



press <Enter>. The original Sample Date will be restored.

### 10.8.6 MASTER PARAMETER LIST

The Master Parameter List screen (Figure 10-85 of the Code Support Screens Menu allows you to modify the parameter list used to validate entries in the spreadsheet screens and the Parameters Database Code Support Screen in **GRITS SAGE**. Parameter entries in **GRITS SAGE** are validated with the Master Parameters List pop-up (Figure 10-13). Use the Modify | Add option to add a new parameter to the Master Parameters List. See Table 10-6 for detailed instructions on using the menu options.

The screenshot shows a menu bar with 'File', 'Locate', and 'Modify'. Below it is a window titled 'Master Parameters Database' containing the following text:

```
Master Parameters Database
Name: 1,1,1-Trichloroethane
Code: 1,1,1Tri
CAS Number: 71-55-6
Multiple: N <Yes/No>
Default Units: ppb
```

Figure 10-85 The Master Parameters List screen.

Table 10-7 describes the entries in the Master Parameter List screen.

Master Parameter List Entry	Description
Name	Long name of the parameter
Code	Code that will be used when entering the parameter in the spreadsheet screens or Parameters Database screen.  This code must be unique (i.e., no two-entries in the Master Parameters List should have identical codes).
CAS Number	Chemical Abstract Service number. If the parameter has a CAS Number it may be entered here.

Multiple	If there is more than one entry for this parameter in the Master Parameters List this entry should be Y (i.e., two entries for the same parameter with different codes). Otherwise this entry should be N.
Default Units	The default units that observations for this parameter will be recorded in. This entry is validated against the Units Code Support database (See Section 10-8-9). Note that the actual units the observations will be recorded in may be changed when specifying a Facility Parameter List.

Table 10-7. Entries on the Master Parameter List screen.

**Note:** Although it is relatively easy to add parameters to the Master Parameter List you should do so with great care. Multiple entries for the same parameters may be expedient, but, they can be confusing to others. Appendix C lists all parameters in the Master Parameter List shipped with **GRITS/STAT**. Please check Appendix C prior to adding parameters to the Master Parameter List. Please notify your State or Regional contact of any changes made to your Master Parameter List.

Although **GRITS Database** and **GRITS SAGE** edit the same **GRITS/STAT** database files, **GRITS SAGE** maintains it's own copy of the Master Parameter List. Therefore, if you make any changes to the Master Parameter List in **GRITS SAGE** you should make identical changes in **GRITS Database**.

### 10.8.7 WELL CASING TYPES

The Well Casing Types (Figure 10-86 screen of the Code Support Screens allows you to modify codes used to validate the Casing Material column of the Wells Database screen. Use the Modify | Add option to add casing materials. See Table 10-6 for detailed instructions on the menu options.



## 10.8.8 WELL LOG CODES

The Well Log Codes (Figure 10-87 screen of the Code Support Screens Menu is allows you to modify the codes used to validate the Well Log Type column in the Wells Database screen. Use the Modify | Add option to add new Well Log Types. See Table 10-6 for detailed instructions on the menu options.

LOGCODE	DESCRIP
A	Galiper
B	Casing Collar
C	Casing Inspect
D	Core
E	Dipimeter Survey
F	DRILLERS
G	Drilling Time
H	Electric

Select using ↑ keys and return

The Well Log Type validation in the Wells Database Screen. The entries in the pop-up validation list are maintained by the Well Log Codes Code Support Screen.

File Locate Modify

Well Log Type Codes Database

Well Log Type Code: A  
Description: Galiper

Figure 10-87 The Well Log Codes Code Support Screen.

### 10.8.9 UNITS CODE SUPPORT

The Units Code Support screen (Figure 10-88) allows you to maintain the list of units that ground water observations are recorded in and the conversion to the units that the observations are stored in. Table 10-8 describes the entries in the Units Code Support screen.

Units Entry	Description
Units	The abbreviation of the units that observations are recorded and viewed in. This entry must be unique (i.e., no two entries should share the same units abbreviation).
Description	Textual description of the units.
Store Units in	The abbreviation of the units that observations will be stored in.
Conversion	<p>The conversion factor between Units and Store Units in.</p> <p>When observations are written to the GWDATA.DBF file the observation value is multiplied by Conversion before being stored in the REAL_DATA and CHR_DATA fields.</p> <p>The relation between the Units and Store Units In entries is:</p> <p style="text-align: center;"><math>\text{Stored Units In} = \text{Conversion} \cdot \text{Units}</math></p>

Table 10-8. Units Code Support screen entries.

Although **GRITS Database** and **GRITS SAGE** edit the same **GRITS/STAT** database files, **GRITS SAGE** maintains its own copy of the Units List. Therefore, if you make any changes to the Units List in **GRITS SAGE** you should make identical changes in **GRITS Database**.

See Table 10-6 for detailed instructions on the menu options.

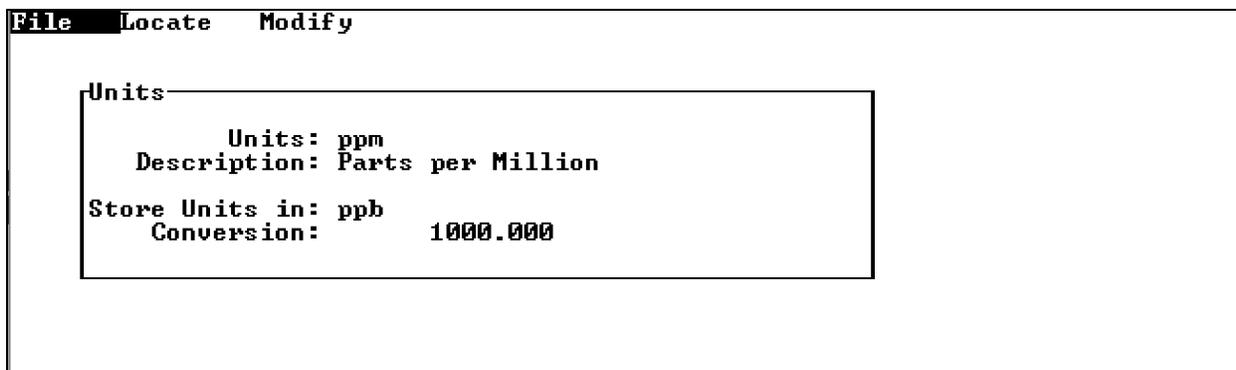


Figure 10-88 The Units Code Support screen.

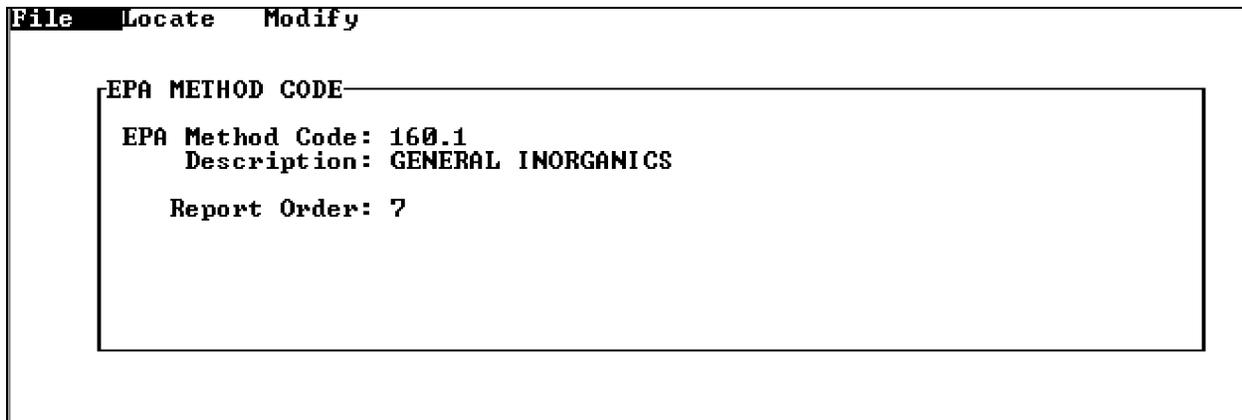
### 10.8.10 EPA METHOD CODES

The EPA Method Codes screen (Figure 10-89) of the Codes Support Screens menu allows you set the order that EPA Method Codes will appear on the Results by EPA Method Code Report. Table 8-9 describes the entries on the EPA Method Codes screen.

