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7. ANEXOS

Anexo 1. Áreas dos picos de possíveis metabólitos por CLAE/EM nas amostras controle

Picos/Amostras	Controle 48h	Controle 48h hidrolisada	Controle 72h	Controle 72h hidrolisada
Fenantreno diol	nd	nd	nd	nd
Fenantreno epoxido	nd	256524	nd	213274
Trihidroxi fenantreno	nd	nd	nd	nd
Não identificado 1	nd	nd	nd	nd
Não identificado 2	nd	nd	nd	nd
Fenantreno monolepoxido	nd	397932	nd	307199
Fenantreno diolepoxido	nd	139105	nd	147185
Fenantreno glicosideo	nd	nd	nd	161284
Fenantreno tetrol	nd	nd	nd	nd
Não identificado 3	nd	nd	nd	nd
Fenantreno ortoquinona	nd	nd	nd	91156
Monohidroxi fenantreno	nd	nd	nd	nd
Não identificado 3	nd	nd	nd	nd
a	17716	nd	16258	nd
b	159343	nd	196299	nd
c	103560	nd	114409	nd
d	165894	nd	154613	nd
w	nd	nd	nd	nd
Y	nd	nd	nd	nd
Z	nd	nd	nd	nd

Anexo 2. Áreas dos picos de possíveis metabólitos por CLAE/EM nas amostras inoculadas com fenantreno

Picos/Amostras	Fenantreno 24h	Fenantreno 24h hidrolisada	Fenantreno 48h	Fenantreno 48 hidrolisada
Fenantreno diol	nd	nd	nd	nd
Fenantreno epoxido	nd	204649	nd	181217
Trihidroxi fenantreno	nd	nd	nd	nd
Não identificado 1	nd	nd	nd	nd
Não identificado 2	nd	nd	nd	nd
Fenantreno monolepoxido	nd	288572	nd	289902
Fenantreno diolepoxido	nd	119323	nd	133533
Fenantreno glicosideo	nd	nd	nd	nd
Fenantreno tetrol	nd	nd	nd	nd
Não identificado 3	nd	nd	nd	nd
Fenantreno ortoquinona	nd	nd	221006	nd
Monohidroxi fenantreno	nd	nd	nd	nd
Não identificado 3	nd	nd	nd	nd
a	17488	nd	76143	nd
b	86673	nd	243253	nd
c	40895	nd	nd	nd
d	101752	nd	291545	nd
w	nd	nd	nd	nd
Y	nd	nd	56566	nd
Z	nd	nd	72506	nd

Anexo 3. Áreas dos picos de possíveis metabólitos por CLAE/EM nas amostras inoculadas com 1-Metil fenantreno

Picos/Amostras	1-Metil fenantreno 24h	1-Metil fenantreno 24h hidrolisada	1-Metil fenantreno 48h	1-Metil fenantreno 48h hidrolisada
Fenantreno diol	nd	nd	nd	nd
Fenantreno epoxido	nd	246895	nd	250999
Trihidroxi fenantreno	nd	nd	nd	nd
Não identificado 1	nd	nd	nd	nd
Não identificado 2	nd	nd	nd	nd
Fenantreno monolepoxido	nd	335928	nd	394381
Fenantreno diolepoxido	nd	141497	nd	133055
Fenantreno glicosideo	nd	58811	nd	nd
Fenantreno tetrol	nd	nd	nd	79494
Não identificado 3	nd	nd	nd	nd
Fenantreno ortoquinona	nd	130567	nd	148400
Monohidroxi fenantreno	nd	nd	nd	nd
Não identificado 3	nd	n.f	nd	96596
a	58630	nd	nd	nd
b	201145	nd	nd	nd
c	434218	nd	nd	nd
d	nd	nd	nd	nd
w	nd	nd	5142232	nd
Y	nd	nd	nd	nd
Z	nd	nd	nd	nd

Anexo 4. Áreas dos picos de possíveis metabólitos por CLAE/EM nas amostras inoculadas com 2,6,9-Trimetil fenantreno

