

<b>SAMPLE ID</b>	<b>Depth (cm)</b>	<b>%Corg</b>	<b>%N</b>	<b>C:N</b>	<b>13C (permil VPDB)</b>
2-C0-1	1	0.141	0.022	6.3	-22.1
2-C0-2	5	0.654	0.053	12.3	-20.17
2-C0-3	10	1.006	0.083	12.1	-20.02
2-C0-4	15	0.507	0.043	11.7	-20.32
2-C0-5	20	0.697	0.065	10.7	-20.59
2C-C1-2	38	0.174	0.010	17.9	-22.03
2C-C1-4	42.75	0.027	0.016	17.3	-21.09
2C-C1-7	49.75	0.231	0.011	21.7	-19.84
2C-C1-10	59.25	0.273	0.013	21.3	-20.35
2C-C1-11	62	0.121	0.005	24.5	-20.91
2C-C1-14	69	0.140	0.005	28.6	-22.53
2C-C1-15	71	0.131	0.006	20.6	-22.9
2C-C1-18	78	0.060	0.001	67.5	-25.17
2C-C1-21	93.25	0.119	0.004	26.8	-22.84
2C-C1-24	102.5	0.088	0.003	30.4	-25.83
2C-C1-25	105.5	0.081	0.004	22.2	-26
2C-C1-26	108.25	0.093	0.004	24.9	-25.29
2C-C1-28	113.5	0.090	0.004	20.0	-25.44
2C-C2-1	121	0.083	0.003	25.2	-27
2C-C2-3	126	0.111	0.007	16.4	-25.52
2C-C2-5	130	0.094	0.006	16.4	-25.24
2C-C2-7	134.25	0.104	0.003	34.9	-25.43
2C-C2-9	139.25	0.094	0.002	53.8	-25.65

SAMPLE ID	Depth (cm)	n-C12:0 FA (uξ n-C13 anteis)	n-C13:0 FA (uξ n-C14 iso-	n-C14 iso-	(uξ n-C14 anteis)	(uξ n-C14 anteis)
2-C0-1 FA	1	0.05	0.00	8.94	0.26	0.18
2-C0-2 FA	5	17.32	4.09	16.17	6.30	3.57
2-C0-3 FA	10	8.50	3.28	10.03	4.63	2.50
2-C0-4 FA	15	34.88	11.42	35.24	18.52	11.93
2-C0-5 F2A	20	7.35	2.95	10.97	5.33	2.98
2C-C1-2 FA	38	101.34	31.27	100.82	29.04	17.89
2C-C1-4 FA	42.75	42.42	9.49	50.31	17.63	11.93
2C-C1-7 FA	49.75	95.46	20.14	61.76	109.21	11.45
2C-C1-10 FA	59.25	63.56	15.96	79.14	33.45	17.38
2C-C1-11 FA	62	3.94	1.55	11.97	7.01	2.61
2C-C1-14 FA	69	67.59	29.17	103.69	41.37	22.91
2C-C1-18 FA	78	3279.95	599.62	2196.27	743.51	546.64
2C-C1-21 FA	93.25	120.87	30.16	71.09	64.07	33.81
2C-C1-24 FA	102.5	57.55	17.22	67.40	36.20	18.69
2C-C1-25 FA	105.5	0.00	0.00	20.83	10.87	0.00
2C-C1-26 FA	108.25	90.56	6.39	78.50	4.40	42.60
2C-C1-28 FA	113.5	15.44	5.22	38.71	16.18	8.55
2C-C2-1 FA	121	166.26	22.88	71.11	95.47	18.69
2C-C2-3 FA	126	138.88	44.28	125.65	150.02	36.78
2C-C2-5 FA	130	47.73	19.66	81.03	62.51	33.33
2C-C2-7 FA	134.25	54.68	12.40	53.68	18.46	35.21
2C-C2-9 FA	139.25	148.63	25.18	67.26	24.03	17.16

