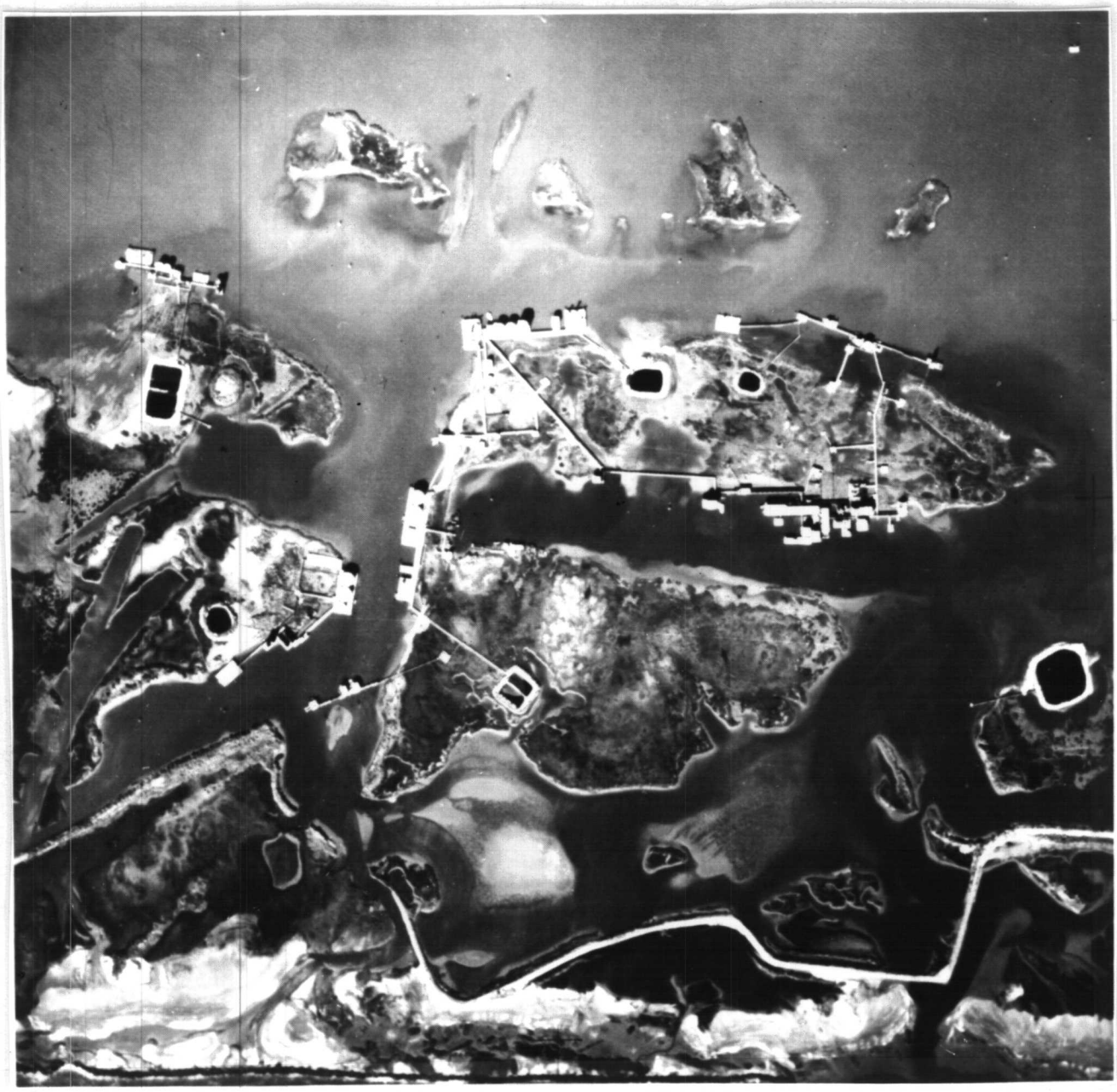
OCS Study
MMS 91-0006

Fate and Effects of Nearshore Discharges of OCS Produced Waters

Volume III: Appendices



MMS U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

OCS Study
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Fate and Effects of Nearshore Discharges of OCS Produced Waters

Volume III: Appendices

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COVER ILLUSTRATION

Aerial photograph of the East Timbalier Island study area with produced water treatment facilities. There are currently four active discharges and one discontinued discharge. Two discharges are generated on the Federal OCS. Black and white print of a color infrared photograph taken at 7000 feet by Wayne Grip of Aero Data Corporation. Orientation to the north.

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LIST OF ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols may be used throughout these appendices:

AEC	acid-extractable compounds
Al	aluminum
As	arsenic
ave	average
Ba	barium
BR	Bayou Rigaud
Cd	cadmium
Cr	chromium
Cu	copper
dpm	disintegrations per minute
EI	Eugene Island Block 18
EP	Emeline Pass
EW	Empire Waterway
FFPI	Fossil Fuel Pollution Index
HC	hydrocarbons, usually total saturated hydrocarbons
Hg	mercury
MDL	minimum detection limit
na	not available
nd	not detected
Ni	nickel
OCS	Outer Continental Shelf
PAH	polynuclear aromatic hydrocarbons
Pb	lead
pCi	picocurie
PF	Pass Fourchon
ppb	parts per billion
ppt	parts per thousand
Ra	radium
RP	Romere Pass
R/T	ratio of resolved to total hydrocarbons
T	East Timbalier Island
TOC	total organic carbon
tr	trace: for hydrocarbons one ion present, but below detection limits; for sulfide, above background but below precision limits of method
trc	trace confirmed; for hydrocarbons two ions present, but below detection limits
V	vanadium
VH	volatile hydrocarbons
Zn	zinc

†	Distance from discharge, in meters (m)
*	Mean of duplicate analyses of a sample
**	Mean of field duplicate samples
***	Mean of replicate analyses of a sample extract

CONVERSIONS

1 bbl = 42 gallons = 159 liters

dpm ÷ 2.2 = pCi

APPENDIX A

Hydrography and Water Quality

Table A.1. Water quality for Pass Fourchon study area, February 14, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
PF-1 OCS Discharge Salinity = 192.0 ppt **PF-2 OCS Discharge Salinity** = 72.5 ppt **PF-2 State Discharge Salinity** = 145.0 ppt					
Station PF200 (10:20)					
0.6	25.9	40.4	19.32	7.15	7.84
0.9	25.8	40.6	19.16	6.90	7.84
1.9	26.7	41.6	18.60	6.18	7.72
2.9	41.5	61.7	18.73	0.72	7.18
4.0	42.9	63.3	18.70	0.79	7.17
4.4	42.4	63.0	18.77	1.08	7.20
Station PF400 (07:32)					
0.3	25.7	40.3	18.66	7.10	7.70
0.6	25.8	40.5	18.61	6.73	7.67
1.7	28.1	43.5	17.85	4.75	7.59
2.3	31.2	48.0	17.98	1.60	7.30
Station PF600S (10:30)					
0.3	25.5	39.4	19.21	7.38	7.34
1.0	26.1	40.6	19.04	7.16	7.86
1.5	26.3	40.8	18.84	7.15	7.84
Station PF600N (12:45)					
0.2	25.7	40.1	19.54	8.55	8.02
1.0	26.2	40.9	19.18	7.64	7.99
1.5	26.0	40.4	19.23	7.97	7.93
Station PF800N (14:24)					
0.2	26.3	41.3	20.27	9.00	8.08
1.0	26.6	41.8	19.10	7.50	8.03
1.9	28.3	42.9	18.91	6.96	7.96
2.5	29.7	25.7	18.71	5.56	7.78
Station PF900N (15:13)					
0.2	28.2	44.1	19.36	8.40	8.10
0.9	28.6	44.3	19.37	8.49	8.09
1.9	28.8	44.7	19.18	8.32	8.08
2.5	29.0	44.9	19.14	8.71	8.07
Station PF1000N (16:50)					
0.2	28.8	44.5	19.37	8.41	8.10
0.9	28.6	44.3	19.34	8.40	8.09
2.0	29.1	45.1	19.21	8.29	8.08
3.2	28.8	44.6	19.25	8.62	8.06

Table A.2. Water quality for Pass Fourchon study area, May 9, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
PF-1 OCS Discharge Salinity = 155.0 ppt					
PF-2 OCS Dishcarge Salinity = 73.0 ppt					
PF-2 State Discharge Salinity = 155.0 ppt					
Station PF200 (11:32)					
0.1	21.0	33.7	26.54	5.73	7.66
1.0	22.4	35.6	26.38	4.70	7.54
2.0	25.4	39.9	26.02	2.35	7.26
2.9	40.4	60.5	26.95	1.00	6.91
3.9	44.7	66.0	27.83	1.04	6.83
Station PF500S (10:14)					
0.1	21.7	34.7	26.12	5.65	7.63
1.0	22.6	36.1	26.00	4.36	7.52
1.8	28.7	40.5	25.65	3.47	7.47
Station PF600S (08:00)					
0.2	23.8	37.5	25.24	4.27	7.47
1.0	23.8	37.7	25.19	4.40	7.44
1.3	23.9	37.6	25.19	4.47	7.35
Station PF400 (11:55)					
0.1	21.4	34.1	26.36	5.51	7.67
0.9	21.6	34.4	26.43	5.27	7.65
2.0	23.6	36.9	25.75	2.48	7.45
2.4	36.2	54.6	26.25	2.12	7.29
Station PF500N (13:00; most likely CTD not on bottom, current pulling instrument up off bottom)					
0.2	21.0	33.6	26.97	5.87	7.74
1.1	21.5	34.2	26.69	5.46	7.67
2.0	22.9	36.5	26.52	4.38	7.54
2.3	25.5	38.0	26.36	2.54	7.35
Station PF600N (13:40)					
0.2	20.8	33.4	27.07	5.87	7.74
1.0	21.9	34.9	26.54	4.61	7.61
2.0	23.3	36.8	26.30	3.06	7.49
3.0	39.4	58.8	27.54	0.84	6.93
3.8	39.5	59.0	27.53	0.95	6.93

Table A.2. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station PF800N (14:15)					
0.1	20.8	33.4	27.57	6.37	7.80
1.0	20.8	33.3	27.49	6.19	7.75
2.0	23.4	36.8	26.36	2.96	7.47
2.8	36.1	54.9	27.01	0.85	7.01
Station PF900N (15:50)					
0.1	20.6	33.0	27.16	5.60	7.71
1.0	20.7	33.1	27.18	5.55	7.71
2.0	20.7	33.2	27.17	5.52	7.71
2.5	20.8	33.2	27.17	5.40	7.70
Station PF1000N (17:07)					
0.2	20.5	33.1	27.45	6.22	7.76
1.0	20.8	33.2	27.44	6.19	7.76
2.0	21.2	33.4	27.43	6.10	7.75
2.8	20.8	33.5	27.40	5.96	7.71
Station PF1200N (18:10)					
0.0	20.7	33.3	27.42	6.42	7.80
1.0	20.9	33.4	27.43	6.17	7.77
2.0	20.8	33.4	27.43	6.24	7.77
3.0	20.8	33.3	27.42	6.23	7.77
4.0	20.6	33.0	27.42	6.21	7.76
5.0	20.9	33.3	27.42	6.19	7.76
5.4	20.9	33.4	27.42	6.19	7.75
Station PF1000NE (19:25)					
0.1	21.1	33.7	27.12	6.49	7.80
1.0	21.1	33.9	27.16	6.53	7.79
2.0	21.0	33.8	27.17	6.58	7.79
2.5	21.1	33.8	27.16	6.63	7.79
Station PF1200NE (20:00)					
0.1	21.1	33.6	27.27	6.62	7.81
1.0	21.1	33.7	27.29	6.67	7.80
1.6	21.1	33.7	27.29	6.77	7.80

Table A.3. Water quality for Pass Fourchon study area, October 3, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	DissolvedOxygen (mg/l)	pH
PF-1 OCS Discharge Salinity = 153.0 ppt			**PF-1 OCS Discharge Sulfide** = nd		
PF-2 OCS Discharge Salinity = 63.0 ppt			**PF-2 OCS Discharge Sulfide** = 113.0 µg-at S/l		
PF-2 State Discharge Salinity = 155.0 ppt			**PF-2 State Discharge Sulfide** = nd		
Station PF200 (10:00)					
0.2	27.1	42.4	25.83	3.45	7.57
1.0	27.6	43.4	25.48	3.20	7.60
2.0	40.8	60.7	26.42	0.19	7.20
3.0	43.1	63.5	26.57	0.40	7.16
Station PF400 (10:55)					
0.1	27.4	42.8	25.11	3.11	7.55
0.5	27.5	42.6	24.91	3.30	7.57
1.0	27.8	43.2	24.93	2.73	7.55
Bottom water sulfide = tr					
Station PF600S (09:40)					
0.1	27.2	42.3	24.61	3.65	7.57
0.6	27.2	42.4	24.61	3.57	7.57
Bottom water sulfide = tr					
Station PF600N (12:00)					
0.2	26.0	40.7	25.92	4.29	7.53
1.0	26.8	41.7	25.63	3.42	7.53
1.5	29.2	45.3	25.50	1.78	7.52
Bottom water sulfide = tr					
Station PF800N (13:19)					
0.2	25.8	40.6	26.12	4.31	7.54
1.0	26.3	40.9	25.54	3.41	7.50
2.0	29.3	45.6	25.54	0.68	7.48
3.1	37.3	56.3	25.97	0.48	7.30
Bottom water sulfide = 8.4 µg-at S/l					
Station PF900N (14:25)					
0.1	26.2	40.9	25.45	3.45	7.49
1.0	26.3	41.0	25.38	3.38	7.48
1.7	26.1	40.9	25.29	3.25	7.47
Bottom water sulfide = tr					
Station PF1000N (16:00)					
0.3	26.2	41.1	25.39	3.25	7.49
1.0	26.2	40.9	25.60	3.73	7.52
2.0	26.2	41.0	25.48	3.52	7.51
3.0	26.2	41.0	25.49	3.69	7.51
3.7	26.2	40.9	25.53	3.69	7.50
Bottom water sulfide = tr					

Table A.4. Water quality for Pass Fourchon study area, February 6, 1990.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
PF-1 OCS Discharge Salinity = 146.0 ppt			**PF-1 OCS Discharge Sulfide** = tr		
PF-2 OCS Discharge Salinity = 67.0 ppt			**PF-2 OCS Discharge Sulfide** = 134 µg-at S/l		
PF-2 State Discharge Salinity = 158.0 ppt			**PF-2 State Discharge Sulfide** = nd		
Station PF200 (11:22)					
0.1	15.8	26.2	14.83	5.51	7.75
0.5	16.7	27.3	14.86	5.18	7.73
1.0	20.0	32.2	14.91	4.44	7.70
1.5	28.9	44.6	15.03	3.14	7.55
2.0	35.2	53.4	15.51	1.18	7.28
2.5	39.4	59.0	16.00	0.23	7.11
2.9	40.1	59.9	16.05	0.39	7.10
3.5	40.6	60.6	16.12	0.47	7.09
3.7	40.5	60.3	16.11	0.77	7.11
Station PF400 (09:15)					
0.1	16.1	26.4	14.85	5.51	7.72
0.5	17.1	28.0	14.92	4.84	7.66
1.0	23.3	37.3	15.06	2.27	7.47
1.6	28.5	44.2	15.23	1.06	7.31
2.0	33.8	51.4	15.59	0.09	7.14
Bottom water sulfide = tr					
Station PF600S (11:40)					
0.1	15.6	25.9	15.08	5.25	7.77
0.5	16.0	26.7	15.05	4.98	7.76
0.9	16.7	27.5	15.04	4.75	7.73
Bottom water sulfide = nd					
Station PF600N (10:10)					
0.1	15.8	26.1	14.58	6.12	7.75
0.5	16.0	26.3	14.64	5.52	7.71
1.0	16.2	26.9	14.75	5.22	7.63
1.5	17.4	28.4	15.10	2.17	7.46
2.0	18.4	30.3	15.26	0.81	7.38
2.5	21.6	34.5	16.44	0.10	7.16
3.0	21.6	34.6	16.62	0.09	7.14
3.5	21.7	34.6	16.65	0.14	7.12
3.9	20.4	32.7	16.92	0.29	7.10
Bottom water sulfide = 130 µg-at S/l					

Table A.4. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station PF800N (13:46)					
0.1	14.5	24.2	15.25	8.42	8.14
0.7	14.7	24.7	15.18	8.24	8.11
1.0	14.8	24.6	15.16	8.13	8.09
1.5	15.6	25.7	15.00	7.82	8.04
2.0	18.4	28.2	14.88	7.36	7.99
Bottom water sulfide = tr					
Station PF900N (14:42)					
0.2	14.7	24.3	15.38	8.56	8.18
0.6	15.8	26.3	15.36	8.43	8.17
1.0	16.5	27.3	15.35	8.38	8.17
1.5	17.1	28.2	15.33	8.34	8.16
2.0	17.6	28.6	15.34	8.36	8.16
2.2	17.7	29.0	15.33	8.41	8.16
Bottom water sulfide = nd					
Station PF1000N (15:35)					
0.3	13.7	22.7	15.55	8.83	8.21
1.0	15.0	25.2	15.49	8.69	8.19
2.0	21.0	33.3	15.48	8.31	8.19
3.0	22.4	35.6	15.48	8.34	8.19
3.3	22.6	36.2	15.48	8.42	8.19
Bottom water sulfide = nd					

Table A.5. Water quality for Bayou Rigaud study area, February 15, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/l)	pH
Exxon "Pre-" Discharge Salinity = 101.5 ppt					
Exxon "Post-" Discharge Salinity = 101.0 ppt					
Conoco Discharge Salinity = 70.0 ppt					
Station BR1 (08:30)					
0.3	21.1	34.0	18.79	9.96	8.44
1.0	22.4	35.4	18.89	9.58	8.35
1.7	22.5	35.9	18.95	9.69	8.33
Station BR2 (07:50)					
0.4	23.3	36.4	18.86	7.75	8.19
1.0	23.1	36.7	18.84	7.76	8.18
2.0	23.2	36.7	18.79	7.64	8.16
2.8	23.1	36.9	18.77	7.69	8.13
Station BR3 (11:35)					
0.1	23.0	36.2	19.15	9.89	8.36
1.0	23.2	36.9	19.11	10.05	8.36
2.0	23.0	36.4	18.92	9.98	8.35
2.9	23.4	36.9	18.06	9.78	8.32
3.3	23.0	36.6	18.08	10.09	8.30
Station BR4 (10:10)					
0.3	21.7	35.0	19.50	9.63	8.41
1.1	22.7	35.9	18.88	8.58	8.30
2.0	23.1	35.8	18.81	8.50	8.23
Station BR5 (12:15)					
0.1	19.7	31.4	19.58	10.39	8.38
0.9	21.2	34.7	18.67	9.93	8.36
1.8	22.5	35.7	18.32	9.72	8.34
2.9	23.0	35.9	18.14	9.85	8.32
3.3	22.8	36.8	18.14	11.48	8.30
Station BR6 (10:26)					
0.3	22.5	35.2	19.59	10.38	8.41
1.1	22.5	35.2	18.93	9.15	8.37
2.0	22.7	36.3	18.77	8.43	8.29
2.3	22.7	36.0	18.82	8.56	8.28

Table A.5. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station BR7 (14:14)					
0.1	18.3	29.7	19.37	10.88	8.41
0.9	18.6	30.6	19.23	10.64	8.40
1.9	20.9	33.4	18.61	10.01	8.34
2.8	21.6	34.1	18.48	9.75	8.33
3.9	22.1	35.4	18.38	9.92	8.29
Station BR8 (15:30)					
0.2	17.4	16.9	19.46	11.48	8.43
1.2	17.6	28.4	19.09	10.85	8.40
2.1	19.0	30.5	18.85	10.47	8.35
3.0	19.2	30.9	18.96	10.48	8.34
4.1	19.4	31.8	18.98	11.09	8.31
Station BR9 (16:30)					
0.3	16.4	26.9	19.34	11.25	8.42
0.9	17.2	28.5	19.22	10.88	8.39
2.0	17.6	28.7	19.12	10.68	8.37
2.9	17.6	30.9	19.10	10.37	8.33
3.4	18.8	29.8	19.17	10.95	8.32
Station BR10 (17:16)					
0.3	15.8	26.0	19.29	11.16	8.42
0.9	16.4	27.2	19.23	11.05	8.40
1.9	16.8	27.7	19.18	10.85	8.38
2.9	17.2	28.4	19.17	10.66	8.35
3.4	18.2	29.5	19.07	10.76	8.31
Station BR11 (17:48)					
0.4	15.7	26.2	19.10	10.99	8.41
1.1	16.4	27.1	19.17	10.93	8.40
2.0	17.0	27.8	19.17	10.88	8.39
3.0	16.9	27.9	19.10	10.97	8.34

Table A.6. Water quality for Bayou Rigaud study area, May 10-11, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Exxon Discharge Salinity = 101.0 ppt **Conoco Discharge Salinity** = 68.0 ppt					
Station BR0 (11:30, 11 May 1989; no box cores)					
0.2	21.4	34.3	23.98	6.46	7.88
1.0	21.5	34.4	23.84	6.28	7.87
2.0	21.9	34.8	23.84	6.24	7.87
3.0	22.6	35.6	23.87	6.22	7.87
4.0	22.7	35.9	23.90	6.31	7.87
Station BR0 (12:25, 11 May 1989; re-positioned in channel, box cores)					
0.1	21.6	34.6	24.18	6.40	7.90
1.0	22.2	35.3	24.05	6.15	7.87
2.0	22.6	35.9	24.04	6.08	7.87
3.0	23.0	36.4	24.04	6.06	7.87
4.0	22.9	36.3	24.02	6.08	7.86
4.3	23.1	36.6	24.02	6.18	7.86
Station BR0A (10:45, 11 May 1989)					
0.1	20.1	32.6	23.96	6.67	7.89
1.0	20.9	33.6	23.75	6.51	7.88
2.0	21.3	34.0	23.71	6.52	7.87
Station BR1 (10:00, 11 May 1989)					
0.1	20.2	32.4	23.75	6.78	7.89
1.0	20.3	32.4	23.76	6.74	7.89
2.0	20.4	33.0	23.74	6.72	7.88
2.4	20.7	33.3	23.73	6.81	7.87
Station BR1A (09:15, 11 May 1989)					
0.1	19.7	31.8	23.51	6.40	7.84
1.0	19.7	31.8	23.53	6.44	7.85
2.0	19.9	31.9	23.56	6.48	7.85
3.0	20.0	32.2	23.59	6.57	7.86
4.0	20.8	33.3	23.74	6.39	7.86
5.1	20.9	33.5	23.75	6.58	7.86
Station BR2 (08:20, 11 May 1989)					
0.1	19.0	30.7	23.44	6.29	7.83
1.0	19.2	31.0	23.45	6.25	7.82
2.0	19.4	31.4	23.80	5.97	7.83
3.0	20.7	33.0	23.82	5.63	7.79
3.4	19.7	32.2	23.84	5.76	7.78