Picos/Amostras	2,6,9-Trimetil fenantreno 24h	2,6,9-Trimetil fenantreno 24h hidrolisada	2,6,9-Trimetil fenantreno 48h	2,6,9-Trimetil fenantreno 48h hidrolisada
Phenanthrene Diol	nd	nd	nd	nd
Phenanthrene epoxide	nd	211474	nd	163993
Trihydroxyphenanthrene	nd	nd	nd	nd
Não identificado 1	nd	nd	nd	nd
Não identificado 2	nd	nd	nd	nd
Phenanthrene monolepoxide	nd	303633	nd	296263
Phenanthrene diolepoxide	nd	102758	nd	172322
Phenanthrene glicoside	nd	nd	nd	nd
Phenanthrene tetrol	nd	nd	nd	nd
Não identificado 3	113820	nd	291773*	nd
Phenanthrene orthoquinone	nd	nd	291773*	nd
OH-phenanthrene	nd	nd	nd	nd
Não identificado 4	nd	nd	nd	nd
a	38190	nd	43269	nd
b	497690	nd	202469	nd
c	325295	nd	335832	nd
d	nd	nd	nd	nd
w	nd	nd	nd	nd
Y	nd	nd	nd	nd
Z	nd	nd	nd	nd

Anexo 5. Resultado contagem de células do ensaio do MN no bioensaio 2 dos organismos expostos ao sedimento

Ensaio/Tempo	Células normais	1MN	2 ou +MN	MN total
Sed/24h	1360	1	0	1
Sed/24h	1339	2	0	2
Sed/24h	1349	2	0	2
Sed/24h	1928	0	0	0
Sed/24h	448	0	0	0
Sed/24h	1026	2	0	2
Sed/48h	1786	2	0	2
Sed/48h	2625	2	1	3
Sed/48h	3197	0	1	1
Sed/72h	2042	0	0	0
Sed/72h	2225	4	0	4
Sed/72h	1626	6	0	6
Sed/96h	1347	3	0	3
Sed/96h	865	5	0	5

Anexo 6. Resultado contagem de células do ensaio do MN no bioensaio 3

Tempo	Ensaio	Ensaio/Tempo	Células normais	1MN	2 ou +MN
24h	Controle	Cont. 24h	716	0	0
72h	Controle	Cont. 72h	1354	0	0
24h	Fen	Fen 24h	762	0	0
24h	Fen	Fen 24h	611	0	0
24h	Fen	Fen 24h	x	0	0
24h	Fen	Fen 24h	332	0	0
24h	Fen	Fen 24h	x	0	0
48h	Fen	Fen 48h	362	0	
48h	Fen	Fen 48h	1501	0	5
72h	Fen	Fen 72h	x	0	0
24h	TriMeFen	TriMeF 24h	1816	1	1
24h	TriMeFen	TriMeF 24h	1091	0	0
24h	TriMeFen	TriMeF 24h	1127	0	1
24h	TriMeFen	TriMeF 24h	1091	0	0
48h	TriMeFen	TriMeF 48h	x	0	0
48h	TriMeFen	TriMeF 48h	300	0	0
72h	TriMeFen	TriMeF 72h	x	0	0

Anexo 7. Resultado contagem de células do ensaio do MN no bioensaio 3 (cont.)

Tempo	Ensaio	Ensaio/Tempo	Células normais	1MN	2 ou +MN
24h	1-MeFen	1-MeF 24h	596	0	0
24h	1-MeFen	1-MeF 24h	x	0	0
24h	1-MeFen	1-MeF 24h	816	0	0
24h	1-MeFen	1-MeF 24h	1004	1	2
24h	1-MeFen	1-MeF 24h	847	0	1
48h	1-MeFen	1-MeF 48h	178	0	0
48h	1-MeFen	1-MeF 48h	1088	1	0
48h	1-MeFen	1-MeF 48h	965	0	0
48h	1-MeFen	1-MeF 48h	938	2	0
72h	1-MeFen	1-MeF 72h	x	0	0
72h	1-MeFen	1-MeF 72h	x	0	0

Anexo 8. Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de hepatopâncreas do bioensaio 1 (ng.g-1)