n-C14:0 FA (ug)	n-C15 iso- (ug	n-C15 anteiso (ug	n-C15:0 FA (ug	n-C16 iso- (ug	n-C16:0 FA (ug	n-C17 iso- (ug
69.83	8.46	18.78	110.97	6.77	1145.89	5.76
30.26	7.52	9.41	21.20	2.56	104.17	3.63
22.78	7.12	7.94	16.10	2.76	85.63	3.11
64.53	18.84	21.92	46.39	4.27	217.62	7.19
25.25	8.65	9.41	19.99	3.03	83.82	4.08
295.07	44.00	52.33	121.64	16.56	10464.11	21.59
202.11	32.61	34.19	85.61	13.46	4937.60	10.75
226.12	25.64	32.97	73.69	6.10	4912.95	6.87
426.40	51.21	85.85	180.44	16.48	15231.70	12.73
144.41	18.35	27.88	85.04	7.26	8032.81	9.54
852.35	70.16	67.45	279.42	19.86	18980.59	0.00
22677.35	1300.82	2118.83	9519.01	731.79	793805.65	0.00
331.36	33.54	44.23	124.16	15.12	8056.28	12.26
544.45	64.82	119.07	247.21	18.16	22221.20	21.95
253.61	37.25	70.55	172.70	26.03	12609.01	15.04
1018.09	63.08	76.33	354.88	0.00	29472.65	18.31
546.11	44.31	65.57	215.08	13.36	28295.38	14.16
692.33	58.76	68.01	242.50	29.28	33672.47	26.18
1052.64	82.81	117.66	360.99	27.78	45155.89	35.72
753.78	64.52	92.42	254.63	15.23	27330.57	28.94
569.00	41.99	46.11	218.82	7.67	26808.59	48.60
585.62	54.49	77.22	183.64	28.94	22662.58	29.94

n-C17 anteis	n-C17:0 FA (u	n-C18:1(9) FA (i	n-C18:0 FA (u	g- n-C20:1(11) F	n-C20:1 FA (i	n-C20:0 FA (u
15.73	290.78	139.77	1669.86	8.65	0.05	129.95
3.00	24.00	0.69	99.88	1.23	1.29	41.13
2.64	16.51	1.39	70.99	66.25	39.48	1248.68
5.70	46.97	0.00	186.20	0.00	0.00	45.43
2.83	21.55	1.07	69.12	0.00	0.00	30.38
17.93	113.73	45.18	5130.77	0.00	0.00	133.44
11.01	73.24	56.75	3045.15	6.87	3.55	90.26
4.78	68.99	46.77	3605.73	0.00	15.32	181.63
17.39	149.21	201.27	6777.94	37.65	23.62	148.71
12.43	118.49	175.23	6929.97	16.07	6.05	223.78
75.59	169.16	108.63	8501.79	0.00	0.00	226.32
0.00	9565.88	10355.36	287386.28	2234.39	0.00	7014.79
12.34	114.77	79.43	4638.65	10.41	20.74	110.06
17.02	257.76	268.42	14691.21	132.40	0.00	343.12
12.04	274.41	301.61	9959.75	16.35	0.00	469.68
22.75	277.77	439.71	12959.20	17.54	27.98	290.43
20.32	226.95	360.47	14052.97	127.90	0.00	279.49
25.73	267.49	140.18	15201.01	78.33	0.00	293.55
30.04	350.84	227.78	14702.32	30.44	94.61	281.57
20.54	250.16	155.19	10118.73	60.07	103.05	237.22
400.54	342.95	389.96	11133.56	75.70	34.04	517.16
25.70	198.89	233.38	11446.81	26.85	48.07	295.35

n-C21:0 FA (u)	n-C22:1(13)FA	n-C22:0 FA (u)	n-C23:0 FA (u)	n-C24:0 FA (u)	n-C25:0 FA (u)	n-C26:0 FA (u)
77.71	0.00	169.08	115.60	186.38	39.40	87.25
25.57	1.99	47.37	27.08	65.09	8.91	30.50
671.37	185.10	965.82	426.08	812.82	90.88	270.18
28.53	2.32	42.71	21.93	42.38	7.23	20.46
17.09	1.13	28.63	17.52	41.20	5.22	15.92
105.42	0.00	163.57	171.18	231.47	31.64	63.70
37.29	0.00	51.33	41.17	42.92	6.21	0.00
58.77	34.23	106.83	100.41	152.70	0.00	57.60
67.73	41.16	111.40	49.93	92.59	28.92	54.33
124.60	28.80	205.20	127.14	208.06	44.19	79.77
60.55	28.32	107.64	47.59	67.08	25.05	42.94
3637.49	6578.44	5830.43	1701.74	4163.70	1582.10	3482.58
60.88	44.23	153.19	59.54	121.21	36.66	67.05
136.39	258.59	266.73	118.72	265.85	103.57	201.85
199.03	121.42	292.77	113.14	257.16	94.21	138.63
68.96	182.51	217.00	58.29	173.71	68.35	110.54
122.53	189.05	249.03	103.46	252.16	92.68	188.26
154.17	237.42	298.29	116.90	264.41	97.45	194.03
136.10	167.34	275.43	114.39	226.22	80.43	152.96
121.16	255.23	249.92	103.24	209.99	82.27	152.92
155.07	347.26	360.53	98.36	225.52	90.89	184.97
128.16	222.73	240.66	91.42	230.39	78.54	179.74