EPA Method Code Entry	Description
EPA Method Code	EPA Method Code
Description	Textual description. This text will be used as a group header on the Results by EPA Method Code Report.
Report Order	Ordinal number that sets the order in which the EPA Method group will appear on the Results by EPA Method Code Report.

Table 10-9. EPA Method Codes entries.

See Table 10-6 for detailed instructions on the menu options.



*Figure 10-89* The EPA Method Codes Code Support screen. EPA Method Code: 160.1 GENERAL ORGANICS will appear as the 7<sup>th</sup> group on the Results by EPA Method Code Report.

## **10.9 GROUND WATER REPORTS**

The Groundwater Reports menu (Figure 10-90) in **GRITS SAGE** contains the following reports:

# Parameter, Date x Well Report

Parameter, Date by Well Report										
Seminar Example Data FCID:ADDENDUMDATA										
Report Covers All Dates										
Report Printed May 14,1997										
Page 1										
	BW-1	CW-1	CW-2	CW-3	CW-3	CW-4	CW-5	CW-6	Well 1	Well 2
Pb	ppb									
01/01/91	24.000	<5.000				<5.000			2.500	10.700
02/01/91	56.000	<5.000							6.600	6.700
03/01/91	<5.000	<5.000							13.500	10.400
04/01/91	<5.000	<5.000							27.000	7.500
05/01/91	<5.000								9.900	23.000
06/01/91	<5.000									
07/01/91										
08/01/91										
09/01/91										
10/01/91										
11/01/91										
12/01/91										
01/01/92	7.500	6.900	7.800	7.400	7.400	9.600				
02/01/92	7.100	7.500	7.700	9.300	9.300	10.200				
03/01/92	7.500	8.100	9.600	6.600	6.600	8.000				
04/01/92	9.700	9.600	7.000	8.500	8.500	10.500				
05/01/92	8.000	8.000	8.000	7.900	7.900	9.500				
06/01/92										
07/01/92										
08/01/92										
09/01/92										
10/01/92										
11/01/92										
12/01/92										
04/27/94										
Obs.s:	11	9	5	5	5	6	0	0	5	5
Mean:	11.800	5.567	8.020	7.940	7.940	8.383			11.900	11.660
Std Dev:	15.155	2.823	0.859	0.922	0.922	2.747			8.379	5.882
Min:	2.500	2.500	7.000	6.600	6.600	2.500			2.500	6.700
Max:	56.000	9.600	9.600	9.300	9.300	10.500			27.000	23.000

The Parameter, Date by Well report prints a report of ground water observations by Parameter and Sample Date for a user-specified list of up to ten wells.

# Well, Date x Parameter Report

Well, Date by Parameter Report  
Seminar Example Data FCID:ADDENDUMDATA  
Report Covers All Dates  
Report Printed May 14,1997

Page 1

	Benzene ppb	As ppb	CCL4 ppb	Ni ppb	Cu ppb	Ni dia ppb	Pb ppb	Zn ppb	Toluen ppb	Chrysene ppb
Well:BW-1										
01/01/91	1.7000						24.0000			
02/01/91	1.9000						56.0000			
03/01/91	1.5000						<5.0000			
04/01/91	1.3000						<5.0000			
05/01/91							<5.0000			
06/01/91							<5.0000			
07/01/91										
08/01/91										
09/01/91										
10/01/91										
11/01/91										
12/01/91										
01/01/92	<1.0000	8.1000					7.5000			
02/01/92	<1.0000	7.7000					7.1000			
03/01/92	1.6000	8.1000					7.5000			
04/01/92	1.8000	10.3000					9.7000			
05/01/92	1.1000	8.6000					8.0000			
06/01/92	16.1000									
07/01/92	1.6000									
08/01/92	0.5000									
09/01/92										
10/01/92										
11/01/92										
12/01/92										
04/27/94										
Obs. s:	12	5	0	0	0	0	11	0	0	0
Mean:	2.5083	8.5600	0.0000	0.0000	0.0000	0.0000	11.8000	0.0000	0.0000	0.0000
Std Dev:	4.1278	0.9156	0.0000	0.0000	0.0000	0.0000	15.1548	0.0000	0.0000	0.0000
Min:	0.5000	7.7000					2.5000			
Max:	16.1000	10.3000					56.0000			

The Well, Date x Parameter report prints ground water observations by Well and Date for a user-specified list of up to ten parameters.

## Summary Statistics by Well (%ND<100)

Summary Statistics By Well  
 Facility: Seminar Example Data (ADDENDUMDATA) Page:1  
 Report Covers All Dates  
 Report Includes Parameters where %ND<100%

(As) Arsenic, total CAS Number: 7440-38-2 Units: (ppb) Parts per Billion

**GRADIENT NOT DESIGNATED**

Well	N	ND	%ND	Mean	Std Dev	Skewness	Minimum	25th Percentile	50th Percentile	75th Percentile	Maximum
*Well 1	10	3	30.00%	10.037	10.966	1.528	2.500	4.375	8.180	15.725	35.700
*Well 2	10	2	20.00%	9.955	15.141	2.437	1.250	3.875	9.250	10.800	52.000
*Well 3	10	4	40.00%	14.790	33.379	2.627	2.000	4.375	3.750	11.625	109.400
*Well 4	6	0	0.00%	11.173	8.170	0.952	2.000	7.880	12.650	20.475	25.900
*Well 5	4	0	0.00%	13.488	14.418	0.010	0.750	1.075	13.750	45.150	27.000
*Well 6	4	0	0.00%	2.293	1.958	0.349	0.340	0.640	2.625	6.435	4.780
-----											
	44	9	20.45%	10.863	18.447	3.893	0.340				109.400

(As) Arsenic, total CAS Number: 7440-38-2 Units: (ppb) Parts per Billion

**Downgradient Wells**

Well	N	ND	%ND	Mean	Std Dev	Skewness	Minimum	25th Percentile	50th Percentile	75th Percentile	Maximum
*CW-1	5	0	0.00%	7.320	1.003	0.664	6.200	9.600	7.300	11.850	8.900
*CW-2	5	0	0.00%	8.020	0.960	0.897	7.000	10.850	7.800	12.800	9.600
*CW-3	5	0	0.00%	7.960	1.031	-0.033	6.600	10.300	8.000	13.150	9.300
*CW-4	5	0	0.00%	9.610	0.966	-0.839	8.050	12.825	9.650	15.525	10.550
-----											
	20	0	0.00%	8.228	1.255	0.288	6.200				10.550

(As) Arsenic, total CAS Number: 7440-38-2 Units: (ppb) Parts per Billion

**Upgradient Wells**

Well	N	ND	%ND	Mean	Std Dev	Skewness	Minimum	25th Percentile	50th Percentile	75th Percentile	Maximum
*BW-1	5	0	0.00%	8.570	1.045	1.169	7.700	11.750	8.100	13.775	10.350
-----											
	5	0	0.00%	8.570	1.045	1.169	7.700				10.350
=====											
	69	9	13.04%	9.933	14.739	4.994	0.340				109.400

\* Well with <100% Non-Detects or SD>0

The Summary Statistics by Well (%ND<100) report prints summary statistics and box plots by Parameter and Well.