Table A.6. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station BR3 (07:50, 11 May 1989)					
0.1	18.9	30.5	23.62	6.26	7.80
1.0	19.1	30.9	23.59	6.12	7.79
2.0	19.2	31.6	23.62	5.90	7.78
2.9	20.3	32.6	23.70	5.67	7.76
3.9	21.2	34.0	23.86	5.58	7.74
4.1	22.2	35.5	23.94	5.56	7.71
Station BR4 (20:05, 10 May 1989)					
0.3	20.7	33.6	25.15	6.30	7.96
1.0	21.5	34.1	25.16	6.25	7.96
2.0	21.7	34.6	25.16	6.20	7.96
3.0	21.8	34.8	25.21	6.13	7.95
4.0	22.4	35.3	25.33	5.87	7.93
4.8	22.2	35.4	25.35	5.82	7.92
Station BR5 (19:20, 10 May 1989)					
0.1	22.0	34.9	25.25	6.19	7.96
1.0	22.2	35.3	25.38	6.14	7.96
2.0	22.3	35.4	25.41	6.15	7.95
3.0	22.5	36.0	25.42	6.03	7.96
4.0	23.3	36.8	25.31	5.50	7.94
Station BR6 (18:35, 10 May 1989)					
0.2	22.1	35.3	25.35	6.29	7.97
1.0	22.6	35.5	25.41	6.31	7.97
2.0	22.9	36.6	25.39	6.16	7.96
3.0	23.0	36.1	25.38	6.16	7.96
3.9	23.6	36.9	25.40	6.20	7.95
Station BR6A (17:55, 10 May 1989)					
0.2	22.4	35.7	25.48	6.32	7.97
1.0	22.5	35.8	25.54	6.28	7.98
2.0	22.9	36.6	25.44	6.07	7.96
3.0	23.2	36.8	25.40	5.97	7.95
4.0	23.3	37.0	25.37	5.89	7.94
4.5	23.4	37.0	25.37	6.02	7.93
Station BR7 (17:05, 10 May 1989)					
0.2	21.6	34.5	25.47	6.47	7.98
0.9	22.4	35.3	25.54	6.38	7.98
2.0	22.5	35.7	25.58	6.34	7.97
3.0	23.1	36.7	25.54	6.24	7.97
4.0	23.5	37.3	25.44	5.85	7.93

Table A.6. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station BR7A (16:05, 10 May 1989)					
0.2	22.5	36.1	25.40	5.94	7.95
1.0	22.9	36.6	25.50	6.16	7.97
2.0	23.2	36.7	25.51	6.07	7.97
3.0	23.6	37.2	25.42	5.78	7.94
4.0	23.9	37.7	25.28	5.49	7.93
5.0	24.2	38.2	25.17	5.40	7.91
5.9	24.3	38.4	25.15	5.50	7.91
Station BR8 (15:00, 10 May 1989)					
0.1	24.1	38.2	25.46	6.39	8.00
1.0	24.3	38.3	25.48	6.42	8.00
2.0	24.5	38.3	25.38	6.24	7.98
3.0	24.4	38.6	25.41	6.15	7.97
4.0	24.6	38.8	25.17	5.95	7.95
4.8	24.6	38.6	25.18	6.05	7.95
Station BR9 (14:10, 10 May 1989)					
0.2	24.0	38.2	25.38	6.32	7.99
1.0	24.4	38.5	25.38	6.34	7.98
2.0	24.7	38.6	25.35	6.31	7.98
3.0	24.6	38.9	25.33	6.20	7.97
4.0	25.0	39.3	25.03	5.82	7.94
5.2	25.2	40.2	24.91	5.79	7.87
Station BR10 (13:05, 10 May 1989)					
0.1	23.5	37.3	25.53	6.24	7.97
1.0	23.5	37.3	25.46	6.08	7.96
2.0	23.8	37.6	25.40	6.04	7.96
3.0	23.7	37.4	25.38	6.02	7.96
4.0	25.3	39.8	24.82	5.55	7.93
4.5	25.1	39.8	24.82	5.58	7.93
Station BR11 (12:05, 10 May 1989)					
0.1	22.2	33.4	25.39	6.01	7.93
1.0	22.4	36.0	25.41	5.90	7.93
2.0	22.6	35.8	25.29	5.84	7.92
3.0	22.8	36.3	25.17	5.68	7.91
4.0	23.8	37.3	25.11	5.64	7.90
4.2	23.4	37.4	25.11	5.79	7.89
Station BR12 (11:25, 10 May 1989)					
0.1	20.6	32.0	25.53	5.77	7.91
1.0	21.1	33.9	25.41	5.68	7.90
2.0	21.1	33.9	25.40	5.89	7.91
3.0	22.4	35.5	25.13	5.71	7.88
3.7	22.7	36.3	25.07	5.74	7.87

Table A.6. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station BR13 (10:45, 10 May 1989)					
0.1	20.5	32.5	25.29	6.21	7.92
0.9	20.6	33.1	25.41	6.15	7.92
2.0	20.4	33.0	25.41	6.12	7.92
3.0	21.0	33.6	25.12	5.55	7.88
3.9	21.2	34.6	25.10	5.47	7.85
Station BR14 (10:00, 10 May 1989)					
0.1	20.1	32.8	25.33	5.84	7.92
1.0	20.3	32.7	25.32	5.82	7.92
2.0	20.4	32.6	25.26	5.63	7.92
3.1	21.4	34.0	25.00	4.90	7.86
3.4	21.4	34.1	25.06	4.80	7.84
Station BR15 (09:15, 10 May 1989)					
0.2	21.6	34.4	24.95	5.39	7.90
1.0	21.7	34.7	24.95	5.33	7.90
2.0	21.8	34.7	24.97	5.34	7.90
2.6	22.3	35.3	24.96	5.41	7.90
Station BR16 (08:20, 10 May 1989)					
0.2	22.3	35.8	24.91	5.62	7.90
1.0	22.6	35.5	24.91	5.52	7.88
1.8	22.7	35.9	24.88	5.48	7.84

Table A.7. Water quality for Bayou Rigaud study area, October 4, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Exxon Discharge Salinity = 95.5 ppt					
Exxon Discharge Sulfide = tr					
Conoco Discharge Salinity = 66.0 ppt					
Conoco Discharge Sulfide = 8.5 µg-at S/l					
Station BR1 (16:40)					
0.2	23.4	37.0	26.60	7.25	8.14
1.0	23.4	36.9	26.54	7.12	8.13
2.0	23.4	37.0	26.54	7.04	8.13
3.0	23.3	36.8	26.47	6.72	8.11
3.3	23.4	37.1	26.47	6.73	8.11
Station BR2 (15:36)					
0.2	23.5	37.1	26.64	6.80	8.10
1.0	23.6	37.4	26.42	6.78	8.09
2.0	23.6	37.4	26.30	6.57	8.08
3.0	23.4	37.2	26.34	6.69	8.08
3.9	23.6	37.5	26.28	6.81	8.06
Bottom water sulfide = tr					
Station BR3 (14:55)					
0.1	23.4	37.2	26.49	7.11	8.12
1.0	23.4	37.1	26.32	6.84	8.10
2.0	23.5	37.3	26.21	6.76	8.09
3.0	23.5	37.3	26.12	6.57	8.07
4.0	23.7	37.2	26.05	6.37	8.07
5.0	23.7	37.6	26.08	6.14	8.05
Station BR4 (13:40)					
0.2	23.4	37.2	26.27	6.97	8.11
1.0	23.4	37.3	26.14	6.80	8.10
2.0	23.4	37.2	25.89	6.36	8.07
3.0	23.5	37.2	25.83	6.16	8.06
4.0	23.7	37.1	25.79	6.13	8.06
5.0	23.6	37.4	25.82	6.12	8.05
5.6	24.5	39.1	26.08	5.67	7.92
Bottom water sulfide = tr					
Station BR5 (12:09)					
0.2	23.6	37.3	25.73	6.11	8.05
1.0	23.7	37.4	25.67	5.22	8.05
2.0	23.6	37.4	25.57	5.98	8.04
3.0	23.6	37.4	25.52	6.05	8.04
4.0	23.7	37.5	25.48	6.13	8.03

Table A.7. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station BR6 (11:20)					
0.2	22.9	35.7	25.56	6.08	8.05
1.0	23.6	37.2	25.62	6.22	8.05
2.0	23.7	37.7	25.43	5.98	8.03
3.0	23.9	37.8	25.32	5.81	8.01
3.4	23.9	37.8	25.31	5.87	8.00
Bottom water sulfide = tr					
Station BR7 (10:30)					
0.2	23.5	37.2	25.28	5.80	8.02
1.0	23.7	37.4	25.21	5.71	8.02
2.0	23.7	37.5	25.19	5.61	8.01
3.0	23.9	37.5	25.22	5.66	8.00
4.0	23.7	37.5	25.22	5.72	8.01
5.0	23.9	37.6	25.20	5.74	8.00
5.2	23.9	37.6	25.19	5.89	8.00
Station BR8 (09:45)					
0.3	23.6	37.1	25.13	5.37	7.98
1.0	23.9	37.5	25.10	5.39	7.97
2.0	23.8	37.5	25.10	5.39	7.97
3.0	23.6	37.5	25.12	5.45	7.98
4.0	23.8	37.6	25.13	5.56	7.98
4.9	24.1	38.1	25.12	5.61	7.96
Bottom water sulfide = nd					
Station BR9 (08:45)					
0.1	23.5	37.5	25.01	4.95	7.96
1.0	23.6	37.4	25.00	4.92	7.97
2.0	23.8	37.6	24.97	4.97	7.96
3.0	23.8	37.8	24.96	5.09	7.97
3.5	23.7	37.6	24.95	5.21	7.96
Bottom water sulfide = nd					
Station BR10 (08:00)					
0.1	24.0	37.8	24.92	5.11	7.97
1.0	24.1	37.9	24.90	5.19	7.98
2.0	24.1	37.9	24.89	5.37	7.99
3.0	24.2	38.1	24.88	5.55	7.98
Station BR11 (07:20)					
0.2	24.2	38.2	24.90	5.55	7.99
1.0	24.4	38.5	24.92	5.56	7.99
2.0	24.3	38.4	24.94	5.57	7.99
2.2	24.3	38.3	24.92	5.62	7.99
Bottom water sulfide = nd					

Table A.8. Water quality for Bayou Rigaud study area, February 7, 1990.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Exxon Discharge Salinity = 102.0 ppt					
Exxon Discharge Sulfide = nd					
Conoco Discharge Salinity = 68.0 ppt					
Conoco Discharge Sulfide = tr					
Station BR1 (17:00)					
0.1	12.5	21.2	15.59	8.65	8.18
1.0	21.3	34.2	15.62	8.28	8.19
2.0	21.1	34.0	15.62	8.28	8.19
3.0	21.6	35.0	15.62	8.24	8.18
4.0	22.4	35.4	15.62	8.32	8.18
4.2	22.0	35.5	15.62	8.62	8.17
Station BR2 (16:30)					
0.2	12.1	21.2	15.59	8.70	8.18
1.0	12.3	22.1	15.59	8.67	8.18
2.0	14.3	23.2	15.61	8.68	8.18
3.0	15.9	26.3	15.61	8.71	8.18
3.3	16.3	28.1	15.61	8.79	8.17
Bottom water sulfide = tr					
Station BR3 (15:55)					
0.1	12.4	21.1	15.57	8.74	8.18
1.0	11.7	20.3	15.57	8.73	8.18
2.0	12.1	20.3	15.59	8.83	8.18
3.0	12.5	21.2	15.60	8.87	8.18
4.0	13.9	23.0	15.61	8.81	8.18
5.0	17.5	28.0	15.59	8.63	8.18
5.6	18.3	29.9	15.59	8.61	8.17
Station BR4 (12:51)					
0.1	13.1	22.3	15.29	8.75	8.14
1.0	14.0	23.5	15.21	8.37	8.12
2.0	15.9	26.0	15.14	7.86	8.10
3.0	17.3	28.3	15.10	7.35	8.04
4.0	17.2	28.6	15.07	7.01	8.01
5.0	18.0	29.2	15.07	6.71	7.97
5.7	18.0	29.2	15.08	6.82	7.94
Bottom water sulfide = tr					
Station BR5 (14:15)					
0.1	13.1	22.1	15.40	8.41	8.13
1.0	16.5	27.2	15.38	8.20	8.12
2.0	17.6	28.8	15.35	8.12	8.12
3.0	17.8	29.3	15.35	8.10	8.13
4.2	18.4	29.5	15.34	8.13	8.12

Table A.8. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station BR6 (11:15)					
0.2	9.2	16.5	14.98	7.94	8.01
1.0	10.2	17.6	15.00	7.31	7.95
2.0	11.5	20.9	15.02	6.69	7.88
3.0	13.6	22.8	15.03	6.69	7.90
3.3	14.6	24.4	15.04	6.79	7.88
Bottom water sulfide = nd					
Station BR7 (07:30)					
0.1	10.7	18.5	14.88	6.95	7.95
1.0	12.6	21.5	14.91	6.63	7.93
2.0	14.6	24.4	14.92	6.41	7.91
3.0	17.7	28.9	14.96	6.18	7.89
4.0	18.6	30.1	14.98	5.99	7.87
4.5	18.7	30.4	14.98	6.02	7.87
5.0	18.5	30.2	15.00	6.07	7.87
5.8	19.1	31.0	15.04	5.98	7.86
Station BR8 (08:20)					
0.2	10.4	18.1	14.86	6.85	7.93
1.0	10.9	18.5	14.86	6.61	7.90
2.0	12.8	21.7	14.87	6.29	7.87
3.0	14.5	24.4	14.88	6.27	7.87
3.5	16.0	25.8	14.91	6.36	7.89
4.1	17.4	28.5	14.92	6.00	7.84
Bottom water sulfide = tr					
Station BR9 (09:02)					
0.2	10.6	18.4	14.88	7.01	7.93
1.0	11.3	18.9	14.87	6.85	7.93
1.9	14.8	24.6	14.87	6.49	7.89
3.0	16.7	27.6	14.88	6.22	7.85
3.5	17.3	28.3	14.89	6.17	7.84
4.1	17.4	28.3	14.94	6.32	7.83
Bottom water sulfide = tr					
Station BR10 (09:45)					
0.2	11.1	19.9	14.92	6.41	7.86
1.0	13.8	23.8	14.88	6.08	7.83
2.0	16.5	27.4	14.89	6.10	7.83
3.0	17.2	28.5	14.89	6.43	7.88
3.3	17.6	28.9	14.89	6.50	7.86
Station BR11 (10:18)					
0.2	11.1	19.4	14.91	6.71	7.90
1.0	12.9	21.8	14.91	6.48	7.89
2.0	16.1	26.3	14.91	6.37	7.87
3.1	17.3	28.4	14.92	5.60	7.78
Bottom water sulfide = tr					

Table A.9. Water quality for Emeline Pass study area, April 12, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Emeline Pass Discharge Salinity = 81.0 ppt					
Station EP0 (16:45)					
0.2	0.0	0.309	15.08	8.94	7.64
1.0	0.0	0.309	15.08	9.15	7.71
2.1	0.0	0.309	15.09	9.36	7.77
3.0	0.0	0.309	15.11	9.81	7.90
Station EP100E (07:55)					
0.4	0.0	0.310	15.05	9.20	7.57
1.0	0.0	0.309	15.07	9.30	7.63
1.5	0.0	0.309	15.10	9.36	7.69
Station EP250E (11:15)					
0.4	0.0	0.309	15.21	9.15	7.76
1.0	0.0	0.310	15.21	9.23	7.70
1.9	0.0	0.308	15.21	9.36	7.75
2.4	0.0	0.309	15.23	9.49	7.81
Station EP400E (12:37)					
0.2	0.0	0.310	15.26	9.30	7.69
0.8	0.0	0.309	15.27	9.44	7.74
1.8	0.0	0.309	15.29	9.61	7.82
2.4	0.0	0.309	15.31	10.01	7.93
Station EP550E (13:45)					
0.3	0.0	0.308	15.24	9.24	7.67
1.0	0.0	0.309	15.24	9.38	7.72
1.7	0.0	0.309	15.26	9.48	7.77
3.0	0.0	0.309	15.29	9.68	7.84
3.4	0.0	0.309	15.31	9.98	7.97
Station EP700E (14:37)					
0.4	0.0	0.310	15.17	9.21	7.68
0.9	0.0	0.309	15.18	9.34	7.72
2.0	0.0	0.309	15.20	9.45	7.77
2.4	0.0	0.309	15.22	9.69	7.83
Station EP1000E (15:20)					
0.2	0.0	0.309	15.15	9.08	7.66
0.8	0.0	0.309	15.14	9.40	7.70
1.7	0.0	0.308	15.15	9.47	7.76
2.5	0.0	0.308	15.16	9.57	7.88

Table A.9. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (^{O}C)	Dissolved Oxygen (mg/l)	pH
Station EP1300E (16:00)					
0.3	0.0	0.309	15.12	8.99	7.68
1.0	0.0	0.308	15.12	9.20	7.71
2.0	0.0	0.309	15.14	9.47	7.81
3.0	0.0	0.308	15.17	10.00	7.98
Station EP300W (17:16)					
0.2	0.0	0.308	15.05	8.85	7.64
1.1	0.0	0.308	15.05	9.02	7.67
1.8	0.0	0.308	15.06	9.30	7.74
3.0	0.0	0.309	15.08	9.82	7.89
Station EP450W (17:52)					
0.2	0.0	0.308	15.00	8.77	7.58
1.0	0.0	0.307	15.01	8.87	7.63
2.0	0.0	0.308	15.01	9.01	7.67
2.9	0.0	0.309	15.02	9.29	7.73
4.2	0.0	0.309	15.04	9.85	7.87
Station EP600W (18:20)					
0.2	0.0	0.307	14.98	8.81	7.61
1.0	0.0	0.307	14.98	8.84	7.63
1.9	0.0	0.308	14.98	8.86	7.65
2.8	0.0	0.308	15.00	8.91	7.72
3.8	0.0	0.308	15.00	9.05	7.80
5.2	0.0	0.308	15.01	9.47	7.96

Table A.10. Water quality for Emeline Pass study area, October 18, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Emeline Pass Discharge Salinity = 63.0 ppt					
Emeline Pass Discharge Sulfide = 11.1 µg-at S/l					
(discharge sample collected Nov. 1989)					
Station EP0 (08:55)					
0.3	0.0	0.45	21.73	7.31	7.80
1.0	0.0	0.45	21.74	7.33	7.81
2.0	0.0	0.45	21.73	7.43	7.81
3.0	0.0	0.44	21.73	7.60	7.80
Bottom water sulfide = tr					
Station EP100E (09:25)					
0.1	0.0	0.45	21.70	7.34	7.79
1.0	0.0	0.45	21.71	7.42	7.80
2.0	0.0	0.45	21.70	7.66	7.79
3.0	0.0	0.45	21.71	8.36	7.80
Bottom water sulfide = tr					
Station EP250E (09:52)					
0.2	0.0	0.45	21.67	7.28	7.79
1.0	0.0	0.45	21.69	7.33	7.79
2.0	0.0	0.45	21.68	7.47	7.77
2.2	0.0	0.45	21.69	7.64	7.78
Bottom water sulfide = tr					
Station EP300W (08:30)					
0.1	0.0	0.45	21.74	7.33	7.80
1.0	0.0	0.44	21.74	7.38	7.82
2.0	0.0	0.45	21.75	7.47	7.81
3.0	0.0	0.44	21.76	7.54	7.80
3.7	0.0	0.44	21.76	7.76	7.81
Station EP400E (10:23)					
0.0	0.0	0.45	21.64	7.22	7.79
1.0	0.0	0.45	21.64	7.25	7.79
2.0	0.0	0.45	21.66	7.27	7.78
3.0	0.0	0.45	21.66	7.31	7.80
3.5	0.0	0.45	21.66	7.46	7.78
Station EP450W (08:00)					
0.1	0.0	0.45	21.76	7.42	7.79
1.0	0.0	0.45	21.76	7.47	7.80
2.0	0.0	0.44	21.77	7.56	7.80
3.0	0.0	0.44	21.77	7.73	7.80
4.0	0.0	0.44	21.78	8.13	7.80
Bottom water sulfide = tr					

Table A.10. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station EP550E (11:00)					
0.1	0.0	0.45	21.59	7.26	7.79
1.0	0.0	0.45	21.62	7.30	7.79
2.0	0.0	0.45	21.62	7.33	7.79
3.0	0.0	0.45	21.62	7.45	7.79
3.6	0.0	0.45	21.62	7.93	7.78
Bottom water sulfide = tr					
Station EP600W (07:30))					
0.2	0.0	0.45	21.77	7.37	7.80
1.0	0.0	0.45	21.78	7.39	7.76
2.0	0.0	0.45	21.78	7.46	7.79
3.0	0.0	0.45	21.78	7.48	7.79
4.0	0.0	0.45	21.78	7.63	7.81
5.0	0.0	0.44	21.79	7.72	7.81
6.0	0.0	0.45	21.79	8.06	7.81
Station EP700E (11:53)					
0.2	0.0	0.45	21.58	7.44	7.84
1.0	0.0	0.44	21.58	7.51	7.80
2.0	0.0	0.45	21.58	8.71	7.82
3.1	0.0	0.45	21.58	8.14	7.81
Station EP1000E (12:00)					
0.1	0.0	0.45	21.56	7.40	7.85
1.0	0.0	0.45	21.57	7.42	7.81
2.0	0.0	0.45	21.56	7.52	7.86
2.9	0.0	0.45	21.56	7.67	7.84
Bottom water sulfide = tr					
Station EP1300E (14:35)					
0.2	0.0	0.45	21.49	7.43	7.80
1.0	0.0	0.46	21.50	7.43	7.82
2.0	0.0	0.45	21.49	7.50	7.82
2.6	0.0	0.45	21.48	7.67	7.82
3.1	0.0	0.45	21.48	7.35	7.81

