NEIC

CHEMICAL COMPOSITION OF DRUM SAMPLES
FROM HAZARDOUS WASTE SITES

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING

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INTRODUCTION

Samples taken from drums, tanks and other containers, and other samples suspected of having high concentrations of hazardous waste from 221 disposal sites in 41 states and one territory have been prepared for analysis by the Regulated Substances Laboratory (RSL), located at the Environmental Protection Agency's (EPA) National Enforcement Investigations Center (NEIC), and operated under contract to the EPA Contract Laboratory Program (CLP) by Fred C. Hart Associates, Inc. These samples were taken from a wide spectrum of hazardous waste sites by EPA and State personnel and contractors retained by EPA for the conduct of hazardous waste site evaluations. After preparation in the RSL, these samples were analyzed in environmental laboratories of the EPA Regions, the NEIC and in eight CLP laboratories.

The data generated by these analyses are believed to represent, generally, a measure of the chemical content of drums and other waste containers on hazardous waste sites throughout the nation, and provide policy-makers, industry and regulatory agency managers, investigators, and analysts with a basis for greater confidence in decisions regarding exposure risks to the public and to personnel engaged in hazardous waste site evaluations.

The data presented herein should be considered reliable to the degree of accuracy and precision required by the contracts under which they were obtained, and achievable through reasonable quality control checks in the collection and compilation thereof. The Appendix A material is abstracted from the Registry of Toxic Effects of Chemical Substances (RTECS), published by the National Institute of Occupational Health and Safety (NIOSH). The reader is cautioned that the Appendix A summary is intended to be a general overview. The original sources referred by RTECS should be consulted for specific characteristics of any of the listed chemicals. The conclusions reached in this paper are those of the authors and are not policy statements of the Environmental Protection Agency.

HISTORICAL PERSPECTIVE

In 1979, as the EPA began the hazardous waste site cleanup programs, the Agency was equipped with relatively minor experience and, essentially, no procedural criteria for the field investigation of sites, packaging and shipping of potentially hazardous samples, nor for the laboratory preparation and analysis of samples suspected of containing high concentrations of hazardous materials. Criteria were quickly developed, based upon the limited experience and professional judgment available within the Agency. This early guidance was provided to EPA and State technical staffs and contractors through a number of procedures manuals, several of which were adapted from internal procedural documents of the NEIC[1] [2] [3] [4], contractor procedures[5], and Department of Transportation regulations[6].

The early guidance documents reflected the extreme concerns, held by their authors and proponents, for the safety of field investigators, transportation industry employees, laboratory personnel and the general public. This concern was based upon good understanding of the potential for spills, releases, exposures, fires and explosions, but less certain knowledge of preventive measures and procedures which could be depended upon to prevent such events under any and all conceivable field, transportation and laboratory circumstances.

At the NEIC, the operational application of these understandings was a consistent effort to "err on the side of safety". This policy permeated site investigation plans; training of NEIC employees and training provided by NEIC to other EPA, State and contractor personnel; and was reflected in continuously updated sample packaging and shipment and RSL procedures. Other EPA elements adapted or adopted portions of these procedures, modifying or adding to them to meet local and Regional requirements or, in some cases, developing criteria and procedures independently. Regardless of the degree or extent of independence, the conservative philosophy toward safety aspects appears to have been generally adopted throughout the Agency.

ANALYTICAL PROCEDURES

The samples which are the subject of this paper were taken from drummed material, waste pits or ponds, piles of waste, tank trucks or onsite tanks and contaminated soils. Many of the samples were used oil, spent solvents, paint wastes, metal treatment and plating wastes, and polymer formulations. They were usually industrial process wastes, waste raw materials and byproducts, synthesis intermediates and off-specification products. The RSL, operating in a containment laboratory configuration and under strict containment laboratory procedures, received 8-oz. hazardous waste samples, as shipped, and provided initially screened and diluted aliquots of each defined phase. Many of the samples contained two or more phases when received by the RSL. Phases were separated and preparations were made from each defined phase.

The organic analytical regime to which the preparations have been subjected by CLP laboratories has varied somewhat according to the contract language in force at any given time. From 1980 to 1982, the specified organic analyses included 113 priority pollutants and a maximum of 30 mass spectrometry library identifications (tentative identifications). From 1982 to the present, the organic analyses included an additional 20 non-priority pollutant organic substances. The categories included 11 priority pollutant organic acids, 45 priority pollutant organic bases and neutrals, 31 priority pollutant organic volatile solvents, 26 priority pollutant organic pesticides and polychlorinated biphenyls (PCBs), and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) plus the 20 additional organics mentioned above.

The contract requirement for analysis of these organics, which are detectable by gas chromatography, imposes certain limitations which should be recognized by the reader. Many common organic chemicals either have poor extraction efficiencies or do not chromatograph. Polymers, carboxylates, glycols, sulfonates, phosphates, and low molecular weight alcohols, amines, and aldehydes will not be qualitatively or quantitatively analyzed by the methods specified. In addition, the pesticides/PCB analysis includes only priority pollutant chlorinated hydrocarbon pesticides and excludes

carbamate and organophosphate insecticides, and nitrogenous or phenoxy herbicides. Constituents of these categories may have been identified by analytical procedures available under the later Special Analytical Services (SAS) contracts, when specified, but the great majority of samples, reported upon in this paper, were not subjected to these additional analyses.

The inorganic analyses were performed by inductively coupled argon plasma spectroscopy (ICP), atomic absorption spectroscopy (AA) and colorimetry. Approximately, 1600 samples were subjected to procedures which identified and quantified the 13 priority pollutant elements. Most samples were also analyzed for 21 additional inorganic elements and cyanide.

Table 1 summarizes the target chemical constituents by category.

ANALYTICAL RESULTS

The analytical procedures described yielded the organic data which are summarized in Table 2 and the inorganic data similarly provided in Table 3. The average number of analyses for organic constituents was 1,100. These constituents were detected by only 3% of the analyses (detected divided by analyzed). The average number of analyses for inorganic constituents was similarly 1,200 but, in contrast, the inorganics were detected by 39% of the analyses.

The average of the mean concentrations of the 113 reported organic values was 576 parts per million (ppm), while the average mean concentration of the 36 reported values greater than 100 ppm was 1,728 ppm. The organic chemicals with the highest reported maximum concentrations (percent) are 2-methylphenol (90%), trichloroethene (82%), o-xylene (79%), chlordane (78%), acetone (76%), 1,1,1-trichloroethane (72%), and benzene (60%). Significantly, 39% percent of the 133 organic chemicals were detected only four times or less. Moreover, 64 organic constituents were detected in less than one of every 100 samples.

The average of the mean concentrations of the 35 inorganic constituents, all of which were detected in some samples, was 1,836 ppm, while the average mean concentration for the 16 reported values greater than 100 ppm

TABLE 1 TARGET CHEMICAL CONSTITUENTS BY CATEGORY

ORGANIC ACIDS

1 2,4,6-Trichlorophenol
2 p-Chloro-m-Cresol
3 2-Chlorophenol
4 2,4-Dichlorophenol
5 2,4-Dimethylphenol
6 2-Nitrophenol
7 4-Nitrophenol
8 2,4-Dinitrophenol
9 4,6-Dinitro-o-Cresol
10 Pentachlorophenol
11 Phenol

ORGANIC BASES AND NEUTRALS

12 Acenaphthene
13 Benzidine
14 1,2,4-Trichlorobenzene
15 Hexachlorobenzene
16 Hexachloroethane
17 Bis(2-Chloroethyl)Ether
18 2-Chloronaphthalene
19 1,2-Dichlorobenzene
20 1,3-Dichlorobenzene
21 1,4-Dichlorobenzene
22 3,3'-Dichlorobenzidine
23 2,4-Dinitrotoluene
24 2,6-Dinitrotoluene
25 1,2-Diphenylhydrazine
26 Fluoranthene
27 4-Chlorophenyl Phenyl Ether
28 4-Bromophenyl Phenyl Ether
29 Bis(2-Chloroisopropyl)Ether
30 Bis(2-Chloroethoxy)Methane
31 Hexachlorobutadiene
32 Hexachlorocyclopentadiene
33 Isophorone
34 Naphthalene
35 Nitrobenzene
36 N-Nitrosodiphenylamine
37 N-Nitrosodipropylamine
38 Bis(2-Ethylhexyl)Phthalate
39 Benzyl Butyl Phthalate
40 Di-n-Butyl Phthalate
41 Di-n-Octyl Phthalate
42 Diethyl Phthalate
43 Dimethyl Phthalate
44 Benzo(a)Anthracene
45 Benzo(a)Pyrene
46 Benzo(b)Fluoranthene
47 Benzo(k)Fluoranthene
48 Chrysene
49 Acenaphthylene
50 Anthracene
51 Benzo(ghi)Perylene
52 Fluorene
53 Phenanthrene
54 Dibenzo(a,h)Anthracene
55 Indeno(1,2,3-cd)Pyrene
56 Pyrene

ORGANIC VOLATILES

57 Acrolein
58 Acrylonitrile
59 Benzene
60 Carbon Tetrachloride
61 Chlorobenzene
62 1,2-Dichloroethane
63 1,1,1-Trichloroethane
64 1,1-Dichloroethane
65 1,1,2-Trichloroethane
66 1,1,2,2-Tetrachloroethane
67 Chloroethane
68 2-Chloroethylvinyl Ether
69 Chloroform
70 1,1-Dichloroethene
71 Trans-1,2-Dichloroethene
72 1,2-Dichloropropane
73 Trans-1,3-Dichloropropene
74 Cis-1,3-Dichloropropene
75 Ethylbenzene
76 Methylene Chloride
77 Chloromethane
78 Bromomethane
79 Bromoform
80 Bromodichloromethane
81 Fluorotrichloromethane
82 Dichlorodifluoromethane
83 Chlorodibromomethane
84 Tetrachloroethene
85 Toluene
86 Trichloroethene
87 Vinyl Chloride

PESTICIDES, PCBs AND TCDD

88 Aldrin
89 Dieldrin
90 Chlordane
91 4,4'-DDT
92 4,4'-DDE
93 4,4'-DDD
94 a-Endosulfan
95 b-Endosulfan
96 Endosulfan Sulfate
97 Endrin
98 Endrin Aldehyde
99 Heptachlor
100 Heptachlor Epoxide
101 a-BHC
102 b-BHC
103 d-BHC
104 g-BHC (Lindane)
105 PCB 1242
106 PCB 1254
107 PCB 1221
108 PCB 1232
109 PCB 1248
110 PCB 1260
111 PCB 1016
112 Toxaphene
113 2,3,7,8-Tetrachloro-dibenzo-p-Dioxin

Table I (cont'd)

ADDITIONAL ORGANIC SUBSTANCES

114	Benzoic Acid	121	Dibenzofuran	128	Carbondisulfide
115	2-Methylphenol	122	2-Methylnaphthalene	129	2-Hexanone
116	4-Methylphenol	123	2-Nitroaniline	130	4-Methyl-2-Pentanone
117	2,4,5-Trichlorophenol	124	3-Nitroaniline	131	Styrene
118	Aniline	125	4-Nitroaniline	132	Vinyl Acetate
119	Benzyl Alcohol	126	Acetone	133	o-Xylene
120	4-Chloroaniline	127	2-Butanone		

INORGANIC ELEMENTAL CONSTITUENTS

1	Aluminum	13	Lanthanum	25	Sodium
2	Antimony	14	Lead	26	Strontium
3	Arsenic	15	Magnesium	27	Thallium
4	Barium	16	Manganese	28	Tin
5	Beryllium	17	Mercury	29	Titanium
6	Boron	18	Molybdenum	30	Tungsten
7	Cadmium	19	Nickel	31	Vanadium
8	Calcium	20	Potassium	32	Yttrium
9	Chromium	21	Scandium	33	Zinc
10	Cobalt	22	Selenium	34	Zirconium
11	Copper	23	Silicon	OTHER	
12	Iron	24	Silver	35	Cyanide

TABLE 2 RESULTS OF HAZARDOUS WASTE ANALYSES
ORGANIC CHEMICAL CONSTITUENTS

CAS	COMPOUND NAME	NUMBER OF TIMES ANALYZED	NUMBER OF TIMES DETECTED	CONCENTRATION (PPM) MEAN	CONCENTRATION (PPM) MAXIMUM
88-06-2	2,4,6-TRICHLOROPHENOL	1131	0	-	-
59-50-7	p-CHLORO-m-CRESOL	1131	3	0.41	310.00
95-57-8	2-CHLOROPHENOL	1131	3	0.73	820.00
120-83-2	2,4-DICHLOROPHENOL	1131	3	0.08	65.00
105-67-9	2,4-DIMETHYLPHENOL	1131	50	637.68	140000.00
88-75-5	2-NITROPHENOL	1131	1	0.07	76.00
100-02-7	4-NITROPHENOL	1131	0	-	-
51-28-5	2,4-DINITROPHENOL	1131	0	-	-
534-52-1	4,6-DINITRO-o-CRESOL	1131	0	-	-
87-86-5	PENTACHLOROPHENOL	1137	16	666.97	370000.00
108-95-2	PHENOL	1131	127	2406.95	400000.00
83-32-9	ACENAPHTHENE	1256	30	26.96	8400.00
92-87-5	BENZIDINE	1132	1	0.00	2.20
120-82-1	1,2,4-TRICHLOROBENZENE	1250	16	66.72	36000.00
118-74-1	HEXACHLOROBENZENE	1273	30	123.10	21000.00
67-72-1	HEXACHLOROETHANE	1250	3	8.57	8300.00
111-44-4	BIS(2-CHLOROETHYL)ETHER	1150	4	1.97	1800.00
91-58-7	2-CHLORONAPHTHALENE	1250	2	0.30	350.00
95-50-1	1,2-DICHLOROBENZENE	1250	50	1936.82	490000.00
541-73-1	1,3-DICHLOROBENZENE	1250	14	387.84	220000.00
106-46-7	1,4-DICHLOROBENZENE	1250	25	993.04	540000.00
91-94-1	3,3'-DICHLOROBENZIDINE	1239	0	-	-
121-14-2	2,4-DINITROTOLUENE	1250	2	0.06	78.00
606-20-2	2,6-DINITROTOLUENE	1250	1	0.06	78.00
122-66-7	1,2-DIPHENYLHYDRAZINE	1136	0	-	-
206-44-0	FLUORANTHENE	1256	65	66.87	42000.00
7005-72-3	4-CHLOROPHENYL PHENYLETHER	1239	0	-	-
101-55-3	4-BROMOPHENYL PHENYL ETHER	1250	0	-	-
39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	1239	2	0.09	87.00
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1250	1	0.06	78.00
87-68-3	HEXACHLOROBUTADIENE	1250	4	1.82	2000.00
77-47-4	HEXACHLOROCYCLOPENTADIENE	1272	28	58.72	14000.00
78-59-1	ISOPHORONE	1250	27	158.23	160000.00
91-20-3	NAPHTHALENE	1256	168	269.02	81000.00
98-95-3	NITROBENZENE	1250	2	0.24	220.00
86-30-6	N-NITROSODIPHENYLAMINE	1255	16	95.08	110000.00
621-64-7	N-NITROSODIPROPYLAMINE	1250	1	0.04	50.00
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1250	190	213.56	45500.00
85-68-7	BENZYL BUTYL PHTHALATE	1250	49	88.55	50000.00
84-74-2	DI-n-BUTYL PHTHALATE	1250	97	509.09	560000.00

TABLE 2 (cont.)

CAS	COMPOUND NAME	NUMBER OF TIMES ANALYZED	NUMBER OF TIMES DETECTED	CONCENTRATION (PPM) MEAN	CONCENTRATION (PPM) MAXIMUM
117-84-0	DI-n-OCTYL PHTHALATE	1250	26	1.69	520.00
84-66-2	DIETHYL PHTHALATE	1250	47	25.29	4500.00
131-11-3	DIMETHYL PHTHALATE	1250	31	51.37	30000.00
56-55-3	BENZO(a)ANTHRACENE	1255	50	28.46	21600.00
50-32-8	BENZO(a)PYRENE	1248	36	10.87	7200.00
205-99-2	BENZO(b)FLUORANTHENE	1228	29	22.97	10200.00
207-08-9	BENZO(k)FLUORANTHENE	1243	23	22.02	10200.00
218-01-9	CHRYSENE	1256	46	27.72	21600.00
208-96-8	ACENAPHTHYLENE	1252	22	4.28	3800.00
120-12-7	ANTHRACENE	1256	77	218.47	126000.00
191-24-2	BENZO(ghi)PERYLENE	1250	14	1.45	400.00
86-73-7	FLUORENE	1256	58	45.56	16800.00
85-01-8	PHENANTHRENE	1256	110	227.92	126000.00
53-70-3	DIBENZO(a,h)ANTHRACENE	1250	3	0.09	98.00
193-39-5	INDENO(1,2,3-cd)PYRENE	1239	14	2.24	630.00
129-00-0	PYRENE	1255	79	50.44	33000.00
107-02-8	ACROLEIN	1052	0	-	-
107-13-1	ACRYLONITRILE	1052	2	19.96	21000.00
71-43-2	BENZENE	1225	104	577.29	600000.00
56-23-5	CARBON TETRACHLORIDE	1225	11	341.99	400000.00
108-90-7	CHLOROBENZENE	1225	50	85.38	57000.00
107-06-2	1,2-DICHLOROETHANE	1225	33	416.69	270000.00
71-55-6	1,1,1-TRICHLOROETHANE	1225	98	1318.02	720000.00
75-34-3	1,1-DICHLOROETHANE	1225	15	12.50	5000.00
79-00-5	1,1,2-TRICHLOROETHANE	1217	10	307.25	240000.00
79-34-5	1,1,2,2-TETRACHLOROETHANE	1225	10	256.09	310000.00
75-00-3	CHLOROETHANE	1225	1	0.05	57.00
110-75-8	2-CHLOROETHYLVINYL ETHER	1141	0	-	-
67-66-3	CHLOROFORM	1225	29	20.49	14000.00
75-35-4	1,1-DICHLOROETHENE	1225	22	14.11	9300.00
156-60-5	TRANS-1,2-DICHLOROETHENE	1225	18	3.86	4300.00
78-87-5	1,2-DICHLOROPROPANE	1225	22	91.50	40000.00
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1140	3	0.02	10.00
10061-01-5	CIS-1,3-DICHLOROPROPENE	1140	0	-	-
100-41-4	ETHYLBENZENE	1225	375	2279.25	150000.00
75-09-2	METHYLENE CHLORIDE	1225	208	780.83	220000.00
74-87-3	CHLOROMETHANE	1224	4	0.38	337.00
74-83-9	BROMOMETHANE	1225	1	0.01	10.00
75-25-2	BROMOFORM	1225	0	-	-
75-27-4	BROMODICHLOROMETHANE	1225	0	-	-

TABLE 2 (cont.)

CAS	COMPOUND NAME	NUMBER OF TIMES ANALYZED	NUMBER OF TIMES DETECTED	CONCENTRATION (PPM) MEAN	CONCENTRATION (PPM) MAXIMUM
75-69-4	FLUOROTRICHLOROMETHANE	1184	5	80.15	45000.00
75-71-8	DICHLORODIFLUOROMETHANE	1064	1	0.94	1000.00
124-48-1	CHLORODIBROMOMETHANE	1224	0	-	-
127-18-4	TETRACHLOROETHENE	1225	150	1345.26	170000.00
108-88-3	TOLUENE	1225	469	10208.85	440000.00
79-01-6	TRICHLOROETHENE	1225	106	2173.11	820000.00
75-01-4	VINYL CHLORIDE	1224	4	0.15	180.00
309-00-2	ALDRIN	1143	11	2.00	2000.00
60-57-1	DIELDRIN	1142	18	44.73	33000.00
57-74-9	CHLORDANE	1142	41	2548.44	780000.00
50-29-3	4,4'-DDT	1142	16	0.21	100.00
72-55-9	4,4'DDE	1142	20	0.04	23.00
72-54-8	4,4'DDD	1142	14	0.11	63.00
115-29-7	a-ENDOSULFAN	1142	13	0.04	22.00
115-29-7	b-ENDOSULFAN	1141	2	0.06	66.00
1031-07-8	ENDOSULFAN SULFATE	1141	2	0.08	86.00
72-20-8	ENDRIN	1142	6	0.01	2.80
7421-93-4	ENDRIN ALDEHYDE	1101	2	0.08	84.00
76-44-8	HEPTACHLOR	1142	48	115.90	110000.00
1024-57-3	HEPTACHLOR EPOXIDE	1142	10	0.01	6.80
319-84-6	a-BHC	1142	10	0.69	400.00
319-85-7	b-BHC	1142	9	0.07	35.00
319-86-8	d-BHC	1142	4	0.04	21.00
58-89-9	g-BHC (LINDANE)	1142	9	0.35	260.00
53469-21-9	PCB 1242	1142	27	2.80	1600.00
11097-69-1	PCB 1254	1145	34	5.21	3620.00
11104-28-2	PCB 1221	1142	1	0.00	0.01
11141-16-5	PCB 1232	1142	1	0.00	0.01
12672-29-6	PCB 1248	1145	18	8.87	8000.00
11096-82-5	PCB 1260	1144	37	390.36	140000.00
12674-11-2	PCB 1016	1143	6	0.12	119.00
8001-35-2	TOXAPHENE	1142	2	1.05	1200.00
1746-01-6	2,3,7,8-TETRACHLORO-DIBENZO-p-DIOXIN	972	6	0.00	0.60
65-85-0	BENZOIC ACID	508	16	131.64	20000.00
95-48-7	2-METHYLPHENOL	498	44	3827.72	900000.00
108-39-4	4-METHYLPHENOL	498	28	1128.10	110000.00
95-95-4	2,4,5-TRICHLOROPHENOL	498	0	-	-
62-53-3	ANILINE	499	0	-	-
100-51-6	BENZYL ALCOHOL	499	0	-	-
106-47-8	4-CHLOROANILINE	499	2	0.00	1.00

TABLE 2 (cont.)

