DEPTH - refer to the actual depth line to which a horizontal line will be drawn on the log.

2.10 ROOM 2213 - CORE RECOVERY AND RQD DATA

This room is displayed as "ADDITIONAL DEPTH RANGE DATA - ADDRESS 2213" on the gINT™ screen. The data stored in this room are core recovery in percent and RQD in percent. Data are compiled from the lithologic log. Data appear in a histogram format.

Explanation	gINT™ Screen	Reserved Word	Remarks
Depth of top of core	TOP DEPTH	RDT.TOPD	(in feet)
Actual length of core run	LENGTH	RDT.LEN	(in feet)
Percentage of core recovered	RDTPARM1	RDTPARM1	(percentage)
RQD	RDTPARM2	RDTPARM2	(percentage)

2.11 ROOM 2214 - DESCRIPTION OF PLANAR WEAKNESS

This room is displayed as "ROCK JOINTING PROPERTIES - ADDRESS 2214" on the gINT™ screen. It stores data about planar weaknesses, which have been identified by a horizontal line (Set #1, Room 2210) in the "Location of Planar Weakness" column at a given depth. These are further described in this room.

2.11.1 Type of Planar Weakness

Reserved Word: RJP.ORNT

All planar weaknesses located by a line (Room 2210, Set #1) in the "Location of Planar Weakness" column are classified in one of the following three categories. Data are compiled from the lithologic log.

Bedding (B) planes are identified in Austin chalk by variations in clay content and are not necessarily an actual plane of separation of the rock core. Taylor Marl and Eagle Ford Shale by definition have pervasive thin beds; hence, no attempt is made to note bedding planes in these units: RJP.ORNT=B.

Shears (S) are non-bedding, naturally occurring planar weaknesses (also discontinuities) showing apparent displacement. They are identified as such only when slickensided or striated discontinuity surfaces have been described: RJP.ORNT=S.

Joints (J) are non-bedding, naturally occurring planar weaknesses as (also discontinuities) lacking evidence of displacement between surface planes (i.e., all separating, naturally occurring discontinuities not identified as Shears): RJP.ORNT=J.

2.11.2 Dip Angle of Planar Weakness

Reserved Word: RJP.DIP

Data are compiled from the lithologic log.

2.11.3 Separation of Planar Weakness (Joints/Shears Only)

Reserved Word: RJP.SPAC

Data are compiled from the lithologic log. This field is left blank for bedding discontinuities.

Description	Separation of Wall (mm)	RJP.SPAC Value
Closed	0	C
Very Narrow	0 - 0.1	VN
Narrow	>0.1 - 1.0	N
Wide	>1.0 - 5.0	W
Very Wide	>5.0	VW

2.11.4 Type of Filling (Joints/Shears Only)

Reserved Word: RJP.FILL

Data are compiled from the lithologic log. This field is left blank for bedding discontinuities.

Description	RJP.FILL Value
Calcite	Calcite
Clay	Clay
Pyrite	Pyrite
Gypsum	Gypsum

2.11.5 Amount of Filling (Joints/Shears Only)

Reserved Word: RJPCODE1, RJPCODE2, or RJPCODE3

Data are compiled from the lithologic log. This field is left blank for bedding discontinuities.

Description	Definition	Amount of Filling		
		None	Partial	Complete
		RJPCODE1 Value	RJPCODE2 Value	RJPCODE3 Value
Clean	No fracture filling material.	X		
Stained	Coloration of rock only. No filling material.	X		
Partially filled	Fracture partially filled with recognizable filling material.		X	
Completely filled	Fracture completely filled with recognizable filling material.			X

2.11.6 Surface Alteration (Joints/Shears Only)

Reserved Word: RJPCODE4

Data are compiled from the lithologic log. This field is left blank for bedding discontinuities.

Description	RJPCODE4 Value
Fresh: no visible sign of weathering (sound)	S
Faintly or slightly weathered: weathering limited to the surface of major discontinuities, or if a fracture occurs, in weathered bedrock (altered)	A

2.11.7 Surface Roughness (Joints/Shears Only)

Reserved Word: RJP.RUFF

Data are compiled from the lithologic logs. This field is left blank for bedding discontinuities.

Classification	Description	RJP.RUFF Value
Smooth	Appears smooth and is essentially smooth to the touch. May be slickensided.	S
Slightly Rough	Asperities (undulations) on the discontinuity surfaces are visible and can be distinctly felt.	SR
Medium Rough	Asperities are clearly visible and discontinuity surface feels abrasive.	MR
Rough	Large angular asperities can be seen. Some ridges and high angle steps evident.	R
Very Rough	Near vertical steps and ridges occur on the discontinuity surface.	VR

SUMMARY OF PLANAR WEAKNESS DESCRIPTION (ROOM 2214)				
Explanation	gINT™	Reserved Word	Possible Values	Remarks
Type of Planar Weakness	ORIENT TO DIP	RJP.ORNT	B, S, or J	
Dip angle of Planar Weakness	DIP	RJP.DIP	0 to 90	
Separation of Planar Weakness (Joints/Shears Only)	SPACING	RJP.SPAC	C, VN, N, W, or VW	Left blank in case of bedding discontinuity
Type of filling (Joints/Shears Only)	FILLING	RJP.FILL	Calcite, Clay, Pyrite, or Gypsum	Left blank in case of bedding discontinuity
Amount of filling: (Joints/ Shears Only) None Partial Complete	RJPCODE1 RJPCODE2 RJPCODE3	RJPCODE1 RJPCODE2 RJPCODE3	X or blank X or blank X or blank	Three columns left blank only in case of bedding discontinuity
Surface Alteration (Joints/Shears Only)	RJPCODE4	RJPCODE4	S or A	Left blank in case of bedding discontinuity
Surface Roughness (Joints/Shears Only)	ROUGHNESS	RJP.RUFF	S, SR, MR, R, or VR	Left blank in case of bedding discontinuity

NOTE: Unless specified in the remarks column, all data entries should have only one possible value.

2.12 ROOM 2903 - LABORATORY TEST DATA

This room is displayed as "INPUT DEPTH RELATED DATA (KYS 13) - ADDRESS 2903" on the gINT™ screen. It stores laboratory test results. It is a custom room and its file ID is S1. Data are compiled from the final geomechanical test results summaries of each boring. Laboratory manuals issued by the subcontractors, Southwestern Laboratories (SWL) and Mason-Johnston & Associates (MJA), describe the laboratory test procedures used for the geomechanical testing program.

gINT™ Screen	Explanation	Reserved Word	Units
MOIST. CONTENT	Moisture content	$MC	percentage
DRY DENSITY	Dry density	$DD	pcf
LIQUID LIMIT	Liquid limit	$LL	percentage
PLASTIC INDEX	Plasticity index	$PI	percentage
CARBONATE CONT	Carbonate content	$CC	percentage
UNCONF COMP STR	Uniaxial compressive strength	$QU	psi
ELASTIC MODULUS	Tangent Young's modulus (E_{50})	$MODULUS	10^5 psi
TENSILE STRENGTH	Brazil tensile strength	$TENSILE	psi
COHESION	Not used	$COHSN	--
PHI	Not used	$PHI	--
DATA1	Shear strength defined as one-half of deviatoric stress at failure during triaxial compression	$DATA1	psi
DATA2	Confining pressure during triaxial compression	$DATA2	psi
DATA3	Not used	$DATA3	--
ALPHA1	Not used	$ALPHA1	--

3.0 DATA OUTPUT STRUCTURE

This section explains the details pertaining to various rooms in Building 3.