n-C27:0 FA (μg/g)	n-C28:0 FA (μg/g)	n-C30:0 FA (μg/g)	hopanoic acid	hopanoic acid	hopanoic acid	sum even C17
13.02	28.71	4.94	0.00	3.85	0.00	2.89
3.29	8.59	1.37	0.00	2.47	4.09	0.23
33.67	45.48	0.00	0.00	29.35	64.51	0.18
2.67	8.64	2.28	0.00	2.88	0.00	0.47
1.89	3.20	0.00	0.00	1.27	2.05	0.18
14.46	17.59	0.00	0.00	0.00	0.00	15.89
0.00	0.00	0.00	0.00	0.00	0.00	8.18
8.36	17.34	3.17	0.00	0.00	0.00	8.74
12.43	24.57	0.00	0.00	0.00	0.00	22.44
11.46	23.43	0.00	0.00	0.00	0.00	15.11
0.00	0.00	0.00	0.00	0.00	0.00	28.33
860.85	1648.47	0.00	0.00	0.00	0.00	1103.87
17.34	24.68	4.28	0.00	7.38	0.00	13.03
50.28	83.95	17.92	0.00	20.25	0.00	37.46
38.67	76.03	0.00	0.00	0.00	0.00	22.82
38.69	51.71	0.00	0.00	0.00	0.00	43.45
33.04	67.50	0.00	0.00	13.74	0.00	42.89
40.32	74.10	13.14	9.17	16.13	0.00	49.57
44.28	70.78	30.88	0.00	29.35	0.00	60.91
29.28	57.98	0.00	0.00	0.00	0.00	38.20
41.75	88.42	24.21	0.00	25.64	0.00	38.51
35.97	85.87	13.39	0.00	20.87	0.00	34.70

sum even C2	sum even C2	CPI 22-28	100Sum iso-	ACL 22-30	Cmax	HPFA
0.49	0.12	2.2	3.59	23.9	18	0.79
0.15	0.04	3.1	17.49	24.0	16	0.54
3.03	0.32	2.9	19.93	23.5	20	0.96
0.13	0.03	2.8	18.62	24.0	16	0.46
0.10	0.02	3.0	22.33	23.8	16	0.44
0.53	0.08	1.8	1.42	23.7	16	0.54
0.18	0.00	1.4	2.00	23.0	16	0.34
0.44	0.08	2.5	1.51	23.8	16	0.72
0.35	0.08	2.4	1.18	24.0	16	0.56
0.64	0.10	2.2	0.92	23.7	16	0.55
0.40	0.04	2.3	1.20	23.5	16	0.37
17.01	5.13	2.7	0.51	24.2	16	0.98
0.38	0.10	2.4	1.42	24.0	16	0.31
0.88	0.30	2.4	1.06	24.4	16	0.80
1.02	0.21	2.4	1.23	24.1	16	0.59
0.68	0.16	2.5	0.60	24.2	16	0.47
0.78	0.26	2.6	0.55	24.2	16	0.57
0.86	0.28	2.5	0.61	24.2	16	0.59
0.78	0.25	2.3	0.64	24.3	16	0.55
0.70	0.21	2.4	0.80	24.1	16	0.55
1.10	0.30	2.7	1.99	24.2	16	0.58
0.77	0.28	2.8	0.94	24.4	16	0.68