CAS	COMPOUND NAME	NUMBER OF TIMES ANALYZED	NUMBER OF TIMES DETECTED	CONCENTRATION (PPM) MEAN	CONCENTRATION (PPM) MAXIMUM
132-64-9	DIBENZOFURAN	502	9	38.80	12000.00
91-57-6	2-METHYLNAPHTHALENE	503	35	89.35	10000.00
88-74-4	2-NITROANILINE	499	0	-	-
99-09-2	3-NITROANILINE	499	0	-	-
100-01-6	4-NITROANILINE	499	0	-	-
67-64-1	ACETONE	510	40	6651.64	760000.00
78-93-3	2-BUTANONE	508	54	6902.96	565000.00
75-15-0	CARBONDISULFIDE	510	2	0.23	100.00
591-78-6	2-HEXANONE	510	14	1945.97	490000.00
108-10-1	4-METHYL-2-PENTANONE	512	46	1170.95	300000.00
100-42-5	STYRENE	510	26	1742.23	300000.00
108-05-4	VINYL ACETATE	510	6	231.18	58000.00
95-47-6	o-XYLENE	600	223	8388.21	790000.00

TABLE 3 RESULTS OF HAZARDOUS WASTE ANALYSES
INORGANIC CHEMICAL CONSTITUENTS

COMPOUND NAME	NUMBER OF TIMES ANALYZED	NUMBER OF TIMES DETECTED	CONCENTRATIONS (PPM) MEAN	CONCENTRATIONS (PPM) MAXIMUM
ALUMINUM(Al)	1311	737	4621.88	252000.00
ANTIMONY(Sb)	1411	470	80.53	14400.00
ARSENIC(As)	1492	507	114.45	143850.00
BARIUM(Ba)	1363	620	476.98	143000.00
BERYLLIUM(Be)	1532	216	1.18	466.00
BORON(B)	1023	272	62.27	23400.00
CADMIUM(Cd)	1565	444	14.02	5100.00
CALCIUM(Ca)	1154	731	5705.22	353000.00
CHROMIUM(Cr)	1574	834	806.30	312000.00
COBALT(Co)	1275	334	11.95	1110.00
COPPER(Cu)	1529	877	521.81	95400.00
CYANIDE(CN)	1200	33	298.00	105000.00
IRON(Fe)	1315	994	11674.65	938000.00
LANTHANUM(La)	832	95	4.47	1150.00
LEAD(Pb)	1578	780	2130.92	656000.00
MAGNESIUM(Mg)	1152	697	1153.15	134000.00
MANGANESE(Mn)	1320	842	155.31	43500.00
MERCURY(Hg)	1167	291	3.17	1900.00
MOLYBDENUM(Mo)	1086	148	91.01	17300.00
NICKEL(Ni)	1533	565	146.85	156000.00
POTASSIUM(K)	446	297	3110.48	87500.00
SCANDIUM(Sc)	963	167	0.53	18.50
SELENIUM(Se)	1417	261	11.83	1900.00
SILICON(Si)	967	566	20411.47	378000.00
SILVER(Ag)	1553	207	1.52	271.00
SODIUM(Na)	1152	549	6966.18	856000.00
STRONTIUM(Sr)	1081	602	43.54	6390.00
THALLIUM(Tl)	1367	110	1.76	400.00
TIN(Sn)	422	54	18.78	4100.00
TITANIUM(Ti)	1084	610	2502.58	244000.00
TUNGSTEN(W)	942	127	19.94	13100.00
VANADIUM(V)	1315	358	6.92	365.00
YTTRIUM(Y)	1046	195	4.09	372.00
ZINC(Zn)	1532	1105	1520.36	745000.00
ZIRCONIUM(Zr)	950	261	18.00	2190.00

was 3,876 ppm. The highest reported maximum inorganic concentrations were iron (94%), sodium (86%), zinc (75%), lead (66%), silicon (38%) and calcium (35%). The inorganics detected in the fewest samples were cyanide (2.7% of times analyzed) and thallium (8.0% of times analyzed).

SIGNIFICANCE OF CHEMICAL CONSTITUENTS IDENTIFIED

An exhaustive evaluation of the significance of each detected chemical constituent is not possible in this paper. However, Appendix A provides a summarized tabulation which will enable the reader to quickly gain a sense of the general nature of any of the 133 organic priority pollutants and other organics detected. The Appendix A indicators are: (1) priority pollutant per the NRDC v. Train consent decree[7]; (2) inclusion in the Department of Transportation (DOT) regulations pertaining to transport of hazardous materials[6]; (3) chemical or compound for which an Occupational Safety and Health Administration (OSHA) standard pertains[8]; (4) one or more of the RCRA/CERCLA indicators[9] - EP toxicity, ignitability, persistence, reactivity, corrosiveness; (5) severe toxicity to a test animal[8]; (6) severe reproductive effect[8]; (7) severe irritation (skin or eye)[8]; (8) known carcinogen[8]; (9) mutagen[8]; or (10) teratogen[8]. Some general conclusions regarding environmental hazards, exposure risk to field investigators, exposure risk to laboratory personnel, and shipment of hazardous waste samples, are offered below.

ENVIRONMENTAL SIGNIFICANCE

A sense of the chemicals present in more plentiful quantities, on hazardous waste sites, may be had by the weighting scheme provided in Tables 4 (organics) and 5 (inorganics). Mean concentration values have been converted to percent. Frequency detected is the number of times detected divided by the number of times analyzed. The product of the mean concentration and the frequency detected ($\bar{X} \times F$) yields a weighted frequency which represents the equal importance of these two variables. To facilitate ranking, the greatest weighted frequency (toluene and silicon) have been normalized to 100, and the other values have been adjusted accordingly.

TABLE 4 PREVALENT ORGANIC CONSTITUENTS

Constituent	Mean Concentration % ($\bar{X}$)	Frequency Detected % (F)	$(\bar{X})(F)$	$(\bar{X})(F)$ Normalized to Toluene
Toluene	1.021	38.3	39.10	100
o-Xylene	0.839	37.2	31.20	80
2-Butanone	0.690	10.6	7.31	19
Ethylbenzene	0.228	30.6	6.98	18
Acetone	0.665	7.8	5.21	13
2-Methylphenol	0.383	8.8	3.39	9
Phenol	0.241	11.2	2.70	7
Trichloroethene	0.217	8.7	1.88	5
Tetrachloroethene	0.135	12.2	1.65	4
Methylene Chloride	0.078	17.0	1.33	3
1,1,1-Trichloroethane	0.132	8.0	1.06	3
4-Methyl-2-Pentanone	0.117	9.0	1.05	3
Chlordane	0.255	3.6	0.92	2
Styrene	0.174	5.1	0.89	2
1,2-Dichlorobenzene	0.194	4.0	0.78	2
4-Methylphenol	0.113	5.6	0.64	2
2-Hexanone	0.195	2.8	0.54	1
Benzene	0.058	8.5	0.49	1
Naphthalene	0.027	13.4	0.36	<1
Bis(2-Ethylhexyl)Phthalate	0.021	15.2	0.32	<1

TABLE 5 PREVALENT INORGANIC CONSTITUENTS

Constituent	Mean Concentration % $(\bar{X})$	Frequency Detected % (F)	$(\bar{X})(F)$	$(\bar{X})(F)$ Normalized to Silicon
Silicon	2.041	58.5	119.5	100
Iron	1.167	75.6	88.2	74
Calcium	0.571	63.6	36.2	30
Sodium	0.697	47.7	33.2	28
Aluminum	0.462	56.2	26.0	22
Potassium	0.311	66.6	20.7	17
Titanium	0.250	56.3	14.1	12
Zinc	0.152	72.1	11.0	9
Lead	0.213	49.4	10.5	9
Magnesium	0.115	60.5	7.0	6
Chromium	0.081	53.0	4.3	4
Copper	0.052	57.4	3.0	3
Barium	0.048	45.5	2.2	2
Manganese	0.016	63.8	1.0	1
Cyanide	0.030	2.8	0.08	<1

The most prevalent 20 organic constituents have been ranked in Table 4. Based upon weighted frequency, the five most prevalent organics were toluene > o-xylene > 2-butanone > ethylbenzene > acetone. As indicated in Appendix A, two are priority pollutants, all are DOT regulated, four have applicable OSHA standards, all are toxics, all are ignitable, three are persistent, one is a mutagen, three are teratogens, and none are known carcinogens. These five organic constituents represent about 81%, by total weighted frequencies, of the total 133 target organics. The weighted frequencies of the remaining 15 organic constituents ranged from less than 1% to 9% of the weighted frequency for toluene.

The 20 prevalent organics of Table 4 included 12 priority pollutants, 17 DOT regulated substances, 19 OSHA regulated constituents, 20 toxics, 16 ignitables, 16 persistants, 13 constituents exhibiting severe reproductive effects, 13 severe irritants, three carcinogens, nine mutagens, and 11 teratogens. In fact, eight of the 20 exhibited more than half of the Appendix A characteristics. These 20 organic constituents represent in excess of 97%, by total weighted frequencies, of all 133 target organic constituents.

An additional 938 non-target organic compounds were identified one or more times. These compounds are listed in Appendix B. Numbers of times detected and minimum, maximum and medium concentrations are provided.

In similar fashion, the 15 most prevalent inorganic constituents have been ranked in Table 5. Based upon weighted frequency, the seven most prevalent inorganic elements were silicon > iron > calcium > sodium > aluminum > potassium > titanium. These seven more prevalent inorganics include no priority pollutants nor known carcinogens. The seven represent nearly 97%, by total weighted frequencies, of all 35 target inorganics.

The weighted frequencies of the remaining eight elements ranged from less than 1% to 9% of the weighted frequency for silicon. This group of eight, having less than 10% weighted frequencies, includes the five inorganic priority pollutants found on Table 5, namely zinc, lead, chromium, copper and cyanide.

The 15 Table 5 inorganics include the five priority pollutants, eight elements subject to DOT regulations, three elements for which OSHA standards exist, three RCRA/CERCLA toxics, and, depending upon the specific species, several ignitables, reactives and corrosives. Also present are three inorganics having severe reproductive effects, two known carcinogens, three mutagens and three teratogens. Overall, these 15 inorganic constituents represent in excess of 99%, by total weighted frequencies, of all 35 target inorganic constituents.

Clearly, the chemical constituents detected in drums, other containers and in contaminated soil on hazardous waste sites, constitute potential or actual hazards to the environment and to the public health. The principle concern in the preparation of the early guidance[1] [2] [3] was the potential for contamination of aquifers which supply domestic water systems. This review lends no rationale for diminished concern in that regard. A wide variety of the prevalent organic constituents are persistent in the environment, are frequent groundwater pollutants, and are here shown to be present in concentrations such that, even with extremes of dilution, unacceptable concentrations could be expected to remain.

Some constituents, such as cadmium, mercury, endrin and lindane, have maximum contaminant levels (MCL) in drinking water, in the low parts per billion (μg/ℓ).[10] Carbon tetrachloride, tetrachlorethene, trichloroethene, vinyl chloride, and benzene have recommended maximum contaminant levels (RMCL) set at zero.[11] Aldrin, dieldrin, toxaphene and benzo(a)pyrene have ambient water quality criteria (AWQC) in the low parts per trillion (ng/ℓ).[12] These compounds were detected a total of 1,192 times. The inevitable deterioration of drums and other containers of these wastes constitutes potential long-term hazard to the groundwater resources of the nation.

Recent literature indicates that Volatile Organic Chemicals (VOCs) such as tetrachloroethene, trichloroethene and dichloroethene are biotransformed in groundwater to refractory compounds such as vinyl chloride.[13] [14] Vinyl chloride exhibits nearly all of the Appendix A characteristics and is

a particularly potent carcinogen. Vinyl chloride is being detected in groundwater which has been contaminated by the precursor VOCs noted above.[15] These VOCs and others were detected in more than 10% of the analyses and one sample contained 82% trichloroethene.

The inorganic constituents identified are conspicuous because of the high frequencies of detection. Many of these elements may not be considered to be commonplace on hazardous waste sites. Again, depending upon the form in which deposited or leached, nearly all are threats to groundwater supplies. Metals such as mercury, lead, cadmium and chromium, in soluble compounds, at very low concentrations, are potent long-term health hazards in groundwater.

The findings confirm the magnitude of the threat to groundwater supplies of deteriorating drums and tanks, leaking pits and ponds and leaking land disposal sites containing these chemicals. Moreover, they strengthen the likelihood that unknown, abandoned, improperly sealed and improperly closed disposal sites can be expected to continue threatening groundwater supplies for many years.

SIGNIFICANCE FOR FIELD INVESTIGATORS

While all of the Appendix A characteristics are of general concern to the field investigator, those which are immediate, onsite hazards are of specific intense concern. Those include immediate toxicity, ignitability, reactivity, corrosivity and severe irritation. Several of the chemicals found are extremely toxic (e.g., dinitrophenol, aldrin and TCDD - tentatively identified). Among the five most prevalent organics, four are ignitable. Maximum concentrations among the prevalent five ranged from 15 to 79%. Among the entire 133 organics, RCRA/CERCLA toxics were detected 3,997 times, ignitables were detected 7,739 times, reactives were present in 371 samples and severe eye and skin or respiratory irritants were present in 1,609 samples. 2,3,7,8-TCDD was tentatively identified at low concentrations in six samples. Inorganic constituents, depending upon the species in which present, also constitute toxic, ignitability (e.g., elemental sodium), reactivity and severe irritant hazards. Cyanide was

present in 33 samples. Thus, encounter with a material having one or more of these properties, is likely at any time a container on a hazardous waste site is opened. Moreover, since the CLP contracts do not require analyses for acutely toxic organophosphates or carbamates, their presence cannot be ruled out. There is no basis in these data for any relaxation of the onsite safety procedures referenced earlier, particularly those dealing with opening and sampling of containers.

SIGNIFICANCE IN PACKAGING AND SHIPPING OF SAMPLES

Considerations pertinent to packaging and shipment of suspected hazardous waste samples are essentially identical to those of the field investigator. These findings reinforce the 1979 and subsequent EPA Office of Health and Safety (OHS) guidance directing adherence to 49 CFR 172-173 requirements. The data further indicate the imperative that packaging be accomplished to preclude any possibility of leakage, breakage, or contact by incompatibles. OHS will shortly issue newly clarified "National Guidance for Complying with DOT Regulations in Shipping Hazardous Samples".

SIGNIFICANCE FOR LABORATORY PERSONNEL

Managers, supervisors, analysts, and support personnel staffing laboratories that perform analyses on hazardous waste samples share the field investigator's concerns with the immediate hazards of toxic, ignitable, reactive and irritant materials. Laboratory personnel may, if careless or inadequately trained, clothed or equipped, incur long-term risk from exposure to materials that are carcinogens or mutagens or that exhibit teratogenic, reproductive or severe irritant properties. A consideration of major operational significance is the prevention of contamination of work areas, equipment and instruments in environmental level laboratories.

The field investigator may find it necessary to deal with large quantities of waste while conducting sampling and other field operations. In contrast, because Agency practice has standardized around shipment of 8-oz. sample containers, the quantity of material to which laboratory personnel

may come into contact is significantly reduced. Leaks, spills, or ignition of such quantities of the waste materials identified herein, may be dealt with safely in a properly designed and operated hood. The findings herein support the concept that laboratory personnel, if properly trained, supervised, equipped and clothed, may perform operations incident to preparation of 8-oz. waste samples for analysis without incurring risks beyond those assumed in normal environmental level laboratory operations. These findings do not provide a basis for relaxing safety rules or guidance or for attempting short cuts in laboratory protocols or procedures.

Many of the wastes (e.g., VOCs and heavy metals) present in environmental samples in high concentration can contaminate large areas of the laboratory and its personnel and equipment. Also, some of these pollutants are extremely toxic or present long-term hazards such as cancer or mutagenic change. For these reasons, the practice of using a modern, well equipped, separate laboratory for sample preparation should be continued.

SUMMARY

Data from the organic and inorganic analyses of samples from drums and other containers, on hazardous waste sites throughout the nation, show the presence of priority pollutants, DOT and OSHA regulated substances, constituents having severe reproductive effects, severe irritants, carcinogens, mutagens, and teratogens, in significant numbers of identifications and in concentrations as high as 93%. These data indicate the magnitude of the threat to groundwater supplies of deteriorating drums and tanks, leaking pits and ponds and leaking land disposal sites containing these chemicals. They strengthen the likelihood that unknown, abandoned, improperly sealed and improperly closed disposal sites can be expected to continue threatening groundwater supplies for years to come.

The early procedural guidance, adopted by EPA, for the field investigation of hazardous waste sites and packaging of samples for shipment, is shown to be valid. The data confirm that laboratory personnel, working in a properly designed containment facility, if properly trained, supervised, equipped and clothed, may perform operations incident to preparation of

8-oz. waste samples for analysis without incurring risks beyond those assumed in normal environmental level laboratory operations. A well designed, maintained and operated separate laboratory will provide the necessary protection from contamination of nearby or adjacent environmental level laboratories.

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APPENDIX A*

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* *Appendix A notation: Y = yes; N = no; ND = no data provided by RTECS[8]; EQ = equivocal*

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	IGNITABLE	PERSISTENT	REACTIVE	CORROSIVE	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
88-06-2	2,4,6-TRICHLOROPHENOL	Y	N	N	Y	N	Y	N	N	N	ND	Y	Y	Y	ND
59-50-7	P-CHLORO-M-CRESOL	Y	N	N	Y	N	Y	N	N	N	ND	ND	ND	ND	ND
95-57-8	CHLOROPHENOL	Y	Y	N	N	N	Y	N	N	N	ND	ND	ND	ND	ND
120-83-2	DICHLOROPHENOL	Y	N	N	Y	Y	Y	N	N	N	ND	ND	EQ	ND	Y
105-67-9	DIMETHYLPHENOL	Y	N	N	Y	N	Y	N	N	N	ND	ND	EQ	ND	ND
88-75-5	2-NITROPHENOL	Y	Y	N	Y	N	Y	Y	N	N	ND	ND	ND	ND	ND
100-02-7	4-NITROPHENOL	Y	Y	N	Y	N	Y	N	N	N	ND	ND	ND	Y	ND
51-28-5	DINITROPHENOL	Y	N	N	Y	N	Y	Y	N	Y	Y	ND	ND	Y	ND
534-52-1	DINITRO-O-CRESOL	Y	N	Y	Y	N	Y	N	N	Y	ND	Y	ND	Y	ND
87-86-5	PENTACHLOROPHENOL	Y	Y	Y	Y	N	Y	N	N	Y	Y	ND	EQ	Y	Y
108-95-2	PHENOL	Y	Y	Y	Y	Y	Y	N	N	N	EQ	Y	ND	EQ	ND
83-32-9	ACENAPHTHENE	Y	N	N	Y	N	Y	N	N	ND	ND	ND	ND	ND	ND
92-87-5	BENZIDINE	Y	N	Y	Y	N	Y	N	N	N	ND	ND	Y	Y	ND

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOX	IGNI	PERSI	RFACT	COR O	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
120-82-1	TRICHLOROBENZENE	Y	Y	N	Y	N	Y	N	N	N	ND	N	ND	ND	ND
118-74-1	HEXACHLOROBENZENE	Y	Y	N	Y	N	Y	N	N	Y	Y	ND	Y	Y	Y
67-72-1	HEXACHLOROETHANE	Y	Y	Y	Y	N	Y	Y	N	N	EQ	ND	EQ	ND	Y
111-44-4	BIS(2-CHLOROETHYL)ETHER	Y	Y	Y	Y	N	Y	Y	N	Y	ND	N	Y	EQ	ND
91-58-7	2-CHLORONAPHTHALENE	Y	N	N	Y	Y	Y	N	N	N	ND	ND	ND	ND	ND
95-50-1	1,2-DICHLOROBENZENE	Y	Y	Y	Y	Y	Y	N	N	N	ND	ND	EQ	ND	ND
541-73-1	1,3-DICHLOROBENZENE	Y	Y	N	Y	N	Y	N	N	ND	ND	ND	ND	ND	ND
106-46-7	1,4-DICHLOROBENZENE	Y	Y	Y	Y	Y	Y	N	N	N	ND	ND	EQ	EQ	ND
91-94-1	3,3-DICHLOROBENZIDINE	Y	N	Y	Y	N	Y	N	N	N	ND	ND	Y	Y	Y
121-14-2	2,4-DINITROTOLUENE	Y	N	Y	Y	N	Y	Y	N	N	ND	ND	ND	Y	ND
606-20-2	2,6-DINITROTOLUENE	Y	N	Y	Y	N	Y	Y	N	N	ND	ND	ND	Y	ND
122-66-7	1,2-DIPHENYLHYDRAZINE	Y	N	N	Y	N	Y	N	N	N	ND	ND	Y	EQ	ND
206-44-0	FLUORANTHENE					N		I			NE	ND		EQ	I

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	RCRA/CERCLA TOXIC	RCRA/CERCLA PERSIST	RCRA/CERCLA REACT	RCRA/CERCLA CORR	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
					X	T	I	T	O						
7005-72-3	4-CHLOROPHENYL PHENYLETHER	Y	N	N	N	N	N	N	N	ND	ND	ND	ND	ND	ND
101-55-3	4-BROMOPHENYL PHENYL ETHER	Y	N	N	N	N	Y	N	N	ND	ND	ND	ND	ND	ND
39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	Y	N	N	N	N	N	N	N	ND	ND	ND	ND	ND	ND
111-91-1	BIS(2-CHLOROETHOXY)METHANE	Y	N	N	Y	Y	Y	N	N	Y	ND	ND	ND	ND	ND
87-68-3	HEXACHLOROBUTADIENE	Y	Y	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	EQ
77-47-4	HEXACHLOROCYCLOPENTADIENE	Y	Y	N	Y	N	Y	N	N	N	EQ	Y	ND	ND	EQ
78-59-1	ISOPHORONE	Y	N	Y	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
91-20-3	NAPHTHALENE	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	ND	ND	Y
98-95-3	NITROBENZENE	Y	Y	Y	Y	Y	Y	N	N	N	ND	ND	ND	EQ	ND
86-30-6	N-NITROSODIPHENYLAMINE	Y	N	N	Y	N	Y	N	N	N	ND	Y	Y	Y	ND
621-64-7	N-NITROSODIPROPYLAMINE	Y	N	N	Y	N	N	N	N	N	ND	ND	Y	Y	Y
117-81-7	BIS-(2-ETHYLHEXYL)PHTHALATE	Y	N	Y	Y	N	Y	N	N	N	Y	N	Y	Y	Y
85-68-7	BENZYL BUTYL PHTHALATE	Y	N	N	Y	Y	Y	N	N	N	ND	ND	EQ	ND	ND

