Guidelines For Using and Generating Write-On Data Files

Drinking Water Program
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The DHS Drinking Water Program (DWP) provides Write-On to public drinking water systems and certified drinking water laboratories to encourage electronic data transfer (EDT) of water quality monitoring results. The software saves the data on disk in files that are compatible with the state water quality monitoring (WQM) database. Accordingly, Write-On generated data submitted to DWP on floppy disks (i.e.*via* EDT) can be fed directly into WQM.

The purpose of this document is to provide interested persons with information about the content and structure of the data files created by Write-On. Several water utilities have reprogrammed their databases or laboratory information management systems (LIMS) so that they can generate data in a format compatible with WQM for submission*via* EDT. During this process, questions arose about the structure of the Write-On data files, especially the use of negative defaults in the "RES" files.

Another frequent inquiry from water utilities has been whether the data files created by Write-On can be utilized to feed their own in-house water quality databases. The data can be fed into databases. This is essentially the process utilized by DWP to feed the data into WQM. Most of the commercial database software packages available today have provisions that allow ASCII files, such as those generated by Write-On, to be fed into databases. In order to do this, a utility must have information about the format of the Write-On files and a person capable of programming its database to accept the files.

Three files are generated by Write-On when it saves chemical analyses. Two of these files contain information about the analyses. These are the header files, which have the ".HED" extension and the result files, which have the ".RES" extension. The third file, having the ".STT" extension (".STS" for Write-On for Windows 95) contains a running tally of the number of forms and pages in each file if it were printed. This file is used internally by Write-On and is not necessary for WQM or other databases to accept and use the data from the other two files.

The critical files for DWP are the result or ".RES" files. These contain all of the information that the state database requires to accept and record the sampling and analyses events. The header, or ".HED", files contain additional information not critical to DWP, but are necessary to produce a form of the analyses. These files are described in more detail on the following pages.

Structure of Data Files Generated by Write-On

Header files structure

The header files have the "HED" extension. They contain information about the analyses which is not stored in the DHS central water quality database. For that reason, they need not be submitted to the Department and are kept separate from the "RES" file data by Write-On.

Each form or sample is represented by a set of eight records, each terminated with a return, in the header files. Those eight records are as follows:

record no.	description	no. of characters
1	date of receipt (YYMMDD)	10
2	sample number and EDT flag	21
3	sampler's name	variable to 26
4	sampler employer name	variable to 26
5	no. records in "RES" file for form	5
6,7,8	comments	variable to 75

Comments on header file format:

- Record 2: The first 20 characters are the sample number. The last character is the EDT flag. If the form is EDT, the character will be "$", if not, it will be "!". This character is used by Write-On to identify the EDT status of the form and is transparent to the user.

- Record 5: This record stores the number of records that reside in the corresponding "RES" file for this form. It is necessary so that Write-On can locate and retrieve the form or sample data from the "RES" file. The number is also necessary if you are programming another database to accept header and results files and wish to categorize results according to sample number. If the form is for a source composite, the number of records is the total for all sources. For example, if the form reports analysis of a five-source composite for three chemicals, the number of records recorded here is 5 x 3 = 15 records.

- Records 6,7,8: If no comments are added to the form, these records default to the single character, "#" as a place-setter.

Result files structure

The result files have the "RES" extension. They contain the data which are maintained on the DHS central water quality database and are the files which are submitted to the DHS through the EDT program. The results files consist of ASCII records, each of which is terminated by a return. Their structure is illustrated in Figure 1.

