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CHARACTERIZATION OF HRGC/MS UNIDENTIFIED PEAKS FROM THE ANALYSIS OF HUMAN ADIPOSE TISSUES

VOLUME II: APPENDICES

by

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FINAL REPORT

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DISCLAIMER

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PREFACE

This report describes Midwest Research Institute's approach to characterize unidentified chromatographic peaks in HRGC/MS data collected from the analysis of human adipose tissue for general volatile and semivolatile organic compounds. This report is provided as two separate volumes. Volume I describes the technical approach and presents a summary of the results based on frequency of observation by age group and census region. Volume II is an appendix to Volume I and contains additional details on frequency of occurrence for both identified and unidentified peaks based on census region, census division, and age. This report focuses on the approach to identifying compounds from the HRGC/MS spectra. The frequency of detection of specific compounds is presente. The HRGC/MS data were collected for 46 samples prepared as composites from individual specimens of the U.S. Environmental Protection Agency's fiscal year 1982 (FY82) National Human Adipose Tissue Survey (NHATS) repository. The sample collection, compositing, and the analysis of the composites for specific volatile and semivolatile organic compounds are described in detail in separate reports (Stanley 1986b, Stanley 1986c).

This approach to the characterization of HRGC/MS unidentified peaks was developed and conducted for the EPA's Office of Toxic Substances, Field Studies Branch (EPA Contract No. 68-02-4252, Work Assignment 23, Ms. Janet Remmers, Work Assignment Manager, and Dr. Joseph Breen, Project Officer. This report was prepared by Mr. Jon Onstot with assistance from Mr. Randall E. Ayling and Dr. John S. Stanley, MRI Work Assignment Leader.

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DOT MATRIX TABLE FOR COMPOUNDS IDENTIFIED IN THE VOLATILE ORGANIC ANALYSIS DATA SET; VOLATILE ORGANIC COMPOUNDS VS. CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table A-1. Compounds Identified in the Volatile Organic Analysis Data Set - West Census Region

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
I.S.	Internal Standard	Bromochloropropane - Internal Standard	•	•	•	•	•	•
1	Carbon Dioxide	Carbon dioxide	•	•	•	•	•	•
2	Alkane	2-Methyl-butane				•	•	•
3		Unidentified C5.H10 [Cyclopentane]					•	
4		C3 Substituted cyclopropane [Propyl-cyclopropane]						
5		C3 Substituted cyclopropane [Propyl-cyclopropane]						
6		2,3-Dimethyl-hexane				•	•	•
7		1,2-Diethyl-cyclobutane						
8		Alkane ≥ C10 [Decane]						
9		C10 Alkane [2-Methyl-nonane]		•				•
10		2,2,3,3-Tetramethyl-hexane						•
11		Sat. alkane ≥ C11 [2-Methyl-decane]						
12		Alkyl substituted hexane [Pentyl-cyclohexane]						•
13		2,2-Dimethyl-decane					•	
14		C13 Alkane [3,3-Dimethyl-undecane]						
15		Alkane [6-Ethyl-2-methyl-decane]	•		•			
16		Alkane [2,6,7-Trimethyl-decane]						•
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]						
18		C13 Alkane [2,2,7-Trimethyl-decane]						
19		3,3,8-Trimethyl-decane						
20		Alkane [6-Methyl-tridecane]						
21	Alkene	C5 Alkene [1-Pentene]						
22		1-Hexene	•	•		•	•	
23		Unidentified C6.H12 [1-Hexene]					•	
24		3-Methyl-1,4-heptadiene						•
25		1,6-Octadiene					•	
26		1,3,6-Octatriene	•		•			
27		Unidentified C8.H12 [3-Ethylidene-1-methyl-cyclopentene]						•
28		1-Nonene						
29		3-Ethyl-2-methyl-1,3-hexadiene	•	•	•	•	•	•
30		C10 Ringed alkane [1,7,7-Trimethyl-bicyclo[2 2.1]hept-2-ene]	•	•	•	•	•	•
31		1-Methyl-4-(1-methylethenyl)-cyclohexene						
32		7-(1-Methylethylidene)-bicyclo[4.1.0] heptane						•
33		C11 Alkene [1-Undecene]	•			•	•	
34		C11 Alkene [1-Ethenyl-2-hexenyl-cyclopropane]						•
35		Isomer of Undecen-3-yne [5-Undec-3-yne]	•		•			•
36		Isomer of Undecen-3-yne [5-Undec-3-yne]	•		•		•	•
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]			•		•	•
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]						
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]						
40		C3 Alkyl benzene [1-Methylethyl-benzene]						
41		Propyl-benzene						
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]						
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]						
44		1-Methyl-3-(1-methylethyl-) benzene						
45		Naphthalene						
46		1-Ethylpropyl-benzene						
47	Saturated Alcohol	3-Methyl-1-butanol	•			•		•
48		1-Hexanol						
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]	•					
50		2-Ethyl-1-Hexanol	•					
51		Isomer of octanol [1-Octanol]		•				
52		Isomer of octanol [1-Octanol]		•	•	•	•	•
53		Unidentified C13 H28 O [1-Tridecanol]						
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]						
55		Isomer of Octen-ol [3-Octen-2-ol]						•
56	Saturated Aldehyde	Unidentified C5.H10 O [Pentanal]	•	•	•	•	•	•
57		Unidentifed C6.H12.O [Hexanal]	•	•	•	•	•	•
58		C7 Aldehyde [Heptanal]	•	•	•	•	•	•
59		Nonanal	•	•	•	•	•	•
60		Decanal		•	•	•	•	•
61	Unsaturated Aldehyde	2-Methyl-propenal						
62		Isomer of Hexenal [2-Hexenal]				•	•	•
63		Isomer of Hexenal [2-Hexenal]	•	•		•	•	
64		C7 Unsat. aldehyde [2-Heptenal]	•	•	•	•	•	•
65		C7 Unsat. aldehyde [2-Heptenal]	•			•	•	•
66		2,4-Heptadienal			•	•		•

Table A-1 (concluded)

		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
67		2,4-Nonadienal	•	•	•			
68		Isomer of decenal [2-Decenal]						
69		Isomer of decenal [2-Decenal]	•	•	•			•
70		Unsat. aldehyde [2-Decenal]	•	•	•	•	•	•
71		Unsat. aldehyde [2-Decenal]	•			•	•	•
72		Unsat. aldehyde [2-Decenal]	•	•	•	•	•	•
73		Diene aldehyde [2,4-Decadienal]				•		
74		Diene aldehyde [2,4-Decadienal]	•	•	•	•		
75		Diene aldehyde [2,4-Dodecadienal]					•	•
76	Saturated Ketone	C7 Ketone [2-Heptanone]	•	•		•	•	•
77		4-Heptanone		•	•		•	•
78		Unidentified C7.H12.O [2,2,3-Trimethyl-cyclobutanone]					•	
79		C8 Ketone [3-Octanone]						
80		Sat. ketone [2-Decanone]						
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]						
82		C8 Ketone [3-Octen-1-one]		•	•	•	•	•
83		3,5-Octadien-2-one						
84		C9 Unsat ketone [3-Nonen-2-one]	•		•	•		•
85	Saturated Ether	Dimethoxy methane						
86	Saturated Ester	Propanoic acid, ethyl ester					•	•
87		C5 Methyl ester [Butanoic acid, methyl ester]				•		
88		Propanoic acid, propyl ester						•
89		Pentanoic acid, methyl ester						
90		C7 Methyl ester [Hexanoic acid, methyl ester]	•	•	•	•	•	•
91		3-Methyl butanoic acid, ethyl ester			•			
92		Propanoic acid, butyl ester						
93		*2-Methyl propanoic acid, 1-methylethyl ester*						
94		Acetic acid, pentyl ester						
95		2-Methyl butanoic acid, ethyl ester						
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]				•		•
97		Acetic acid, hexyl ester		•			•	
98		C8 Ester [3-Methyl butanoic acid, propyl ester]						
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]						
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]						
101		Octanoic acid, methyl ester	•	•		•		•
102		Hexanoic acid, 1-methylethyl ester						
103		Butanoic acid, pentyl ester			•	•	•	
104		Hexanoic acid, 2-methylpropyl ester						
105		Octanoic acid, ethyl ester		•	•	•	•	•
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]				•		
107		C11 Ester [Hexanoic acid, pentyl ester]	•				•	
108		C11 Ester [4-Methyl pentanoic acid, pentyl ester]			•			
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]						
110		Isomer of octanoic acid [3-Methyl-butyl ester]	•	•		•	•	•
111	Unsaturated Ester	3-Octen-1-ol, acetate						
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]				•		
113		3-Bromo-Pentane	•	•				
114		Brominated alkane ≥ C7 [1-Bromo-heptane]						
115		Dichlorobutane [1,4-dichlorobutane]						
116		2-Bromo-2-chloro-1,1,1,trifluoro-ethane				•	•	•
117	Phenol	Isomer of ethyl-phenol [4-Ethyl-phenol]			•			
118	Heterocycle	Unidentified C9 H14.O [2-Pentyl-furan]	•	•	•		•	
119	Sulfide	Dimethyl disulfide					•	•
120		Dimethyl trisulfide						
121	Organo-Silicon	Decamethyl-cyclopentasiloxane		•	•	•	•	•

(a) Tentative compound identification is based on search vs the NBS mass spectral library Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table A-2. Compounds Identified in the Volatile Organic Analysis Data Set - South Census Region

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)									
I.S.	Internal Standard	Bromochloropropane - Internal Standard	•	• •	• •	• •	• • • •	• • • •	•	• •	•
1	Carbon Dioxide	Carbon dioxide	•	• •	• •	• •	• • • •	• • • •	•	• •	•
2	Alkane	2-Methyl-butane		•	•	•	•	• •			
3		Unidentified C5.H10 [Cyclopentane]	•			•				•	•
4		C3 Substituted cyclopropane [Propyl-cyclopropane]		•		•	• • •	•		•	
5		C3 Substituted cyclopropane [Propyl-cyclopropane]		•	• •	•	• • •	• • • •			
6		2,3-Dimethyl-hexane	•	•	• •		• • • •	• • •		• •	
7		1,2-Diethyl-cyclobutane				• •	•				
8		Alkane ≥ C10 [Decane]	•		• •		•	• •			•
9		C10 Alkane [2-Methyl-nonane]									
10		2,2,3,3-Tetramethyl-hexane			•			•		•	
11		Sat alkane ≥ C11 [2-Methyl-decane]		•		•	•			•	
12		Alkyl substituted hexane [Pentyl-cyclohexane]									
13		2,2-Dimethyl-decane		•		• •	•				•
14		C13 Alkane [3,3-Dimethyl-undecane]									
15		Alkane [6-Ethyl-2-methyl-decane]							•	•	
16		Alkane [2,6,7-Trimethyl-decane]	•	•	• •	•	• • • •	• •		•	•
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]									
18		C13 Alkane [2,2,7-Trimethyl-decane]		•		•	• •	• •			
19		3,3,8-Trimethyl-decane									
20		Alkane [6-Methyl-tridecane]								•	
21	Alkene	C5 Alkane [1-Pentene]	•					• •			•
22		1-Hexene	•			•			•	•	•
23		Unidentified C6 H12 [1-Hexene]	•	•	• •	•	•	•	•	• •	•
24		3-Methyl-1,4-heptadiene						•			
25		1,6-Octadiene									
26		1,3,6-Octatriene				•					
27		Unidentified C8 H12 [3-Ethylidene-1-methyl-cyclopentene]									
28		1-Nonene		•		•		•		•	
29		3-Ethyl-2-methyl-1,3-hexadiene	•	• •	• •	• •	• • • •	• • • •	•	• •	•
30		C10 Ringed alkane [1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-ene]	•	• •	• •	• •	• • • •	• • • •	•	• •	•
31		1-Methyl-4-(1-methylethenyl)-cyclohexene									
32		7-(1-Methylethylidene)-bicyclo[4.1 0] heptane									
33		C11 Alkene [1-Undecene]		•			•		•		
34		C11 Alkene [1-Ethenyl-2-hexenyl-cyclopropane]			•						
35		Isomer of Undecen-3-yne [5-Undec-3-yne]		•	• •	•		• •			
36		Isomer of Undecen-3-yne [5-Undec-3-yne]	•	•	• •	•	• • •		•	• •	•
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]	•	• •	• •	•	• • • •	• • •	•	• •	•
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]					• •	•	•	• •	•
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]					•	•			
40		C3 Alkyl benzene [1-Methylethyl-benzene]									
41		Propyl-benzene					• • • •	• •			
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]					• •				
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]					•				
44		1-Methyl-3-(1-methylethyl-) benzene									
45		Naphthalene								•	
46		1-Ethylpropyl-benzene									
47	Saturated Alcohol	3-Methyl-1-butanol		• •	• •		• • • •	•		•	
48		1-Hexanol									
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]									•
50		2-Ethyl-1-Hexanol					•			•	
51		Isomer of octanol [1-Octanol]			•	•	• •	•		•	•
52		Isomer of octanol [1-Octanol]	•	• •		•	•	•	•	•	•
53		Unidentified C13 H28 O [1-Tridecanol]									
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]					•	•			
55		Isomer of Octen-ol [3-Octen-2-ol]		•	• •			•		•	
56	Saturated Aldehyde	Unidentified C5 H10 O [Pentanal]	•	• •	• •	• •	• • • •	• • • •	•	• •	•
57		Unidentfied C6.H12 O [Hexanal]	•	• •	• •	• •	• • • •	• • • •	•	• •	
58		C7 Aldehyde [Heptanal]	•	• •	• •	• •	• • • •	• • • •	•	• •	•
59		Nonanal	•	• •	• •	• •	• • • •	• • • •	•	• •	•
60		Decanal	•	• •	• •	• •	• • • •	• • •	•	• •	•
61	Unsaturated Aldehyde	2-Methyl-propenal				•					
62		Isomer of Hexenal [2-Hexenal]		•	•	• •	•	• • •			
63		Isomer of Hexenal [2-Hexenal]	•	• •	• •	• •		• •	•		
64		C7 Unsat aldehyde [2-Heptenal]	•	• •	• •	• •	• • • •	• • • •	•	• •	•
65		C7 Unsat aldehyde [2-Heptenal]	•	•	• •			•		• •	•
66		2,4-Heptadienal		•	•	•	•	• • •		•	•

Table A-2 (concluded)

Index	Compound Class	Compound Name (a)	CENSUS REGION			SOUTH					
			CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL	
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
67		2,4-Nonadienal		•	•	•	•	• •	• •	•	•	
68		Isomer of decenal [2-Decenal]					•					
69		Isomer of decenal [2-Decenal]			•	•	• •	• •	•			
70		Unsat. aldehyde [2-Decenal]		•	•	•	•	• • •	• • •	•	• •	•
71		Unsat. aldehyde [2-Decenal]			•	•	• •	• • • •	• • •		•	
72		Unsat. aldehyde [2-Decenal]		•	• •	• •	• •	• • • •	• • •	•	• •	•
73		Diene aldehyde [2,4-Decadienal]										
74		Diene aldehyde [2,4-Decadienal]					•		•	•	• •	•
75		Diene aldehyde [2,4-Dodecadienal]		•	•	• •	•	• • • •	• •			
76	Saturated Ketone	C7 Ketone [2-Heptanone]			•	• •	•	• • • •	• • • •	•	•	•
77		4-Heptanone		•	•	• •	• •	• •	•	•	•	
78		Unidentified C7.H12.O [2,2,3-Trimethyl-cyclobutanone]						•	•			
79		C8 Ketone [3-Octanone]										
80		Sat. ketone [2-Decanone]										
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]			•	•		•	• •		•	
82		C8 Ketone [3-Octen-1-one]		•	•	•	• •	• • •	• •	•	•	•
83		3,5-Octadien-2-one					•	•	•	•	•	
84		C9 Unsat. ketone [3-Nonen-2-one]		•			•	•	• •	•	•	
85	Saturated Ether	Dimethoxy methane										
86	Saturated Ester	Propanoic acid, ethyl ester			•	•		• • •	• • • •		• •	•
87		C5 Methyl ester [Butanoic acid, methyl ester]							•			
88		Propanoic acid, propyl ester							•		•	
89		Pentanoic acid, methyl ester										
90		C7 Methyl ester [Hexanoic acid, methyl ester]		•	• •	• •	• •	• • • •	• • • •	•	• •	
91		3-Methyl butanoic acid, ethyl ester							•	•	• •	•
92		Propanoic acid, butyl ester										•
93		2-Methyl propanoic acid, 1-methylethyl ester						•			•	
94		Acetic acid, pentyl ester							•			
95		2-Methyl butanoic acid, ethyl ester							• •		•	
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]						•	• •			
97		Acetic acid, hexyl ester		•	•	•	•	•	• •	•		•
98		C8 Ester [3-Methyl butanoic acid, propyl ester]							•		•	•
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]										
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]									• •	
101		Octanoic acid, methyl ester					• •	•	• •	• •	•	
102		Hexanoic acid, 1-methylethyl ester						•				
103		Butanoic acid, pentyl ester		•	•		• •	• •			•	
104		Hexanoic acid, 2-methylpropyl ester							•			
105		Octanoic acid, ethyl ester			•		• •	• •	• •	•	• •	•
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]					•	•	• •			
107		C11 Ester [Hexanoic acid, pentyl ester]		•	•		•	• •	• •	•	•	•
108		C11 Ester [4-Methyl pentanoic acid, pentyl ester]							• •			
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]									•	
110		Isomer of octanoic acid [3-Methyl-butyl ester]			•	•	• •	•	• •			•
111	Unsaturated Ester	3-Octen-1-ol, acetate										
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]				•						
113		3-Bromo-Pentane										
114		Brominated alkane ≥ C7 [1-Bromo-heptane]									•	
115		Dichlorobutane [1,4-dichlorobutane]							•			
116		2-Bromo-2-chloro-1,1,trifluoro-ethane		•	•	•					•	•
117	Phenol	Isomer of ethyl-phenol [4-Ethyl-phenol]					• •			•		
118	Heterocycle	Unidentified C9 H14.O [2-Pentyl-furan]		•		•	• •		•	•	• •	•
119	Sulfide	Dimethyl disulfide			•		•	• • • •	• • • •		• •	•
120		Dimethyl trisulfide										
121	Organo-Silicon	Decamethyl-cyclopentasiloxane		•	• •	•		• • •	• • •	•	• •	•

(a) Tentative compound identification is based on search vs the NBS mass spectral library Confirmation has not been achieved by comparing retention with an authentic standard In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets

Table A-3. Compounds Identified in the Volatile Organic Analysis Data Set - North Central Census Region

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
I.S	Internal Standard	Bromochloropropane - Internal Standard	• •	• • •	• • •	•	•	• •
1	Carbon Dioxide	Carbon dioxide	• •	• • •	• •	•	•	• •
2	Alkane	2-Methyl-butane	•	•	•	•		
3		Unidentified C5 H10 [Cyclopentane]	•					
4		C3 Substituted cyclopropane [Propyl-cyclopropane]	•	• •	• •			
5		C3 Substituted cyclopropane [Propyl-cyclopropane]	•	• •	• •			•
6		2,3-Dimethyl-hexane		• • •	• • •	•	•	
7		1,2-Diethyl-cyclobutane						
8		Alkane ≥ C10 [Decane]	•	• •	• •	•		•
9		C10 Alkane [2-Methyl-nonane]	•		•		•	•
10		2,2,3,3-Tetramethyl-hexane			• •			
11		Sat. alkane ≥ C11 [2-Methyl-decane]		•			•	
12		Alkyl substituted hexane [Pentyl-cyclohexane]						
13		2,2-Dimethyl-decane	•	•	• • •			•
14		C13 Alkane [3,3-Dimethyl-undecane]			•			
15		Alkane [6-Ethyl-2-methyl-decane]						•
16		Alkane [2,6,7-Trimethyl-decane]			• • •	•		
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]						•
18		C13 Alkane [2,2,7-Trimethyl-decane]	•	•	• •			
19		3,3,8-Trimethyl-decane			•			
20		Alkane [6-Methyl-tridecane]	•		•			•
21	Alkene	C5 Alkane [1-Pentene]						
22		1-Hexene	•	• •				•
23		Unidentified C6.H12 [1-Hexene]	•	• •	• •	•		•
24		3-Methyl-1,4-heptadiene			•			•
25		1,6-Octadiene	•			•		
26		1,3,6-Octatriene	•		• •			•
27		Unidentified C8 H12 [3-Ethylidene-1-methyl-cyclopentene]						
28		1-Nonene				•	•	
29		3-Ethyl-2-methyl-1,3-hexadiene	• •	• • •	• • •	•	•	
30		C10 Ringed alkane [1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-ene]	•	• • •	• • •	•	•	• •
31		1-Methyl-4-(1-methylethenyl)-cyclohexene	•					
32		7-(1-Methylethylidene)-bicyclo[4.1.0] heptane						
33		C11 Alkene [1-Undecene]		•				
34		C11 Alkene [1-Ethenyl-2-hexenyl-cyclopropane]						
35		Isomer of Undecen-3-yne [5-Undec-3-yne]		• •	• •	•		•
36		Isomer of Undecen-3-yne [5-Undec-3-yne]	• •	•	• •	•	•	•
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]	• •	• • •	• • •	•	•	• •
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]	•	• • •	• •			• •
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]						
40		C3 Alkyl benzene [1-Methylethyl-benzene]					•	
41		Propyl-benzene					•	•
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]						•
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]						
44		1-Methyl-3-(1-methylethyl-) benzene			•		•	
45		Naphthalene						
46		1-Ethylpropyl-benzene					•	
47	Saturated Alcohol	3-Methyl-1-butanol	• •	• •	• • •	•	•	• •
48		1-Hexanol		•				
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]						
50		2-Ethyl-1-Hexanol		• •	•			
51		Isomer of octanol [1-Octanol]	• •		•			
52		Isomer of octanol [1-Octanol]	• •	• •	• •			
53		Unidentified C13 H28 O [1-Tridecanol]						•
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]						
55		Isomer of Octen-ol [3-Octen-2-ol]	•	• •	• •		•	•
56	Saturated Aldehyde	Unidentified C5 H10 O [Pentanal]	• •	• • •	• • •	•	•	• •
57		Unidentified C6.H12.O [Hexanal]	• •	• • •	• • •	•	•	• •
58		C7 Aldehyde [Heptanal]	• •	• • •	• • •	•	•	• •
59		Nonanal	• •	• • •	• • •	•	•	• •
60		Decanal	• •	• • •	• •	•	•	• •
61	Unsaturated Aldehyde	2-Methyl-propenal						
62		Isomer of Hexenal [2-Hexenal]		•	•			•
63		Isomer of Hexenal [2-Hexenal]		• •	• •	•		•
64		C7 Unsat aldehyde [2-Heptenal]	• •	• • •	• • •	•	•	• •
65		C7 Unsat aldehyde [2-Heptenal]	• •	•	• • •			•
66		2,4-Heptadienal	•	• •	• • •		•	• •