3.1 ROOM 3201 - TABLE OUTPUT

This room is displayed as "OUTPUT TABLES - ADDRESS 3201" on the gINT™ screen. The data stored may be output as tables. The table definition takes place in Room 3101 and is explained thoroughly in the gINT™ documentation manual (gINT™ 1990). In this section, several tables specifically prepared for the SSC project are introduced. The user may also define new tables more suitable to meet future project needs.

3.1.1 DRILL-1 Drilling Summary

This table summarizes boring definition data for a given set of borings. Figure 6 is an example of table output from gINT™. Figure 7 shows a table output after it is transferred to Lotus 1-2-3/Allways™ software. This transfer allows additional manipulations of data.

3.1.2 LAYER-1 Layer Data Summary

This table summarizes the list of lithologic layers with top and bottom depths; each layer is identified by a material symbol code, description of which can be found in Room 2204. Figures 8 and 9 show a list of layers for the full extent of the boring. Figure 8 is an example of table output from gINT™. Figure 9 shows a table output after it is transferred to Lotus 1-2-3/Allways™ software.

3.1.3 LAB-1 Laboratory Data Summary

This table may be used to present a laboratory data summary for one boring (Figure 10) or to compile the geomechanical properties of a specific lithologic layer or stratigraphic unit using data from several borings. Figure 11 shows a table output after transfer to Lotus 1-2-3/Allways™ software.

3.1.4 DISCON-1 Planar Weakness Description Summary

The description of planar weakness with reserved words from Room 2214 is presented for a specific boring (Figure 12). This table can also be used to present data for a particular stratigraphic unit or lithologic layer. Figure 13 shows a table output after transfer to Lotus 1-2-3/Allways™ software.

3.1.5 RQD-1 Rock Quality Summary

Rock quality data may also be presented for the full depth of the boring as shown in Figure 14. Figure 15 shows the same table after transfer to Lotus 1-2-3/Allways™ software.

DRILLING SUMMARY
INTERACTION HALLS

BOR. NUM.	DRILL. START DATE	DRILL. END DATE	VERT. DEPTH (feet)	GROUND ELEV. (feet)	NORTH COORD. (feet)	EAST COORD. (feet)	DRILL. CONTR.	DRILL. GEOL.
BIR11	9/11/89	9/15/89	265.00	670.20	239029	2175454	SWL	S. Wood
BIR12	9/12/89	9/16/89	243.40	667.50	239008	2175582	MJA	S. Lesikar
BIR13	2/23/90	3/2/90	304.00	669.90	238844	2175494	SWL	M. Granger
BIR14	2/26/90	3/2/90	303.00	667.50	239199	2175518	SWL	D. Brown
BIR21	9/11/89	9/15/89	312.80	665.30	238620	2175708	SWL	R. Randall
BIR22	9/12/89	9/19/89	261.20	658.40	238494	2175935	MJA	J. Sansom
BIR23	9/15/89	9/19/89	241.00	659.90	238320	2175840	SWL	E. Nicholas
BIR31	9/20/89	9/25/89	296.00	617.50	232079	2178442	SWL	E. Nicholas
BIR32	9/21/89	9/26/89	226.40	618.50	231944	2178644	MJA	J. Sansom
BIR33	9/11/89	9/14/89	204.00	616.40	231772	2178541	SWL	E. Nicholas
BIR41	9/21/89	9/23/89	226.00	618.70	231388	2178618	SWL	S. Wood
BIR42	9/20/89	9/23/89	204.20	620.00	231357	2178714	MJA	S. Lesikar
BIR43	3/5/90	3/12/90	320.00	623.30	231237	2178839	SWL	M. Granger
BIR44	3/5/90	3/13/90	315.00	617.90	231160	2178664	SWL	D. Brown
BIR45	4/3/90	4/9/90	312.00	616.30	231515	2178508	SWL	D. Brown
BIR51	11/14/89	11/16/89	200.00	449.00	266170	2250529	SWL	S.Wood
BIR52	11/17/89	11/20/89	205.00	447.80	266420	2250682	SWL	S. Wood
BIR53	11/14/89	11/16/89	218.00	438.70	266088	2250927	MJA	S. Lesikar
BIR54	9/22/89	9/29/89	422.00	440.30	265911	2250528	SWL	R. Randall
BIR81	11/10/89	11/21/89	405.00	452.20	273893	2247359	SWL	M. Granger
BIR82	10/2/89	10/3/89	197.00	464.50	273986	2247570	SWL	M. Granger
BIR83	9/26/89	10/2/89	206.00	454.80	273745	2247675	MJA	S. Lesikar
BIR84	10/4/89	10/5/89	179.00	446.80	273653	2247464	SWL	M. Granger

DRILLING SUMMARY
INTERACTION HALLS

BORING NUMBER	DRILLING START DATE	DRILLING END DATE	VERTICAL DEPTH (feet)	GROUND ELEVATION (feet)	NORTH COORD. (feet)	EAST COORD. (feet)	DRILLING CONTRACTOR	DRILLING GEOLOGIST
BIR11	9/11/89	9/15/89	265.00	670.20	239029	2175454	SWL	S. Wood
BIR12	9/12/89	9/16/89	243.40	667.50	239008	2175582	MJA	S. Lesikar
BIR13	2/23/90	3/2/90	304.00	669.90	238844	2175494	SWL	M. Granger
BIR14	2/26/90	3/2/90	303.00	667.50	239199	2175518	SWL	D. Brown
BIR21	9/11/89	9/15/89	312.80	665.30	238620	2175708	SWL	R. Randall
BIR22	9/12/89	9/19/89	261.20	658.40	238494	2175935	MJA	J. Sansom
BIR23	9/15/89	9/19/89	241.00	659.90	238320	2175840	SWL	E. Nicholas
BIR31	9/20/89	9/25/89	296.00	617.50	232079	2178442	SWL	E. Nicholas
BIR32	9/21/89	9/26/89	226.40	618.50	231944	2178644	MJA	J. Sansom
BIR33	9/11/89	9/14/89	204.00	616.40	231772	2178541	SWL	E. Nicholas
BIR41	9/21/89	9/23/89	226.00	618.70	231388	2178618	SWL	S. Wood
BIR42	9/20/89	9/23/89	204.20	620.00	231357	2178714	MJA	S. Lesikar
BIR43	3/5/90	3/12/90	320.00	623.30	231237	2178839	SWL	M. Granger
BIR44	3/5/90	3/13/90	315.00	617.90	231160	2178664	SWL	D. Brown
BIR45	4/3/90	4/9/90	312.00	616.30	231515	2178508	SWL	D. Brown
BIR51	11/14/89	11/16/89	200.00	449.00	266170	2250529	SWL	S.Wood
BIR52	11/17/89	11/20/89	205.00	447.80	266420	2250682	SWL	S. Wood
BIR53	11/14/89	11/16/89	218.00	438.70	266088	2250927	MJA	S. Lesikar
BIR54	9/22/89	9/29/89	422.00	440.30	265911	2250528	SWL	R. Randall
BIR81	11/10/89	11/21/89	405.00	452.20	273893	2247359	SWL	M. Granger
BIR82	10/2/89	10/3/89	197.00	464.50	273986	2247570	SWL	M. Granger
BIR83	9/26/89	10/2/89	206.00	454.80	273745	2247675	MJA	S. Lesikar
BIR84	10/4/89	10/5/89	179.00	446.80	273653	2247464	SWL	M. Granger