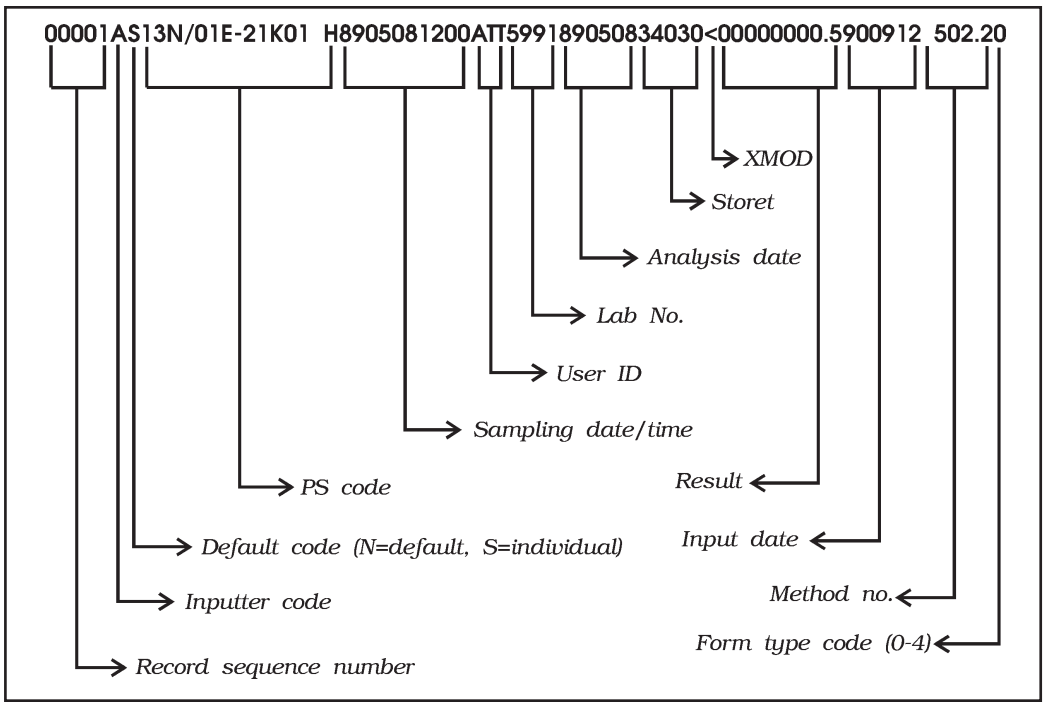

Figure 1: Structure of results ("RES") file records.

The fields in a results records are as follows:

Name	description	no. of characters
Record sequence no.	The number of the records in a result file.	5
Inputter code	A code character used to identify the person inputting data. Can be any keyboard character.	1
Default code	A code character used to identify whether an analysis is defaulted or individual and whether the analysis is for a source composite sample (see following pages)	1
PS Code	The number of a source. Can be a state well number, surface intake number, or U.S. EPA FRDS number. See Appendix E of the Write-On Manual for details about source numbers.	15

name	description	no. of characters
Sampling date/time	The date and time (24 hour system) that water sample was collected (format: YYMMDDTTTT).	10
User ID	The ID code for the agency which has jurisdiction over the source. (see Appendix A, Write-On User's Manual)	3
Laboratory number	The Department of Water Resources number of the analyzing laboratory. Temporary numbers beginning with zeros (e.g. "0002") were assigned by ODW.	4
Analysis date	The date that the analysis was completed for all constituents in the sample. (format: YYMMDD).	6
Storet number	The U.S EPA storet number for the constituent. Numbers beginning with an "A" were assigned by ODW.	5
XMOD	The modifier for results. It is left blank if the result is a positive detection or if a nondection is shown as "0000000000". It is shown as "<" if the result is an MDL representing a nondetection at that level.	1
Result	The numerical analytical result of an analysis. Can also be "000000000" or the MDL for a nondetection. Can also be " X" for a negative default (see below).	10
Input date	The date that the data were keyed in or entered into the file (format: YYMMDD).	6
Method no.	The analytical method number. Normally will be a U.S. EPA method number.	6
Form type code	The number of the state form that the data would appear on if printed out. Codes are as follows: 0 = Organic Chemicals 1 = Agricultural Chemicals 2 = Inorganics, Genl. Mineral, & Physical 3 = BNA's 4 = Radiologicals	1