Table A-3 (concluded)

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
67		2,4-Nonadienal	• •	•	•	•	•	
68		Isomer of decenal [2-Decenal]						
69		Isomer of decenal [2-Decenal]	•	• •	• •	•	•	•
70		Unsat. aldehyde [2-Decenal]	•	• •	•			
71		Unsat. aldehyde [2-Decenal]	•	• •	•	•	•	
72		Unsat. aldehyde [2-Decenal]	• •	• • •	• • •	•	•	• •
73		Diene aldehyde [2,4-Decadienal]						
74		Diene aldehyde [2,4-Decadienal]	•					
75		Diene aldehyde [2,4-Dodecadienal]	•	• •	• • •		•	•
76	Saturated Ketone	C7 Ketone [2-Heptanone]	• •	• •	• • •		•	• •
77		4-Heptanone	• •	• • •	• • •	•	•	• •
78		Unidentified C7.H12.O [2,2,3-Trimethyl-cyclobutanone]		• •				
79		C8 Ketone [3-Octanone]						•
80		Sat. ketone [2-Decanone]				•		
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]		•				
82		C8 Ketone [3-Octen-1-one]	• •	• •	• • •	•	•	• •
83		3,5-Octadien-2-one		•		•		
84		C9 Unsat. ketone [3-Nonen-2-one]	• •	•	•	•		
85	Saturated Ether	Dimethoxy methane						
86	Saturated Ester	*Propanoic acid, ethyl ester*	• •	• • •	• • •		•	• •
87		C5 Methyl ester [Butanoic acid, methyl ester]			•			
88		Propanoic acid, propyl ester		•	•		•	•
89		Pentanoic acid, methyl ester			•			
90		C7 Methyl ester [Hexanoic acid, methyl ester]	•	• • •	• • •	•	•	•
91		3-Methyl butanoic acid, ethyl ester	• •	• •	• • •	•	•	•
92		Propanoic acid, butyl ester			•			
93		2-Methyl propanoic acid, 1-methylethyl ester					•	•
94		Acetic acid, pentyl ester	•					
95		2-Methyl butanoic acid, ethyl ester		•	•			
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]	•		•			•
97		Acetic acid, hexyl ester		•	•	•		•
98		C8 Ester [3-Methyl butanoic acid, propyl ester]	•	• •				•
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]					•	
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]			•		•	
101		Octanoic acid, methyl ester	• •	• •	• •	•		
102		Hexanoic acid, 1-methylethyl ester						
103		Butanoic acid, pentyl ester		• • •		•		
104		Hexanoic acid, 2-methylpropyl ester						
105		Octanoic acid, ethyl ester	• •	• • •	• • •	•	•	• •
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]		• •	• •			•
107		C11 Ester [Hexanoic acid, pentyl ester]	•	• •	• •			
108		*C11 Ester [4-Methyl pentanoic acid, pentyl ester]*	•	• •				
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]		• •				
110		Isomer of octanoic acid [3-Methyl-butyl ester]	• •	•	• •			•
111	Unsaturated Ester	3-Octen-1-ol, acetate	•					
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]				•		
113		3-Bromo-Pentane						•
114		Brominated alkane ≥ C7 [1-Bromo-heptane]				•		
115		Dichlorobutane [1,4-dichlorobutane]					•	
116		2-Bromo-2-chloro-1,1,trifluoro-ethane		• •	•	•	•	• •
117	*Phenol*	*Isomer of ethyl-phenol [4-Ethyl-phenol]*	•					
118	Heterocycle	Unidentified C9 H14.O [2-Pentyl-furan]	• •	• •	•	•	•	•
119	Sulfide	Dimethyl disulfide	• •	• • •	• • •		•	• •
120		Dimethyl trisulfide			•			•
121	Organo-Silicon	Decamethyl-cyclopentasiloxane		• •	• • •			• •

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets

Table A-4. Compounds Identified in the Volatile Organic Analysis Data Set - Northeast Census Region

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
I S	Internal Standard	Bromochloropropane - Internal Standard	• •	• •	• •	•	•	•
1	Carbon Dioxide	Carbon dioxide	• •	• •	• •	•	•	•
2	Alkane	2-Methyl-butane	•	•	•	•	•	
3		Unidentified C5.H10 [Cyclopentane]					•	
4		C3 Substituted cyclopropane [Propyl-cyclopropane]			•			
5		C3 Substituted cyclopropane [Propyl-cyclopropane]	•	•	• •		•	
6		2,3-Dimethyl-hexane	• •	•	•	•	•	•
7		1,2-Diethyl-cyclobutane						
8		Alkane ≥ C10 [Decane]	•	•				
9		C10 Alkane [2-Methyl-nonane]	•				•	•
10		2,2,3,3-Tetramethyl-hexane	•	•	• •			
11		Sat. alkane ≥ C11 [2-Methyl-decane]						
12		Alkyl substituted hexane [Pentyl-cyclohexane]						
13		2,2-Dimethyl-decane	•					
14		C13 Alkane [3,3-Dimethyl-undecane]						
15		Alkane [6-Ethyl-2-methyl-decane]		•	•		•	
16		Alkane [2,6,7-Trimethyl-decane]		•	•			•
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]						
18		C13 Alkane [2,2,7-Trimethyl-decane]						
19		3,3,8-Trimethyl-decane						
20		Alkane [6-Methyl-tridecane]						
21	Alkene	C5 Alkene [1-Pentene]						
22		1-Hexene	•		•			
23		Unidentified C6.H12 [1-Hexene]	•	• •	• •			
24		3-Methyl-1,4-heptadiene						
25		1,6-Octadiene	•					
26		1,3,6-Octatriene		•	•			•
27		Unidentified C8 H12 [3-Ethylidene-1-methyl-cyclopentene]						
28		1-Nonene		•	•			
29		3-Ethyl-2-methyl-1,3-hexadiene	• •	• •	• •	•	•	•
30		C10 Ringed alkane [1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-ene]	• •	• •	• •		•	•
31		1-Methyl-4-(1-methylethenyl)-cyclohexene						
32		7-(1-Methylethylidene)-bicyclo[4.1.0] heptane						
33		C11 Alkene [1-Undecene]						
34		C11 Alkene [1-Ethenyl-2-hexenyl-cyclopropane]						
35		Isomer of Undecen-3-yne [5-Undec-3-yne]	•	•				
36		Isomer of Undecen-3-yne [5-Undec-3-yne]	•	• •	• •		•	•
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]	• •	• •	• •	•	•	•
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]						•
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]						
40		C3 Alkyl benzene [1-Methylethyl-benzene]						
41		Propyl-benzene						
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]						
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]						
44		1-Methyl-3-(1-methylethyl-) benzene						
45		Naphthalene						
46		1-Ethylpropyl-benzene						
47	Saturated Alcohol	3-Methyl-1-butanol	• •	• •	•			
48		1-Hexanol						
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]		•				
50		2-Ethyl-1-Hexanol						•
51		Isomer of octanol [1-Octanol]				•		
52		Isomer of octanol [1-Octanol]	• •	• •	• •	•		•
53		Unidentified C13 H28 O [1-Tridecanol]						
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]						
55		Isomer of Octen-ol [3-Octen-2-ol]	• •					
56	Saturated Aldehyde	Unidentified C5 H10.O [Pentanal]	• •	• •	• •	•	•	•
57		Unidentifed C6.H12.O [Hexanal]	• •	• •	• •	•	•	•
58		C7 Aldehyde [Heptanal]	• •	• •	• •	•	•	•
59		Nonanal	• •	• •	• •	•	•	•
60		Decanal	• •	• •	• •	•	•	•
61	Unsaturated Aldehyde	2-Methyl-propenal						
62		Isomer of Hexenal [2-Hexenal]	•	•	•	•		•
63		Isomer of Hexenal [2-Hexenal]	• •	• •	• •	•	•	•
64		C7 Unsat aldehyde [2-Heptenal]	• •	• •	• •	•	•	•
65		C7 Unsat. aldehyde [2-Heptenal]	• •	•		•		
66		2,4-Heptadienal	• •	• •	• •	•	•	

Table A-4 (concluded)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
67		2,4-Nonadienal	• •	• •	• •	•	•	•
68		Isomer of decenal [2-Decenal]						
69		Isomer of decenal [2-Decenal]		• •	• •		•	•
70		Unsat. aldehyde [2-Decenal]	• •	•		•		
71		Unsat. aldehyde [2-Decenal]	• •	•	•	•	•	•
72		Unsat. aldehyde [2-Decenal]	• •	• •	• •	•	•	•
73		Diene aldehyde [2,4-Decadienal]						
74		Diene aldehyde [2,4-Decadienal]	•	•	• •			
75		Diene aldehyde [2,4-Dodecadienal]	• •			•	•	•
76	Saturated Ketone	C7 Ketone [2-Heptanone]	• •	•	•	•	•	
77		4-Heptanone	• •	• •	• •	•		•
78		Unidentified C7 H12 O [2,2,3-Trimethyl-cyclobutanone]				•	•	
79		C8 Ketone [3-Octanone]						
80		Sat. ketone [2-Decanone]						
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]		•	•			
82		C8 Ketone [3-Octen-1-one]	• •	• •	•	•	•	•
83		3,5-Octadien-2-one						
84		C9 Unsat. ketone [3-Nonen-2-one]	•	•	• •	•	•	•
85	Saturated Ether	Dimethoxy methane						•
86	Saturated Ester	Propanoic acid, ethyl ester	• •	•	•			
87		C5 Methyl ester [Butanoic acid, methyl ester]						
88		Propanoic acid, propyl ester						
89		Pentanoic acid, methyl ester						
90		C7 Methyl ester [Hexanoic acid, methyl ester]	• •	• •	•	•	•	•
91		3-Methyl butanoic acid, ethyl ester						
92		Propanoic acid, butyl ester						
93		2-Methyl propanoic acid, 1-methylethyl ester						
94		Acetic acid, pentyl ester		•				
95		2-Methyl butanoic acid, ethyl ester						
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]	• •	•				
97		Acetic acid, hexyl ester	•					
98		C8 Ester [3-Methyl butanoic acid, propyl ester]						
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]						
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]						
101		Octanoic acid, methyl ester	• •	• •	•	•	•	•
102		Hexanoic acid, 1-methylethyl ester						
103		Butanoic acid, pentyl ester		•	•	•		
104		Hexanoic acid, 2-methylpropyl ester						
105		Octanoic acid, ethyl ester	• •	• •	• •	•	•	
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]			•	•		
107		C11 Ester [Hexanoic acid, pentyl ester]	• •	•	•	•	•	•
108		C11 Ester [4-Methyl pentanoic acid, pentyl ester]						
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]						
110		Isomer of octanoic acid [3-Methyl-butyl ester]		•	•	•	•	
111	Unsaturated Ester	3-Octen-1-ol, acetate						
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]						
113		3-Bromo-Pentane						
114		Brominated alkane ≥ C7 [1-Bromo-heptane]						
115		Dichlorobutane [1,4-dichlorobutane]						
116		2-Bromo-2-chloro-1,1,1-trifluoro-ethane					•	
117	Phenol	Isomer of ethyl-phenol [4-Ethyl-phenol]			•			
118	Heterocycle	Unidentified C9.H14.O [2-Pentyl-furan]	• •	•	• •	•	•	•
119	Sulfide	Dimethyl disulfide				•		
120		Dimethyl trisulfide						
121	Organo-Silicon	Decamethyl-cyclopentasiloxane	•					•

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

APPENDIX B

DOT MATRIX TABLE FOR COMPOUNDS IDENTIFIED IN THE 6% FLORISIL SEMIVOLATILE ORGANIC ANALYSIS DATA SET; SEMIVOLATILE ORGANIC COMPOUNDS VS. CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table B-1. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set - West Census Region

		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
I.S	Internal Standard	D10-Anthracene	•	•	•	•		•
1	Alkane	2,6,10,14-Tetramethyl-hexadecane						•
2		2,6,10,14-Tetramethyl-nonadecane						
3		Alkane ≥ C18 [2,6,10,14,19-Pentamethyl eicosane]						
4	Saturated Ketone	1,2,4-Cyclopentatrione	•					
5	Saturated Ester	12-Methyl-tridecanoic acid, methyl ester		•				
6		Nonanedioic acid, bis(1-methylpropyl) ester						•
7		9-Octadecenoic acid, ethyl ester		•		•		•
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide						
9		Dimethyl trisulfide						
10	Dipeptide	Glycine, anhydride	•			•		
11	Alkene	C5 Substituted naphthalene [Octahydro-tetramethyl-1H-cyclopropan[A]naphthalene]				•		•
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene..						
13		5-Ethylidene-1-methyl-cycloheptene	•	•	•	•		•
14		C30 Unsat. hydrocarbon [Hexamethyl-tetracosahexaene]						
15		Ylangene						•
16	Unsaturated Aldehyde	2-Butyl-2-octenal						
17		Unidentified C9.H8.O [Cyclooctatetraene-1-carboxaldehyde]						
18	Unsaturated Amine	N,N-Dimethyl-3-octen-2-amine		•				
19	Unsaturated Ketone	6,10-Dimethyl-5,9-undecadien-2-one		•				
20	Arene	C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
21		2-Ethyl-1,3-dimethyl-benzene						
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]						
23		C4 Alkyl benzene [Diethyl benzene]						
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]						
25		Cyclohexyl-benzene	•	•	•			
26		C3 Alkyl benzene [1,3,5 Trimethyl-benzene]				•		
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]						
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]						
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene						
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene			•			
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]						
34		2-Methyl-naphthalene						
35		Unidentified C10.H12 [2,3-Dihydro-1-methyl-1H-Indene]						
36		Unidentified C15.H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]						
37		Unsat. C4 alkyl benzene [4-Ethenyl-1,2-dimethyl-benzene]						
38		2-Propenyl-benzene						
39	Aromatic Aldehyde	Benzaldehyde	•			•		
40		4-Pentyl-benzaldehyde		•				
41	Aromatic Ketone	Unidentified C9 H8 O [2,3-Dihydro-1H-Inden-1-one]		•				
42		1-Phenyl-ethanone		•				
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol						
44		[1,1'-Biphenyl]-2-ol			•			
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol			•			•
46	Aromatic Ester	Benzenepropanoic acid, ethyl ester						
47	Aromatic Ether	1,1'-Oxybis-benzene		•	•			•
48		1-Methoxy-4-(1-propenyl)-benzene						
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]			•			•
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime		•	•	•		•
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester						
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole	•			•		
53		Unidentified C8.H7.N [1H-Indole]						
54		Unidentified C8 H7 N [Indolizine]			•			
55		2-(Methylthio)-benzothiazole						
56		5-(2-Propenyl)-1,3-Benzodioxole						
57		1,4-Dioxaspiro[4.6]undec-7-ene						
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one	•			•		

Table B-1 (concluded)

		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
59		5,5-Diethyl-2,4-imidazolidinedione						
60	Steroid	(5.Alpha.)-cholest-3-ene						
61		(3.Beta.)- Cholest-5-en-3-ol acetate						
62		Cholest-5-en-3-ol- (3.beta.)-, propanoate						
63		Cholest-5-en-3-one			•			
64		Cholest-5-ene			•			
65		(5.Alpha.)-cholest-7-en-3-one						
66		Cholesta-3,5-dien-7-one						
67		(3 Beta.)-cholesta-4,6-dien-3-ol benzoate			•			
68		Cholesterol			•			
69		Isomer of cholestenol [5-cholesten-3-ol propionate]		•	•			•
70		Pregnane, (5.alpha.)-						•
71		(3 Beta)-26,27-dinorergost-5-en-3-ol benzoate						
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene						
73		(4-Chlorophenyl)phenyl-methanone		•				
74		2-Chloro-6-methyl-benzonitrile						
75		Dichlorobenzene [1,3-dichloro-benzene]				•		
76		Lindane						
77		DDD						
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane		•	•	•		•
79		Octamethyl-cyclotetrasiloxane	•		•	•		•
80		Isomer of decamethyl-cyclopentasiloxane						•
81	Phthalate	Diheptyl phthalate						•

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table B-2. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set - South Census Region

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)									
I.S.	Internal Standard	D10-Anthracene	•	•	• •	• •	• • • •	• • • •	•	• •	•
1	Alkane	2,6,10,14-Tetramethyl-hexadecane	•		• •	• •	•	• • •	•	•	•
2		2,6,10,14-Tetramethyl-nonadecane			•		• •				
3		Alkane ≥ C18 [2,6,10,14,19-Pentamethyl eicosane]			•			•			
4	Saturated Ketone	1,2,4-Cyclopentatrione									
5	Saturated Ester	12-Methyl-tridecanoic acid, methyl ester				•					
6		Nonanedioic acid, bis(1-methylpropyl) ester									
7		9-Octadecenoic acid, ethyl ester			•	•	• • •	• • •	•	• •	•
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide			•			•			
9		Dimethyl trisulfide									
10	Dipeptide	Glycine, anhydride									
11	Alkene	C5 Substituted naphthalene [Octahydro-tetramethyl-1H-cyclopropan[A]naphthalene]						• •			
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene...									
13		5-Ethylidene-1-methyl-cycloheptene	•	•	• •	• •	• •	• • •		•	•
14		C30 Unsat. hydrocarbon [Hexamethyl-tetracosahexaene]									
15		Ylangene									
16	Unsaturated Aldehyde	2-Butyl-2-octenal				•					
17		Unidentified C9 H8 O [Cyclooctatetraene-1-carboxaldehyde]									
18	Unsaturated Amine	N,N-Dimethyl-3-octen-2-amine									
19	Unsaturated Ketone	6,10-Dimethyl-5,9-undecadien-2-one									
20	Arene	C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						•			
21		2-Ethyl-1,3-dimethyl-benzene		•		•	• •	• • •			•
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]					•	• • •			•
23		C4 Alkyl benzene [Diethyl benzene]				•	•	•			•
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]			•	•	•	•			•
25		Cyclohexyl-benzene									
26		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]				•		•			
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						•			
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]						•			
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]			•	•	•	•			
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]			•	• •		•			•
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene				•		•			
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene		•		•		•			•
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]				•	•	• • •		•	•
34		2-Methyl-naphthalene			•						
35		Unidentified C10 H12 [2,3-Dihydro-1-methyl-1H-Indene]					•				
36		Unidentified C15.H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]			•						
37		Unsat C4 alkyl benzene [4-Ethenyl-1,2-dimethyl-benzene]				•	•	• •			•
38		2-Propenyl-benzene				•		• •			
39	Aromatic Aldehyde	Benzaldehyde	•			• •			•		
40		4-Pentyl-benzaldehyde									
41	Aromatic Ketone	Unidentified C9.H8.O [2,3-Dihydro-1H-Inden-1-one]									
42		1-Phenyl-ethanone									
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol		•	•		•	• •		•	
44		[1,1'-Biphenyl]-2-ol									
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol									
46	Aromatic Ester	Benzenepropanoic acid, ethyl ester						•		•	
47	Aromatic Ether	1,1'-Oxybis-benzene	•	•	• •	• •	• • • •	• •		• •	•
48		1-Methoxy-4-(1-propenyl)-benzene									
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]						•			
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime	•	•	•	• •	• • •	• • • •	•	• •	•
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester						•			
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole				•		•	•		•
53		Unidentified C8 H7.N [1H-Indole]			•		•	• •			
54		Unidentified C8 H7 N [Indolizine]					•	•			
55		2-(Methylthio)-benzothiazole									
56		5-(2-Propenyl)-1,3-Benzodioxole									
57		1,4-Dioxaspiro[4 6]undec-7-ene									
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one									
59		5,5-Diethyl-2,4-imidazolidinedione									
60	Steroid	(5.Alpha.)-cholest-3-ene			•		• •	• • •			
61		(3.Beta.)- Cholest-5-en-3-ol acetate		•							

Table B-2 (concluded)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)									
62		Cholest-5-en-3-ol- (3.beta.)-, propanoate									
63		Cholest-5-en-3-one		•			•				
64		Cholest-5-ene	•	•			•			•	
65		(5.Alpha.)-cholest-7-en-3-one		•							
66		Cholesta-3,5-dien-7-one		•							
67		(3.Beta)-cholesta-4,6-dien-3-ol benzoate		•			•				
68		Cholesterol		•							
69		Isomer of cholestenol [5-cholesten-3-ol propionate]	•	•	• •	• •	• • • •	• • •		• •	•
70		Pregnane, (5.alpha)-						•			
71		(3 Beta.)-26,27-dinorergost-5-en-3-ol benzoate		•							
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene									
73		(4-Chlorophenyl)phenyl-methanone									
74		2-Chloro-6-methyl-benzonitrile									
75		Dichlorobenzene [1,3-dichloro-benzene]	•		•	•		• •			•
76		Lindane	•								
77		DDD	•	•	•	•	• •	•	•		
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane	•	•	• •	•	•	• • •		•	•
79		Octamethyl-cyclotetrasiloxane	•	•	•	• •	•	• •			•
80		Isomer of decamethyl-cyclopentasiloxane									
81	Phthalate	Diheptyl phthalate									