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DRILL-1
Example #2

11-90

Figure 7

Layer Data Summary of Boring BIR82
Page 1

Top Depth (feet)	Bottom Depth (feet)	Layer Material Code (*)
0.00	1.60	CLML
1.60	21.60	CLML
21.60	40.00	WEAMARL
40.00	155.00	MARL
155.00	168.00	LIMESHAL
168.00	182.20	LIMESTON
182.20	190.20	LIMESHAL
190.20	197.00	LIMESTON

(* Material codes defined in Room 2204)

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LAYER-1
Example #1

11-90

Figure 8

LAYER DATA SUMMARY
BORING: BIR82

Top Depth (feet)	Bottom Depth (feet)	Layer Material Code (*)
0	1.60	CLML
1.60	21.60	CLML
21.60	40.00	WEAMARL
40.00	155.00	MARL
155.00	168.00	LIMESHAL
168.00	182.20	LIMESTON
182.20	190.20	LIMESHAL
190.20	197.00	LIMESTON

(* Material codes are defined in Room 2204)

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LAYER-1
Example #2

11-90

Figure

SUMMARY TABLE OF LABORATORY DATA
Boring BE1

Boring Number	Sample Depth (ft)	Moist. Cont. (%)	Dry Dens. (pcf)	Atterberg Limits LL	Atterberg Limits PI	Carb. Cont. (%)	Uniaxial QU (psi)	Triax. Sigma3 (psi)	Test Su (psi)	E50 (x10e5 psi)	Braz. Tens. (psi)
BE1	11.3	16.5	111.6								
BE1	11.6							11	85		
BE1	85.6							85	900		
BE1	86.0							170	698		
BE1	86.5	16.1	114.5				1670				
BE1	87.0										255
BE1	112.8	19.8									
BE1	134.0							135	171		
BE1	134.5							270	178		
BE1	135.0	17.5	115.5				321				
BE1	148.3	18.4	116.1				306				
BE1	149.0						206			3.0	
BE1	174.1	14.3	131.6				753				
BE1	174.5						792				
BE1	192.0	14.9	118.0				472				
BE1	192.5						347				

SUMMARY TABLE OF LABORATORY DATA
BORING: BE1

Boring Number	Sample Depth (feet)	Moisture Content (%)	Dry Density (pcf)	Atterberg Limits LL	Atterberg Limits PI	Carbonate Content (%)	Uniaxial Compressive Strength (psi)	Triaxial Strength Confining Pressure (psi)	Triaxial Strength Shear Strength (psi)	Tangent Young's Modulus E50 x10E5 (psi)	Brazil Tensile Strength (psi)
BE1	11.3	16.5	111.6								
BE1	11.6							11	85		
BE1	85.6							85	900		
BE1	86.0							170	698		
BE1	86.5	16.1	114.5				1670				
BE1	87.0										255
BE1	112.8	19.8									
BE1	134.0							135	171		
BE1	134.5							270	178		
BE1	135.0	17.5	115.5				321				
BE1	148.3	18.4	116.1				306				
BE1	149.0						206			3.0	
BE1	174.1	14.3	131.6				753				
BE1	174.5						792				
BE1	192.0	14.9	118.0				472				
BE1	192.5						347				

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LAB-1
Example #2

11-90

Figure 11

DESCRIPTION OF PLANAR WEAKNESS SUMMARY
Boring BIR23

Boring Number	Weak. Depth (Ft)	Type	Dip (deg)	Sepa-ration	Type of Filling	Amount of filling None	Part.	Comp.	Surf. Alter.	Surf. Rough.
BIR23	27.50	B	0							
BIR23	30.40	B	0							
BIR23	32.70	B	0							
BIR23	36.50	B	0							
BIR23	42.60	B	0							
BIR23	49.00	B	0							
BIR23	53.70	B	0							
BIR23	56.50	B	0							
BIR23	59.20	B	0							
BIR23	63.90	B	0							
BIR23	67.80	B	0							
BIR23	73.50	B	0							
BIR23	76.60	B	0							
BIR23	83.30	B	0							
BIR23	87.30	B	0							
BIR23	95.30	B	0							
BIR23	99.80	B	0							
BIR23	102.40	B	0							
BIR23	105.30	B	0							
BIR23	109.10	B	0							
BIR23	113.10	B	0							
BIR23	124.70	B	0							
BIR23	126.90	B	0							
BIR23	130.70	B	0							
BIR23	133.40	B	0							
BIR23	135.60	B	0							
BIR23	137.00	B	0							
BIR23	139.40	B	0							
BIR23	139.60	S	60	C		X			S	S
BIR23	139.80	S	60	C		X			S	S
BIR23	155.10	B	0							
BIR23	172.40	S	45	C		X			S	S
BIR23	173.10	B	0							
BIR23	185.00	B	0							
BIR23	189.00	B	0							
BIR23	194.40	B	0							
BIR23	224.50	S	60	C		X			S	S

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DISCON-1
Example #1

11-90

Figure 12

DESCRIPTION OF PLANAR WEAKNESS SUMMARY
BORING: BIR23

Boring Number	Weakness Depth (feet)	Type	Dip (degrees)	Separation	Type of Filling	Amount of Filling			Surface	
						None	Partial	Complete	Alteration	Roughness
BIR23	27.50	B	0							
BIR23	30.40	B	0							
BIR23	32.70	B	0							
BIR23	36.50	B	0							
BIR23	42.60	B	0							
BIR23	49.00	B	0							
BIR23	53.70	B	0							
BIR23	56.50	B	0							
BIR23	59.20	B	0							
BIR23	63.90	B	0							
BIR23	67.80	B	0							
BIR23	73.50	B	0							
BIR23	76.60	B	0							
BIR23	83.30	B	0							
BIR23	87.30	B	0							
BIR23	95.30	B	0							
BIR23	99.80	B	0							
BIR23	102.40	B	0							
BIR23	105.30	B	0							
BIR23	109.10	B	0							
BIR23	113.10	B	0							
BIR23	124.70	B	0							
BIR23	126.90	B	0							
BIR23	130.70	B	0							
BIR23	133.40	B	0							
BIR23	135.60	B	0							
BIR23	137.00	B	0							
BIR23	139.40	B	0							
BIR23	139.60	S	60	C		X			S	S
BIR23	139.80	S	60	C		X			S	S
BIR23	155.10	B	0							
BIR23	172.40	S	45	C		X			S	S
BIR23	173.10	B	0							
BIR23	185.00	B	0							
BIR23	189.00	B	0							
BIR23	194.40	B	0							
BIR23	224.50	S	60	C		X			S	S