CAS NO	CHEMICAL PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	IGNITABILITY	PERSISTENCE	REACTIVITY	CORROSIVITY	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
84-74-2	DI-N-BUTYL PHTHALATE	Y	Y	N	Y	Y	N	N	N	Y	ND	ND	Y	Y
117-84-0	DI-N-OCTYL PHTHALATE	Y	N	N	Y	N	Y	N	N	ND	Y	Y	ND	ND	Y
84-66-2	DIETHYL PHTHALATE	Y	N	N	N	Y	Y	N	N	N	EQ	ND	ND	ND	EQ
131-11-3	DIMETHYL PHTHALATE	Y	N	Y	N	Y	Y	N	N	N	Y	ND	ND	ND	EQ
56-55-3	BENZO(A)ANTHRACENE	Y	N	N	Y	N	Y	N	N	ND	ND	ND	Y	Y	ND
50-32-8	BENZO(A)PYRENE	Y	N	N	Y	N	Y	N	N	ND	Y	ND	Y	Y	Y
205-99-2	BENZO(B)FLUORANTHENE	Y	N	N	Y	N	Y	N	N	ND	ND	ND	Y	Y	ND
207-08-9	BENZO(K)FLUORANTHENE	Y	N	N	N	N	Y	N	N	ND	ND	ND	EQ	Y	ND
218-01-9	CHRYSENE	Y	N	N	Y	N	Y	Y	N	ND	ND	ND	EQ	Y	ND
208-96-8	ACENAPHTHYLENE	Y	N	N	Y	Y	Y	N	N	ND	ND	ND	ND	EQ	ND
120-12-7	ANTHRACENE	Y	N	N	N	Y	Y	Y	N	N	ND	ND	EQ	Y	ND
191-24-2	BENZO(GHI)PERYLENE	Y	N	N	N	N	Y	N	N	ND	ND	ND	ND	Y	ND
86-73-7	FLUORENE	N	N	N	N	N	N	N	N	ND	ND	ND	ND	EQ	

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	IGNITABLE	PERSISTENT	REACTIVE	CORROSIVE	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
85-01-8	PHENANTHRENE	Y	N	N	Y	Y	Y	N	N	N	ND	ND	EQ	Y	ND
53-70-3	DIBENZO(A,H)ANTHRACENE	Y	N	N	Y	N	Y	N	N	ND	ND	ND	Y	Y	ND
193-39-5	INDENO(1,2,3-CD)PYRENE	Y	N	N	Y	N	Y	N	N	ND	ND	ND	Y	Y	ND
129-00-0	PYRENE	Y	N	N	Y	N	Y	N	N	ND	ND	ND	ND	Y	ND
107-02-8	ACROLEIN	Y	Y	Y	Y	Y	N	Y	N	Y	EQ	Y	ND	Y	Y
107-13-1	ACRYLONITRILE	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y
71-43-2	BENZENE	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y
56-23-5	CARBON TETRACHLORIDE	Y	Y	Y	Y	N	Y	N	N	N	Y	Y	Y	Y	Y
108-90-7	CHLOROBENZENE	Y	Y	Y	Y	Y	Y	N	N	N	ND	ND	ND	ND	ND
107-06-2	1,2,-DICHLOROETHANE	Y	Y	Y	Y	Y	Y	Y	N	N	ND	Y	Y	Y	ND
71-55-6	1,1,1-TRICHLOROETHANE	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	EQ	Y	Y
75-34-3	1,1-DICHLOROETHANE	Y	Y	Y	Y	Y	Y	N	N	N	ND	ND	EQ	ND	EQ
79-00-5	1,1,2-TRICHLOROETHANE	Y	N	Y	Y	N	Y	N	N	N	ND	Y	EQ	Y	ND

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	IGNITABLE	PERSISTENT	REACTIVE	CORROSIVE	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
79-34-5	1,1,2,2-TETRACHLOROETHANE	Y	N	Y	Y	N	Y	N	N	ND	ND	ND	EQ	Y	ND
75-00-3	CHLOROETHANE	Y	Y	Y	Y	Y	Y	N	N	ND	ND	ND	ND	ND	ND
110-75-8	2-CHLOROETHYLVINYL ETHER	Y	N	N	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
67-66-3	CHLOROFORM	Y	Y	Y	Y	N	Y	N	N	N	Y	N	Y	Y	Y
75-35-4	1,1-DICHLOROETHENE	Y	N	N	Y	Y	N	Y	N	N	Y	ND	EQ	Y	Y
156-60-5	TRANS-1,2-DICHLOROETHENE	Y	N	N	Y	Y	N	N	N	ND	ND	ND	ND	ND	ND
78-87-5	1,2-DICHLOROPROPANE	Y	Y	Y	Y	Y	Y	N	N	N	ND	ND	ND	EQ	ND
61-02-6	TRANS-1,3-DICHLOROPROPENE	Y	N	N	Y	Y	Y	N	N	ND	ND	ND	ND	EQ	ND
10061-01-5	CIS-1,3-DICHLOROPROPENE	Y	N	N	Y	Y	Y	N	N	ND	ND	ND	ND	EQ	ND
100-41-4	ETHYLBENZENE	Y	Y	Y	Y	Y	Y	N	N	N	Y	ND	ND	ND	Y
75-09-2	METHYLENE CHLORIDE	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	ND	Y	Y
74-87-3	CHLOROMETHANE	Y	Y	Y	Y	Y	Y	N	N	ND	ND	ND	ND	EQ	ND
74-83-9	BROMOMETHANE	Y	Y	Y	Y	N	Y	N	N	ND	ND	ND	ND	EQ	ND

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOX	MUTAGEN	PERSIST	REACT	CORR	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
75-25-2	BROMOFORM	Y	N	Y	Y	N	Y	Y	N	ND	ND	ND	ND	EQ	ND
75-27-4	BROMODICHLOROMETHANE	Y	N	N	Y	N	Y	N	N	N	ND	ND	ND	EQ	ND
75-69-4	FLUOROTRICHLOROMETHANE	Y	N	Y	Y	N	N	N	N	ND	ND	ND	ND	ND	ND
75-71-8	DICHLORODIFLUOROMETHANE	Y	Y	Y	Y	N	Y	Y	N	ND	ND	ND	ND	ND	ND
124-48-1	CHLORODIBROMOMETHANE	Y	N	N	Y	Y	Y	N	N	N	ND	ND	ND	EQ	ND
127-18-4	TETRACHLOROETHENE	Y	Y	Y	Y	N	Y	N	N	N	Y	Y	EQ	Y	Y
108-88-3	TOLUENE	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	ND	Y	Y
79-01-6	TRICHLOROETHENE	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	EQ	Y	Y
75-01-4	VINYL CHLORIDE	Y	Y	Y	Y	Y	Y	Y	N	N	Y	ND	Y	Y	ND
309-00-2	ALDRIN	Y	Y	Y	Y	Y	Y	N	N	Y	Y	ND	Y	Y	Y
60-57-1	DIELDRIN	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y
57-74-9	CHLORDANE	Y	Y	Y	Y	N	Y	Y	N	ND	Y	ND	Y	Y	Y
50-29-3	4,4'-DDT	Y	Y	Y	Y	N	Y	N	N	N	Y	ND	Y	Y	N

CAS NO	CHEMICAL / PRIORITY POLLUTANT	DOT 49CFR 172,101	OSHA STANDARDS	RCRA/CERCLA TOX	RCRA/CERCLA IGNT	RCRA/CERCLA PERS 1	RCRA/CERCLA REACT	RCRA/CERCLA CORO	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
72-55-9	4,4'DDE													
	Y	N	N	N	N	N	N	N	ND	Y	ND	EQ	Y	Y
72-54-8	4,4'DDD													
	Y	N	N	Y	N	Y	N	N	ND	ND	ND	EQ	Y	ND
115-29-7	A-ENDOSULFAN													
	Y	N	N	Y	N	Y	N	N	Y	Y	ND	ND	ND	Y
115-29-7	B-ENDOSULFAN													
	Y	N	N	Y	N	Y	N	N	Y	Y	ND	ND	ND	Y
1031-07-8	ENDOSULFAN SULFATE													
	Y	N	N	Y	N	Y	N	N	ND	ND	ND	ND	ND	ND
72-20-8	ENDRIN													
	Y	N	Y	Y	Y	Y	N	N	Y	Y	ND	EQ	Y	Y
7421-93-4	ENDRIN ALDEHYDE													
	Y	N	N	Y	N	Y	N	N	ND	ND	ND	ND	ND	ND
76-44-8	HEPTACHLOR													
	Y	N	Y	Y	N	Y	N	N	Y	ND	ND	Y	Y	ND
1024-57-3	HEPTACHLOR EPOXIDE													
	Y	N	N	Y	N	Y	N	N	Y	ND	ND	Y	EQ	ND
319-84-6	A-BHC													
	Y	N	N	Y	N	Y	N	N	N	ND	ND	Y	Y	ND
319-85-7	B-BHC													
	Y	N	N	Y	N	Y	N	N	ND	ND	ND	Y	ND	ND
319-86-8	D-BHC													
	Y	N	N	Y	N	Y	N	N	ND	ND	ND	ND	ND	ND
58-89-9	G-BHC (LINDANE)													
					Y		N			Y	ND		Y	

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOX	TGNT	PERSIST	REACT	CORR	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
53469-21-9	PCB 1242	Y	N	Y	Y	N	Y	N	N	N	Y	ND	Y	ND	ND
11097-69-1	PCB 1254	Y	N	Y	Y	N	Y	N	N	N	Y	ND	Y	Y	EQ
11104-28-2	PCB 1221	Y	N	N	Y	N	Y	N	N	N	ND	ND	Y	ND	ND
11141-16-5	PCB-1232	Y	N	N	Y	N	Y	N	N	N	ND	ND	Y	ND	ND
12672-29-6	PCB 1248	Y	N	N	Y	N	Y	N	N	N	Y	ND	Y	ND	ND
11096-82-5	PCB 1260	Y	N	N	Y	N	Y	N	N	N	Y	ND	Y	Y	ND
12674-11-2	PCB 1016	Y	N	N	Y	N	Y	N	N	ND	Y	ND	ND	ND	ND
8001-35-2	TOXAPHENE	Y	Y	Y	Y	N	Y	N	N	Y	Y	ND	Y	Y	Y
1746-01-6	TETRACHLORO-DIBENZO-P-DIOXIN	Y	N	N	Y	N	Y	N	N	Y	Y	N	Y	Y	Y

EQ-EQUIVOCAL
SEVERE REPRODUCTIVE EFFECTS - OTHER THAN TERATOGENIC
N - NO
Y - YES
ND - NO DATA

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	IGNITABILITY	PERSISTENCE	REACTIVITY	CORROSIVITY	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
65-85-0	BENZOIC ACID	N	Y	N	Y	N	Y	N	N	ND	ND	Y	ND	EQ	ND
95-48-7	METHYLPHENOL	N	Y	Y	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
106-44-5	4-METHYLPHENOL	N	Y	Y	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
95-95-4	2,4,5-TRICHLOROPHENOL	N	N	N	Y	N	Y	N	N	N	ND	ND	EQ	ND	ND
62-53-3	ANILINE	N	Y	Y	Y	Y	Y	N	N	N	ND	Y	EQ	Y	ND
100-51-6	BENZYL ALCOHOL	N	N	N	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
106-47-8	CHLOROANILINE	N	Y	N	Y	N	Y	N	N	N	ND	Y	EQ	Y	ND
132-64-9	DIBENZOFURAN	N	N	N	N	N	N	N	N	ND	ND	ND	ND	ND	ND
91-57-6	METHYLNAPHTHALENE	N	N	N	T	N	N	N	N	N	ND	ND	ND	ND	ND
88-74-4	2-NITROANILINE	N	Y	N	Y	Y	Y	Y	N	N	ND	ND	ND	ND	ND
99-09-2	3-NITROANILINE	N	Y	N	Y	Y	Y	Y	N	N	ND	ND	ND	Y	ND
100-01-6	4-NITROANILINE	N	Y	Y	Y	Y	Y	Y	N	N	ND	ND	ND	Y	ND
67-64-1	ACETONE	N	Y	Y	Y	Y	N	N	N	N	ND	Y	ND	EQ	ND

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	IGNITY	PRESSURE	REACT	CORRO	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
78-93-3	BUTANONE	N	Y	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND	Y
75-15-0	CARBONDISULFIDE	N	Y	Y	Y	Y	Y	N	N	ND	Y	ND	ND	Y	Y
591-78-6	HEXANONE	N	N	Y	Y	Y	N	N	N	N	ND	ND	ND	ND	ND
108-10-1	4-METHYL-2-PENTANONE	N	Y	Y	Y	Y	N	N	N	N	ND	Y	ND	ND	ND
100-42-5	STYRENE	N	Y	Y	Y	Y	Y	Y	N	N	Y	ND	EQ	Y	ND
108-05-4	VINYL ACETATE	N	Y	N	Y	Y	Y	Y	N	N	ND	ND	EQ	ND	ND
95-47-6	XYLENE	N	Y	N	Y	Y	Y	N	N	N	Y	ND	ND	ND	EQ

EQ - EQUIVOCAL
SEVERE REPRODUCTIVE EFFECTS - OTHER THAN TERATOGENIC
N - NO
Y - YES
ND - NO DATA

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOXIC	IGNITABILITY	PERSISTENCE	REACTIVITY	CORROSIVITY	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
65-85-0	BENZOIC ACID	N	Y	N	Y	N	Y	N	N	ND	ND	Y	ND	EQ	ND
95-48-7	METHYLPHENOL	N	Y	Y	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
106-44-5	4-METHYLPHENOL	N	Y	Y	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
95-95-4	2,4,5-TRICHLOROPHENOL	N	N	N	Y	N	Y	N	N	N	ND	ND	EQ	ND	ND
62-53-3	ANILINE	N	Y	Y	Y	Y	Y	N	N	N	ND	Y	EQ	Y	ND
100-51-6	BENZYL ALCOHOL	N	N	N	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND
106-47-8	CHLOROANILINE	N	Y	N	Y	N	Y	N	N	N	ND	Y	EQ	Y	ND
132-64-9	DIBENZOFURAN	N	N	N	N	N	N	N	N	ND	ND	ND	ND	ND	ND
91-57-6	METHYLNAPHTHALENE	N	N	N	T	N	N	N	N	N	ND	ND	ND	ND	ND
88-74-4	2-NITROANILINE	N	Y	N	Y	Y	Y	Y	N	N	ND	ND	ND	ND	ND
99-09-2	3-NITROANILINE	N	Y	N	Y	Y	Y	Y	N	N	ND	ND	ND	Y	ND
100-01-6	4-NITROANILINE	N	Y	Y	Y	Y	Y	Y	N	N	ND	ND	ND	Y	ND
67-64-1	ACETONE	N	Y	Y	Y	Y	N	N	N	N	ND	Y	ND	EQ	ND

CAS NO	CHEMICAL	PRIORITY POLLUTANT	DOT 49CFR 172.101	OSHA STANDARDS	RCRA/CERCLA TOX	RCRA/CERCLA TOXIGN	RCRA/CERCLA PERSIST	RCRA/CERCLA PRFACT	RCRA/CERCLA CORROS	ORAL RAT TOXICITY <100MG/KG	SEVERE REPRODUCTIVE EFFECTS	SEVERE IRRITATION	CARCINOGEN	MUTAGEN	TERATOGEN
78-93-3	BUTANONE	N	Y	Y	Y	Y	N	N	N	ND	Y	ND	ND	ND	Y
75-15-0	CARBONDISULFIDE	N	Y	Y	Y	Y	Y	N	N	ND	Y	ND	ND	Y	Y
591-78-6	HEXANONE	N	N	Y	Y	Y	N	N	N	N	ND	ND	ND	ND	ND
108-10-1	4-METHYL-2-PENTANONE	N	Y	Y	Y	Y	N	N	N	N	ND	Y	ND	ND	ND
100-42-5	STYRENE	N	Y	Y	Y	Y	Y	Y	N	N	Y	ND	EQ	Y	ND
108-05-4	VINYL ACETATE	N	Y	N	Y	Y	Y	Y	N	N	ND	ND	EQ	ND	ND
95-47-6	XYLENE	N	Y	N	Y	Y	Y	N	N	N	Y	ND	ND	ND	EQ