(a) Tentative compound identification is based on search vs. the NBS mass spectral library Confirmation has not been achieved by comparing retention with an authentic standard In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table B-3. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
I.S.	Internal Standard	D10-Anthracene	• •	• • •	• • •	•	•	• •
1	Alkane	2,6,10,14-Tetramethyl-hexadecane	•	• • •	• • •	•		•
2		2,6,10,14-Tetramethyl-nonadecane		•	•			•
3		Alkane ≥ C18 [2,6,10,14,19-Pentamethyl eicosane]			•			
4	Saturated Ketone	1,2,4-Cyclopentatrione						
5	Saturated Ester	12-Methyl-tridecanoic acid, methyl ester			•			
6		Nonanedioic acid, bis(1-methylpropyl) ester						
7		9-Octadecenoic acid, ethyl ester	• •	• •	• • •	•	•	• •
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide	•		• •			
9		Dimethyl trisulfide						•
10	Dipeptide	Glycine, anhydride	•					
11	Alkene	C5 Substituted naphthalene [Octahydro-tetramethyl-1H-cyclopropan[A]naphthalene]						•
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene..						
13		5-Ethylidene-1-methyl-cycloheptene	•	•	• • •	•	•	• •
14		C30 Unsat hydrocarbon [Hexamethyl-tetracosahexaene]					•	
15		Ylangene						
16	Unsaturated Aldehyde	2-Butyl-2-octenal						
17		Unidentified C9 H8 O [Cyclooctatetraene-1-carboxaldehyde]						
18	Unsaturated Amine	N,N-Dimethyl-3-octen-2-amine						
19	Unsaturated Ketone	6,10-Dimethyl-5,9-undecadien-2-one						
20	Arene	C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
21		2-Ethyl-1,3-dimethyl-benzene	•					•
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]						•
23		C4 Alkyl benzene [Diethyl benzene]						•
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]						•
25		Cyclohexyl-benzene						
26		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]						
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]						
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						•
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]			•			•
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene						•
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene						
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]			•			•
34		2-Methyl-naphthalene						
35		Unidentified C10 H12 [2,3-Dihydro-1-methyl-1H-Indene]						
36		Unidentified C15 H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]						
37		Unsat. C4 alkyl benzene [4-Ethenyl-1,2-dimethyl-benzene]						
38		2-Propenyl-benzene						
39	Aromatic Aldehyde	Benzaldehyde	•			•		
40		4-Pentyl-benzaldehyde						
41	Aromatic Ketone	Unidentified C9 H8 O [2,3-Dihydro-1H-Inden-1-one]		•				
42		1-Phenyl-ethanone						
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol			•			
44		[1,1'-Biphenyl]-2-ol						
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol						
46	Aromatic Ester	Benzenepropanoic acid, ethyl ester		•				
47	Aromatic Ether	1,1'-Oxybis-benzene		• •	• • •		•	• •
48		1-Methoxy-4-(1-propenyl)-benzene				•		
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]			• • •			•
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime	• •	• • •	• • •	•	•	• •
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester		•				
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole	•		•			
53		Unidentified C8 H7 N [1H-Indole]						
54		Unidentified C8 H7 N [Indolizine]						
55		2-(Methylthio)-benzothiazole						
56		5-(2-Propenyl)-1,3-Benzodioxole						
57		1,4-Dioxaspiro[4 6]undec-7-ene						
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one	•					
59		5,5-Diethyl-2,4-imidazolidinedione						
60	Steroid	(5 Alpha)-cholest-3-ene			• •			
61		(3 Beta)- Cholest-5-en-3-ol acetate						
62		Cholest-5-en-3-ol- (3 beta)-, propanoate						

Table B-3 (concluded)

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
63		Cholest-5-en-3-one						
64		Cholest-5-ene	•	•	•			•
65		(5.Alpha.)-cholest-7-en-3-one						
66		Cholesta-3,5-dien-7-one						
67		(3.Beta.)-cholesta-4,6-dien-3-ol benzoate						
68		Cholesterol						
69		Isomer of cholestenol [5-cholesten-3-ol propionate]	• •	• • •	• • •	•	•	• •
70		Pregnane, (5.alpha)-						
71		(3.Beta.)-26,27-dinorergost-5-en-3-ol benzoate						
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene		•				
73		(4-Chlorophenyl)phenyl-methanone						
74		2-Chloro-6-methyl-benzonitrile	•					
75		Dichlorobenzene [1,3-dichloro-benzene]		•	• •			•
76		*Lindane*			•			•
77		DDD	•		•			•
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane		• •	• • •			• •
79		Octamethyl-cyclotetrasiloxane		•	•			•
80		Isomer of decamethyl-cyclopentasiloxane						
81	Phthalate	Diheptyl phthalate						

(a) Tentative compound identification is based on search vs the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table B-4. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set - Northeast Census Region

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
IS.	Internal Standard	D10-Anthracene	• •	• •	• •	•	•	•
1	Alkane	2,6,10,14-Tetramethyl-hexadecane			•			•
2		2,6,10,14-Tetramethyl-nonadecane		•	•			
3		Alkane ≥ C18 [2,6,10,14,19-Pentamethyl eicosane]						•
4	Saturated Ketone	1,2,4-Cyclopentatrione						
5	Saturated Ester	12-Methyl-tridecanoic acid, methyl ester				•		
6		Nonanedioic acid, bis(1-methylpropyl) ester						
7		9-Octadecenoic acid, ethyl ester	• •			•		
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide			•			
9		Dimethyl trisulfide						
10	Dipeptide	Glycine, anhydride						
11	Alkene	C5 Substituted naphthalene [Octahydro-tetramethyl-1H-cyclopropan[A]naphthalene]			•			
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene						•
13		5-Ethylidene-1-methyl-cycloheptene	•	• •	• •		•	•
14		C30 Unsat. hydrocarbon [Hexamethyl-tetracosahexaene]						
15		Ylangene						•
16	Unsaturated Aldehyde	2-Butyl-2-octenal			•	•		•
17		Unidentified C9 H8 O [Cyclooctatetraene-1-carboxaldehyde]			•			
18	Unsaturated Amine	N,N-Dimethyl-3-octen-2-amine						
19	Unsaturated Ketone	6,10-Dimethyl-5,9 undecadien-2-one						
20	Arene	C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
21		2-Ethyl-1,3-dimethyl-benzene						
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]						
23		C4 Alkyl benzene [Diethyl benzene]						
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]						
25		Cyclohexyl-benzene						
26		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]						
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]						
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]			•			
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene						
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene						
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]						•
34		2-Methyl-naphthalene						
35		Unidentified C10 H12 [2,3-Dihydro-1-methyl-1H-Indene]						
36		Unidentified C15 H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]						
37		Unsat C4 alkyl benzene [4-Ethenyl-1,2-dimethyl-benzene]						
38		2-Propenyl-benzene						
39	Aromatic Aldehyde	Benzaldehyde	• •			•		
40		4-Pentyl-benzaldehyde						
41	Aromatic Ketone	Unidentified C9 H8 O [2,3-Dihydro-1H-Inden-1-one]		•				
42		1-Phenyl-ethanone						•
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol			•			
44		[1,1'-Biphenyl]-2-ol						•
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol						
46	Aromatic Ester	Benzenepropanoic acid, ethyl ester						
47	Aromatic Ether	1,1'-Oxybis-benzene	•	• •	• •			•
48		1-Methoxy-4-(1-propenyl)-benzene						
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]						
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime	•	•	• •	•	•	•
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester						•
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole	• •			•		
53		Unidentified C8 H7 N [1H-Indole]						
54		Unidentified C8 H7 N [Indolizine]						
55		2-(Methylthio)-benzothiazole						•
56		5-(2-Propenyl)-1,3-Benzodioxole			•			
57		1,4-Dioxaspiro[4.6]undec-7-ene			•			
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one						
59		5,5-Diethyl-2,4-imidazolidinedione						•
60	Steroid	(5.Alpha.)-cholest-3-ene			•			
61		(3.Beta.)- Cholest-5-en-3-ol acetate						
62		Cholest-5-en-3-ol- (3 beta)-, propanoate				•		

Table B-4 (concluded)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
63		Cholest-5-en-3-one						
64		Cholest-5-ene						•
65		(5 Alpha.)-cholest-7-en-3-one						
66		Cholesta-3,5-dien-7-one						
67		(3 Beta.)-cholesta-4,6-dien-3-ol benzoate						
68		Cholesterol						•
69		Isomer of cholestenol [5-cholesten-3-ol propionate]	• •	• •	• •	•	•	•
70		Pregnane, (5.alpha)-	•					•
71		(3 Beta.)-26,27-dinorergost-5-en-3-ol benzoate						
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene						
73		(4-Chlorophenyl)phenyl-methanone						
74		2-Chloro-6-methyl-benzonitrile						
75		Dichlorobenzene [1,3-dichloro-benzene]			•			•
76		Lindane	•		• •			
77		DDD			•			
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane	•	•	• •			•
79		Octamethyl-cyclotetrasiloxane	• •		• •			•
80		Isomer of decamethyl-cyclopentasiloxane						
81	Phthalate	Diheptyl phthalate						

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

APPENDIX C

DOT MATRIX TABLE FOR COMPOUNDS IDENTIFIED IN THE 15/50% FLORISIL SEMIVOLATILE ORGANIC ANALYSIS DATA SET; SEMIVOLATILE ORGANIC COMPOUNDS VS. CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table C-1. Compounds Identified in the 15/50% Florisil Semivolatile Organic Analysis Data Set - West Census Region

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
I.S.	Internal Standard	D10-Anthracene - Internal Standard	•	•	•	•	•	•
1	Alkane	Unidentified C10.H20 [Diethyl cyclohexane]						
2	Saturated Ester	1,7,7-Trimethyl-bicyclo[2 2.1]heptan-2-ol, exo propanoate-						
3		Dodecanoic acid, ethyl ester						
4		Hexanedioic acid,mono(2-ethylhexyl) ester						
5		Alkyl ester [15-Methyl-heptadecanoate]						
6	Saturated Polyfunctional	Ethylhydrazone propionaldehyde						
7		9-Oxo-nonanoic acid, ethyl ester						
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene						
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde						
10		2-Butyl-2-octenal	•		•			
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer						
12		2,4,6-Cycloheptatriene-1-one						
13		5-Undecen-4-one						
14		5-Ethyl-2-methyl-4-heptene-3-one						
15	Unsaturated Polyfuntional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]						
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]						
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]	•		•	•	•	•
18		2-Methoxy-2-octen-4-one						
19	Alkyne	5,5-Dimethyl-3-heptyne						
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]	•	•	•			
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]						
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]						
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						
24		Unidentified C11.H10 [1-Ethylidene-indene]						
25	Aromatic Aldehyde	Benzaldehyde				•	•	
26		Unidentified C10.H10.O [.Alpha.-ethylidene-benzeneacetaldehyde]	•					
27		Unidentified C10 H10.O [Alpha.-ethylidene-benzeneacetaldehyde]		•				
28	Aromatic Ketone	1-Phenyl-ethanone						
29	Aromatic Amide	N-Methyl-1-naphthalenecarboxamide						
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, .beta.,.beta -dimethyl-						
31		2-(acetylamino)-benzoic adid,methyl ester						
32		Benzenepropanoic acid, ethyl ester					•	
33		Benzenepropanoic acid						
34	Phthalic Acid Derivative	Butyl decyl phthalate						
35		Isomer of diheptyl phthalate						
36		Isomer of diheptyl phthalate						
37		Butyl phthalate, ester with butyl glycolate						
38		Unidentified phthalate			•			
39	Phenol	Methyl phenol [2-Methyl-phenol]						•
40		[1,1'-Biphenyl]-2-ol		•	•			
41		2-Naphthalenol						
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene						
43		1-Phenyl-1,2-butanediol						
44		2-Ethoxy-benzaldehyde		•				
45		Unidentified C7 H5 O N S [Thiocyanic acid, 4-hydroxyphenyl ester]				•		
46	Drug	Methaqualone						
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetrione]						
48		Alkyl substituted pyrimidinetrione [Mephobarbital]						
49		Alkyl substituted pyrimidinetrione [Pentobarbital]		•				
50		Alkyl substituted pyrimidinetrione [Phenobarbital]						
51		Alkyl substituted pyrimidinetrione [Metharbital]						
52		Alkyl substituted pyrimidinetrione [Metharbital]						
53	Heterocyclic Compound	1,7-Naphthyridine						
54		Isomer of dimethyl-piperidine [1,4-Dimethyl-piperidine]	•			•	•	
55		3-Pyridinecarboxaldehyde, oxime		•		•		
56		4-Pyridinecarboxaldehyde						
57		Unidentified C8 H7 N [Indolizine]						
58		C2 Alkyl pyrazine [2,6-Dimethyl pyrizine]						
59		2-Methoxy-3-methyl-pyrazine						

Table C-1 (concluded)

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound (a)						
60		1,2-Benzisothiazole						
61		Unidentified C7.H11.N.S [2-Methyl-4-propyl-thiazole]						•
62		Alkyl thazole [4-Ethyl-5-methyl-thiazole]	•					
63		4-Propyl-thiazole						
64		1,3-Benzodioxole						
65		4,7-Dimethyl-3(2H)-benzofuranone						
66		Unidentified C11 H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]		•				
67		5-(Butylimino)-2(5H)-furanone						
68		2H-1-Benzopyran-2-one						
69		1,3,5-Trimethyl-1H-pyrazole						
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]	•					
71		1-(4-Hydroxy-3-thienyl)-ethanone	•				•	
72		2,3,4-trimethyl thiophene						
73		2-Methyl-5-propyl-thiophene						
74		2-t-Butoxy-thiophene	•					
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	•	•	•	•	•	
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]			•			
77		Cholest-5-en-3-ol (3.beta.)-, propanoate	•	•	•	•	•	
78		Cholest-5-en-3-one	•	•	•	•	•	
79		Cholest-5-ene		•	•			
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]						
81		Cholesta-3,5-dien-7-one	•	•				
82		Cholesta-4,6-dien-3-ol (3 Beta.), Benzoate	•	•	•	•	•	
83		Cholesta-5,7-dien-3-ol, (3.beta)						
84		Isomer of cholestanol [Cholestanol]						
85		Methyl-cholestan-3-ol, (3 beta ,5 alpha.,6.beta.)-			•			
86		3-(Acetoxy)-cholestan-6-one, (3.beta,5.alpha.)-	•	•				
87		Cholestane-3,5-diol, (3.beta ,5 alpha.)-						
88		Cholestanol			•			
89		Cholesterol	•	•	•	•	•	
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene						
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]			•			
92		Carbonochloridothioic acid, S-methyl ester	•			•	•	
93		1,1-Dichloro-ethene	•					
94		4-Chloro-2-(phenylmethyl)-phenol						
95	Organo-Silicon	1-Butynyl-trimethyl silane		•				
96		Trimethyl[(1-methyl-2-propynyl)oxy]-silane						

(a) Tentative compound identification is based on search vs the NBS mass spectral library Confirmation has not been achieved by comparing retention with an authentic standard In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets

Table C-2. Compounds Identified in the 15/50% Florisil Semivolatile Organic Analysis Data Set - South Census Region

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)									
IS	Internal Standard	D10-Anthracene - Internal Standard	•	• •	• •	• •	• • • •	• • • •	•	• •	•
1	Alkane	Unidentified C10 H20 [Diethyl cyclohexane]						•			
2	Saturated Ester	1,7,7-Trimethyl-bicyclo[2 2.1]heptan-2-ol, exo propanoate-									
3		Dodecanoic acid, ethyl ester						•			
4		Hexanedioic acid,mono(2-ethylhexyl) ester			•						
5		Alkyl ester [15-Methyl-heptadecanoate]					• • •	• • •		•	•
6	Saturated Polyfunctional	Ethylhydrazone propionaldehyde							•		
7		9-Oxo-nonanoic acid, ethyl ester						•			
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene				•	• •	•			
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde					•	•			
10		2-Butyl-2-octenal	•		•	• •	• • • •	• •	•	•	•
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer				•					
12		2,4,6-Cycloheptatnene 1-one									
13		5-Undecen-4-one									
14		5-Ethyl-2-methyl-4-heptene-3-one									
15	Unsaturated Polyfunctional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]									•
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]									•
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]		•	•	•	•	• •			•
18		2-Methoxy-2-octen-4-one				•					
19	Alkyne	5,5-Dimethyl-3-heptyne				•					
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]	•						•		
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]				•					
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]							•		
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]			•						•
24		Unidentified C11.H10 [1-Ethylidene-indene]									
25	Aromatic Aldehyde	Benzaldehyde				• •		•			
26		Unidentified C10.H10.O [Alpha.-ethylidene-benzeneacetaldehyde]				•					
27		Unidentified C10 H10 O [Alpha.-ethylidene-benzeneacetaldehyde]			•		•	• • •		•	
28	Aromatic Ketone	1-Phenyl-ethanone						•		•	
29	Aromatic Amide	N-Methyl-1-naphthalenecarboxamide						•			
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, .beta.,.beta.-dimethyl-					•				
31		2-(acetylamino)-benzoic acid,methyl ester									•
32		Benzenepropanoic acid, ethyl ester								• •	
33		Benzenepropanoic acid						•			
34	Phthalic Acid Derivative	Butyl decyl phthalate			•	•	•		•		
35		Isomer of diheptyl phthalate				•	•				
36		Isomer of diheptyl phthalate				•	• •				
37		Butyl phthalate, ester with butyl glycolate					•	•	•		
38		Unidentified phthalate		•							
39	Phenol	Methyl phenol [2-Methyl-phenol]			•						
40		[1,1'-Biphenyl]-2-ol					•	• •		• •	•
41		2-Naphthalenol						•			
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene				•					
43		1-Phenyl-1,2-butanediol									
44		2-Ethoxy-benzaldehyde				•					
45		Unidentified C7 H5 O N S [Thiocyanic acid, 4-hydroxyphenyl ester]									
46	Drug	Methaqualone					• • •			•	
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetnone]									
48		Alkyl substituted pyrimidinetrione [Mephobarbital]					•		•		
49		Alkyl substituted pyrimidinetrione [Pentobarbital]					•	•	•	• •	•
50		Alkyl substituted pyrimidinetnone [Phenobarbital]	•				•		•		
51		Alkyl substituted pyrimidinetrione [Metharbital]									
52		Alkyl substituted pyrimidinetrione [Metharbital]									
53	Heterocyclic Compound	1,7-Naphthyridine								•	
54		Isomer of dimethyl-pipendine [1,4-Dimethyl-pipendine]		•		• •			•		
55		3-Pyridinecarboxaldehyde, oxime				•		•	•	•	
56		4-Pyridinecarboxaldehyde									
57		Unidentified C8 H7 N [Indolizine]						•			
58		C2 Alkyl pyrazine [2,6-Dimethyl pyrizine]									
59		2-Methoxy-3-methyl-pyrazine				•		• •			
60		1,2-Benzisothiazole			•			•			
61		Unidentified C7 H11 N S [2-Methyl-4-propyl-thiazole]						• •			
62		Alkyl thazole [4-Ethyl-5-methyl-thiazole]				•		•			•

Table C-2 (concluded)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)									
63		4-Propyl-thiazole				•					
64		1,3-Benzodioxole									
65		4,7-Dimethyl-3(2H)-benzofuranone						• •			
66		Unidentified C11.H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]						• •			
67		5-(Butylimino)-2(5H)-furanone									
68		2H-1-Benzopyran-2-one									
69		1,3,5-Trimethyl-1H-pyrazole									•
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]				•		•			
71		1-(4-Hydroxy-3-thienyl)-ethanone							•		
72		2,3,4-trimethyl thiophene								•	
73		2-Methyl-5-propyl-thiophene				•	•		•		
74		2-t-Butoxy-thiophene				•		•			
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	•	• •	•	• •	• • •	• • •	•	• •	•
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	•	•	•	•	•	• •		•	•
77		Cholest-5-en-3-ol (3.beta)-, propanoate	•	• •	• •	• •	• • • •	• • • •	•	• •	•
78		Cholest-5-en-3-one	•	• •	• •	• •	• • • •	• • • •	•	• •	•
79		Cholest-5-ene	•	•	• •	•	• • •	• • •		• •	•
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]					•				
81		Cholesta-3,5-dien-7-one	•	•		• •	•	• •	•	• •	•
82		Cholesta-4,6-dien-3-ol (3 Beta.), Benzoate	•	• •	• •	• •	• • • •	• • • •	•	• •	•
83		Cholesta-5,7-dien-3-ol, (3.beta)									
84		Isomer of cholestanol [Cholestanol]	•	•	•	•	•	• •		• •	•
85		Methyl-cholestan-3-ol, (3.beta.,5.alpha.,6.beta)-			•	•	•	• •		•	
86		3-(Acetoxy)-cholestan-6-one, (3.beta,5.alpha.)-					•				
87		Cholestane-3,5-diol, (3.beta ,5 alpha.)-						•			
88		Cholestanol			•			•			
89		Cholesterol	•	• •	• •	• •	• • • •	• • • •	•	• •	•
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene									
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]	•	•	•						
92		Carbonochloridothioic acid, S-methyl ester									
93		1,1-Dichloro-ethene									
94		4-Chloro-2-(phenylmethyl)-phenol						•			
95	Organo-Silicon	1-Butynyl-trimethyl silane				• •			•		
96		Trimethyl[(1-methyl-2-propynyl)oxy]-silane				•		• •			