Table A.11. Water quality for Eugene Island Block 18 study area, May 17, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Eugene Island Block 18 Discharge Salinity = 144.0 ppt					
Station EI0 (12:40)					
0.2	20.0	32.3	25.44	7.05	7.80
1.0	19.8	32.0	25.45	7.14	7.79
2.0	20.0	32.3	25.39	7.15	7.76
Station EIA50 (11:40)					
0.2	14.7	24.0	25.15	7.39	7.78
1.0	14.8	25.0	25.10	7.36	7.77
2.0	16.9	28.0	25.06	7.21	7.73
2.1	17.8	28.5	25.06	7.37	7.71
Station EIA100 (10:35)					
0.2	3.9	7.66	24.49	7.91	7.77
1.0	3.9	7.67	24.46	7.93	7.78
1.2	4.6	8.41	24.46	8.11	7.74
1.5	6.0	13.32	24.54	7.53	7.78
Station EIA250 (09:45)					
0.1	5.4	10.1	24.45	7.92	7.82
1.0	7.4	15.1	24.51	7.94	7.83
2.0	23.1	36.4	24.97	6.92	7.73
Station EIA500 (08:35)					
0.2	15.0	25.5	24.96	7.43	7.80
1.0	16.5	26.5	24.96	7.27	7.79
2.0	19.4	30.7	25.02	7.28	7.76
Station EIA1000 (07:35)					
0.2	25.0	39.0	25.13	6.64	7.70
1.0	24.3	39.0	25.13	6.66	7.66
2.1	24.7	38.7	25.12	6.73	7.60
Station EIB200 (15:20)					
0.2	24.7	39.1	26.11	6.76	7.76
1.0	24.8	39.0	26.10	6.82	7.75
1.9	25.0	38.7	26.08	6.84	7.74
Station EIB300 (16:20)					
0.2	24.0	38.0	26.39	6.97	7.81
1.0	24.2	38.1	26.38	7.04	7.79
1.5	24.0	37.8	26.38	7.32	7.79
Station EIB500 (17:50)					
0.2	16.3	26.3	26.58	7.96	7.95
1.0	16.1	26.6	26.58	8.08	7.95
1.5	16.2	27.1	26.58	8.33	7.93

Table A.12. Eugene Island Block 18 study area, November 21, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Eugene Island Block 18 Discharge Salinity = 140.0 ppt					
Eugene Island Block 18 Discharge Sulfide = nd					
Station EI0 (08:45)					
0.2	0.0	0.64	15.27	9.93	8.24
1.0	0.0	0.80	15.26	9.97	8.26
1.5	1.7	3.96	15.35	9.65	7.93
2.0	17.4	28.00	16.12	8.45	7.84
Bottom water sulfide = tr					
Station EIA50 (08:30)					
0.1	0.0	0.79	15.43	9.87	8.19
1.0	0.1	1.16	15.20	10.12	8.18
1.7	11.4	20.20	15.55	9.22	7.86
Bottom water sulfide = tr					
Station EIA100 (09:20)					
0.1	0.0	0.62	15.88	9.67	8.20
1.0	0.1	1.30	15.26	9.70	8.12
1.6	3.3	6.00	15.41	9.75	7.97
Bottom water sulfide = tr					
Station EIA250 (06:30)					
0.3	0.0	1.08	14.86	10.10	8.22
1.0	0.1	1.27	14.83	10.12	8.23
1.5	1.6	3.70	14.88	9.90	8.24
2.0	17.4	27.20	16.02	7.94	7.86
Bottom water sulfide = tr					
Station EIA500 (10:10)					
0.2	0.0	0.89	15.38	9.83	8.22
1.0	0.2	1.37	15.10	9.83	8.22
1.5	5.8	10.76	15.29	9.12	7.95
1.9	13.2	23.10	15.74	8.63	7.84
Bottom water sulfide = nd					
Station EIA1000 (11:30)					
0.2	0.0	0.99	15.36	9.80	8.20
1.0	0.1	1.24	15.28	9.70	8.20
1.5	2.1	4.68	15.01	9.50	7.99
1.9	18.6	30.20	16.25	7.56	7.83
Station EIB200 (13:00)					
0.2	0.2	1.47	15.47	9.49	8.10
0.5	0.3	1.48	15.51	9.50	8.14
1.0	0.5	1.96	15.33	9.56	8.12
1.5	2.0	5.20	15.46	9.10	8.01
2.0	17.6	29.50	16.27	7.47	7.85

Table A.12. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station EIB300 (13:40)					
0.2	0.2	1.37	15.57	9.50	8.12
1.0	0.6	1.82	15.46	9.42	8.11
1.5	1.9	4.40	15.55	9.42	8.04
1.8	17.8	28.20	16.13	7.40	7.83
Station EIB500 (14:15)					
0.2	0.0	1.08	16.18	9.50	8.15
1.0	0.2	1.31	15.95	9.50	8.10
1.5	2.4	4.73	15.53	9.27	7.97
1.8	15.5	25.30	15.70	8.62	7.85
Station EIB700 (15:00)					
0.3	0.00	0.95	16.10	9.53	8.17
1.0	0.00	0.91	15.84	9.57	8.19
1.5	1.00	2.65	15.95	9.25	7.93
1.9	17.2	28.00	16.12	7.15	7.83
Station EIB1000 (15:30)					
0.2	0.0	0.92	16.26	9.48	8.18
1.0	0.1	1.23	16.10	9.46	8.17
1.5	1.3	3.25	16.07	8.96	7.95
1.8	17.0	25.50	15.75	7.42	7.82

Table A.13. Water quality for East Timbalier Island study area, May 15, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Timbalier TB #21, 27, 28 (T-1) Discharge Salinity = 154.0 ppt **Timbalier TB #36, 37 (T-2) Discharge Salinity** = 158.0 ppt					
Station T1 (14:15)					
0.1	22.6	35.9	25.27	7.08	7.91
0.3	22.8	36.0	25.28	7.16	7.90
0.7	22.6	36.1	25.27	7.29	7.88
Station T2 (12:45)					
0.1	22.7	36.1	25.42	7.29	7.93
0.3	22.7	36.1	25.41	7.36	7.90
Station T3 (11:30)					
0.1	23.3	37.0	25.33	6.66	7.75
0.5	23.8	37.9	25.33	6.01	7.61
1.0	38.0	57.1	25.48	3.29	6.91
Station T4 (12:30)					
0.1	23.6	37.2	25.31	5.21	7.84
0.3	24.0	38.0	25.22	4.54	7.79
0.7	24.1	38.1	25.15	4.68	7.76
Station T5 (14:45)					
0.1	23.8	37.8	25.15	5.11	7.81
0.5	24.0	37.5	25.16	5.22	7.81
1.0	23.9	37.6	25.20	5.46	7.79
1.2	23.8	37.6	25.20	5.71	7.77
Station T6 (19:50)					
0.1	23.9	37.8	25.47	5.43	7.89
0.5	24.3	38.0	25.47	5.53	7.89
1.0	24.2	38.0	25.46	5.64	7.89
1.3	24.2	38.3	25.48	5.70	7.88
Station T7 (19:45)					
0.1	24.1	38.5	25.53	5.26	7.88
0.5	24.2	38.4	25.54	5.25	7.88
1.0	24.3	38.1	25.52	5.32	7.88
1.6	24.3	38.3	25.52	5.74	7.88
Station T8 (15:30)					
0.1	23.7	37.6	25.08	5.72	7.84
0.5	23.7	37.8	25.09	5.09	7.82
1.0	24.0	38.6	25.10	5.03	7.82
1.2	24.0	38.1	25.13	5.03	7.80

Table A.13. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station T9 (13:25)					
0.1	24.0	38.3	25.33	5.52	7.82
0.5	24.2	38.2	25.30	5.57	7.80
1.0	24.2	38.2	25.32	5.78	7.78
1.4	24.0	38.0	25.20	5.97	7.76
Station T10 (15:50)					
0.1	24.2	38.0	25.23	7.84	7.96
0.5	24.2	38.3	25.19	7.88	7.94
1.0	24.2	38.2	25.17	7.88	7.92
Station T11 (19:30)					
0.1	24.0	37.9	25.48	7.11	7.97
0.5	24.4	38.2	25.53	6.91	7.98
1.0	24.2	38.0	25.51	6.88	7.97
1.5	24.4	38.4	25.51	6.95	7.97
1.8	24.4	38.3	25.46	7.20	7.97
Station T12 (19:05)					
0.1	23.1	37.3	25.57	7.22	7.99
0.5	24.3	38.3	25.54	7.43	8.00
1.0	24.4	38.3	25.57	7.44	7.97
1.8	24.1	38.5	25.57	7.72	7.97
Station T13 (16:15)					
0.1	24.4	38.7	25.44	6.56	7.89
0.5	24.4	38.2	25.45	6.82	7.88
Station T14 (18:05)					
0.1	24.4	38.4	25.51	7.43	7.99
0.5	24.1	38.0	25.50	7.45	7.98
1.0	24.4	38.1	25.49	7.55	7.98
1.5	24.4	38.6	25.48	7.62	7.98
2.1	24.2	38.6	25.50	7.70	7.97
Station T15 (18:25)					
0.1	24.1	38.2	25.54	7.76	8.01
1.0	24.1	38.1	25.56	7.83	8.01
1.8	24.0	38.1	25.54	8.01	8.00

Table A.14. Water quality for Romere Pass study area, October 19, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (^{o}C)	Dissolved Oxygen (mg/l)	pH
Romere Pass RP-1 OCS Discharge Salinity = 43.0 ppt					
Romere Pass RP-1 OCS Discharge Sulfide = 48.0 µg-at S/l					
Romere Pass RP-2 State Discharge Salinity = 98.0 ppt					
Romere Pass RP-2 State Discharge Sulfide = 3.6 µg-at S/l					
Station RP0 (13:15)					
0.1	7.5	13.58	15.82	9.13	7.91
1.0	7.6	13.62	15.81	9.29	7.92
1.6	7.6	13.65	15.77	9.71	7.94
Bottom water sulfide = 3.3 µg-at S/l					
Station RP100S (14:30)					
0.2	7.3	13.22	15.88	8.98	7.92
1.0	7.3	13.24	15.87	9.05	7.92
1.4	7.3	13.19	15.87	9.18	7.94
Station RP250N (09:10)					
0.3	5.0	9.54	16.48	9.07	7.88
1.0	5.0	9.51	16.49	9.36	7.89
1.6	5.1	9.57	16.46	10.15	7.93
Station RP450S (14:45)					
0.1	7.5	13.51	15.89	9.04	7.92
1.3	7.5	13.55	15.87	9.22	7.97
Bottom water sulfide = tr					
Station RP550N (10:00)					
0.3	5.9	10.97	15.98	8.72	7.88
1.0	6.0	11.14	15.95	8.82	7.89
2.0	6.5	11.87	15.98	8.97	7.87
2.4	7.0	12.55	15.96	9.87	7.84
Bottom water sulfide = 4.6 µg-at S/l					
Station RP750S (15:15)					
0.1	1.8	4.18	15.98	9.52	8.11
1.0	2.5	5.31	15.98	9.80	8.08
1.6	2.5	5.25	15.96	10.50	8.06
Station RP750N (10:55)					
0.2	6.1	10.85	15.90	9.26	7.89
1.0	5.9	10.90	15.92	8.63	7.86
2.2	6.3	11.80	15.86	9.45	7.86
Station RP1000N (11:55)					
0.2	8.3	15.0	16.05	8.72	7.89
1.0	8.4	14.7	16.02	8.81	7.90
2.0	8.3	14.7	16.01	8.96	7.90
2.3	8.4	14.7	16.01	9.35	7.92
Bottom water sulfide = 3.9 µg-at S/l					

Table A.15. Water quality for Empire Waterway study area, November 14, 1989.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Empire Waterway Discharge Salinity = 140.5 ppt **Empire Waterway Discharge Sulfide** = 6.5 µg-at S/l					
Station EW1 (13:35)					
0.2	18.6	30.0	22.66	7.46	8.18
1.0	18.5	30.2	22.59	7.41	8.18
2.0	18.4	30.9	22.57	7.40	8.17
3.0	18.9	30.6	22.61	7.42	8.16
4.0	18.8	30.8	22.64	7.43	8.16
5.0	18.7	30.1	22.58	7.43	8.15
6.0	19.0	30.5	22.58	7.54	8.15
6.3	18.9	30.5	22.54	7.97	8.16
Station EW2 (12:20)					
0.3	20.5	33.0	22.77	6.92	8.06
1.0	21.0	34.0	22.50	6.80	8.04
2.0	21.4	33.8	22.46	6.82	8.03
3.0	21.5	34.3	22.39	6.87	8.02
3.3	21.6	34.1	22.39	7.18	8.02
Bottom water sulfide = tr					
Station EW3 (11:00)					
0.3	20.1	32.4	22.73	7.29	8.10
1.0	20.1	31.9	22.73	7.31	8.08
2.0	20.4	32.6	22.71	7.52	8.08
2.7	20.1	32.2	22.70	8.16	8.06
Bottom water sulfide = nd					
Station EW4 (10:10)					
0.2	10.9	18.7	22.76	7.73	8.09
0.5	19.3	31.1	22.74	7.32	8.11
1.0	20.0	32.7	22.73	7.30	8.10
2.0	19.8	32.2	22.72	7.31	8.09
3.1	19.9	32.4	22.71	7.51	8.08
Bottom water sulfide = tr					
Station EW6 (14:10)					
0.3	18.6	30.3	22.60	7.33	8.18
1.0	19.1	31.5	22.61	7.35	8.18
2.0	18.7	31.0	22.61	7.35	8.18
3.0	19.1	30.9	22.61	7.45	8.19
4.0	19.5	31.1	22.66	7.55	8.19
5.0	19.1	31.3	22.66	7.68	8.20
5.6	19.5	31.6	22.67	7.96	8.20

Table A.15. Continued.

Depth (m)	Salinity (ppt)	Conductivity (mmho/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	pH
Station EW7 (14:45)					
0.3	18.9	30.5	22.69	7.42	8.19
1.0	18.9	30.6	22.68	7.39	8.19
2.0	18.9	30.0	22.68	7.45	8.19
3.0	19.0	30.8	22.67	7.51	8.19
4.0	19.3	30.8	22.67	7.63	8.20
5.0	19.0	31.1	22.68	7.89	8.20
Bottom water sulfide = 3.9 µg-at S/l					
Station EW8 (09:10)					
0.1	20.6	33.1	22.36	6.95	8.02
1.0	20.7	33.4	22.35	7.16	8.02
1.3	20.7	33.3	22.34	7.61	8.01
Bottom water sulfide = tr					
Station EW9 (07:10)					
0.1	21.1	33.7	21.79	6.73	7.95
1.0	21.0	33.7	21.80	6.85	7.95
1.3	21.1	33.8	21.81	7.10	7.95
Bottom water sulfide = tr					
Station EW10 (08:25)					
0.1	21.1	33.8	22.17	8.69	8.01
1.0	20.8	33.6	22.14	6.77	8.00
2.0	21.0	33.8	22.14	6.81	8.00
2.2	20.9	33.9	22.11	6.93	7.98
Station EW11 (15:36)					
0.2	18.9	30.2	22.81	7.51	8.20
1.0	19.3	31.0	22.72	7.55	8.20
2.0	19.0	30.7	22.72	7.61	8.19
3.0	18.7	30.6	22.77	7.77	8.19
3.5	19.0	30.5	22.79	8.05	8.19

APPENDIX B

Sediment Grain Size and Total Organic Carbon

Table B.1. Surficial sediment total organic carbon content and grain size.

STATION	DATE	%TOC	%CLAY	%SILT	%SAND
Pass Fourchon					
PF400	02/89	1.59	1.89	13.01	85.10
PF600N	02/89	1.54	4.35	24.28	71.37
PF600S	02/89	1.54	3.98	17.18	78.84
PF800N	02/89	1.64	0.58	6.93	92.49
PF900N	02/89	0.04	0.05	0.53	99.42
PF1000N	02/89	0.12	0.56	2.82	96.62
PF400	05/89	1.69	3.55	20.12	76.33
PF500N	05/89	1.91	2.10	11.34	86.57
PF500S	05/89	1.39	2.94	17.05	80.01
PF600N	05/89	1.65	1.26	8.31	90.42
PF600S	05/89	1.79	3.91	24.44	71.65
PF800N	05/89	1.39	0.93	4.79	94.28
PF900N	05/89	0.21	0.45	1.60	97.95
PF1000N	05/89	0.47	0.70	4.22	95.08
PF1000NE	05/89	0.56	1.24	5.63	93.13
PF1200N	05/89	0.88	2.02	10.99	87.00
PF1200NE	05/89	0.1	0.49	2.69	96.82
PF400	10/89	1.61	2.53	64.52	32.95
PF600N	10/89	1.35	1.18	56.39	42.43
PF600S	10/89	0.85	1.35	39.19	59.46
PF800N	10/89	1.33	2.25	59.56	38.19
PF900N	10/89	1.09	0.65	39.68	59.67
PF1000N	10/89	0.49	1.73	42.34	55.93
PF400	02/90	1.98	4.47	94.04	1.49
PF600N	02/90	2.01	4.12	93.00	2.88
PF600S	02/90	0.96	3.04	33.13	63.83
PF800N	02/90	0.81	3.90	67.72	28.38
PF900N	02/90	0	0.11	5.78	94.11
PF1000N	02/90	0.16	0.34	10.50	89.17
Bayou Rigaud					
BR1	02/89	0.9	1.36	8.20	90.44
BR2	02/89	1.18	1.47	11.09	87.44
BR3	02/89	1.59	1.83	24.34	73.83
BR4	02/89	2.36	2.52	24.26	73.21
BR5	02/89	1.57	1.05	18.02	80.93
BR6	02/89	1.4	1.21	12.28	86.52
BR7	02/89	1.88	1.23	11.20	87.57
BR8	02/89	1.99	0.88	11.37	87.76
BR9	02/89	2.35	1.05	11.73	87.21
BR10	02/89	1.9	2.77	25.23	72.00
BR11	02/89	1.45	1.48	15.30	83.22

Table B.1. Continued.

STATION	DATE	%TOC	%CLAY	%SILT	%SAND
BR0	05/89	1.09	0.78	10.27	88.96
BR0A	05/89	1.67	1.96	19.24	78.80
BR1	05/89	1.2	1.51	16.35	82.14
BR1A	05/89	1.82	4.22	17.93	77.85
BR2	05/89	1.78	1.81	30.47	67.72
BR3	05/89	0.6	0.47	8.36	91.17
BR4	05/89	2.13	0.78	11.78	87.44
BR5	05/89	1.77	2.48	24.29	73.23
BR6	05/89	1.41	2.03	23.30	74.67
BR6A	05/89	1.76	4.13	31.77	64.10
BR7	05/89	2.33	3.57	20.54	75.89
BR7A	05/89	2.32	1.20	20.59	78.21
BR8	05/89	2.22	0.68	11.56	87.76
BR9	05/89	2.09	1.26	12.68	86.06
BR10	05/89	2.24	2.58	21.32	76.10
BR11	05/89	1.46	1.68	15.71	82.61
BR12	05/89	2.24	1.05	15.59	83.35
BR13	05/89	2.32	0.92	15.94	83.14
BR14	05/89	2.49	2.60	21.67	75.74
BR15	05/89	1.02	2.07	24.05	73.88
BR16	05/89	1.48	2.67	24.07	73.26
BR1	10/89	1.19	1.99	53.65	44.36
BR2	10/89	0.81	1.73	44.21	54.06
BR3	10/89	1.58	1.50	58.94	39.56
BR4	10/89	1.86	2.74	60.48	36.78
BR5	10/89	1.4	1.97	57.31	40.72
BR6	10/89	1.07	1.84	58.36	39.80
BR7	10/89	1.95	1.79	64.48	33.73
BR8	10/89	2.48	1.69	55.88	42.43
BR9	10/89	1.14	1.12	48.16	50.72
BR10	10/89	1.96	1.06	51.65	47.29
BR11	10/89	1.75	1.60	56.51	41.89
BR1	02/90	1.38	7.68	83.38	8.94
BR2	02/90	1.62	3.68	82.33	13.99
BR3	02/90	1.69	3.89	85.92	10.19
BR4	02/90	1.81	2.04	74.78	23.18
BR5	02/90	1.36	5.06	84.53	10.41
BR6	02/90	2.6	5.95	89.01	5.04
BR7	02/90	0.74	9.68	69.78	20.54
BR8	02/90	2.45	3.03	92.73	4.24
BR9	02/90	2.61	4.86	92.78	2.36
BR10	02/90	2.1	7.82	84.94	7.24
BR11	02/90	1.61	6.82	86.46	6.72

Table B.1. Continued.

STATION	DATE	%TOC	%CLAY	%SILT	%SAND
Emeline Pass					
EP0	04/89	0.23	0.00	0.16	99.84
EP100E	04/89	0.04	0.00	0.40	99.60
EP250E	04/89	0.02	0.00	0.14	99.86
EP300W	04/89	0.08	0.00	0.12	99.88
EP400E	04/89	0.14	0.00	0.03	99.97
EP450W	04/89	0	0.00	0.12	99.88
EP550E	04/89	0	0.00	0.12	99.88
EP600W	04/89	0.07	0.00	0.09	99.91
EP700E	04/89	0.23	0.00	0.12	99.88
EP1000E	04/89	0.11	0.00	0.23	99.77
EP1300E	04/89	0.03	0.00	0.32	99.68
EP0	10/89	0	0.06	1.09	98.85
EP100E	10/89	0	0.00	0.63	99.37
EP250E	10/89	0.01	0.09	2.76	97.14
EP300W	10/89	0.03	0.00	0.60	99.40
EP400E	10/89	0.04	0.37	5.00	94.63
EP450W	10/89	0.29	0.82	25.56	73.62
EP550E	10/89	0	0.28	4.70	95.03
EP600W	10/89	0.07	0.00	0.61	99.39
EP700E	10/89	0	0.00	0.34	99.66
EP1000E	10/89	0	0.00	0.63	99.37
EP1300E	10/89	0.49	0.02	1.41	98.57
Eugene Island					
EI0	05/89	0.53	7.31	84.42	8.27
EIA50	05/89	0.63	6.80	86.18	7.02
EIA100	05/89	0.88	8.16	91.12	0.72
EIA250	05/89	0.93	9.08	89.77	1.15
EIA500	05/89	1.04	8.37	91.17	0.46
EIA1000	05/89	1.1	8.57	90.49	0.94
EIB200	05/89	1.22	6.10	93.17	0.73
EIB300	05/89	0.98	6.27	93.40	0.33
EIB500	05/89	0.96	9.19	89.36	1.45
EI0	11/89	0.89	8.10	88.92	2.98
EIA50	11/89	0.87	7.22	91.61	1.17
EIA100	11/89	0.7	2.69	95.91	1.40
EIA250	11/89	0.88	7.74	88.80	3.46
EIA500	11/89	0.92	9.23	88.20	2.57
EIA1000	11/89	0.89	5.12	92.04	2.84
EIB200	11/89	0.77	5.05	94.35	0.60
EIB300	11/89	0.83	8.25	90.94	0.81
EIB500	11/89	0.91	4.63	94.38	0.99
EIB700	11/89	0.7	3.25	90.55	6.20
EIB1000	11/89	0.73	2.18	95.83	1.99

Table B.1. Continued.