EQ - EQUIVOCAL
SEVERE REPRODUCTIVE EFFECTS - OTHER THAN TERATOGENIC
N - NO
Y - YES
ND - NO DATA

APPENDIX B

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
60-35-5	ACETAMIDE	1	255.10	255.10	255.10
519-87-9	ACETAMIDE, N,N-DIPHENYL- (8CI)(9CI)	1	85000.00	85000.00	85000.00
103-84-4	ACETAMIDE (9CI), N-PHENYL-	2	140.00	1470.00	2800.00
142-71-2	CUPRIC ACETATE	1	1000.00	1000.00	1000.00
150-84-5	ACETATE, 6-OCTEN-1-OL, 3,7-DIMETHYL-	1	-	-	-
127-09-3	SODIUM ACETATE	1	1280.00	1280.00	1280.00
126-96-5	ACID ACETIC	4	1980.00	45540.00	89100.00
123-86-4	ACETIC ACID, BUTYL ESTER	33	4.40	1000.00	74000.00
112-17-4	ACETIC ACID, DECYL ESTER	1	100.00	100.00	100.00
141-78-6	ACETIC ACID, ETHYL ESTER (8CI 9CI)	45	4.00	3800.00	999000.00
103-09-3	ACETIC ACID (8CI 9CI), 2-ETHYLHEXYL ESTER	13	7.80	175.00	1500.00
110-19-0	ACETIC ACID, 2-METHYLPROPYL ESTER	6	8000.00	30411.00	70000.00
79-20-9	ACETIC ACID, METHYL ESTER (8CI)(9CI)	10	40.00	72.00	800.00
108-21-4	ACETIC ACID, 1-METHYLETHYL ESTER	8	63.00	2303.95	79000.00
105-46-4	ACETIC ACID, 1-METHYLPROPYL ESTER	2	370.00	370.00	370.00
2065-23-8	ACETIC ACID, PHENOXY-, METHYL ESTER	2	9.00	124.50	240.00
109-60-4	ACETIC ACID (8CI 9CI), PROPYL ESTER	22	3.60	40000.00	334940.00
95-51-2	ANILINE, O-CHLORO-	1	600.00	600.00	600.00
55255-70-4	ANTHRACENE, 9-CYCLOHEXYLTETRADECAHYDRO-	1	-	-	-
26914-18-1	ANTHRACENE, METHYL-	1	497.00	497.00	497.00
613-12-7	ANTHRACENE, 2-METHYL-	7	69.00	239.50	410.00
56-84-8	L-ASPARTIC ACID	1	-	-	-
28883-94-5	2H-AZIRINE-2-CARBOXAMIDE, 3-PHENYL-	2	-	-	-
100-52-7	BENZALDEHYDE (8CI 9CI)	31	13.00	318.50	20000.00
35913-09-8	BENZALDEHYDE, CHLORO-	1	-	-	-
90-02-8	BENZALDEHYDE (9CI), 2-HYDROXY-	7	0.51	32.76	65.00
529-20-4	BENZALDEHYDE (9CI), 2-METHYL-	2	916.00	1208.00	1500.00
55-21-0	BENZAMIDE	2	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
614-28-8	BENZAMIDE, N-BENZOYL-	1	-	-	-
19264-38-1	BENZAMIDE, N-BENZOYL-N-(PHENYLMETHYL)-	1	-	-	-
1696-17-9	BENZAMIDE, N,N-DIETHYL-	1	-	-	-
10546-70-0	BENZAMIDE (8CI 9CI), N-PROPYL-	3	440.00	440.00	440.00
100-44-7	BENZENAMINE, (CHLOROMETHYL)-	1	2000.00	2000.00	2000.00
121-69-7	BENZENAMINE (9CI), N,N-DIMETHYL-	2	40.00	120020.00	240000.00
100-61-8	BENZENAMINE, N-METHYL- (9CI)	1	513.30	513.30	513.30
106-49-0	BENZENAMINE, 4-METHYL- (9CI)	1	8900.00	8900.00	8900.00
101-14-4	BENZENAMINE, 4,4'-METHYLENEBIS-(2-CHLORO-	2	2000.00	2000.00	2000.00
93-53-8	BENZENEACETALDEHYDE, ALPHA-METHYL-	2	59.00	59.00	59.00
103-82-2	BENZENEACETIC ACID	4	-	-	-
140-29-4	BENZENEACETONITRILE	2	-	-	-
27134-26-5	BENZENAMINE, CHLORO-	2	60.00	380.00	700.00
95-76-1	BENZENAMINE, 3,4-DICHLORO-	1	-	-	-
91-66-7	BENZENAMINE, N,N-DIETHYL-	1	-	-	-
1582-09-8	BENZENAMINE, 2,6-DINITRO-N,N-DIPROPYL-4-(TRIFLUORO METHYL)-	1	-	-	-
103-69-5	BENZENAMINE, N-ETHYL-	1	-	-	-
41855-73-6	BENZENAMINE, 4-METHOXY-N-(3-PYRIDINYLMETHYLENE)-	1	-	-	-
40515-18-2	BENZENE, 4-AZIDO-1-METHYL-2-NITRO-	1	50000.00	50000.00	50000.00
55373-93-8	BENZENE, 1,1',1"-(1-BROMOMETHYL-2-METHOXY-1-METHYL -1-ETHANYL-2-YLIDE-	1	-	-	-
54815-20-2	BENZENE, (1-BUTOXY-1-METHYLETHYL)-	1	-	-	-
104-51-8	BENZENE, BUTYL- (8CI)(9CI)	3	10.00	25.00	1000.00
4537-11-5	BENZENE, 1-BUTYLHEXYL-	1	-	-	-
7459-67-8	BENZENECARBOTHIOIC ACID	1	-	-	-
2725-21-7	1,2-BENZENECARBOXYLIC ACID	1	33.00	33.00	33.00
25168-05-2	BENZENE, CHLOROMETHYL-	4	500.00	750.00	1000.00
95-49-8	BENZENE, 1-CHLORO-2-METHYL-	2	310.00	310.00	310.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
121-73-3	BENZENE, 1-CHLORO-3-NITRO-	1	-	-	-
827-52-1	BENZENE, CYCLOHEXYL-	1	-	-	-
873-49-4	BENZENE, CYCLOPROPYL- (8CI)(9CI)	2	0.47	245.24	490.00
95-80-7	1,3-BENZENEDIAMINE (9CI), 4-METHYL-	1	300.00	300.00	300.00
88-99-3	1,2-BENZENEDICARBOXYLIC ACID (9CI)	30	21.00	670.00	20000.00
7299-89-0	1,2-BENZENEDICARBOXYLIC ACID (9CI), BIS(2-ETHYLBUTYL) ESTER	2	15.00	107.50	200.00
117-82-8	1,2-BENZENEDICARBOXYLIC ACID, BIS (2-METHOXYETHYL) ESTER	1	13.00	13.00	13.00
605-45-8	1,2-BENZENEDICARBOXYLIC ACID, BIS(1-METHYLETHYL)ESTER	1	-	-	-
131-15-7	1,2-BENZENEDICARBOXYLIC ACID, BIS(1-METHYLHEPTYL) ESTER	1	76.00	76.00	76.00
33374-28-6	1,2-BENZENEDICARBOXYLIC ACID (9CI), 2-BUTOXYETHYL BUTYL ESTER	12	100.00	100.00	100.00
17851-53-5	1,2-BENZENEDICARBOXYLIC ACID (9CI), BUTYL 2-METHYL PROPYL ESTER	15	1.70	46.60	257.10
119-07-3	1,2-BENZENEDICARBOXYLIC ACID, DECYLOCTYL ESTER	1	270.00	270.00	270.00
84-61-7	1,2-BENZENEDICARBOXYLIC ACID (9CI), DICYCLOHEXYL ESTER	4	15.00	57.50	100.00
636-09-9	1,4-BENZENEDICARBOXYLIC ACID (9CI), DIETHYL ESTER	1	100.00	100.00	100.00
94-99-5	BENZENE, 2,4-DICHLORO-1-(CHLOROMETHYL)-	1	-	-	-
611-06-3	BENZENE (8CI 9CI), 2,4-DICHLORO-1-NITRO-	1	2400.00	2400.00	2400.00
1321-74-0	BENZENE, DIETHENYL-	1	3.60	3.60	3.60
135-01-3	BENZENE (9CI), 1,2-DIETHYL-	2	5800.00	27900.00	50000.00
105-05-5	BENZENE (9CI), 1,4-DIETHYL-	6	22.00	5387.95	13000.00
25550-13-4	BENZENE (9CI), DIETHYLMETHYL-	1	600.00	600.00	600.00
1321-38-6	BENZENE (9CI), DIISOCYANATOMETHYL-	2	500.00	500.00	500.00
26471-62-5	BENZENE (9CI), 1,3-DIISOCYANATOMETHYL-	7	560.00	2000.00	16504.50
1330-20-7	BENZENE, DIMETHYL-	53	2.00	470.00	140000.00
108-38-3	BENZENE (9CI), 1,3-DIMETHYL-	171	0.53	1748.00	440000.00
106-42-3	BENZENE (9CI), 1,4-DIMETHYL-	66	20.00	4200.00	100000.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
27854-40-6	BENZENE, (1,1-DIMETHYLDECYL)-	1	-	-	-
4706-90-5	BENZENE (9CI), 1,3-DIMETHYL-5-(1-METHYLETHYL)-	1	1300.00	1300.00	1300.00
2049-95-8	BENZENE (9CI), (1,1-DIMETHYLPROPYL)-	8	31.00	2250.00	20000.00
103-29-7	BENZENE (9CI), 1,1'-(1,2-ETHANEDIYL)BIS-	5	24.00	89.50	120.00
632-51-9	BENZENE (9CI), 1,1',1'',1'''-(1,2-ETHENEDIYLIDENE) TETRAKIS-	4	354.60	354.60	354.60
530-48-3	BENZENE, 1,1'-ETHENYLIDENEBIS-	1	-	-	-
25013-15-4	BENZENE, ETHENYLMETHYL-	10	13.00	300.00	1000.00
611-15-4	BENZENE (9CI), 1-ETHENYL-2-METHYL-	9	4.60	1600.00	11000.00
29224-55-3	BENZENE, ETHYLDIMETHYL-	22	150.00	2500.00	100000.00
933-98-2	BENZENE (9CI), 1-ETHYL-2,3-DIMETHYL-	4	150.00	9830.00	81000.00
934-74-7	BENZENE (9CI), 1-ETHYL-3,5-DIMETHYL-	6	22.00	1480.00	8500.00
2870-04-4	BENZENE (9CI), 2-ETHYL-1,3-DIMETHYL-	4	100.00	5220.00	14000.00
1758-88-9	BENZENE (9CI), 2-ETHYL-1,4-DIMETHYL-	18	25.00	2200.00	17000.00
934-80-5	BENZENE (9CI), 4-ETHYL-1,2-DIMETHYL-	2	9000.00	9000.00	9000.00
18335-15-4	BENZENE, (1-ETHYLHEXYL)-	1	-	-	-
25550-14-5	BENZENE, ETHYLMETHYL-	51	0.01	1210.00	79000.00
611-14-3	BENZENE (9CI), 1-ETHYL-2-METHYL-	53	3.70	1123.70	210000.00
620-14-4	BENZENE (9CI), 1-ETHYL-3-METHYL-	16	50.00	345.00	34000.00
622-96-8	BENZENE (9CI), 1-ETHYL-4-METHYL-	4	110.00	4305.00	8500.00
4218-48-8	BENZENE (9CI), 1-ETHYL-4-(1-METHYLETHYL)-	4	94.00	295.00	11000.00
2400-02-1	BENZENE, (1-ETHYLOCTADECYL)-	1	-	-	-
17851-27-3	BENZENE, 1-ETHYL-2,4,5-TRIMETHYL- (8CI)(9CI)	2	20.00	485.00	950.00
321-28-8	BENZENE (9CI), 1-FLUORO-2-METHOXY-	6	2.60	14.00	38.00
459-60-9	BENZENE (9CI), 1-FLUORO-4-METHOXY-	3	6.50	13.00	46.00
56701-18-9	BENZENE, 1,1'-(ISOCYANOCYCLOPROPYLIDENE)BIS-	1	-	-	-
780-25-6	BENZENEMETHANAMINE (9CI), N-(PHENYLMETHYLENE)-	4	459.30	459.30	459.30
617-94-7	BENZENEMETHANOL, ALPHA,ALPHA-DIMETHYL-	3	-	-	-
90-01-7	BENZENEMETHANOL (9CI), 2-HYDROXY-	1	90.00	90.00	90.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
15638-10-5	BENZENE, 1-METHOXY-2-(2-PHENYLETHENYL)-	1	-	-	-
75-13-8	ISOCYANIC ACID	1	1500.00	1500.00	1500.00
101-68-8	BENZENE, 1,1'-METHYLENEBIS[4-ISOCYANATO-	1	15000.00	15000.00	15000.00
98-83-9	BENZENE (9CI), (1-METHYLETHENYL)-	3	220.00	1504.40	3200.00
98-82-8	BENZENE (9CI), (1-METHYLETHYL)-	55	0.89	600.00	47000.00
777-22-0	BENZENE, (1-METHYLHEPTYL)-	3	-	-	-
527-84-4	BENZENE, 1-METHYL-2-(1-METHYLETHYL)- (9CI)	1	120.00	120.00	120.00
535-77-3	BENZENE (9CI), 1-METHYL-3-(1-METHYLETHYL)-	3	240.00	8000.00	10000.00
99-87-6	BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	2	440.00	440.00	440.00
1587-04-8	BENZENE, 1-METHYL-2-(2-PROPENYL)-	2	100.00	115.00	130.00
28729-54-6	BENZENE, METHYLPROPYL-	18	100.00	755.00	7600.00
135-98-8	BENZENE, (1-METHYLPROPYL)- (9CI)	5	35.00	100.00	10000.00
538-93-2	BENZENE, (2-METHYLPROPYL)-	5	54.00	450.00	1000.00
1074-17-5	BENZENE, 1-METHYL-2-PROPYL- (9CI)	2	670.00	4778.95	8887.90
1074-43-7	BENZENE, 1-METHYL-3-PROPYL- (9CI)	11	3.50	1700.00	29000.00
1074-55-1	BENZENE (9CI), 1-METHYL-4-PROPYL-	9	12.00	1300.00	15000.00
622-42-4	BENZENE, (NITROMETHYL)-	1	-	-	-
5840-40-4	BENZENE (9CI), 1-NITRO-2-(PHENYLMETHYL)-	1	110.00	110.00	110.00
5279-14-1	BENZENE, (1-NITROPROPYL)-	2	-	-	-
22818-69-5	BENZENE, 3-NITROPROPYL-	1	10000.00	10000.00	10000.00
2189-60-8	BENZENE, OCTYL-	1	-	-	-
103-50-4	BENZENE, 1,1'-[OXYBIS(METHYLENE)]BIS-	3	640.00	1370.00	2100.00
101-84-8	BENZENE, 1,1-OXYBIS-	8	2.30	29.00	317.00
608-93-5	BENZENE, PENTACHLORO-	3	15.00	4907.50	9800.00
82-68-8	BENZENE (8CI 9CI), PENTACHLORONITRO-	2	500.00	562.50	625.00
700-12-9	BENZENE, PENTAMETHYL- (8CI)(9CI)	3	0.29	100.00	220.00
55134-07-1	BENZENE, (1,1,4,6,6-PENTAMETHYLHEPTYL)-	1	-	-	-
1081-75-0	BENZENE, 1,1'-(1,3-PROPANEDIYL)BIS-	2	0.94	65.47	130.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
501-52-0	BENZENEPROPANOIC ACID	3	-	-	-
10500-29-5	BENZENEPROPANOYL BROMIDE (9CI)	1	525.90	525.90	525.90
637-50-3	BENZENE, 1-PROPENYL-	2	15.00	25.00	35.00
300-57-2	BENZENE, 2-PROPENYL-	2	170.00	565.00	960.00
103-65-1	BENZENE (ACI 9CI), PROPYL-	87	1.20	760.00	64000.00
2400-03-5	BENZENE, 1-PROPYLHEPTADECYL-	1	330.00	330.00	330.00
18335-17-6	BENZENE, 1-PROPYLPENTYL-	1	-	-	-
144-83-2	BENZENESULFONAMIDE, 4-AMINO-N-2-PYRIDINYL-	2	-	-	-
3622-84-2	BENZENESULFONAMIDE, N-BUTYL -	2	-	-	-
1907-65-9	BENZENESULFONAMIDE, N-BUTYL-4-METHYL-	1	-	-	-
88-19-7	BENZENESULFONAMIDE, 2-METHYL-	1	310.00	310.00	310.00
70-55-3	BENZENESULFONAMIDE, 4-METHYL-	1	110.00	110.00	110.00
12408-10-5	BENZENE, TETRACHLORO-	3	200.00	2350.00	4500.00
634-66-2	BENZENE, 1,2,3,4-TETRACHLORO-	1	-	-	-
25619-60-7	BENZENE, TETRAMETHYL-	20	32.00	910.00	15000.00
488-23-3	BENZENE (ACI 9CI), 1,2,3,4-TETRAMETHYL-	2	2400.00	29700.00	57000.00
527-53-7	BENZENE (ACI 9CI), 1,2,3,5-TETRAMETHYL-	13	16.00	6307.60	86000.00
95-93-2	BENZENE, 1,2,4,5-TETRAMETHYL- (8CI)(9CI)	1	90.00	90.00	90.00
54699-35-3	1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-DIMETHYL ESTER	1	-	-	-
87-61-6	BENZENE (ACI 9CI), 1,2,3-TRICHLORO-	2	15.00	357.50	700.00
108-70-3	BENZENE (8CI 9CI), 1,3,5-TRICHLORO-	2	1000.00	1500.00	2000.00
25551-13-7	BENZENE, TRIMETHYL-	45	0.10	1270.00	130000.00
526-73-8	BENZENE (ACI 9CI), 1,2,3-TRIMETHYL-	34	170.00	2480.00	140000.00
95-63-6	BENZENE (ACI 9CI), 1,2,4-TRIMETHYL-	78	4.00	1800.00	200000.00
108-67-8	BENZENE (9CI), 1,3,5-TRIMETHYL-	46	4.20	5700.00	260000.00
26356-11-6	BENZENE, (1,1,2-TRIMETHYL PROPYL)-	1	-	-	-
5400-75-9	2H-BENZIMIDAZOL-2-ONE, 1,3-DIHYDRO-5-METHYL-	1	-	-	-
2634-33-5	1,2-BENZISOTHIAZOL-3(2H)-ONE	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
195-19-7	BENZO(C)PHENANTHRENE	2	37.00	68.50	100.00
203-12-3	BENZOFLUORANTHENE (GHT)	3	100.00	180.00	400.00
61089-87-0	BENZOFLUORENE	1	200.00	200.00	200.00
10586-16-0	BENZOIC ACID, 2,4-BIS(TRIMETHYLSILYL)OXY-TRIMETHYL SILYL ESTER	1	-	-	-
26264-09-5	BENZOIC ACID, CHLORO-	9	24.00	32.00	3100.00
3040-64-7	BENZOIC ACID, 4-(CHLOROMETHYL)-METHYL ESTER	1	-	-	-
35915-19-6	BENZOIC ACID, DICHLORO-	7	24.00	32.00	34.00
99-64-9	BENZOIC ACID, 3-(DIMETHYLAMINO)-	3	-	-	-
119-67-5	BENZOIC ACID, 2-FORMYL-	1	-	-	-
69-72-7	BENZOIC ACID, 2-HYDROXY- (9CI)	2	130.00	565.00	1000.00
118-55-8	BENZOIC ACID, 2-HYDROXY-, PHENYL ESTER	4	200.00	1500.00	6600.00
93-99-2	BENZOIC ACID, PHENYL ESTER (8CI)(9CI)	4	3.70	9.70	169.50
120-51-4	BENZOIC ACID, PHENYLMETHYL ESTER	1	-	-	-
2078-17-3	BENZOIC ACID, 3,4,5-TRIS(TRIMETHYLSILOXY)-, TRIMETHYLSILYL ESTER	1	-	-	-
27807-96-1	BENZONITRILE, 4-(1,5-DIHYDRO-3-METHYL-5-OXO-1-PHENYL-4H-	1	72.00	72.00	72.00
119-61-9	BENZOPHENONE	1	200.00	200.00	200.00
95-16-9	BENZOTHIAZOLE	1	-	-	-
934-34-4	BENZOTHIAZOLONE	1	100.00	100.00	100.00
934-34-9	2(3H)BENZOTHIAZOLONE	1	58.00	58.00	58.00
464-41-5	BICYCLO(2.2.1)HEPTANE (9CI), 2-CHLORO-1,7,7-TRIMETHYL-, ENDO-	2	47.00	123.50	200.00
18172-67-3	BICYCLO(3.1.1)HEPTANE (9CI), 6,6-DIMETHYL-2-METHYLENE-, (1S)-	2	150.00	4425.00	8700.00
33312-98-0	BICYCLO(2.2.1)HEPTANE-2-THIONE (9CI), 3,3-DIMETHYL-	1	260.00	260.00	260.00
507-70-0	BICYCLO(2.2.1)HEPTAN-2-OL, 1,7,7-TRIMETHYL-, ENDO-	2	-	-	-
124-76-5	BICYCLO(2.2.1)HEPTAN-2-OL, 1,7,7-TRIMETHYL-, EXO-	1	46000.00	46000.00	46000.00
14845-41-1	BICYCLO(4.1.0)HEPTAN-2-ONE, 6-METHYL-	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
76-22-2	BICYCLO[2.2.1]HEPTAN-2-ONE, 1,7,7-TRIMETHYL-	1	-	-	-
80-56-8	BICYCLO[3.1.1]HEPT-2-ENE, 2,6,6-TRIMETHYL-	2	30.00	36015.00	72000.00
23183-11-1	1,1'-BICYCLOHEPTYL	2	-	-	-
3387-41-5	BICYCLO[3.1.0]HEXANE (9CI), 4-METHYLENE-1-(1-METHYLETHYL)-	2	85.00	192.50	300.00
471-16-9	BICYCLO[3.1.0]HEXAN-3-OL (9CI), 4-METHYLENE-1-(1-METHYLETHYL)-, (1S-(1.ALPHA.,3.BETA.,5.ALPHA.))-	1	130.00	130.00	130.00
280-65-9	BICYCLO[3.3.1]NONANE	1	4100.00	4100.00	4100.00
66324-47-8	1,1'-BICYCLOHEXYL, 2-METHYL-	1	-	-	-
6221-55-2	BICYCLO[3.2.1.]OCTANE (8CI) (9CI)	1	37.00	37.00	37.00
1194-44-1	BICYCLO[2.2.2]OCTANE, 1,4-DIOL-	1	-	-	-
55044-15-0	BICYCLO[2.2.2]OCTANE, 1-IODO-4-PHENYL-	2	-	-	-
694-87-1	BICYCLO[4.2.0]OCTA-1,3,5-TRIENE (8CI 9CI)	10	27.00	1200.00	14080.00
56701-33-8	2,2'BIFURAN-5,5'(2H,2'H)-DIONE, TETRAHYDRO-3,3'-BIS(2,4A,5,6,7,8-HEXAHYDRO-1-NAPHTHALENYL)-	1	-	-	-
92-52-4	1,1'-BIPHENYL (9CI)	30	0.79	450.00	42000.00
13029-08-8	1,1'-BIPHENYL, 2,2'-DICHLORO-	1	-	-	-
259-79-0	BIPHENYLENE	1	-	-	-
40529-66-6	BIPHENYL, (ETHYL)-	1	2200.00	2200.00	2200.00
1812-51-7	1,1'-BIPHENYL (9CI), 2-ETHYL-	1	55.00	55.00	55.00
52712-05-7	1,1'-BIPHENYL, 2,2',3,4,5,5',6-HEPTACHLORO-	3	-	-	-
26601-64-9	1,1'-BIPHENYL, HEXACHLORO-	1	-	-	-
52712-04-6	1,1'-BIPHENYL, 2,2',3,4,5,5'-HEXACHLORO-	4	-	-	-
33979-03-2	1,1'-BIPHENYL, 2,2',4,4',6,6'-HEXACHLORO-	1	-	-	-
28652-72-4	BIPHENYL, (METHYL)-	9	100.00	100.00	1700.00
643-58-3	1,1'-BIPHENYL, 2-METHYL- (9CI)	2	4.80	6.60	8.40
25429-29-2	1,1'-BIPHENYL, PENTACHLORO-	3	-	-	-
37680-73-2	1,1'-BIPHENYL, 2,2',4,5,5'-PENTACHLORO-	1	-	-	-
26914-33-0	1,1'-BIPHENYL, TETRACHLORO-	2	-	-	-
41464-40-8	1,1'-BIPHENYL, 2,2',4,5'-TETRACHLORO-	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
37680-65-2	1,1'-BIPHENYL, 2,2',5-TRICHLORO-	1	-	-	-
38444-81-4	1,1'-BIPHENYL, 2,3',5-TRICHLORO-	1	-	-	-
55702-45-9	1,1'-BIPHENYL, 2,3,6-TRICHLORO-	1	-	-	-
123-72-8	BUTANAL (9CI)	1	34.00	34.00	34.00
111-92-2	1-BUTANAMINE, N-BUTYL-	1	-	-	-
594-39-8	2-BUTANAMINE, 2-METHYL-	1	-	-	-
541-33-3	BUTANE, 1,1-DICHLORO-	1	-	-	-
75-83-2	BUTANE, 2,2-DIMETHYL-	2	-	-	-
79-29-8	BUTANE, 2,3-DIMETHYL-	3	38.00	140.00	500.00
40938-21-4	BUTANEDIOIC ACID, (2,2-DIMETHYLPROPYLIDENE)-	3	-	-	-
1587-18-4	BUTANEDIOIC ACID, HYDROXY-, DIBUTYL ESTER (9CI)	2	1.80	2.00	2.20
18447-89-7	BUTANEDIOIC ACID, METHYL-, DIBUTYL ESTER	1	-	-	-
1604-11-1	BUTANEDIOIC ACID (9CI), METHYL-, DIMETHYL ESTER	3	15.00	177.50	340.00
584-03-2	1,2-BUTANEDIOL	3	210.00	1745.00	3280.00
495-71-6	1,4-BUTANEDIONE, 1,4-DIPHENYL-	1	-	-	-
6668-24-2	1,3-BUTANEDIONE (8CI 9CI), 2-METHYL-1-PHENYL-	1	200.00	200.00	200.00
78-78-4	BUTANE, 2-METHYL-	13	0.50	56.00	840.00
2568-90-3	BUTANE, 1,1'-METHYLENEBIS(OXY)BIS-	1	22.00	22.00	22.00
2568-92-5	BUTANE (9CI), 2,2'-(METHYLENEBIS(OXY))BIS-	1	41.40	41.40	41.40
3073-92-5	BUTANE (9CI), 1-PROPOXY-	1	17.00	17.00	17.00
464-06-2	BUTANE, 2,2,3-TRIMETHYL-	1	250.00	250.00	250.00
3068-00-6	1,2,4-BUTANETRIOL (8CI 9CI)	1	900.00	900.00	900.00
55724-73-7	BUTANOIC ACID, 4-BUTOXY-	2	750.00	750.00	750.00
107-92-6	BUTANOIC ACID	7	-	-	-
116-53-0	BUTANOIC ACID, 2-METHYL-	3	-	-	-
503-74-2	BUTANOIC ACID, 3-METHYL-	1	-	-	-
623-42-7	BUTANOIC ACID, METHYL ESTER	1	140.00	140.00	140.00
71-36-3	1-BUTANOL (9CI)	10	13.00	510.00	200000.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
78-92-2	2-BUTANOL	2	20.00	165.00	310.00
1873-25-2	2-BUTANOL, 1-CHLORO-	2	52.00	52.00	52.00
123-51-3	1-BUTANOL, 3-METHYL-	1	873000.00	873000.00	873000.00
75-85-4	2-BUTANOL, 2-METHYL-	2	2.10	29.05	56.00
1823-90-1	2-BUTANONE (8CI 9CI), 4-HYDROXY-3,3-DIMETHYL-	1	890.20	890.20	890.20
3393-64-4	2-BUTANONE (8CI 9CI), 4-HYDROXY-3-METHYL-	3	20.00	20.00	20.00
563-80-4	2-BUTANONE, 3-METHYL-	21	5.00	5.50	6.00
11069-19-5	BUTENE, DICHLORO-	1	280.00	280.00	280.00
624-48-6	2-BUTENEDIOIC ACID (Z)- (9CI), DIMETHYL ESTER	1	280.00	280.00	280.00
56631-01-7	BUTENE, HEXACHLORO-	1	13000.00	13000.00	13000.00
513-35-9	2-BUTENE, 2-METHYL-	1	38.00	38.00	38.00
107-93-7	2-BUTENOIC ACID, (E)-	2	-	-	-
10371-45-6	2-BUTENOIC ACID, 1-METHYLPROPYL ESTER, (E)-	1	-	-	-
122-57-6	3-BUTEN-2-ONE (8CI 9CI), 4-PHENYL-	5	150.00	210.00	300.00
115-19-5	3-BUTYN-2-OL, 2-METHYL-	1	68.00	68.00	68.00
869-08-9	BUTYRIC ACID, 2-METHYL-SEC-BUTYL ESTER	1	-	-	-
101-21-3	CARBAMIC ACID, (3-CHLOROPHENYL)-1-METHYLETHYL ESTER	1	-	-	-
86-74-8	9H-CARBAZOLE	5	180.00	240.00	330.00
3652-91-3	CARBAZOLE, 2-METHYL-	1	-	-	-
2788-23-0	9H-CARBAZOLE, 9-NITROSO-	2	1837.90	1837.90	1837.90
102-09-0	CARBONIC ACID, DIPHENYL ESTER (8CI)(9CI)	1	100.00	100.00	100.00
13183-19-2	CARBONIC ACID, NEOPENTYLPHENYL ESTER	1	-	-	-
623-79-0	CARBONODITHIOIC ACID (9CI), O,S-DIETHYL ESTER	1	3175.80	3175.80	3175.80
29976-53-2	CARBOXYLIC ACID, 1-PIPERIDINONE-, ETHYL ESTER	1	-	-	-
41637-90-5	CHRYSENE, METHYL-	2	140.00	170.00	200.00
1768-36-1	CYANIC ACID, PROPYL ESTER	1	1200.00	1200.00	1200.00
4806-61-5	CYCLOBUTANE, ETHYL-	1	-	-	-
2404-35-5	CYCLOHEPTANE, BROMO-	1	260.00	260.00	260.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
23799-25-9	CYCLOHEPTANE, 1-METHYL-4-METHYLENE-	1	-	-	-
544-25-2	1,3,5-CYCLOHEPTATRIENE (8CI 9CI)	25	3.30	200.00	21000.00
17634-51-4	1,3,5-CYCLOHEPTATRIENE, 7-ETHYL-	1	-	-	-
539-80-0	2,4,6-CYCLOHEPTATRIEN-1-ONE (8CI)(9CI)	3	16.00	16.00	16.00
106-51-4	2,5-CYCLOHEXADIENE-1,4-DIONE (9CI)	1	2000.00	2000.00	2000.00
137-18-8	2,5-CYCLOHEXADIENE-1,4-DIONE, 2,5-DIMETHYL-	1	14.00	14.00	14.00
99-83-2	1,3-CYCLOHEXADIENE, 2-METHYL-5-(1-METHYLETHYL)-	1	100.00	100.00	100.00
101-83-7	CYCLOHEXANAMINE, N-CYCLOHEXYL-	2	350.00	350.00	350.00
110-82-7	CYCLOHEXANE (8CI 9CI)	55	0.16	270.00	200000.00
1678-93-9	CYCLOHEXANE (8CI 9CI), BUTYL-	13	47.00	1700.00	37000.00
98-89-5	CYCLOHEXANECARBOXYLIC ACID	5	5.60	7.80	10.00
54823-95-9	CYCLOHEXANE, 1-(CYCLOHEXYLMETHYL)-3-METHYL-, TRANS-	1	400.00	400.00	400.00
4431-89-4	CYCLOHEXANE, (CYCLOPENTYLMETHYL)-	1	-	-	-
32669-86-6	CYCLOHEXANE, CYCLOPROPYL-	2	19.00	3359.50	6700.00
1795-16-0	CYCLOHEXANE, DECYL-	1	-	-	-
1331-43-7	CYCLOHEXANE, DIETHYL- (8CI)(9CI)	1	6.70	6.70	6.70
100-49-2	CYCLOHEXANEMETHANOL	1	-	-	-
27195-67-1	CYCLOHEXANE, DIMETHYL	9	120.00	510.00	22000.00
590-66-9	CYCLOHEXANE (8CI 9CI), 1,1-DIMETHYL-	11	5.00	38.00	2200.00
6876-23-9	CYCLOHEXANE (8CI 9CI), 1,2-DIMETHYL-, TRANS-	3	32.00	320.00	15000.00
591-21-9	CYCLOHEXANE, 1,3-DIMETHYL-	1	1300.00	1300.00	1300.00
61142-19-6	CYCLOHEXANE, (1,3-DIMETHYLBUTYL)-	2	490.00	5745.00	11000.00
638-04-0	CYCLOHEXANE (8CI 9CI), 1,3-DIMETHYL-, CIS-	18	98.50	1150.00	50000.00
624-29-3	CYCLOHEXANE (8CI 9CI), 1,4-DIMETHYL-, CIS-	5	126.10	3900.00	5400.00
2207-04-7	CYCLOHEXANE (8CI 9CI), 1,4-DIMETHYL-, TRANS-	3	220.00	250.00	410.00
56009-20-2	CYCLOHEXANE, 1-(1,5-DIMETHYLHEXYL)-4-(4-METHYLPENTYL)-	1	-	-	-
4443-55-4	CYCLOHEXANE, EICOSYL-	6	14.00	290.00	1400.00