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table C-3. Compounds Identified in the 15/50% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
I.S.	Internal Standard	D10-Anthracene - Internal Standard	• •	• • •	• • •	•	•	• •
1	Alkane	Unidentified C10 H20 [Diethyl cyclohexane]						•
2	Saturated Ester	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-ol, exo propanoate-						
3		Dodecanoic acid, ethyl ester			•			•
4		Hexanedioic acid,mono(2-ethylhexyl) ester						
5		Alkyl ester [15-Methyl-heptadecanoate]			• • •	•		•
6	Saturated Polyfunctional	Ethylhydrazone propionaldehyde						
7		9-Oxo-nonanoic acid, ethyl ester						•
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene						
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde		•				
10		2-Butyl-2-octenal	• •	• •	• •	•		
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer	•					
12		2,4,6-Cycloheptatriene-1-one						
13		5-Undecen-4-one						
14		5-Ethyl-2-methyl-4-heptene-3-one						
15	Unsaturated Polyfuntional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]				•		•
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]				•		•
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]	•	•	• • •	•		•
18		2-Methoxy-2-octen-4-one	•					
19	Alkyne	5,5-Dimethyl-3-heptyne						
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]				•		•
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]	•		•			
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]						
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						
24		Unidentified C11.H10 [1-Ethylidene-indene]						•
25	Aromatic Aldehyde	Benzaldehyde	• •		•			
26		Unidentified C10.H10.O [.Alpha.-ethylidene-benzeneacetaldehyde]		•				
27		Unidentified C10 H10 O [Alpha.-ethylidene-benzeneacetaldehyde]	•	• •	•	•		•
28	Aromatic Ketone	1-Phenyl-ethanone						
29	Aromatic Amide	N-Methyl-1-naphthalenecarboxamide						
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, beta., beta.-dimethyl-						
31		2-(acetylamino)-benzoic acid,methyl ester				•		
32		Benzenepropanoic acid, ethyl ester	•	•				
33		Benzenepropanoic acid						
34	Phthalic Acid Derivative	Butyl decyl phthalate		• •				• •
35		Isomer of diheptyl phthalate						
36		Isomer of diheptyl phthalate						
37		Butyl phthalate, ester with butyl glycolate			•	•		•
38		Unidentified phthalate						
39	Phenol	Methyl phenol [2-Methyl-phenol]			•			•
40		[1,1'-Biphenyl]-2-ol	•		• •			•
41		2-Naphthalenol						
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene						
43		1-Phenyl-1,2-butanediol						
44		2-Ethoxy-benzaldehyde						
45		Unidentified C7 H5 O N S [Thiocyanic acid, 4-hydroxyphenyl ester]						
46	Drug	Methaqualone						
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetrione]						
48		Alkyl substituted pyrimidinetrione [Mephobarbital]						
49		Alkyl substituted pyrimidinetrione [Pentobarbital]	•	• •	•	•		•
50		Alkyl substituted pyrimidinetrione [Phenobarbital]						
51		Alkyl substituted pyrimidinetrione [Metharbital]						
52		Alkyl substituted pyrimidinetrione [Metharbital]						
53	Heterocyclic Compound	1,7-Naphthyridine					•	•
54		Isomer of dimethyl-piperidine [1,4-Dimethyl-piperidine]	•			•		
55		3-Pyridinecarboxaldehyde, oxime	•	• •		•		
56		4-Pyridinecarboxaldehyde	•					
57		Unidentified C8 H7.N [Indolizine]						
58		C2 Alkyl pyrazine [2,6-Dimethyl pyrizine]	•					
59		2-Methoxy-3-methyl-pyrazine	•	•				

Table C-3 (concluded)

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
60		1,2-Benzisothiazole			•			
61		Unidentified C7.H11.N.S [2-Methyl-4-propyl-thiazole]			• •			•
62		Alkyl thazole [4-Ethyl-5-methyl-thiazole]	•					
63		4-Propyl-thiazole	•					
64		1,3-Benzodioxole						•
65		4,7-Dimethyl-3(2H)-benzofuranone			•	•		
66		Unidentified C11.H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]		•	•			•
67		5-(Butylimino)-2(5H)-furanone						
68		2H-1-Benzopyran-2-one						
69		1,3,5-Trimethyl-1H-pyrazole						
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]	• •					
71		1-(4-Hydroxy-3-thienyl)-ethanone						
72		2,3,4-trimethyl thiophene			• •		•	•
73		2-Methyl-5-propyl-thiophene		•				
74		2-t-Butoxy-thiophene	•					
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	• •	• •	•	•	•	• •
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	•	• •	• •			• •
77		Cholest-5-en-3-ol (3.beta.)-, propanoate	• •	• • •	• • •	•	•	• •
78		Cholest-5-en-3-one	• •	• • •	• • •	•	•	• •
79		Cholest-5-ene	•	• •	• • •	•	•	• •
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]		• •	•			
81		Cholesta-3,5-dien-7-one			•	•	•	• •
82		Cholesta-4,6-dien-3-ol (3.Beta.), Benzoate	• •	• • •	• • •	•	•	• •
83		Cholesta-5,7-dien-3-ol, (3.beta)						• •
84		Isomer of cholestanol [Cholestanol]	•	• • •	• •	•	•	•
85		Methyl-cholestan-3-ol, (3.beta.,5.alpha.,6 beta.)-	•	•	• •			•
86		3-(Acetoxy)-cholestan-6-one, (3.beta,5.alpha.)-						
87		Cholestane-3,5-diol, (3 beta.,5 alpha.)-				•		
88		Cholestanol						•
89		Cholesterol	• •	• • •	• •	•	•	• •
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene			•			
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]					•	• •
92		Carbonochloridothioic acid, S-methyl ester	•					
93		1,1-Dichloro-ethene						
94		4-Chloro-2-(phenylmethyl)-phenol						
95	Organo-Silicon	1-Butynyl-trimethyl silane	•	•				
96		Trimethyl[(1-methyl-2-propynyl)oxy]-silane	•	•				

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table C-4. Compounds Identified in the 15/50% Florisil Semivolatile Organic Analysis Data Set - Northeast Census Region

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
I.S.	Internal Standard	D10-Anthracene - Internal Standard	• •	• •	• •	•	•	•
1	Alkane	Unidentified C10.H20 [Diethyl cyclohexane]						
2	Saturated Ester	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-ol, exo propanoate-			•			
3		Dodecanoic acid, ethyl ester			•			
4		Hexanedioic acid,mono(2-ethylhexyl) ester						
5		Alkyl ester [15-Methyl-heptadecanoate]						
6	Saturated Polyfunctional	Ethylhydrazone propionaldehyde						
7		9-Oxo-nonanoic acid, ethyl ester						
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene						
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde						
10		2-Butyl-2-octenal	•	•	•	•	•	•
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer						
12		2,4,6-Cycloheptatriene-1-one	•			•		
13		5-Undecen-4-one			•	•		•
14		5-Ethyl-2-methyl-4-heptene-3-one	•					•
15	Unsaturated Polyfuntional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]						
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]			•			
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]			• •	•		•
18		2-Methoxy-2-octen-4-one						
19	Alkyne	5,5-Dimethyl-3-heptyne						
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]						•
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]	•	•				
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]						
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						
24		Unidentified C11.H10 [1-Ethylidene-indene]		•				
25	Aromatic Aldehyde	Benzaldehyde						
26		Unidentified C10.H10 O [Alpha.-ethylidene-benzeneacetaldehyde]			•			
27		Unidentified C10.H10.O [.Alpha.-ethylidene-benzeneacetaldehyde]	• •	•	•	•	•	•
28	Aromatic Ketone	1-Phenyl-ethanone		•	•			
29	Aromatic Amide	N-Methyl-1-naphthalenecarboxamide						
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, .beta , beta.-dimethyl-						
31		2-(acetylamino)-benzoic acid,methyl ester						
32		Benzenepropanoic acid, ethyl ester						
33		Benzenepropanoic acid						
34	Phthalic Acid Derivative	Butyl decyl phthalate	•	•	•			
35		Isomer of diheptyl phthalate						
36		Isomer of diheptyl phthalate						
37		Butyl phthalate, ester with butyl glycolate						
38		Unidentified phthalate			•			
39	Phenol	Methyl phenol [2-Methyl-phenol]			•			
40		[1,1'-Biphenyl]-2-ol	•	•	•	•	•	•
41		2-Naphthalenol						
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene						•
43		1-Phenyl-1,2-butanediol	•		•			
44		2-Ethoxy-benzaldehyde	•					•
45		Unidentified C7 H5 O N S [Thiocyanic acid, 4-hydroxyphenyl ester]						
46	Drug	Methaqualone						
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetrione]			•			
48		Alkyl substituted pyrimidinetrione [Mephobarbital]	•					
49		Alkyl substituted pyrimidinetrione [Pentobarbital]	• •	• •	• •			
50		Alkyl substituted pyrimidinetrione [Phenobarbital]	•		•			
51		Alkyl substituted pyrimidinetrione [Metharbital]			•			
52		Alkyl substituted pyrimidinetrione [Metharbital]	•	•	•			
53	Heterocyclic Compound	1,7-Naphthyridine						
54		Isomer of dimethyl-piperidine [1,4-Dimethyl-piperidine]	•			•		
55		3-Pyridinecarboxaldehyde, oxime						
56		4-Pyridinecarboxaldehyde						
57		Unidentified C8.H7.N [Indolizine]			•			
58		C2 Alkyl pyrazine [2,6-Dimethyl pyrizine]	•			•		
59		2-Methoxy-3-methyl-pyrazine	•					•

Table C-4 (concluded)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Compound Class	Compound Name (a)						
60		1,2-Benzisothiazole						•
61		Unidentified C7.H11.N.S [2-Methyl-4-propyl-thiazole]			• •			
62		Alkyl thazole [4-Ethyl-5-methyl-thiazole]						
63		4-Propyl-thiazole			•			
64		1,3-Benzodioxole			•			
65		4,7-Dimethyl-3(2H)-benzofuranone						
66		Unidentified C11.H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]						
67		5-(Butylimino)-2(5H)-furanone		•	•		•	
68		2H-1-Benzopyran-2-one			•			
69		1,3,5-Trimethyl-1H-pyrazole						
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]			•			•
71		1-(4-Hydroxy-3-thienyl)-ethanone						
72		2,3,4-trimethyl thiophene						
73		2-Methyl-5-propyl-thiophene						
74		2-t-Butoxy-thiophene						
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	• •	•	•	•	•	•
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	• •	•	• •	•	•	•
77		Cholest-5-en-3-ol (3 beta.)-, propanoate	• •	• •	• •	•	•	•
78		Cholest-5-en-3-one	• •	• •	• •		•	•
79		Cholest-5-ene	•	•	•			•
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]		•				
81		Cholesta-3,5-dien-7-one	• •		•			•
82		Cholesta-4,6-dien-3-ol (3.Beta.), Benzoate	• •	• •	• •	•	•	•
83		Cholesta-5,7-dien-3-ol, (3.beta.)			•			
84		Isomer of cholestanol [Cholestanol]	•	•	•			
85		Methyl-cholestan-3-ol, (3.beta.,5 alpha.,6.beta.)-	•	•	•			
86		3-(Acetoxy)-cholestan-6-one, (3 beta,5.alpha.)-						
87		Cholestane-3,5-diol, (3.beta.,5.alpha)-						
88		Cholestanol						
89		Cholesterol	• •	• •	• •	•	•	•
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene						
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]	•	•	•			
92		Carbonochloridothioic acid, S-methyl ester	•					
93		1,1-Dichloro-ethene						
94		4-Chloro-2-(phenylmethyl)-phenol			•	•		•
95	Organo-Silicon	1-Butynyl-trimethyl silane						•
96		Trimethyl[(1-methyl-2-propynyl)oxy]-silane						

(a) Tentative compound identification is based on search vs the NBS mass spectral library. Confirmation has not been achieved by comparing *retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum,* a general descriptive name is reported and the best ranked NBS name is provided in brackets

APPENDIX D

DOT MATRIX TABLE FOR UNIDENTIFIED HRGC/MS PEAKS IN THE VOLATILE ORGANIC ANALYSIS DATA SET; UNIDENTIFIED VOLATILE ORGANIC COMPOUND RESPONSES VS. CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table D-1. Unidentified Peaks in the Volatile Organic Analysis Data Set - West Census Region

	CENSUS REGION		WEST					
	CENSUS DIVISION		MOUNTAIN			PACIFIC		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences[a]						
I.S.	1.000	46	•	•	•	•	•	•
1	0.481	46	•	•	•	•	•	•
2	3.216	46	•	•	•	•	•	•
3	3.114	45	•	•	•	•	•	•
4	2 659	44		•	•	•	•	•
5	4.213	43	•	•	•	•	•	•
6	0 370	41	•	•	•		•	•
7	2 398	41			•	•	•	•
8	0.405	34		•			•	•
9	2.890	30		•	•	•	•	•
10	4 353	28	•	•		•	•	•
11	3.862	24						
12	0.286	23	•	•	•			
13	3.322	21	•					•
14	3.314	18						•
15	2 771	14	•					
16	2.689	13					•	•
17	1.997	12			•			
18	3.384	12						
19	3.873	12	•	•				
20	2.666	11				•		
21	4 390	11	•	•	•			
22	2.570	10			•		•	
23	3.962	9	•					
24	4 142	9						
25	0 335	8						
26	2.369	8					•	
27	2.619	8						•
28	3.364	8						
29	3.812	8				•		
30	1.488	7						
31	2.572	7						•
32	3 177	7						
33	4 159	7	•		•			
34	2.053	6						
35	4.388	6						
36	4 573	6						
37	0 802	5						
38	1.744	5		•		•		
39	2.495	5						
40	2.867	5		•				
41	2.906	5	•					
42	3.308	5					•	
43	3 501	5						
44	4 319	5						
45	0 277	4						
46	0 408	4			•	•		
47	1 719	4			•			
48	3 064	4		•	•			
49	3.159	4						
50	3.513	4						
51	3 881	4			•			
52	3.908	4						
53	4 317	4	•					
54	0 381	3						
55	1 141	3						•
56	2.721	3	•					
57	3 482	3						•
58	4.146	3						

Table D-1 (concluded)

Index Number	Average RRT	Total Number of Occurrences [a]	CENSUS REGION			WEST		
			CENSUS DIVISION	MOUNTAIN			PACIFIC	
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
59	0.285	2							
60	0.573	2							•
61	2.141	2							
62	2.892	2							
63	3.012	2							•
64	3.551	2							•
65	3 564	2							
66	3.700	2							
67	3.963	2					•		
68	4.113	2							
69	0.313	1							
70	1.036	1							
71	1.511	1				•			
72	1.672	1							
73	2.028	1							
74	2.239	1							
75	2.262	1							
76	2.271	1							
77	2.301	1							
78	2.407	1							
79	2.671	1					•		
80	2.891	1							•
81	2.907	1							
82	2.988	1							
83	3.073	1							
84	3.100	1							
85	3.175	1							
86	3.314	1							
87	3.371	1							
88	3.453	1							
89	3.461	1							
90	3.494	1							
91	3.650	1							
92	3.782	1							
93	3.829	1							
94	3.975	1							
95	3.993	1							
96	4.192	1							
97	4.635	1							
98	4.812	1							
99	5.004	1							

[a] Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table D-2. Unidentified Peaks in the Volatile Organic Analysis Data Set - South Census Region

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences [a]									
IS	1 000	46	•	• •	• •	• •	• • • •	• • • •	•	• •	•
1	0 481	46	•	• •	• •	• •	• • • •	• • • •	•	• •	•
2	3 216	46	•	• •	• •	• •	• • • •	• • • •	•	• •	•
3	3.114	45	•	• •	• •	• •	• • • •	• • • •	•	• •	•
4	2.659	44	•	• •	• •	• •	• • •	• • • •	•	• •	•
5	4.213	43	•	• •	• •	• •	• • • •	• •	•	• •	•
6	0 370	41	•	• •	• •	• •	• • • •	• • •	•	• •	•
7	2 398	41	•	• •	• •	• •	• • • •	• • •	•	• •	•
8	0 405	34		•	•		• • •	• • • •		• •	•
9	2.890	30	•	• •	•	•	•	•	•	• •	•
10	4 353	28	•	•	• •	•	•	•	•	•	•
11	3.862	24	•	•		• •	• • •	• •	•	•	•
12	0 286	23	•		•	•	• • •	• •	•	• •	•
13	3.322	21		•	•		•	• •			
14	3 314	18	•		• •			• •		•	
15	2 771	14			•	•	• • •	• •			
16	2 689	13		• •			•	•		•	
17	1 997	12				• •				•	
18	3 384	12			• •		• •	• • • •		•	
19	3 873	12	•	•	•		•		•	•	•
20	2 666	11			•		• • •	• •			
21	4 390	11				•	• •		•		
22	2 570	10		•			•	• •		•	
23	3.962	9	•	•	• •		•	•			
24	4.142	9		•			• • •			•	
25	0.335	8					•	• • •	•	•	
26	2.369	8	•	•				•			•
27	2 619	8		•				•		•	
28	3 364	8				• •	•				
29	3.812	8					•				
30	1.488	7	•	•	•	•		•		•	
31	2.572	7					• •				
32	3 177	7		•							•
33	4.159	7		•					•	•	•
34	2.053	6					•				
35	4 388	6				•	•				•
36	4 573	6									
37	0 802	5									
38	1 744	5				•					
39	2 495	5						•	•		
40	2 867	5									
41	2 906	5					•	•			
42	3 308	5									
43	3 501	5		•	•			• •			•
44	4 319	5				•		•			
45	0 277	4		•							
46	0.408	4				•	•				
47	1.719	4						•		•	
48	3.064	4					•	•			
49	3 159	4		•						•	
50	3.513	4									
51	3.881	4						•			
52	3 908	4				•					
53	4 317	4		•					•	•	
54	0.381	3						•			
55	1 141	3									
56	2 721	3									
57	3 482	3						•			
58	4.146	3						•			

Table D-2 (concluded)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences[a]									
59	0.285	2									
60	0 573	2									
61	2.141	2									
62	2.892	2		•					•		
63	3 012	2									
64	3.551	2					•				
65	3 564	2									
66	3 700	2						•			
67	3 963	2									
68	4.113	2						• •			
69	0 313	1									
70	1.036	1									
71	1.511	1									
72	1 672	1									
73	2 028	1									
74	2 239	1									
75	2.262	1									•
76	2 271	1				•					
77	2.301	1									
78	2 407	1									
79	2 671	1									
80	2 891	1									
81	2.907	1									
82	2 988	1									
83	3 073	1								•	
84	3.100	1								•	
85	3.175	1						•			
86	3 314	1								•	
87	3 371	1								•	
88	3 453	1									
89	3.461	1									
90	3.494	1									
91	3 650	1									•
92	3.782	1									
93	3 829	1									
94	3 975	1				•					
95	3.993	1				•					
96	4.192	1									
97	4 635	1									
98	4.812	1									
99	5 004	1									

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table D-3. Unidentified Peaks in the Volatile Organic Analysis Data Set - North Central Census Region

	CENSUS REGION		NORTH CENTRAL					
	CENSUS DIVISION		EAST NORTH CENTRAL			WEST NORTH CENTRAL		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences [a]						
IS.	1.000	46	• •	• • •	• • •	•	•	• •
1	0.481	46	• •	• • •	• • •	•	•	• •
2	3.216	46	• •	• • •	• • •	•	•	• •
3	3.114	45	• •	• • •	• •	•	•	• •
4	2.659	44	• •	• • •	• • •	•	•	• •
5	4.213	43	• •	• • •	• • •	•	•	•
6	0.370	41	• •	• • •	• • •			•
7	2.398	41	• •	• • •	• • •	•	•	•
8	0 405	34	• •	• • •	• • •		•	• •
9	2 890	30	• •	• •	•	•	•	•
10	4.353	28	•	•		•	•	
11	3 862	24	• •	• •	• •			
12	0.286	23	•	•	• •			•
13	3.322	21	•	• •	• • •	•	•	• •
14	3.314	18		• •	• •		•	• •
15	2.771	14		•	• •			•
16	2 689	13	•	• •	•			•
17	1.997	12		•		•		
18	3.384	12			• •			•
19	3.873	12	•					
20	2.666	11		•	• •			
21	4.390	11			•	•		
22	2.570	10		•				•
23	3 962	9						
24	4.142	9		•	• • •			
25	0 335	8		•				
26	2.369	8			•			
27	2.619	8	•		•			
28	3.364	8				•		
29	3 812	8			•			•
30	1.488	7		•				
31	2 572	7			• •	•		•
32	3 177	7	•	•				
33	4.159	7	•					
34	2.053	6				•	•	•
35	4.388	6			•			
36	4 573	6	•	•		•		
37	0 802	5				•		
38	1.744	5						
39	2 495	5		• •				
40	2.867	5	•	•				
41	2.906	5		•				
42	3.308	5	•	• •				•
43	3 501	5						
44	4.319	5		•	•			
45	0.277	4		•	•			
46	0.408	4						
47	1 719	4	•					
48	3 064	4						
49	3 159	4		•	•			
50	3 513	4		•	•		•	
51	3.881	4	•	•				
52	3.908	4						
53	4.317	4						
54	0 381	3					•	•
55	1.141	3			•			•
56	2.721	3					•	•
57	3 482	3	•					
58	4.146	3	•		•			

Table D-3 (concluded)

	CENSUS REGION	NORTH CENTRAL					
	CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
	AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences [a]					
59	0.285	2				•	•
60	0.573	2					•
61	2 141	2	•		•		
62	2.892	2					
63	3.012	2				•	
64	3.551	2					
65	3.564	2		• •			
66	3.700	2	•				
67	3 963	2					
68	4.113	2					
69	0.313	1					•
70	1.036	1			•		
71	1.511	1					
72	1.672	1					•
73	2 028	1					
74	2.239	1					•
75	2.262	1					
76	2 271	1					
77	2.301	1					•
78	2.407	1		•			
79	2.671	1					
80	2.891	1					
81	2.907	1					
82	2.988	1					•
83	3.073	1					
84	3.100	1					
85	3.175	1					
86	3.314	1					
87	3.371	1					
88	3.453	1				•	
89	3.461	1	•				
90	3.494	1					•
91	3 650	1					
92	3.782	1					
93	3 829	1		•			
94	3.975	1					
95	3.993	1					
96	4.192	1					
97	4 635	1					
98	4.812	1					
99	5 004	1					

[a] Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table D-4. Unidentified Peaks in the Volatile Organic Analysis Data Set - Northeast Census Region