STATION	DATE	%TOC	%CLAY	%SILT	%SAND
East Timbalier Island					
T1	05/89	0.09	0.55	2.46	96.99
T2	05/89	0.03	0.17	1.57	98.26
T3	05/89	0.83	2.01	13.58	84.41
T4	05/89	0.25	0.56	3.79	95.65
T5	05/89	0.04	0.43	3.01	96.57
T6	05/89	0.72	0.93	8.81	90.26
T7	05/89	0.76	1.25	11.29	87.46
T8	05/89	0.97	3.17	13.97	82.85
T9	05/89	0.83	5.62	21.66	72.71
T10	05/89	0.76	5.18	24.59	70.23
T11	05/89	0.44	3.43	17.38	79.18
T12	05/89	0.5	3.67	20.82	75.50
T13	05/89	0.24	1.66	6.06	92.29
T14	05/89	0.7	3.81	26.88	69.31
T15	05/89	0.65	3.76	25.41	70.82
Romere Pass					
RP0	10/89	0.54	0.68	21.77	77.55
RP100S	10/89	0.04	0.35	3.83	95.82
RP250N	10/89	0.02	0.12	2.35	97.53
RP450S	10/89	0	0.04	1.17	98.78
RP500N	10/89	0.08	0.01	0.25	99.74
RP750N	10/89	0.92	3.29	85.14	11.57
RP750S	10/89	0.01	0.74	13.09	86.17
RP1000N	10/89	0.55	3.82	78.39	17.79
Empire Waterway					
EW1	11/89	1.25	3.73	88.62	7.65
EW2	11/89	1.53	8.11	74.10	17.79
EW3	11/89	1.99	7.76	82.13	10.11
EW4	11/89	1.6	7.81	73.30	18.89
EW6	11/89	1.47	4.68	69.50	25.82
EW7	11/89	1.98	7.73	82.53	9.74
EW8	11/89	1.76	5.86	83.26	10.88
EW9	11/89	1.5	9.13	73.39	17.48
EW10	11/89	3.32	6.91	72.59	20.50
EW11	11/89	1.78	7.55	62.99	29.46

Table B.2. Sediment grain size data for vertical cores.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
Pass Fourchon					
PF400	0-1	02/89	3.12	91.84	5.04
PF400	5-6	02/89	6.65	91.26	2.09
PF400	10-11	02/89	5.17	91.63	3.2
PF400	15-16	02/89	3.89	93.64	2.47
PF400	20-21	02/89	4.61	93.03	2.36
PF400	25-26	02/89	2.97	93.23	3.8
PF400	30-31	02/89	4.16	89.59	6.25
PF600N	0-1	02/89	0	94.63	5.37
PF600N	5-6	02/89	0	95	5
PF600N	10-11	02/89	0	94.67	5.33
PF600N	15-16	02/89	0	95.9	4.1
PF600N	20-21	02/89	0	94.38	5.62
PF600N	25-26	02/89	0	93.12	6.88
PF600S	0-1	02/89	4.56	91.24	4.2
PF600S	5-6	02/89	19.31	78.69	2
PF600S	10-11	02/89	9.75	87.08	3.17
PF600S	15-16	02/89	1.96	93.04	5
PF600S	20-21	02/89	5.27	90.68	4.05
PF600S	25-26	02/89	11.03	86.1	2.87
PF600S	30-31	02/89	6.3	90.17	3.53
PF800N	0-1	02/89	6.73	87.72	5.55
PF800N	5-6	02/89	7.29	89.12	3.59
PF800N	10-11	02/89	7.6	87.23	5.17
PF800N	15-16	02/89	3.66	91.6	4.74
PF800N	20-21	02/89	10.14	84.19	5.67
PF800N	25-26	02/89	3.91	92.23	3.86
PF800N	30-31	02/89	14.66	80.77	4.57
PF900N	0-1	02/89	99.12	0.88	0
PF900N	5-6	02/89	93	6.66	0.33
PF900N	10-11	02/89	80.74	18.72	0.53
PF900N	15-16	02/89	98.18	1.75	0.06
PF900N	20-21	02/89	94.5	5.20	0.29
PF900N	25-26	02/89	97	2.86	0.13
PF900N	30-31	02/89	88.05	11.49	0.45
PF1000N	0-1	02/89	96.87	3.00	0.12
PF1000N	5-6	02/89	46.25	51.18	2.57
PF1000N	10-11	02/89	48.2	47.25	4.55
PF1000N	15-16	02/89	47.3	49.27	3.43
PF1000N	20-21	02/89	26.7	67.95	5.35
PF1000N	25-26	02/89	29.9	65.54	4.56
PF1000N	30-31	02/89	42.7	52.24	5.06
PF400	0-1	05/89	3.32	91.19	5.49
PF400	5-6	05/89	0	96.23	3.77
PF400	10-11	05/89	2	94.29	3.71
PF400	15-16	05/89	0	96.51	3.49
PF400	20-21	05/89	0	95.24	4.76
PF400	25-26	05/89	3.04	94.76	2.2
PF400	30-31	05/89	2.21	92.72	5.07

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
PF600N	0-1	05/89	0	94.37	5.63
PF600N	5-6	05/89	0	93.21	6.79
PF600N	10-11	05/89	0.4	95.43	4.17
PF600N	15-16	05/89	0	93.29	6.71
PF600N	20-21	05/89	0	94.2	5.8
PF600N	25-26	05/89	2.51	92.49	5
PF600N	30-31	05/89	5.63	89.08	5.29
PF600S	0-1	05/89	5.17	91.01	3.82
PF600S	5-6	05/89	2.8	94.23	2.97
PF600S	10-11	05/89	6.84	89.26	3.9
PF600S	15-16	05/89	18.21	78.24	3.55
PF600S	20-21	05/89	11.65	84.7	3.65
PF600S	25-26	05/89	3.41	91.4	5.19
PF600S	30-31	05/89	10.61	84.04	5.35
PF800N	0-1	05/89	0.66	96.61	2.73
PF800N	5-6	05/89	0	93.77	6.23
PF800N	10-11	05/89	0	92.47	7.53
PF800N	15-16	05/89	0	95.07	4.93
PF800N	20-21	05/89	16.41	81.39	2.2
PF800N	25-26	05/89	11.03	85.67	3.3
PF900N	0-1	05/89	96.54	3.15	0.29
PF900N	5-6	05/89	99.36	0.63	0
PF900N	10-11	05/89	92.37	7.25	0.36
PF900N	15-16	05/89	86.92	12.51	0.56
PF1000N	0-1	05/89	96.74	3.18	0.07
PF1000N	5-6	05/89	92.82	7.08	0.09
PF1000N	10-11	05/89	88.40	11.17	0.42
PF1000N	15-16	05/89	92.50	7.30	0.19
PF1000N	20-21	05/89	95.29	4.53	0.17
PF400	0-1	10/89	9.4	83.02	7.58
PF400	5-6	10/89	2.89	91.78	5.33
PF400	10-11	10/89	3.84	92.98	3.18
PF400	15-16	10/89	3.29	90.36	6.35
PF400	20-21	10/89	2.74	91.61	5.65
PF400	25-26	10/89	10.53	84.67	4.8
PF400	30-31	10/89	23.14	75.73	1.13
PF600N	0-1	10/89	6.29	90.47	3.24
PF600N	5-6	10/89	3.04	92.97	3.99
PF600N	10-11	10/89	3.02	93.28	3.7
PF600N	15-16	10/89	2.79	92.44	4.77
PF600N	20-21	10/89	0.36	97.56	2.08
PF600N	25-26	10/89	2.93	90.8	6.27
PF600N	30-31	10/89	4.66	92.51	2.83
PF600S	0-1	10/89	14.52	82.26	3.22
PF600S	5-6	10/89	33.14	63.46	3.4
PF600S	10-11	10/89	1.36	92.73	5.91
PF600S	15-16	10/89	1.51	93.3	5.19
PF600S	20-21	10/89	20.13	76.72	3.15
PF600S	25-26	10/89	24.95	72.11	2.94
PF600S	30-31	10/89	84.70	15.12	0.16

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
PF800N	0-1	10/89	0.83	95.15	4.02
PF800N	5-6	10/89	0.81	97.36	1.83
PF800N	10-11	10/89	19.59	77.78	2.63
PF800N	15-16	10/89	4.51	93.51	1.98
PF800N	20-21	10/89	37.6	60.92	1.48
PF800N	25-26	10/89	18.86	78.16	2.98
PF800N	30-31	10/89	2.84	94.46	2.7
PF900N	0-1	10/89	30.6	62.65	6.75
PF900N	5-6	10/89	96.11	3.68	0.19
PF900N	10-11	10/89	79.75	19.80	0.44
PF900N	15-16	10/89	87.03	12.28	0.68
PF900N	20-21	10/89	93.38	6.15	0.46
PF1000N	0-1	10/89	39.4	58.57	2.03
PF1000N	5-6	10/89	91.55	8.09	0.34
PF1000N	10-11	10/89	34.58	62.57	2.85
PF1000N	15-16	10/89	35.76	61.71	2.53
PF1000N	20-21	10/89	36.6	60.68	2.72
PF1000N	25-26	10/89	45.31	51.16	3.53
PF1000N	30-31	10/89	25.51	73.07	1.42
PF400	0-1	02/90	0.94	89.82	9.24
PF400	5-6	02/90	0	87.14	12.86
PF400	10-11	02/90	2.45	89.66	7.89
PF400	15-16	02/90	2.73	88	9.27
PF400	20-21	02/90	3.6	89.69	6.71
PF400	25-26	02/90	5.09	87.16	7.75
PF600N	0-1	02/90	2.44	92.48	5.08
PF600N	5-6	02/90	5.86	87.37	6.77
PF600N	10-11	02/90	3.02	87.69	9.29
PF600N	15-16	02/90	0	91.06	8.94
PF600N	20-21	02/90	1.96	91.34	6.7
PF600N	25-26	02/90	0	93.25	6.75
PF600N	30-31	02/90	0.53	91.86	7.61
PF600S	0-1	02/90	22.82	75.17	2.01
PF600S	5-6	02/90	38.75	60.14	1.11
PF600S	10-11	02/90	21.32	76.55	2.13
PF600S	15-16	02/90	15.09	82.45	2.46
PF600S	20-21	02/90	2.38	94.2	3.42
PF600S	25-26	02/90	61.84	37.64	0.50
PF800N	0-1	02/90	1.57	94.17	4.26
PF800N	5-6	02/90	44.36	53.98	1.66
PF800N	10-11	02/90	25.32	72.94	1.74
PF800N	15-16	02/90	32.2	66.27	1.53
PF800N	20-21	02/90	16.53	79.6	3.87
PF800N	25-26	02/90	29.28	68.72	2
PF800N	30-31	02/90	35.93	63.6	0.47
PF900N	0-1	02/90	7.1	87.24	5.66
PF900N	5-6	02/90	98.73	1.19	0.07
PF900N	10-11	02/90	95.93	3.85	0.20
PF900N	15-16	02/90	84.94	14.37	0.68

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
PF1000N	0-1	02/90	87.95	11.42	0.61
PF1000N	5-6	02/90	97.73	2.18	0.08
PF1000N	10-11	02/90	96.63	3.14	0.22
Bayou Rigaud					
BR2	0-1	02/89	26.08	70.98	2.94
BR2	5-6	02/89	15.1	81.6	3.3
BR2	10-11	02/89	47.43	50.77	1.8
BR2	15-16	02/89	33.27	62.46	4.27
BR2	20-21	02/89	13.27	83.25	3.48
BR2	25-26	02/89	23.78	71.67	4.55
BR2	30-31	02/89	28.57	68.32	3.11
BR4	0-1	02/89	0	96.86	3.14
BR4	5-6	02/89	10.73	86.83	2.44
BR4	10-11	02/89	2.4	95.22	2.38
BR4	15-16	02/89	9.93	87.45	2.62
BR4	20-21	02/89	10.83	85.94	3.23
BR4	25-26	02/89	13.81	83.23	2.96
BR4	30-31	02/89	3.76	92.72	3.52
BR6	0-1	02/89	24.11	74.68	1.21
BR6	5-6	02/89	36.51	61.69	1.8
BR6	10-11	02/89	14.2	84.1	1.7
BR6	15-16	02/89	36.89	62.01	1.1
BR6	20-21	02/89	29.97	66.95	3.08
BR6	25-26	02/89	20.47	76.56	2.97
BR6	30-31	02/89	33.03	64.64	2.33
BR8	0-1	02/89	6.79	89.97	3.24
BR8	5-6	02/89	2.16	94.26	3.58
BR8	10-11	02/89	5.3	90.98	3.72
BR8	15-16	02/89	3.22	93.35	3.43
BR8	20-21	02/89	0	95.09	4.91
BR8	25-26	02/89	3.37	93.61	3.02
BR8	30-31	02/89	2.46	94.49	3.05
BR9	0-1	02/89	1.7	93.79	4.51
BR9	5-6	02/89	2.72	93.33	3.95
BR9	10-11	02/89	1.26	95.42	3.32
BR9	15-16	02/89	2.88	92.33	4.79
BR9	20-21	02/89	8.88	85.48	5.64
BR9	25-26	02/89	0.51	96.89	2.6
BR9	30-31	02/89	2.98	93.82	3.2
BR11	0-1	02/89	11.55	85.14	3.31
BR11	5-6	02/89	23.28	75.78	0.94
BR11	10-11	02/89	20.88	77.65	1.47
BR11	15-16	02/89	20.62	77.71	1.67
BR11	20-21	02/89	21.48	75.33	3.19
BR11	25-26	02/89	16.91	80.3	2.79
BR11	30-31	02/89	3.79	89.23	6.98

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
BR2	0-1	05/89	11.06	85.65	3.29
BR2	5-6	05/89	14.29	82.35	3.36
BR2	10-11	05/89	5.4	91.23	3.37
BR2	15-16	05/89	19.75	74.3	5.95
BR2	20-21	05/89	6	88.8	5.2
BR2	25-26	05/89	14.72	83.28	2
BR2	30-31	05/89	3.72	90.06	6.22
BR4	0-1	05/89	14.47	84.29	1.24
BR4	5-6	05/89	5.63	92.24	2.13
BR4	10-11	05/89	8.3	90.03	1.67
BR4	15-16	05/89	3.42	87.36	9.22
BR4	20-21	05/89	6.17	91.4	2.43
BR4	25-26	05/89	12.13	85.47	2.4
BR6	0-1	05/89	26.73	71.03	2.24
BR6	5-6	05/89	15.16	82.6	2.24
BR6	10-11	05/89	8.43	86.31	5.26
BR6	15-16	05/89	27.68	71.27	1.05
BR6	20-21	05/89	39.96	58.94	1.1
BR6	25-26	05/89	21.68	75.19	3.13
BR6	30-31	05/89	25.55	71.98	2.47
BR8	0-1	05/89	2.17	93.04	4.79
BR8	5-6	05/89	5.58	90.5	3.92
BR8	10-11	05/89	7.49	87.98	4.53
BR8	15-16	05/89	0.02	94.55	5.43
BR8	20-21	05/89	2.02	94.09	3.89
BR8	25-26	05/89	18.51	79.25	2.24
BR8	30-31	05/89	0	93.93	6.07
BR9	0-1	05/89	3.17	94.25	2.58
BR9	5-6	05/89	11.68	83.22	5.1
BR9	10-11	05/89	2.69	92.1	5.21
BR9	15-16	05/89	0	93.94	6.06
BR9	20-21	05/89	0	94.03	5.97
BR9	25-26	05/89	0	91.53	8.47
BR9	30-31	05/89	0	92.72	7.28
BR11	0-1	05/89	2.66	92.07	5.27
BR11	5-6	05/89	7.82	87.24	4.94
BR11	10-11	05/89	18.04	78.45	3.51
BR11	15-16	05/89	6.16	89.59	4.25
BR11	20-21	05/89	27.97	69.32	2.71
BR11	25-26	05/89	17.4	81.49	1.11
BR11	30-31	05/89	4.39	91.65	3.96
BR2	0-1	10/89	37.65	59.36	2.99
BR2	5-6	10/89	37.87	59.06	3.07
BR2	10-11	10/89	44.62	52.47	2.91
BR2	15-16	10/89	7.21	87.39	5.4
BR2	20-21	10/89	14.28	83.51	2.21
BR2	25-26	10/89	9.84	86.8	3.36
BR2	30-31	10/89	14.49	82.11	3.4

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
BR4	0-1	10/89	23.24	73.47	3.29
BR4	5-6	10/89	7.29	86.44	6.27
BR4	10-11	10/89	6.31	88.95	4.74
BR4	15-16	10/89	11.87	83.59	4.54
BR4	20-21	10/89	5.71	88.81	5.48
BR4	25-26	10/89	32.33	60.39	7.28
BR4	30-31	10/89	4.06	88.73	7.21
BR6	0-1	10/89	31.05	66.56	2.39
BR6	5-6	10/89	42.78	54.99	2.23
BR6	10-11	10/89	13.79	83.31	2.9
BR6	15-16	10/89	6.73	89.76	3.51
BR6	20-21	10/89	17.24	78.56	4.2
BR6	25-26	10/89	20.72	76.42	2.86
BR6	30-31	10/89	27.39	69.29	3.32
BR8	0-1	10/89	12.64	85.15	2.21
BR8	5-6	10/89	2.1	95.06	2.84
BR8	10-11	10/89	9.2	87.44	3.36
BR8	15-16	10/89	5.59	90.61	3.8
BR8	20-21	10/89	12.13	84.51	3.36
BR8	25-26	10/89	6.12	90.13	3.75
BR8	30-31	10/89	2.36	91.4	6.24
BR9	0-1	10/89	29.88	66.72	3.4
BR9	5-6	10/89	14.06	80.51	5.43
BR9	10-11	10/89	8.36	86.39	5.25
BR9	15-16	10/89	3.66	89.27	7.07
BR9	20-21	10/89	19.15	73.44	7.41
BR9	25-26	10/89	5.15	87.45	7.4
BR9	30-31	10/89	3.12	85.43	11.45
BR11	0-1	10/89	18.18	76.2	5.62
BR11	5-6	10/89	5.91	82.55	11.54
BR11	10-11	10/89	3.11	86.4	10.49
BR11	15-16	10/89	19.02	75.07	5.91
BR11	20-21	10/89	44.31	52.53	3.16
BR11	25-26	10/89	13.37	79.59	7.04
BR11	30-31	10/89	23.15	67.15	9.7
BR2	0-1	02/90	39.32	58.84	1.84
BR2	5-6	02/90	17.68	79.27	3.05
BR2	10-11	02/90	38.82	59.53	1.65
BR2	15-16	02/90	89.01	10.51	0.46
BR2	20-21	02/90	26.52	69.6	3.88
BR4	0-1	02/90	11.68	82.3	6.02
BR4	5-6	02/90	24.2	72.25	3.55
BR4	10-11	02/90	19.97	77.26	2.77
BR4	15-16	02/90	22.71	74.43	2.86
BR6	0-1	02/90	27.1	69.08	3.82
BR6	5-6	02/90	13.12	82.42	4.46
BR6	10-11	02/90	10.45	85.97	3.58
BR6	15-16	02/90	19.59	77.59	2.82
BR6	20-21	02/90	16.57	77.61	5.82
BR6	25-26	02/90	15.65	80.8	3.55

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
BR8	0-1	02/90	6.23	83.97	9.8
BR8	5-6	02/90	3.1	89.88	7.02
BR8	10-11	02/90	4.25	85.37	10.38
BR8	15-16	02/90	8.08	82.9	9.02
BR8	20-21	02/90	12.67	81.82	5.51
BR8	25-26	02/90	3.68	89.96	6.36
BR8	30-31	02/90	6.83	84.54	8.63
BR9	0-1	02/90	5.58	91.68	2.74
BR9	5-6	02/90	11.36	84.43	4.21
BR9	10-11	02/90	16.18	82.64	1.18
BR9	15-16	02/90	3.21	93.79	3
BR9	20-21	02/90	9.26	86.75	3.99
BR9	25-26	02/90	0.79	94.23	4.98
BR11	0-1	02/90	18.54	75.78	5.68
BR11	5-6	02/90	9.69	84.09	6.22
BR11	10-11	02/90	18.61	73.33	8.06
BR11	15-16	02/90	17.55	75.05	7.4
BR11	20-21	02/90	3.85	87.09	9.06
BR11	25-26	02/90	9.19	83.48	7.33
Emeline Pass					
EP0	0-1	04/89	99.82	0.18	0
EP0	5-6	04/89	99.76	0.24	0
EP100E	0-1	04/89	99.81	0.19	0
EP100E	5-6	04/89	3.77	92.4	3.83
EP250E	0-1	04/89	99.84	0.16	0
EP250E	5-6	04/89	99.91	0.09	0
EP250E	10-11	04/89	99.81	0.19	0
EP250E	15-16	04/89	99.81	0.19	0
EP450W	0-1	04/89	99.84	0.16	0
EP450W	5-6	04/89	99.83	0.17	0
EP550E	0-1	04/89	99.69	0.31	0
EP550E	5-6	04/89	69.34	30.03	0.62
EP550E	10-11	04/89	72.99	26.46	0.54
EP550E	15-16	04/89	98.71	1.26	0.02
EP1000E	0-1	04/89	99.71	0.29	0
EP1000E	5-6	04/89	99.36	0.64	0
EP0	0-1	10/89	99.34	0.66	0
EP0	5-6	10/89	99.56	0.44	0
EP100E	0-1	10/89	99.48	0.52	0
EP100E	5-6	10/89	99.27	0.73	0
EP250E	0-1	10/89	98.81	1.17	0.01
EP450W	0-1	10/89	65.36	34.35	0.27
EP450W	5-6	10/89	82.12	17.74	0.13
EP550E	0-1	10/89	92.23	7.35	0.41

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
EP1000E	0-1	10/89	99.47	0.53	0
Eugene Island					
EI0	0-1	05/89	3.83	86.34	9.83
EI0	5-6	05/89	1.2	89.83	8.97
EI0	10-11	05/89	3.17	86.04	10.79
EI0	15-16	05/89	1.28	96.29	2.43
EI0	20-21	05/89	2.21	88.33	9.46
EI0	25-26	05/89	1.63	91.34	7.03
EIA50	0-1	05/89	2.41	91.28	6.31
EIA50	5-6	05/89	1.06	94.03	4.91
EIA50	10-11	05/89	2.4	88.55	9.05
EIA50	15-16	05/89	3.71	85.47	10.82
EIA50	20-21	05/89	1.47	90.95	7.58
EIA50	25-26	05/89	6.54	84.86	8.6
EIA100	0-1	05/89	1.16	93.46	5.38
EIA100	5-6	05/89	1.5	90.24	8.26
EIA100	10-11	05/89	1.09	91.48	7.43
EIA100	15-16	05/89	3.38	85.95	10.67
EIA100	20-21	05/89	2.41	86.12	11.47
EIA100	25-26	05/89	4.92	86.37	8.71
EIA250	0-1	05/89	2.58	88.08	9.34
EIA250	5-6	05/89	1.47	87.93	10.6
EIA250	10-11	05/89	2.79	88.44	8.77
EIA250	15-16	05/89	0	98	2
EIA250	20-21	05/89	0.2	97.45	2.35
EIA250	25-26	05/89	0.51	96.15	3.34
EIA250	30-31	05/89	0.01	94.75	5.24
EIA500	0-1	05/89	2.71	93.26	4.03
EIA500	5-6	05/89	0.02	91.65	8.33
EIA500	10-11	05/89	0.77	95.85	3.38
EIA500	15-16	05/89	2.92	87.95	9.13
EIA500	20-21	05/89	0	96.43	3.57
EIA500	25-26	05/89	0.31	94.62	5.07
EIA500	30-31	05/89	0.36	94.36	5.28
EI0	0-1	11/89	0.68	90.74	8.58
EI0	5-6	11/89	0	91.02	8.98
EI0	10-11	11/89	0	89.79	10.21
EI0	15-16	11/89	1.34	90.66	8
EI0	20-21	11/89	1.44	94	4.56
EI0	25-26	11/89	2.79	92.4	4.81
EI0	30-31	11/89	1.63	91.55	6.82
EIA50	0-1	11/89	0	91.79	8.21
EIA50	5-6	11/89	0	95.56	4.44
EIA50	10-11	11/89	0.9	96.06	3.04
EIA50	15-16	11/89	1.49	93.7	4.81
EIA50	20-21	11/89	1.08	96.22	2.7
EIA50	25-26	11/89	0	98.45	1.55
EIA50	30-31	11/89	1.41	93.51	5.08