# Results by EPA Method Code

GROUNDWATER ANALYSIS FOR Dry Gulch Landfill  
Mason Hollow Road Knoxville, TN 37918  
Report Covers All Dates

Downgradient Well No. OW-022A

Page:1

CONSTITUENT	01/14/87	04/22/87	07/16/87	10/26/87	01/29/88	04/27/88	07/26/88	10/12/88	01/17/89	04/25/89
150.1 pH, Field	6.800	6.200								
170.1 Temperature, field										
120.1 Specific Conductivity, F	1228.000	1035.000								
415.1 Total Organic Carbon	500.0	41.000	71.000							
9020 Total Organic Halogens	5.0	<0.005	<0.005							
325.2 Chloride	500.0	51.000	80.000							
374.4 Sulfate, total	1000.0	16.000	14.000							
6010 Barium, dissolved	5.0									
6010 Cadmium, dissolved	3.0	<0.003	<0.003							
7191 Chromium, dissolved	2.0	<0.003	<0.003							
6010 Copper, dissolved	15.0	0.100	0.100							
335.3 Cyanide, total	20.0	<0.020	<0.020							
6010 Iron, dissolved	50.0	0.100	0.100							
6010 Magnesium, dissolved	60.0									
6010 Manganese, dissolved	10.0	2.790	2.890							
6010 Nickel, dissolved	50.0	0.100	0.100							
6010 Sodium, dissolved	600.0	45.000	45.000							
6010 Zinc, dissolved	15.0	0.135	0.126							
353.1 Nitrate	20.0									
353.1 Nitrite	2.0									
350.1 Ammonia Nitrogen	20.0									
351.2 TKN	30.0									
410.4 Chemical Oxygen Demand	1000.0									
405.1 Biological Oxygen Demand	1000.0									
160.2 Total Suspended Solids	1000.0									
8015 Ethyl Ether	10.0									
8015 Ethanol	100.0									
8015 Methyl ethyl ketone (MEK)	10.0									
8015 Methyl isobutyl ketone (MI)	10.0									
SEMIVOLATILE ORGANICS										
8270 2-Chlorophenol	5.0									
8270 2-Nitrophenol	5.0									
8270 Phenols	5.0									
8270 2,4-Dimethylphenol	5.0									
SEMIVOLATILE ORGANICS										
8270 2,4-Dichlorophenol	5.0									
8270 2,4,6-Trichlorophenol	5.0									
8270 4-Chloro-3-Methylphenol	5.0									
8270 2,4-Dinitrophenol	5.0									
8270 2-Methyl-4,6-Dinitrophenol	5.0									
8270 Pentachlorophenol	5.0									
8270 4-Nitrophenol	5.0									
8270 Cresols (mixed)--methyl	5.0									
BTX										
8020 Benzene	0.5									
8020 Toluene	0.5									
8020 Ethylbenzene	0.5									
8020 Xylene	0.5									
8020 DCB T	0.5									
8020 Chlorobenzene, aqueous p	0.5									
8020 MTBE	5.0									
TOTAL METALS										
7421 Lead, dissolved	2.0									

The Results by EPA Method Code report prints ground water observations grouped by EPA Method Code. The order in which the EPA Method Codes appear on this report is set by the EPA Method Codes Code Support Screens.

Table 10-10 Reports in the Groundwater Reports menu.



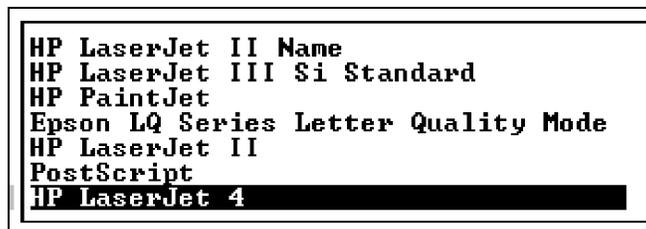


Figure 10-91. The Printer Selection pop-up list.

2. Use the up and down arrow keys to highlight the desired printer and press **<Enter>**. All reports in the Groundwater Reports menu are set to print to the selected printer.

**Note:** The Printer Selection pop-up list may be customized by running the RRSETUP.EXE utility in the \GRITS500\GRITSAGE directory. See Section 10.9.2 on running the RRSETUP utility.

## 10.9.2 CUSTOMIZING PRINTERS

Up to seven printers can be selected and configured for use with GRITS SAGE. If your printer does not appear in the Printer Selection pop-up list (Figure 10-91) follow the instructions below.

1. At the MS-DOS prompt switch to the \GRITS500\GRITSAGE directory.
2. Type RRSETUP and press **<Enter>**. The R&R Report Writer Configuration Program appears on your screen as shown in Figure 10-92.

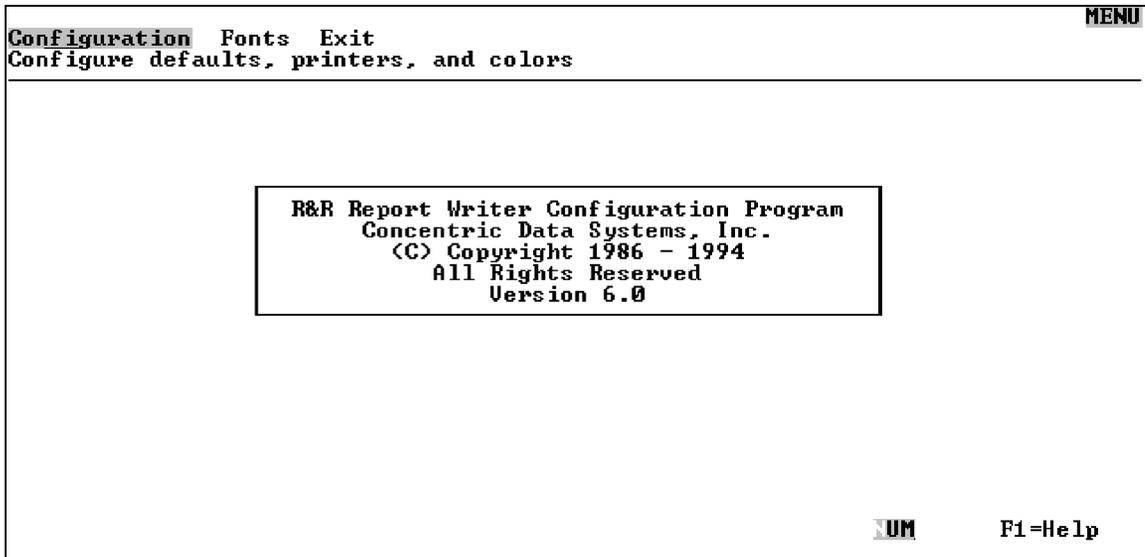


Figure 10-92. The R&R Report Writer Configuration Program.

3. Press <C> to execute the Configure option. A File Name prompt appears. Press <Enter> to accept RR.CNF.
4. Press <P> to execute the Printers option. The Printer Configuration dialog appears on your screen as shown in Figure 10-93.