	CENSUS REGION		NORTHEAST					
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences [a]						
IS	1.000	46	• •	• •	• •	•	•	•
1	0.481	46	• •	• •	• •	•	•	•
2	3 216	46	• •	• •	• •	•	•	•
3	3.114	45	• •	• •	• •	•	•	•
4	2.659	44	• •	• •	• •	•	•	•
5	4.213	43	• •	• •	• •	•	•	•
6	0.370	41	• •	• •	• •	•	•	•
7	2.398	41	• •	• •	• •		•	•
8	0.405	34	• •	• •	• •	•	•	
9	2 890	30	• •	•	• •		•	
10	4.353	28	• •	• •	• •	•	•	•
11	3.862	24		•	• •	•	•	•
12	0.286	23	•	•	•			
13	3 322	21		•	• •		•	
14	3.314	18	•	•	•			•
15	2.771	14					•	•
16	2.689	13	•					
17	1.997	12		• •	•	•	•	•
18	3.384	12						
19	3.873	12		•	•			
20	2.666	11		•				
21	4.390	11			•			•
22	2.570	10			•			
23	3.962	9						•
24	4.142	9						
25	0.335	8	•					
26	2.369	8	• •					
27	2.619	8	• •					
28	3.364	8	•	•		•	•	
29	3.812	8	• •	•	•			
30	1 488	7						
31	2.572	7						
32	3.177	7	•	•	•			
33	4 159	7						
34	2 053	6	•	•				
35	4.388	6		•	•			
36	4 573	6		•	•			•
37	0.802	5	• •	•	•			
38	1.744	5					•	•
39	2.495	5						•
40	2.867	5		•	•			
41	2.906	5						•
42	3.308	5						
43	3.501	5						
44	4.319	5		•				
45	0.277	4						•
46	0.408	4						
47	1.719	4						
48	3 064	4						
49	3.159	4						
50	3.513	4					•	
51	3.881	4						
52	3.908	4		•	•			•
53	4 317	4						
54	0.381	3						
55	1.141	3						
56	2 721	3						
57	3.482	3						
58	4 146	3						

Table D-4 (concluded)

	CENSUS REGION	NORTHEAST					
	CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences [a]					
59	0.285	2					
60	0.573	2					
61	2.141	2					
62	2.892	2					
63	3.012	2					
64	3.551	2					
65	3.564	2					
66	3.700	2					
67	3.963	2	•				
68	4 113	2					
69	0.313	1					
70	1.036	1					
71	1.511	1					
72	1.672	1					
73	2.028	1		•			
74	2.239	1					
75	2.262	1					
76	2.271	1					
77	2.301	1					
78	2 407	1					
79	2.671	1					
80	2.891	1					
81	2.907	1				•	
82	2.988	1					
83	3.073	1					
84	3.100	1					
85	3.175	1					
86	3.314	1					
87	3.371	1					
88	3.453	1					
89	3.461	1					
90	3.494	1					
91	3.650	1					
92	3.782	1			•		
93	3.829	1					
94	3.975	1					
95	3.993	1					
96	4.192	1				•	
97	4 635	1	•				
98	4.812	1			•		
99	5.004	1			•		

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

APPENDIX E

DOT MATRIX TABLE FOR UNIDENTIFIED HRGC/MS PEAKS IN THE 6% FLORISIL SEMIVOLATILE ORGANIC ANALYSIS DATA SET; UNIDENTIFIED SEMIVOLATILE ORGANIC COMPOUND RESPONSES VS. CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table E-1. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - West Census Region

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]						
I.S	1.000	44	•	•	•	•		•
1	0.924	42		•	•			•
2	1.600	42	•	•	•	•		•
3	0 759	38			•			•
4	1.027	38	•	•	•	•		•
5	1 023	35		•	•	•		•
6	1.117	34	•	•		•		•
7	1 706	34			•			•
8	1.129	32	•	•		•		•
9	0 879	31			•			
10	0 702	30		•	•	•		•
11	0.919	30		•	•			
12	0.990	29		•		•		•
13	0.838	28		•		•		•
14	0.912	26	•	•	•	•		
15	1.481	26			•			•
16	1.760	25			•			•
17	0.985	24			•			•
18	1.059	24		•	•			•
19	0.673	23		•		•		•
20	0 993	23			•			•
21	0.982	22		•				•
22	1.533	22			•			
23	1.063	21			•	•		•
24	1.199	21						
25	1 374	21						•
26	0.726	19			•			
27	1.741	19			•			
28	0.952	17			•			•
29	1.237	17	•	•				•
30	1.629	17		•				
31	1.586	16						
32	0.493	15		•		•		•
33	1 002	15			•			
34	1 065	15		•				
35	0 839	14			•			
36	1.070	14	•	•				•
37	1 728	14			•			
38	0.574	13	•		•			
39	0.665	13						
40	1.178	13				•		
41	1 280	13						•
42	1.297	13		•				
43	0 190	12	•			•		
44	0.666	12		•				
45	0.310	11	•	•				•
46	0.603	11	•					
47	1 082	11	•	•		•		
48	1 131	11		•	•			
49	1 146	11	•	•		•		
50	0 411	10	•	•		•		
51	0.780	10		•		•		
52	1.009	10	•	•		•		
53	1.160	10						•
54	1 219	10			•			
55	1.224	9			•			•
56	0 220	8	•			•		
57	0.670	8			•			

Table E-1 (continued)

	CENSUS REGION		WEST					
	CENSUS DIVISION		MOUNTAIN			PACIFIC		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]						
58	0.959	8			•			
59	1.178	8		•				
60	1.197	8	•	•				
61	1.626	8						
62	1.638	8						
63	0.360	7		•				
64	0.674	7						
65	0.897	7						
66	0.932	7						
67	1.051	7				•		•
68	1.094	7						
69	1.427	7				•		
70	1 475	7						
71	1 681	7			•			
72	1.773	7						
73	0 337	6				•		
74	0 662	6		•	•			
75	0.880	6				•		•
76	1 177	6						
77	1.253	6						•
78	1 681	6						
79	0.278	5						
80	0.472	5						
81	0 736	5						
82	0 991	5						
83	1.057	5				•		
84	1 069	5						
85	1 073	5						•
86	1 085	5						
87	1.195	5		•		•		
88	1 407	5						
89	0.399	4						
90	0 661	4						
91	0 730	4				•		
92	0 965	4						
93	1 068	4				•		
94	1.144	4						
95	1 195	4				•		
96	1 222	4			•			
97	1 326	4			•			•
98	1 355	4						
99	1 389	4						
100	1.411	4						
101	1.538	4			•			
102	0 316	3	•					
103	0.608	3		•				
104	0 662	3	•					
105	0 747	3		•				
106	0.754	3						
107	0.855	3		•	•			
108	0 893	3						
109	0.918	3						
110	0 967	3						
111	1.019	3						
112	1 025	3						
113	1.041	3						
114	1 045	3						
115	1 050	3		•				

Table E-1 (continued)

	CENSUS REGION		WEST					
	CENSUS DIVISION		MOUNTAIN			PACIFIC		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]						
116	1.055	3						
117	1.076	3						
118	1.107	3						
119	1.109	3						
120	1.186	3		•				
121	1 244	3						
122	1.251	3						
123	1.414	3						•
124	1.457	3						
125	1.585	3						
126	0 325	2						
127	0.356	2						
128	0.747	2						
129	0.754	2						
130	0 817	2			•			
131	0.823	2						
132	0.855	2		•				
133	0.896	2			•			
134	0.898	2						
135	0.905	2						
136	0.933	2		•				
137	0.976	2						
138	0 982	2						
139	0.985	2	•					
140	1.020	2						
141	1.038	2						
142	1.053	2						
143	1.080	2						
144	1 106	2						•
145	1.120	2						
146	1.124	2						
147	1 143	2						
148	1.152	2			•			
149	1 158	2						
150	1.179	2						•
151	1.221	2						
152	1.252	2						
153	1 336	2						
154	1.345	2						
155	1.360	2						
156	1.382	2						
157	1 542	2						
158	1.577	2						
159	1 589	2						
160	1 600	2						•
161	1 680	2						
162	1.727	2						
163	1.731	2						
164	0.229	1						
165	0 255	1						
166	0.266	1						
167	0 269	1				•		
168	0 279	1			•			
169	0.293	1						
170	0.300	1						
171	0 329	1						
172	0.357	1		•				
173	0 406	1						

Table E-1 (continued)

	CENSUS REGION		WEST					
	CENSUS DIVISION		MOUNTAIN			PACIFIC		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]						
174	0.406	1						
175	0.463	1						
176	0.499	1						
177	0.539	1			•			
178	0.575	1						
179	0.672	1						
180	0.676	1						
181	0.708	1						
182	0.724	1						
183	0 732	1						
184	0.732	1			•			
185	0 734	1						
186	0 742	1						
187	0.743	1						
188	0.747	1						
189	0 749	1						
190	0.799	1						
191	0.829	1						
192	0 830	1						
193	0.855	1						
194	0 892	1						
195	0.911	1						
196	0.914	1						
197	0.973	1						
198	1.011	1						
199	1.018	1						
200	1.035	1						
201	1.051	1						
202	1.053	1						
203	1.060	1						
204	1.064	1						
205	1.075	1						
206	1 078	1		•				
207	1.084	1						
208	1.107	1						
209	1 117	1						
210	1.117	1						
211	1 118	1						
212	1 121	1						
213	1.122	1						
214	1.134	1		•				
215	1 134	1						
216	1 138	1						
217	1.140	1						
218	1 140	1						
219	1 152	1						
220	1 161	1						
221	1.170	1						
222	1.189	1						
223	1.208	1						
224	1 217	1						
225	1.226	1						
226	1.262	1						
227	1.288	1						
228	1.289	1						
229	1.304	1						
230	1.348	1						
231	1 349	1						

Table E-1 (concluded)

	CENSUS REGION		WEST					
	CENSUS DIVISION		MOUNTAIN			PACIFIC		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]						
232	1.349	1						
233	1.350	1						
234	1 356	1						
235	1.375	1						
236	1 379	1						
237	1.394	1						
238	1.407	1						
239	1.534	1						
240	1.588	1						
241	1.590	1						
242	1.596	1						
243	1.624	1						
244	1.634	1						
245	1.646	1						
246	1.659	1						
247	1.676	1						
248	1.678	1						
249	1.701	1						
250	1.709	1						
251	1.718	1						
252	1.721	1						
253	1.731	1						
254	1.734	1						
255	1.734	1						
256	1.740	1						
257	1.804	1						
258	1.889	1						

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table E-2. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - South Census Region

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]									
IS	1 000	44	•	•	• •	• •	• • • •	• • • •	•	• •	•
1	0 924	42	•	•	• •	• •	• • • •	• • • •	•	• •	•
2	1 600	42	•	•	• •	• •	• • • •	• • • •	•	• •	•
3	0 759	38	•	•	• •	•	• • • •	• • • •	•	• •	•
4	1 027	38	•		•	• •	• • •	• • •	•	•	•
5	1.023	35		•	• •	• •	• • • •	• • • •		• •	•
6	1 117	34		•	•	•	• • • •	• • • •	•	• •	•
7	1 706	34	•	•	• •	•	• • • •	• • • •		• •	•
8	1 129	32		•	•	•	• • • •	• • • •	•	• •	•
9	0 879	31	•	•	• •	• •	• • •	• • •		• •	
10	0 702	30		•	• •	•	• • • •	• • •		•	•
11	0 919	30	•	•	•	• •	• •	•	•	• •	•
12	0 990	29		•	•	•	• •	• • • •	•	• •	•
13	0 838	28				• •	• • • •	• • •	•	• •	•
14	0 912	26	•		•	• •	• •	•	•	• •	•
15	1 481	26	•	•	• •	• •	• • •	•	•	• •	•
16	1 760	25	•		• •	•	• • •	• • • •		• •	•
17	0 985	24	•	•	• •	•	•	• • •		•	
18	1 059	24	•	•	• •	•	•	• •	•	• •	•
19	0 673	23				•	• •	•	•	• •	•
20	0.993	23	•	•	• •	•	• •	• •		•	
21	0 982	22					•	• • •	•	• •	•
22	1 533	22	•		•	•	• •	•	•	• •	•
23	1.063	21			• •	•	•	• •	•		•
24	1.199	21	•		• •	•	• •	• •			
25	1 374	21	•		•	• •	• •	•	•	• •	
26	0 726	19		•	• •		• •	• •			•
27	1 741	19	•		•	•	• • •	• •		•	
28	0 952	17			• •			• • •			•
29	1 237	17				•	• •	• •		• •	
30	1 629	17			• •	• •	•	• • • •	•		•
31	1 586	16	•		• •	•	•	• •	•		•
32	0 493	15					•	• •			•
33	1 002	15			•			• • •		•	
34	1 065	15	•	•		•	• • •			• •	
35	0 839	14	•	•	• •		• •	•			
36	1 070	14				• •	•	•	•		
37	1 728	14	•		•		• •	•			
38	0 574	13	•			• •		•	•	•	•
39	0 665	13			•	•	•	•			
40	1 178	13		•		•	•	•	•		•
41	1 280	13	•		• •	•					
42	1 297	13				•	•	•	•	• •	•
43	0 190	12	•			• •			•		
44	0 666	12					•	•			
45	0 310	11					•	•			
46	0 603	11	•	•	• •		•	• •			
47	1 082	11				• •	•	•			
48	1 131	11	•	•	•	•					
49	1 146	11				•	•	•			
50	0 411	10				•	•	•			
51	0 780	10				• •	•	•			
52	1 009	10	•			• •	•	•			
53	1 160	10			•			• •			
54	1 219	10			• •			•			
55	1 224	9			•						
56	0 220	8				•					
57	0 670	8	•		•	•	• •	•			

Table E-2 (continued)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples a									
58	0 959	8			•			•			
59	1.178	8				•		•		• •	
60	1.197	8				•	• • •	•			
61	1 626	8			•			• • •			
62	1 638	8					• • •			•	
63	0.360	7						• • •		•	
64	0 674	7				•				•	
65	0 897	7				•	• • •	• •			
66	0 932	7				•	•	•			
67	1.051	7							•		
68	1 094	7	•					•			
69	1 427	7		•			•		•	•	
70	1.475	7						•			
71	1 681	7						•			
72	1 773	7			•			• •			
73	0.337	6				•	•	•			•
74	0 662	6				•					
75	0.880	6						•			•
76	1.177	6			•			•			
77	1 253	6	•			•					
78	1 681	6					• •	•	•		
79	0.278	5						• •			
80	0 472	5					• • •				
81	0.736	5			•		•	•			
82	0 991	5					• •				
83	1.057	5					•				
84	1 069	5						•			
85	1 073	5						•			
86	1.085	5			•						
87	1.195	5				•	• •				
88	1.407	5			•			•			
89	0 399	4									
90	0 661	4								•	
91	0 730	4					•	•			
92	0.965	4							•		
93	1.068	4					•				
94	1 144	4			•						
95	1 195	4				•					
96	1 222	4			•			•			
97	1.326	4									
98	1 355	4			•				•		
99	1.389	4			•			•			
100	1 411	4				•		•			
101	1.538	4						•			
102	0 316	3									
103	0 608	3				•					
104	0 662	3	•				•				
105	0 747	3									
106	0 754	3									
107	0 855	3			•						
108	0 893	3				•	•	•			
109	0 918	3					• •				
110	0 967	3									
111	1 019	3									
112	1 025	3		•			•				
113	1.041	3									
114	1 045	3			•			•			
115	1 050	3					•				

Table E-2 (continued)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]									
116	1.055	3						•			
117	1 076	3									
118	1 107	3									
119	1 109	3	•			•			•		
120	1 186	3							•		
121	1 244	3		•		•	•				
122	1 251	3			•	•					
123	1.414	3					•				
124	1.457	3				•	•		•		
125	1 585	3				•	•			•	
126	0 325	2					•				
127	0 356	2									
128	0 747	2									
129	0.754	2					•	•			
130	0.817	2									
131	0 823	2									
132	0 855	2					•				
133	0 896	2									
134	0 898	2									
135	0 905	2									
136	0 933	2				•					
137	0 976	2				•			•		
138	0.982	2									
139	0 985	2					•				
140	1 020	2									
141	1 038	2						•			
142	1 053	2				• •					
143	1 080	2							•		
144	1 106	2									
145	1 120	2									
146	1 124	2			•						
147	1.143	2									
148	1 152	2		•							
149	1 158	2							•		
150	1 179	2									
151	1 221	2			•				•		
152	1 252	2					•	•			
153	1 336	2									
154	1.345	2						•	•		
155	1 360	2									
156	1 382	2						•			
157	1.542	2					•	•			
158	1 577	2									
159	1 589	2						•			
160	1 600	2									
161	1 680	2						• •			
162	1 727	2									
163	1 731	2					•				
164	0 229	1									
165	0 255	1									
166	0 266	1									
167	0 269	1									
168	0 279	1									
169	0 293	1									
170	0 300	1									
171	0 329	1									
172	0.357	1									
173	0 406	1									

Table E-2 (continued)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples a									
174	0.406	1									
175	0.463	1									
176	0 499	1						•			
177	0.539	1									
178	0 575	1									
179	0 672	1									•
180	0.676	1				•					
181	0.708	1						•			
182	0.724	1									
183	0.732	1									
184	0 732	1									
185	0.734	1									
186	0 742	1						•			
187	0.743	1					•				
188	0.747	1					•				
189	0 749	1									
190	0 799	1									
191	0.829	1									
192	0 830	1									
193	0 855	1									
194	0.892	1									
195	0 911	1									
196	0.914	1									
197	0 973	1									
198	1 011	1									
199	1.018	1								•	
200	1 035	1								•	
201	1 051	1								•	
202	1 053	1									
203	1.060	1					•				
204	1 064	1									
205	1.075	1									
206	1.078	1									
207	1.084	1									
208	1.107	1					•				
209	1.117	1									
210	1.117	1				•					
211	1.118	1				•					
212	1 121	1									•
213	1 122	1				•					
214	1 134	1									
215	1 134	1									
216	1.138	1									
217	1.140	1							•		
218	1.140	1				•					
219	1 152	1									
220	1 161	1									
221	1 170	1									
222	1 189	1						•			
223	1 208	1									
224	1 217	1									
225	1.226	1									
226	1 262	1					•				
227	1 288	1									
228	1 289	1						•			
229	1 304	1									
230	1 348	1									•
231	1 349	1			•						

Table E-2 (concluded)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]									
232	1 349	1									
233	1.350	1									
234	1 356	1									
235	1 375	1									
236	1 379	1					•				
237	1 394	1									
238	1 407	1			•						
239	1 534	1	•								
240	1.588	1					•				
241	1 590	1									
242	1 596	1						•			
243	1 624	1									
244	1 634	1						•			
245	1 646	1						•			
246	1 659	1					•				
247	1 676	1									
248	1 678	1									
249	1 701	1						•			
250	1.709	1							•		
251	1 718	1									
252	1 721	1						•			
253	1.731	1								•	
254	1 734	1									
255	1.734	1									
256	1 740	1					•				
257	1.804	1									
258	1 889	1		•							

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table E-3. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

	CENSUS REGION		NORTH CENTRAL								
	CENSUS DIVISION		EAST NORTH CENTRAL						WEST NORTH CENTRAL		
	AGE GROUP		0-14		15-44		45+		0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples a									
I.S.	1.000	44	•	•	•	•	•	•	•	•	•
1	0.924	42	•	•	•	•	•	•	•	•	•
2	1.600	42	•	•	•	•	•	•	•	•	•
3	0.759	38		•	•	•	•	•	•	•	•
4	1 027	38	•	•	•	•	•	•	•	•	•
5	1.023	35	•		•	•	•	•			•
6	1.117	34	•	•	•	•	•	•	•	•	•
7	1.706	34		•	•	•	•	•	•	•	•
8	1.129	32	•	•	•	•	•	•	•	•	•
9	0.879	31		•	•	•		•	•	•	•
10	0.702	30	•		•	•	•	•			•
11	0.919	30	•	•	•			•	•	•	•
12	0.990	29	•		•		•	•	•	•	•
13	0.838	28	•	•	•	•	•		•	•	
14	0.912	26	•	•	•				•	•	
15	1.481	26		•		•		•	•	•	•
16	1.760	25			•		•	•		•	•
17	0.985	24				•	•	•			•
18	1.059	24				•	•	•	•		•
19	0.673	23	•		•		•		•	•	•
20	0.993	23				•	•	•			
21	0.982	22	•	•	•	•	•		•	•	
22	1.533	22		•		•		•		•	•
23	1.063	21	•				•	•	•		•
24	1.199	21		•	•	•	•	•	•		•
25	1.374	21		•		•			•		•
26	0 726	19				•	•	•			•
27	1 741	19					•	•			•
28	0.952	17				•	•	•			•
29	1 237	17			•	•	•		•		
30	1.629	17					•		•		•
31	1 586	16		•				•		•	•
32	0.493	15	•		•			•			
33	1 002	15				•	•				•
34	1.065	15		•	•	•	•				
35	0 839	14				•		•			•
36	1.070	14		•			•	•			
37	1.728	14			•			•	•	•	•
38	0.574	13	•		•						
39	0.665	13		•		•	•				•
40	1.178	13	•	•	•				•	•	
41	1 280	13				•		•			•
42	1 297	13		•	•				•	•	
43	0 190	12	•	•					•		
44	0 666	12	•		•			•			
45	0.310	11	•	•	•			•			
46	0.603	11									•
47	1.082	11					•				
48	1 131	11							•		•
49	1.146	11	•		•			•			
50	0.411	10	•		•			•			
51	0.780	10		•				•			
52	1.009	10	•					•			
53	1 160	10						•			•
54	1 219	10				•					•
55	1.224	9						•	•		
56	0 220	8	•	•							
57	0 670	8									

Table E-3 (continued)