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DISCON-1
Example #2

11-90

Figure 13

RQD Depth Range Table
Boring BIR11

Boring Number	Range Data Top Depth (feet)	Range Data Bottom Depth (feet)	Range Data Core recovery (%)	Range Data RQD (%)
BIR11	3.0	5.0	96	96
BIR11	5.0	10.0	95	95
BIR11	10.0	15.0	100	100
BIR11	15.0	25.0	96	96
BIR11	25.0	35.0	98	98
BIR11	35.0	45.0	100	100
BIR11	45.0	55.0	100	100
BIR11	55.0	65.0	99	99
BIR11	65.0	75.0	95	95
BIR11	75.0	85.0	97	97
BIR11	85.0	95.0	98	98
BIR11	95.0	105.0	100	100
BIR11	105.0	115.0	100	100
BIR11	115.0	125.0	100	100
BIR11	125.0	135.0	100	100
BIR11	135.0	145.0	100	88
BIR11	145.0	155.0	100	100
BIR11	155.0	165.0	100	100
BIR11	165.0	175.0	100	100
BIR11	175.0	185.0	100	100
BIR11	185.0	195.0	100	100
BIR11	195.0	205.0	100	100
BIR11	205.0	215.0	100	100
BIR11	215.0	225.0	100	96
BIR11	225.0	235.0	95	95
BIR11	235.0	245.0	100	100
BIR11	245.0	255.0	100	100
BIR11	255.0	265.0	100	100

RQD Depth Range Table
BORING: BIR11

Boring Number	Range Data Top Depth (feet)	Range Data Bottom Depth (feet)	Range Data Core recovery (%)	Range Data RQD (%)
BIR11	3.0	5.0	96	96
BIR11	5.0	10.0	95	95
BIR11	10.0	15.0	100	100
BIR11	15.0	25.0	96	96
BIR11	25.0	35.0	98	98
BIR11	35.0	45.0	100	100
BIR11	45.0	55.0	100	100
BIR11	55.0	65.0	99	99
BIR11	65.0	75.0	95	95
BIR11	75.0	85.0	97	97
BIR11	85.0	95.0	98	98
BIR11	95.0	105.0	100	100
BIR11	105.0	115.0	100	100
BIR11	115.0	125.0	100	100
BIR11	125.0	135.0	100	100
BIR11	135.0	145.0	100	88
BIR11	145.0	155.0	100	100
BIR11	155.0	165.0	100	100
BIR11	165.0	175.0	100	100
BIR11	175.0	185.0	100	100
BIR11	185.0	195.0	100	100
BIR11	195.0	205.0	100	100
BIR11	205.0	215.0	100	100
BIR11	215.0	225.0	100	96
BIR11	225.0	235.0	95	95
BIR11	235.0	245.0	100	100
BIR11	245.0	255.0	100	100
BIR11	255.0	265.0	100	100

3.2 ROOM 3203 - GRAPHICAL OUTPUT

This room is displayed as "OUTPUT XY GRAPHS - ADDRESS 3203" on the gINT™ screen. Graph plots are defined in Room 3103 (See gINT™ documentation manual). Graphs can supplement tables to enhance presentation of the data. As mentioned before, a large number of possibilities are available for specific needs.

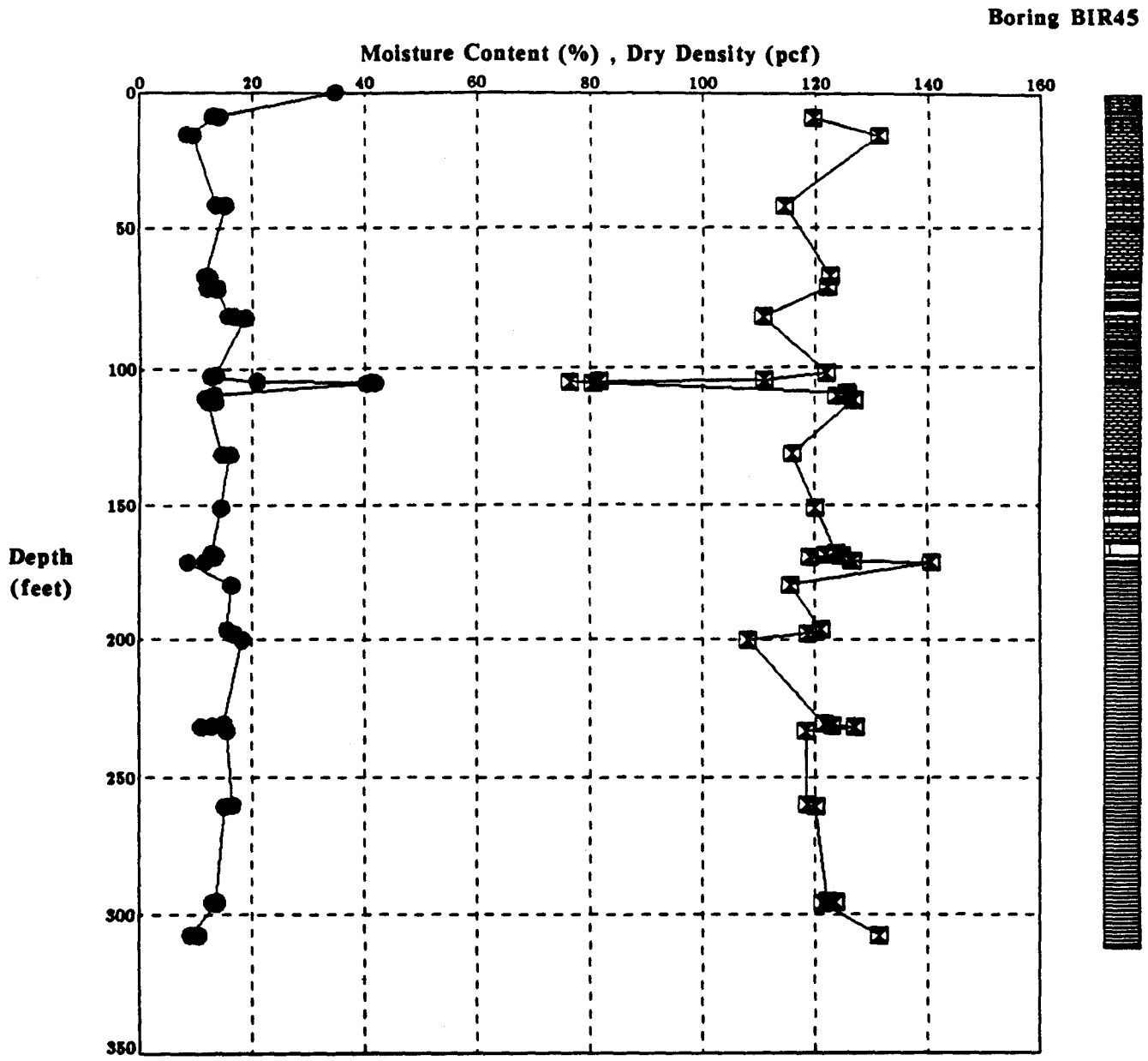
3.2.1 GRLAB-1 Moisture Content/Dry Density versus Depth

This graph also provides a lithologic column of the boring (Figure 16).

3.2.2 Site Plans

Examples of two site plans are shown.