1678-91-7	CYCLOHEXANE (8CI 9CI), ETHYL-	31	3.90	550.00	40000.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
30677-34-0	CYCLOHEXANE, ETHYLMETHYL-	14	100.00	1000.00	10000.00
4926-90-3	CYCLOHEXANE (8CI 9CI), 1-ETHYL-1-METHYL-	12	50.00	2735.00	14000.00
4926-78-7	CYCLOHEXANE, 1-ETHYL-4-METHYL-, CIS-	1	-	-	-
6236-88-0	CYCLOHEXANE (8CI 9CI), 1-ETHYL-4-METHYL-, TRANS-	3	154.40	162.70	600.00
4292-75-5	CYCLOHEXANE, HEXYL-	8	14.00	1300.00	5300.00
2451-01-6	CYCLOHEXANEMETHANOL, 4-HYDROXY, ACID 4-TRIMETHYL-	1	-	-	-
2105-40-0	CYCLOHEXANEMETHANOL, 2-METHYL-	4	280.00	280.00	280.00
3937-49-3	CYCLOHEXANEMETHANOL, TRANS-4-METHYL-	1	-	-	-
108-87-2	CYCLOHEXANE, METHYL- (8CI)(9CI)	73	0.72	985.00	280000.00
696-29-7	CYCLOHEXANE (9CI), (1-METHYLETHYL)-	9	160.00	240.10	510.00
6069-98-3	CYCLOHEXANE, 1-METHYL-4-(1-METH)-	1	29.40	29.40	29.40
54411-01-7	CYCLOHEXANE, 1-METHYL-2-PENTYL-	1	2600.00	2600.00	2600.00
4291-79-6	CYCLOHEXANE, 1-METHYL-2-PROPYL-	6	580.00	4200.00	15000.00
1678-98-4	CYCLOHEXANE (9CI), (2-METHYLPROPYL)-	4	360.70	10000.00	14000.00
1795-15-9	CYCLOHEXANE, OCTYL-	4	45.00	2600.00	2900.00
4292-92-6	CYCLOHEXANE, PENTYL-	5	13.00	12000.00	32000.00
5364-83-0	CYCLOHEXANE, 1-PROPENYL-	3	180.00	510.00	680.00
1678-92-8	CYCLOHEXANE (8CI 9CI), PROPYL-	16	8.00	1000.00	11000.00
1613-51-0	CYCLOHEXANE, THIA-	6	-	-	-
822-86-6	CYCLOHEXANE, TRANS-1,2-DICHLORO-	1	-	-	-
7094-26-0	CYCLOHEXANE, 1,1,2-TRIMETHYL-	2	140.00	490.00	840.00
3073-66-3	CYCLOHEXANE (8CI 9CI), 1,1,3-TRIMETHYL-	17	26.00	630.00	10000.00
1678-97-3	CYCLOHEXANE (8CI 9CI), 1,2,3-TRIMETHYL-	6	220.00	320.00	350.00
2234-75-5	CYCLOHEXANE, 1,2,4-TRIMETHYL-	1	1400.00	1400.00	1400.00
1839-63-0	CYCLOHEXANE (8CI 9CI), 1,3,5-TRIMETHYL-	2	600.00	8800.00	17000.00
54105-66-7	CYCLOHEXANE, UNDECYL-	7	17.00	170.00	6100.00
126-52-3	CYCLOHEXANOL, 1-ETHYNYL-, CARBAMATE	1	-	-	-
29538-77-0	CYCLOHEXANOL, TRANS-4-CHLORO-	3	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
109-94-1	CYCLOHEXANONE (8CI)(9CI)	7	60.00	424.60	15000.00
54166-48-2	CYCLOHEXANONE, 2-(2-BUTYNYL)-	1	-	-	-
13395-76-1	CYCLOHEXANONE, 2,3-DIMETHYL-	1	390.00	390.00	390.00
873-94-9	CYCLOHEXANONE, 3,3,5-TRIMETHYL-	3	93.00	746.50	1400.00
110-83-8	CYCLOHEXENE (8CI)(9CI)	9	11.00	100.00	280.00
2228-98-0	CYCLOHEXENE, 4-(1,1-DIMETHYLETHYL)-	1	-	-	-
100-40-3	CYCLOHEXENE, 4-ETHENYL- (9CI)	1	120.00	120.00	120.00
5113-87-1	CYCLOHEXENE (9CI), 3-METHYL-6-(1-METHYLETHENYL)-, (3R-TRANS)-	1	568.00	568.00	568.00
32730-40-8	CYCLOHEXENE, 3-(2-METHYLPROPOXY)-	1	-	-	-
562-74-3	3-CYCLOHEXEN-1-OL, 4-METHYL-1-1(METHYLETHYL)-	1	-	-	-
1193-18-6	2-CYCLOHEXEN-1-ONE (8CI 9CI), 3-METHYL-	1	12.00	12.00	12.00
99-49-0	2-CYCLOHEXEN-1-ONE, 2-METHYL-5-(1-METHYLETHENYL)-	1	500.00	500.00	500.00
4994-16-5	3-CYCLOHEXEN-1-YL-BENZENE	1	10.00	10.00	10.00
629-20-9	1,3,5,7-CYCLOOCTATETRAENE (8CI 9CI)	5	0.57	87.00	240.00
38653-47-3	5H-CYCLOPENTA-1,4-DIOXIN, 4A,6,7,7A-TETRAHYDRO-2-METHYL-, TRANS-	1	-	-	-
287-92-3	CYCLOPENTANE, DIMETHYL-	4	81.00	12680.00	47000.00
54549-80-3	CYCLOPENTANE, DIMETHYLETHYL-	1	90.00	90.00	90.00
1640-89-7	CYCLOPENTANE, ETHYL-	6	130.00	5900.00	74000.00
4413-21-2	CYCLOPENTANE, 1,1'-ETHYLIDENEBIS-	5	1900.00	24950.00	48000.00
1674-50-5	CYCLOPENTANE, 1-ETHYL-1-METHYL-	5	100.00	2500.00	3777.60
3726-47-4	CYCLOPENTANE, 1-ETHYL-3-METHYL-	1	250.00	250.00	250.00
930-89-2	CYCLOPENTANE (8CI 9CI), 1-ETHYL-2-METHYL-, CIS-	1	720.00	720.00	720.00
2613-66-3	CYCLOPENTANE, 1-ETHYL-3-METHYL, CIS-	3	213.00	956.50	1700.00
2613-65-2	CYCLOPENTANE (8CI 9CI), 1-ETHYL-3-METHYL-, TRANS-	5	68.70	1250.00	12000.00
61142-68-5	CYCLOPENTANE, 1-HEXYL-3-METHYL- (9CI)	1	451.30	451.30	451.30
96-37-7	CYCLOPENTANE (8CI 9CI), METHYL-	37	0.22	160.00	15000.00
50746-53-7	CYCLOPENTANE (9CI), 1-METHYL-2-(2-PROPENYL)-, TRANS-	1	77.00	77.00	77.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
2040-96-2	CYCLOPENTANE, PROPYL- (8CI)(9CI)	1	120.00	120.00	120.00
4516-69-2	CYCLOPENTANE, 1,1,3-TRIMETHYL- (8CI)(9CI)	2	1.50	245.75	490.00
15890-40-1	CYCLOPENTANE, 1,2,3-TRIMETHYL-, (1ALPHA,2ALPHA,3BETA)- (9CI)	2	66.00	383.00	700.00
1757-42-2	CYCLOPENTANONE, 3-METHYL-	1	0.90	0.90	0.90
61142-07-2	CYCLOPENTENE, 1-ETHENYL-3-METHYLENE-	1	70000.00	70000.00	70000.00
1120-73-6	2-CYCLOPENTEN-1-ONE (8CI 9CI), 2-METHYL-	1	54.00	54.00	54.00
10152-71-3	CYCLOPROPANEOCTANOIC ACID, 2-[[2-[[2-ETHYLCYCLOPROPYL]METHYL]CYCLOPROPYL]-METHYL]-,-METHY ESTER	2	-	-	-
1472-09-9	CYCLOPROPANE, OCTYL-	1	22.00	22.00	22.00
2511-91-3	CYCLOPROPANE, PENTYL-	1	-	-	-
2415-72-7	CYCLOPROPANE, PROPYL-	1	75.00	75.00	75.00
7220-78-2	4,8,13-CYCLOTETRADECATRIENE-1,3-DIOL, 1,5,9-TRIMETHYL-12-(1-METHYLETHYL)-	1	-	-	-
541-05-9	CYCLOTRISILOXANE, HEXAMETHYL- (8CI)(9CI)	8	0.77	0.77	0.77
112-31-2	DECANAL	1	101.30	101.30	101.30
124-18-5	DECANE (8CI 9CI)	67	6.90	1303.25	260000.00
30571-71-2	DECANE, 3-BROMO-	1	397.80	397.80	397.80
1002-69-3	DECANE, 1-CHLORO- (8CI)(9CI)	2	1.30	1.70	2.10
13151-73-0	DECANE, 2-CYCLOHEXYL-, 2-CYCLOHEXYL-	6	38.00	30500.00	41000.00
17302-37-3	DECANE, 2,2-DIMETHYL-	1	120.00	120.00	120.00
2801-84-5	DECANE, 2,4-DIMETHYL-	4	9.20	1206.00	5300.00
17312-50-4	DECANE, 2,5-DIMETHYL-	2	-	-	-
1002-17-1	DECANE, 2,9-DIMETHYL-	6	18.00	193.00	7100.00
17312-45-7	DECANE, 3,4-DIMETHYL-	1	17.00	17.00	17.00
17312-53-7	DECANE, 3,6-DIMETHYL-	2	100.00	1005.00	1910.00
17312-55-9	DECANE, 3,8-DIMETHYL-	4	9.00	6850.00	13000.00
22607-17-1	4,5-DECANEDIOL, 6-ETHYL-	1	-	-	-
765-05-9	DECANE (9CI), 1-(ETHENYLOXY)-	1	54.00	54.00	54.00
55103-52-1	1,4-DIOXASPIRO[4.5]DECANE, 8-ETHOXY-	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
122-62-3	DECANEDIOIC ACID (9CI), BIS(2-ETHYLHEXYL) ESTER	4	350.00	1150.00	1900.00
17312-66-2	DECANE, 3-ETHYL-3-METHYL-	2	25.00	202.50	380.00
17312-74-2	DECANE, 5-ETHYL-5-METHYL-	1	420.00	420.00	420.00
6975-98-0	DECANE (8CI 9CI), 2-METHYL-	17	36.00	30000.00	51000.00
13151-34-3	DECANE (8CI 9CI), 3-METHYL-	6	245.00	5760.00	64000.00
2847-72-5	DECANE (8CI 9CI), 4-METHYL-	14	0.66	4750.00	64000.00
13151-35-4	DECANE (8CI 9CI), 5-METHYL-	6	140.00	24000.00	42000.00
3079-28-5	DECANE, 1-(METHYLSULFINYL)-	1	-	-	-
62238-11-3	DECANE, 2,3,5-TRIMETHYL-	5	14.00	100.00	1200.00
62238-13-5	DECANE, 2,3,7-TRIMETHYL-	2	23.00	33.50	44.00
62238-14-6	DECANE, 2,3,8-TRIMETHYL-	1	14.00	14.00	14.00
62108-27-4	DECANE, 2,4,6-TRIMETHYL-	1	37.00	37.00	37.00
62108-23-0	DECANE, 2,5,6-TRIMETHYL-	7	6400.00	40000.00	46000.00
62108-22-9	DECANE, 2,5,9-TRIMETHYL-	5	380.00	4800.00	14000.00
62108-24-1	DECANE, 2,6,6-TRIMETHYL-	1	100.00	100.00	100.00
62108-26-3	DECANE, 2,6,8-TRIMETHYL-	3	41.00	51.00	260.00
334-48-5	DECANOIC ACID	2	-	-	-
55683-30-2	DECANOIC ACID, 2-OXY-METHYL ESTER	1	-	-	-
36729-58-5	DECANOL	5	22.00	220.00	3000.00
112-30-1	1-DECANOL (9CI)	3	12.00	156.00	300.00
21078-65-9	1-DECANOL, 2-ETHYL-	7	5.50	350.00	1700.00
928-80-3	3-DECANONE	1	-	-	-
820-29-1	5-DECANONE (8CI)(9CI)	1	5.30	5.30	5.30
3913-71-1	2-DECENAL	1	2.70	2.70	2.70
584-90-7	DIAZENE, BIS(2-METHYLPHENYL)-	1	-	-	-
2285-06-5	DIAZENE (9CI), BIS(PENTAFLUOROPHENYL)-	1	10.90	10.90	10.90
25649-70-1	4H-1,2-DIAZEPINE, 3,5,7-TRIPHENYL-	1	-	-	-
256-81-5	5H-DIBENZO(A,D)CYCLOHEPTENE (8CI 9CI)	1	90.00	90.00	90.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
3268-87-9	DIBENZODIOXIN, OCTACHLORO-	1	100.00	100.00	100.00
40801-42-1	1-DIBENZOFURANCARBOXYLIC ACID, 4A,9B-DIHYDRO-4A-HYDROPEROXY-4,9B-DIMETHYL-, METHYLESTER	1	-	-	-
132-65-0	DIBENZOTHIOPHENE	8	100.00	210.00	600.00
7372-88-5	DIBENZOTHIOPHENE (8CI 9CI), 4-METHYL-	1	3200.00	3200.00	3200.00
1918-00-9	DICAMBA	11	0.10	0.30	9.00
368-96-12-	1,3-DIENOLAZO, 1,5-B:1',5'E\\1,4,2,5-DIOXADIAZINE, 3,3A,8,8A-TETRAHYDRO-	1	-	-	-
58-08-2	3,7-DIHYDRO-1,3,7-TRIMETHYL-1H-PURINE-2,6-DIONE	4	-	-	-
126-39-6	1,3-DIOXOLANE (8CI 9CI), 2-ETHYL-2-METHYL-	1	81.00	81.00	81.00
629-97-0	DOCOSANE (8CI 9CI)	5	106.80	150.00	2500.00
55401-55-3	DOCOSANE, 11-DECYL-	3	-	-	-
112-40-3	DODECANE (8CI 9CI)	58	48.00	930.00	85000.00
112-52-7	DODECANE (8CI 9CI), 1-CHLORO-	1	7600.00	7600.00	7600.00
24251-86-3	DODECANE, 5,8-DIETHYL-	2	41.00	41.00	41.00
55334-42-4	DODECANE, 1,2-DIBROMO- (9CI)	1	3.00	3.00	3.00
56292-65-0	DODECANE, 2,5-DIMETHYL-	1	33.00	33.00	33.00
61141-72-8	DODECANE, 4,6-DIMETHYL-	14	23.00	61.00	18000.00
1560-97-0	DODECANE (8CI 9CI), 2-METHYL-	5	24.00	1900.00	6000.00
17312-57-1	DODECANE, 3-METHYL-	1	-	-	-
6044-71-9	DODECANE, 6-METHYL-	2	18.00	50.00	82.00
2469-45-6	DODECANE, 1,1'-THIOBIS-	1	-	-	-
112-55-0	1-DODECANETHIOL	1	151.10	151.10	151.10
3891-98-3	DODECANE, 2,6,10-TRIMETHYL-	7	53.00	190.00	890.00
31295-56-4	DODECANE, 2,6,11-TRIMETHYL-	22	2.60	76.00	9000.00
74645-98-0	DODECANE, 2,7,10-TRIMETHYL-	32	9.60	100.00	29000.00
143-07-7	DODECANOIC ACID (9CI)	13	48.00	360.00	61000.00
2146-71-6	DODECANOIC ACID, ETHENYL ESTER	1	-	-	-
112-53-8	1-DODECANOL (9CI)	3	53.00	919.20	4800.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
17909-77-2	2,6,9,11-DODECATETRAENAL (8CI 9CI), 2,6,10-TRIMETHYL-, (E,E,E)-	1	1000.00	1000.00	1000.00
4826-62-4	2-DODECENAL	1	17.00	17.00	17.00
765-03-7	1-DODECYNE (8CI 9CI)	1	418.80	418.80	418.80
2463-02-7	11,14-EICOSADIENOIC ACID, METHYL ESTER	2	-	-	-
112-95-8	EICOSANE (8CI 9CI)	87	13.00	420.00	15000.00
6418-46-8	EICOSANE (8CI 9CI), 3-METHYL-	2	70.00	255.00	440.00
54833-27-7	EICOSANE (9CI), 10-METHYL-	4	78.60	750.00	1300.00
629-96-9	1-EICOSANOL (8CI 9CI)	2	89.00	89.00	89.00
1783-84-2	8,11,14-EICOSATRIENOIC ACID, (Z,Z,Z)- (8CI)(9CI)	1	200.00	200.00	200.00
3033-62-3	ETHANAMINE, 2,2'-OXYBIS(N,N-DIMETHYL-	1	-	-	-
107-04-0	ETHANE, 1-BROMO-2-CHLORO-	1	80.00	80.00	80.00
428-92-2	ETHANE, 2-CHLORO-1-(CHLOROMETHOXY)-1,1,2-TRIFLUORO-	1	-	-	-
112-26-5	ETHANE (8CI 9CI), 1,2-BIS(2-CHLOROETHOXY)-	3	83.30	451.20	736.00
25167-88-8	ETHANE, DICHLOROFLUORO-	1	-	-	-
105-57-7	ETHANE, 1,1-DIETHOXY- (9CI)	8	21.00	305.00	33000.00
123-73-9	1,2-ETHANEDIOL, DIPROPANOATE-	1	22000.00	22000.00	22000.00
93-56-1	1,2-ETHANEDIOL (8CI 9CI), 1-PHENYL-	6	22.00	63.00	120.00
302-17-0	1,1-ETHANEDIOL, 2,2,2-TRICHLORO-	2	-	-	-
134-81-6	ETHANEDIONE, DIPHENYL-	3	2000.00	2000.00	2000.00
542-85-8	ETHANE (9CI), ISOTHIOCYANATO-	2	40.00	2420.00	4800.00
112-36-7	ETHANE (9CI), 1,1'-OXYBIS(2-ETHOXY-	1	170.00	170.00	170.00
111-96-6	ETHANE, 1,1'-OXYBIS(2-METHOXY-	2	2000.00	2000.00	2000.00
76-01-7	ETHANE, PENTACHLORO-	2	4000.00	4000.00	4000.00
25322-20-7	ETHANE, TETRACHLORO-	3	210.00	2200.00	7200.00
26523-64-8	ETHANE, TRICHLOROTRIFLUORO-	3	30.00	2765.00	4500.00
76-13-1	ETHANE (8CI 9CI), 1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	7	51.00	130.00	950000.00
64-17-5	ETHANOL (9CI)	15	420.00	80000.00	553000.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
111-76-2	ETHANOL (8CI 9CI), 2-BUTOXY-	42	16.00	1300.00	120000.00
54446-78-5	ETHANOL (9CI), 1-(2-BUTOXYETHOXY)-	4	480.00	735.00	7000.00
112-34-5	ETHANOL, 2-(2-BUTOXYETHOXY)-	1	630.00	630.00	630.00
143-22-6	ETHANOL (8CI 9CI), 2-(2-(2-BUTOXYETHOXY)ETHOXY)-	1	21.00	21.00	21.00
100-37-8	ETHANOL (8CI 9CI), 2-(DIETHYLAMINO)-	1	120.00	120.00	120.00
112-27-6	ETHANOL (9CI), 2,2'-(1,2-ETHANEDIYLBIS(OXY))BIS-	5	4.30	40.00	2300.00
929-37-3	ETHANOL, 2-(2-(ETHENYLOXY)ETHOXY)-	1	22.00	22.00	22.00
110-80-5	ETHANOL, 2-ETHOXY- (8CI)(9CI)	3	500.00	700.00	704000.00
111-15-9	ETHANOL (8CI 9CI), 2-ETHOXY-, ACETATE	27	2.40	2950.00	188000.00
111-90-0	ETHANOL, 2-(2-ETHOXYETHOXY)- (8CI)(9CI)	5	400.00	7000.00	17600.00
112-15-2	ETHANOL, 2-(2-ETHOXYETHOXY)-, ACETATE (8CI)(9CI)	2	1.50	340.75	680.00
112-50-5	ETHANOL (8CI 9CI), 2-(2-(2-ETHOXYETHOXY)ETHOXY)-	1	110.00	110.00	110.00
112-25-4	ETHANOL, 2-(HEXYLOXY)-	2	-	-	-
111-77-3	ETHANOL (8CI 9CI), 2-(2-METHOXYETHOXY)-	2	520.00	31260.00	62000.00
112-35-6	ETHANOL (8CI 9CI), 2-(2-(2-METHOXYETHOXY)ETHOXY)-	1	120.00	120.00	120.00
102-41-0	ETHANOL (9CI), 2-((3-METHYLPHENYL)AMINO)-	1	160.70	160.70	160.70
111-46-6	ETHANOL (9CI), 2,2'-OXYBIS-	9	67.00	6000.00	885500.00
55191-59-8	ETHANOL, 2-(4-PHENOXY-PHENOXY)BENZOATE-	4	145.00	145.00	145.00
532-27-4	ETHANONE, 2-CHLORO-1-PHENYL- (9CI)	3	96.00	103.00	110.00
932-66-1	ETHANONE (9CI), 1-(1-CYCLOHEXEN-1-YL)-	1	40.00	40.00	40.00
403-42-9	ETHANONE, 1-(4-FLUOROPHENYL)-	1	122.80	122.80	122.80
26444-19-9	ETHANONE, 1-(METHYLPHENYL)- (9CI)	2	0.92	70.46	140.00
98-86-2	ETHANONE, 1-PHENYL- (9CI)	7	6.80	200.00	1400.00
1667-01-2	ETHANONE, 1-(2,4,6-TRIMETHYLPHENYL)-	1	62.00	62.00	62.00
359-04-6	ETHENE, 1-CHLORO-1,2-DIFLUORO- (9CI)	1	5600.00	5600.00	5600.00
109-92-2	ETHENE, ETHOXY-	1	-	-	-
142-96-1	ETHER, BUTYL-	1	-	-	-
1860-27-1	ETHER, BUTYL ISOPROPYL-	1	870.00	870.00	870.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
108-20-3	ETHER, DIISOPROPYL-	1	-	-	-
101-84-8	ETHER, DIPHENYL-	1	-	-	-
60-29-7	ETHER, ETHYL-	1	10000.00	10000.00	10000.00
103-73-1	ETHER, ETHYLPHENYL-	3	0.10	0.40	0.70
32357-83-8	ETHER, HEXYLPENTYL-	1	19.00	19.00	19.00
4419-58-3	ETHER, TERT-BUTYL-3,3-DIMETHYLBUTYL-	1	120.00	120.00	120.00
111-55-7	ETHYLENE GLYCOL, DIACETATE	1	800.00	800.00	800.00
26914-17-0	9H-FLUORENE, METHYL-	3	190.00	410.00	1000.00
1730-37-6	9H-FLUORENE (9CI), 1-METHYL-	2	1500.00	1500.00	1500.00
4425-82-5	9H-FLUORENE, 9-METHYLENE-	1	480.00	480.00	480.00
25017-69-9	9H-FLUOREN-9-OL (9CI), ACETATE	1	410.00	410.00	410.00
486-25-9	FLUORENONE	1	2000.00	2000.00	2000.00
68-12-2	FORMAMIDE, N,N-DIMETHYL- (8CI)(9CI)	6	5.50	1250.00	764000.00
109-94-4	FORMATE, ETHYL-	1	400.00	400.00	400.00
592-84-7	FORMIC ACID (8CI 9CI), BUTYL ESTER	1	280.00	280.00	280.00
107-31-3	FORMIC ACID, METHYL ESTER	4	5.00	10.00	60.00
104-62-1	FORMIC ACID (9CI), 2-PHENYLETHYL ESTER	1	300.00	300.00	300.00
7283-69-4	FUMARIC ACID, DIISOBUTYL ESTER	1	166.00	166.00	166.00
1004-29-1	FURAN, 2-BUTYLTETRAHYDRO-	2	-	-	-
3777-69-3	FURAN, 2-PENTYL-	1	3.60	3.60	3.60
109-99-9	FURAN, TETRAHYDRO- (8CI)(9CI)	10	39.00	9000.00	260000.00
104-50-7	2(3H)-FURANONE, 5-BUTYLDIHYDRO-	1	-	-	-
55013-32-6	2(3H)-FURANONE, 5-BUTYLDIHYDRO-4-METHYL-CIS	1	-	-	-
96-48-0	2(3H)-FURANONE (8CI 9CI), DIHYDRO-	1	46.00	46.00	46.00
695-06-7	2(3H)-FURANONE, 5-ETHYLDIHYDRO-	1	-	-	-
706-14-9	2(3H)-FURANONE, 5-HEXYLDIHYDRO-	1	-	-	-
629-94-7	HENEICOSANE (8CI 9CI)	35	0.01	650.00	10000.00
55320-06-4	HENEICOSANE, 11-DECYL-	4	160.00	370.00	580.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
55282-11-6	HENEICOSANE, 11-(1-ETHYLPROPYL)-	1	810.80	3305.40	5800.00
593-49-7	HEPTACOSANE	21	5.70	410.00	10000.00
629-78-7	HEPTADECANE (8CI 9CI)	89	6.80	652.95	62000.00
1560-89-0	HEPTADECANE, 2-METHYL-	1	-	-	-
18344-37-1	HEPTADECANE (8CI 9CI), 2,6,10,14-TETRAMETHYL-	49	8.70	394.70	10560.00
54833-48-6	HEPTADECANE (9CI), 2,6,10,15-TETRAMETHYL-	9	500.00	800.00	4300.00
57274-46-1	HEPTADECANOIC ACID, 15-METHYL-, ETHYL ESTER	2	-	-	-
5129-61-3	HEPTADECANOIC ACID (8CI 9CI), 16-METHYL-, METHYL ESTER	9	58.00	1510.00	28000.00
1454-85-9	1-HEPTADECANOL	1	-	-	-
56554-77-9	13-HEPTADECYN-1-OL	1	-	-	-
51945-98-3	1,5-HEPTADIENE-3,4-DIOL	1	-	-	-
16647-04-4	3,5-HEPTADIEN-2-ONE, 6-METHYL-, (E)	1	-	-	-
41898-89-9	2,3-HEPTADIEN-5-YNE, 2,4-DIMETHYL-	2	4700.00	29350.00	54000.00
2396-63-6	1,6-HEPTADIYNE (8CI)(9CI)	2	5300.00	10550.00	15800.00
111-71-7	HEPTANAL (8CI 9CI)	2	3.50	351.75	700.00
142-82-5	HEPTANE (8CI 9CI)	10	52.00	570.00	310000.00
18908-66-2	HEPTANE, 3-(BROMOMETHYL)-	1	-	-	-
3074-71-3	HEPTANE, 2,3-DIMETHYL-	3	150.00	1400.00	10451.60
2213-23-2	HEPTANE (8CI 9CI), 2,4-DIMETHYL-	4	100.00	400.00	7300.00
2216-30-0	HEPTANE (8CI 9CI), 2,5-DIMETHYL-	2	55.70	11027.85	22000.00
1072-05-5	HEPTANE, 2,6-DIMETHYL-	7	40.00	110.00	7400.00
922-28-1	HEPTANE (8CI 9CI), 3,4-DIMETHYL-	1	5700.00	5700.00	5700.00
2216-32-2	HEPTANE, 4-ETHYL-	1	2.20	2.20	2.20
14676-29-0	HEPTANE (8CI 9CI), 3-ETHYL-2-METHYL-	13	13.00	510.00	35000.00
13475-78-0	HEPTANE, 5-ETHYL-2-METHYL-	7	8.60	88.00	18000.00
661-11-0	HEPTANE, 1-FLUORO	1	-	-	-
7225-67-4	HEPTANE, 2,2,3,3,5,6,6-HEPTAMETHYL-	1	-	-	-
592-27-8	HEPTANE (8CI 9CI) 2-METHYL-	15	60.00	2450.00	24000.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
589-81-1	HEPTANE, 3-METHYL	17	16.00	3300.00	20000.00
1632-16-2	HEPTANE, 3-METHYLENE- (9CI)	2	6.20	30.10	54.00
52896-87-4	HEPTANE (9CI), 4-(1-METHYLETHYL)-	1	28000.00	28000.00	28000.00
693-39-0	HEPTANE (8CI 9CI), 1-NITRO-	1	11.00	11.00	11.00
13475-82-6	HEPTANE, 2,2,4,6,6-PENTAMETHYL- (8CI)(9CI)	1	3200.00	3200.00	3200.00
763-20-2	2-HEPTANETHIOL, 2-METHYL-	1	-	-	-
4032-93-3	HEPTANE, 2,3,6-TRIMETHYL-	1	100.00	100.00	100.00
111-14-8	HEPTANOIC ACID	2	-	-	-
33315-72-9	HEPTANOIC ACID, 2,6-DIMETHYL-, METHYL ESTER	1	-	-	-
3274-29-1	HEPTANOIC ACID, 2-ETHYL-	1	-	-	-
1573-28-0	3-HEPTANOL (9CI), 3,6-DIMETHYL-	2	90.00	175.00	260.00
19549-77-0	4-HEPTANOL, 2,4-DIMETHYL-	1	-	-	-
108-82-7	4-HEPTANOL (8CI 9CI), 2,6-DIMETHYL-	1	100.00	100.00	100.00
1653-40-3	1-HEPTANOL, 6-METHYL- (8CI)(9CI)	1	1400.00	1400.00	1400.00
10042-59-8	1-HEPTANOL (8CI 9CI), 2-PROPYL-	8	21.00	78.35	140.00
3074-78-0	1-HEPTENE (8CI 9CI), 2,6-DIMETHYL-	1	170.00	170.00	170.00
630-01-3	HEXACOSANE (8CI 9CI)	2	130.00	1115.00	2100.00
544-76-3	HEXADECANE (8CI 9CI)	88	14.00	620.00	45000.00
55000-52-7	HEXADECANE (9CI), 2,6,10-TRIMETHYL-	7	200.00	360.00	36080.00
638-36-8	HEXADECANE, 2,6,10,14-TETRAMETHYL-	8	240.00	1702.55	4400.00
57-10-3	HEXADECANOIC ACID (9CI)	47	0.88	213.60	25000.00
2091-29-4	9-HEXADECENOIC ACID (8CI 9CI)	3	1700.00	2500.00	3300.00
628-97-7	HEXADECANOIC ACID, ETHYL ESTER	2	-	-	-
761-35-3	HEXADECANOIC ACID (9CI), 1-(HYDROXYMETHYL)-1,2-ETHANEDIYL ESTER	1	1500.00	1500.00	1500.00
112-39-0	HEXADECANOIC ACID (9CI), METHYL ESTER	17	66.00	5570.00	32000.00
1120-25-8	9-HEXADECENOIC ACID (8CI 9CI), METHYL ESTER, (Z)-	1	98.00	98.00	98.00
55836-30-1	HEXADECANOIC ACID, 2-OXO-, METHYL ESTER	1	-	-	-
2490-48-4	1-HEXADECANOL, 2-METHYL-	4	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
629-74-3	1-HEXADECYNE	2	-	-	-
2417-88-1	2,4-HEXADIENE, 3,4-DIMETHYL-, (E,Z)-	1	-	-	-
1515-80-6	2,4-HEXADIENOIC ACID, METHYL ESTER	1	-	-	-
628-16-0	1,5-HEXADIYNE (8CI)(9CI)	2	120000.00	125000.00	130000.00
22118-00-9	2,3,4,5,6,7-HEXAHYDRO-1H-INDENE-1-ONE	1	40.00	40.00	40.00
66-25-1	HEXANAL (8CI)(9CI)	3	25.00	74.00	1700.00
110-54-3	HEXANE (8CI 9CI)	27	35.00	2000.00	46000.00
584-94-1	HEXANE, 2,3-DIMETHYL- (8CI)(9CI)	5	14.00	500.00	6200.00
589-43-5	HEXANE, 2,4-DIMETHYL-	11	26.00	1445.00	31000.00
563-16-6	HEXANE, 3,3-DIMETHYL- (8CI)(9CI)	10	5.50	40.00	1100.00
124-04-9	HEXANEDIOIC ACID	5	39.00	39.00	39.00
141-04-8	HEXANEDIOIC ACID, BIS(2-METHYLPROPYL)ESTER	1	86.00	86.00	86.00
627-93-0	HEXANEDIOIC ACID, DIMETHYL ESTER	2	290.00	290.00	290.00
123-79-5	HEXANEDIOIC ACID, DIOCTYL ESTER	5	100.00	3550.00	100000.00
619-99-8	HEXANE, 3-ETHYL-	2	290.00	290.00	290.00
3074-75-7	HEXANE (8CI 9CI), 4-ETHYL-2-METHYL-	3	1.60	500.80	1000.00
591-76-4	HEXANE, 2-METHYL- (8CI)(9CI)	4	570.00	7500.00	20000.00
13475-81-5	HEXANE, 2,2,3,3-TETRAMETHYL-	8	100.00	18500.00	110000.00
589-34-4	HEXANE (8CI 9CI), 3-METHYL-	14	19.00	1035.00	11000.00
1071-81-4	HEXANE, 2,2,5,5-TETRAMETHYL-	2	260.00	260.00	260.00
921-47-1	HEXANE, 2,3,4-TRIMETHYL- (8CI)(9CI)	2	1000.00	2650.00	4300.00
1069-53-0	HEXANE, 2,3,5-TRIMETHYL-	1	80.00	80.00	80.00
142-62-1	HEXANOIC ACID (8CI)(9CI)	16	0.01	25.00	80.00
149-57-5	HEXANOIC ACID, 2-ETHYL-	8	55.00	180.00	1100.00
816-19-3	HEXANOIC ACID, 2-ETHYL-, METHYL ESTER	1	-	-	-
4536-23-6	HEXANOIC ACID, 2-METHYL-	2	-	-	-
3780-58-3	HEXANOIC ACID, 3-METHYL-	2	6.10	6.75	7.40
1561-11-1	HEXANOIC ACID, 4-METHYL-	1	5.20	5.20	5.20