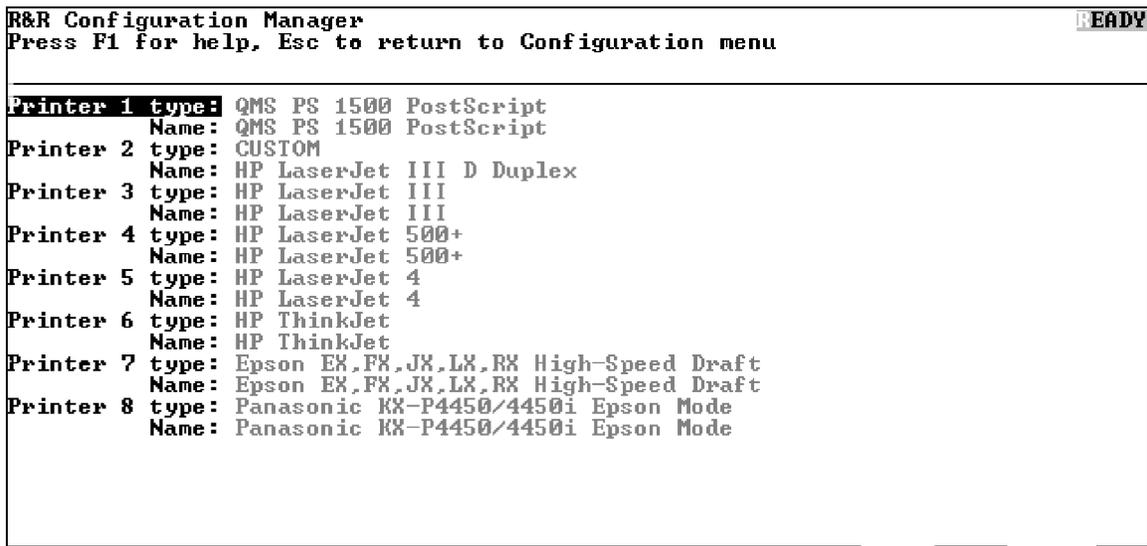


Figure 10-93. The Printer Configuration dialog.

The Printer Configuration dialog allows you to specify the printers which appear in the Printer Selection pop-up list (Figure 10-91).

5. Use the up and down arrow keys to highlight the printer you wish to change and press **<Enter>**. A pop-up list of printers appears on your screen as shown in Figure 10-94.

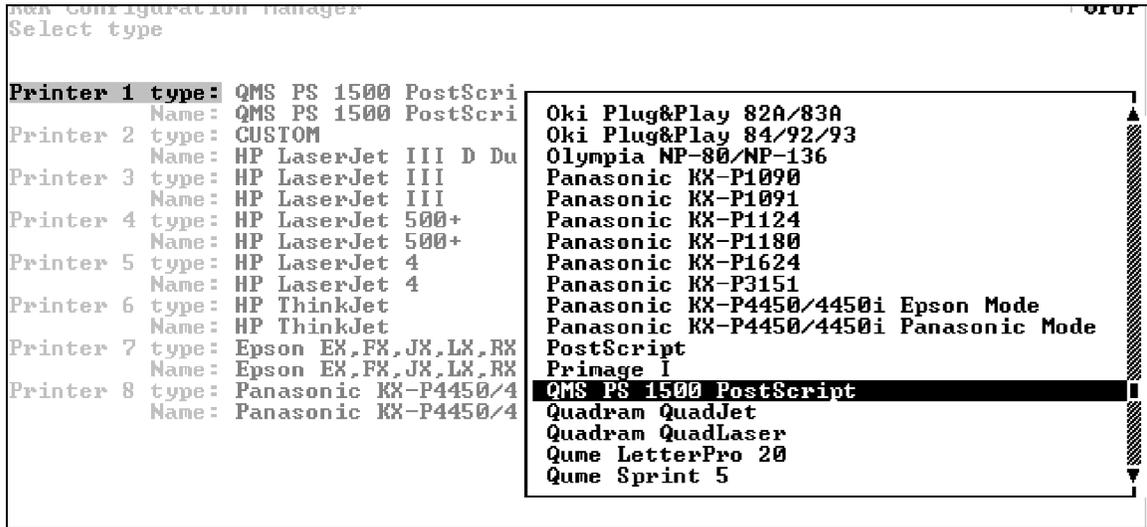


Figure 10-94. Pop-up list of printers.

6. Use the up and down arrow keys or first-letter pointing to highlight the name of your printer or, if the exact name does not appear, the name of a printer that your printer emulates. Select **CUSTOM** if no name on the menu matches your printer. Select **UNASSIGNED** if you want to remove a printer. Press **<Enter>**.
7. Press **<I>** to execute the Interface menu. Use the up and down arrow keys to highlight **Port** and press **<Enter>**. Use the left and right arrow keys to highlight the port the printer is attached to and press **<Enter>**.
8. Press **<Esc>** three times and press **<S>** to save your changes.
9. Press **<Q> <E>** to exit RRSETUP.

### 10.9.3 PARAMETER, DATE x WELL REPORT

The Parameter, Date x Well Report (Table 10-10) prints the Parameter, Date x Well Report to the selected printer (see section 10.9.2). To print this report follow the steps below.

1. Use the up and down arrow keys to highlight the **Parameter, Date x Well Report** option of the **Groundwater Reports** menu and press **<Enter>**. The **Parameter, Date x Well Report** dialog appears on your screen as shown in Figure 10-95.

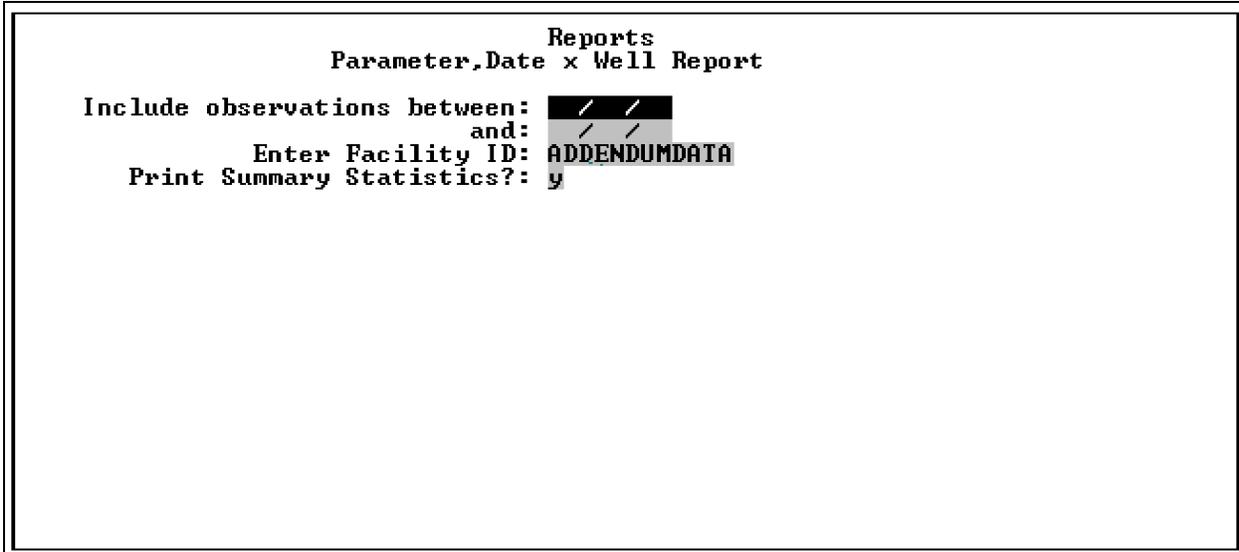


Figure 10-95. The **Parameter, Date and Well Report** dialog.