SITE-1 Large-Scale Site Plan (Figure 17)
SITE-2 Small-Scale Site Plan (Figure 18)



SSC Laboratory

● Moisture Content (%)

⊠ Dry density (pcf)

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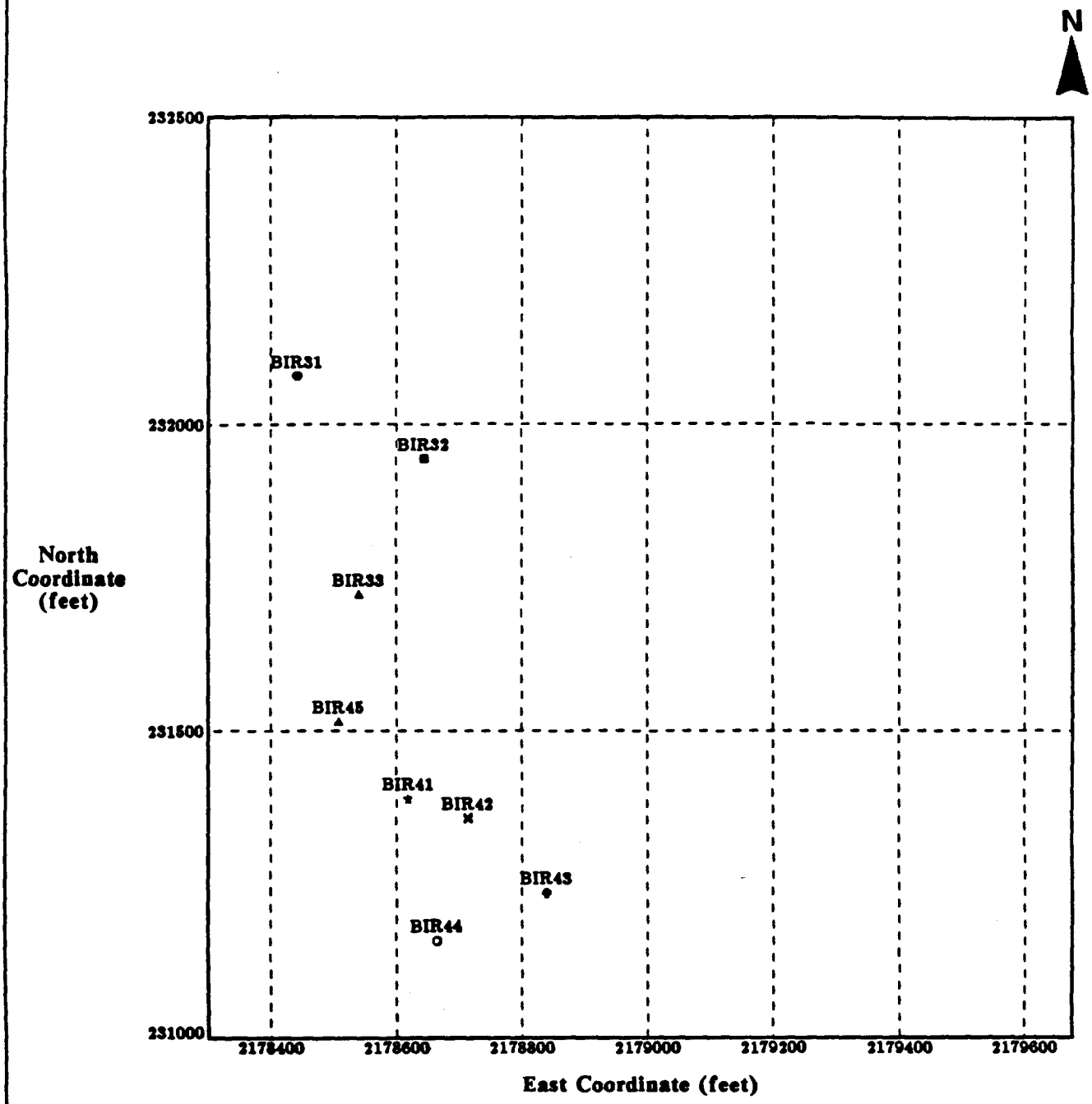
GRLAB-1
Example #1

11-90

Figure 16



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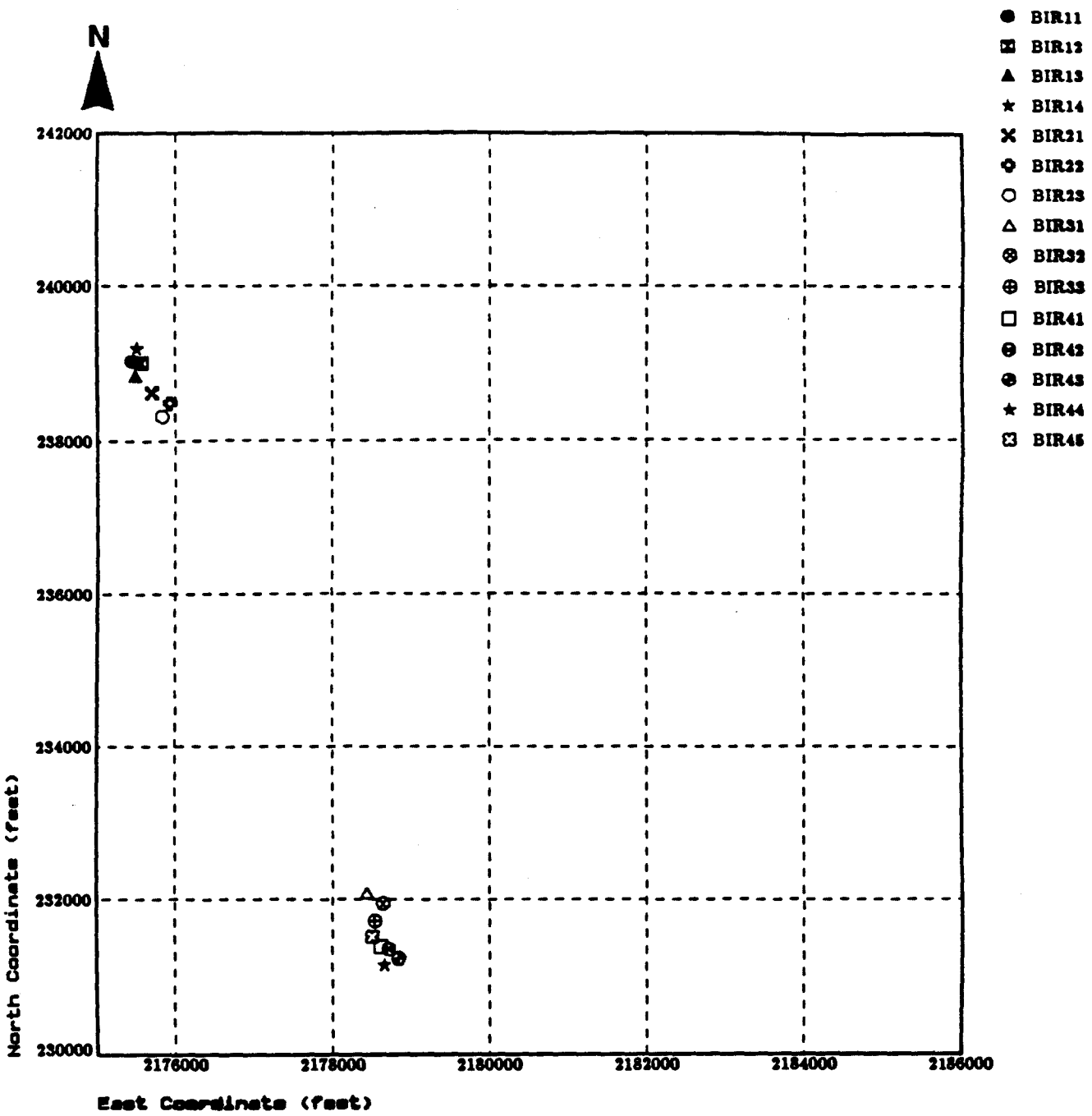
SITE-1
Example #1