Negative Defaults

This section explains the format of negative defaults to aid that persons interested in reprogramming their databases or LIMS so that they can generate compatible ".RES" files. There are benefits in utilizing negative defaults, the most important being the considerable disk storage space that is saved. This might be an important consideration if the laboratory or utility will be submitting large amounts of data to the ODW*via* EDT. There is no requirement that EDT files be submitted in negative defaulted format. All analyses can be submitted as expanded files which show every analysis, even if there is no detection. Examples of both approaches will be illustrated in the following discussion.

Write-On for DOS saves certain analyses in the ".RES" files as negative defaulted data. Negative defaults save time when manually key entering data and disk storage space. When an organic chemical or BNA analysis is negative defaulted, all results for constituents covered by the chosen group analysis are automatically designated "ND" if no positive detections are explicitly key entered. The person entering results, therefore, need enter only positive results. When noncomposite results are saved on disk, the negative default code in the ".RES" file is set at "N" to indicate that all chemicals covered by the method were analyzed and that those having no detection are to be defaulted to "ND". Note that Write-On for Windows 95 saves all analyses as expanded files.

When there are no positive detections in a negative default, there are two important considerations:

- The storet number is assigned the appropriate negative default storet code. The negative defaults are as follows:

Method & Chemicals Covered	Default Code
501.1 THMs	THMN
501.2 THMs	THMN
501.3 THMs	THMN
502.1 VOCs	52.1N
502.2 VOCs	52.2N
503.1 VOCs	53.1N
524.1 VOCs	54.1N
524.2 VOCs	54.2N
625 BNAs	625N
525 BNAs	525N
608 Pesticides and PCBs	608N
508 Pesticides and PCBs	508N
608 Pesticides (no PCBs)	608PN
508 Pesticides (no PCBs)	508PN

  The chemicals defaulted by the above defaults are listed in Tables I and II in the Appendix.

- The result is assigned a right-justified "X" (e.g. " X").

Sometimes only selected chemicals covered by an organic chemical or BNA analysis might be analyzed and reported. For such cases Write-On can be set to "individual" mode and the negative default option is turned off, and the default code is set to "S" for noncomposite samples. This allows chemical findings to be individually entered and saved.

Examples of Negative Defaults

Figure 2 illustrates a negative defaulted 502.2 analysis in which no positive detections were observed. This

```
00001AN48N/04E-18L03  M9210071214ATT509192100952.2N                X921009  502.20
```

Figure 2: Negative defaulted 502.2 with no detections

single record represents 59 individual analyses. Note that the ten character result field must contain a right-justified "X" and the storet field contains the negative default "storet" code, "52.2N".

Figure 3 shows a negative defaulted 524.2 analysis in which three constituents, benzene, ethyl benzene, and total xylenes were detected. A default code of "N" indicates that the other constituents covered by method 524.2 were analyzed and not detected. These three records can be assigned to the same sample on the basis of two pieces of information. First, the header would indicate three records for this sample, and second, the source number, sample date and time, and laboratory number are the same.

```
00001!NWATXX  1-XXX     19209260823WAT509192092881551          5.6921009  524.20
00002!NWATXX  1-XXX     19209260823WAT509192092834371          1.2921009  524.20
00003!NWATXX  1-XXX     19209260823WAT509192092834030           .9921009  524.20
```

Figure 3: Negative defaulted 524.2 with three detections

Figure 4 represents a negative defaulted 502.2 analysis in which none of the constituents covered by method 502.2 were detected. Two chemicals not covered by method 502.2, DBCP and EDB, were also analyzed in this sample using method 511 and reported as nondetections at their state DLR's. Note that the latter two chemicals were individually analyzed and the default code in their records is "S".

```
00001AN05S/11W-01M01  S9105050831TEE509191050652.2N              X921009  502.20
00002AS05S/11W-01M01  S9105050831TEE509191050677651<     .02  921009     5110
00003AS05S/11W-01M01  S9105050831TEE509191050638761<     .01  921009     5110
```