**sum Hopanoic Acids (ug g<sup>-1</sup> TOC)**

3.8461765

6.56064676

93.861458

2.87729293

3.31972063

0

0

0

0

0

0

0

7.37552711

20.2541826

0

0

13.7399956

25.2940915

29.3539096

0

25.6367027

20.8658701



<b>SAMPLE ID</b>	<b>Depth (cm)</b>	<b>C15 n-alkane</b>	<b>C16 n-alkane</b>	<b>C17 n-alkane</b>	<b>Pristane (ug/g)</b>	<b>C18 n-alkane (ug/g)</b>
2-C0-1 F1	1	87.28	406.73	654.90	82.78	1236.44
2-C0-2 F1	5	3.00	13.48	68.39	11.57	71.79
2-C0-3 F1	10	10.58	33.90	102.30	10.37	101.94
2-C0-4 F1	15	2.34	55.64	137.13	21.17	347.93
2-C0-5 F1	20	44.73	157.41	256.90	36.44	454.32
2C-C1-2 F1	38	0.15	0.31	1.43	0.32	25.39
2C-C1-4 F1	42.75	14.04	0.00	152.63	1.81	250.42
2C-C1-7 F1	49.75	14.71	12.58	133.20	0.00	26.85
2C-C1-10 F1	59.25	0.76	33.47	80.40	18.23	16.57
2C-C1-11 F1	62	75.87	665.35	502.62	235.35	565.55
2C-C1-14 F1	69	10.29	79.84	196.09	56.44	218.98
2C-C1-15 F1	71	7.59	101.84	216.85	75.45	370.60
2C-C1-18 F1	78	0.74	33.02	410.50	69.51	532.78
2C-C1-21 F1	93.25	5.37	67.97	175.28	32.03	169.45
2C-C1-24 F1	102.5	2.88	78.80	127.76	27.78	322.47
2C-C1-25 F1	105.5	104.48	833.75	782.23	131.57	612.54
2C-C1-26 F1	108.25	17.37	258.05	582.75	83.77	354.52
2C-C1-28 F1	113.5	8.80	115.25	296.84	53.55	325.93
2C-C2-1 F1	121	3.63	118.19	334.93	45.29	595.48
2C-C2-3 F1	126	1.40	50.04	231.87	39.68	433.36
2C-C2-5 F1	130	1.77	46.34	330.26	48.75	425.83
2C-C2-7 F1	134.25	0.26	6.75	189.02	32.16	346.91
2C-C2-9 F1	139.25	0.49	3.60	74.56	24.81	136.66

Phytane (ug)	C19 n-alkane	C20 n-alkane	C21 n-alkane	C22 n-alkane	C23 n-alkane	C24 n-alkane
11.83	163.82	782.60	89.74	236.97	19.61	60.54
2.17	32.89	59.62	18.11	24.22	16.59	10.62
1.49	30.98	74.69	15.55	27.05	14.16	9.00
5.11	69.31	267.43	38.12	95.24	24.61	29.23
4.87	67.11	335.48	31.26	88.80	26.78	20.11
1.22	16.59	40.64	25.77	40.75	39.56	55.74
10.35	31.10	102.64	21.07	177.89	33.95	23.12
0.00	299.17	251.02	172.80	28.80	71.49	230.59
16.05	21.86	126.71	40.38	84.54	43.44	28.62
128.43	45.15	247.02	82.73	167.03	76.51	60.41
39.86	170.87	195.82	127.30	176.20	51.55	58.23
35.84	167.99	313.36	127.63	177.37	50.74	52.37
50.43	214.41	616.55	350.17	442.75	116.03	130.77
45.05	53.19	146.58	92.08	114.21	29.49	32.18
60.88	77.54	320.58	171.04	276.62	59.32	99.24
137.12	116.69	320.64	204.51	220.42	85.09	97.85
98.50	1635.48	546.97	0.00	1066.17	447.20	110.97
63.58	121.32	364.04	226.67	258.70	175.57	107.27
73.62	352.72	504.70	230.22	355.21	82.18	100.86
96.97	131.12	437.40	234.71	351.16	85.42	101.67
84.09	320.00	441.81	223.38	332.11	85.04	92.66
30.16	185.98	440.01	249.88	298.05	62.15	73.09
133.02	1537.82	82.67	409.23	919.77	0.00	79.95

<b>C25 n-alkane</b>	<b>C26 n-alkane</b>	<b>C27 n-alkane</b>	<b>C28 n-alkane</b>	<b>C29 n-alkane</b>	<b>C30 n-alkane</b>	<b>Hopane (ug g</b>
528.94	22.77	44.15	10.50	20.04	12.38	0.00
39.54	7.00	38.64	5.32	30.11	3.57	11.78
30.45	4.87	22.77	3.03	16.36	2.01	8.82
72.54	12.92	41.78	7.07	25.60	5.14	8.70
40.32	8.65	37.53	4.90	23.32	2.88	11.45
40.25	105.05	124.52	86.42	83.01	58.51	12.73
30.17	23.03	44.74	16.50	25.84	10.89	9.95
168.80	80.02	34.40	72.09	25.24	119.09	0.00
39.64	20.02	81.37	12.69	32.94	7.34	0.00
225.73	49.33	152.81	36.25	66.57	23.78	0.00
592.21	41.19	120.17	38.72	41.85	24.99	0.00
372.13	38.11	112.94	23.07	43.63	21.67	0.00
857.62	82.60	295.74	56.52	116.73	45.31	0.00
361.52	26.81	87.19	33.63	30.07	20.36	0.00
1298.60	72.87	210.00	70.69	72.50	66.81	0.00
1217.43	85.53	239.38	86.81	89.78	89.00	0.00
1259.66	81.90	262.03	55.94	73.55	38.09	0.00
1333.22	77.51	246.31	57.64	80.64	47.74	0.00
1219.94	75.00	246.02	49.82	80.22	37.29	0.00
727.68	66.41	228.21	42.16	78.60	30.37	0.00
846.87	63.16	245.50	44.95	82.18	29.74	0.00
518.86	38.28	154.20	28.72	52.72	18.56	0.00
817.80	53.38	211.75	21.30	59.85	16.67	0.00