11-90

Figure 17



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SSC Data Base Manual

SITE-2
Example #1

11-90

Figure 16

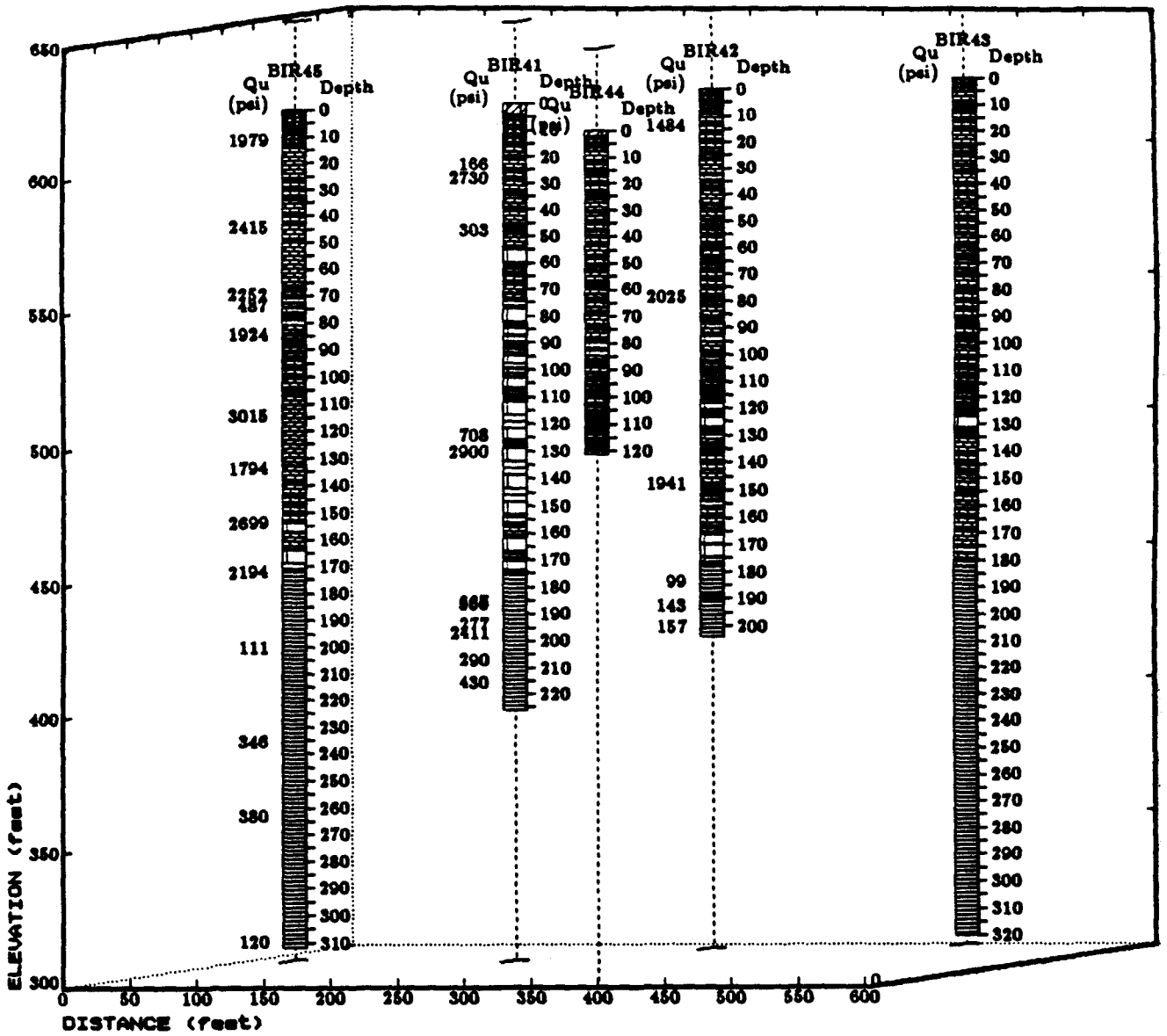
3.3 ROOM 3204 - BORING LOG OUTPUT

This room is displayed as "OUTPUT EXPLORATION POINT LOGS - ADDRESS 3204" on the gINT™ screen. The boring log format is an 11-inch by 17-inch landscape sheet printed in two half pages (8-1/2-inch by 11-inch portrait) and assembled together (See Figure 3). Boring log templates and graphics are defined in Rooms 3104 and 3105, respectively, as explained in the gINT™ documentation manual.

The SSC project-specific boring log sheets have been named SSC3LAS1 for the left side and SSC4LAS2 for the right side of the 11-inch by 17-inch sheet.

3.4 ROOM 3206 - FENCE DIAGRAM OUTPUT

This room is displayed as "OUTPUT FENCE DIAGRAMS (2/3D, coordinate method) - ADDRESS 3206" on the gINT™ screen. Three-dimensional fence diagrams are available through the SSCFENCE template, as shown in Figure 19. Fence diagram templates and graphics are defined in Room 3106.



Boring	North	East	Elev.	Depth
BIR41	231388	2178618	619	226
BIR42	231357	2178714	620	204
BIR43	231237	2178839	623	320
BIR44	231160	2178664	619	315
BIR45	231518	2178508	616	312

Position	North	East
Left, Front	231459	2178308
Right, Front	231009	2178798
Left, Back	231580	2178534
Right, Back	231130	2178934