Figure 4: Negative defaulted 502.2 with no detections and two individual analyses

If you intend to submit ".RES" files generated by your LIMS or database *via* EDT, you are not required to utilize negative defaults. There is a considerable savings in required disk storage space from use of negative defaults; however, programming a database to generate such files is more complicated than just listing all constituents that were analyzed. An example of an accepatable fully listed, non-negative defaulted ".RES" file is shown in Figure 5 for a method 502.2 analysis having no detections. The default code for all of the records is set at "S" since each analysis is considered individual. The results for all nondetections in the file represented in Figure 5 are set at "0000000000", and the XMODs are left blank. WQM interprets "0000000000" as an "ND". Do not place "NDs" as results because WQM cannot read them. Nondetections can also be indicated by setting the XMODS at "<" and showing MDLs or DLRs in the results.

Note that the records in Figure 5, and in the other figures, are ordered in reverse of the order for constituents listed on the state analysis forms and on the Write-On input screens. This reverse ordering is typical for files created by Write-On. The ordering of constituents is not critical, however, for files that are submitted *via* EDT. Accordingly, if files are generated by another database or a LIMS, any ordering that is convenient is acceptable. On the other hand, any analyses submitted to ODW *via* hardcopy forms must have the constituents ordered exactly as listed on state forms to facilitate manual key entry.