2. The **Parameter, Date x Well Report** dialog allows you to specify a date range, Facility and whether or not summary statistics will be printed or not. Table 10-11 details the entries on the **Parameter, Date x Well Report** dialog.

Parameter, Date x Well Report dialog entry	Description
Include observations between: and:	Type a beginning and ending date in MMDDYY format. (It is not necessary to type the /). All observations between the beginning and ending dates will be included on the report.  Leave the beginning and ending dates blank to include all dates.

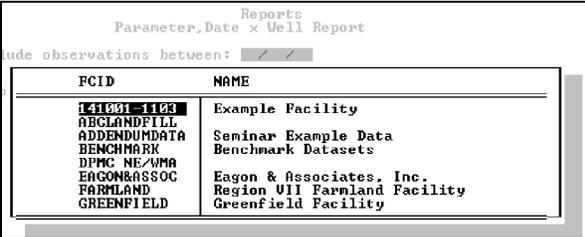
<p>Enter Facility ID:</p>	<p>Type the FCID of the Facility you want to run this report on.</p> <p>If you do not know the FCID:</p> <ol style="list-style-type: none"> <li>Hold the &lt;Ctrl&gt; key down and press &lt;Y&gt;.</li> <li>Press &lt;Enter&gt;. A list of all Facilities in the currently selected data directory will appear on your screen as shown in Figure 10-96.</li> </ol>  <p>Figure 10-96. The pop-up list for Facility ID validation.</p> <ol style="list-style-type: none"> <li>Use the up and down arrow keys to highlight the desired Facility and press &lt;Enter&gt;.</li> </ol> <p>If the desired Facility does not appear in the list it is probably in a different data directory. See section 10.4 for instructions on selecting a data directory.</p>
<p>Print Summary Statistics?</p>	<p>Type &lt;Y&gt; to print the Number of observations, Mean, Standard Deviation, Min and Max for each well and parameter.</p> <p>Type &lt;N&gt; to omit the summary statistics and show observations only.</p>

Table 10-11. Parameter, Date x Well Report dialog entries.

Use the up and down arrow keys to navigate between entries. Press <Page Down> when finished. The Column Parameters dialog appears on your screen as shown in Figure 10-97.

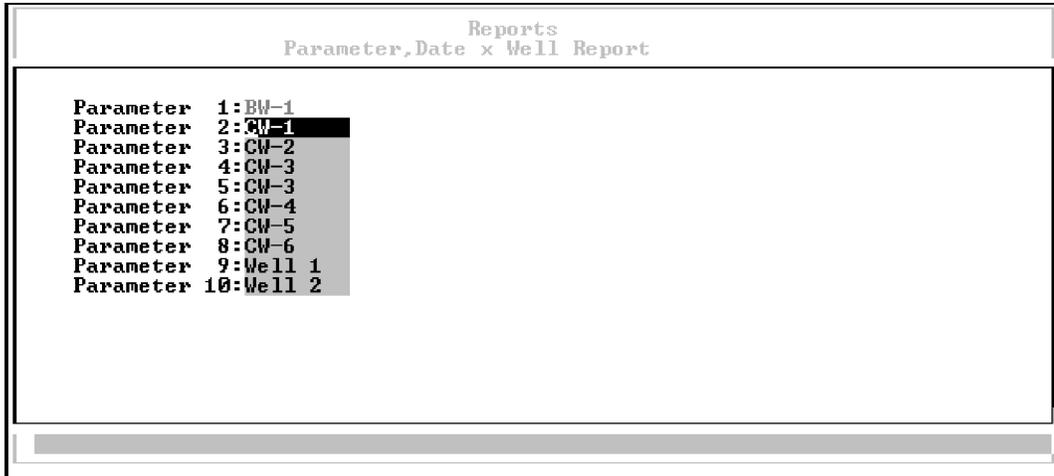


Figure 10-97. The Column Parameters dialog allows you to specify the wells to appear on the Parameter, Date x Well Report.

3. The Column Parameters dialog allows you to select up to ten wells that will form the columns of the Parameter, Date x Well Report. Use the up and down arrow keys to navigate between entries. Type the Well ID of the well you want as the first column on the Parameter, Date x Well Report in the Parameter 1 field. Type the Well ID of the well you want as the second column in the Parameter 2 field, etc.

Columns may be left blank. For example you might want to only use columns 1, 3, 5, 7 and 9. In this case simply blank the Parameter 2, Parameter 4, Parameter 6, Parameter 8 and Parameter 10 entries blank.

To leave a column blank:

- a. Use the up and down arrow keys to move the cursor into the desired Parameter field.
- b. Hold the <Ctrl> key down and press <Y>.

If you do not know the exact Well ID:

- a. Use the up and down arrow keys to move the cursor into the desired Parameter field.
- b. Type <?> and press the <Enter> key. A pop-up list of Wells for the

selected Facility appears on your screen as shown in Figure 10-98.

Reports	
Parameter, Date x Well Report	
WELL_ID	GRAD_POSTN+' '+FCID
BW-1	U ADDENDUMDATA
CW-1	D ADDENDUMDATA
CW-2	D ADDENDUMDATA
CW-3	D ADDENDUMDATA
CW-4	D ADDENDUMDATA
CW-5	D ADDENDUMDATA
CW-6	D ADDENDUMDATA
Well 1	ADDENDUMDATA

Figure 10-98. Pop-up validation list of Well IDs for the wells in the selected Facility.

Use the up and down arrow keys to highlight the desired Well and press **<Enter>**.

When you have specified the desired Well IDs press the **<Page Down>** key to begin printing.

You may cancel the report at any time by pressing the **<Esc>** key.

**Note:** Depending upon the number of observations the report may take a few minutes to print.

#### 10.9.4 WELL, DATE x PARAMETER REPORT

The Well, Date x Parameter Report (Table 10-10) prints the Well, Date x Parameter Report to the selected printer (see section 10.9.2). To print this report follow the steps below.

1. Use the up and down arrow keys to highlight the Well, Date x Parameter Report option of the Groundwater Reports menu and press **<Enter>**. The Well, Date x Parameter Report dialog appears on your screen as shown in Figure 10-99.