C31 n-alkane	C32 n-alkane	Hopane (ug g	C33 n-alkane	Hopane (ug g	Hopane (ug g	C34 n-alkane
13.85	4.08	0.00	5.48	0.00	0.00	13.91
21.73	2.65	9.27	5.25	3.92	2.18	2.65
12.39	2.16	7.20	2.91	2.91	3.49	3.14
16.79	7.69	6.01	4.79	3.57	4.08	3.40
15.77	3.10	8.63	3.74	3.00	3.34	4.87
54.88	31.38	8.78	24.79	7.61	11.72	3.84
13.31	6.16	6.72	3.28	3.38	4.69	3.30
29.21	240.94	0.00	59.23	0.00	0.00	0.00
18.70	8.67	0.00	5.17	0.00	0.00	0.00
36.49	3.89	0.00	12.09	0.00	0.00	16.12
24.11	20.34	0.00	7.82	0.00	0.00	11.10
24.11	15.49	0.00	9.28	0.00	0.00	8.87
60.80	32.88	0.00	24.19	0.00	0.00	0.00
18.05	0.00	0.00	5.90	0.00	0.00	8.23
41.46	26.27	0.00	15.16	0.00	0.00	16.24
55.18	46.07	0.00	25.94	0.00	0.00	42.23
40.82	18.18	0.00	10.22	0.00	0.00	12.94
44.90	21.39	0.00	11.99	0.00	0.00	14.00
42.74	24.64	0.00	13.15	0.00	0.00	16.27
37.96	20.78	0.00	8.52	0.00	0.00	10.46
38.32	25.81	0.00	11.56	0.00	0.00	14.37
22.23	20.38	0.00	8.04	0.00	0.00	10.29
27.52	0.00	0.00	0.00	0.00	0.00	0.00

Hopane (ug g	sum odd C15	sum odd C21	sum odd C27	CPI 25-33	SC:LC	ACL 27-33
0.00	906.00	638.29	83.52	6.94	4.93	28.8
4.58	104.27	74.24	95.72	6.08	1.61	28.9
3.62	143.87	60.17	54.43	5.65	3.31	28.9
3.49	208.79	135.27	88.96	3.74	4.08	28.9
4.07	368.74	98.36	80.36	5.05	7.67	28.8
5.85	18.17	105.57	287.19	1.05	0.21	29.1
3.11	197.77	85.19	87.17	1.78	3.25	28.7
0.00	447.09	413.09	148.07	0.40	0.83	30.7
0.00	103.02	123.47	138.18	3.19	1.36	28.5
0.00	623.65	384.97	267.97	3.31	3.16	28.4
0.00	377.25	771.05	193.95	3.88	1.15	28.6
0.00	392.43	550.50	189.95	3.78	1.94	28.6
0.00	625.65	1323.82	497.45	4.21	1.43	28.5
0.00	233.84	483.09	141.20	3.95	1.28	28.3
0.00	208.18	1528.96	339.11	4.14	0.68	28.6
0.00	1003.40	1507.03	410.28	3.27	1.51	28.8
0.00	2235.60	1706.86	386.62	5.21	1.86	28.3
0.00	426.96	1735.46	383.84	5.11	0.78	28.4
0.00	691.28	1532.34	382.14	5.28	1.27	28.4
0.00	364.40	1047.81	353.28	4.46	1.31	28.3
0.00	652.03	1155.29	377.56	4.86	1.35	28.4
0.00	375.26	830.89	237.18	4.65	1.72	28.4
0.00	1612.87	1227.03	299.12	7.75	2.46	27.9

Cmax	Paq index	Sum Hopane:Pristane:Phytane	
18	0.94	0	7.00
18	0.52	31.72	5.33
17	0.61	26.04	6.95
18	0.70	25.85	4.15
18	0.63	30.50	7.48
27	0.37	46.69	0.26
18	0.62	27.86	0.17
19	0.82	0	
20	0.62	0	1.14
16	0.75	0	1.83
25	0.91	0	1.42
25	0.86	0	2.11
25	0.85	0	1.38
25	0.89	0	0.71
25	0.92	0	0.46
25	0.90	0	0.96
19	0.94	0	0.85
25	0.92	0	0.84
25	0.91	0	0.62
25	0.87	0	0.41
25	0.89	0	0.58
25	0.89	0	1.07
19	0.90	0	0.19