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
EIA100	0-1	11/89	1.28	92.97	5.75
EIA100	5-6	11/89	0.38	93.89	5.73
EIA100	10-11	11/89	5.1	90.32	4.58
EIA100	15-16	11/89	1.27	93.81	4.92
EIA100	20-21	11/89	0.4	96.01	3.59
EIA100	25-26	11/89	0.69	96.39	2.92
EIA100	30-31	11/89	1.5	91.34	7.16
EIA250	0-1	11/89	2.06	91.37	6.57
EIA250	5-6	11/89	0.42	95	4.58
EIA250	10-11	11/89	1.12	89.16	9.72
EIA250	15-16	11/89	1.2	90.61	8.19
EIA250	20-21	11/89	1.46	91.95	6.59
EIA250	25-26	11/89	0.47	96.26	3.27
EIA250	30-31	11/89	1.54	93.74	4.72
EIA500	0-1	11/89	1.6	91.99	6.41
EIA500	5-6	11/89	1.89	92.05	6.06
EIA500	10-11	11/89	1.26	95.63	3.11
EIA500	15-16	11/89	1.49	95.83	2.68
EIA500	20-21	11/89	0.42	94.08	5.5
EIA500	25-26	11/89	1.6	94.56	3.84
EIA500	30-31	11/89	1.25	94.8	3.95
Romere Pass					
RP0	0-1	10/89	65.23	32.28	2.49
RP0	5-6	10/89	17.4	80.75	1.85
RP0	10-11	10/89	16.94	79.69	3.37
RP0	15-16	10/89	23.62	71.23	5.15
RP0	20-21	10/89	12.09	81.34	6.57
RP0	25-26	10/89	18.87	77.11	4.02
RP450S	0-1	10/89	53.93	44.17	1.9
RP450S	5-6	10/89	3.9	90.88	5.22
RP450S	10-11	10/89	2.45	93.82	3.73
RP450S	15-16	10/89	0.77	95.15	4.08
RP550N	0-1	10/89	92.86	7.01	0.11
RP550N	5-6	10/89	50.11	46.87	3.02
RP550N	10-11	10/89	53.06	45.75	1.19
RP1000N	0-1	10/89	9.46	86.76	3.78
RP1000N	5-6	10/89	46.08	51.23	2.69
RP1000N	10-11	10/89	17.02	79.99	2.99
RP1000N	15-16	10/89	7.86	89.03	3.11
RP1000N	20-21	10/89	4.77	92.21	3.02
RP1000N	25-26	10/89	3.79	92.52	3.69
Empire Waterway					
EW2	0-1	11/89	43.81	53.4	2.79
EW2	5-6	11/89	3.03	91.09	5.88
EW2	10-11	11/89	0.68	89.33	9.99
EW2	15-16	11/89	0.96	93.4	5.64
EW2	20-21	11/89	2.46	88.23	9.31

Table B.2. Continued.

STATION	DEPTH (cm)	DATE	% SAND	% SILT	% CLAY
EW3	0-1	11/89	3.06	91.64	5.3
EW3	5-6	11/89	1.53	92.78	5.69
EW3	10-11	11/89	0.49	89.1	10.41
EW3	15-16	11/89	1.24	89.55	9.21
EW3	20-21	11/89	1.24	89.95	8.81
EW4	0-1	11/89	11.45	80.36	8.19
EW4	5-6	11/89	12.63	84.53	2.84
EW4	10-11	11/89	13.89	81.53	4.58
EW4	15-16	11/89	0	90.04	9.96
EW4	20-21	11/89	3.22	87.4	9.38
EW4	25-26	11/89	7.46	83.8	8.74
EW4	30-31	11/89	8.39	87.18	4.43
EW7	0-1	11/89	3.59	89.54	6.87
EW7	5-6	11/89	2.66	92.13	5.21
EW7	10-11	11/89	7.6	86	6.4
EW7	15-16	11/89	9.22	82.79	7.99
EW7	20-21	11/89	45.68	50.42	3.9
EW7	25-26	11/89	4.3	87.5	8.2
EW7	30-31	11/89	2.87	90.64	6.49
EW8	0-1	11/89	39.19	53.96	6.85
EW8	5-6	11/89	13.29	85.44	1.27
EW8	10-11	11/89	2.91	95.32	1.77
EW8	15-16	11/89	4	94.24	1.76
EW8	20-21	11/89	42.81	56.35	0.84
EW9	0-1	11/89	5.18	88.33	6.49
EW9	5-6	11/89	24.75	70.98	4.27
EW9	10-11	11/89	3.97	87.22	8.81
EW9	15-16	11/89	20.48	74.46	5.06

APPENDIX C

Chemical Constituents of Produced Waters

Table C.1. Salinity and sulfide concentrations of produced water discharges.

Discharge	Date	Salinity (ppt)	Sulfide (μg-at $S \cdot l^{-1}$)
PF-1 OCS	02/89	192	---
	05/89	155	---
	10/89	153	nd
	02/90	146	tr
PF-2 OCS	02/89	72	---
	05/89	73	---
	10/89	63	113.0
	02/90	67	134.0
PF-2 State	02/89	145	---
	05/89	155	---
	10/89	155	nd
	02/90	158	nd
Exxon "Pre"	02/89	102	---
Exxon "Post"	02/89	101	---
Exxon	05/89	101	---
	10/89	96	tr
	02/90	102	nd
Conoco	02/89	70	---
	05/89	68	---
	10/89	66	8.5
	02/90	68	tr
Emeline Pass	04/89	81	---
	10/89	63	11.1
Eugene Island	05/89	144	---
	11/89	140	nd
East Timbalier, T-1	05/89	154	---
East Timbalier, T-2	05/89	158	---
Romere Pass, RP-1 OCS	10/89	43	48.0
Romere Pass, RP-2 State	10/89	98	3.6
Empire Waterway	11/89	140	6.5

Table C.2. Concentrations (µg/l) of volatile hydrocarbons, acid-extractable compounds and saturated hydrocarbons in produced water samples from three facilities at Pass Fourchon (PF).

	PF-1 OCS 2/89	PF-1 OCS 5/89	PF-1 OCS 10/89	PF-1* OCS 2/90	PF-2 OCS 2/89	PF-2 OCS 5/89	PF-2 OCS 10/89	PF-2* OCS 2/90	PF-2 STATE 2/89	PF-2 STATE 5/89	PF-2 STATE 10/89	PF-2 STATE 2/90
Volatile Hydrocarbons (µg/l)												
MDL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Benzene	2,900	3,500	3,200	3,300	190	26	110	150	420	280	590	560
Toluene	980	990	1,100	760	110	11	43	62	190	68	190	190
Ethylbenzene	38	30	67	16	8.8	2.1	3.4	4.1	9.5	3.6	11	7.3
Xylenes	430	200	580	120	48	8.8	24	18	80	25	78	45
Isopropylbenzene	31	3.5	16	1.6	2.2	nd	nd	nd	2.6	nd	1.6	nd
n-Propylbenzene	23	3.8	17	nd	1.9	nd	nd	nd	2.7	nd	1.7	1.6
1,3,5-Trimethylbenzene	34	13	43	2.9	5.0	1.0	2.0	4.6	4.3	1.7	3.4	1.8
1,2,4-Trimethylbenzene	120	26	69	6.5	5.3	1.6	4.9	2.6	8.5	4.2	8.3	3.6
Naphthalene	67	25	87	11	10	2.2	10	nd	16	8.0	13	4.3
Total VH	4,600	4,800	5,200	4,200	380	53	200	240	730	390	900	810
Acid-Extractable Compounds (µg/l)												
MDL	4.8	6.3	1.1	3.5	4.8	3.0	1.8	3.2	4.8	3.0	1.0	2.9
Phenol	820	3,800	840	1,600	1,000	240	540	1,100	540	610	250	420
C1-Phenols (Cresols)	820	2,400	940	1,500	1,100	450	610	730	510	540	230	540
C2-Phenols	290	1,300	420	620	470	200	340	540	130	240	140	440
Benzoic Acid	8,000	15,000	12,000	13,000	11,000	7,600	7,600	12,000	970	1,300	920	2,700
C1-Benzoic Acids	5,700	11,000	7,900	8,400	10,000	10,000	10,000	9,500	2,400	2,900	1,600	2,800
C2-Benzoic Acids	910	2,300	1,500	1,500	2,200	1,900	1,700	1,700	860	1,100	420	880
Aliphatic Fatty Acids	34,000	120,000	100,000	120,000	21,000	10,000	15,000	53,000	10,000	14,000	8,500	21,000
Total AEC	51,000	160,000	120,000	150,000	47,000	30,000	36,000	79,000	15,000	21,000	12,000	29,000
Saturated Hydrocarbons (µg/l)												
MDL	0.34	0.16	0.30	0.37	0.41	0.33	0.25	0.24	0.45	0.21	0.41	0.45
Resolved	4,400	5,600	5,300	2,700	330	280	16	220	430	930	1,500	2,000
Unresolved	7,600	7,400	7,300	2,100	440	340	69	450	1,100	2,700	3,400	2,400
Total	12,000	13,000	13,000	4,800	770	620	85	670	1,500	3,600	4,900	4,400
Ratio Resolved/Total	0.37	0.43	0.41	0.56	0.43	0.45	0.19	0.33	0.29	0.26	0.31	0.45

Table C.3. Concentrations (µg/l) of polynuclear aromatic hydrocarbons (PAH) in produced water samples from three facilities at Pass Fourchon (PF).

Analyte	PF-1 OCS 2/89	PF-1 OCS 5/89	PF-1 OCS 10/89	PF-1* OCS 2/90	PF-2 OCS 2/89	PF-2 OCS 5/89	PF-2 OCS 10/89	PF-2 OCS 2/90	PF-2 State 2/89	PF-2 State 5/89	PF-2 State 10/89	PF-2 State 2/90
MDL	0.34	0.16	0.30	0.37	0.41	0.33	0.25	0.24	0.45	0.21	0.41	0.45
Naphthalene	74	80	94	84	12	5.5	8.4	7.7	24	28	17	36
C1-Naphthalenes	47	63	150	89	6.6	5.2	14	11	18	29	30	30
C2-Naphthalenes	61	110	170	74	8.0	10	15	12	24	66	58	62
C3-Naphthalenes	100	220	240	81	16	19	12	15	45	160	96	110
C4-Naphthalenes	61	100	130	40	12	9.6	tr	7.0	30	97	58	38
C5-Naphthalenes	30	47	45	19	5.4	tr	tr	tr	28	56	23	49
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	tr	nd	nd
Acenaphthene	nd	1.3	0.62	nd	tr	tr	tr	nd	0.60	1.7	0.58	nd
Fluorene	3.2	4.3	3.7	2.2	0.86	1.1	0.81	0.65	3.9	10	3.1	3.3
C1-Fluorenes	10	16	12	5.6	tr	2.5	1.3	tr	9.8	26	9.6	6.3
C2-Fluorenes	14	20	17	7.2	4.5	3.7	1.2	2.4	14	39	13	9.3
C3-Fluorenes	11	8.4	7.3	4.9	6.2	3.4	tr	tr	16	19	9.1	4.4
Dibenzothiophene	1.3	1.7	2.5	1.1	tr	trc	trc	tr	0.67	1.4	1.1	1.2
C1-Dibenzothiophenes	4.4	6.6	9.9	1.8	trc	0.82	0.37	tr	3.2	6.7	5.9	3.5
C2-Dibenzothiophenes	7.3	9.6	12	2.7	1.6	1.2	trc	tr	6.0	10	10	4.9
C3-Dibenzothiophenes	6.3	6.5	5.9	tr	2.4	1.2	tr	tr	7.8	7.8	8.3	3.5
Phenanthrene	8.5	15	13	4.8	1.9	2.7	1.7	1.5	6.2	13	7.7	5.7
C1-Phenanthrenes	13	20	27	9.2	3.9	4.0	3.1	3.5	13	29	28	20
C2-Phenanthrenes	13	15	18	7.0	5.0	4.5	2.3	2.3	17	28	28	21
C3-Phenanthrenes	8.5	7.3	7.3	2.4	4.1	2.8	trc	trc	16	17	15	9.5
Anthracene	nd	tr	nd	nd	nd	tr	nd	nd	nd	0.68	nd	nd
Fluoranthene	tr	tr	tr	nd	tr	tr	nd	nd	tr	0.36	tr	nd
Pyrene	tr	tr	tr	nd	tr	tr	tr	nd	0.65	0.76	0.97	nd
Benz(a)anthracene	tr	0.57	0.62	nd	tr	tr	tr	tr	0.82	nd	trc	0.50
Chrysene	0.47	0.84	0.58	nd	0.61	0.39	trc	tr	1.7	6.1	1.9	2.1
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.4	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	tr	nd	nd	nd	nd	0.30	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.59	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	87	100	120	92	15	10	11	10	39	65	32	49
Total Alkylated PAH	390	650	850	340	76	68	49	53	250	590	390	370
Total PAH	470	750	970	440	91	77	60	63	290	650	430	420
FFPI	0.96	0.96	0.97	0.97	0.93	0.92	0.94	0.94	0.91	0.90	0.92	0.94

Table C.4. Concentrations (µg/l) of volatile hydrocarbons, acid-extractable compounds and saturated hydrocarbons in produced water samples from two facilities at Bayou Rigaud.

	Exxon-Pre 2/89	Exxon-Post* 2/89	Exxon* 5/89	Exxon 10/89	Exxon 2/90	Conoco 3/89	Conoco* 5/89	Conoco 10/89	Conoco 2/90
Volatile Hydrocarbons (µg/l)									
MDL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Benzene	3,100	1,800	1,800	2,100	2,300	3,000	3,000	2,700	3,300
Toluene	1,200	670	550	690	660	1,300	1,300	1,200	1,200
Ethylbenzene	51	30	17	37	20	65	46	75	44
Xylenes	320	200	120	230	120	440	350	520	290
Isopropylbenzene	5.0	3.1	1.5	4.0	1.6	5.8	4.0	9.9	4.4
n-Propylbenzene	3.8	2.1	1.3	2.5	nd	5.9	2.9	6.4	2.6
1,3,5-Trimethylbenzene	11	6.2	3.6	7.6	2.2	21	12	25	8.4
1,2,4-Trimethylbenzene	30	16	8.8	19	5.5	53	31	61	22
Naphthalene	27	22	11	21	7.8	33	21	38	15
Total VH	4,700	2,700	2,500	3,100	3,100	4,900	4,800	4,600	4,900
Acid-Extractable Compounds (µg/l)									
MDL	7.0	4.8	4.7	1.2	1.9	4.3	4.7	1.1	4.0
Phenol	1,000	64	1,100	340	540	780	1,800	1,200	2,100
C1-Phenols (Cresols)	1,100	47	1,100	400	620	1,300	2,300	1,700	3,400
C2-Phenols	540	13	670	220	320	640	1,500	680	2,000
Benzoic Acid	2,300	130	2,000	700	1,600	4,800	9,700	10,000	16,000
C1-Benzoic Acids	2,800	89	2,700	1,100	1,900	4,800	10,000	8,900	14,000
C2-Benzoic Acids	1,100	43	1,200	560	830	1,000	2,000	2,000	2,700
Aliphatic Fatty Acids	51,000	1,800	47,000	26,000	39,000	14,000	29,000	50,000	78,000
Total AEC	60,000	2,200	56,000	29,000	45,000	27,000	56,000	74,000	120,000
Saturated Hydrocarbons (µg/l)									
MDL	0.30	0.50	0.18	0.27	0.31	0.34	0.28	0.25	0.27
Resolved	720	48	130	98	300	1,600	1,900	4,600	4,300
Unresolved	590	51	130	230	450	2,100	2,900	6,500	3,500
Total	1,300	99	260	330	750	3,700	4,800	11,000	7,800
Ratio Resolved/Total	0.55	0.48	0.50	0.30	0.40	0.43	0.40	0.42	0.55

Table C.5. Concentrations (µg/l) of polynuclear aromatic hydrocarbons (PAH) in produced water samples from two facilities at Bayou Rigaud.

Analyte	Exxon-Pre 2/89	Exxon-Post* 2/89	Exxon* 5/89	Exxon 10/89	Exxon 2/90	Conoco 3/89	Conoco* 5/89	Conoco 10/89	Conoco 2/90
MDL	0.30	0.50	0.18	0.27	0.31	0.34	0.28	0.25	0.27
Naphthalene	75	47	43	44	48	71	67	69	71
C1-Naphthalenes	33	18	17	37	39	46	45	110	92
C2-Naphthalenes	32	8.4	14	22	20	59	59	140	100
C3-Naphthalenes	41	4.2	11	16	14	110	110	200	170
C4-Naphthalenes	21	tr	2.2	4.6	6.1	58	54	110	97
C5-Naphthalenes	9.7	nd	tr	nd	tr	33	38	42	41
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	tr	nd	0.23	trc	nd	1.2	1.0	1.0	0.85
Fluorene	2.5	0.75	1.3	0.74	0.73	2.8	3.4	2.6	2.1
C1-Fluorenes	4.4	tr	2.3	1.1	0.86	7.3	9.0	7.2	4.6
C2-Fluorenes	6.6	nd	1.7	tr	0.72	11	12	7.2	6.3
C3-Fluorenes	4.0	tr	tr	tr	tr	9.4	14	4.7	7.9
Dibenzothiophene	0.62	tr	0.29	0.31	0.44	0.75	0.72	1.3	1.3
C1-Dibenzothiophenes	1.5	tr	0.35	0.35	tr	2.6	3.0	5.6	4.9
C2-Dibenzothiophenes	3.1	nd	0.32	trc	tr	6.4	6.1	7.8	7.6
C3-Dibenzothiophenes	3.0	nd	0.20	nd	tr	5.9	6.1	4.9	5.3
Phenanthrene	4.7	1.1	1.9	1.6	1.9	5.4	5.5	6.3	5.5
C1-Phenanthrenes	5.9	trc	1.4	2.4	1.3	9.3	9.2	16	13
C2-Phenanthrenes	7.0	tr	0.90	trc	0.47	12	12	13	14
C3-Phenanthrenes	4.6	nd	0.42	trc	tr	9.4	8.8	6.2	6.4
Anthracene	nd	nd	nd	nd	nd	tr	0.47	tr	nd
Fluoranthene	tr	nd	nd	nd	nd	tr	tr	tr	nd
Pyrene	tr	nd	nd	nd	nd	tr	tr	tr	nd
Benz(a)anthracene	tr	tr	0.29	tr	nd	trc	nd	0.28	nd
Chrysene	tr	nd	nd	tr	nd	0.50	0.86	0.34	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	83	49	47	47	51	82	79	81	81
Total Alkylated PAH	180	30	52	84	83	380	390	670	570
Total PAH	260	79	99	130	130	460	470	750	650
FFPI	0.96	0.98	0.96	0.98	0.98	0.97	0.96	0.97	0.98

Table C.6. Concentrations (μg/l) of volatile hydrocarbons, acid-extractable compounds and saturated hydrocarbons in produced water samples from the facilities at Emeline Pass (EP), Eugene Island (EI), East Timbalier Island (T), Romere Pass (RP) and Empire Waterway (EW).

	EP 4/89	EP 11/89	EI 5/89	EI* 11/89	T-1 5/89	T-2 5/89	RP-1 OCS* 10/89	RP-2 State 10/89	EW 11/89
Volatile Hydrocarbons (μg/l)									
MDL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Benzene	160	570	4,300	4,700	3,600	1,000	580	760	910
Toluene	140	310	1,000	1,100	810	210	230	400	340
Ethylbenzene	17	26	22	33	22	7.4	13	21	20
Xylenes	72	150	170	250	180	51	100	300	140
Isopropylbenzene	3.5	13	2.0	3.1	2.5	1.4	3.8	16	4.0
n-Propylbenzene	2.6	13	1.7	2.4	2.8	1.4	1.9	29	3.8
1,3,5-Trimethylbenzene	7.6	17	6.0	7.1	9.4	3.4	6.5	77	7.8
1,2,4-Trimethylbenzene	14	22	14	18	21	7.7	10	35	18
Naphthalene	26	38	14	19	13	6.3	12	34	11
Total VH	440	1,200	5,500	6,100	4,700	1,300	960	1,700	1,500
Acid-Extractable Compounds (μg/l)									
MDL	2.2	2.1	4.7	1.8	4.7	4.7	3.2	1.7	3.0
Phenol	110	130	500	710	1,900	640	490	570	190
C1-Phenols (Cresols)	230	250	970	990	2,400	750	590	820	240
C2-Phenols	230	200	570	690	670	380	620	620	200
Benzoic Acid	1,600	1,200	2,000	3,400	7,000	5,400	13,000	7,000	1,800
C1-Benzoic Acids	2,000	2,100	1,600	2,000	3,800	3,500	16,000	6,700	2,800
C2-Benzoic Acids	930	820	290	390	530	630	3,800	1,300	910
Aliphatic Fatty Acids	15,000	12,000	7,900	21,000	16,000	19,000	75,000	45,000	7,000
Total AEC	20,000	17,000	14,000	29,000	32,000	30,000	110,000	62,000	13,000
Saturated Hydrocarbons (μg/l)									
MDL	0.28	0.37	0.27	0.27	0.22	0.18	0.43	0.33	0.42
Resolved	2,500	4,300	4,100	4,200	14,000	5,500	6,500	7,800	3,600
Unresolved	4,200	14,000	3,200	4,700	11,000	5,500	11,000	11,000	4,900
Total	6,700	19,000	7,300	8,900	25,000	11,000	18,000	19,000	8,500
Ratio Resolved/Total	0.37	0.23	0.56	0.47	0.56	0.50	0.36	0.41	0.42

Table C.7. Concentrations (µg/l) of polynuclear aromatic hydrocarbons (PAH) in produced water samples from facilities at Emeline Pass (EP), Eugene Island (EI), East Timbalier Island (T), Romere Pass (RP) and Empire Waterway (EW).