Amostra	Maio 09 Fen 12h	Maio 089 Fen 24h	Maio 09 Fen 48h	Maio 09 Fen 72h
NAF	19,77	27,78	21,13	<LD
1ME_NAF	11,92	11,12	7,73	<LD
2Me_NAF	11,33	17,54	13,28	<LD
C2_NAF	52,03	61,98	37,54	N/F
C3_NAF	29,29	17,06	31,32	5,22
C4_NAF	237,49	-13,29	77,84	17,71
ACENAFTY	<LD	<LD	<LD	nd
ACE	<LD	<LD	<LD	<LD
FLUOR	34,43	47,31	45,90	<LQ
C1_FLUOR	56,34	106,72	75,12	11,31
C2_FLUOR	381,97	-9,21	509,29	85,89
C3_FLUOR	481,66	1201,76	642,22	175,87
DBZTIOF	177,77	466,57	115,55	70,13
C1_DBZTIOF	20,20	1,38	22,69	8,44
C2_DBZTIOF	33,40	82,04	37,54	18,29
C3_DBZTIOF	52,95	124,71	53,60	28,76
FEN	16047,17	50637,03	21396,22	7987,62
C1_FEN	37,48	-11,22	49,97	19,37
C2_FEN	241,33	-11,22	321,77	114,87
C3_FEN	945,06	-4,26	1260,07	301,71
C4_FEN	119,83	240,15	159,77	45,16
ANT	128,80	503,08	171,73	58,80
FLUORAN	19,50	18,36	26,00	8,64
PIR	43,45	17,28	57,94	18,56
C1_PIR	84,85	34,47	113,13	35,35
C2_PIR	24,73	1,57	32,97	13,26
Bz(a)ANT	16,43	<LD	21,91	<LD
CRIS	2,32	<LD	<LD	7,51
C1_CRIS	<LD	<LD	<LD	<LD
C2_CRIS	<LD	<LD	<LD	<LD
Bz(b)FLUOR	<LD	<LD	<LD	<LD
Bz(k)FLUOR	6,76	<LD	<LQ	<LD
Bz(e)PIR	<LQ	4,96	<LQ	N/F
Bz(a)PIR	nd	<LD	<LD	<LD
Perileno	nd	2,14	nd	nd
Indeno(123-cd)PIR	<LD	<LD	<LD	<LD
DBz(ah)ANT	<LD	<LD	<LD	nd
Bz(ghi)PERIL	<LD	<LD	<LD	<LD
p-TERPHd14	117,83	98,34	124,20	83,56
16 HPA	16318,63	51250,83	21740,83	8081,14
Σ HPA	19318,24	53575,80	25302,25	9032,47

Anexo 9. Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de hepatopâncreas do bioensaio 1 (ng.g-1)

Amostra	Maio 09 Óleo 12h	Maio 09 Óleo 24h	Maio 09 Óleo 48h	Maio 09 Óleo 72h
NAF	13,26	31,50	22,42	39,54
1ME_NAF	124,35	290,01	376,66	342,59
2Me_NAF	156,77	322,19	410,88	422,73
C2_NAF	792,04	2795,62	3702,55	2698,31
C3_NAF	423,85	1222,89	1503,39	973,70
C4_NAF	388,28	878,91	989,51	644,68
ACENAFTY	nd	10,08	11,88	10,39
ACE	21,52	71,78	80,37	59,94
FLUOR	27,28	82,49	84,27	73,23
C1_FLUOR	135,85	225,98	227,34	208,65
C2_FLUOR	404,24	344,16	417,53	<LD
C3_FLUOR	317,43	233,23	263,51	265,37
DBZTIOF	26,23	70,41	61,66	53,81
C1_DBZTIOF	56,53	113,53	138,02	0,65
C2_DBZTIOF	50,74	82,28	125,23	86,74
C3_DBZTIOF	32,72	48,07	75,27	92,03
FEN	144,06	434,44	361,34	261,46
C1_FEN	261,10	453,77	552,20	388,77
C2_FEN	244,89	303,92	417,64	276,63
C3_FEN	387,37	14,66	146,60	11,57
C4_FEN	30,67	23,74	22,71	57,40
ANT	10,88	68,40	71,28	60,47
FLUORAN	8,64	10,69	15,49	22,52
PIR	27,26	18,29	28,66	28,73
C1_PIR	19,02	6,24	10,81	12,33
C2_PIR	15,07	0,85	3,93	12,17
Bz(a)ANT	6,68	<LD	0,88	19,92
CRIS	3,28	<LD	4,40	6,17
C1_CRIS	<LD	<LD	<LD	<LD
C2_CRIS	<LD	<LD	<LD	<LD
Bz(b)FLUOR	nd	<LD	<LD	<LD
Bz(k)FLUOR	<LD	<LD	<LD	<LD
Bz(e)PIR	nd	2,85	3,07	2,13
Bz(a)PIR	<LD	<LD	<LD	<LD
Perileno	nd	1,19	1,36	1,01
Indeno(123-cd)PIR	<LD	<LD	<LD	<LD
DBz(ah)ANT	<LD	<LD	<LD	<LD
Bz(ghi)PERIL	<LD	<LD	<LD	<LD
p-TERPHd14	86,40	76,45	75,70	88,97
16 HPA	262,87	727,67	680,98	582,36
Σ HPA	4130,04	8162,16	10130,86	7133,65