<b>SAMPLE ID</b>	<b>Depth (cm)</b>	<b>n-C12 OH (ug</b>	<b>n-C13 OH (ug</b>	<b>n-C15 ketone</b>	<b>n-C14 OH (ug</b>	<b>n-C15 OH (ug</b>
2-C0-1 F2	1	3.44	3.51	6.92	15.57	31.34
2-C0-2 F2	5	1.29	2.04	1.32	7.39	10.06
2-C0-3 F2	10	1.10	1.41	2.37	4.63	6.72
2-C0-4 F2	15	1.17	3.17	4.83	14.83	20.15
2-C0-5 F2	20	1.24	2.48	5.44	8.26	9.55
2C-C1-2 F2	38	1.03	3.88	2.04	19.53	32.96
2C-C1-4 F2	42.75	7.04	5.60	6.04	19.02	24.94
2C-C1-7 F2	49.75	5.79	5.73	5.76	27.37	36.80
2C-C1-10 F2	59.25	4.85	6.69	8.16	37.97	55.99
2C-C1-11 F2	62	10.97	8.89	7.98	51.46	47.15
2C-C1-14 F2	69	3.75	4.37	6.11	38.35	47.32
2C-C1-15 F2	71	10.65	7.94	8.43	72.08	63.64
2C-C1-18 F2	78	2.92	9.87	7.27	83.07	113.25
2C-C1-21 F2	93.25	7.00	4.97	5.74	40.77	32.18
2C-C1-24 F2	102.5	1.79	3.67	3.69	39.30	45.37
2C-C1-25 F2	105.5	8.22	9.48	10.42	51.55	52.75
2C-C1-26 F2	108.25	10.27	9.27	14.77	74.90	65.01
2C-C1-28 F2	113.5	5.80	6.80	8.46	46.77	58.12
2C-C2-1 F2	121	5.57	6.49	6.39	59.70	66.37
2C-C2-3 F2	126	5.81	5.96	7.66	39.68	49.05
2C-C2-5 F2	130	6.21	7.15	9.17	58.38	69.69
2C-C2-7 F2	134.25	2.96	6.79	5.70	38.03	60.36
2C-C2-9 F2	139.25	3.40	7.69	6.36	44.94	58.37

n-C17 ketone	n-C16 OH (ug g <sup>-1</sup> )	n-C18 ketone	n-C17 OH (ug g <sup>-1</sup> )	Phytol (ug g <sup>-1</sup> )	n-C19 ketone	n-C18 OH (ug g <sup>-1</sup> )
0.00	102.79	18.33	84.21	0.00	0.00	241.45
1.66	35.08	2.88	17.02	0.00	0.00	77.30
1.51	22.62	4.08	11.39	0.00	0.00	51.32
4.37	63.85	7.46	30.71	0.00	0.00	107.67
2.71	34.52	4.99	14.08	0.00	3.70	70.85
3.39	77.07	10.46	51.96	3.95	5.49	220.22
9.75	64.42	7.44	27.28	8.41	6.11	191.12
11.97	96.48	11.88	40.47	13.59	5.21	289.77
15.65	130.40	12.16	68.28	0.00	7.19	363.75
5.30	171.65	13.78	56.70	28.83	17.18	651.37
2.89	121.84	18.74	54.49	22.34	6.73	387.08
5.58	206.58	25.68	79.09	90.41	7.20	687.99
18.16	371.48	34.00	215.37	13.50	13.36	1689.54
3.36	105.81	13.73	33.63	16.79	6.58	299.88
13.87	153.28	19.07	65.06	99.88	8.22	652.34
18.05	174.65	16.66	67.77	115.73	6.09	739.19
6.60	204.84	21.07	68.13	96.01	13.12	74.58
4.38	160.88	20.86	78.50	78.29	8.83	665.01
6.28	198.21	25.18	95.16	216.43	13.96	703.00
5.80	153.37	31.00	87.04	47.40	4.26	741.69
6.16	201.69	31.61	88.23	71.42	12.07	738.18
4.56	150.20	17.67	89.49	7.06	5.72	545.45
9.65	149.07	13.52	79.74	4.68	16.49	541.43