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
628-46-6	HEXANOIC ACID, 5-METHYL-	3	21.00	31.00	99.00
111-27-3	1-HEXANOL	1	-	-	-
104-76-7	1-HEXANOL (8CI 9CI), 2-ETHYL-	25	1.10	210.00	6800.00
591-78-6	2-HEXANONE (8CI 9CI)	9	6.60	425.00	26500.00
17429-05-9	3-HEXANONE, 6-METHOXY-2-METHYL-	1	-	-	-
630-06-8	HEXATRIACONTANE (8CI 9CI)	17	11.00	560.25	22000.00
645-62-5	2-HEXENAL (8CI 9CI), 2-ETHYL-	1	530.00	530.00	530.00
6975-92-4	1-HEXENE, 2,5-DIMETHYL-	3	43.00	70.00	160.00
16745-94-1	1-HEXENE, 3,4-DIMETHYL-	1	-	-	-
3404-78-2	2-HEXENE, 2,5-DIMETHYL-	1	-	-	-
50639-00-4	2-HEXEN-1-OL, 2-ETHYL-	1	-	-	-
692-47-7	3-HEXENE (8CI 9CI), 2,2,5,5-TETRAMETHYL-, (Z)-	5	280.00	375.00	470.00
56728-10-0	1-HEXENE, 3,4,5-TRIMETHYL-	2	55.00	55.00	55.00
56771-77-8	4-HEXENOIC ACID, 3-METHYL-2,6-DIOXO-	4	-	-	-
763-93-9	3-HEXEN-2-ONE (8CI)(9CI)	3	0.75	6.60	33.00
15814-45-6	HYDROCINNAMIC ACID, ALLYL ESTER	1	-	-	-
80-15-9	HYDROPEROXIDE (9CI), 1-METHYL-1-PHENYLETHYL-	2	110.00	415.00	720.00
29812-79-1	HYDROXYLAMINE (8CI 9CI), O-DECYL-	19	8.80	2300.00	15000.00
21150-1-6	1H-IMIDAZOLE, 4-ETHANAMINE-, DIMETHYL-	1	-	-	-
54833-61-3	2,4-IMIDAZOLIDINEDIONE, 5-(4-METHOXYPHENYL-3-METHYL-5-PHENYL-)-	2	-	-	-
60-27-5	4H-IMIDAZOL-4-ONE, 2-AMINO-1,5-DIHYDRO-1-METHYL- (9CI)	1	53.00	53.00	53.00
6682-06-0	INDAN, 4,5,7-TRIMETHYL-	1	-	-	-
2305-79-5	1H-INDAZOLE (8CI 9CI), 4,5,6,7-TETRAHYDRO-	1	80.00	80.00	80.00
95-13-6	1H-INDENE	1	1000.00	1000.00	1000.00
496-11-7	1H-INDENE (9CI), 2,3-DIHYDRO-	14	100.00	5400.00	15000.00
824-22-6	1H-INDENE (9CI), 2,3-DIHYDRO-4-METHYL-	2	6.00	8503.00	17000.00
874-35-1	1H-INDENE (9CI), 2,3-DIHYDRO-5-METHYL-	1	4980.00	4980.00	4980.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
3910-35-8	1H-INDENE, 2,3-DIHYDRO-1,1,3-TRIMETHYL-3-PHENYL-	3	67.00	67.00	67.00
18636-55-0	1H-INDENE, 1,1-DIMETHYL-	1	1000.00	1000.00	1000.00
54832-63-6	1H-INDENE, OCTAHYDRO-2,2,4,4,7,7-HEXAMETHYL-,TRANS	1	59.00	59.00	59.00
4551-51-3	1H-INDENE, OCTAHYDRO-, CIS-	10	510.00	7600.00	35000.00
54725-16-5	2H-INDEN-2-ONE, 1,4,5,6,7,7A-HEXAHYDRO-7A-METHYL-	1	180.00	180.00	180.00
603-76-9	1H-INDOLE, 1-METHYL-	1	-	-	-
33039-67-7	4,5,6-IRON (9CI), (.ETA.5-2,4-CYCLOPENTADIEN-1-YL) ((1,2,3,3A,7A-.ETA.)-	1	1032.40	1032.40	1032.40
85-44-9	1,3-ISOBENZOFURANDIONE (9CI)	14	31.00	2400.00	14000.00
26266-63-7	1,3-ISOBENZOFURANDIONE (9CI), TETRAHYDRO-	2	14.00	807.00	1600.00
87-41-2	(1)3H-ISOBENZOFURANONE	1	-	-	-
26952-21-6	ISOOCTANOL	4	5.60	99.00	1000.00
119-65-3	ISOQUINOLINE	1	-	-	-
55902-84-6	KAURAN-18-AL,17-(ACETYLOXY)-, (4.BETA.)-	1	-	-	-
105-44-2	KETONE, METHYLISOBUTYL-	14	5.00	900.00	10000.00
14447-12-2	MALEIC ACID, DI-SEC-BUTYL ESTER	1	1700.00	1700.00	1700.00
109-87-5	METHANE, DIMETHOXY-	3	40.00	45.00	50.00
101-81-5	METHANE, DIPHENYL-	1	48.00	48.00	48.00
149-73-5	METHANE, TRIMETHOXY-	1	-	-	-
77-73-6	4,7-METHANO-1H-INDENE, 3A,4,7,7A-TETRAHYDRO- (9CI)	1	70.00	70.00	70.00
67-56-1	METHANOL	7	8500.00	11000.00	241800.00
54518-04-6	METHANOL, DIBUTOXY-	2	240.00	240.00	240.00
4453-90-1	1,4-METHANONAPHTHALENE (8CI 9CI), 1,4-DIHYDRO-	5	110.00	160.00	1300.00
14984-21-5	METHANONE, BIS(4-PHENOXYLPHENYL)-	1	-	-	-
110-91-8	MORPHOLINE (8CI 9CI)	1	96.00	96.00	96.00
3400-33-7	1-NAPHTHALENECARBOXAMIDE (9CI), N-METHYL-	1	8700.00	8700.00	8700.00
1008-80-6	NAPHTHALENE, DECAHYDRO-2,3-DIMETHYL-	1	110.00	110.00	110.00
2958-76-1	NAPHTHALENE, DECAHYDRO-2-METHYL-	1	210.00	210.00	210.00
493-02-7	NAPHTHALENE (8CI 9CI), DECAHYDRO-, TRANS-	3	100.00	334.80	7500.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
28804-88-8	NAPHTHALENE, DIMETHYL-	9	26.00	850.00	1300.00
573-98-8	NAPHTHALENE, 1,2-DIMETHYL- (8CI)(9CI)	1	140.00	140.00	140.00
575-41-7	NAPHTHALENE (8CI 9CI), 1,3-DIMETHYL-	3	71.00	2035.50	4000.00
571-61-9	NAPHTHALENE, 1,5-DIMETHYL-	1	-	-	-
575-37-1	NAPHTHALENE (8CI 9CI), 1,7-DIMETHYL-	4	1.40	194.50	4000.00
569-41-5	NAPHTHALENE (8CI 9CI), 1,8-DIMETHYL-	11	1.60	675.00	2500.00
581-40-8	NAPHTHALENE, 2,3-DIMETHYL-	2	670.00	670.00	670.00
582-16-1	NAPHTHALENE (8CI 9CI), 2,7-DIMETHYL-	2	76.00	278.00	480.00
1127-54-4	1,4-NAPHTHALENEDIOL, DECAHYDRO-, (1.ALPHA.,4.BETA. ,4A.ALPHA.,8A.ALPHA)-	1	-	-	-
524-42-5	1,2-NAPHTHALENEDIONE	1	0.70	0.70	0.70
130-15-4	1,4-NAPHTHALENEDIONE	1	-	-	-
27138-19-8	NAPHTHALENE, ETHYL-	8	2.70	705.00	4000.00
1321-94-4	NAPHTHALENE, METHYL-	41	1.30	500.00	10000.00
90-12-0	NAPHTHALENE, 1-METHYL-	9	-	-	-
2027-17-0	NAPHTHALENE (9CI), 2-(1-METHYLETHYL)-	2	35.00	67.50	100.00
611-48-3	NAPHTHALENE, 1-(2-NAPHTHALENYLMETHYL)-	1	-	-	-
35465-71-5	NAPHTHALENE, (PHENYL)-	6	100.00	180.00	3200.00
27378-74-1	NAPHTHALENE, PROPYL-	7	1.50	440.00	4000.00
21693-54-9	NAPHTHALENE (8CI 9CI), 1,2,3,4,-TETRAHYDRO-5,7-DIM ETHYL-	1	35.00	35.00	35.00
28652-77-9	NAPHTHALENE, (TRIMETHYL)-	7	26.00	450.00	1300.00
2245-38-7	NAPHTHALENE (8CI 9CI), 1,6,7-TRIMETHYL-	1	140.00	140.00	140.00
829-26-5	NAPHTHALENE (8CI 9CI), 2,3,6-TRIMETHYL-	3	1.00	130.00	280.00
135-19-3	2-NAPHTHALENOL (9CI)	6	6100.00	66000.00	140000.00
63-25-2	1-NAPHTHALENOL (9CI), METHYLCARBAMATE	6	9600.00	95000.00	260000.00
50617-01-1	2-NAPHTHALENOL, 1-(1H-NAPHTH\1,2-E\\1,3\OXAZIN-2(3 H)-YL-METHYL)-	1	-	-	-
33503-02-7	1-NAPHTHOL, 2,5,8-TRIMETHYL-	1	-	-	-
5090-88-0	NAPHTHO/1,8-BC/PYRAN-7,8-DIONE, 3,6,9-TRIMETHYL-	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
629-92-5	NONADECANE (8CI 9CI)	28	13.00	574.65	30000.00
52783-43-4	NONADECANOL	4	-	-	-
6750-03-4	2,4-NONADIENAL (8CI)(9CI)	1	35.00	35.00	35.00
124-19-6	NONANAL (8CI)(9CI)	2	4.50	4.90	5.30
1120-07-6	NONANAMIDE	1	-	-	-
111-84-2	NONANE (8CI 9CI)	47	0.57	900.00	80000.00
17312-63-9	NONANE (8CI 9CI), 5-BUTYL-	5	31.00	430.00	12000.00
2884-06-2	NONANE, 2,3-DIMETHYL-	1	21.30	21.30	21.30
17302-27-1	NONANE (8CI 9CI), 2,5-DIMETHYL-	2	8200.00	8200.00	8200.00
17302-28-2	NONANE, 2,6-DIMETHYL-	15	1.40	1800.00	44000.00
17302-32-8	NONANE, 3,7-DIMETHYL-	5	13.00	220.00	21000.00
17302-23-7	NONANE (8CI 9CI), 4,5-DIMETHYL-	1	266.70	266.70	266.70
103-24-2	NONANEDIOIC ACID, BIS(2-ETHYLHEXYL)ESTER	2	-	-	-
3937-56-2	1,9-NONANEDIOL	2	85.10	532.55	980.00
54725-73-4	1,8-NONANEDIOL, 8-METHYL-	1	-	-	-
871-83-0	NONANE (8CI 9CI), 2-METHYL-	3	290.00	10000.00	41000.00
5911-04-6	NONANE (8CI 9CI), 3-METHYL-	10	23.00	1000.00	8900.00
17301-94-9	NONANE (8CI 9CI), 4-METHYL-	4	372.90	1000.00	140000.00
17312-75-3	NONANE, 5-METHYL-5-PROPYL-	1	130.00	130.00	130.00
112-05-0	NONANOIC ACID (8CI)(9CI)	2	12.00	12.00	12.00
623-93-8	5-NONANOL (8CI)(9CI)	1	10.00	10.00	10.00
3389-71-7	NORBORNADIENE, HEXACHLORO-	4	20.00	3000.00	3500.00
54410-99-9	1-NONENE (9CI), 4,6,8-TRIMETHYL-	8	0.05	2.80	36000.00
32064-72-5	2-NONEN-4-ONE	1	-	-	-
20184-89-8	3-NONYNE (8CI 9CI)	1	560.00	560.00	560.00
2440-02-0	NORBORNENE, HEPTACHLORO-	5	0.10	5.90	30000.00
24181-64-4	OCHROBIRINE	1	-	-	-
630-02-4	OCTACOSANE	21	11.00	375.00	3700.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
60-33-3	OCTADECADIENOIC ACID	1	100.00	100.00	100.00
124-26-5	OCTADECANAMIDE (9CI)	1	18.20	18.20	18.20
593-45-3	OCTADECANE (8CI 9CI)	71	0.09	645.00	40000.00
3386-33-2	OCTADECANE (8CI 9CI), 1-CHLORO-	2	336.50	440.55	544.60
930-02-9	OCTADECANE, 1-(ETHENYLOXY)-	4	31.00	170.00	290.00
10544-96-4	OCTADECANE, 6-METHYL-	3	24.00	62.00	100.00
57-11-4	OCTADECANOIC ACID (9CI)	10	100.00	195.00	700.00
112-61-8	OCTADECANOIC ACID (9CI), METHYL ESTER	4	800.00	5100.00	16000.00
52355-31-4	6-OCTADECENOIC ACID (9CI), METHYL ESTER	7	380.00	6400.00	46000.00
2027-47-6	9-OCTADECENOIC ACID	1	-	-	-
26762-44-7	OCTADECANOL	1	-	-	-
56555-00-1	7-OCTADECENAL	2	-	-	-
301-02-0	9-OCTADECENAMIDE, (Z)-	16	-	-	-
112-88-9	1-OCTADECENE	2	-	-	-
112-80-1	9-OCTADECENOIC ACID (Z)- (9CI)	2	650.00	650.00	650.00
4500-01-0	9-OCTADECENOIC ACID (Z)- (9CI), 2-HYDROXYETHYL ESTER	1	315.50	315.50	315.50
143-28-2	9-OCTADECEN-1-OL-(Z)-	4	11000.00	11000.00	11000.00
111-65-9	OCTANE (8CI 9CI)	34	26.00	1300.00	38000.00
111-83-1	OCTANE, 1-BROMO- (8CI)(9CI)	1	4500.00	4500.00	4500.00
7146-60-3	OCTANE, 2,3-DIMETHYL-	2	19.00	45.50	72.00
15869-89-3	OCTANE, 2,5-DIMETHYL-	2	160.00	205.00	250.00
2051-30-1	OCTANE (8CI 9CI), 2,6-DIMETHYL-	8	16.00	790.00	49000.00
1072-16-8	OCTANE, 2,7-DIMETHYL-	1	270.00	270.00	270.00
15869-94-0	OCTANE, 3,6-DIMETHYL-	3	680.00	980.00	1500.00
29714-87-2	OCTANE (9CI), 2,6-DIMETHYL-, HEXADEHYDRO DERIV.	1	110.00	110.00	110.00
62183-55-5	OCTANE, 3-ETHYL-2,7-DIMETHYL-	1	150.00	150.00	150.00
3221-61-2	OCTANE, 2-METHYL-	4	190.00	260.00	330.00
2216-33-3	OCTANE, 3-METHYL- (8CI)(9CI)	3	400.00	3000.00	5200.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
2216-34-4	OCTANE, 4-METHYL-	1	4600.00	4600.00	4600.00
629-82-3	OCTANE, 1,1'-OXYBIS	2	-	-	-
62016-34-6	OCTANE, 2,3,7-TRIMETHYL-	7	20.00	500.00	15000.00
62016-37-9	OCTANE, 2,4,6- TRIMETHYL-	31	0.51	53.00	7200.00
124-07-2	OCTANOIC ACID (8CI)(9CI)	10	0.05	47.00	420.00
111-87-5	1-OCTANOL	2	1000.00	1000.00	1000.00
3913-02-8	1-OCTANOL (8CI 9CI), 2-BUTYL-	14	43.90	585.00	1400.00
2370-14-1	OCTANOL, 2,2-DIMETHYL-	1	-	-	-
106-21-8	1-OCTANOL, 3,7-DIMETHYL- (8CI)(9CI)	1	590.00	590.00	590.00
502-99-8	1,3,7-OCTATRIENE (8CI 9CI), 3,7-DIMETHYL-	1	25.00	25.00	25.00
673-84-7	2,4,6-OCTATRIENE (8CI 9CI), 2,6-DIMETHYL-	1	680.00	680.00	680.00
4984-01-4	1-OCTENE (8CI 9CI), 3,7-DIMETHYL-	8	4.90	320.00	4100.00
470-67-7	7-OXABICYCLO(2.2.1)HEPTANE (9CI), 1-METHYL-4-(1-METHYLETHYL)-	1	59000.00	59000.00	59000.00
470-82-6	2-OXABICYCLO(2.2.2)OCTANE (9CI), 1,3,3-TRIMETHYL-	1	68000.00	68000.00	68000.00
1725-04-8	OXACYCLOHEXADECAN-2-ONE	1	-	-	-
13080-28-9	1-OXASPIRO[2.5]OCTAN-4-ONE, 2,2,6-TRIMETHYL, TRANS-	1	-	-	-
56909-26-3	2-OXATRICYCLO/5.5.0.04,10/DODECA-5,8,11-TRIEN-3-ONE	1	-	-	-
92-71-7	OXAZOLE, 2,5-DIPHENYL-	1	-	-	-
3375-84-6	2-OXAZOLIDINONE, 3-(2-HYDROXYPROPYL)-5-METHYL-	11	800000.00	800000.00	850000.00
32461-34-0	2-OXAZOLIDINONE, 3-METHYL-4,5-DIPHENYL-, CIS-	1	-	-	-
502-44-3	2-OXEPANONE	1	600.00	600.00	600.00
53907-77-0	OXIRANE, (3,3-DIMETHYLBUTYL)-	1	-	-	-
1675-54-3	OXIRANE (9CI), 2,2'-((1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE-))BIS-	6	140.00	1105.00	89000.00
6124-90-9	OXIRANE (9CI), 2-METHYL-3-PROPYL-, CIS-	1	1300.00	1300.00	1300.00
96-09-3	OXIRANE, PHENYL-	1	48.00	48.00	48.00
629-99-2	PENTACOSANE (8CI 9CI)	58	1.30	549.50	25520.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
629-62-9	PENTADECANE (8CI 9CI)	50	16.00	900.00	70000.00
1560-93-6	PENTADECANE, 2-METHYL-	1	240.00	240.00	240.00
29833-69-0	1-PENTADECENE (8CI 9CI), 2-METHYL-	2	190.00	190.00	190.00
1921-70-6	PENTADECANE (8CI 9CI), 2,6,10,14-TETRAMETHYL-	45	6.20	260.00	9200.00
5129-60-2	PENTADECANOIC ACID (8CI 9CI), 14-METHYL-, METHYL ESTER	4	700.00	2850.00	41000.00
49833-91-2	1,2-PENTADIENE, 4-METHOXY-4-METHYL-	1	-	-	-
56554-70-2	4-PENTADECYNE, 15-CHLORO-	3	3700.00	3700.00	3700.00
538-58-9	1,4-PENTADIEN-3-ONE, 1,5-DIPHENYL-	1	-	-	-
694-72-4	PENTALENE, OCTAHYDRO-	1	1500.00	1500.00	1500.00
1755-05-1	PENTALENE (8CI 9CI), OCTAHYDRO-, CIS-	7	60.00	405.00	4800.00
32273-77-1	PENTALENE (8CI 9CI), OCTAHYDRO-1-METHYL-	2	460.00	5130.00	9800.00
3868-64-2	PENTALENE (8CI 9CI), OCTAHYDRO-2-METHYL-	7	220.00	1260.00	2300.00
55401-65-5	PENTALENE, OCTAHYDRO-1-(2-OCTYLDECYL)-	1	-	-	-
110-62-3	PENTANAL (9CI)	1	76.00	76.00	76.00
109-66-0	PENTANE (8CI)(9CI)	10	20.00	980.00	10000.00
590-35-2	PENTANE, 2,2-DIMETHYL-	3	6300.00	14150.00	22000.00
565-59-3	PENTANE, 2,3-DIMETHYL-	9	31.00	300.00	71000.00
108-08-7	PENTANE, 2,4-DIMETHYL-	2	170.00	7085.00	14000.00
562-49-2	PENTANE, 3,3-DIMETHYL-	2	800.00	5900.00	11000.00
1068-87-7	PENTANE, 3-ETHYL-2,4-DIMETHYL-	1	-	-	-
609-26-7	PENTANE, 3-ETHYL-2-METHYL-	3	1700.00	15000.00	17000.00
107-83-5	PENTANE, 2-METHYL-	3	89.00	244.50	400.00
96-14-0	PENTANE, 3-METHYL- (8CI)(9CI)	10	0.38	840.00	5500.00
7154-79-2	PENTANE, 2,2,3,3-TETRAMETHYL-	3	-	-	-
1186-53-4	PENTANE, 2,2,3,4-TETRAMETHYL- (8CI)(9CI)	3	13.00	150.00	1500.00
540-84-1	PENTANE, 2,2,4-TRIMETHYL-	6	450.00	4950.00	34000.00
109-52-4	PENTANOIC ACID (9CI)	7	130.00	130.00	130.00
97-61-0	PENTANOIC ACID, 2-METHYL-	2	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
105-43-1	PENTANOIC ACID, 3-METHYL-	3	6.70	29.00	58.00
646-07-1	PENTANOIC ACID, 4-METHYL-	3	12.00	18.00	30.00
108-11-2	2-PENTANOL, 4-METHYL-	2	24.00	962.00	1900.00
107-87-9	2-PENTANONE	2	2.40	651.20	1300.00
3884-71-7	2-PENTANONE, 5-BROMO-	1	-	-	-
590-50-1	2-PENTANONE, 4,4-DIMETHYL-	1	-	-	-
123-42-2	2-PENTANONE (8CI 9CI), 4-HYDROXY-4-METHYL-	29	1.30	76.50	1400.00
565-61-7	2-PENTANONE, 3-METHYL-	2	12.00	206.00	400.00
96-22-0	3-PENTANONE	1	1.00	1.00	1.00
143-24-8	2,5,8,11,14-PENTAOXAPENTADECANE (8CI 9CI)	1	41.00	41.00	41.00
630-07-9	PENTATRIACONTANE (8CI 9CI)	6	100.00	404.50	8500.00
107-39-1	1-PENTENE, 2,4,4-TRIMETHYL- (8CI)(9CI)	2	90.00	370.00	650.00
109-68-2	2-PENTENE	1	20.00	20.00	20.00
56312-52-8	2-PENTENE, 5-BROMO-2,3-DIMETHYL-	1	-	-	-
53907-59-8	2-PENTENE, 3-ETHYL-4,4-DIMETHYL-	2	340.00	340.00	340.00
107-40-4	2-PENTENE, 2,4,4-TRIMETHYL- (8CI)(9CI)	4	29.00	113.00	230.00
625-31-0	4-PENTEN-2-OL	1	-	-	-
141-79-7	3-PENTEN-2-ONE (8CI 9CI), 4-METHYL-	9	26.00	180.00	610.00
203-80-5	1H-PHENALENE	3	192.00	192.00	192.00
33892-15-8	1-PHENANTHRENECARBOXYLIC ACID (9CI), 1,2,3,4,4A,5,6,7,8,9,10,10A-DODECAHYDRO-1,4A-DIMETHYL-7-(1-METHYLETHYL)-, METHYL ESTER, (1R-(1.ALPHA.,4A.BETA.,7.BETA.,10A.ALPHA.))-	2	8.40	82.10	155.80
33952-78-2	1-PHENANTHRENECARBOXYLIC ACID (9CI), 7-ETHYL-1,2,3,4,4A,5,6,7,8,9,10,10A-DODECAHYDRO-1,4A,7-TRIMETHYL-, METHYL ESTER, (1S-(1.ALPHA.,4A.ALPHA.,7.BETA.,10A.BETA.))-	2	40.00	50.00	60.00
1740-19-8	1-PHENANTHRENECARBOXYLIC ACID (9CI), 1,2,3,4,4A,9,10,10A-OCTAHYDRO-1,4A-DIMETHYL-7-(1-METHYLETHYL)-, (1R-(1.ALPHA.,4A.BETA.,10A.ALPHA.))-	3	38.90	2264.45	4490.00
1235-74-1	1-PHENANTHRENECARBOXYLIC ACID (9CI), 1,2,3,4,4A,9,10,10A-OCTAHYDRO-1,4A-DIMETHYL-7-(1-METHYLETHYL)-, METHYL ESTER, (1R-(1.ALPHA.,4A.BETA.,10A.ALPHA.))-	3	144.50	190.00	210.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
29062-98-4	PHENANTHRENE, DIMETHYL-	5	11.00	100.00	841.00
3674-65-5	PHENANTHRENE, 2,3-DIMETHYL-	1	-	-	-
107-41-5	2,4-PENTANEDIOL, 2-METHYL-	1	162.00	162.00	162.00
55334-01-5	PHENANTHRENE, 9-DODECYLTETRADECAHYDRO-	3	9.10	9.10	9.10
832-69-9	PHENANTHRENE, 1-METHYL-	1	-	-	-
832-71-3	PHENANTHRENE (8CI 9CI), 3-METHYL-	2	6200.00	6200.00	6200.00
832-64-4	PHENANTHRENE (8CI 9CI), 4-METHYL-	2	0.03	4450.02	8900.00
30232-26-9	PHENANTHRENE, TRIMETHYL-	3	39.00	440.00	530.00
3674-73-5	PHENANTHRENE, 2,3,5-TRIMETHYL-	1	19.00	19.00	19.00
29723-32-8	PHENETHYLAMINE, N-(2,2,3,3,4,4,4-HEPTAFLUOROBUTYLIDENE)-	8	24.00	185.00	1000.00
31711-53-2	PHENANTHRENE, METHYL-	1	-	-	-
2440-22-4	PHENOL, 2-(2H-BENZOTRIAZOL-2-YL)-4-METHYL-	7	75.00	580.00	1200.00
108-43-0	PHENOL, 3-CHLORO-	1	-	-	-
299-86-5	PHENOL, CHLOROPHENYLMETHYL-	5	100.00	100.00	2000.00
1943-95-9	PHENOL, 3-CYCLOHEXYL- (9CI)	1	80.00	80.00	80.00
583-78-8	PHENOL (8CI 9CI), 2,5-DICHLORO-	2	1184.00	1940.10	2696.20
526-75-0	PHENOL (9CI), 2,3-DIMETHYL-	19	2.00	3000.00	9746.30
95-87-4	PHENOL (9CI), 2,5-DIMETHYL-	15	11.00	15144.40	260000.00
576-26-1	PHENOL (9CI), 2,6-DIMETHYL-	14	21.00	4150.00	200000.00
95-65-8	PHENOL (9CI), 3,4-DIMETHYL-	23	1.20	4000.00	32000.00
27178-34-3	PHENOL, (1,1-DIMETHYLETHYL)-	4	0.67	13.34	26.00
26746-38-3	PHENOL, BIS(1,1-DIMETHYLETHYL)-	1	-	-	-
88-18-6	PHENOL (9CI), 2-(1,1-DIMETHYLETHYL)-	1	20000.00	20000.00	20000.00
585-34-2	PHENOL (9CI), 3-(1,1-DIMETHYLETHYL)-	5	44.00	1300.00	3000.00
98-54-4	PHENOL, 4-(1,1-DIMETHYLETHYL)- (9CI)	3	1.30	850.65	1700.00
96-76-4	PHENOL (9CI), 2,4-BIS(1,1-DIMETHYLETHYL)-	1	80000.00	80000.00	80000.00
732-26-3	PHENOL (9CI), 2,4,6-TRIS(1,1-DIMETHYLETHYL)-	1	27000.00	27000.00	27000.00
128-39-2	PHENOL (9CI), 2,6-BIS(1,1-DIMETHYLETHYL)-	2	640.00	640.00	640.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
128-37-0	PHENOL (9CI), 2,6-BIS(1,1-DIMETHYLETHYL)-4-METHYL-	11	9.20	700.00	12000.00
25340-17-1	BENZENE (8CI 9CI), DIETHYL-	3	200.00	450.00	700.00
90-00-6	PHENOL (9CI), 2-ETHYL-	13	1.30	995.00	15600.00
620-17-7	PHENOL (9CI), 3-ETHYL-	13	4.00	4840.00	62000.00
123-07-9	PHENOL, 4-ETHYL-	2	1000.00	15500.00	30000.00
3855-26-3	PHENOL (9CI), 2-ETHYL-4-METHYL-	13	0.66	1400.00	25000.00
1687-61-2	PHENOL, 2-ETHYL-5-METHYL- (9CI)	10	17.00	2840.00	14000.00
698-71-5	PHENOL, 3-ETHYL-5-METHYL	1	560.00	560.00	560.00
2219-73-0	PHENOL, 4-ETHYL-2-METHYL- (9CI)	3	11.00	2800.00	32000.00
367-12-4	PHENOL (9CI), 2-FLUORO-	2	67.10	186.70	306.30
371-41-5	PHENOL (9CI), 4-FLUORO-	1	5.00	5.00	5.00
150-76-5	PHENOL, 4-METHOXY-	2	-	-	-
34883-04-0	PHENOL, 3-METHOXY-2,4,5-TRIMETHYL-	1	-	-	-
1319-77-3	PHENOL, METHYL-	12	0.03	100.00	10000.00
108-39-4	PHENOL (9CI), 3-METHYL-	4	15000.00	28000.00	43000.00
106-44-5	PHENOL, 4-METHYL-	2	15.00	15.00	15.00
2467-02-9	PHENOL (9CI), 2,2'-METHYLENEBIS-	5	75.00	180.00	380.00
620-92-8	PHENOL (9CI), 4,4'-METHYLENEBIS-	5	52.00	186.00	320.00
118-82-1	PHENOL (9CI), 4,4'-METHYLENEBIS(2,6-BIS(1,1-DIMETHYLETHYL)-	1	240.20	240.20	240.20
99-89-8	PHENOL, 4-(1-METHYLETHYL)- (9CI)	6	17.00	665.00	8800.00
80-05-7	PHENOL (9CI), 4,4'-(1-METHYLETHYLIDENE)BIS-	3	93.00	1546.50	3000.00
25154-52-3	PHENOL (8CI 9CI), NONYL-	2	50.00	50.00	50.00
104-40-5	PHENOL (9CI), 4-NONYL-	1	40.00	40.00	40.00
18979-50-5	PHENOL, 4-PROPOXY- (9CI)	1	22000.00	22000.00	22000.00
25167-83-3	PHENOL, TETRACHLORO-	2	100.00	1050.00	2000.00
58-90-2	PHENOL (8CI 9CI), 2,3,4,6-TETRACHLORO-	2	30000.00	30000.00	30000.00
140-66-9	PHENOL, 4-(1,1,3,3-TETRAMETHYLBUTYL)-	2	-	-	-
54932-78-4	PHENOL, 4-(2,2,3,3-TETRAMETHYLBUTYL)-	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
697-82-5	PHENOL, 2,3,5-TRIMETHYL- (8CI)(9CI)	4	1.20	462.00	940.00
2416-94-6	PHENOL, 2,3,6-TRIMETHYL-	2	9000.00	13800.00	18600.00
527-60-6	PHENOL (9CI), 2,4,6-TRIMETHYL-	7	1.80	10000.00	21103.80
135-67-1	10H-PHENOXAZINE (9CI)	3	50.00	110.00	170.00
527-54-8	PHENOL, 3,4,5-TRIMETHYL-	1	780.00	780.00	780.00
5074-71-5	PHOSPHINE (8CI 9CI), BIS(PENTAFLUOROPHENYL)PHENYL-	5	727.90	1319.70	1945.90
502-62-5	PHI-PHI-CAROTENE, 7,7'8,8',11,11',12,12',15,15'-DECAHYDRO-	1	-	-	-
1241-94-7	PHOSPHORIC ACID, 2-ETHYLHEXYL DIPHENYL ESTER	2	23.00	161.50	300.00
115-88-8	PHOSPHORIC ACID (8CI 9CI), OCTYL DIPHENYL ESTER	3	917.40	2558.70	4200.00
126-73-8	PHOSPHORIC ACID, TRIBUTYL ESTER (8CI 9CI)	4	10.00	490.00	2100.00
1806-54-8	PHOSPHORIC ACID, TRIOCTYL ESTER	1	-	-	-
115-86-6	PHOSPHORIC ACID, TRIPHENYL ESTER (8CI)(9CI)	1	92.00	92.00	92.00
85-69-8	PHTHALATE, BUTYL-2-ETHYLHEXYL-	1	1000.00	1000.00	1000.00
27554-26-3	PHTHALATE, DIISOOCTYL-	3	140.00	1570.00	3000.00
131-18-0	PHTHALATE, DI-N-AMYL-	1	1000.00	1000.00	1000.00
626-67-5	PIPERIDINE (8CI 9CI), 1-METHYL-	1	15112.80	15112.80	15112.80
54751-98-3	3-PIPERIDINOL, 1-ETHYL-6-METHYL-	1	-	-	-
27154-43-4	PIPERIDINONE (9CI)	3	1600.00	1600.00	1600.00
78-84-2	PROPANAL, 2-METHYL-	1	7.00	7.00	7.00
13165-71-4	1-PROPANAMINE, 2-METHYL-N-SULFINYL	1	-	-	-
75-64-9	2-PROPANAMINE, 2-METHYL-	1	-	-	-
13749-37-6	PROPANE, 3-BROMO-1,1,1-TRICHLORO-	1	4500.00	4500.00	4500.00
463-82-1	PROPANE, 2-2-DIMETHYL-	1	-	-	-
57-55-6	1,2-PROPANEDIOL (8CI 9CI)	1	20.00	20.00	20.00
126-30-7	1,3-PROPANEDIOL, 2,2-DIMETHYL-	5	3.90	2700.00	7500.00
123-59-1	PROPANE (9CI), 1-ETHOXY-1,3,3-TRIMETHOXY-	2	64.30	76.55	88.80
75-30-9	PROPANE, 2-IODO-	1	-	-	-
625-44-5	PROPANE, 1-METHOXY-2-METHYL-	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
16754-49-7	PROPANE, 1,1,1-TRIMETHYLTRIS(OXY)TRIS(2-METHYL-	1	-	-	-
25735-29-9	PROPANE, TRICHLORO-	1	310.00	310.00	310.00
123-62-6	PROPANOIC ACID (9CI), ANHYDRIDE	1	67.00	67.00	67.00
105-37-3	PROPANOIC ACID, ETHYL ESTER (9CI)	2	11.00	100.50	190.00
594-61-6	PROPANOIC ACID, 2-HYDROXY-2-METHYL-	1	-	-	-
74367-32-2	PROPANOIC ACID, 2-METHYL-, 2,2-DIMETHYL-1-(2-HYDRO XY-1-METHYLETHYL)PRO	1	84.00	84.00	84.00
18388-42-6	PROPANOIC ACID, 2-METHYL-3-(TRIMETHYLSILYL)-, METH YL ESTER	1	-	-	-
71-23-8	N-PROPANOL	4	28000.00	140000.00	150000.00
67-63-0	2-PROPANOL (9CI)	27	17.00	6000.00	990000.00
96-23-1	2-PROPANOL, 1,3-DICHLORO-	7	23.00	96.00	300.00
106-62-7	1-PROPANOL (8CI 9CI), 2-(2-HYDROXYPROPOXY)-	5	45.00	1500.00	6800.00
3587-64-2	2-PROPANOL (8CI 9CI), 1-METHOXY-2-METHYL-	7	25.00	352.50	680.00
20324-33-8	2-PROPANOL (9CI), 1-(2-(2-METHOXY-1-METHYLETHOXY)- 1-METHYLETHOXY)-	1	95.00	95.00	95.00
78-83-1	1-PROPANOL, 2-METHYL-	5	8.00	8.00	8.00
75-65-0	2-PROPANOL, 2-METHYL-	1	-	-	-
1638-16-0	2-PROPANOL (9CI), 1,1'-((1-METHYL-1,2-ETHANEDIYL)B IS(OXY))BIS-	4	20.00	135.00	970.00
110-98-5	2-PROPANOL (9CI), 1,1'-OXYBIS-	1	700.00	700.00	700.00
21460-36-6	2-PROPANOL (9CI), 1-(2-PROPENYLOXY)-	3	22.00	36.00	130.00
6704-19-4	1-PROPANONE, 1-CYCLOPROPYL-	2	-	-	-
104-55-2	2-PROPENAL, 3-PHENYL-	1	2.60	2.60	2.60
16136-84-8	1-PROPENE, 1-CHLORO-, (Z)- (9CI)	2	770.00	1835.00	2900.00
557-98-2	1-PROPENE, 2-CHLORO- (9CI)	2	250.00	675.00	1100.00
79-10-7	2-PROPENOIC ACID	1	142.00	142.00	142.00
141-32-2	2-PROPENOIC ACID (9CI), BUTYL ESTER	1	28.00	28.00	28.00
140-88-5	2-PROPENOIC ACID, ETHYL ESTER (9CI)	7	34.00	72.00	110.00
79-41-4	2-PROPENOIC ACID, 2-METHYL-	3	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
97-88-1	2-PROPENOIC ACID (9CI), 2-METHYL-, BUTYL ESTER	3	24.00	1400.00	3161.90
2867-47-2	2-PROPENOIC ACID (9CI), 2-METHYL-, 2-(DIMETHYLAMIN O)ETHYL ESTER	1	200.00	200.00	200.00
97-90-5	2-PROPENOIC ACID, 2-METHYL-, 1,2-ETHANEDIYL ESTER	1	-	-	-
4245-37-8	2-PROPENOIC ACID, 2-METHYLETHENYL ESTER	1	-	-	-
54774-91-3	2-PROPENOIC ACID, 6-METHYLHEPTYL ESTER	14	2.20	770.00	3500.00
80-62-6	2-PROPENOIC ACID (9CI), 2-METHYL-, METHYL ESTER	2	120.40	560.20	1000.00
97-86-9	2-PROPENOIC ACID, 2-METHYL-, 2-METHYLPROPYL ESTER	1	87.00	87.00	87.00
2078-20-8	2-PROPENOIC ACID, 3-PHENYL-, TRIMETHYLSILYL ESTER	2	0.20	0.20	0.20
94-41-7	2-PROPEN-1-ONE, 1,3-DIPHENYL-	2	100.00	100.00	100.00
578-76-7	6H-PURIN-6-ONE, 2-AMINO-1,7-DIHYDRO-7-METHYL-	1	-	-	-
118-71-8	4H-PYRAN-4-ONE, 3-HYDROXY-2-METHYL	1	1200.00	1200.00	1200.00
29943-42-8	4H-PYRAN-4-ONE, TETRAHYDRO-	1	-	-	-
27577-90-8	PYRENE, METHYL-	1	100.00	100.00	100.00
4427-22-9	4-PYRIDINECARBOXAMIDE (9CI), N-HYDROXY-	1	251.30	251.30	251.30
108-47-4	PYRIDINE, 2,4-DIMETHYL-	6	-	-	-
1124-35-2	PYRIDINE, 2,4-DIMETHYL-6-ETHYL-	6	-	-	-
537-75-4	PYRIDINE (8CI 9CI), 4-ETHYL-	1	740.00	740.00	740.00
1122-69-6	PYRIDINE, 2-METHYL-6-ETHYL-	6	-	-	-
28783-05-3	PYRIDINE, 3-NITRO-, THIENO(3,2-C)-	1	-	-	-
695-98-7	PYRIDINE, 2,3,5-TRIMETHYL-	3	3299.00	3299.00	3299.00
108-75-8	PYRIDINE, 2,4,6-TRIMETHYL-	6	30.00	40.00	50.00
2036-41-1	PYRIMIDINE, 5-METHYL-	1	-	-	-
123-75-1	PYRROLIDINE	2	100.00	100.00	100.00
1121-07-9	2,5-PYRROLIDINEDIONE, 1-METHYL-	1	-	-	-
872-50-4	2-PYRROLIDINONE, 1-METHYL-	3	200.00	1100.00	2000.00
91-22-5	QUINOLINE	9	38.00	100.00	400.00
611-32-5	QUINOLINE, 8-METHYL-	6	-	-	-
16007-79-7	QUINOXALINE (8CI), 2-ISOPROPYL-3-PHENYL-, 4-OXIDE-	1	652.70	652.70	652.70