To further explore the format of header and results files, utilize Write-On to generate them under various conditions.

```
00001ASD07/300-CLUB     9209260823ENG509192100877226 0000000000921009 502.20
00002ASD07/300-CLUB     9209260823ENG509192100877222 0000000000921009 502.20
00003ASD07/300-CLUB     9209260823ENG509192100877443 0000000000921009 502.20
00004ASD07/300-CLUB     9209260823ENG509192100834551 0000000000921009 502.20
00005ASD07/300-CLUB     9209260823ENG509192100877613 0000000000921009 502.20
00006ASD07/300-CLUB     9209260823ENG509192100834010 0000000000921009 502.20
00007ASD07/300-CLUB     9209260823ENG509192100877562 0000000000921009 502.20
00008ASD07/300-CLUB     9209260823ENG509192100877128 0000000000921009 502.20
00009ASD07/300-CLUB     9209260823ENG509192100877224 0000000000921009 502.20
00010ASD07/300-CLUB     9209260823ENG509192100834696 0000000000921009 502.20
00011ASD07/300-CLUB     9209260823ENG509192100834423 0000000000921009 502.20
00012ASD07/300-CLUB     9209260823ENG5091921008A-011 0000000000921009 502.20
00013ASD07/300-CLUB     9209260823ENG509192100877223 0000000000921009 502.20
00014ASD07/300-CLUB     9209260823ENG509192100834391 0000000000921009 502.20
00015ASD07/300-CLUB     9209260823ENG509192100877168 0000000000921009 502.20
00016ASD07/300-CLUB     9209260823ENG509192100877170 0000000000921009 502.20
00017ASD07/300-CLUB     9209260823ENG509192100877173 0000000000921009 502.20
00018ASD07/300-CLUB     9209260823ENG509192100834668 0000000000921009 502.20
00019ASD07/300-CLUB     9209260823ENG509192100834566 0000000000921009 502.20
00020ASD07/300-CLUB     9209260823ENG509192100834536 0000000000921009 502.20
00021ASD07/300-CLUB     9209260823ENG509192100877596 0000000000921009 502.20
00022ASD07/300-CLUB     9209260823ENG5091921008A-009 0000000000921009 502.20
00023ASD07/300-CLUB     9209260823ENG5091921008A-008 0000000000921009 502.20
00024ASD07/300-CLUB     9209260823ENG509192100834418 0000000000921009 502.20
00025ASD07/300-CLUB     9209260823ENG509192100834311 0000000000921009 502.20
00026ASD07/300-CLUB     9209260823ENG509192100877353 0000000000921009 502.20
00027ASD07/300-CLUB     9209260823ENG509192100877350 0000000000921009 502.20
00028ASD07/300-CLUB     9209260823ENG5091921008A-010 0000000000921009 502.20
00029ASD07/300-CLUB     9209260823ENG509192100834413 0000000000921009 502.20
00030ASD07/300-CLUB     9209260823ENG5091921008A-012 0000000000921009 502.20
00031ASD07/300-CLUB     9209260823ENG509192100881555 0000000000921009 502.20
00032ASD07/300-CLUB     9209260823ENG509192100881551 0000000000921009 502.20
00033ASD07/300-CLUB     9209260823ENG509192100877135 0000000000921009 502.20
00034ASD07/300-CLUB     9209260823ENG5091921008A-014 0000000000921009 502.20
00035ASD07/300-CLUB     9209260823ENG509192100839175 0000000000921009 502.20
00036ASD07/300-CLUB     9209260823ENG509192100881611 0000000000921009 502.20
00037ASD07/300-CLUB     9209260823ENG509192100834488 0000000000921009 502.20
00038ASD07/300-CLUB     9209260823ENG509192100839180 0000000000921009 502.20
00039ASD07/300-CLUB     9209260823ENG509192100834511 0000000000921009 502.20
00040ASD07/300-CLUB     9209260823ENG509192100834506 0000000000921009 502.20
00041ASD07/300-CLUB     9209260823ENG509192100834475 0000000000921009 502.20
00042ASD07/300-CLUB     9209260823ENG509192100834516 0000000000921009 502.20
00043ASD07/300-CLUB     9209260823ENG509192100834301 0000000000921009 502.20
00044ASD07/300-CLUB     9209260823ENG509192100834561 0000000000921009 502.20
00045ASD07/300-CLUB     9209260823ENG509192100834541 0000000000921009 502.20
00046ASD07/300-CLUB     9209260823ENG509192100834546 0000000000921009 502.20
00047ASD07/300-CLUB     9209260823ENG509192100877093 0000000000921009 502.20
00048ASD07/300-CLUB     9209260823ENG509192100834501 0000000000921009 502.20
00049ASD07/300-CLUB     9209260823ENG509192100834531 0000000000921009 502.20
00050ASD07/300-CLUB     9209260823ENG509192100834496 0000000000921009 502.20
00051ASD07/300-CLUB     9209260823ENG509192100834571 0000000000921009 502.20
00052ASD07/300-CLUB     9209260823ENG509192100834371 0000000000921009 502.20
00053ASD07/300-CLUB     9209260823ENG509192100832102 0000000000921009 502.20
00054ASD07/300-CLUB     9209260823ENG509192100834030 0000000000921009 502.20
00055ASD07/300-CLUB     9209260823ENG509192100882080 0000000000921009 502.20
00056ASD07/300-CLUB     9209260823ENG509192100832105 0000000000921009 502.20
00057ASD07/300-CLUB     9209260823ENG509192100832106 0000000000921009 502.20
00058ASD07/300-CLUB     9209260823ENG509192100832104 0000000000921009 502.20
00059ASD07/300-CLUB     9209260823ENG509192100832101 0000000000921009 502.20
```

Figure 5: Nondefaulted method 502.2 analysis

Source Composite Data

No special coding is required in header files for composite samples, except as stated earlier that record no. 5 in the header nust indicate the total number of records (i.e. number of sources in composite x number of analyses).