n-C20 ketone	n-C21 ketone	n-C20 OH (ug	n-C22 ketone	n-C21 OH (ug	n-C23 ketone	n-C22 OH (ug
3.04	1.84	48.97	23.04	5.84	12.05	97.03
2.88	6.02	45.57	4.38	5.70	11.29	96.20
2.29	4.76	37.96	3.27	8.24	8.07	97.96
4.41	7.24	46.73	9.17	6.08	12.99	91.36
2.48	5.14	52.99	3.47	8.36	5.49	153.86
9.55	12.79	41.77	10.12	17.83	34.36	424.19
4.54	8.44	44.02	8.97	17.33	20.81	340.80
6.17	10.25	44.32	12.84	13.93	21.86	344.26
6.18	17.40	47.16	26.11	16.52	31.43	184.68
5.50	3.97	150.52	21.30	40.39	31.47	602.93
8.08	16.18	60.87	12.82	18.50	23.83	237.41
8.50	16.45	112.29	20.71	28.87	29.39	325.59
19.33	22.09	246.43	83.36	72.52	57.50	524.52
4.16	4.61	48.50	12.11	11.34	10.61	117.47
5.39	3.85	132.66	24.74	31.80	25.77	304.98
31.21	9.67	148.24	22.98	38.37	36.25	367.68
5.20	6.28	103.61	23.39	28.09	26.72	341.21
6.81	10.28	102.24	22.27	30.32	27.47	345.50
6.48	18.24	97.77	42.86	30.83	40.74	17.49
7.96	11.12	95.03	49.58	36.06	27.05	426.50
10.75	14.79	74.97	44.56	22.04	37.59	344.96
7.07	14.55	79.13	24.00	29.74	23.14	238.44
8.84	12.18	106.45	14.57	38.37	47.83	470.02

n-C23 OH (ug	n-C25 ketone	n-C24 OH (ug	n-C26 ketone	n-C25 OH (ug	n-C26 OH (ug	n-C27 OH (ug
7.90	4.33	13.74	0.00	31.39	3.89	13.30
8.82	7.30	64.42	0.00	5.34	37.32	6.15
9.20	5.34	73.03	0.00	2.77	29.57	9.76
12.03	6.80	76.17	0.00	2.84	37.47	1.78
14.68	3.83	116.26	0.00	3.96	35.33	7.81
22.65	18.61	86.99	7.18	7.06	20.55	8.59
28.09	8.55	176.41	56.71	8.17	67.25	15.88
21.34	12.62	148.98	19.28	9.99	61.25	1.49
23.21	13.30	105.93	116.15	16.07	22.14	5.39
66.80	16.63	417.87	177.62	33.43	126.74	8.48
30.04	21.40	121.34	10.53	10.32	18.10	7.10
41.06	17.26	172.13	37.85	17.28	29.30	8.18
57.62	21.61	249.27	83.89	34.86	52.88	8.74
15.09	6.54	60.07	11.39	6.43	11.40	4.74
37.70	16.64	152.57	79.31	18.21	22.55	6.80
50.25	7.43	203.83	55.07	16.77	20.05	4.55
45.68	22.12	160.00	89.29	19.04	12.17	8.48
45.57	21.32	168.19	60.88	22.83	26.02	7.67
67.83	19.96	316.19	59.79	43.46	91.47	9.83
62.79	17.14	214.50	21.50	24.25	25.03	16.72
53.96	24.36	228.54	62.49	31.94	44.86	23.51
29.60	7.91	77.27	65.96	10.74	7.68	73.00
64.41	26.91	285.38	29.72	21.77	48.42	0.00

n-C28 OH (ug	Cholesterol (u	Stigmasterol	Sitosterol (ug	Sitostanol (u	Hopanol (ug g	sum even C1
2.51	3.58	0.00	4.74	0.00	7.00	359.81
16.88	7.23	10.10	23.63	63.12	76.95	119.77
7.52	10.79	9.72	21.00	40.19	54.72	78.56
12.03	5.11	13.62	8.98	42.45	59.92	186.35
7.72	8.30	24.44	16.18	58.48	0.00	113.64
4.73	8.20	23.53	0.00	13.82	127.16	316.82
10.87	39.11	32.88	0.00	0.00	77.32	274.56
9.89	38.37	19.28	0.00	0.00	43.68	413.61
5.48	11.24	0.00	1.95	0.00	12.43	532.11
37.09	136.92	10.01	0.00	0.00	23.28	874.47
15.25	28.70	0.00	7.66	0.00	27.60	547.28
13.79	47.66	0.00	11.09	0.00	30.45	966.66
22.23	82.70	0.00	19.76	0.00	19.49	2144.09
6.49	22.46	0.00	2.06	10.88	9.31	446.45
17.38	41.66	2.17	6.03	5.72	4.10	844.91
10.51	49.33	6.73	26.61	13.75	6.42	965.39
17.34	22.22	0.00	0.00	19.33	5.83	354.33
24.61	46.49	0.00	7.07	14.42	7.84	872.65
57.12	34.71	0.00	6.11	11.09	10.55	960.91
11.15	22.76	0.00	7.02	11.11	8.93	934.74
17.21	29.02	0.00	5.09	18.84	16.48	998.25
8.19	6.82	0.00	7.63	0.00	38.40	733.67
28.07	53.01	0.00	13.43	0.00	15.82	735.45