Analyte	EP 4/89	EP 11/89	EI 5/89	EI* 11/89	T-1 5/89	T-2 5/89	RP-1 OCS* 10/89	RP-2 State 10/89	EW 11/89
MDL	0.28	0.37	0.27	0.27	0.22	0.18	0.43	0.33	0.42
Naphthalene	40	61	80	84	79	47	23	29	20
C1-Naphthalenes	35	150	43	91	74	59	42	93	34
C2-Naphthalenes	220	450	50	68	120	95	99	180	59
C3-Naphthalenes	410	1,200	82	110	270	230	210	360	160
C4-Naphthalenes	210	580	32	59	140	130	150	200	91
C5-Naphthalenes	87	260	24	30	68	68	74	110	61
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	2.8	tr	1.0	0.68	1.5	1.2	0.62	0.83	0.52
Fluorene	33	40	1.6	0.70	2.7	4.6	2.4	4.2	2.3
C1-Fluorenes	63	66	4.8	1.9	20	18	9.0	14	7.2
C2-Fluorenes	94	88	7.0	3.2	34	33	15	19	9.1
C3-Fluorenes	61	51	6.3	3.0	26	17	11	12	2.2
Dibenzothiophene	2.2	4.6	0.32	0.32	1.6	1.0	0.77	1.4	1.0
C1-Dibenzothiophenes	8.3	18	1.1	1.2	7.7	5.5	7.4	8.0	5.9
C2-Dibenzothiophenes	17	25	1.4	trc	15	11	8.6	11	8.7
C3-Dibenzothiophenes	14	15	1.3	trc	12	9.5	6.5	6.8	5.5
Phenanthrene	43	61	2.6	1.6	10	11	6.7	11	6.0
C1-Phenanthrenes	73	160	3.3	3.8	24	22	27	31	19
C2-Phenanthrenes	73	120	3.6	4.2	25	24	29	24	22
C3-Phenanthrenes	43	51	2.2	1.6	17	16	16	13	11
Anthracene	nd	nd	tr	nd	0.40	tr	nd	0.45	nd
Fluoranthene	0.65	0.86	tr	tr	0.28	0.27	0.92	0.81	tr
Pyrene	2.1	1.8	tr	tr	0.24	0.34	0.75	0.73	tr
Benz(a)anthracene	2.4	3.0	0.32	trc	0.89	1.2	0.43	0.36	0.53
Chrysene	5.4	7.5	tr	trc	1.2	1.0	0.79	1.0	1.3
Benzo(b)fluoranthene	tr	0.78	tr	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	tr	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	130	180	86	87	98	67	37	50	32
Total Alkylated PAH	1,400	3,200	260	370	860	740	700	1,100	500
Total PAH	1,500	3,400	350	460	960	810	740	1,100	530
FFPI	0.90	0.93	0.98	0.99	0.96	0.95	0.95	0.96	0.95

Table C.8. Concentrations (µg/l) of selected trace metals in produced water discharges.

Discharge	Date	Cr µg/l	V µg/l	Ni µg/l	Cu µg/l	Zn µg/l	Cd µg/l	Ba µg/l	Hg µg/l	Pb µg/l
PF-1 OCS	2/89	400	11,000	6,900	1,300	5,500	7	5,700	nd	15
PF-1 OCS	5/89	380	9,100	7,800	1,600	600	1	7,100	nd	4
PF-1 OCS	10/89	560	14,000	5,600	1,100	470	35	5,200	nd	8
PF-1 OCS	2/90	560	14,000	5,600	1,300	480	24	6,800	nd	nd
PF-2 OCS	2/89	590	8,200	5,200	1,400	470	6	21,000	nd	nd
PF-2 OCS	5/89	420	7,700	3,700	1,000	440	10	19,000	nd	nd
PF-2 OCS	10/89	540	7,200	4,600	1,100	270	3	6,700	230	nd
PF-2 OCS	2/90	410	6,300	5,000	1,300	320	1	16,000	nd	nd
PF-2 State	2/89	390	9,700	7,100	1,700	220	1	2,500	nd	2
PF-2 State	5/89	660	14,000	9,500	2,000	730	11	22,000	nd	9
PF-2 State	10/89	590	15,000	7,200	1,700	1,600	15	64,000	9	11
PF-2 State	2/90	400	10,000	6,700	1,600	1,800	8	50,000	nd	29
Exxon Pre	2/89	440	10,000	4,700	1,100	380	14	15,000	nd	nd
Exxon Post	2/89	450	10,000	5,100	1,100	430	2	18,000	nd	4
Exxon	5/89	420	11,000	4,300	1,100	390	16	16,000	nd	nd
Exxon	10/89	480	11,000	5,700	1,300	410	10	20,000	nd	1
Exxon	2/90	510	11,000	4,600	990	490	12	20,000	nd	4
Conoco	3/89	420	8,200	5,000	1,200	740	nd	57,000	nd	nd
Conoco	5/89	320	6,700	3,800	1,000	670	15	48,000	nd	nd
Conoco	10/89	370	6,900	3,800	920	590	8	56,000	nd	1
Conoco	2/90	330	6,900	5,000	1,300	760	7	56,000	nd	nd
EP	4/89	350	8,600	5,200	1,100	610	4	32,000	nd	nd
EP	11/89	450	10,000	3,700	560	350	7	17,000	nd	3
EI	5/89	810	19,000	8,300	1,700	3,200	46	190,000	nd	9
EI	11/89	640	14,000	6,000	1,300	3,100	32	190,000	nd	4
T-1	5/89	610	13,000	7,400	1,500	4,700	9	280,000	nd	5
T-2	5/89	530	12,000	7,700	1,800	2,500	33	180,000	nd	4
RP-1 OCS	10/89	500	6,900	5,100	1,100	420	5	23,000	74	1
RP-2 State	10/89	420	9,800	5,100	1,200	260	nd	5,400	nd	nd
EW	11/89	1,000	22,000	8,800	1,700	440	40	7,000	nd	13

Table C.9. Radionuclide concentration of produced water discharges.

Discharge	Date	Pb-210 ($dpm \cdot l^{-1}$)	Total Radium ($dpm \cdot l^{-1}$)
PF-1 OCS	02/89	18.12	2312
	05/89	17.89	1625
	10/89	7.89	1026
	02/90	7.40	943
PF-2 OCS	02/89	8.79	650
	05/89	3.21	380
	10/89	1.13	373
	02/90	2.73	371
PF-2 State	02/89	25.40	1890
	05/89	8.49	1250
	10/89	2.71	1230
	02/90	4.38	1251
Exxon "Pre"	02/89	27.54	1007
Exxon "Post"	02/89	6.88	1012
Exxon	05/89	1.26	897
	10/89	5.37	759
	02/90	0.78	843
Conoco	02/89	21.10	416
	05/89	0.21	389
	10/89	0.79	333
	02/90	0.76	304
Emeline Pass	04/89	1.13	662
	10/89	4.35	415
Eugene Island	05/89	5.21	1394
	11/89	3.71	1232
East Timbalier, T-1	05/89	10.51	1299
East Timbalier, T-2	05/89	7.58	1462
Romere Pass, RP-1 OCS	10/89	1.53	231
Romere Pass, RP-2 State	10/89	1.88	867
Empire Waterway	11/89	1.56	1996

APPENDIX D

Hydrocarbon Concentrations in Near-Bottom Waters, Surficial Sediments and Vertical Sediment Cores

Table D.1. Volatile and semivolatile hydrocarbon concentrations (μg/l) detected in near-bottom waters at the Pass Fourchon study site, February 1989.

Analyte	PF400* 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	17	2.1	14	nd	nd	nd
Toluene	7.1	0.55	5.7	nd	nd	nd
Ethylbenzene	0.54	nd	0.40	nd	nd	nd
Xylenes	4.4	0.42	3.4	nd	nd	nd
Isopropylbenzene	0.16	nd	0.12	nd	nd	nd
n-Propylbenzene	0.13	nd	0.09	nd	nd	nd
1,3,5-Trimethylbenzene	0.31	0.06	0.23	nd	nd	nd
1,2,4-Trimethylbenzene	0.60	0.06	0.40	nd	nd	nd
Naphthalene	0.87	0.10	0.63	nd	nd	nd
Total Volatiles	31	3.3	25	nd	nd	nd
PAH						
MDL	0.03	0.06	0.15	0.12	0.21	0.06
Naphthalene	0.92	tr	0.65	nd	nd	nd
C1-Naphthalenes	0.95	tr	0.37	nd	nd	trc
C2-Naphthalenes	1.9	tr	trc	nd	nd	nd
C3-Naphthalenes	2.5	tr	0.53	nd	nd	tr
C4-Naphthalenes	tr	nd	nd	nd	nd	nd
C5-Naphthalenes	tr	nd	nd	nd	nd	nd
Acenaphthylene	tr	nd	nd	nd	nd	nd
Acenaphthene	0.09	nd	nd	nd	nd	nd
Fluorene	0.44	nd	trc	nd	nd	nd
C1-Fluorenes	tr	nd	tr	nd	nd	nd
C2-Fluorenes	tr	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd
Dibenzothiophene	tr	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	trc	nd	nd	nd	nd	tr
C3-Dibenzothiophenes	trc	tr	nd	nd	nd	tr
Phenanthrene	0.13	trc	tr	nd	nd	trc
C1-Phenanthrenes	0.17	tr	trc	nd	nd	nd
C2-Phenanthrenes	0.12	trc	trc	nd	nd	trc
C3-Phenanthrenes	0.06	trc	nd	nd	nd	trc
Anthracene	tr	nd	nd	nd	nd	nd
Fluoranthene	tr	trc	nd	nd	nd	trc
Pyrene	trc	tr	nd	nd	nd	trc
Benz(a)anthracene	trc	nd	nd	nd	nd	trc
Chrysene	trc	nd	nd	nd	nd	trc
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	trc
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	1.6	tr	0.65	nd	nd	tr
Total Alkylated PAH	5.7	tr	0.90	nd	nd	tr
Total PAH	7.3	tr	1.6	nd	nd	tr
FFPI	0.91	na	1.00	na	na	na
Saturated Hydrocarbons						
Resolved	15	8.6	8.7	11	7.5	7.7
Unresolved	12	11	15	1.7	8.2	16
Total	27	20	23	12	16	24
Ratio Resolved/Total	0.56	0.43	0.38	0.92	0.47	0.32

Table D.2. Volatile and semivolatile hydrocarbon concentrations (μg/l) detected in near-bottom waters at the Pass Fourchon study site, May 1989.

Analyte	PF400 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	21	32	27	2.5	0.82	nd
Toluene	7.9	12	9.6	1.7	0.45	nd
Ethylbenzene	0.47	0.91	0.64	0.30	0.16	nd
Xylenes	2.7	5.9	4.2	0.92	0.41	nd
Isopropylbenzene	0.09	0.13	0.10	0.08	0.06	nd
n-Propylbenzene	0.10	0.13	0.10	0.06	0.05	nd
1,3,5-Trimethylbenzene	0.22	0.38	0.29	0.12	0.10	nd
1,2,4-Trimethylbenzene	0.41	0.82	0.61	0.11	0.04	nd
Naphthalene	0.58	1.3	0.99	0.05	0.05	nd
Total Volatiles	33	54	43	5.8	2.1	nd
PAH						
MDL	0.36	0.14	0.22	0.18	0.13	0.10
Naphthalene	0.63	2.0	1.1	nd	nd	nd
C1-Naphthalenes	trc	1.7	1.0	nd	nd	nd
C2-Naphthalenes	0.36	2.2	1.0	nd	nd	nd
C3-Naphthalenes	1.6	2.6	1.6	nd	nd	nd
C4-Naphthalenes	nd	tr	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	tr	0.16	tr	nd	nd	nd
Fluorene	trc	0.40	0.24	nd	nd	nd
C1-Fluorenes	tr	tr	tr	nd	nd	nd
C2-Fluorenes	tr	tr	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd
Dibenzothiophene	trc	trc	tr	nd	nd	nd
C1-Dibenzothiophenes	trc	trc	tr	nd	nd	nd
C2-Dibenzothiophenes	tr	tr	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
Phenanthrene	tr	0.60	0.29	nd	nd	nd
C1-Phenanthrenes	trc	0.29	trc	nd	nd	nd
C2-Phenanthrenes	tr	trc	trc	nd	nd	nd
C3-Phenanthrenes	tr	tr	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	0.63	3.1	1.6	nd	nd	nd
Total Alkylated PAH	2.0	6.8	3.6	nd	nd	nd
Total PAH	2.6	9.9	5.2	nd	nd	nd
FFPI	1.00	0.90	0.93	na	na	na
Saturated Hydrocarbons						
Resolved	28	36	38	27	20	15
Unresolved	61	52	63	11	7.6	23
Total	89	88	100	38	28	38
Ratio Resolved/Total	0.31	0.41	0.38	0.71	0.71	0.39

Table D.3. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Pass Fourchon study site, October 1989.

Analyte	PF400 0†	PF600N* 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	0.12	0.30	31	nd	nd	nd
Toluene	0.05	0.13	11	nd	0.69	nd
Ethylbenzene	nd	nd	0.75	nd	nd	nd
Xylenes	0.05	nd	5.2	nd	0.05	nd
Isopropylbenzene	nd	nd	0.21	nd	nd	nd
n-Propylbenzene	nd	nd	0.13	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	0.37	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	0.81	nd	nd	nd
Naphthalene	nd	nd	0.96	nd	nd	nd
Total Volatiles	0.22	0.43	50	nd	0.74	nd
PAH						
MDL	0.04	0.04	0.03	0.03	0.03	0.02
Naphthalene	nd	nd	0.51	nd	nd	nd
C1-Naphthalenes	tr	tr	0.81	nd	nd	tr
C2-Naphthalenes	nd	nd	0.73	nd	nd	nd
C3-Naphthalenes	nd	nd	1.6	nd	nd	nd
C4-Naphthalenes	nd	nd	0.84	nd	nd	nd
C5-Naphthalenes	nd	nd	tr	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	tr	nd	nd	nd
Fluorene	nd	nd	0.11	nd	nd	nd
C1-Fluorenes	nd	nd	0.18	nd	nd	nd
C2-Fluorenes	nd	nd	0.25	nd	nd	nd
C3-Fluorenes	nd	nd	tr	nd	nd	nd
Dibenzothiophene	nd	nd	0.03	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	0.04	nd	nd	nd
C2-Dibenzothiophenes	trc	tr	trc	nd	nd	nd
C3-Dibenzothiophenes	trc	tr	tr	nd	nd	nd
Phenanthrene	nd	nd	0.10	nd	nd	nd
C1-Phenanthrenes	nd	nd	0.23	nd	nd	nd
C2-Phenanthrenes	trc	tr	0.18	nd	nd	nd
C3-Phenanthrenes	trc	tr	trc	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	nd	0.75	nd	nd	nd
Total Alkylated PAH	trc	tr	4.9	nd	nd	tr
Total PAH	trc	tr	5.6	nd	nd	tr
FFPI	na	na	0.94	na	na	na
Saturated Hydrocarbons						
Resolved	4.3	3.4	16	2.0	1.3	4.1
Unresolved	46	21	46	1.7	10	16
Total	50	24	62	3.7	11	20
Ratio Resolved/Total	0.09	0.14	0.26	0.54	0.12	0.21

Table D.4. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Pass Fourchon study site, Feburary 1990.

Analyte	PF400 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
Volatile Hdyrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	18	57	nd	nd	nd	nd
Toluene	9.0	24	nd	nd	nd	nd
Ethylbenzene	0.57	1.5	nd	nd	nd	nd
Xylenes	3.9	9.1	nd	nd	nd	nd
Isopropylbenzene	0.12	0.19	nd	nd	nd	nd
n-Propylbenzene	0.09	0.19	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.17	0.30	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.37	0.76	nd	nd	nd	nd
Naphthalene	0.45	0.94	nd	nd	nd	nd
Total Volatiles	32	94	nd	nd	nd	nd
PAH						
MDL	0.05	0.08	0.05	0.05	0.03	0.05
Naphthalene	0.75	4.6	0.08	nd	nd	nd
C1-Naphthalenes	1.0	3.9	nd	nd	nd	nd
C2-Naphthalenes	0.87	4.9	nd	nd	nd	nd
C3-Naphthalenes	1.6	6.1	nd	nd	nd	nd
C4-Naphthalenes	1.9	1.0	nd	nd	nd	nd
C5-Naphthalenes	tr	0.83	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	tr	tr	nd	nd	nd	nd
Fluorene	0.11	0.30	nd	nd	nd	nd
C1-Fluorenes	tr	0.35	nd	nd	nd	nd
C2-Fluorenes	tr	1.0	nd	nd	nd	nd
C3-Fluorenes	tr	tr	nd	nd	nd	nd
Dibenzothiophene	tr	tr	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	0.14	nd	nd	nd	nd
C2-Dibenzothiophenes	tr	tr	nd	nd	nd	nd
C3-Dibenzothiophenes	tr	tr	nd	nd	nd	nd
Phenanthrene	0.11	0.44	tr	nd	nd	nd
C1-Phenanthrenes	0.15	1.0	nd	nd	tr	tr
C2-Phenanthrenes	0.36	0.74	nd	nd	tr	nd
C3-Phenanthrenes	0.23	tr	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	tr	tr	nd	nd	tr	nd
Pyrene	tr	tr	nd	nd	trc	nd
Benz(a)anthracene	tr	nd	nd	nd	nd	nd
Chrysene	tr	trc	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	0.97	5.3	tr	nd	tr	nd
Total Alkylated PAH	6.1	19	nd	nd	tr	tr
Total PAH	7.1	24	tr	nd	tr	tr
FFPI	0.95	0.95	na	na	na	na
Saturated Hydrocarbons						
Resolved	33	210	6.8	4.4	3.3	4.0
Unresolved	87	170	15	26	8.7	29
Total	120	380	22	30	12	33
Ratio Resolved/Total	0.28	0.55	0.31	0.15	0.28	0.12

Table D.5. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Bayou Rigaud study site, February 1989.

Analyte	BR2 250†	BR4 0	BR6 -250	BR8 -700	BR9 -850	BR11 -1150
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	2.8	47	2.6	3.0	3.8	4.3
Toluene	1.5	32	1.6	1.8	2.2	2.4
Ethylbenzene	0.10	2.3	0.11	0.12	0.14	0.16
Xylenes	0.74	17	0.78	0.82	1.0	1.1
Isopropylbenzene	nd	0.30	nd	nd	nd	nd
n-Propylbenzene	nd	0.30	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.05	1.1	0.10	0.06	0.07	0.07
1,2,4-Trimethylbenzene	0.11	2.8	0.14	0.13	0.15	0.16
Naphthalene	0.09	4.7	0.16	0.12	0.13	0.19
Total Volatiles	5.4	110	5.5	6.1	7.5	8.4
PAH						
MDL	0.03	0.03	0.03	0.09	0.06	0.06
Naphthalene	nd	0.88	tr	tr	tr	tr
C1-Naphthalenes	nd	0.53	trc	trc	tr	trc
C2-Naphthalenes	nd	0.44	tr	nd	nd	nd
C3-Naphthalenes	nd	0.66	nd	nd	nd	nd
C4-Naphthalenes	nd	tr	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	0.04	nd	nd	nd	nd
Fluorene	nd	0.04	nd	nd	nd	nd
C1-Fluorenes	nd	tr	nd	nd	nd	nd
C2-Fluorenes	nd	tr	nd	nd	nd	nd
C3-Fluorenes	nd	tr	nd	nd	nd	nd
Dibenzothiophene	nd	tr	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	trc	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	trc	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	tr	nd	nd	nd	nd
Phenanthrene	nd	0.06	trc	nd	nd	nd
C1-Phenanthrenes	nd	0.05	trc	nd	nd	nd
C2-Phenanthrenes	nd	0.04	trc	nd	nd	nd
C3-Phenanthrenes	nd	trc	trc	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	1.0	tr	tr	tr	tr
Total Alkylated PAH	nd	1.7	tr	tr	tr	tr
Total PAH	nd	2.7	tr	tr	tr	tr
FFPI	na	0.96	na	na	na	na
Saturated Hydrocarbons						
Resolved	3.3	8.8	4.1	4.7	5.0	10
Unresolved	3.7	4.6	7.6	5.7	4.2	14
Total	7.0	13	12	10	9.2	24
Ratio Resolved/Total	0.47	0.68	0.34	0.47	0.54	0.42

Table D.6. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Bayou Rigaud study site, May 1989.

Analyte	BR2* 250†	BR4 0	BR6 -250	BR8 -700	BR9 -850	BR11 -1150
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	5.2	nd	nd	0.20	4.0	0.18
Toluene	3.5	nd	nd	0.06	1.7	nd
Ethylbenzene	0.10	nd	nd	0.05	0.19	0.05
Xylenes	0.60	nd	nd	0.21	1.3	0.24
Isopropylbenzene	nd	nd	nd	nd	0.04	nd
n-Propylbenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.06	nd	nd	nd	0.07	nd
1,2,4-Trimethylbenzene	0.08	nd	nd	0.05	0.15	0.04
Naphthalene	0.08	nd	nd	0.04	0.14	0.05
Total Volatiles	9.6	nd	nd	0.61	7.5	0.56
PAH						
MDL	0.31	0.12	0.11	0.18	0.19	0.18
Naphthalene	nd	nd	nd	nd	0.28	tr
C1-Naphthalenes	nd	nd	nd	nd	trc	trc
C2-Naphthalenes	nd	nd	nd	nd	nd	nd
C3-Naphthalenes	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	nd	nd	nd	tr
C1-Phenanthrenes	nd	nd	nd	nd	nd	tr
C2-Phenanthrenes	nd	nd	nd	nd	nd	trc
C3-Phenanthrenes	nd	nd	nd	nd	nd	tr
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	nd	nd	nd	0.28	tr
Total Alkylated PAH	nd	nd	nd	nd	tr	tr
Total PAH	nd	nd	nd	nd	0.28	tr
FFPI	na	na	na	na	na	na
Saturated Hydrocarbons						
Resolved	7.7	21	6.1	0.35	0.39	7.1
Unresolved	5.4	22	20	5.6	16	29
Total	13	43	26	5.9	16	36
Ratio Resolved/Total	0.59	0.49	0.23	0.06	0.02	0.20

Table D.8. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Bayou Rigaud study site, February 1990.