<p>Enter Facility ID:</p>	<p>Type the FCID of the Facility you want to run this report on.</p> <p>If you do not know the FCID:</p> <p>a. Hold the &lt;Ctrl&gt; key down and press &lt;Y&gt;.</p> <div data-bbox="808 445 1396 697" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Reports Well, Date x Parameter Report</p> <p>Include observations between: / /</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">FCID</th> <th style="text-align: left;">NAME</th> </tr> </thead> <tbody> <tr> <td>141001-1103</td> <td>Example Facility</td> </tr> <tr> <td>ABCLANDFILL</td> <td>Seminar Example Data</td> </tr> <tr> <td>ADDENDUMDATA</td> <td>Benchmark Datasets</td> </tr> <tr> <td>BENCHMARK</td> <td></td> </tr> <tr> <td>DPMC NE/UMA</td> <td>Eagon &amp; Associates, Inc.</td> </tr> <tr> <td>EAGON&amp;ASSOC</td> <td>Region III Farmland Facility</td> </tr> <tr> <td>FARMLAND</td> <td></td> </tr> <tr> <td>GREENFIELD</td> <td>Greenfield Facility</td> </tr> </tbody> </table> </div> <p>Figure 10-100. The pop-up list for Facility ID Validation.</p> <p>b. Press &lt;Enter&gt;. A list of all Facilities in the currently selected data directory will appear on your screen as shown in Figure 10-100.</p> <p>c. Use the up and down arrow keys to highlight the desired Facility and press &lt;Enter&gt;.</p> <p>If the desired Facility does not appear in the list it is probably in a different data directory. See section 10.4 for instructions on selecting a data directory.</p>	FCID	NAME	141001-1103	Example Facility	ABCLANDFILL	Seminar Example Data	ADDENDUMDATA	Benchmark Datasets	BENCHMARK		DPMC NE/UMA	Eagon & Associates, Inc.	EAGON&ASSOC	Region III Farmland Facility	FARMLAND		GREENFIELD	Greenfield Facility
FCID	NAME																		
141001-1103	Example Facility																		
ABCLANDFILL	Seminar Example Data																		
ADDENDUMDATA	Benchmark Datasets																		
BENCHMARK																			
DPMC NE/UMA	Eagon & Associates, Inc.																		
EAGON&ASSOC	Region III Farmland Facility																		
FARMLAND																			
GREENFIELD	Greenfield Facility																		
<p>Print Summary Statistics?</p>	<p>Type &lt;Y&gt; to print the Number of observations, Mean, Standard Deviation, Min and Max for each well and parameter.</p> <p>Type &lt;N&gt; to omit the summary statistics and show observations only.</p>																		

Table 10-12. Well, Date x Parameter Report dialog entries.

Use the up and down arrow keys to navigate between entries. Press <Page Down> when finished. The Column Parameters dialog appears on your screen as shown in Figure 10-101.

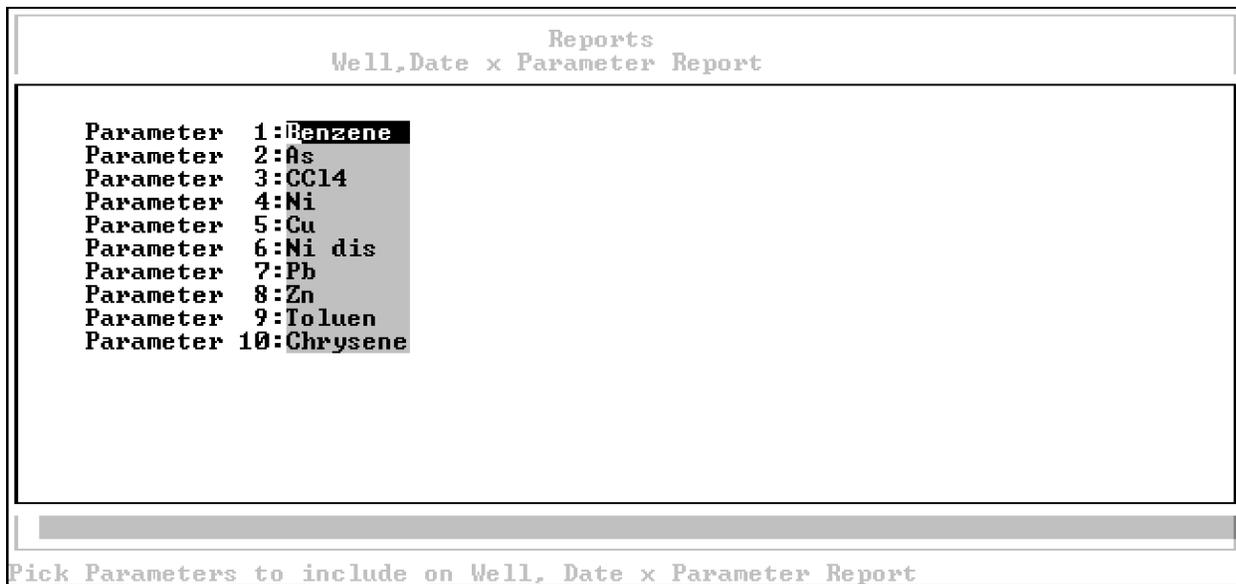


Figure 10-101. The Column Parameters dialog allows you to specify the Parameters that appear on the Well, Date x Parameter Report.

3. The Column Parameters dialog allows you to select up to ten parameters that will form the columns of the Well, Date x Parameter Report. Use the up and down arrow keys to navigate between entries. Type the Parameter Code of the parameter you want as the first column on the Well, Date x Parameter Report in the Parameter 1 field. Type the Parameter Code of the parameter you want as the second column in the Parameter 2 field, etc.

Columns may be left blank. For example you might want to only use columns 1, 3, 5, 7 and 9. In this case simply blank the Parameter 2, Parameter 4, Parameter 6, Parameter 8 and Parameter 10 entries blank.

To leave a column blank:

- a. Use the up and down arrow keys to move the cursor into the desired Parameter field.
- b. Hold the <Ctrl> key down and press <Y>.

If you do not know the exact Parameter Code:

- a. Use the up and down arrow keys to move the cursor into the desired Parameter field.
- b. Type <?> and press the <Enter> key. A pop-up list of Parameters for the

selected Facility appears on your screen as shown in Figure 10-102.

Reports		
Well,Date x Parameter Report		
Parameter 1:?	NAME	REP_CODE
Parameter 2:As	As	
Parameter 3:CC14	Benzene	
Parameter 4:Ni	CC14	
Parameter 5:Cu	Cd Cpds	
Parameter 6:Ni dis	Chrysene	
Parameter 7:Pb	Cu	
Parameter 8:Zn	Ni	
Parameter 9:Toluen	Ni dis	
Parameter 10:Chrysen		

Figure 10-102. The pop-up list of parameters used to validate the Parameter Codes in the Parameter Columns dialog.

Use the up and down arrow keys to highlight the desired Parameter and press **<Enter>**.

When you have specified the desired Parameters press the **<Page Down>** key to begin printing.

You may cancel the report at any time by pressing the **<Esc>** key.

**Note:** Depending upon the number of observations the report may take a few minutes to print.

### 10.9.5 SUMMARY STATISTICS BY WELL (%ND<100)

The Summary Statistics by Well (%ND<100) option of the Groundwater Reports Menu prints the Summary by Well Report to the currently selected printer (see section 10.9.1). To print this report follow the steps below.

1. Use the up and down arrow keys to highlight the Summary Statistics by Well (%ND<100) option of the Groundwater Reports Menu and press **<Enter>**. The Summary by Well (%ND<100) dialog appears on your screen as shown in Figure 10-103.