sum even C2	sum even C2	CPI 22-28	Cholesterol:f	ACL C22-28	Cmax	C26-28/C22-28
159.75	6.40	1.28	0.76	23.34	18	0.06
206.18	54.20	7.80	0.07	23.85	22	0.34
208.95	37.09	7.15	0.15	23.64	22	0.22
214.27	49.50	9.93	0.08	23.73	18	0.30
323.12	43.05	8.79	0.08	23.43	22	0.16
552.95	25.28	8.41	0.22	22.65	22	0.05
561.24	78.12	8.05	1.19	23.26	22	0.15
537.56	71.14	11.80	1.99	23.11	22	0.14
337.77	27.62	4.99	5.76	23.19	18	0.10
1171.33	163.83	7.95	13.68	23.37	18	0.16
419.62	33.35	5.60	3.75	23.14	18	0.09
610.01	43.09	5.58	4.30	23.12	18	0.09
1020.22	75.10	5.69	4.19	23.10	18	0.10
226.03	17.89	5.08	1.74	23.19	18	0.10
590.21	39.93	5.36	2.99	23.12	18	0.09
719.75	30.56	5.77	1.05	23.00	18	0.05
604.83	29.51	4.80	1.15	23.02	22	0.06
615.93	50.63	4.99	2.16	23.16	18	0.10
431.45	148.59	3.67	2.02	24.63	18	0.45
736.03	36.17	4.42	1.26	23.04	18	0.06
648.47	62.07	4.15	1.21	23.35	18	0.11
394.83	15.87	1.84	0.89	23.49	18	0.05
861.85	76.50	6.76	3.95	23.16	18	0.10



Naafs et al. 2017 Jonge et al. 2014

Sample ID	Depth (cm)	BIT	pHpeat	pH
2-C0-1	1	1.00	6.9	6.7
2-C0-2	5	1.00	6.9	6.9
2-C0-3	10	1.00	6.9	6.9
2-C0-4	15	1.00	6.9	6.8
2-C0-5	20	1.00	6.9	6.9
2C-C1-2	38	1.00	7.1	7.1
2C-C1-4	42.75	1.00	7.1	7.1
2C-C1-7	49.75	1.00	6.9	6.8
2C-C1-10	59.25	1.00	7.0	7.0
2C-C1-11	62	1.00	6.9	6.8
2C-C1-14	69	1.00	6.9	6.9
2C-C1-18	78	1.00	7.0	6.6
2C-C1-21	93.25	1.00	6.9	6.8
2C-C1-24	102.5	1.00	7.0	6.7
2C-C1-25	105.5	1.00	7.2	6.8
2C-C1-26	108.25	1.00	7.1	6.8
2C-C1-28	113.5	1.00	7.1	6.7
2C-C2-1	121	1.00	6.9	6.5
2C-C2-3	126	1.00	7.1	6.7
2C-C2-5	130	1.00	7.0	6.7
2C-C2-7	134.25	1.00	6.9	6.6
2C-C2-9	139.25	1.00	6.9	6.6

Uncorr. T-model (calibr to MAAT >0C)		Uncorr. T0-model (not synthesized at T<0C)	
Naafs et al. 2017	Crampton-Flood et al 2020	DeJonge et al. 2014	Crampton-Flood et al 2020
MAATpeat °C	ayMBT MAAT °C	MAAT °C	ayMBT MAAT °C
-5.3	-5.0	2.1	3.7
-6.4	-6.1	1.5	3.6
-5.9	-5.5	1.8	3.8
-5.8	-5.6	1.8	4.0
-6.9	-6.9	1.2	3.4
-9.5	-8.7	-0.4	2.6
-10.2	-9.4	-0.8	2.5
-3.3	-3.6	3.3	4.4
-10.6	-10.4	-1.1	2.3
-7.5	-7.2	0.8	3.2
-5.9	-6.0	1.8	3.7
-0.4	-0.8	5.1	6.4
-3.7	-4.0	3.1	4.5
0.5	-0.6	5.6	6.7
-0.5	-2.0	5.0	5.4
1.1	-0.3	6.0	6.5
1.8	0.4	6.4	7.1
-0.3	-1.1	5.1	6.1
0.5	-0.9	5.6	6.3
0.3	-0.4	5.5	6.6
0.7	0.2	5.7	6.3
0.1	-0.4	5.4	6.4