Analyte	BR2 250†	BR4 0	BR6 -250	BR8 -700	BR9 -850	BR11 -1150
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	nd	0.88	0.55	nd	nd	nd
Toluene	nd	0.08	0.92	nd	nd	nd
Ethylbenzene	nd	0.27	0.16	nd	nd	nd
Xylenes	nd	0.46	1.5	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
n-Propylbenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	0.07	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	0.14	nd	nd	nd
Naphthalene	nd	nd	0.13	nd	nd	nd
Total Volatiles	nd	1.7	3.5	nd	nd	nd
PAH						
MDL	0.04	0.04	0.03	0.03	0.03	0.04
Naphthalene	nd	0.18	0.43	nd	0.14	nd
C1-Naphthalenes	nd	0.24	0.48	nd	0.05	nd
C2-Naphthalenes	nd	0.18	0.33	nd	nd	nd
C3-Naphthalenes	nd	nd	tr	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	tr	nd	nd	nd
Fluorene	nd	tr	tr	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	tr	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	tr	0.04	tr	trc	nd
C1-Phenanthrenes	nd	tr	trc	trc	tr	nd
C2-Phenanthrenes	nd	tr	tr	tr	tr	nd
C3-Phenanthrenes	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	tr	nd	nd	nd
Pyrene	nd	nd	tr	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	0.18	0.47	tr	0.14	nd
Total Alkylated PAH	nd	0.42	0.81	tr	0.05	nd
Total PAH	nd	0.60	1.3	tr	0.19	nd
FFPI	na	1.00	0.98	na	1.00	na
Saturated Hydrocarbons						
Resolved	1.9	7.9	8.5	1.8	3.6	2.1
Unresolved	16	28	20	7.9	17	7.6
Total	18	36	29	9.7	21	9.7
Ratio Resolved/Total	0.11	0.22	0.29	0.19	0.17	0.22

Table D.7. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Bayou Rigaud study site, October 1989.

Analyte	BR2 250†	BR4 0	BR6 -250	BR8 -700	BR9 -850	BR11 -1150
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	2.8	0.92	nd	6.6	nd	nd
Toluene	0.55	0.26	nd	1.8	nd	nd
Ethylbenzene	0.05	nd	nd	0.07	nd	nd
Xylenes	0.26	0.12	nd	0.41	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
n-Propylbenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
Total Volatiles	3.7	1.3	nd	8.9	nd	nd
PAH						
MDL	0.02	0.03	0.03	0.04	0.03	0.03
Naphthalene	tr	nd	nd	tr	nd	nd
C1-Naphthalenes	trc	nd	nd	tr	nd	nd
C2-Naphthalenes	tr	nd	nd	tr	nd	nd
C3-Naphthalenes	tr	nd	nd	1.1	nd	nd
C4-Naphthalenes	nd	nd	nd	6.3	nd	nd
C5-Naphthalenes	nd	nd	nd	5.0	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	tr	nd	nd	tr	nd	nd
Fluorene	tr	nd	nd	trc	nd	nd
C1-Fluorenes	tr	nd	nd	0.31	nd	nd
C2-Fluorenes	tr	nd	nd	1.1	nd	nd
C3-Fluorenes	nd	nd	nd	0.39	nd	nd
Dibenzothiophene	tr	nd	nd	tr	nd	nd
C1-Dibenzothiophenes	tr	nd	nd	0.36	nd	nd
C2-Dibenzothiophenes	tr	tr	nd	0.94	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	0.54	nd	nd
Phenanthrene	tr	nd	nd	0.06	nd	nd
C1-Phenanthrenes	tr	nd	nd	0.87	nd	nd
C2-Phenanthrenes	trc	trc	nd	3.2	nd	nd
C3-Phenanthrenes	nd	nd	nd	1.5	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	0.06	nd	nd
Pyrene	nd	nd	nd	0.16	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	tr	nd	nd	0.27	nd	nd
Total Alkylated PAH	tr	tr	nd	22	nd	nd
Total PAH	tr	tr	nd	22	nd	nd
FFPI	na	na	na	0.92	na	na
Saturated Hydrocarbons						
Resolved	5.6	2.2	3.0	180	1.4	1.7
Unresolved	18	14	12	170	8.4	12
Total	24	16	15	350	9.8	14
Ratio Resolved/Total	0.23	0.14	0.20	0.51	0.14	0.12

Table D.9. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Emeline Pass study site, April 1989.

Analyte	EP0*	EP100E	EP250E	EP450W	EP550E	EP1000E
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd
Xylenes	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
n-Propylbenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
Total Volatiles	nd	nd	nd	nd	nd	nd
PAH						
MDL	0.05	0.06	0.07	0.06	0.04	0.04
Naphthalene	nd	nd	nd	nd	nd	nd
C1-Naphthalenes	nd	nd	nd	nd	nd	nd
C2-Naphthalenes	nd	nd	nd	nd	nd	nd
C3-Naphthalenes	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	tr	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	tr	nd	nd	nd
Phenanthrene	nd	nd	nd	nd	nd	nd
C1-Phenanthrenes	nd	nd	trc	nd	nd	nd
C2-Phenanthrenes	nd	nd	tr	nd	nd	nd
C3-Phenanthrenes	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	nd	nd	nd	nd	nd
Total Alkylated PAH	nd	nd	tr	nd	nd	nd
Total PAH	nd	nd	tr	nd	nd	nd
FFPI	na	na	na	na	na	na
Saturated Hydrocarbons						
Resolved	3.0	1.5	40	1.5	5.9	0.20
Unresolved	12	6.8	280	11	7.1	1.0
Total	15	8.3	320	13	13	1.2
Ratio Resolved/Total	0.20	0.18	0.13	0.12	0.45	0.17

Table D.10. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Emeline Pass study site, November 1989.

Analyte	EP0*	EP100E	EP250E	EP450W	EP550E	EP1000E
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd
Xylenes	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
n-Propylbenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
Total Volatiles	nd	nd	nd	nd	nd	nd
PAH						
MDL	0.04	0.03	0.03	0.06	0.06	0.07
Naphthalene	nd	nd	nd	nd	nd	nd
C1-Naphthalenes	nd	nd	nd	nd	nd	nd
C2-Naphthalenes	nd	nd	nd	nd	nd	nd
C3-Naphthalenes	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	nd	nd	nd	nd
C1-Phenanthrenes	nd	nd	nd	nd	nd	nd
C2-Phenanthrenes	nd	nd	nd	nd	nd	nd
C3-Phenanthrenes	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	nd	nd	nd	nd	nd
Total Alkylated PAH	nd	nd	nd	nd	nd	nd
Total PAH	nd	nd	nd	nd	nd	nd
FFPI	na	na	na	na	na	na
Saturated Hydrocarbons						
Resolved	0.77	0.69	0.73	1.1	0.96	0.76
Unresolved	5.5	3.1	6.1	8.3	1.3	3.8
Total	6.3	3.8	6.8	9.4	2.3	4.6
Ratio Resolved/Total	0.12	0.18	0.11	0.12	0.42	0.17

Table D.11. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at Eugene Island study site, May 1989.

Analyte	EI0	EIA50	EIA100	EIA250	EIA500
Volatile Hydrocarbons					
MDL	0.04	0.04	0.04	0.04	0.04
Benzene	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd
Xylenes	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd
n-Propylbenzene	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd
Total Volatiles	nd	nd	nd	nd	nd
PAH					
MDL	0.05	0.07	0.06	0.14	0.08
Naphthalene	nd	nd	nd	nd	nd
C1-Naphthalenes	nd	nd	nd	nd	nd
C2-Naphthalenes	nd	nd	nd	nd	nd
C3-Naphthalenes	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	nd	nd	nd
C1-Phenanthrenes	nd	nd	nd	nd	nd
C2-Phenanthrenes	nd	nd	nd	nd	nd
C3-Phenanthrenes	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd
Total Parent PAH	nd	nd	nd	nd	nd
Total Alkylated PAH	nd	nd	nd	nd	nd
Total PAH	nd	nd	nd	nd	nd
FFPI	na	na	na	na	na
Saturated Hydrocarbons					
Resolved	2.1	1.3	1.7	2.8	4.9
Unresolved	3.1	7.7	7.2	5.4	9.0
Total	5.2	9.0	8.9	8.2	14
Ratio Resolved/Total	0.40	0.14	0.19	0.34	0.35

Table D.12. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Eugene Island study site, November 1989. (n/d: no volatile sample, bottle broke)

Analyte	EI0	EIA50	EIA100	EIA250	EIA500
Volatile Hydrocarbons					
MDL	0.04	0.04	0.04	0.04	0.04
Benzene	86	n/d	0.57	0.05	nd
Toluene	27	n/d	nd	nd	nd
Ethylbenzene	1.1	n/d	nd	nd	nd
Xylenes	8.9	n/d	nd	nd	nd
Isopropylbenzene	0.14	n/d	nd	nd	nd
n-Propylbenzene	0.08	n/d	nd	nd	nd
1,3,5-Trimethylbenzene	0.34	n/d	nd	nd	nd
1,2,4-Trimethylbenzene	0.75	n/d	nd	nd	nd
Naphthalene	0.93	n/d	nd	nd	nd
Total Volatiles	130	n/d	0.57	0.05	nd
PAH					
MDL	0.04	0.03	0.04	0.05	0.03
Naphthalene	1.8	nd	nd	nd	nd
C1-Naphthalenes	1.8	nd	nd	nd	nd
C2-Naphthalenes	1.2	nd	nd	nd	nd
C3-Naphthalenes	1.4	nd	nd	nd	nd
C4-Naphthalenes	tr	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd
Acenaphthene	tr	nd	nd	nd	nd
Fluorene	tr	nd	nd	nd	nd
C1-Fluorenes	tr	nd	nd	nd	nd
C2-Fluorenes	tr	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd
Dibenzothiophene	tr	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd
Phenanthrene	0.04	tr	nd	nd	nd
C1-Phenanthrenes	trc	tr	nd	nd	nd
C2-Phenanthrenes	trc	trc	nd	nd	nd
C3-Phenanthrenes	trc	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd
Total Parent PAH	1.8	tr	nd	nd	nd
Total Alkylated PAH	4.3	tr	nd	nd	nd
Total PAH	6.1	tr	nd	nd	nd
FFPI	1.00	na	na	na	na
Saturated Hydrocarbons					
Resolved	110	10	3.0	3.4	2.9
Unresolved	80	20	8.4	19	0.40
Total	190	30	11	23	3.3
Ratio Resolved/Total	0.58	0.33	0.27	0.15	0.88

Table D.13. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the East Timbalier Island study site, May 1989.

Analyte	T1	T4	T6	T7	T9	T11*	T12
Volatile Hydrocarbons							
MDL	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	nd	3.7	4.5	0.66	nd	nd	nd
Toluene	nd	0.54	2.5	nd	nd	nd	nd
Ethylbenzene	nd	0.05	nd	nd	nd	nd	nd
Xylenes	nd	0.23	0.30	0.06	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd	nd
n-Propylbenzene	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	0.05	0.07	0.04	nd	nd	nd
1,2,4-Trimethylbenzene	nd	0.06	0.07	nd	nd	nd	nd
Naphthalene	nd	0.04	0.05	nd	nd	nd	nd
Total Volatiles	nd	4.7	7.5	0.76	nd	nd	nd
PAH							
MDL	0.04	0.04	0.05	0.05	0.04	0.06	0.04
Naphthalene	nd	tr	tr	nd	nd	nd	nd
C1-Naphthalenes	nd	trc	trc	nd	nd	nd	nd
C2-Naphthalenes	nd	trc	trc	nd	nd	nd	nd
C3-Naphthalenes	nd	tr	tr	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	tr	nd	nd	nd	nd
Fluorene	nd	nd	trc	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	tr	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	tr	nd	nd	nd	nd
C1-Phenanthrenes	nd	nd	trc	nd	tr	nd	nd
C2-Phenanthrenes	nd	nd	trc	nd	trc	nd	nd
C3-Phenanthrenes	nd	nd	tr	nd	trc	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	tr	tr	nd	nd	nd	nd
Total Alkylated PAH	nd	tr	tr	nd	tr	nd	nd
Total PAH	nd	tr	tr	nd	tr	nd	nd
FFPI	na	na	na	na	na	na	na
Saturated Hydrocarbons							
Resolved	0.82	0.77	2.1	1.2	2.9	0.94	1.0
Unresolved	0.68	0.83	15	4.6	5.0	8.5	6.9
Total	1.5	1.6	17	5.8	7.9	9.4	7.9
Ratio Resolved/Total	0.55	0.48	0.12	0.21	0.37	0.10	0.13

Table D.14. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Romere Pass study site, October 1989.

Analyte	RP0	RP450S	RP550N	RP1000N
Volatile Hydrocarbons				
MDL	0.04	0.04	0.04	0.04
Benzene	1.2	1.3	4.0	nd
Toluene	0.81	0.86	2.8	nd
Ethylbenzene	0.07	0.07	0.20	nd
Xylenes	0.45	0.50	1.4	nd
Isopropylbenzene	nd	nd	0.04	nd
n-Propylbenzene	nd	nd	0.06	nd
1,3,5-Trimethylbenzene	nd	nd	0.11	nd
1,2,4-Trimethylbenzene	0.09	0.09	0.22	nd
Naphthalene	0.09	0.10	0.17	nd
Total Volatiles	2.7	2.9	9.0	nd
PAH				
MDL	0.05	0.05	0.03	0.14
Naphthalene	0.07	0.06	0.05	nd
C1-Naphthalenes	0.06	0.10	0.13	nd
C2-Naphthalenes	trc	0.05	0.17	nd
C3-Naphthalenes	nd	tr	tr	nd
C4-Naphthalenes	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd
Dibenzothiophene	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd
Phenanthrene	nd	nd	trc	nd
C1-Phenanthrenes	nd	nd	nd	nd
C2-Phenanthrenes	nd	nd	nd	nd
C3-Phenanthrenes	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd
Total Parent PAH	0.07	0.06	0.05	nd
Total Alkylated PAH	0.06	0.15	0.30	nd
Total PAH	0.13	0.21	0.35	nd
FFPI	1.00	1.00	1.00	na
Saturated Hydrocarbons				
Resolved	7.6	6.7	9.6	7.5
Unresolved	10	11	20	30
Total	18	18	30	38
Ratio Resolved/Total	0.42	0.37	0.32	0.20

Table D.15. Volatile and semivolatile hydrocarbon concentrations (µg/l) detected in near-bottom waters at the Empire Waterway study site, November 1989.

Analyte	EW2	EW3	EW4	EW7*	EW8	EW9
Volatile Hydrocarbons						
MDL	0.04	0.04	0.04	0.04	0.04	0.04
Benzene	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd
Xylenes	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
n-Propylbenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
Total Volatiles	nd	nd	nd	nd	nd	nd
PAH						
MDL	0.04	0.03	0.04	0.07	0.04	0.05
Naphthalene	nd	nd	nd	nd	nd	nd
C1-Naphthalenes	nd	nd	nd	nd	nd	nd
C2-Naphthalenes	nd	nd	nd	nd	nd	nd
C3-Naphthalenes	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	nd	nd	nd	nd
C1-Phenanthrenes	nd	nd	nd	nd	nd	nd
C2-Phenanthrenes	nd	nd	nd	nd	nd	nd
C3-Phenanthrenes	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd	nd	nd	nd
Benz(a)anthracene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	nd	nd	nd	nd	nd	nd
Total Alkylated PAH	nd	nd	nd	nd	nd	nd
Total PAH	nd	nd	nd	nd	nd	nd
FFPI	na	na	na	na	na	na
Saturated Hydrocarbons						
Resolved	4.2	5.6	7	4.7	2.3	5.60
Unresolved	4	10.0	22	15	13.0	24.0
Total	8	16	29	20	15	30
Ratio Resolved/Total	0.53	0.35	0.26	0.24	0.15	0.19

Table D.16. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Pass Fourchon, February 1989.

Analyte	PF400 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
MDL	19	24	21	2.5	3.6	9.9
Naphthalene	31	nd	37	tr	5.1	tr
C1-Naphthalenes	20	41	150	tr	15	trc
C2-Naphthalenes	400	940	850	tr	6.2	trc
C3-Naphthalenes	3,100	6,400	3,200	nd	33	trc
C4-Naphthalenes	5,300	5,000	920	nd	tr	nd
C5-Naphthalenes	1,800	tr	1,100	nd	tr	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	trc	nd
Fluorene	47	77	77	tr	nd	nd
C1-Fluorenes	250	500	410	nd	tr	tr
C2-Fluorenes	500	1600	630	nd	tr	tr
C3-Fluorenes	890	1400	720	nd	36	160
Dibenzothiophene	tr	27	31	tr	nd	nd
C1-Dibenzothiopenes	180	460	240	trc	trc	15
C2-Dibenzothiophenes	1,000	1,400	670	trc	7.0	150
C3-Dibenzothiophenes	1,200	1,500	860	nd	11	330
Phenanthrene	nd	nd	180	10	18	14
C1-Phenanthrenes	660	1,500	1,200	tr	22	tr
C2-Phenanthrenes	2,300	3,900	2,000	trc	60	300
C3-Phenanthrenes	2,400	3,400	1,800	tr	44	610
Anthracene	nd	nd	27	3.5	3.7	12
Fluoranthene	180	190	110	23	54	110
Pyrene	150	190	110	20	56	110
Benzanthracene	74	94	46	10	13	38
Chrysene	230	340	140	11	19	70
Benzo(b)fluoranthene	nd	nd	nd	8.0	15	nd
Benzo(a)pyrene	nd	nd	nd	7.4	tr	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	710	920	760	99	190	350
Total Alkylated PAH	20,000	28,000	15,000	tr	230	1,600
Total PAH	21,000	29,000	16,000	99	430	1,900
FFPI	0.92	0.92	0.90	0.05	0.52	0.80
Saturated Hydrocarbons						
Resolved	32,000	57,000	68,000	480	2,100	3,600
Unresolved	460,000	520,000	300,000	1,700	2,200	110,000
Total	490,000	580,000	370,000	2,200	4,300	110,000
Ratio Resolved/Total	0.07	0.10	0.18	0.22	0.49	0.03

Table D.17. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Pass Fourchon, May 1989.

Analyte	PF400 0†	PF500N 100	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF1200N 800	PF1000NE 600	PF1200NE*** 800	PF500S -100	PF600S* -200
MDL	18	74	25	7.8	3.5	3.5	16	16	14	8.7	15
Naphthalene	tr	nd	trc	tr	tr	nd	tr	nd	tr	nd	tr
C1-Naphthalenes	22	tr	tr	15	nd	trc	trc	trc	nd	nd	tr
C2-Naphthalenes	640	860	720	200	4.9	7.0	20	nd	tr	110	21
C3-Naphthalenes	5,700	6,500	3,700	1,200	nd	nd	tr	nd	nd	tr	tr
C4-Naphthalenes	8,100	7,000	2,900	1,300	nd	nd	nd	nd	tr	tr	tr
C5-Naphthalenes	5,000	6,100	tr	tr	nd	nd	nd	nd	tr	nd	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	trc	trc	tr	nd	nd
Acenaphthene	nd	tr	nd	nd	nd	nd	trc	tr	tr	nd	nd
Fluorene	53	tr	nd	52	nd	nd	trc	trc	trc	nd	nd
C1-Fluorenes	400	490	400	180	nd	nd	tr	110	tr	tr	tr
C2-Fluorenes	1600	1200	790	210	nd	nd	tr	nd	tr	330	tr
C3-Fluorenes	1800	1200	1400	270	nd	nd	nd	nd	tr	nd	tr
Dibenzothiophene	nd	tr	26	nd	nd	nd	trc	tr	tr	nd	nd
C1-Dibenzothiophenes	360	430	320	120	nd	tr	tr	tr	tr	nd	tr
C2-Dibenzothiophenes	1100	1100	940	290	nd	tr	tr	tr	nd	tr	86
C3-Dibenzothiophenes	1300	1200	970	250	nd	tr	tr	tr	nd	tr	200
Phenanthrene	98	86	130	76	nd	5.4	56	48	tr	tr	33
C1-Phenanthrenes	1600	1700	1400	430	nd	tr	tr	tr	tr	120	25
C2-Phenanthrenes	3300	6100	2600	750	nd	tr	tr	tr	tr	tr	320
C3-Phenanthrenes	2700	3900	2300	660	nd	tr	tr	tr	tr	tr	420
Anthracene	nd	tr	nd	11	nd	nd	tr	tr	nd	nd	tr
Fluoranthene	150	280	140	70	trc	16	78	58	61	110	100
Pyrene	160	380	130	69	tr	18	67	70	49	130	90
Benzanthracene	75	83	47	25	nd	6.0	25	27	tr	200	41
Chrysene	400	430	130	50	nd	7.5	24	35	tr	nd	76
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	tr	27	97	tr	nd	tr
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	tr	tr	nd	nd	nd	tr
Benzo(a)pyrene	nd	tr	nd	nd	nd	nd	21	33	tr	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	940	1,300	600	350	tr	53	300	370	110	440	340
Total Alkylated PAH	34,000	38,000	18,000	5,900	4.9	7	20	110	tr	560	1,100
Total PAH	35,000	39,000	19,000	6,200	4.9	60	320	480	110	1,000	1,400
FFPI	0.90	0.91	0.91	0.88	1.00	0.16	0.15	0.07	0.00	0.25	0.76
Saturated Hydrocarbons											
Resolved	61,000	130,000	57,000	15,000	410	670	2,500	560	tr	13,000	6,700
Unresolved	620,000	970,000	310,000	85,000	220	2,300	7,400	4,700	tr	240,000	110,000
Total	680,000	1,100,000	370,000	100,000	630	3,000	9,900	5,300	tr	250,000	120,000
Ratio Resolved/Total	0.09	0.12	0.15	0.15	0.65	0.22	0.25	0.11	na	0.05	0.06

Table D.18. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Pass Fourchon, October 1989.

Analyte	PF400 0†	PF600N 200	PF800N* 400	PF900N 500	PF1000N 600	PF600S -200
MDL	40.0	21	13	4.9	4.8	13
Naphthalene	nd	tr	tr	tr	8.4	tr
C1-Naphthalenes	nd	tr	tr	tr	11	trc
C2-Naphthalenes	300	tr	160	7.8	25	trc
C3-Naphthalenes	4,100	nd	1,500	nd	91	nd
C4-Naphthalenes	7,500	580	2,400	71	200	96
C5-Naphthalenes	7,000	590	2,000	tr	140	180
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	12	nd
Fluorene	nd	tr	tr	trc	20	tr
C1-Fluorenes	160	nd	tr	nd	34	tr
C2-Fluorenes	980	250	200	46	30	84
C3-Fluorenes	600	190	300	40	60	97
Dibenzothiophene	nd	nd	nd	nd	6.6	nd
C1-Dibenzothiophenes	83	nd	35	nd	tr	nd
C2-Dibenzothiophenes	tr	nd	tr	nd	nd	nd
C3-Dibenzothiophenes	tr	nd	nd	nd	tr	nd
Phenanthrene	nd	tr	21	22	91	21
C1-Phenanthrenes	470	nd	230	15	63	nd
C2-Phenanthrenes	160	tr	360	21	120	46
C3-Phenanthrenes	780	130	330	32	63	50
Anthracene	nd	nd	nd	9.0	19	tr
Fluoranthene	110	51	33	37	95	46
Pyrene	110	52	30	29	67	40
Benz(a)anthracene	tr	tr	tr	17	33	33
Chrysene	99	tr	tr	39	68	71
Benzo(b)fluoranthene	nd	nd	nd	nd	100	69
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	320	100	84	150	520	280
Total Alkylated PAH	22,000	1,700	7,500	230	840	550
Total PAH	22,000	1,800	7,600	390	1,400	830
FFPI	0.91	0.56	0.93	0.35	0.45	0.28
Saturated Hydrocarbons						
Resolved	99,000	9,500	21,000	2,500	4,400	2,400
Unresolved	660,000	83,000	130,000	13,000	19,000	32,000
Total	760,000	92,000	150,000	15,000	23,000	150,000
Ratio Resolved/Total	0.13	0.10	0.14	0.17	0.19	0.02

Table D.19. Hydrocarbon concentrations (ppb, drywt.) in surface sediments from Pass Fourchon, February 1990.