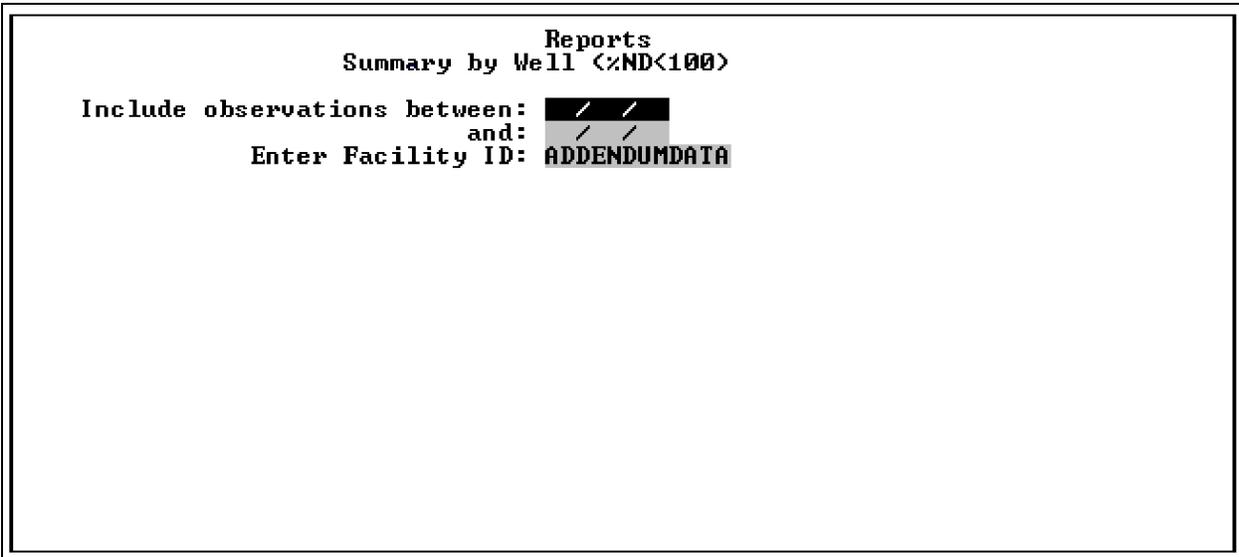


Figure 10-103. The Summary by Well (%ND<100) dialog.

2. The Summary by Well (%ND<100) dialog allows you to specify a date range and Facility to produce the Summary by Well Report on. Table 10-13 describes the entries on the Summary by Well (%ND<100) dialog in detail.

Summary by Well (%ND<100) entry	Description
Include observations between: and:	Type a beginning and ending date in MMDDYY format. (It is not necessary to type the /). All observations between the beginning and ending dates will be included on the report.  Leave the beginning and ending dates blank to include all dates.

Enter Facility ID:

Type the FCID of the Facility you want to run this report on.

If you do not know the FCID:

- Hold the <Ctrl> key down and press <Y>.

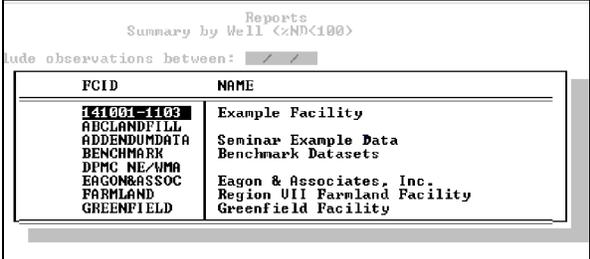


Figure 10-104. Pop-up list for Facility ID validation.

- Press <Enter>. A list of all Facilities in the currently selected data directory will appear on your screen as shown in Figure 10-104.
- Use the up and down arrow keys to highlight the desired Facility and press <Enter>.

If the desired Facility does not appear in the list it is probably in a different data directory. See section 10.4 for instructions on selecting a data directory.

Table 10-13. Summary by Well (%ND<100) dialog entries.

Use the up and down arrow keys to navigate between entries press <Page Down> when you are finished. The Summary by Well Report will begin.

You may cancel the report at any time by pressing the <Esc> key.

**Note:** Depending on the number of observations at the selected Facility the Summary by Well Report will take a few minutes to print.

### 10.9.6 RESULTS BY EPA METHOD CODE

The Results by EPA Method Code option of the Groundwater Reports Menu prints the Results by EPA Method Code report (Table 10-10) to the currently selected printer (see section 10.9.1) To print the Results by EPA Method Code report follow the instructions below.

1. Use the up and down arrow keys to highlight the Results by EPA Method Code option of the Groundwater Reports Menu and press <Enter>. The Results by EPA Method Code dialog appears on your screen as shown in Figure 10-105.

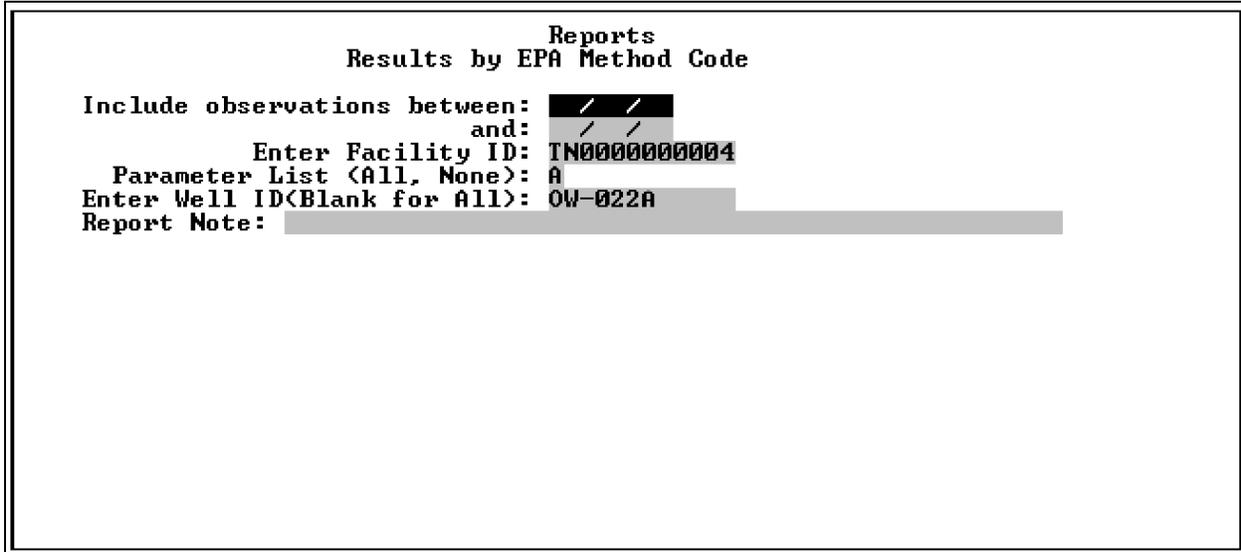


Figure 10-105. The Results by EPA Method Code dialog.

2. Table 10-14 details the entries in the Results by EPA Method Code dialog.

Results by EPA Method Code entry	Description
Include observations between: and:	Type a beginning and ending date in MMDDYY format. (It is not necessary to type the /). All observations between the beginning and ending dates will be included on the report.  Leave the beginning and ending dates blank to include all dates.

Enter Facility ID:

Type the FCID of the Facility you want to run this report on.

If you do not know the FCID:

- a. Hold the <Ctrl> key down and press <Y>.

FCID	NAME
141001-1103	Example Facility
ABCLANDFILL	
ADDENDUMDATA	Seminar Example Data
BENCHMARK	Benchmark Datasets
DPMC NE/OMA	
EAGONASSOC	Eagon & Associates, Inc.
FARMLAND	Region III Farmland Facility
GREENFIELD	Greenfield Facility

Figure 10-106. The pop-up list for Facility ID validation.

- b. Press <Enter>. A list of all Facilities in the currently selected data directory will appear on your screen as shown in Figure 10-106.
- c. Use the up and down arrow keys to highlight the desired Facility and press <Enter>.

If the desired Facility does not appear in the list it is probably in a different data directory. See section 10.4 for instructions on selecting a data directory.

Parameter List (All, None):

Prior to running the report you will be prompted to tag all parameters (Figure 10-108) that you wish to include in the Results by EPA Method Code Report.

Type <A> to initially tag all parameters. (Set the Selected flag to T for all parameters in the Parameter Selection dialog).

Type <N> to initially tag no parameters. (Set the Selection flag to F for all parameters in the Parameter Selection dialog).