In the results files, source composites are identified with the one character default code as follows:

- "N" = defaulted noncomposite analysis
- "S" = individual noncomposite analysis
- "T" = individual composite analysis - 2 sources
- "U" = individual composite analysis - 3 sources
- "V" = individual composite analysis - 4 sources
- "W" = individual composite analysis - 5 sources

The results of each analysis are recorded for each source in the results file. Examples are provided in Figures 6 and 7.

```
00006AU29S/27E-36K02  M9501010000CYA514695010177651<      .02  950120      0
00007AU29S/27E-36K02  M9501010000CYA514695010138761<      .01  950120      0
00008AU30S/28E-05C01  M9501010000CYA514695010177651<      .02  950120      0
00009AU30S/28E-05C01  M9501010000CYA514695010138761<      .01  950120      0
00010AU29S/27E-25B02  M9501010000CYA514695010177651<      .02  950120      0
00011AU29S/27E-25B02  M9501010000CYA514695010138761<      .01  950120      0
```

Figure 6: Analyses of two organic chemicals for three-source composite

```
00001AT06N/04W-30P05  S9501010000TAN514695010101092<     50.00950120     2
00002AT06N/04W-30P05  S9501010000TAN514695010101055<     30.00950120     2
00003AT06N/04W-30P05  S9501010000TAN514695010101045<    100.00950120     2
00004AT06N/04W-30K03  S9501010000TAN514695010101092<     50.00950120     2
00005AT06N/04W-30K03  S9501010000TAN514695010101055<     30.00950120     2
00006AT06N/04W-30K03  S9501010000TAN514695010101045<    100.00950120     2
```

Figure 7: Analyses of three inorganic chemicals for two-source composite

The records for a given composite should be grouped together in the results file and the records for each source should be grouped together as shown in the examples above if WRITE-ON is used to generate hardcopy forms from the files. If the data is to be submitted via EDT, but Write-On is not used to generate hardcopy forms, the records should be grouped together, but the order is not important. The sample dates must all be the same for all records in a composite.

Note that all composite data must be submitted as nondefaulted, individual analyses.

Year 2000 Issues

It is anticipated that the date formats used in ".RES" and ".HED" files will remain in the "YYMMDD" format, primarily for ease of date input on Write-On. The state database will be Year 2000 compliant, and dates in ".RES" files will be transformed into "YYYYMMDD" format when added to the state database.

Table 1
Organic Constituents Defaulted by EPA Methods

Constituent	Storet Number	Method							
		501.1	501.2	501.3	502.1	502.2	503.1	524.1	524.2
1,1,1,2-Tetrachloroethane	77562					X	X	X	X
1,1,1-Trichloroethane (1,1,1-TCA)	34506							X	X
1,1,2,2-Tetrachloroethane	34516				X	X		X	X
1,1,2-Trichloroethane (1,1,2-TCA)	34511				X	X		X	X
1,1-Dichloroethane (1,1-DCA)	34496				X	X		X	X
1,1,-Dichloroethylene (1,1-DCE)	34501				X	X		X	X
1,1-Dichloropropene	77168				X	X		X	X
1,2,3-Trichlorobenzene	77613					X	X		X
1,2,3-Trichloropropane	77443				X	X		X	X
1,2,4-Trichlorobenzene	34551					X	X		X
1,2,4-Trimethylbenzene	77222					X	X		X
1,2-Dichlorobenzene (o-DCB)	34536				X	X	X	X	X
1,2-Dichloroethane (1,2-DCA)	34531				X	X		X	X
1,2-Dichloropropane	34541				X	X		X	X
1,3,5-Trimethylbenzene	77226					X	X		X
1,3-Dichlorobenzene (m-DCB)	34566				X	X	X	X	X
1,3-Dichloropropane	77173				X	X		X	X
1,4-Dichlorobenzene (p-DCB)	34571				X	X	X	X	X
2,2-Dichloropropane	77170				X	X		X	X
2-Chloroethylvinyl Ether	34576				X			X	X
2-Chlorotoluene	A-008				X	X	X	X	X
4-Chlorotoluene	A-009				X	X	X	X	X
Benzene	34030					X	X	X	X
Bromobenzene	81555				X	X	X	X	X
Bromochloromethane	A-012				X	X		X	X
Bromodichloromethane	32101	X	X	X	X	X		X	X
Bromoform	32104	X	X	X	X	X		X	X
Bromomethane (Methyl Bromide)	34413				X	X		X	X
Carbon Tetrachloride	32102				X	X		X	X
Chloroethane	34311				X	X		X	X
Chloroform (Trichloromethane)	32106	X	X	X	X	X		X	X
Chloromethane (Methyl Chloride)	34418				X	X		X	X
cis-1,2-Dichloroethylene (c-1,2-DCE)	77093				X	X			X
Dibromochloromethane	32105	X	X	X	X	X		X	X
Dibromomethane	77596				X	X		X	X
Dicamba (BANVEL)	82052								
Dichlorodifluoromethane	34668				X	X		X	X
Ethyl Benzene	34371					X	X	X	X
Hexachlorobutadiene	34391					X	X	X	X
Isopropylbenzene (Cumene)	77223					X	X	X	X
mp-Xylene	A-014					X	X	X	X
Methylene chloride	34423				X	X		X	X
Monochlorobenzene (Chlorobenzene)	34301				X	X	X	X	X
n-Butylbenzene	A-010					X	X		X