		CENSUS REGION	NORTH CENTRAL							
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL				
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
Index	Average RRT	Number of Occurences In Samples [a]								
58	0 959	8			• •			• •		
59	1.178	8		•	•					
60	1.197	8								
61	1.626	8			• •			•		
62	1.638	8	•	•	•			•		
63	0.360	7	•	•						
64	0.674	7					•			
65	0.897	7			•					
66	0.932	7		•	•					
67	1 051	7	•		•	•				
68	1 094	7			• •	•		•		
69	1.427	7				•				
70	1 475	7			•					
71	1.681	7		•	• • •					
72	1.773	7			• •					
73	0 337	6	•							
74	0.662	6		•						
75	0.880	6			•					
76	1.177	6			• • •			•		
77	1.253	6	•	•		•				
78	1.681	6						•		
79	0.278	5								
80	0 472	5	•	•						
81	0 736	5		•	•					
82	0.991	5	•	• •						
83	1.057	5	• •	•						
84	1.069	5		•	•					
85	1.073	5			•					
86	1 085	5			•			•		
87	1.195	5								
88	1.407	5			• •			•		
89	0 399	4								
90	0 661	4	•	• •						
91	0.730	4		•						
92	0 965	4								
93	1 068	4	•			•				
94	1.144	4		•		•				
95	1.195	4	•		•					
96	1.222	4				•				
97	1 326	4			•					
98	1 355	4				•		•		
99	1 389	4			•			•		
100	1 411	4				•		•		
101	1.538	4			•					
102	0 316	3			•					
103	0 608	3			•					
104	0.662	3								
105	0 747	3								
106	0.754	3	•	•						
107	0 855	3								
108	0 893	3								
109	0 918	3		•						
110	0.967	3			• •					
111	1 019	3								
112	1 025	3								
113	1 041	3				•				
114	1.045	3								
115	1 050	3								

Table E-3 (continued)

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples [a]						
116	1.055	3			•			•
117	1.076	3			• •			•
118	1.107	3						
119	1.109	3						
120	1.186	3						
121	1.244	3						
122	1 251	3						•
123	1.414	3						
124	1.457	3						
125	1.585	3						
126	0.325	2		•				
127	0.356	2						
128	0.747	2						
129	0.754	2						
130	0.817	2		•				
131	0.823	2						
132	0.855	2						
133	0.896	2						
134	0.898	2						
135	0 905	2						
136	0.933	2						
137	0.976	2						
138	0.982	2			•			•
139	0.985	2						
140	1.020	2			•			•
141	1.038	2			•			
142	1.053	2						
143	1.080	2	•					
144	1.106	2						
145	1.120	2						
146	1.124	2						•
147	1.143	2			• •			
148	1.152	2						
149	1.158	2						
150	1.179	2						
151	1.221	2						
152	1.252	2						
153	1.336	2			•			•
154	1.345	2						
155	1.360	2			•			
156	1.382	2			•			
157	1.542	2						
158	1.577	2		•	•			
159	1 589	2						
160	1.600	2						
161	1.680	2						
162	1 727	2			•			
163	1 731	2			•			
164	0.229	1						
165	0.255	1						
166	0.266	1						
167	0.269	1						
168	0.279	1						
169	0.293	1	•					
170	0.300	1						
171	0 329	1		•				
172	0.357	1						
173	0.406	1			•			

Table E-3 (continued)

	CENSUS REGION		NORTH CENTRAL					
	CENSUS DIVISION		EAST NORTH CENTRAL			WEST NORTH CENTRAL		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples[a]						
174	0.406	1			•			
175	0 463	1						
176	0.499	1						
177	0.539	1						
178	0.575	1						
179	0.672	1						
180	0.676	1						
181	0 708	1						
182	0.724	1		•				
183	0.732	1	•					
184	0.732	1						
185	0 734	1						
186	0 742	1						
187	0.743	1						
188	0 747	1						
189	0.749	1	•					
190	0.799	1		•				
191	0.829	1						
192	0.830	1	•					
193	0 855	1		•				
194	0 892	1						
195	0 911	1						
196	0 914	1						•
197	0.973	1			•			
198	1 011	1				•		
199	1.018	1						
200	1 035	1						
201	1.051	1						
202	1.053	1						
203	1 060	1						
204	1 064	1						
205	1.075	1						•
206	1.078	1						
207	1 084	1				•		
208	1 107	1						
209	1.117	1						
210	1.117	1						
211	1.118	1						
212	1 121	1						
213	1 122	1						
214	1.134	1						
215	1.134	1						
216	1 138	1	•					
217	1 140	1						
218	1.140	1						
219	1 152	1				•		
220	1 161	1						
221	1.170	1				•		
222	1.189	1						
223	1 208	1						
224	1 217	1			•			
225	1 226	1						
226	1 262	1						
227	1 288	1					•	
228	1.289	1						
229	1 304	1						
230	1.348	1						
231	1 349	1						

Table E-3 (concluded)

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples [a]						
232	1.349	1			•			
233	1.350	1						•
234	1.356	1			•			
235	1.375	1			•			
236	1.379	1						
237	1 394	1				•		
238	1.407	1						
239	1.534	1						
240	1 588	1						
241	1.590	1						
242	1.596	1						
243	1.624	1			•			
244	1.634	1						
245	1 646	1						
246	1.659	1						
247	1.676	1						
248	1.678	1						
249	1.701	1						
250	1.709	1						
251	1.718	1						
252	1.721	1						
253	1.731	1						
254	1.734	1						
255	1.734	1						
256	1.740	1						
257	1.804	1		•				
258	1.889	1						

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table E-4. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - Northeast Census Region

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples[a]						
IS	1.000	44	• •	• •	• •	•	•	•
1	0 924	42	• •	• •	• •	•	•	•
2	1.600	42	• •	•	• •	•		•
3	0.759	38	• •	• •	• •	•	•	•
4	1.027	38	• •	• •	• •		•	•
5	1.023	35	• •	•	• •			•
6	1.117	34	•	•		•		
7	1.706	34	• •	•	•			•
8	1 129	32				•		
9	0 879	31	•	•	• •		•	•
10	0 702	30		•	•		•	•
11	0 919	30	• •	• •	•	•	•	
12	0.990	29	• •	•			•	
13	0.838	28	•	•	•	•		
14	0 912	26	•	• •		•		•
15	1.481	26	•					
16	1.760	25			•			•
17	0 985	24	•	•	• •			•
18	1 059	24						•
19	0.673	23	• •	• •		•	•	
20	0 993	23	•	• •	• •			•
21	0.982	22	•	•		•		
22	1.533	22	•					•
23	1.063	21		•	•		•	•
24	1 199	21	•		•			•
25	1.374	21	•			•		•
26	0.726	19		•	•			•
27	1.741	19		•	•			•
28	0 952	17			• •			
29	1 237	17	•					
30	1.629	17			•	•		
31	1.586	16			•			
32	0.493	15	• •	• •		•		
33	1.002	15		•	•			
34	1.065	15	•	•				
35	0 839	14			•		•	•
36	1.070	14				•		
37	1.728	14			•			
38	0.574	13						
39	0 665	13			• •			
40	1 178	13						
41	1 280	13						•
42	1.297	13						
43	0 190	12	• •			•		
44	0 666	12	• •	• •				
45	0.310	11	•		•			
46	0 603	11		•				
47	1 082	11						
48	1 131	11	•		•			•
49	1 146	11			•	•		
50	0.411	10						•
51	0.780	10				•		
52	1 009	10						
53	1 160	10			•			•

Table E-4 (continued)

	CENSUS REGION		NORTHEAST					
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples[a]						
54	1.219	10			•			•
55	1.224	9			• •			
56	0.220	8	• •			•		
57	0.670	8						•
58	0.959	8			•			
59	1 178	8						•
60	1 197	8				•		
61	1 626	8			•			
62	1.638	8						
63	0.360	7						
64	0 674	7	•	•		•	•	
65	0.897	7						
66	0.932	7				•		•
67	1.051	7						•
68	1.094	7			•			
69	1.427	7		•				
70	1.475	7	• •		• •			•
71	1.681	7						•
72	1.773	7			•			•
73	0.337	6						
74	0 662	6		•			•	
75	0.880	6		•				
76	1.177	6						
77	1.253	6						
78	1 681	6			•			
79	0.278	5	•		•	•		
80	0.472	5						
81	0.736	5						
82	0 991	5						
83	1.057	5						
84	1 069	5			• •			
85	1 073	5			•			•
86	1.085	5			•			•
87	1.195	5						
88	1.407	5						
89	0.399	4		• •		•	•	
90	0 661	4						
91	0 730	4						
92	0 965	4	•			•		•
93	1.068	4						
94	1.144	4						•
95	1 195	4						
96	1 222	4						
97	1.326	4						•
98	1 355	4						
99	1.389	4						
100	1.411	4						
101	1 538	4						•
102	0 316	3						•
103	0 608	3						
104	0 662	3						
105	0 747	3		•				•
106	0 754	3						
107	0 855	3						

Table E-4 (continued)

	CENSUS REGION		NORTHEAST					
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples[a]						
108	0.893	3						
109	0.918	3						
110	0.967	3						
111	1.019	3		•			•	
112	1.025	3		•				
113	1.041	3	•					•
114	1.045	3						
115	1.050	3	•					
116	1.055	3						
117	1.076	3						
118	1.107	3	•	•			•	
119	1 109	3						
120	1 186	3			•			
121	1.244	3						
122	1.251	3						
123	1.414	3				•		
124	1.457	3						
125	1 585	3						
126	0.325	2						
127	0.356	2			•			•
128	0.747	2		•				•
129	0 754	2						
130	0.817	2						
131	0.823	2		•				•
132	0.855	2						
133	0.896	2		•				
134	0 898	2		•				•
135	0 905	2		•				•
136	0.933	2						
137	0.976	2						
138	0.982	2						
139	0.985	2						
140	1.020	2						
141	1.038	2						
142	1 053	2						
143	1.080	2						
144	1 106	2			•			
145	1 120	2	•				•	
146	1 124	2						
147	1.143	2						
148	1.152	2						
149	1 158	2	•					
150	1 179	2	•					
151	1.221	2						
152	1 252	2						
153	1.336	2						
154	1 345	2						
155	1 360	2			•			
156	1 382	2						
157	1.542	2						
158	1 577	2						
159	1 589	2	•					
160	1.600	2		•				
161	1.680	2						

Table E-4 (continued)

	CENSUS REGION		NORTHEAST					
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples [a]						
162	1 727	2						•
163	1 731	2						
164	0.229	1				•		
165	0 255	1				•		
166	0 266	1				•		
167	0 269	1						
168	0 279	1						
169	0.293	1						
170	0.300	1						•
171	0 329	1						
172	0 357	1						
173	0 406	1						
174	0 406	1						
175	0.463	1						•
176	0 499	1						
177	0 539	1						
178	0 575	1	•					
179	0.672	1						
180	0.676	1						
181	0.708	1						
182	0.724	1						
183	0.732	1						
184	0.732	1						
185	0.734	1			•			
186	0.742	1						
187	0 743	1						
188	0 747	1						
189	0.749	1						
190	0.799	1						
191	0.829	1						•
192	0 830	1						
193	0.855	1						
194	0.892	1						•
195	0.911	1				•		
196	0.914	1						
197	0 973	1						
198	1.011	1						
199	1.018	1						
200	1 035	1						
201	1.051	1						
202	1 053	1	•					
203	1.060	1						
204	1.064	1	•					
205	1 075	1						
206	1 078	1						
207	1 084	1						
208	1 107	1						
209	1 117	1			•			
210	1.117	1						
211	1 118	1						
212	1 121	1						
213	1 122	1						
214	1.134	1						
215	1.134	1	•					

Table E-4 (concluded)

	CENSUS REGION		NORTHEAST					
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurences In Samples[a]						
216	1 138	1						
217	1 140	1						
218	1 140	1						
219	1.152	1						
220	1.161	1	•					
221	1.170	1						
222	1.189	1						
223	1.208	1	•					
224	1.217	1						
225	1.226	1					•	
226	1.262	1						
227	1.288	1						
228	1.289	1						
229	1.304	1			•			
230	1.348	1						
231	1.349	1						
232	1 349	1						
233	1.350	1						
234	1.356	1						
235	1.375	1						
236	1.379	1						
237	1.394	1						
238	1.407	1						
239	1.534	1						
240	1.588	1						
241	1.590	1						•
242	1.596	1						
243	1 624	1						
244	1 634	1						
245	1.646	1						
246	1 659	1						
247	1 676	1			•			
248	1.678	1						•
249	1.701	1						
250	1.709	1						
251	1.718	1						•
252	1.721	1						
253	1.731	1						
254	1 734	1	•					
255	1.734	1	•					
256	1.740	1						
257	1.804	1						
258	1 889	1						

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

APPENDIX F

DOT MATRIX TABLE FOR UNIDENTIFIED HRGC/MS PEAKS IN THE 15/50% FLORISIL SEMIVOLATILE ORGANIC ANALYSIS DATA SET; UNIDENTIFIED SEMIVOLATILE ORGANIC COMPOUND RESPONSES VS. CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table F-1. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - West Census Region

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]						
IS	1.000	46	•	•	•	•	•	•
1	1 920	44	•	•	•	•	•	
2	0.419	42	•		•	•	•	•
3	1 052	41	•	•	•	•	•	
4	1 007	40	•	•	•	•	•	
5	0.452	38	•	•	•	•	•	•
6	1.616	38		•	•		•	
7	0.402	37	•	•	•	•	•	•
8	0.633	35	•	•		•	•	
9	1 742	35		•	•			
10	0 449	34	•	•	•	•	•	•
11	1.569	34	•	•			•	
12	2.034	34	•	•	•	•	•	
13	1.692	33		•	•			
14	1.682	32			•			
15	1 710	32		•	•			
16	0.437	29	•	•	•	•	•	•
17	0.606	29	•	•		•	•	•
18	1 238	29				•	•	
19	1.657	28		•	•			
20	1.187	28		•	•			
21	1.453	28		•	•			
22	0.839	27				•	•	
23	1.665	27			•			
24	0.647	26	•	•			•	
25	1.128	26					•	
26	2.059	26		•	•			
27	1.953	25		•	•			
28	1.440	25			•			
29	1.490	24		•	•			
30	1.722	23		•	•			
31	1.430	22			•			
32	0.932	21	•					
33	1.115	21				•	•	
34	1.223	21	•	•		•		
35	2.009	20		•	•			
36	0.589	20	•	•		•	•	•
37	1.147	20				•	•	
38	1.567	20		•	•			
39	1.235	19				•		
40	1.178	18			•			
41	0 555	18	•	•				
42	0 990	17						
43	1.319	17			•			
44	1.629	16		•				
45	0 876	16	•	•				
46	0.680	15	•	•	•			
47	0.912	15	•					
48	1.086	15	•	•		•		
49	1 089	15			•			
50	1.556	15		•	•			
51	1 980	15			•			
52	1.929	14		•	•			
53	0.982	14						
54	1.809	14		•				
55	1 027	13		•				
56	1.210	13		•				
57	1 500	13			•			

Table F-1 (continued)

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
58	1 950	13			•			
59	0 586	12			•			
60	0.858	12						
61	1 511	12			•			
62	1.961	12		•				
63	2.014	12		•	•			
64	2.088	12			•			
65	0.996	11			•			
66	1.027	11			•			
67	0.218	11	•			•		
68	0.398	11						
69	1 475	11						
70	1.522	11		•	•			
71	1.542	11			•			
72	1.980	11		•				
73	0.745	10						
74	0 904	10	•					
75	1.105	10			•			
76	1.359	10						
77	0.429	9					•	
78	0.673	9						
79	0 897	9	•					
80	1.548	9			•			
81	1.989	9						
82	0.226	8	•			•		
83	0.243	8	•			•		
84	0 989	8					•	
85	1.149	8						
86	1.351	8		•				
87	1 973	8						
88	2.151	8			•			
89	2.174	8						
90	0 301	7	•			•	•	
91	0 392	7					•	
92	0.520	7		•				
93	0 672	7	•					
94	1.198	7						
95	1.675	7		•				
96	1.889	7			•			
97	0.492	6					•	
98	0.758	6						
99	1 175	6						
100	1 202	6		•				
101	1.308	6						
102	1 472	6		•	•			
103	1 531	6						
104	1.966	6						
105	2 137	6			•			
106	1 531	5		•				
107	0 374	5		•				
108	0 450	5						
109	0 540	5						
110	0 547	5						
111	0.559	5						
112	0 573	5	•					
113	0 762	5						
114	0 918	5						
115	1 062	5			•			

Table F-1 (continued)

	CENSUS REGION	WEST					
	CENSUS DIVISION	MOUNTAIN			PACIFIC		
	AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]					
116	1 070	5		•			
117	1.105	5					
118	1.138	5					
119	1.175	5					
120	1.288	5			•		
121	1.460	5			•		
122	1.716	5					
123	1.729	5					
124	0.475	4	•				
125	0.507	4					
126	0.520	4			•		
127	0.667	4					
128	0 721	4					
129	0.832	4					
130	0.936	4	•				
131	1.061	4					
132	1 109	4		•			
133	1.153	4					
134	1.173	4					
135	1.277	4					
136	1.328	4					
137	1.580	4			•		
138	1.927	4				•	
139	1.979	4			•		
140	2.000	4					
141	0.319	3					
142	0.375	3					•
143	0.609	3					
144	0.307	3				•	
145	0.346	3					
146	0.353	3	•	•			•
147	0.487	3					
148	0.727	3					
149	0.739	3	•				
150	0.790	3		•			
151	0.821	3					
152	0 828	3					
153	1.083	3					
154	1.119	3					
155	1.123	3					
156	1.195	3					
157	1.309	3		•			
158	1.404	3					
159	1.448	3					
160	1 538	3					
161	1.856	3					
162	1.953	3					
163	2.084	3					
164	2.091	3					
165	0.512	2					
166	0 572	2					
167	1 809	2					
168	1 900	2					
169	0 237	2					
170	0.261	2					
171	0.337	2					
172	0 341	2					
173	0.342	2					

Table F-1 (continued)

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Sample[a]						
174	0.382	2	•					
175	0.413	2						
176	0.435	2			•			
177	0.450	2						
178	0 489	2						
179	0.496	2						
180	0.552	2						
181	0.599	2						
182	0.614	2						
183	0.677	2						
184	0.758	2		•				
185	0.791	2						
186	0 908	2						
187	0.921	2						
188	0 957	2						
189	1.059	2						
190	1.261	2						
191	1 283	2						
192	1.291	2						
193	1.297	2						
194	1.353	2						
195	1 463	2						
196	1 507	2						
197	1 516	2						
198	1.525	2						
199	1.586	2						
200	1 594	2						
201	1 673	2						
202	1 866	2						
203	1 931	2						
204	2 030	2						
205	2.102	2			•			
206	0 333	1						
207	0 544	1						
208	0.199	1						
209	0.203	1						
210	0.216	1						
211	0.221	1						
212	0.239	1						
213	0 240	1						
214	0.241	1						
215	0 254	1						
216	0 266	1						
217	0 268	1						
218	0 283	1						
219	0.285	1						
220	0 293	1						
221	0 300	1						
222	0.327	1						
223	0.344	1			•			
224	0.352	1						
225	0.353	1			•			
226	0.358	1			•			
227	0 359	1						
228	0.362	1			•			
229	0 365	1						
230	0 370	1						
231	0.371	1			•			

Table F-1 (continued)

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
232	0.372	1						
233	0.394	1						
234	0.405	1						
235	0.414	1						
236	0.419	1						
237	0.421	1						
238	0.422	1						
239	0.455	1						
240	0.463	1						
241	0.465	1						
242	0 504	1	•					
243	0.507	1	•					
244	0.510	1						
245	0.516	1						
246	0.545	1						
247	0.575	1						
248	0.584	1	•					
249	0.652	1						
250	0.653	1						
251	0.678	1						
252	0 683	1						
253	0.711	1						
254	0.744	1		•				
255	0.745	1						
256	0.767	1						
257	0.771	1						
258	0.775	1						
259	0.779	1						
260	0.786	1						
261	0.787	1						
262	0.821	1		•				
263	0.915	1						
264	0.929	1						
265	0.945	1						
266	0.960	1						
267	0.988	1						
268	1 017	1						
269	1.018	1						
270	1.037	1						
271	1.046	1						
272	1.061	1						
273	1 063	1						
274	1.070	1						
275	1.089	1						
276	1.091	1						
277	1.112	1						
278	1.121	1						
279	1.140	1						
280	1.174	1			•			
281	1.180	1						
282	1.197	1						
283	1.204	1						
284	1.204	1						
285	1.218	1						
286	1.223	1						
287	1.226	1						
288	1.243	1						
289	1.248	1						

Table F-1 (concluded)

		CENSUS REGION	WEST					
		CENSUS DIVISION	MOUNTAIN			PACIFIC		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
290	1.289	1						
291	1.291	1						
292	1.296	1						
293	1.309	1						
294	1.311	1						
295	1.335	1						
296	1 342	1						
297	1.346	1						
298	1.348	1						
299	1.350	1						
300	1 363	1						
301	1 366	1						
302	1.377	1						
303	1 384	1						
304	1.386	1						
305	1.390	1						
306	1.403	1						
307	1.421	1						
308	1.422	1						
309	1.427	1						
310	1.433	1						
311	1.435	1						
312	1.457	1						
313	1.481	1						
314	1.492	1						
315	1.495	1						
316	1.499	1						
317	1.523	1						
318	1.525	1						
319	1 531	1						
320	1.545	1						
321	1.562	1						
322	1 583	1						
323	1 584	1						
324	1.589	1						
325	1.596	1						
326	1.602	1						
327	1 606	1						
328	1.607	1						
329	1.671	1						
330	1.695	1						
331	1.740	1						
332	1.761	1						
333	1.762	1						
334	1.776	1						
335	1 839	1						
336	1 907	1						
337	1 964	1						
338	1 973	1						
339	1 980	1						
340	1 991	1						
341	2 053	1						
342	2 063	1						
343	2.107	1						

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table F-2. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - South Central Region