<p>Enter Well ID(Blank for All):</p>	<p>The Results by EPA Method Code report may be printed for one specific well at the selected Facility or all wells at a specific facility.</p> <p>To include all wells leave this entry blank:</p> <ol style="list-style-type: none"> <li>Hold the &lt;Ctrl&gt; key down and press &lt;Y&gt;.</li> <li>Press &lt;Enter&gt;.</li> </ol> <p>To print this report for a specific Well:</p> <ol style="list-style-type: none"> <li>Type &lt;?&gt; and press &lt;Enter&gt;. A pop-up list of wells at the selected Facility appears as shown in Figure 10-107.</li> </ol> <div data-bbox="808 695 1398 1178" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Reports Results by EPA Method Code</p> <p>ons between:    / /</p> <p>                  and:    / /</p> <p>Facility ID:    ADDENDUMDATA</p> <p>&lt;Al</p> <p>nk</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">WELL_ID</th> <th style="text-align: left;">GRAD_POSTN</th> </tr> </thead> <tbody> <tr><td>BW-1</td><td>U</td></tr> <tr><td>CW-1</td><td>D</td></tr> <tr><td>CW-2</td><td>D</td></tr> <tr><td>CW-3</td><td>D</td></tr> <tr><td>CW-4</td><td>D</td></tr> <tr><td>CW-5</td><td>D</td></tr> <tr><td>CW-6</td><td>D</td></tr> <tr><td>Well 1</td><td></td></tr> </tbody> </table> </div> <p>Figure 10-107. Pop-up list for Well ID validation.</p> <ol style="list-style-type: none"> <li>Use the up and down arrow keys to highlight the desired well and press &lt;Enter&gt;.</li> </ol>	WELL_ID	GRAD_POSTN	BW-1	U	CW-1	D	CW-2	D	CW-3	D	CW-4	D	CW-5	D	CW-6	D	Well 1	
WELL_ID	GRAD_POSTN																		
BW-1	U																		
CW-1	D																		
CW-2	D																		
CW-3	D																		
CW-4	D																		
CW-5	D																		
CW-6	D																		
Well 1																			
<p>Report Note:</p>	<p>This is an optional comment that will be printed at the top of every page of the report.</p>																		

Figure 10-14. Results by EPA Method Code dialog entries.

- Use the up and down arrow keys to navigate between entries. Press <Page Down> to proceed. The Parameter Selection dialog appears on your screen as shown in Figure 10-108.

Reports Results by EPA Method Code		
Selected?	Parameter	EPA Method
T	Arsenic, total	8240
T	Benzene	8240
T	Carbon tetrachloride	8240
T	Cadmium compounds, N.O.S.	7131
T	Chrysene	
T	Copper, total	
T	Nickel, total	
T	Nickel, dissolved	
T	Lead, total	7421
T	Toluene	
T	Zinc, total	

Use cursor keys to move, Del/Ins keys to remove and add, ESC to Save and Exit

Figure 10-108. The Parameter Selection dialog lets you select the parameters that will appear on the Results by EPA Method Code Report.

- Use the up and down arrow keys to move between parameters in the Parameter Selection dialog. All parameters flagged with T will appear on the Results by EPA Method Code Report. All parameter flagged with F will not. Set the parameter selection flags as desired.
- Press <Esc> to close the Parameter Selection dialog. The Results by EPA Method Code Report will begin.

You may cancel the report at any time by pressing the <Esc> key.

## 10.10 CLEAN UP DATABASES

The Clean Up Databases option of the System Utilities and Maintenance menu is similar in function to the Pack & Index option of the INDEX MENU in the **GRITS Utilities** module. Note that the Clean Up Databases option also maintains the data dictionary files used solely by **GRITS SAGE**.

The Clean Up Databases option:

- Permanently removes all records marked for deletion from the **GRITS/STAT** database files.
- Rebuilds all index files (files with the NTX) extension.

The Clean Up Databases option should be run when:

- Data you have worked with recently (and have not deleted) appear to be missing. This may be caused by a corrupt index file. The **Clean Up Databases** option rebuilds all index files from scratch.
- You have deleted ground water data in one of the spreadsheet screens or one of the **Code Support** screens. Although deleted data is not shown in **GRITS SAGE**, it is not physically removed from the **GRITS/STAT** database files until the **Clean up Databases** option is executed. Prior to exiting **GRITS SAGE** after deleting records run the **Clean Up Databases** option.
- You have created a data directory with MS DOS commands and copied **GRITS/STAT** database files into the newly created directory. You should start **GRITS/SAGE** and select the new directory as the data directory (see section 10.4) and run the **Clean Up Databases** option.
- You have experienced an unexpected power outage while working in **GRITS SAGE**. (Actually, the best solution to this problem is a good and regular backup procedure.)

To execute the **Clean Up Databases** option follow the steps below.

1. Use the up and down arrow keys to highlight the **System Utilities and Maintenance** option of the **Data System Main Menu** (Figure 10-2) and press **<Enter>**. The **System Utilities and Maintenance Menu** (Figure 10-6) appear on your screen.
2. Use the up and down arrow keys to highlight the **Clean Up Databases** option and press **<Enter>**. The **PCE Clean Up** window shown in Figure 10-109 appears on your screen.

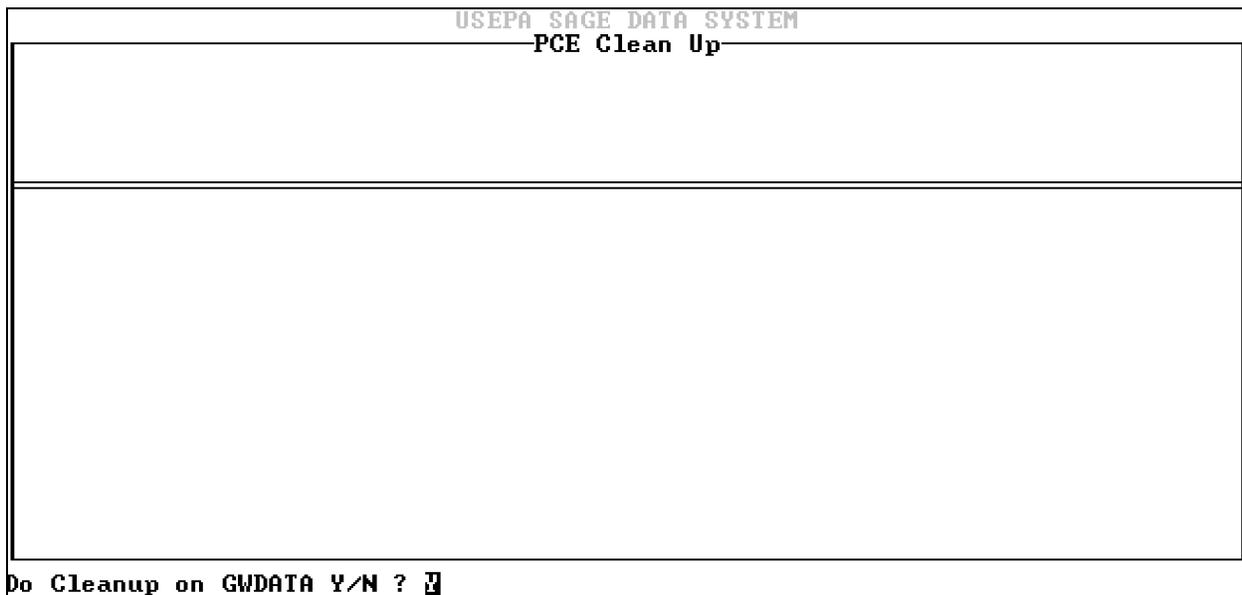


Figure 10-109. The **PCE Clean Up** window.