Table 1 (continued)
Organic Constituents Defaulted by EPA Methods

Constituent	Storet Number	Method							
		501.1	501.2	501.3	502.1	502.2	503.1	524.1	524.2
n-Propylbenzene	77224					X	X	X	X
Naphthalene	34696					X	X	X	
o-Xylene	77135					X	X	X	X
p-Isopropyltoluene	A-011					X	X		X
Sec-Butylbenzene	77350					X	X	X	X
Styrene	77128					X	X	X	X
Tert-Butylbenzene	77353					X	X	X	X
Tetrachloroethylene (PCE)	34475				X	X	X	X	X
Toluene	34010					X	X	X	X
Total 1,3-Dichloropropene	34561				X	X			X
Total Trihalomethanes (THM'S / TTHM)	82080	X	X	X	X	X		X	X
Total Xylenes (m,p &o)	81551					X	X	X	X
trans-12-Dichloroethylene (t-1,2-DCE)	34546				X	X		X	X
Trichloroethylene (TCE)	39180				X	X	X	X	X
Trichlorofluoromethane (FREON 11)	34488				X	X		X	X
Trichlorotrifluoroethane (FREON 113)	81611				X	X		X	
Vinyl Chloride (VC)	39175				X	X		X	X
NEGATIVE 501.1 THMs	THMN	X							
NEGATIVE 501.2 THMs	THMN		X						
NEGATIVE 501.3 THMs	THMN			X					
NEGATIVE 502.1 CHEMICALS	52.1N				X				
NEGATIVE 502.2 CHEMICALS	52.2N					X			
NEGATIVE 503.1 CHEMICALS	53.1N						X		
NEGATIVE 524.1 CHEMICALS	54.1N							X	
NEGATIVE 524.2 CHEMICALS	54.2N								X