Anexo 10. Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de hepatopâncreas do bioensaio 1 (ng.g-1)

Amostra	Ago 09 Campo	Ago 09 To	Ago 09 Cont. 24hs	Ago 09 Cont. 48hs	Ago 09 Cont. 48hs
NAF	27,10	nd	38,46	34,24	nd
1ME_NAF	19,08	nd	15,67	32,14	nd
2Me_NAF	34,67	nd	21,41	26,13	nd
C2_NAF	nd	nd	nd	nd	nd
C3_NAF	<LD	<LD	<LD	<LD	<LD
C4_NAF	<LD	<LD	<LD	<LD	<LD
ACENAFTY	19,31	nd	15,65	nd	nd
ACE	nd	nd	nd	nd	nd
FLUOR	nd	nd	20,19	nd	nd
C1_FLUOR	<LD	<LD	<LD	<LD	<LD
C2_FLUOR	<LD	<LD	<LD	<LD	<LD
C3_FLUOR	<LD	<LD	<LD	<LD	<LD
DBZTIOF	nd	nd	<LQ	nd	nd
C1_DBZTIOF	<LD	<LD	<LD	<LD	<LD
C2_DBZTIOF	<LD	<LD	<LD	<LD	<LD
C3_DBZTIOF	<LD	<LD	<LD	<LD	<LD
FEN	116,46	nd	46,95	31,39	37,52
C1_FEN	<LD	<LD	<LD	<LD	<LD
C2_FEN	<LD	<LD	<LD	<LD	<LD
C3_FEN	<LD	<LD	<LD	<LD	<LD
C4_FEN	<LD	<LD	<LD	<LD	<LD
ANT	nd	nd	nd	nd	nd
FLUORAN	nd	nd	nd	nd	nd
PIR	nd	nd	nd	nd	nd
C1_PIR	<LD	<LD	<LD	<LD	<LD
C2_PIR	<LD	<LD	<LD	<LD	<LD
Bz(a)ANT	8,15	nd	nd	nd	nd
CRIS	<LQ	nd	nd	nd	nd
C1_CRIS	<LD	<LD	<LD	<LD	<LD
C2_CRIS	<LD	<LD	<LD	<LD	<LD
Bz(b)FLUOR	nd	nd	nd	nd	nd
Bz(k)FLUOR	nd	nd	nd	nd	nd
Bz(e)PIR	nd	nd	nd	nd	nd
Bz(a)PIR	nd	nd	nd	nd	nd
Perileno	nd	nd	nd	nd	nd
Indeno(123-cd)PIR	nd	nd	nd	nd	nd
DBz(ah)ANT	nd	nd	nd	nd	nd
Bz(ghi)PERIL	nd	nd	nd	nd	nd
p-TERPHd14	76,28	83,06	71,71	66,73	65,18
16 HPA	171,01	0,00	121,25	65,63	37,52
Σ HPA	224,76	0,00	158,34	123,90	37,52

Anexo 11 Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de hepatopâncreas do bioensaio 1 (ng.g-1)

