

Appendix A.1: Relative composition of initial and oceanic boundary NMHC.

Compound	Initial ppbC Species per ppmC NMHC	Oceanic Boundary ppbC Species per ppmC NMHC
Toluene	80.7	7.4
2-Methylbutane	77.8	5.0
Ethane	60.5	44.3
Propane	58.2	18.9
Ethene	43.6	5.8
n-Pentane	36.7	4.3
2-Methyl-1-butene	36.7	0.0
n-Butane	35.5	8.6
Benzene	33.9	12.5
Acetylene	31.6	11.5
Naphthalene	28.7	0.0
2-Methylpentane	26.6	0.6
p-Xylene	24.0	0.0
m-Xylene	24.0	0.0
1,2,4-Trimethylbenzene	22.5	0.0
o-Xylene	19.5	0.0
2,2,4-Trimethylpentane(iso-octane)	18.4	0.0
Propene	17.9	0.0
3-Methylpentane	17.4	4.3
2-Methylpropane	17.2	3.2
n-Hexane	16.7	0.7
Methylcyclopentane	16.1	0.0
Ethylbenzene	14.2	0.0
3-Methylhexane	13.8	14.1
p-Ethyltoluene	13.8	0.0
2-Methylhexane	12.4	7.7
Methylcyclohexane	11.9	0.0
n-Heptane	11.0	0.0
2,3-Dimethylpentane	10.5	0.0
Isobutene	9.6	2.8
1,3,5-Trimethylbenzene	8.9	0.0
1,2,4-Trimethylbenzene	7.6	0.0
2,3-Dimethylbutane	7.6	0.0
Trichloroacetylene	7.6	0.0
m-Ethyltoluene	6.9	0.0
2,4-Dimethylpentane	6.7	0.0
n-Decane	6.6	0.0
2-Methyl-2-butene	5.7	0.0
n-Octane	5.3	0.7
2-Methylheptane	5.1	0.0
o-Ethyltoluene	5.1	0.0
trans-2-Pentene	5.0	0.0
1-Butene	4.6	0.0

Appendix A.1: continued.

Compound	Initial ppbC Species per ppmC NMHC	Background ppbC Species per ppmC NMHC
1,3-Butadiene	4.4	0.0
Cyclohexane	4.4	0.0
Cyclopentane	4.3	0.0
n-Nonane	4.1	0.0
n-Propylbenzene	4.1	0.0
trans-2-Butene	3.2	0.0
1-Pentene	3.0	0.0
2,2-Dimethylbutane	3.0	0.0
Isoprene	2.8	0.0
2,4-Dimethylhexane	2.8	0.0
cis-2-Pentene	2.8	0.0
2,3-Dimethylhexane	2.7	0.0
cis-2-Butene	2.7	0.0
2-Methylnaphthalene	2.3	0.0
1-Methylnaphthalene	2.3	0.0
d-Limonene	2.1	0.0
a-Pinene	2.1	0.0
Perchloroethene	1.9	0.0
trans-2-Hexene	1.8	0.0
3-Methyl-1-butene	1.4	0.0
1-Hexene	1.4	0.0
2,2,4-Trimethyl-1-pentene	1.4	0.0
Cyclopentene	1.2	0.0
2-Methyl-1-pentene	1.2	0.0
Dimethylnaphthalene	1.2	0.0
Cresols	1.0	0.0
i-Propylbenzene	0.9	0.0
cis-2-Hexene	0.7	0.0
4-Methyl-1-pentene	0.7	0.0
Phytane	0.4	0.0
n-Octadecane	0.3	0.0
Pristane	0.3	0.0
n-Nonadecane	0.2	0.0
n-Docosane	0.2	0.0
Fluorene	0.2	0.0
n-Heneicosane	0.1	0.0

Appendix A.2: Speciation of initial and boundary particulate organic carbon.

Compound	Speciation of Organic Carbon ng compound per μg OC
n-Tricosane	0.35
n-Tetracosane	0.56
n-Pentacosane	0.69
n-Hexacosane	0.56
n-Heptacosane	0.60
n-Octacosane	0.40
n-Nonacosane	0.41
n-Triacontane	0.23
n-Hetriacontane	0.29
n-Dotriacontane	0.12
n-Tritriacontane	0.25
n-Tetratriacontane	0.00
Hopanes	1.10
Steranes	0.44
Chrysene/Triphenylene	0.05
Benzo[k]fluoranthene	0.04
Benzo[e]acephenanthrylene	0.04
Benzo[e]pyrene	0.04
Benzo[a]pyrene	0.04
Perylene	0.01
Indeno[123-cd]fluoranthene	0.02
Indeno[123-cd]pyrene	0.06
Benzo[ghi]perylene	0.16
Antracene-9,10-dione	0.07
Benz[de]anthracen-7-one	0.03
Benz[a]anthracene-7,12-dione	0.01
Dehydroabietic acid	0.03
Hexanedioic acid	0.93
Octanedioic acid	0.06
n-Hexadecenoic acid	0.31
n-Hexadecanoic acid	4.45
n-Eicosanoic acid	0.00
n-Docosanoic acid	0.27