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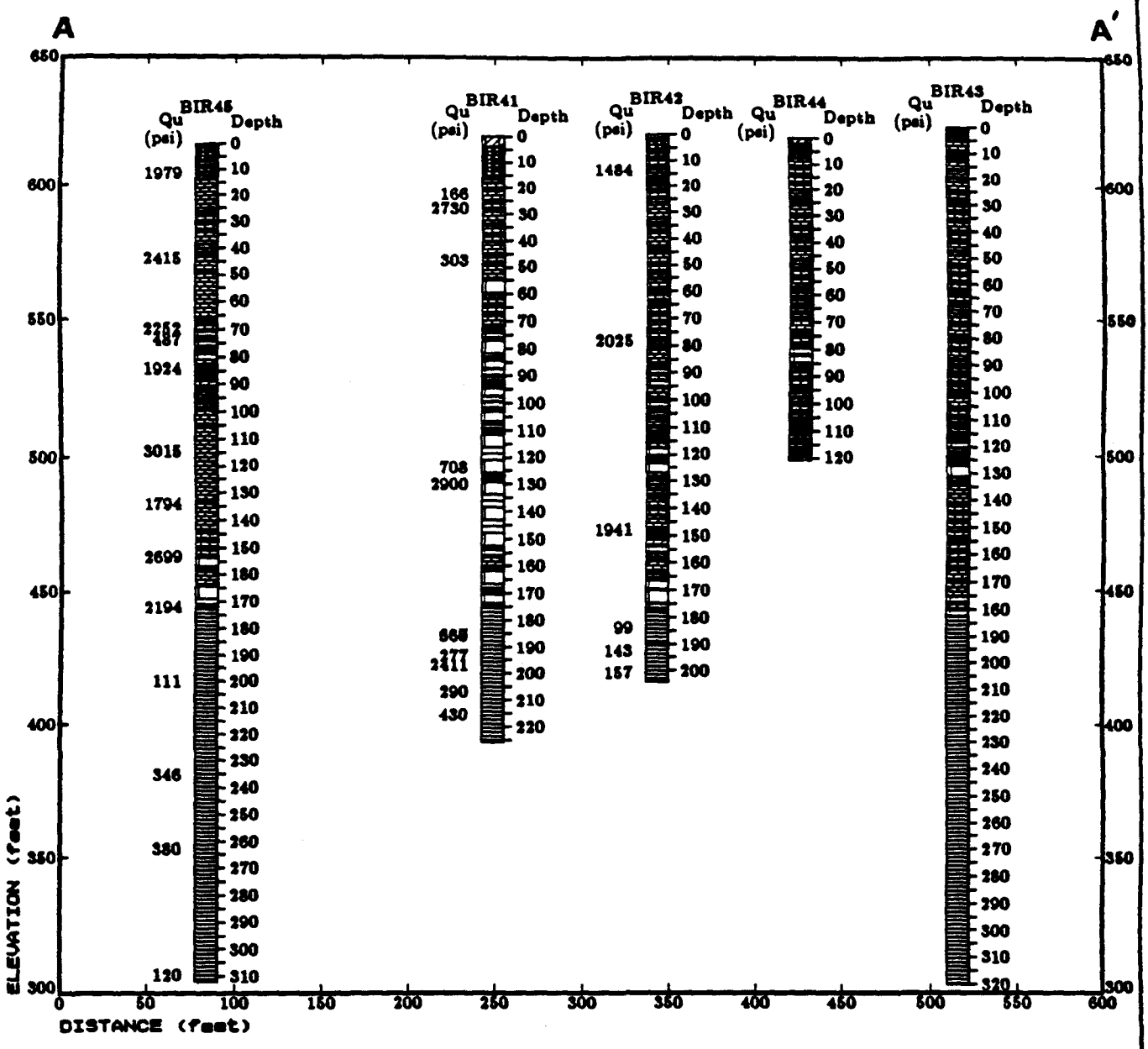
SSCFENCE
Example #1

11-90

Figure 1

3.5 ROOM 3207 - PROFILE OUTPUT

This room is displayed as "OUTPUT FENCE DIAGRAMS (2D, specified points methods - ADDRESS 3207" on the gINT™ screen. Two-dimensional profiles may be output with SSCPROFI template, as shown in Figure 20. However, specific needs may also be accommodated by defining new templates in Room 3106.



Boring	North	East	Elev.	Depth
BIR41	231388	2178618	619	226
BIR42	231357	2178714	620	204
BIR43	231237	2178839	623	320
BIR44	231160	2178664	619	315
BIR45	231518	2178508	616	312

BASE LINE

Point	North	East
A	231531	2178414
A'	231161	2178886

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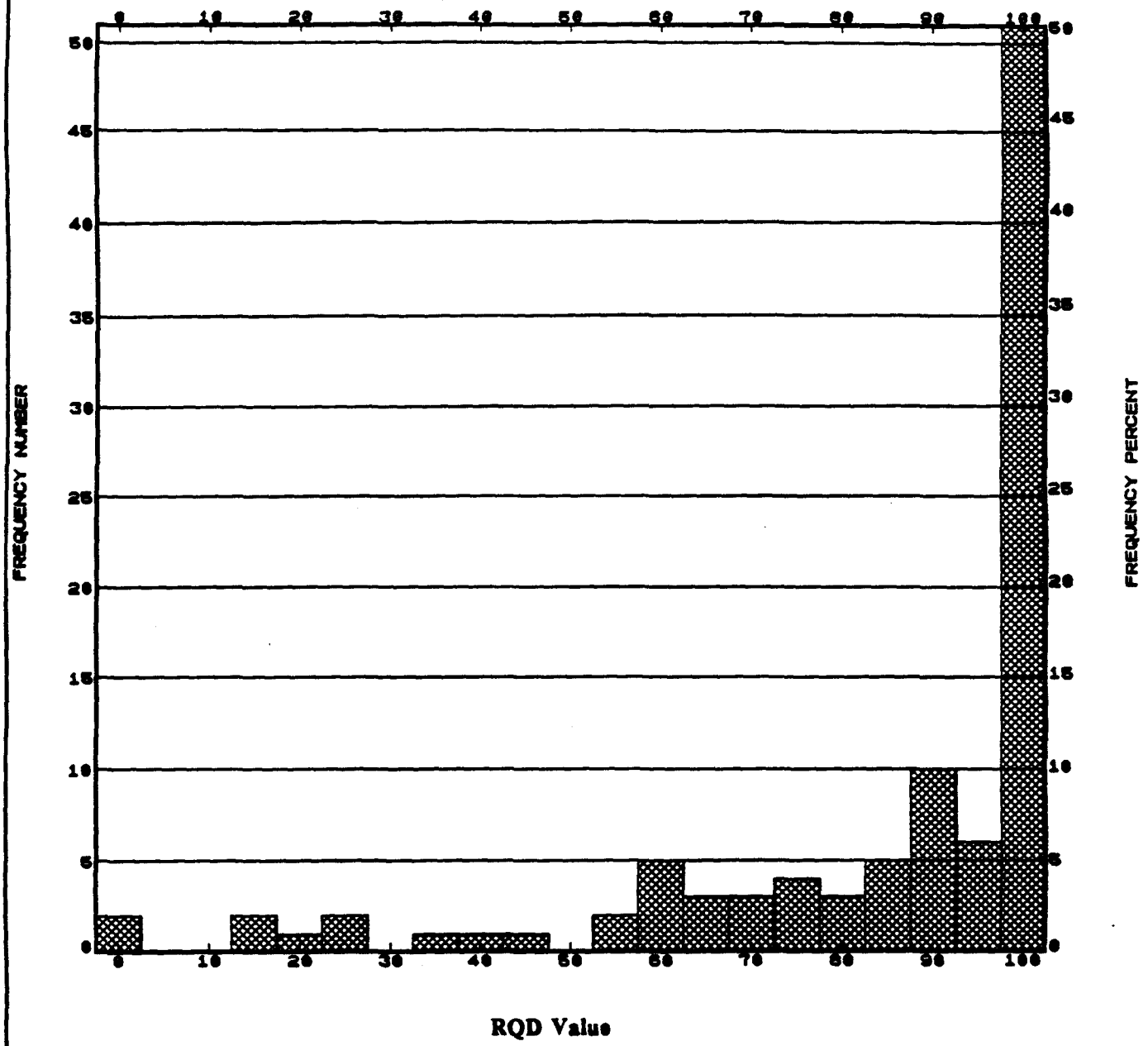
SSCPROFI
Example #1

11-90

Figure 20

3.6 ROOM 3208 - HISTOGRAM OUTPUT

This room is displayed as "OUTPUT HISTOGRAMS - ADDRESS 3208" on the gINT™ screen. Histograms, defined in Room 3108, provide a graphic aid to the presentation of data in tables. As a complement to Table RQD-1 (Figure 14), the example shown in Figure 21 (HISRQD-1) may be useful.