Amostra	Ago 09 Óleo 24hs	Ago 09 Óleo 48hs	Ago 09 Óleo 48hs
NAF	144,30	46,34	39,69
1ME_NAF	366,75	150,17	164,54
2Me_NAF	490,36	179,95	214,84
C2_NAF	8056,10	1897,76	2026,68
C3_NAF	22778,71	1671,33	1530,64
C4_NAF	9863,39	1053,27	1091,90
ACENAFTY	23,75	18,12	31,98
ACE	37,06	44,12	65,78
FLUOR	76,27	55,77	104,22
C1_FLUOR	170,63	<LD	174,67
C2_FLUOR	<LD	<LD	<LD
C3_FLUOR	<LD	<LD	<LD
DBZTIOF	43,80	nd	46,06
C1_DBZTIOF	<LD	<LD	<LD
C2_DBZTIOF	<LD	<LD	<LD
C3_DBZTIOF	<LD	<LD	<LD
FEN	233,60	200,66	232,63
C1_FEN	3921,28	18504,79	4603,71
C2_FEN	<LD	<LD	<LD
C3_FEN	<LD	<LD	<LD
C4_FEN	<LD	<LD	<LD
ANT	75,42	109,30	165,49
FLUORAN	nd	nd	nd
PIR	nd	nd	nd
C1_PIR	<LD	<LD	<LD
C2_PIR	<LD	<LD	<LD
Bz(a)ANT	nd	nd	nd
CRIS	nd	nd	nd
C1_CRIS	<LD	<LD	<LD
C2_CRIS	<LD	<LD	<LD
Bz(b)FLUOR	nd	nd	nd
Bz(k)FLUOR	nd	nd	nd
Bz(e)PIR	nd	nd	nd
Bz(a)PIR	nd	nd	nd
Perileno	nd	nd	nd
Indeno(123-cd)PIR	nd	nd	nd
DBz(ah)ANT	nd	nd	nd
Bz(ghi)PERIL	nd	nd	nd
p-TERPHd14	62,43	73,02	60,40
16 HPA	590,39	474,31	639,78
Σ HPA	46281,41	23931,58	10492,83

Anexo 12 Concentração dos hidrocarbonetos policíclicos aromáticos individuais no óleo árabe leve e concentração real inoculada no bioensaio 1 (ng.g-1)

Amostra	óleo árabe	Conc. Inoculada
NAF	1452,1	2904,2
1ME_NAF	18852,1	37704,2
2Me_NAF	10558,1	21116,2
C2_NAF	61032,3	122064,6
C3_NAF	55181,6	110363,2
C4_NAF	28911,0	57822
ACE	469,6	939,2
ACENAFTY	1885,6	3771,2
FLUOR	1404,5	2809
C1_FLUOR	3724,8	7449,6
C2_FLUOR	5529,5	11059
C3_FLUOR	3934,1	7868,2
DBZTIOF	804,7	1609,4
C1_DBZTIOF	1564,3	3128,6
C2_DBZTIOF	895,2	1790,4
C3_DBZTIOF	364,8	729,6
FEN	4914,4	9828,8
C1_FEN	8051,6	16103,2
C2_FEN	4921,2	9842,4
C3_FEN	1272,9	2545,8
C4_FEN	259,8	519,6
ANT	1033	2066
FLUORAN	27,2	54,4
PIR	125,1	250,2
C1_PIR	84	168
C2_PIR	23	46
Bz(a)ANT	1,1	2,2
CRIS	1,7	3,4
C1_CRIS	1,9	3,8
C2_CRIS	1,2	2,4
Bz(b)FLUOR	<0,5	-
Bz(k)FLUOR	nd	-
Bz(e)PIR	<0,5	-
Bz(a)PIR	<0,5	-
Perileno	nd	-
Indeno(123-cd)PIR	nd	-
DBz(ah)ANT	nd	-
Bz(ghi)PERIL	nd	-
p-TERPHd14	90,44	-
16 HPA	11314,3	-
ΣHPA	217282,4	-

Anexo 13 Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de hepatopâncreas após 96 horas do bioensaio 2 (ng.g-1)

Amostra	Controle 96h	Sedimento 96h
NAF	1,78	nd
1ME_NAF	4,25	6,42
2Me_NAF	1,12	4,81
C2_NAF	nd	nd
C3_NAF	nd	nd
C4_NAF	nd	nd
ACENAFTY	3,04	4,30
ACE	1,43	1,58
FLUOR	8,25	5,25
C1_FLUOR	nd	2,54
C2_FLUOR	nd	nd
C3_FLUOR	nd	nd
DBZTIOF	nd	18,71
C1_DBZTIOF	nd	nd
C2_DBZTIOF	nd	nd
C3_DBZTIOF	nd	nd
FEN	nd	nd
C1_FEN	nd	50,44
C2_FEN	nd	4,68
C3_FEN	nd	7,17
C4_FEN	nd	2,15
ANT	3,18	3,30
FLUORAN	nd	40,65
PIR	nd	nd
C1_PIR	nd	1,58
C2_PIR	nd	5,22
Bz(a)ANT	nd	nd
CRIS	nd	nd
C1_CRIS	nd	nd
C2_CRIS	nd	3,47
Bz(b)FLUOR	nd	8,61
Bz(k)FLUOR	nd	nd
Bz(e)PIR	nd	nd
Bz(a)PIR	nd	nd
Perileno	nd	11,40
Indeno(123-cd)PIR	nd	nd
DBz(ah)ANT	nd	nd
Bz(ghi)PERIL	3,23	nd
p-TERPHd14	106,33	106,52
16 HPA	20,91	63,69
Σ HPA	26,28	182,25