Table ll
BNA Constituents Defaulted by EPA Methods

Constituent	Storet Number	Method					
		625N	525N	608	508	608P	508P
1,2-Dichlorobenzene (o-DCB)	34536	X	X				
1,2,4-Trichlorobenzene	34551	X	X				
1,3-Dichlorobenzene (m-DCB)	34566	X	X				
1,4-Dichlorobenzene (p-DCB)	34571	X	X				
2-Chloronaphthalene	34581	X	X				
2-Chlorophenol	34586	X	X				
2-Methyl-4,6-Dinitrophenol	34657	X	X				
2-Nitrophenol	34591	X	X				
2,4-Dichlorophenol	34601	X	X				
2,4-Dimethylphenol	34606	X	X				
2,4-Dinitrophenol	34616	X	X				
2,4-Dinitrotoluene	34611	X	X				
2,4,6-Trichlorophenol	34621	X	X				
2,6-Dinitrotoluene	34626	X	X				
3,3-Dichlorobenzidine	34631	X	X				
4-Bromophenyl Phenyl Ether	34636	X	X				
4-Chloro-3-Methylphenol	34452	X	X				
4-Chlorophenyl Phenyl Ether	34641	X	X				
4-Nitrophenol	34646	X	X				
4,4'-DDD	39310			X	X	X	X
4.4'-DDE	39320			X	X	X	X
4,4'-DDT	39300			X	X	X	X
Acenaphthene	34205				X	X	
Acenaphthylene	34200				X	X	
Aldrin	39330		X	X	X	X	X
alpha-BHC	39337			X	X	X	X
Anthracene	34220				X	X	
Benzidine	39120	X	X				
Benzo (a) Anthracene	34526	X	X				
Benzo (a) Pyrene	34247	X	X				
Benzo (b) Fluoranthene	34230	X	X				
Benzo (ghi) Perylene	34521	X	X				
Benzo (k) Fluoranthene	34242	X	X				
Benzyl Butyl Phthalate	34292	X	X				
beta-BHC	39338			X	X	X	X
bis (2-Chloroethoxy) Methane	34278	X	X				
bis (2-Chloroethyl) Ether	34273	X	X				
bis (2-Chloroisopropyl) Ether	34283	X	X				
bis (2-Ethylhexyl) Phthalate	39100	X	X				
Chlordane	39350			X	X	X	X
Chrysene	34320	X	X				
delta-BHC	34259			X	X	X	X
di-n-Butylphthalate	39110	X	X				

Table II (continued)
BNA Constituents Defaulted by EPA Methods

Constituent	Storet Number	Method				
		625N	525N	608	508	608P	508P
Endosulfan I	34361			X	X	X	X
Endosulfan II	34356			X	X	X	X
Endosulfan Sulfate	34351			X	X	X	X
Endrin	39390			X	X	X	X
Endrin Aldehyde	34366			X	X	X	X
Fluoranthene	34376	X	X				
Fluorene	34381	X	X				
gamma-BHC (Lindane)	39340			X	X	X	X
Heptachlor	39410			X	X	X	X
Heptachlor Epoxide	39420			X	X	X	X
Hexachlorobenzene	39700	X	X				
Hexachlorobutadiene	34391	X	X				
Hexachlorocyclopentadiene	34386	X	X				
Hexachloroethane	34396	X	X				
Indeno (1,2,3-cd) Pyrene	34403	X	X				
Isophorone	34408	X	X				
N-Nitrosodi-n-Propylamine	34428	X	X				
N-Nitrosodimethylamine	34438	X	X				
N-Nitrosodiphenylamine	34433	X	X				
Naphthalene	34696	X	X				
Nitrobenzene	34447	X	X				
PCB-1016	34671			X	X		
PCB-1221	39488			X	X		
PCB-1232	39492			X	X		
PCB-1242	39496			X	X		
PCB-1248	39500			X	X		
PCB-1254	39504			X	X		
PCB-1260	39508			X	X		
Pentachlorophenol (PCP)	39032	X	X				
Phenanthrene	34461	X	X				
Phenol (Carbolic Acid)	34694	X	X				
Pyrene	34469	X	X				
NEGATIVE 625 BNAS	625N	X					
NEGATIVE 525 BNAS	525N		X				
NEGATIVE 608 PESTICIDES AND PCBS	608N			X			
NEGATIVE 508 PESTICIDES AND PCBS	508N				X		
NEGATIVE 608 PESTICIDES (NO PCBS)	608PN					X	
NEGATIVE 508 PESTICIDES (NO PCBS)	508PN						X