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples a									
IS	1 000	46	•	• •	• •	• •	• • • •	• • • •	•	• •	•
1	1.920	44	•	• •	•	• •	• • • •	• • • •	•	• •	•
2	0.419	42	•	• •	•	• •	• • • •	• • •	•	• •	•
3	1.052	41	•	• •	• •	• •	• • • •	• • •	•	• •	•
4	1.007	40	•	• •	•	• •	• • • •	• • • •	•	• •	•
5	0.452	38	•	•	•	• •	• • •	• • •	•	• •	•
6	1 616	38	•	•	• •	• •	• • • •	• • • •		• •	•
7	0.402	37	•	•	•	•	• • •	• • •	•	• •	•
8	0 633	35	•	•	•	• •	• • • •	• • •	•		
9	1 742	35	•	•	• •	• •	• • • •	• • •		• •	•
10	0 449	34	•	•	•	• •	• •	• •	•	•	•
11	1 569	34	•	•	• •	• •	• • • •	• • •	•	•	•
12	2.034	34	•	•	•	• •	• • •	• •	•	• •	•
13	1 692	33	•	•	• •	• •	• • • •	• • •		• •	•
14	1.682	32	•	•	•	• •	• • • •	• • • •		•	
15	1 710	32	•	•	• •	• •	• • • •	• • •		• •	•
16	0.437	29	•	•	•	•	•	• • •	•		•
17	0.606	29		•	•	• •	• • • •	• • •			
18	1.238	29			•		• • • •	• • • •	•	• •	•
19	1.657	28	•	•	•	•	•	• •	•	•	•
20	1.187	28	•	•	• •	• •	• • • •	• • •			•
21	1.453	28	•	•	•	•	• • •	• • •		•	
22	0 839	27				• •	• • •	• • •	•	• •	•
23	1.665	27	•	• •	•	•	• •	• • •		• •	•
24	0.647	26		•	• •	• •	• • • •	• • •			
25	1.128	26		•	•		• • • •	• • • •	•	• •	•
26	2 059	26	•	•	•	• •	• •	• • •		• •	•
27	1.953	25	•	•	•	• •	• •	• •	•	• •	•
28	1.440	25	•	•	•	•	• • •	• • •		• •	•
29	1.490	24	•	•	•	•	• •	• • •		• •	
30	1.722	23	•	•	•	•	•	•		• •	•
31	1.430	22	•	•	•	•	• •	• •		• •	•
32	0 932	21		•	• •	•	• • •	• • •	•		•
33	1 115	21		•			• • •	• • • •		• •	•
34	1 223	21	•		•	•	• • •	• •	•		
35	2 009	20	•	•	•	•	•	•	•	• •	•
36	0 589	20				•	• •	• •			
37	1 147	20	•	•	• •		• • •	• • • •		•	•
38	1.567	20	•	•	•	•	• •	•		• •	
39	1 235	19	•			•	• • •	• •		• •	•
40	1.178	18	•	•	•		•	• •	•	•	•
41	0 555	18		•		• •	• •	• •			
42	0 990	17					• • •	• • •	•	• •	
43	1.319	17	•	•	•	•	•	• •		•	
44	1 629	16			•		• •	• •			•
45	0 876	16				• •	• •	• • •		•	
46	0.680	15				• •	• • •	• •			
47	0 912	15				• •	• •	• •		•	•
48	1.086	15	•			• •	•	•	•		
49	1 089	15			• •		• •	•			•
50	1 556	15	•	•	•	•				•	
51	1 980	15	•	•	•	•	•	•		• •	
52	1.929	14		•			• •	• •	•	•	•
53	0 982	14					• •	• •		• •	•
54	1 809	14		•	•	• •	•	•		•	•
55	1.027	13			•		• •	• •			•
56	1.210	13			•			• •	•		
57	1 500	13	•		•		•	•		•	

Table F-2 (continued)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]									
58	1.950	13			•		•	• •		• •	
59	0 586	12	•		•	•	•		•	•	•
60	0.858	12	•		•	•		•			
61	1 511	12	•	•	•					•	
62	1.961	12		•			• •	• •			
63	2.014	12	•	•	•	•		•			•
64	2.088	12			•	•		•		•	•
65	0 996	11	•	•	•				•	•	
66	1 027	11	•	•					•	• •	
67	0 218	11	•			• •			•		
68	0 398	11		•		•	• •	• •			
69	1.475	11		•	•	•		•			
70	1 522	11	•	•		•				•	
71	1.542	11	•	•	•	•		•			
72	1 980	11		•		•		•	•		•
73	0.745	10			•		• •	• •			•
74	0.904	10				• •		•		•	•
75	1 105	10	•	•	•					•	
76	1 359	10	•		•		•		•		
77	0 429	9				•	•				
78	0.673	9					•	•	•		
79	0 897	9				• •		•		•	•
80	1 548	9	•		•					•	
81	1.989	9		•	•		•	• •			
82	0.226	8	•			•					
83	0.243	8	•			•					
84	0 989	8					•	•			•
85	1.149	8				•	• •				
86	1 351	8					•	•		•	
87	1 973	8		•			• •	•			
88	2 151	8		•	•	•					•
89	2 174	8		•		•		•		•	•
90	0 301	7				•		•			
91	0.392	7					•	•		•	
92	0 520	7									
93	0 672	7				• •		•		•	•
94	1.198	7					• • •	• •			
95	1 675	7			•	•				•	•
96	1.889	7		•	•			•			
97	0 492	6									
98	0 758	6					•	•			
99	1.175	6					•	• •			
100	1 202	6			•	•			•	•	
101	1 308	6	•		•					•	
102	1.472	6	•					•		•	
103	1 531	6		•		•		•			
104	1 966	6			•	•				•	
105	2.137	6		•	•					•	
106	1 531	5				•	•				
107	0.374	5				• •					
108	0 450	5					• •				
109	0 540	5				•	•	•			•
110	0 547	5			•			•			•
111	0 559	5						•	•		•
112	0 573	5				•				•	•
113	0 762	5			•					•	•
114	0.918	5					•	•			
115	1.062	5	•		•					•	

Table F-2 (continued)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]									
116	1 070	5					•	•			
117	1.105	5						•			•
118	1.138	5						• •			
119	1.175	5									
120	1.288	5		•						•	
121	1.460	5	•							•	
122	1 716	5			•	•		•			
123	1.729	5			•						•
124	0.475	4						•			
125	0.507	4					•	•		•	
126	0 520	4	•							•	
127	0 667	4						•			
128	0.721	4						• •		•	•
129	0.832	4			•		•	• •			
130	0 936	4				•					
131	1 061	4						•			•
132	1.109	4									
133	1 153	4	•							•	
134	1.173	4						• •			
135	1.277	4						•	•		
136	1.328	4			•	•		•		•	
137	1.580	4									
138	1 927	4					•				
139	1.979	4			•						
140	2.000	4					•	•			
141	0.319	3				•					
142	0 375	3									
143	0.609	3			•						•
144	0 307	3				•		•			
145	0.346	3									•
146	0.353	3									
147	0.487	3			•						•
148	0.727	3				•	•	•			
149	0 739	3									
150	0.790	3									
151	0.821	3				•				•	
152	0 828	3				•				•	
153	1 083	3					•	• •			
154	1.119	3			•			•			
155	1 123	3						•			
156	1 195	3				•	•	•			
157	1 309	3				•	•				
158	1 404	3	•								
159	1 448	3			•			•			
160	1.538	3				•		•			
161	1.856	3									•
162	1.953	3						•			
163	2.084	3				•					
164	2 091	3						•		•	
165	0 512	2									
166	0.572	2			•					•	
167	1.809	2								•	•
168	1.900	2								•	•
169	0.237	2				•					
170	0.261	2									
171	0.337	2						•			
172	0.341	2									
173	0 342	2				•					

Table F-2 (continued)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]									
174	0.382	2						•			
175	0 413	2						•	•		
176	0.435	2									
177	0.450	2						•			
178	0.489	2			•			•			
179	0.496	2						•	•		
180	0 552	2				•					
181	0 599	2									
182	0.614	2									
183	0.677	2									
184	0.758	2									
185	0.791	2				•					
186	0.908	2			•						
187	0.921	2				• •					
188	0.957	2								•	
189	1.059	2	.								•
190	1.261	2						•			
191	1.283	2	•								
192	1.291	2					•	•			
193	1.297	2					•				
194	1.353	2					•				
195	1.463	2									
196	1.507	2	•								
197	1.516	2						•			
198	1.525	2									
199	1 586	2						•			
200	1.594	2									
201	1.673	2									
202	1.866	2			•						
203	1 931	2			•						
204	2.030	2						•			
205	2 102	2				•					
206	0.333	1									
207	0.544	1						•			
208	0.199	1							•		
209	0.203	1							•		
210	0.216	1									
211	0.221	1									
212	0.239	1							•		
213	0 240	1				•					
214	0.241	1									
215	0 254	1									
216	0 266	1				•					
217	0 268	1	•								
218	0.283	1									
219	0 285	1									
220	0.293	1									
221	0 300	1									
222	0.327	1									
223	0.344	1									
224	0.352	1						•			
225	0.353	1									
226	0.358	1									
227	0 359	1									
228	0.362	1									
229	0.365	1									
230	0.370	1									
231	0.371	1									

Table F-2 (continued)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]									
232	0.372	1							•		
233	0.394	1				•					
234	0.405	1						•			
235	0.414	1						•			
236	0.419	1									
237	0.421	1	•								
238	0 422	1				•					
239	0 455	1	•								
240	0.463	1									
241	0.465	1									
242	0 504	1									
243	0.507	1									
244	0.510	1									
245	0 516	1				•					
246	0 545	1						•			
247	0.575	1				•					
248	0.584	1									
249	0 652	1						•			
250	0.653	1									
251	0.678	1						•			
252	0.683	1									
253	0.711	1									
254	0.744	1									
255	0.745	1				•					
256	0.767	1									
257	0.771	1				•					
258	0.775	1				•					
259	0.779	1									•
260	0.786	1								•	
261	0.787	1				•					
262	0.821	1									
263	0.915	1			•						
264	0.929	1				•					
265	0.945	1				•					
266	0.960	1			•						
267	0.988	1			•						
268	1.017	1									
269	1.018	1						•			
270	1.037	1									•
271	1.046	1								•	
272	1.061	1									
273	1 063	1				•					
274	1.070	1					•				
275	1.089	1						•			
276	1.091	1			•						
277	1 112	1			•						
278	1.121	1									•
279	1 140	1									
280	1 174	1									
281	1.180	1			•						
282	1 197	1									•
283	1.204	1						•			
284	1 204	1			•						
285	1.218	1						•			
286	1.223	1			•						
287	1 226	1						•			
288	1 243	1			•						
289	1.248	1									•

Table F-2 (concluded)

		CENSUS REGION	SOUTH								
		CENSUS DIVISION	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]									
290	1 289	1									
291	1.291	1	•								
292	1.296	1									•
293	1.309	1			•						
294	1.311	1								•	
295	1 335	1						•			
296	1.342	1									
297	1.346	1			•						
298	1.348	1								•	
299	1.350	1									•
300	1.363	1						•			
301	1.366	1			•						
302	1.377	1			•						
303	1.384	1			•						
304	1.386	1				•					
305	1.390	1			•						
306	1.403	1			•						
307	1.421	1									
308	1.422	1									
309	1.427	1			•						
310	1.433	1									
311	1.435	1									
312	1.457	1			•						
313	1.481	1									
314	1.492	1		•							
315	1.495	1									
316	1.499	1									
317	1.523	1									
318	1.525	1			•						
319	1.531	1									
320	1 545	1									
321	1.562	1									
322	1.583	1									
323	1.584	1									
324	1.589	1									
325	1.596	1									
326	1.602	1									
327	1 606	1									
328	1.607	1									
329	1.671	1						•			
330	1.695	1						•			
331	1.740	1									
332	1 761	1							•		
333	1.762	1			•						
334	1 776	1									
335	1.839	1									
336	1.907	1			•						
337	1.964	1						•			
338	1.973	1		•							
339	1.980	1									
340	1 991	1						•			
341	2.053	1		•							
342	2.063	1		•							
343	2.107	1									

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table F-3. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

		CENSUS REGION	NORTH CENTRAL							
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL				
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
Index	Average RRT	Number of Occurrences In Samples [a]								
IS.	1.000	46	• •	• • •	• • •	•	•	• •		
1	1 920	44	• •	• • •	• • •	•	•	• •		
2	0 419	42	• •	• •	• • •	•	•	• •		
3	1.052	41	• •	• • •	• • •	•	•	• •		
4	1.007	40	• •	• • •	• • •	•	•	• •		
5	0.452	38	• •	• •	• • •	•	•	• •		
6	1.616	38	• •	• • •	• • •	•	•	• •		
7	0.402	37	•	• •	• • •	•	•	• •		
8	0.633	35	• •	• •	• • •	•		•		
9	1.742	35	• •	• • •	• • •	•		• •		
10	0.449	34	• •	• •	• •	•	•	• •		
11	1.569	34	•	• • •	• • •	•	•	•		
12	2 034	34	• •	• • •	• •	•		• •		
13	1.692	33	•	• • •	• • •	•	•	• •		
14	1 682	32	• •	• • •	• •	•		• •		
15	1.710	32	•	• • •	• • •	•	•	• •		
16	0 437	29	•	•	• •			• •		
17	0.606	29	•	• •	• • •	•				
18	1.238	29	• •	• • •	• • •	•	•	• •		
19	1.657	28	• •	• • •	•	•	•	• •		
20	1.187	28	•	• • •	• • •	•		•		
21	1 453	28	• •	• •	• • •	•	•	• •		
22	0.839	27	• •	• • •	• •	•	•	•		
23	1.665	27	•	• • •	• • •	•		• •		
24	0.647	26	•	• •	• • •	•				
25	1.128	26	• •	• • •	• • •	•	•	•		
26	2.059	26	•	• •	• • •	•		• •		
27	1.953	25	• •	•	•			• •		
28	1 440	25	•	•	• •	•	•	• •		
29	1.490	24	•	•	• •	•	•	• •		
30	1.722	23	•	•	•	•	•	• •		
31	1.430	22	•	•	•	•	•	• •		
32	0.932	21	•	• •	• •			•		
33	1.115	21	• •	•	• • •	•				
34	1.223	21	•	•	• •	•				
35	2 009	20	•	•	•		•	• •		
36	0.589	20	•	• •	• •					
37	1.147	20	•	•	•	•		•		
38	1.567	20		•	• •		•	• •		
39	1.235	19	•	• • •	•		•			
40	1.178	18	•	•	•	•		•		
41	0 555	18	•	•						
42	0.990	17	•	• •	• •	•		•		
43	1.319	17	•	•	• •			• •		
44	1 629	16		• •	•		•			
45	0.876	16	• •	•	•					
46	0 680	15	•	• •						
47	0 912	15	• •	•	• •	•				
48	1 086	15	• •	•	•	•				
49	1.089	15		• •	• •			•		
50	1 556	15		•	•		•	•		
51	1 980	15	•	•				•		
52	1.929	14	•				•			
53	0 982	14	• •	•	• •	•				
54	1.809	14		•			•	•		
55	1.027	13	•	•	• • •					
56	1.210	13	•		• •			•		
57	1 500	13		•	•		•	•		

Table F-3 (continued)

		CENSUS REGION	NORTH CENTRAL							
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL				
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
Index	Average RRT	Number of Occurrences In Samples[a]								
58	1.950	13	•		• •			•		
59	0 586	12		•	•	•		•		
60	0.858	12	•		• •			• •		
61	1.511	12	•	•	•		•			
62	1.961	12		• •	• • •					
63	2.014	12				•	•	• •		
64	2.088	12		•	•	•		•		
65	0.996	11					•	•		
66	1.027	11					•	•		
67	0.218	11	•			•				
68	0 398	11	•	•	•					
69	1.475	11		•	•		•	•		
70	1.522	11		•	•		•			
71	1.542	11		•			•	•		
72	1.980	11	•	•			•	•		
73	0.745	10	•	•		•				
74	0.904	10	•		• •					
75	1.105	10					•	•		
76	1.359	10	•	•	•					
77	0.429	9	•	• •	•		•			
78	0.673	9	• •		•	•				
79	0.897	9	• •							
80	1.548	9		•	•			•		
81	1.989	9		•	• • •					
82	0.226	8	•			•				
83	0.243	8	•			•				
84	0.989	8	•		•		•	•		
85	1.149	8	•	•	•					
86	1.351	8			•		•	• •		
87	1.973	8		• •	• •					
88	2 151	8						• •		
89	2.174	8		•	•					
90	0.301	7	• •							
91	0.392	7	•					•		
92	0.520	7								
93	0.672	7	•							
94	1.198	7	•		•					
95	1.675	7			•		•			
96	1 889	7						•		
97	0.492	6	• •		•					
98	0.758	6	•		• •					
99	1.175	6			• •			•		
100	1 202	6	•							
101	1.308	6			•					
102	1.472	6				•	•			
103	1.531	6		•	•		•			
104	1 966	6						•		
105	2 137	6						•		
106	1.531	5			•					
107	0.374	5		•						
108	0.450	5		•						
109	0.540	5		•						
110	0.547	5				•				
111	0.559	5				•				
112	0.573	5	•							
113	0.762	5				•		•		
114	0.918	5			• •			•		
115	1.062	5								

Table F-3 (continued)

		CENSUS REGION	NORTH CENTRAL						
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL			
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	
Index	Average RRT	Number of Occurrences In Samples [a]							
116	1.070	5			• •				
117	1.105	5						•	
118	1.138	5			• •			•	
119	1.175	5	•	•					
120	1.288	5							
121	1.460	5					•		
122	1.716	5	•						
123	1.729	5						• •	
124	0.475	4	•						
125	0.507	4							
126	0.520	4							
127	0.667	4	•		•	•			
128	0.721	4							
129	0.832	4							
130	0.936	4	•						
131	1 061	4	•						
132	1.109	4	•	•					
133	1 153	4							
134	1.173	4			• •				
135	1.277	4						•	
136	1 328	4							
137	1.580	4						• •	
138	1.927	4		• •					
139	1.979	4						•	
140	2.000	4			• •				
141	0.319	3	• •						
142	0.375	3	•						
143	0.609	3						•	
144	0.307	3							
145	0.346	3	•						
146	0.353	3							
147	0.487	3						•	
148	0 727	3							
149	0.739	3				•			
150	0.790	3							
151	0.821	3							
152	0 828	3							
153	1 083	3							
154	1.119	3						•	
155	1.123	3			• •				
156	1.195	3							
157	1.309	3							
158	1.404	3	•						
159	1.448	3							
160	1 538	3		•					
161	1 856	3					•	•	
162	1 953	3			• •				
163	2.084	3					•	•	
164	2 091	3						•	
165	0 512	2	•					•	
166	0.572	2							
167	1 809	2							
168	1 900	2							
169	0 237	2	•						
170	0 261	2							
171	0 337	2	•						
172	0 341	2							
173	0.342	2	•						

Table F-3 (continued)

		CENSUS REGION	NORTH CENTRAL							
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL				
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
Index	Average RRT	Number of Occurrences In Samples[a]								
174	0.382	2								
175	0.413	2								
176	0.435	2								
177	0.450	2								
178	0.489	2								
179	0.496	2								
180	0.552	2								
181	0.599	2								
182	0.614	2								
183	0.677	2								
184	0.758	2								
185	0.791	2								
186	0.908	2								
187	0 921	2								
188	0.957	2								
189	1.059	2								
190	1.261	2								
191	1.283	2								
192	1.291	2								
193	1.297	2								
194	1.353	2								
195	1.463	2								
196	1 507	2								
197	1.516	2								
198	1.525	2								
199	1 586	2								
200	1.594	2								
201	1.673	2								
202	1.866	2								
203	1.931	2								
204	2.030	2								
205	2.102	2								
206	0 333	1								
207	0.544	1								
208	0.199	1								
209	0.203	1								
210	0.216	1								
211	0 221	1								
212	0.239	1								
213	0.240	1								
214	0.241	1								
215	0.254	1								
216	0.266	1								
217	0 268	1								
218	0.283	1								
219	0.285	1								
220	0 293	1								
221	0.300	1								
222	0 327	1								
223	0.344	1								
224	0.352	1								
225	0 353	1								
226	0.358	1								
227	0.359	1								
228	0.362	1								
229	0.365	1								
230	0.370	1								
231	0.371	1								

Table F-3 (continued)

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
232	0.372	1						
233	0.394	1						
234	0 405	1						
235	0.414	1						
236	0.419	1						
237	0.421	1						
238	0.422	1						
239	0.455	1						
240	0.463	1						
241	0.465	1						
242	0.504	1						
243	0.507	1						
244	0.510	1						
245	0 516	1						
246	0.545	1						
247	0.575	1						
248	0.584	1						
249	0.652	1						
250	0.653	1						
251	0.678	1						
252	0 683	1						
253	0.711	1						
254	0.744	1						
255	0.745	1						
256	0.767	1						
257	0.771	1						
258	0.775	1						
259	0 779	1						
260	0.786	1						
261	0 787	1						
262	0.821	1						
263	0.915	1						
264	0.929	1						
265	0.945	1						
266	0.960	1						
267	0.988	1						
268	1.017	1						
269	1.018	1						
270	1.037	1						
271	1.046	1						
272	1.061	1						
273	1.063	1						
274	1 070	1						
275	1.089	1						
276	1.091	1						
277	1.112	1						
278	1.121	1						
279	1.140	1						
280	1 174	1						
281	1.180	1						
282	1.197	1						
283	1.204	1						
284	1.204	1						
285	1.218	1						
286	1.223	1						
287	1.226	1						
288	1 243	1						
289	1 248	1						

Table F-3 (concluded)

		CENSUS REGION	NORTH CENTRAL					
		CENSUS DIVISION	EAST NORTH CENTRAL			WEST NORTH CENTRAL		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
290	1.289	1			•			
291	1.291	1						
292	1.296	1						
293	1.309	1						
294	1.311	1						
295	1.335	1						
296	1.342	1			•			
297	1.346	1						
298	1.348	1						
299	1.350	1						
300	1.363	1						
301	1.366	1						
302	1.377	1						
303	1.384	1						
304	1.386	1						
305	1.390	1						
306	1.403	1						
307	1.421	1						
308	1.422	1	•					
309	1.427	1						
310	1.433	1			•			
311	1 435	1	•					
312	1.457	1						
313	1.481	1	•					
314	1.492	1						
315	1 495	1	•					
316	1.499	1	•					
317	1 523	1	•					
318	1.525	1						
319	1.531	1	•					
320	1 545	1	•					
321	1.562	1	•					
322	1.583	1	•					
323	1.584	1			•			
324	1.589	1	•					
325	1.596	1	•					
326	1.602	1	•					
327	1.606	1	•					
328	1.607	1			•			
329	1 671	1						
330	1.695	1						
331	1.740	1						
332	1.761	1						
333	1.762	1						
334	1 776	1						•
335	1.839	1			•			
336	1.907	1						
337	1 964	1						
338	1 973	1						
339	1 980	1						•
340	1.991	1						
341	2 053	1						
342	2.063	1						
343	2.107	1			•			