Anexo 14. Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de sedimento antes do início do e após 96 horas do bioensaio 2 (ng.g-1)

Amostra	Início bioensaio	Final bioensaio
NAF	< 0,23	2,09
1ME_NAF	< 0,23	0,72
2Me_NAF	< 0,23	0,78
C2_NAF	1,45	8,03
C3_NAF	5,43	10,44
C4_NAF	31,11	12,83
ACENAFTY	0,40	0,61
ACE	< 0,23	1,12
FLUOR	0,56	9,35
C1_FLUOR	5,70	33,97
C2_FLUOR	32,61	27,26
C3_FLUOR	88,15	32,31
DBZTIOF	2,51	1,69
C1_DBZTIOF	13,77	4,47
C2_DBZTIOF	72,84	9,76
C3_DBZTIOF	144,91	13,08
FEN	2,50	33,69
C1_FEN	18,47	22,32
C2_FEN	69,96	30,37
C3_FEN	146,48	87,61
C4_FEN	161,61	26,49
ANT	2,73	3,57
FLUORAN	5,98	11,60
PIR	45,55	22,55
C1_PIR	146,47	23,01
C2_PIR	251,25	34,42
Bz(a)ANT	11,20	4,44
CRIS	37,93	6,90
C1_CRIS	91,73	14,34
C2_CRIS	111,71	9,75
Bz(b)FLUOR	13,85	11,80
Bz(k)FLUOR	2,77	2,26
Bz(e)PIR	23,54	3,37
Bz(a)PIR	14,47	5,00
Perileno	10,38	5,08
Indeno(123-cd)PIR	5,04	4,58
DBz(ah)ANT	4,80	2,51
Bz(ghi)PERIL	7,06	2,72
p-TERPHd14	110,65	108,42
16 HPA	154,8	124,80
Σ HPA	1584,9	536,90

Anexo 15. Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de hepatopâncreas do bioensaio 3 (ng.g-1)

Amostra	Cont24hs	Cont48hs	Fen24hs01	Fen48hs	Fen72hs
NAF	67,41	125,21	51,40	18,83	48,84
1ME_NAF	23,59	42,94	58,65	9,11	31,10
2Me_NAF	12,62	54,05	37,34	12,58	32,06
C2_NAF	<LD	<LD	<LD	<LD	<LD
C3_NAF	<LQ	<LQ	<LQ	<LQ	<LQ
C4_NAF	<LQ	<LQ	<LQ	<LQ	<LQ
ACENAFTY	<LD	5,27	27,43	6,88	16,67
ACE	22,84	2,62	15,58	1,58	10,83
FLUOR	19,22	19,16	106,85	52,27	12,84
C1_FLUOR	<LQ	<LQ	<LQ	<LQ	<LQ
C2_FLUOR	<LQ	<LQ	<LQ	<LQ	<LQ
C3_FLUOR	<LQ	<LQ	<LQ	<LQ	<LQ
DBZTIOF	14,50	236,61	1487,73	602,97	9,07
C1_DBZTIOF	<LQ	<LQ	<LQ	<LQ	<LQ
C2_DBZTIOF	<LQ	<LQ	<LQ	<LQ	<LQ
C3_DBZTIOF	<LQ	<LQ	<LQ	<LQ	<LQ
FEN	142,78	<LQ	249,83	112,80	93,01
C1_FEN	<LQ	153,68	<LQ	<LQ	<LQ
C2_FEN	<LQ	<LQ	<LQ	<LQ	<LQ
C3_FEN	<LQ	<LQ	<LQ	<LQ	<LQ
C4_FEN	<LQ	<LQ	<LQ	<LQ	<LQ
ANT	<LD	<LD	<LD	<LD	<LD
FLUORAN	<LD	<LD	<LD	<LD	<LD
PIR	<LD	<LD	22,26	107,23	34,57
C1_PIR	<LQ	<LQ	<LQ	<LQ	<LQ
C2_PIR	<LQ	<LQ	<LQ	<LQ	<LQ
Bz(a)ANT	<LD	<LD	<LD	<LD	<LD
CRIS	<LD	<LD	<LD	<LD	<LD
C1_CRIS	<LQ	<LQ	<LQ	<LQ	<LQ
C2_CRIS	<LQ	<LQ	<LQ	<LQ	<LQ
Bz(b)FLUOR	<LD	<LD	<LD	<LD	<LD
Bz(k)FLUOR	<LD	<LD	<LD	<LD	<LD
Bz(e)PIR	<LD	<LD	<LD	<LD	<LD
Bz(a)PIR	<LD	<LD	<LD	37,89	<LD
Perileno	<LD	<LD	<LD	<LD	<LD
Indeno(123-cd)PIR	<LD	<LD	<LD	<LD	<LD
DBz(ah)ANT	<LD	<LD	<LD	<LD	<LD
Bz(ghi)PERIL	<LD	<LD	<LD	<LD	<LD
16 HPA	252,25	152,26	10866,52	4172,76	216,76
Σ HPA	302,97	639,55	15485,26	7828,76	19167,67
p-TERPHd14	75,53	73,69	66,41	74,36	65,34