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
8001-23-8	SAFFLOWER OIL	1	-	-	-
1112-39-6	SILANE, DIMETHOXYDIMETHYL-	1	400.00	400.00	400.00
180-43-8	SPIRO(5.5)UNDECANE (8CI 9CI)	1	680.00	680.00	680.00
937-11-1	STANNANE, (4-BROMOPHENYL)-TRIMETHYL-	1	-	-	-
55044-62-7	STANNANE, BUTYLDIMETHYL(1-METHYLETHYL)-	1	-	-	-
7342-38-3	STANNANE, CHLORO-TRIS(2-METHYLPROPYL)-	1	-	-	-
76-87-9	STANNANE, HYDROXYTRIPHENYL-	1	-	-	-
3531-43-9	STANNANE, TETRAKIS(2-METHYL-PROPYL)-	1	-	-	-
40218-10-8	STANNANE, TRIBUTYLCYCLOHEXYL-	1	-	-	-
83-47-6	STIGMAST-5-EN-3-OL,(3.BETA.,24S)-	2	-	-	-
18525-35-4	STIGMAST-7-EN-3-OL,(3,BETA.,5.ALPHA.,24S)	1	-	-	-
7704-34-9	SULFUR (8CI 9CI), MOL. (S8)	1	-	-	-
26537-53-1	SYDNONE, 3-(CARBOXYMETHYL)-	1	-	-	-
120-06-9	SYDNONE (8CI 9CI), 3-PHENYL-	1	200.00	200.00	200.00
26140-60-3	TERPHENYL	1	-	-	-
84-15-1	1,1':2',1''-TERPHENYL (9CI)	1	170.00	170.00	170.00
55162-61-3	TETRACONTANE, 3,5,24-TRIMETHYL-	10	13.00	185.00	1300.00
646-31-1	TETRACOSANE (8CI 9CI)	3	818.60	1109.30	1400.00
629-59-4	TETRADECANE (8CI 9CI)	71	14.00	530.00	110000.00
2425-54-9	TETRADECANE (8CI 9CI), 1-CHLORO-	3	1.50	31.25	61.00
544-63-8	TETRADECANOIC ACID (9CI)	5	155.00	360.00	2000.00
22413-00-9	TETRADECANOIC ACID, EICOSYL ESTER	1	-	-	-
124-10-7	TETRADECANOIC ACID (9CI), METHYL ESTER	3	73.00	760.00	4400.00
7098-22-8	TETRATETRACONTANE (8CI 9CI)	3	110.00	555.00	1000.00
35028-99-0	1,2,4,5-TETRAZINE (9CI), 1,4-DIACETYL-2,5-DIBUTYLH EXAHYDRO-	1	7040.00	7040.00	7040.00
3732-56-7	2-THIAZOLIDINIMINE, 3-METHYL-	1	-	-	-
1003-09-4	THIOPHENE (8CI 9CI), 2-BROMO-	2	2128.10	2165.00	2201.90
126-33-0	THIOPHENE, 1,1-DIOXIDETETRAHYDRO-	1	-	-	-