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

Table F-4. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - Northeast Census Region

		CENSUS REGION	NORTHEAST							
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND				
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
Index	Average RRT	Number of Occurrences In Samples a								
I.S.	1.000	46	•	•	•	•	•	•	•	•
1	1 920	44	•	•	•	•	•	•	•	•
2	0.419	42	•	•	•	•	•	•	•	•
3	1.052	41		•	•	•	•	•		•
4	1.007	40	•	•		•		•		•
5	0.452	38	•	•		•		•	•	•
6	1.616	38	•	•		•		•	•	•
7	0 402	37	•			•		•	•	•
8	0.633	35	•	•	•	•		•	•	•
9	1.742	35	•	•		•		•		•
10	0.449	34	•	•		•		•		•
11	1.569	34	•	•				•	•	•
12	2 034	34	•	•				•	•	•
13	1.692	33		•		•		•		•
14	1 682	32	•	•		•		•	•	•
15	1 710	32		•		•		•		
16	0.437	29	•	•				•	•	•
17	0.606	29	•			•		•	•	•
18	1.238	29		•					•	
19	1.657	28	•	•		•		•	•	•
20	1.187	28		•		•		•		
21	1.453	28		•		•		•		•
22	0.839	27	•	•					•	
23	1.665	27		•		•		•		
24	0.647	26	•			•			•	•
25	1.128	26								
26	2 059	26		•				•		
27	1.953	25		•		•		•		•
28	1.440	25		•		•		•		
29	1.490	24		•		•		•		
30	1.722	23		•		•		•		•
31	1.430	22		•		•		•		
32	0 932	21						•		
33	1 115	21								
34	1.223	21				•	•		•	
35	2.009	20		•				•		
36	0 589	20	•			•		•	•	•
37	1.147	20								
38	1.567	20		•		•		•		
39	1 235	19							•	
40	1.178	18		•		•		•		
41	0.555	18	•			•		•	•	•
42	0.990	17		•						
43	1.319	17				•		•		
44	1.629	16	•						•	•
45	0.876	16	•							•
46	0.680	15							•	•
47	0 912	15								
48	1 086	15							•	
49	1.089	15				•		•		
50	1 556	15		•		•		•		
51	1 980	15		•				•		
52	1.929	14								•
53	0.982	14		•						
54	1 809	14		•		•				
55	1 027	13								
56	1.210	13		•		•		•		
57	1.500	13		•		•		•		

Table F-4 (continued)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples [a]						
58	1.950	13	•		•			
59	0 586	12						
60	0.858	12	•	•	•			
61	1.511	12	•	•	•			
62	1.961	12		•				
63	2.014	12						
64	2.088	12	•		•			
65	0.996	11	•	•	•			
66	1.027	11	•	•	•			
67	0.218	11	•	•		•		
68	0.398	11	•			•		
69	1 475	11	•	•	•			
70	1.522	11		•	•			
71	1.542	11	•		•			
72	1.980	11	•					
73	0.745	10		•				
74	0.904	10	•					
75	1.105	10	•	•	•			
76	1.359	10	•	•	•			
77	0.429	9	•					
78	0.673	9	• •					
79	0.897	9	•					
80	1.548	9	•	•				
81	1.989	9						
82	0.226	8	•			•		
83	0 243	8	•			•		
84	0.989	8						
85	1.149	8	•		•			
86	1.351	8						
87	1 973	8						
88	2.151	8			•			
89	2 174	8			•			
90	0.301	7						
91	0.392	7				•		
92	0 520	7	•	•	•	•	•	•
93	0.672	7						
94	1 198	7						
95	1 675	7						
96	1.889	7	•		•			
97	0.492	6	• •					
98	0.758	6			•			
99	1 175	6						
100	1.202	6						
101	1.308	6	•	•				
102	1 472	6						
103	1.531	6						
104	1.966	6	•		•			
105	2 137	6	•					
106	1 531	5						
107	0.374	5		•				
108	0.450	5	•	•				
109	0.540	5						
110	0 547	5			•			
111	0 559	5			•			
112	0 573	5						
113	0.762	5						
114	0.918	5						
115	1.062	5		•				

Table F-4 (continued)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
116	1.070	5						
117	1.105	5				•		•
118	1.138	5						
119	1.175	5	•	•	•			
120	1.288	5	•	•				
121	1.460	5	•					
122	1.716	5						•
123	1.729	5						•
124	0.475	4						•
125	0.507	4	•					
126	0.520	4		•				
127	0 667	4						
128	0.721	4						
129	0.832	4						
130	0.936	4				•		
131	1.061	4			•			
132	1.109	4			•			
133	1.153	4		•	•			
134	1.173	4						
135	1.277	4			•			
136	1.328	4						
137	1.580	4			•			
138	1.927	4						
139	1.979	4			•			
140	2.000	4						
141	0.319	3						
142	0.375	3			•			
143	0.609	3						
144	0.307	3						
145	0.346	3			•			
146	0.353	3						
147	0.487	3						
148	0.727	3						
149	0 739	3				•		
150	0.790	3		•	•			
151	0 821	3	•					
152	0.828	3	•					
153	1 083	3						
154	1.119	3						
155	1.123	3						
156	1.195	3						
157	1.309	3						
158	1.404	3	•					
159	1 448	3			•			
160	1 538	3						
161	1.856	3						
162	1.953	3						
163	2 084	3						
164	2.091	3						
165	0.512	2						
166	0 572	2						
167	1 809	2						
168	1 900	2						
169	0.237	2						
170	0.261	2		•			•	
171	0.337	2						
172	0.341	2		•			•	
173	0 342	2						

Table F-4 (continued)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
174	0.382	2						
175	0.413	2						
176	0.435	2						
177	0.450	2						
178	0.489	2						
179	0.496	2						
180	0 552	2						
181	0 599	2	•			•		
182	0.614	2		•	•			
183	0.677	2		•	•			
184	0.758	2						
185	0.791	2						
186	0.908	2						
187	0.921	2						
188	0.957	2						
189	1 059	2						
190	1.261	2						
191	1.283	2		•				
192	1.291	2						
193	1.297	2						
194	1.353	2						
195	1.463	2			•			
196	1.507	2			•			
197	1.516	2						•
198	1.525	2			•			
199	1.586	2						
200	1.594	2						
201	1.673	2						
202	1 866	2			•			
203	1.931	2						
204	2 030	2						
205	2.102	2						
206	0.333	1	•					
207	0 544	1						
208	0 199	1						
209	0.203	1						
210	0.216	1				•		
211	0.221	1		•				
212	0.239	1						
213	0 240	1						
214	0.241	1						
215	0.254	1						
216	0.266	1						
217	0 268	1						
218	0.283	1	•					
219	0 285	1				•		
220	0.293	1						
221	0.300	1	•					
222	0.327	1						
223	0.344	1						
224	0 352	1						
225	0 353	1						
226	0.358	1						
227	0.359	1					•	
228	0.362	1						
229	0 365	1						•
230	0.370	1						•
231	0.371	1						

Table F-4 (continued)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences in Samples[a]						
232	0.372	1						
233	0.394	1						
234	0.405	1						
235	0.414	1						
236	0.419	1	•					
237	0.421	1						
238	0.422	1						
239	0.455	1						
240	0.463	1						
241	0 465	1			•			
242	0 504	1						
243	0.507	1						
244	0.510	1			•			
245	0.516	1						
246	0.545	1						
247	0.575	1						
248	0.584	1						
249	0.652	1						
250	0 653	1					•	
251	0.678	1						
252	0.683	1				•		
253	0.711	1						
254	0 744	1						
255	0.745	1						
256	0 767	1						
257	0.771	1						
258	0.775	1						
259	0.779	1						
260	0.786	1						
261	0.787	1						
262	0.821	1						
263	0.915	1						
264	0.929	1						
265	0.945	1						
266	0 960	1						
267	0 988	1						
268	1 017	1			•			
269	1.018	1						
270	1.037	1						
271	1.046	1						
272	1.061	1						
273	1.063	1						
274	1.070	1						
275	1.089	1						
276	1.091	1						
277	1 112	1						
278	1.121	1						
279	1 140	1						
280	1.174	1						
281	1 180	1						
282	1.197	1						
283	1 204	1						
284	1.204	1						
285	1.218	1						
286	1.223	1						
287	1 226	1						
288	1.243	1						
289	1.248	1						

Table F-4 (concluded)

		CENSUS REGION	NORTHEAST					
		CENSUS DIVISION	MIDDLE ATLANTIC			NEW ENGLAND		
		AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples[a]						
290	1.289	1						
291	1.291	1						
292	1.296	1						
293	1.309	1						
294	1.311	1						
295	1.335	1						
296	1.342	1						
297	1.346	1						
298	1.348	1						
299	1.350	1						
300	1.363	1						
301	1.366	1						
302	1.377	1						
303	1.384	1						
304	1.386	1						
305	1.390	1						
306	1.403	1						
307	1.421	1						
308	1.422	1						
309	1.427	1						
310	1.433	1						
311	1.435	1						
312	1.457	1						
313	1 481	1						
314	1.492	1						
315	1.495	1						
316	1.499	1						
317	1.523	1						
318	1.525	1						
319	1.531	1						
320	1.545	1						
321	1.562	1						
322	1.583	1						
323	1.584	1						
324	1.589	1						
325	1.596	1						
326	1 602	1						
327	1.606	1						
328	1 607	1						
329	1 671	1						
330	1.695	1						
331	1.740	1						
332	1.761	1						
333	1.762	1						
334	1.776	1						
335	1 839	1						
336	1.907	1						
337	1.964	1						
338	1 973	1						
339	1 980	1						
340	1 991	1						
341	2 053	1						
342	2.063	1						
343	2.107	1						

[a]Total number of occurrences from all sample analyses (four census regions and nine census divisions).

APPENDIX G

LISTING OF THE ACORN PROGRAM

```
Trace of procedure ACORN
    *
    * [    *** PROCEDURE ACORN...  J.ONSTOT
    *
    * LATEST REVISION 7/25/86
    * ]
    * EDLL $(-;W;E)
    * SET1 #1;SET7 $1;SET8 $1
    * IS
    * FTP(DE;1:PRIN.91/N;E)
    * PHEAD/KX
    * DOONE
    * PRIN/KX(F;E)
    * FTP(DE;1:$1.91/N;RE;1:PRIN.91;1:$1.91;E)
    *
    EDLL $ (-;W;E)
    SET1 #1
    SET7 $1
    SET8 $1
    (S
        *
        * [  FIND THE INTERNAL STANDARD...MUST BE THE FIRST ENTRY IN LIBRARY SI
        * ]
        *
        * SETL SE;SET9 $8;SET8 TEMP;GETL
        * CHRO/O(I;R;F1;#;$,&;G-30,30;N3,3;A1<;D-30,30;E)
        * IS1
        * EDQL ,$9(U*100;W;E)
        * EDQL $9,FOUND(W;E)
        * SET8 $9
        * QUAN(D,R;S;T;E)
        *
        SETL SE
        SET9 $8
        SET8 TEMP
        GETL
        CHRO  (I;R;F1;#;$;&;G-30.30;N3,3;A1<;D-30,30;E)/O
        IS1
            * (S2
            * ERASE;[     THE INBTERNAL STANDARD WAS NOT FOUND!!!   ]
            * QUIT
```

```
      *
      IS2
         * IF IS2!28,IS1#1
         * RETU IS1
         *
         IF IS2!28,IS1#1
         RETU IS1
      ERASE
      QUIT
      Trace of IS1 aborted.
   EDQL ,$9 (U*100;W;E)
   EDQL $9,FOUND (W;E)
   SET8 $9
   QUAN  (D;R;S;T;E)
FTP  (DE;1:PRIN.91/N;E)
PHEAD /KX
   * PRIN(@HE)
   *
   PRIN  (@HE)
   @HE

      : T;ACORN LIBRARY SEARCH RESULTS;T20;  ;T;FILENAME:  ;#1;C;C
      : T8;PEAK;T8;SCAN;T8;PEAKS;T9;BEST;T9;BEST;T9;BEST;T13;LIBRARY;T12;CU
      : T8;NO. ;T8;NO. ;T8;/SCAN;T9;NBS;T9;NBS;T9;NBS;T13;CHOICE;T12;ENTRY;C
      : T24;  ;T9;FIT;T9;PURITY;T9;ENTRY;C;C
      : E
      :
      T;ACORN LIBRARY SEARCH RESULTS;T20;  ;T;FILENAME:  ;#1;C;C
      T8;PEAK;T8;SCAN;T8;PEAKS;T9;BEST;T9;BEST;T9;BEST;T13;LIBRARY;T12;CURR-
      T8;NO. ;T8;NO. ;T8;/SCAN;T9;NBS;T9;NBS;T9;NBS;T13;CHOICE;T12;ENTRY;C
      T24;  ;T9;FIT;T9;PURITY;T9;ENTRY;C;C
      E


DOONE
   * GETS;SET12 !1;SET11 !7
   * [ SAVE CURRENT SCAN# IN !12, .SL ENTRY NO.  IN !11
   * ]
   * EDLL FOUND(-;W;E)
   * DOMAS   [ PRINT NO.  OF MASS PEAKS TO STATUS REPORT
```

```
*  ]
* SET4 SE;LIBTEST
* INLIB [ MAIN LIBRARY SEARCH ROUTINTE ]
* ERASE;[  ADD THE CORRESPONDING SE ENTRY NO.  TO $.LL
* ]
* EDLL $($;W;E)
* SET1 !12;SETS $;SET7 !11
* LOOP
*
GETS
SET12 !1
SET11 !7
EDLL FOUND (-;W;E)
DOMAS
    * ENMA/OV
    * SET13 !18
    *
    ENMA /OV
    SET13 !18
SET4 SE
LIBTES
    * SETL FIT
    * LIBFIT/V
    * IF !26
    * SETL PURITY
    * LIBPUR/V
    * IF !26
    * RUN INSED
    *
    SETL FIT
    LIBFIT /V
        * LIBR(T800;X2<;D;E)
        *
        LIBR  (T800;X2<;D;E)
    IF !26
    SETL PURITY
    LIBPUR /V
        * LIBR(T400;X<;D;E)
        *
```

```
      LIBR  (T400;X<;D;E)
   IF !26
   RUN INSED
INLIB
   *
   * INSEED
   * INNB
   * [  NOT FOUND IN SEED OR NB LIBRARY. ADDING TO SEED...]
   * LIBR(ED;D;#SE;I';UNIDENTIFIED PEAK;;;;;;;;;;;SE,1;;;E;E)
   * NOTFND
   * SET4 SE
   * SET4 !24
   * LINEEND
   * UPRES
   *
   INSEED
      *
      * IF !4
      * ERASE;[ THE PEAK WAS LOCATED IN THE SEED LIBRARY!!!
      * ]
      * SET10 !4
      * EDLB ,ZZ(I!1;E)
      * DOMAS
      * LIBR/V($ZZ;X;J1;D;E)
      * SET4 !10
      * SEEDFND
      * SET8 TEMP
      * CHRO/O(@DO)
      * IF !28
      * EDQL ,$(U*100;A;E)
      * SET8 $
      * RETU INLIB
      *
      IF !4
      ERASE
      SET10 !4
      EDLB ,ZZ (I!1;E)
      DOMAS
         * ENMA/OV
         * SET13 !18
         *
```

```
      ENMA /OV
      SET13 !18
   LIBR  ($ZZ;X;J1;D;E)/V
   SET4 !10
   SEEDFN
      * PRIN/KX(@FS)
      *
      PRIN  (@FS)/KX
      @FS

         :
         : !11,4;T4; ;!12,4;T4; ;!13,4;T4; ;!18,4;T4; ;!17,4;T4; ;
         : T12; ;T;SEED;T10; ;!4,3;C;E
         :

         !11,4;T4; ;!12,4;T4; ;!13,4;T4; ;'18,4;T4; ;!17,4;T4; ;
         T12, ;T;SEED;T10; ;!4,3;C;E


   SET8 TEMP
   CHRO  (@DO)/O
   @DO

      : I;#;G-2,2;N1,1;U20,2;A1<;D-20,20;E
      .
      I;#;G-2,2;N1,1;U20,2;A1<;D-20,20;E


   IF !28
   EDQL ,$ (U*100,A;E)
   SET8 $
   RETU INLIB
INNB
   *
   * SETL FOUND;SET4 NB
   * LIBNB/V
   * IF INNB!26,INNB
   * IF INNB!18,INNB#900
   * IF INNB!17,INNB#600
   * [ MATCH FOUND IN NBS LIBRARY
   * ]
   * SETL;GETL
   * NBSFND
   * EDLB ,SE(D;I';;;;;;;;;;;;;SE,1;;;E;E)
```

```
* SET4 SE;SET4 !24;
* LINEEND
* UPRES      [UPDATE RESPONSE FACTOR FOR NEW SE ENTRY
* ]
*
* RETU INLIB
*
SETL FOUND
SET4 NB
LIBNB /V
   * LIBR(X;D;J1<;E)
   *
   LIBR  (X;D;J1<;E)
IF INNB!26,INNB
IF INNB!18,INNB#900
IF INNB!17,INNB#600
SETL
GETL
NBSFND
   * PRIN/KX(@FN)
   *
   PRIN  (@FN)/KX
   @FN

      :
      : !11,4;T4; ;!12,4;T4; ;!13,4;T4; ;!18,4;T4; ;!17,4;T4; ;
      : !4,5;T8; ;T;NBS;E
      :

      !11,4;T4; ;!12,4;T4; ;!13,4;T4; ;!18,4;T4; ;!17,4;T4; ;
      !4,5;T8; ;T;NBS;E


EDLB ,SE (D;I';;;;;;;;;;;;;SE,1;;;E;E)
SET4 SE
SET4 !24
LINEEN
```

```
      * PRIN/KX(@FE)
      *
      PRIN  (@FE)/KX
      @FE

         : T10;  ;!24;C;E
         :
         T10;  ;!24;C;E


   UPRES
      *
      * SET8 TEMP
      * CHRO/O(I;#;N1,1;G-2,2;U20,2;A1<;D-10,10;E)
      * IF !28
      * EDQL,FOUND(U*100;A;E)
      * QUAN FOUND(D;R;S;T;E)  [ NEED THIS TO SET LIB RRT FOR FUTURE
      * EDQL FOUND (-2;W;F)
      * EDQL ,$(U*100;A;E)
      *
      * SET8 $
      *
      SET8 TEMP
      CHRO  (I;#;N1,1;G-2,2;U20,2;A1<;D-10,10;E)/O
      IF !28
      EDQL ,FOUND (U*100;A;E)
      QUAN FOUND (D;R;S;T;E)
      EDQL FOUND (-2;W;E)
      EDQL ,$ (U*100;A;E)
      SET8 $
   RETU INLIB
LIBR  (ED;D,#SE;I';UNIDENTIFIED PEAK;;;;;;;;;;;SE,1;;;E;E)
NOTFND
   * PRIN/KX(@NF)
   *
   PRIN  (@NF)/KX
   @NF
```

```
        :
        : !11,4;T4;  ;!12,4;T4;  ;!13,4;T4;  ;!18,4;T4;  ;!17,4;T4;  ;
        : !4,5;T7;  ;T;UNKN;E
        :

        !11,4;T4;  ;!12,4;T4;  ;!13,4;T4;  ;!18,4;T4;  ;!17,4;T4;  ;
        !4,5;T7;  ;T;UNKN;E


SET4 SE
SET4 !24
LINEEN
    * PRIN/KX(@FE)
    *
    PRIN  (@FE)/KX
    @FE

        : T10;  ;!24;C;E
        :
        T10;  ;!24;C,E


UPRES
    *
    * SET8 TEMP
    * CHRO/O(I;#;N1,1;G-2,2;U20,2;A1<;D-10,10;E)
    * IF !28
    * EDQL,FOUND(U*100;A;E)
    * QUAN FOUND(D;R;S;T;E)  [ NEED THIS TO SET LIB RRT FOR FUTURE SEA
    * EDQL FOUND (-2;W;E)
    * EDQL ,$(U*100;A;E)
    *
    * SET8 $
    *
    SET8 TEMP
    CHRO  (I;#;N1,1;G-2,2;U20,2;A1<;D-10,10;E)/O
    IF !28
    EDQL ,FOUND (U*100;A;E)
    QUAN FOUND (D;R;S;T;E)
    EDQL FOUND (-2;W;E)
    EDQL ,$ (U*100;A;E)
```

```
        SET8 $
    ERASE
    EDLL $ ($;W;E)
    SET1 !12
    SETS $
    SET7 !11
    LOOP
PRIN  (F;E)/KX
FTP   (DE;1:$1.91/N;RE;1:PRIN.91;1:$1.91;E)
```

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

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EPA-560/5-87-002B		

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15. SUPPLEMENTARY NOTES

16. ABSTRACT

The National Human Adipose Tissue Survey (NHATS), administered by EPA/OTS, is an ongoing chemical monitoring network designed to detect levels and prevalences of toxic substances in the adipose tissue of the general U.S. population. Adipose specimens collected in fiscal year 1982 were analyzed as composites for volatile and semivolatile organic compounds via HRGC/MS as part of a previous effort. The data files were then processed using a method developed to automatically identify unknown HRGC/MS peaks. The method consisted of automatic identification of unknown spectra via comparisons to reference mass spectra, transfer of the results of the identification step to a microcomputer, compilation of the data into a spreadsheet program and generation of compound identification tables from the spreadsheet. Application of the method to the adipose data resulted in the identification of volatile compounds from 18 separate chemical classes and semivolatiles from 29 chemical classes. Compound classes included saturated and unsaturated hydrocarbons, aldehydes, ketones, steroids, heterocyclic compounds, drugs, aliphatic and phthalate esters, phenols, halocarbons, and methyl-substituted organosiloxanes. Volume I (EPA-560/5-87-002A) describes the technical approach. Volume II (EPA-560/5-87-002B) provides supplemental data.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Adipose Computer program Mass spectrometry GC/MS Volatile Semivolatile Data transfer Characterization		

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