Anexo 16. Concentração dos hidrocarbonetos policíclicos aromáticos individuais em amostras de hepatopâncreas inoculadas com 1-Metil fenantreno e 2,6,9-Trimetil fenantreno do bioensaio 3 (ng.g-1)

Amostra	1Mef24hs	1Mef48hs	1Mef72hs	Trimef24hs	Trimef48hs	Trimef72hs
NAF	40,46	57,31	587,02	2032,27	30,58	58,67
1ME_NAF	49,28	53,47	529,46	877,56	9,06	37,37
2Me_NAF	47,14	51,74	626,99	442,11	27,15	36,05
C2_NAF	<LD	<LD	128,19	<LD	<LD	<LD
C3_NAF	<LQ	<LQ	60,70	<LQ	<LQ	<LQ
C4_NAF	<LQ	<LQ	91,10	<LQ	<LQ	<LQ
ACENAFTY	18,09	<LD	115,81	36,48	12,58	14,12
ACE	25,66	<LD	88,65	<LD	<LD	<LD
FLUOR	16,40	<LD	75,65	<LD	11,71	9,75
C1_FLUOR	<LQ	<LQ	51,03	<LQ	<LQ	<LQ
C2_FLUOR	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C3_FLUOR	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
DBZTIOF	21,45	9,86	0,87	<LD	<LD	19,64
C1_DBZTIOF	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C2_DBZTIOF	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C3_DBZTIOF	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
FEN	<LQ	4,80	3,37	<LQ	<LQ	3,45
C1_FEN	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C2_FEN	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C3_FEN	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C4_FEN	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
ANT	133,62	31,09	10,27	47,41	138,18	165,99
FLUORAN	11,30	86,54	<LD	<LD	<LD	<LD
PIR	82,89	125,71	0,87	<LD	<LD	<LD
C1_PIR	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C2_PIR	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
Bz(a)ANT	<LD	<LD	<LD	<LD	<LD	<LD
CRIS	<LD	<LD	0,96	<LD	<LD	<LD
C1_CRIS	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
C2_CRIS	<LQ	<LQ	<LQ	<LQ	<LQ	<LQ
Bz(b)FLUOR	<LD	9,69	<LD	<LD	<LD	<LD
Bz(k)FLUOR	<LD	7,17	<LD	<LD	<LD	<LD
Bz(e)PIR	<LD	<LD	<LD	<LD	<LD	<LD
Bz(a)PIR	<LD	<LD	<LD	<LD	<LD	<LD
Perileno	161,48	29,28	<LD	<LD	<LD	<LD
Indeno(123-cd)PIR	<LD	<LD	<LD	<LD	<LD	<LD
DBz(ah)ANT	<LD	<LD	<LD	<LD	<LD	<LD
Bz(ghi)PERIL	<LD	<LD	<LD	<LD	<LD	<LD
16 HPA	379,10	485,45	997,12	2141,67	246,58	369,17
Σ HPA	658,45	3262,12	2485,45	3461,34	15511,49	2863,72
p-TERPHd14	66,53	95,18	74,80	71,57	64,26	69,32