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
110-01-0	THIOPHENE, TETRAHYDRO-	11	7.80	54.00	160.00
102-47-6	TOLUENE, ALPHA,3,4-TRICHLORO-	1	20000.00	20000.00	20000.00
13148-78-2	1H-1,2,3-TRIAZOLE, 1,4-DIPHENYL-	1	-	-	-
4874-85-5	1H-1,2,3-TRIAZOLE, 1,5-DIPHENYL-	2	-	-	-
10570-40-8	4H-1,2,4-TRIAZOLE, 4-METHYL-	1	-	-	-
4073-72-7	4H-1,2,4-TRIAZOLE, 3,4,5-TRIPHENYL-	1	-	-	-
638-67-5	TRICOSANE (8CI 9CI)	12	90.00	463.50	1500.00
281-23-2	TRICYCLO(3.3.1.13,7)DECANE (9CI)	4	900.00	1500.00	14000.00
508-32-7	TRICYCLO(2.2.1.02,6)HEPTANE (8CI 9CI), 1,7,7-TRIMETHYL-	1	87.00	87.00	87.00
21964-48-7	1,12-TRIDECADIENE (8CI 9CI)	3	620.00	3100.00	3700.00
629-50-5	TRIDECANE	57	5.90	660.00	50160.00
55030-62-1	TRIDECANE, 4,8-DIMETHYL-	3	-	-	-
1560-69-9	TRIDECANE (8CI 9CI), 2-METHYL-	6	100.00	670.00	1000.00
6418-41-3	TRIDECANE, 3-METHYL-	2	36.00	1968.00	3900.00
13287-21-3	TRIDECANE, 6-METHYL-	4	16.00	26.00	245.90
26730-14-3	TRIDECANE (8CI 9CI), 7-METHYL-	8	23.00	340.00	2200.00
55045-11-9	TRIDECANE, 5-PROPYL-	5	12.00	24.00	36.00
55045-09-5	TRIDECANE, 7-PROPYL-	2	63.00	63.00	63.00
6006-01-5	3,7,11-TRIDECATRIENENITRILE, 4,8,12-TRIMETHYL-	2	-	-	-
110-88-3	TRISILOXANE, OCTAMETHYL-1,3,5-TRIOXANE-	1	37.00	37.00	37.00
112-44-7	UNDECANAL (8CI)(9CI)	1	23.00	23.00	23.00
1120-21-4	UNDECANE (8CI 9CI)	96	0.07	530.00	280000.00
17312-77-5	UNDECANE, 2,3-DIMETHYL-	2	3400.00	10200.00	17000.00
17312-80-0	UNDECANE, 2,4-DIMETHYL-	1	40.00	40.00	40.00
17301-22-3	UNDECANE (8CI 9CI), 2,5-DIMETHYL-	6	14.00	83.00	650.00
17301-23-4	UNDECANE (8CI 9CI), 2,6-DIMETHYL-	5	36.60	410.00	1130.00
17301-24-5	UNDECANE, 2,7-DIMETHYL-	3	190.00	7900.00	9000.00
17301-27-8	UNDECANE, 2,10-DIMETHYL-	3	15.00	57.00	470.00

CAS #	COMPOUND NAME	# TIMES DETECTED	FROM REPORTED VALUES (PPM) MINIMUM	MEDIAN	MAXIMUM
17312-81-1	UNDECANE, 3,5-DIMETHYL-	2	110.00	110.00	110.00
17301-28-9	UNDECANE, 3,6-DIMETHYL-	5	5.00	47.00	1500.00
17301-29-0	UNDECANE, 3,7-DIMETHYL-	5	21.00	245.00	4900.00
17312-82-2	UNDECANE, 4,6-DIMETHYL-	10	13.00	59.00	13000.00
17301-32-5	UNDECANE, 4,7-DIMETHYL-	28	3.00	130.00	46000.00
17301-33-6	UNDECANE (8CI 9CI), 4,8-DIMETHYL-	14	32.00	215.00	9800.00
17615-91-7	UNDECANE, 5,6-DIMETHYL-	3	340.00	830.00	2700.00
17312-58-2	UNDECANE, 3-ETHYL-	2	27.00	303.50	580.00
17312-59-3	UNDECANE, 4-ETHYL-	1	5100.00	5100.00	5100.00
17453-94-0	UNDECANE, 5-ETHYL-	1	3400.00	3400.00	3400.00
7045-71-8	UNDECANE (8CI 9CI), 2-METHYL-	15	180.00	1325.00	39000.00
1002-43-3	UNDECANE, 3-METHYL-	10	15.00	13500.00	21000.00
2980-69-0	UNDECANE (8CI 9CI), 4-METHYL-	8	6900.00	22000.00	23000.00
17302-33-9	UNDECANE, 6-METHYL-	1	250.00	250.00	250.00
112-37-8	UNDECANOIC ACID	1	-	-	-
112-42-5	1-UNDECANOL (9CI)	3	36.00	73.00	110.00
1604-34-8	2-UNDECANONE, 6,10-DIMETHYL-	1	-	-	-
112-43-6	10-UNDECEN-1-OL	1	34.00	34.00	34.00
2243-98-3	1-UNDECYNE	1	-	-	-
50285-72-8	UREA, N,N-DIETHYL-N'-METHYL-N'-NITROSO-	1	-	-	-