Note: This histogram is for Eagle Ford unit cored in Western Interaction Regions.

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HISRQD-1
Example #1

11-90

Figure 21

4.0 LIST OF RESERVED WORDS

This partial list of reserved words includes the reserved words used for the SSC project and supplements the main list in the gINT™ documentation manual.

Reserved Word	Description
DEPTH	Specimens or sample depth
LOGNOTE2	Log notes II
LOGNOTE3	Log notes III
LOGNOTE4	Log notes IV
LOGNOTES	Log notes
LYR.BDPH	Log layers; bottom depth of layer on logs
LYR.BELD	Log layers; bottom elevation and depth of layer
LYR.BELL	Log layers; bottom elevation of layer on logs
LYR.BOTD	Log layers; bottom depth of layer
LYR.BOTE	Log layers; bottom elevation of layer
LYR.CODE	Log layers; layer code
LYR.MTLC	Log layers; material symbol code
LYR.TOPD	Log layers; top depth of layer
LYR.TOPE	Log layers; top elevation of layer
MATLDESC	Log material description, only on tables for logs
MATLGRFC	Log material graphics column
NPGS	Total number of pages of output
PG	Page number of output
PRJ.ID	Project identification
PRJ.NUM	Project number
PT.BOTEL	Exploration point bottom elevation
PT.DEPTH	Exploration point depth
PT.DRILLR	Exploration point driller
PT.EAST	Exploration point east coordinate

Reserved Word	Description
PT.ELEV	Exploration point surface elevation
PT.END1	Exploration point end date
PT.ID	Exploration point identification
PT.NORTH	Exploration point north coordinate
PT.STRT1	Exploration point start date
PT.SUPER	Geologist/Supervisor
RDT.BOTD	Range data bottom depth
RDT.LEN	Range data length
RDT.TOPD	Range data top depth
RDTPARM1	Range data parameter 1 (percent of core recovered)
RDTPARM2	Range data parameter 2 (RQD)
RJP.DIP	Rock joints: Dip (0° to 90°)
RJP.FILL	Rock joints: Filling (Calcite/Clay/Pyrite/Gypsum)
RJP.ORNT	Rock joints: Orientation to dip (B/S/J)
RJP.RUFF	Rock joints: Roughness (S/SR/MR/R/VR)
RJP.SPAC	Rock joints: Spacing (C/VN/N/W/VW)
RJPCODE1	Rock joints: Amount of filling - None
RJPCODE2	Rock joints: Amount of filling - Partial
RJPCODE3	Rock joints: Amount of filling - Complete
RJPCODE4	Rock joints: Discontinuity surface condition (S/A)
SMP.BDPH	Sample bottom depth (on logs only)
SMP.BOTD	Sample bottom depth
SMP.DSC1	Sample description code 1 (water gain/loss)
SMP.DSC3	Numeric code for bedding spacing (lower)
SMP.DSC4	Numberic code for bedding spacing (upper)
SMP.LEN	Sample length
SMP.TOPD	Sample top depth
SPACE	Empty columns in tables

Reserved Word	Description
WELL	Log well graphics column
WLL.BDPH	Well log; section bottom depth
$CC	Carbonate content
$DATA1	Shear strength during triaxial compression
$DATA2	Confining pressure during triaxial compression
$DD	Dry density
$LL	Liquid limit
$MC	Moisture content
$MODULUS	Tangent Young's modulus
$PI	Plasticity index
$QU	Uniaxial compressive strength
$TENSILE	Brazil tensile strength

5.0 REFERENCES

gINT™ (1990), the gEOTECHNICAL INTegrator, version 3.1, DOCUMENTATION. Copyright by Salvatore Caronna, Santa Rosa, California.

MJA (1989), Laboratory Manual, Mason Johnston & Associates. Prepared for the SSC Laboratory Testing Program for Footprint and Post-Footprint Phase by Johnston, J.W., Principal-in-charge of MJA, 235 Morgan Ave., Dallas, Texas 75203.

SWL (1989), Laboratory Manual, Southwestern Laboratories. Prepared for the SSC Laboratory Testing Program for Footprint and Post-Footprint Phase by Bruce Bailey, Senior Engineer of SWL, 2575 Lone Star Drive, Dallas, Texas 75222.

The Earth Technology Corporation (1990), Superconducting Super Collider Site Reference Stratigraphic Column, Report No. GR-23.

6.0 gINT™ DATA BASE

The SSC project geotechnical data base is included on five diskettes which are labelled as Diskette No. 1 of 5 through Diskette No. 5 of 5. Diskettes No. 1 through 4 contain Project Files and Diskette No. 5 contains Shared Files. The contents of the five diskettes are as follows:

DISKETTE NO.	FILE NAMES	FILE DESCRIPTION
1 OF 5	LYR, SPC, SMP	LAYER DATA, SPECIMEN DEFINITION, AND SAMPLE DATA
2 OF 5	LN3, LN4, HZL, LN2, $S1	LOG NOTES II, III, & IV, HORIZONTAL LINES ON LOGS, AND GEOMECHANICS DATA
3 OF 5	RDT, LOG	ADDITIONAL RANGE DATA, AND EXPLORATION POINT LOGS
4 OF 5	RJP, XPD, HDR, WLL, ANM, ADT, WLD	ROCK JOINTING PROPERTIES, EXPLORATION POINT DEFINITION, PROJECT DATA HEADER FILES, WELL SECTION DATA, ADDITIONAL NUMERIC DATA WITH DEPTH, ADDITIONAL DEPTH RELATED DATA, AND WATER LEVEL DOCUMENTATION
5 OF 5	SHARED FILES - CFL, CLT, CMM, CRW, DIC, DMK, ENV, FCD, FSY, FXC, GRF, HST, HYC, IAL, LGF, LGG, LRC, LYC, MAC, MTL, PJD, SCT, SETUP, SMC, SVC, TBL, TXT, WLC	CUSTOM FILE DATA, CUSTOM FILE RESERVED DATA, GRAPHIC DEVICE ENVIRONMENTS, LOG GRAPHICS, HISTOGRAM AND XY GRAPH TEMPLATES, FENCE AND TABLE DEFINITION, FILL SYMBOLS, SPELLING DICTIONARY, AND LAYER, MATERIAL, SAMPLER, AND WELL SYMBOL CODES

Instructions to install gINT™ data base on to a computer are as follows:

STEP 1: Backup Shared Files which are on Diskette No. 5 of 5.

STEP 2: Create subdirectory SSC within C:\GI3
Check the existence of subdirectory C:\GI3\SSC

STEP 3: Copy diskettes No. 1 of 5 through No. 4 of 5 in SSC subdirectory (C:\GI3\SSC).

STEP 4: Enter gINT™ merge facility (GI3 1301) and merge Shared Files from Diskette No. 5 of 5.

STEP 5: Enter gINT™ and go to Room 2101. Check the existence of project SSC by listing all the projects.
If not created, create one.