Analyte	PF400 0†	PF600N 200	PF800N** 400	PF900N 500	PF1000N 600	PF600S -200
MDL	50	29	9.4	10	4.1	13
Naphthalene	nd	76	tr	tr	tr	tr
C1-Naphthalenes	180	440	tr	tr	tr	trc
C2-Naphthalenes	3,500	4,200	68	29	78	tr
C3-Naphthalenes	20,000	16,000	560	tr	220	nd
C4-Naphthalenes	14,000	7,000	nd	nd	nd	nd
C5-Naphthalenes	18,000	8,700	tr	tr	tr	nd
Acenaphthylene	tr	tr	nd	nd	nd	nd
Acenaphthene	tr	tr	nd	nd	20	nd
Fluorene	na	na	tr	trc	21	nd
C1-Fluorenes	600	1,200	tr	tr	tr	84
C2-Fluorenes	4,500	3,300	230	tr	110	160
C3-Fluorenes	4,500	2,500	250	80	120	80
Dibenzothiophene	100	110	nd	nd	6.6	nd
C1-Dibenzothiophenes	1,200	790	40	tr	10	nd
C2-Dibenzothiophenes	2,900	1,900	150	tr	64	tr
C3-Dibenzothiophenes	2,800	1,500	130	tr	94	tr
Phenanthrene	340	530	34	43	64	19
C1-Phenanthrenes	3,600	3,200	160	40	85	nd
C2-Phenanthrenes	8,000	3,700	270	75	140	tr
C3-Phenanthrenes	5,400	2,300	120	tr	92	tr
Anthracene	tr	tr	tr	68	20	nd
Fluoranthene	280	120	47	35	97	43
Pyrene	250	140	40	28	96	33
Benz(a)anthracene	tr	tr	tr	trc	37	tr
Chrysene	630	360	39	trc	45	46
Benzo(b)fluoranthene	nd	nd	nd	nd	32	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	14	nd
Benzo(a)pyrene	nd	nd	nd	nd	23	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	19	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	1,600	1,300	160	170	500	140
Total Alkylated PAH	89,000	57,000	2,000	220	1,000	320
Total PAH	91,000	58,000	2,100	400	1,500	470
FFPI	0.94	0.93	0.87	0.46	0.61	0.07
Saturated Hydrocarbons						
Resolved	320,000	380,000	14,000	12,000	50,000	3,800
Unresolved	1,400,000	920,000	50,000	26,000	110,000	55,000
Total	1,700,000	1,300,000	64,000	38,000	160,000	59,000
Ratio Resolved/Total	0.19	0.29	0.22	0.32	0.31	0.06

Table D.20. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Bayou Rigaud, February 1989.

Analyte	BR1 500†	BR2 250	BR3 100	BR4 0	BR5 -100	BR6 -250	BR7 -500	BR8 150	BR9 0	BR10* -150	BR11 -300
MDL	15	5.2	41	7.5	46	5.0	35	6.0	7.0	40	6.8
Naphthalene	tr	5.8	tr	18	tr	6.4	nd	24	10	tr	14
C1-Naphthalenes	trc	11	310	45	trc	tr	nd	15	10	tr	9.4
C2-Naphthalenes	trc	76	2,400	390	340	61	tr	83	85	tr	12
C3-Naphthalenes	170	1,100	12,000	4,400	3,900	770	370	860	1,100	560	180
C4-Naphthalenes	400	1,600	8,700	4,500	4,900	770	tr	1,900	1,600	1,400	610
C5-Naphthalenes	tr	380	5,600	1,700	2,300	770	1,900	610	1,500	tr	160
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	tr	nd	tr	nd	nd	nd	nd	nd	nd
Fluorene	trc	nd	68	42	trc	17	nd	20	17	tr	nd
C1-Fluorenes	tr	120	270	260	220	55	tr	96	120	tr	86
C2-Fluorenes	tr	180	650	510	500	220	150	180	140	tr	110
C3-Fluorenes	nd	210	730	550	320	200	150	240	270	210	210
Dibenzothiophene	trc	12	46	33	tr	12	nd	13	20	tr	trc
C1-Dibenzothiophenes	16	130	450	360	130	140	nd	110	130	49	27
C2-Dibenzothiophenes	tr	370	720	810	tr	380	tr	310	360	tr	140
C3-Dibenzothiophenes	tr	320	620	670	tr	360	tr	340	390	tr	180
Phenanthrene	30	40	130	100	83	42	54	58	56	48	18
C1-Phenanthrenes	tr	230	1,100	780	430	300	tr	210	310	150	72
C2-Phenanthrenes	tr	560	2,100	1,400	1,100	700	tr	510	690	tr	280
C3-Phenanthrenes	tr	500	1,200	980	560	590	440	510	630	tr	340
Anthracene	tr	17	tr	30	tr	17	tr	23	16	tr	8.6
Fluoranthene	50	74	130	130	130	100	100	100	99	68	54
Pyrene	53	65	130	120	150	85	99	76	89	74	47
Benzanthracene	33	26	56	42	49	37	48	29	30	tr	19
Chrysene	47	45	98	66	110	68	71	56	42	tr	23
Benzo(b)fluoranthene	34	22	nd	68	90	30	67	tr	tr	nd	nd
Benzo(k)fluoranthene	20	tr	nd	tr	nd	tr	nd	nd	tr	nd	nd
Benzo(a)pyrene	tr	nd	tr	tr	48	tr	nd	nd	tr	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	tr	nd	tr	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	270	310	660	650	660	410	440	400	380	190	180
Total Alkylated PAH	590	5,800	37,000	17,000	15,000	5,300	3,000	6,000	7,300	2,300	2,400
Total PAH	850	6,100	38,000	18,000	15,000	5,700	3,400	6,400	7,700	2,500	2,600
FFPI	0.44	0.89	0.95	0.91	0.88	0.86	0.67	0.87	0.88	0.75	0.86
Saturated Hydrocarbons											
Resolved	5,200	29,000	320,000	55,000	42,000	27,000	10,000	20,000	19,000	11,000	8,000
Unresolved	30,000	130,000	600,000	170,000	190,000	100,000	140,000	90,000	100,000	89,000	46,000
Total	35,000	160,000	920,000	220,000	230,000	130,000	150,000	110,000	120,000	100,000	54,000
Ratio Resolved/Total	0.15	0.18	0.35	0.25	0.18	0.21	0.07	0.18	0.16	0.11	0.15

Table D.21. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Bayou Rigaud, May 1989, transect 1.

Analyte	BR7 350†	BR7A 250	BR8 150	BR9 0	BR10 -150	BR11 -300	BR12* -450	BR13 -650	BR14 -850	BR15 -1,050	BR16 -1,250
MDL	39	43	8.0	10	56	5.8	48	20	57	14	14
Naphthalene	tr	tr	15	21	tr	7.7	tr	tr	tr	tr	tr
C1-Naphthalenes	trc	nd	11	34	tr	tr	tr	tr	trc	tr	trc
C2-Naphthalenes	tr	tr	54	100	tr	45	tr	tr	trc	nd	tr
C3-Naphthalenes	tr	tr	460	570	tr	400	tr	tr	tr	nd	nd
C4-Naphthalenes	840	nd	830	410	tr	860	tr	200	1,100	tr	nd
C5-Naphthalenes	580	nd	650	600	tr	690	tr	tr	tr	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	tr	nd	tr	nd	tr	nd	nd
Fluorene	trc	trc	13	20	trc	16	tr	trc	trc	nd	trc
C1-Fluorenes	tr	nd	nd	tr	nd	31	tr	tr	510	tr	nd
C2-Fluorenes	tr	nd	220	tr	tr	120	tr	tr	tr	tr	nd
C3-Fluorenes	tr	nd	270	tr	tr	86	tr	tr	nd	nd	nd
Dibenzothiophene	tr	tr	tr	15	tr	7.8	tr	tr	tr	nd	nd
C1-Dibenzothiophenes	tr	tr	32	62	tr	51	tr	tr	tr	tr	trc
C2-Dibenzothiophenes	tr	nd	160	210	tr	170	tr	tr	tr	tr	tr
C3-Dibenzothiophenes	tr	tr	170	250	tr	190	tr	tr	tr	tr	tr
Phenanthrene	44	tr	40	68	tr	58	tr	22	83	16	15
C1-Phenanthrenes	tr	tr	140	230	tr	150	tr	tr	tr	tr	tr
C2-Phenanthrenes	tr	tr	360	420	tr	280	tr	tr	tr	tr	tr
C3-Phenanthrenes	tr	tr	260	230	tr	270	tr	tr	tr	tr	tr
Anthracene	tr	tr	17	25	tr	94	tr	tr	tr	tr	tr
Fluoranthene	75	52	82	120	73	89	77	59	80	40	17
Pyrene	77	45	66	90	62	68	70	42	75	43	16
Benzanthracene	41	45	34	38	tr	72	tr	29	tr	16	tr
Chrysene	52	tr	45	63	tr	320	tr	32	tr	27	tr
Benzo(b)fluoranthene	tr	nd	44	tr	nd	tr	tr	nd	nd	tr	nd
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	tr	tr	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	290	140	360	460	140	730	150	180	240	140	48
Total Alkylated PAH	1,400	tr	3,600	3,100	tr	3,300	tr	200	1,600	tr	tr
Total PAH	1,700	140	4,000	3,600	140	4,000	150	380	1,800	140	48
FFPI	0.08	0.00	0.80	0.80	0.00	0.67	0.00	0.06	0.17	0.06	0.16
Saturated Hydrocarbons											
Resolved	11,000	4,500	16,000	17,000	12,000	14,000	6,400	2,600	11,000	1,400	2,100
Unresolved	99,000	22,000	63,000	69,000	110,000	67,000	42,000	36,000	83,000	25,000	8,900
Total	110,000	26,000	79,000	86,000	120,000	81,000	48,000	39,000	94,000	26,000	11,000
Ratio Resolved/Total	0.10	0.17	0.20	0.20	0.10	0.17	0.13	0.07	0.12	0.05	0.19

Table D.22. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Bayou Rigaud, May 1989, transect 2.

Analyte	BR0 900†	BR0A 700	BR1 500	BR1A 400	BR2 250	BR3 100	BR4 0	BR5 -100	BR6 -250	BR6A -400	BR7 -500
MDL	20	35	34	44	5.7	44	9.8	52	6.0	61	39
Naphthalene	tr	tr	tr	tr	8.9	tr	12	tr	tr	tr	tr
C1-Naphthalenes	nd	tr	tr	trc	9.2	trc	tr	tr	tr	tr	trc
C2-Naphthalenes	trc	tr	tr	tr	95	tr	35	tr	35	tr	tr
C3-Naphthalenes	nd	nd	tr	690	930	480	280	600	490	tr	tr
C4-Naphthalenes	nd	nd	tr	750	1,400	tr	580	660	860	tr	840
C5-Naphthalenes	nd	nd	nd	tr	310	560	400	920	490	tr	580
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	trc	nd	tr	nd	tr	nd	nd	nd
Fluorene	nd	tr	tr	trc	17	trc	14	trc	nd	tr	trc
C1-Fluorenes	nd	nd	tr	nd	57	150	69	190	39	tr	tr
C2-Fluorenes	nd	tr	tr	tr	94	tr	190	260	210	tr	tr
C3-Fluorenes	nd	tr	tr	tr	130	tr	100	nd	150	tr	tr
Dibenzothiophene	tr	nd	tr	tr	14	tr	tr	nd	11	tr	tr
C1-Dibenzothiophenes	nd	tr	tr	tr	79	tr	26	tr	64	tr	tr
C2-Dibenzothiophenes	nd	nd	tr	tr	210	tr	140	tr	230	nd	tr
C3-Dibenzothiophenes	nd	nd	tr	tr	230	tr	170	tr	240	nd	tr
Phenanthrene	tr	tr	tr	120	74	tr	50	62	30	69	44
C1-Phenanthrenes	tr	nd	tr	130	180	trc	140	120	100	tr	tr
C2-Phenanthrenes	nd	nd	tr	tr	410	tr	310	tr	400	tr	tr
C3-Phenanthrenes	nd	nd	nd	tr	290	tr	300	tr	350	nd	tr
Anthracene	nd	nd	tr	53	32	tr	23	tr	21	tr	tr
Fluoranthene	tr	85	56	160	140	110	210	100	120	110	75
Pyrene	tr	69	40	120	88	93	140	82	89	88	77
Benzanthracene	tr	tr	tr	trc	29	trc	40	tr	47	tr	41
Chrysene	tr	46	trc	45	75	54	99	trc	64	59	52
Benzo(b)fluoranthene	nd	tr	nd	nd	35	tr	tr	53	41	tr	tr
Benzo(k)fluoranthene	nd	tr	nd	nd	14	tr	tr	tr	nd	tr	tr
Benzo(a)pyrene	nd	tr	nd	nd	nd	nd	nd	tr	nd	tr	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	tr	200	96	500	530	260	590	300	420	330	290
Total Alkylated PAH	tr	tr	tr	1,600	4,400	1,200	2,700	2,800	3,700	tr	1,400
Total PAH	tr	200	96	2,100	5,000	1,400	3,300	3,000	4,100	330	1,700
FFPI	na	0.00	0.00	0.62	0.81	0.65	0.69	0.68	0.81	0.11	0.08
Saturated Hydrocarbons											
Resolved	nd	1,400	3,900	30,000	24,000	17,000	15,000	22,000	14,000	10,000	11,000
Unresolved	na	26,000	43,000	110,000	86,000	120,000	59,000	140,000	84,000	120,000	99,000
Total	nd	27,000	47,000	140,000	110,000	140,000	74,000	160,000	98,000	130,000	110,000
Ratio Resolved/Total	na	0.05	0.08	0.21	0.22	0.12	0.20	0.14	0.14	0.08	0.10

Table D.23. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Bayou Rigaud, October 1989.

Analyte	BR1 500†	BR2 250	BR3 100	BR4** 0	BR5 -100	BR6 -250	BR7 -500	BR8 150	BR9** 0	BR10 -150	BR11* -300
MDL	7.3	8.3	13	14	11	11	8.9	14	11	12	8.0
Naphthalene	trc	8.4	23	tr	tr	tr	tr	trc	tr	tr	tr
C1-Naphthalenes	trc	tr	29	25	tr	tr	tr	tr	tr	tr	tr
C2-Naphthalenes	tr	140	400	1,100	55	43	73	63	tr	tr	tr
C3-Naphthalenes	tr	1,200	3,300	5,600	940	470	660	630	tr	500	nd
C4-Naphthalenes	430	1,300	2,700	5,200	2,100	1,000	810	940	670	1,200	tr
C5-Naphthalenes	300	1,000	2,600	2,500	1,400	1,800	660	1,300	760	1,100	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	78	tr	nd	nd	14	nd	tr	nd	nd
Fluorene	tr	17	54	60	24	22	13	nd	tr	13	tr
C1-Fluorenes	tr	41	180	170	tr	82	50	74	tr	tr	tr
C2-Fluorenes	84	140	240	550	210	280	150	99	64	tr	tr
C3-Fluorenes	75	84	230	360	210	150	170	150	tr	300	tr
Dibenzothiophene	nd	tr	15	22	tr	nd	9.6	nd	tr	nd	tr
C1-Dibenzothiophenes	tr	26	59	83	39	nd	30	39	18	23	nd
C2-Dibenzothiophenes	tr	tr	78	100	200	140	160	110	tr	140	tr
C3-Dibenzothiophenes	nd	tr	tr	tr	150	150	180	tr	tr	90	tr
Phenanthrene	22	74	200	110	35	46	53	43	110	53	22
C1-Phenanthrenes	54	180	210	500	54	45	90	73	tr	130	tr
C2-Phenanthrenes	190	360	460	730	320	320	180	320	340	400	tr
C3-Phenanthrenes	100	140	230	460	170	190	350	90	180	180	tr
Anthracene	15	44	78	53	25	25	29	42	53	41	22
Fluoranthene	84	240	280	160	75	140	130	90	230	130	65
Pyrene	74	190	240	130	54	110	110	58	180	89	62
Benzanthracene	trc	120	210	74	39	74	73	61	94	60	22
Chrysene	trc	210	260	130	72	96	98	110	tr	73	75
Benzo(b)fluoranthene	tr	89	250	tr	tr	180	110	85	tr	tr	42
Benzo(k)fluoranthene	tr	94	210	tr	tr	na	nd	nd	tr	tr	nd
Benzo(a)pyrene	tr	62	230	tr	tr	tr	tr	nd	tr	nd	nd
Indeno(1,2,3-cd)pyrene	nd	tr	110	nd	nd	tr	nd	nd	tr	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	tr	tr	nd	nd	nd	nd	nd	tr	nd	nd
Total Parent PAH	200	1,100	2,200	740	320	690	640	490	670	460	310
Total Alkylated PAH	1,200	4,600	11,000	17,000	5,800	4,700	3,600	3,900	2,000	4,100	tr
Total PAH	1,400	5,800	13,000	18,000	6,200	5,400	4,200	4,400	2,700	4,500	310
FFPI	0.61	0.63	0.69	0.90	0.85	0.66	0.73	0.72	0.49	0.74	0.04
Saturated Hydrocarbons											
Resolved	3,900	49,000	79,000	130,000	31,000	16,000	25,000	37,000	13,500	15,000	3,400
Unresolved	26,000	100,000	220,000	270,000	140,000	110,000	95,000	100,000	61,000	73,000	36,000
Total	30,000	150,000	300,000	400,000	170,000	130,000	120,000	140,000	74,500	88,000	39,000
Ratio Resolved/Total	0.13	0.33	0.26	0.33	0.18	0.12	0.21	0.26	0.18	0.17	0.09

Table D.24. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Bayou Rigaud, February 1990.

Analyte	BR1 500†	BR2** 250	BR3* 100	BR4 0	BR5 -100	BR6** -250	BR7 -500	BR8 150	BR9 0	BR10 -150	BR11 -300
MDL	11	10	16	16	18	16	4.2	11	18	9.8	11
Naphthalene	tr	tr	18	tr	trc	16	tr	16	65	tr	12
C1-Naphthalenes	trc	tr	50	trc	29	36	tr	23	100	tr	tr
C2-Naphthalenes	trc	130	2,000	47	230	330	trc	190	510	50	trc
C3-Naphthalenes	nd	1,100	9,100	1,400	970	2,200	nd	1,000	2,700	440	nd
C4-Naphthalenes	420	tr	7,700	2,300	tr	150	tr	nd	nd	tr	nd
C5-Naphthalenes	tr	tr	3,700	1,300	nd	1,900	nd	290	800	nd	690
Acenaphthylene	nd	tr	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	trc	nd	tr	nd	nd	nd	nd	nd
Fluorene	nd	tr	nd	nd	nd	41	nd	27	84	trc	nd
C1-Fluorenes	nd	tr	400	140	140	150	tr	tr	230	tr	76
C2-Fluorenes	110	380	930	670	530	490	tr	290	960	290	130
C3-Fluorenes	230	340	880	770	580	520	tr	160	870	160	tr
Dibenzothiophene	nd	nd	tr	nd	nd	tr	nd	15	28	nd	nd
C1-Dibenzothiophenes	nd	tr	110	66	46	140	nd	70	170	15	tr
C2-Dibenzothiophenes	nd	tr	180	340	230	390	tr	190	400	tr	80
C3-Dibenzothiophenes	nd	tr	tr	370	380	280	nd	160	230	tr	tr
Phenanthrene	21	100	39	31	44	92	trc	63	150	36	37
C1-Phenanthrenes	26	220	520	67	160	320	tr	210	630	120	68
C2-Phenanthrenes	80	370	950	480	500	500	tr	360	990	240	110
C3-Phenanthrenes	150	230	450	340	340	270	nd	170	480	86	60
Anthracene	18	14	49	27	tr	29	trc	tr	24	11	20
Fluoranthene	69	110	100	98	74	82	tr	48	97	46	53
Pyrene	50	76	63	57	64	60	tr	35	75	29	37
Benz(a)anthracene	32	52	tr	tr	tr	53	tr	tr	tr	tr	trc
Chrysene	40	76	tr	trc	tr	94	tr	57	120	62	84
Benzo(b)fluoranthene	tr	tr	tr	tr	nd	110	nd	tr	nd	tr	tr
Benzo(k)fluoranthene	tr	tr	tr	tr	nd	tr	nd	tr	nd	tr	tr
Benzo(a)pyrene	tr	nd	nd	nd	nd	tr	nd	tr	nd	tr	tr
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	na	na	na	na	na
Dibenzo(a,h)anthracene	nd	nd	nd	nd	nd	nd	na	na	na	na	na
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	na	na	na	na	na
Total Parent PAH	230	430	270	210	180	580	tr	260	640	180	240
Total Alkylated PAH	1,000	2,800	27,000	8,300	4,100	7,700	tr	3,100	9,100	1,400	1,200
Total PAH	1,200	3,200	27,000	8,500	4,300	8,200	tr	3,400	9,700	1,600	1,500
FFPI	0.52	0.80	0.96	0.93	0.92	0.87	na	0.88	0.88	0.80	0.56
Saturated Hydrocarbons											
Resolved	16,000	33,000	130,000	19,000	73,000	34,000	650	41,000	46,000	15,000	10,000
Unresolved	64,000	100,000	380,000	140,000	170,000	120,000	330	89,000	130,000	63,000	54,000
Total	80,000	140,000	510,000	160,000	240,000	510,000	980	130,000	180,000	78,000	64,000
Ratio Resolved/Total	0.20	0.24	0.25	0.12	0.30	0.07	0.66	0.32	0.26	0.19	0.16

Table D.25. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Emeline Pass, April 1989.

Analyte	EP	EAST							WEST		
	0†	100	250	400	550	700	1000	1300	-300	-450	-600
MDL	11	12	2.2	7.0	6.6	14	5.5	9.9	10	10	8.1
Naphthalene	tr	nd	trc	tr	tr	nd	tr	nd	nd	nd	nd
C1-Naphthalenes	nd	nd	tr	trc	trc	nd	nd	nd	nd	nd	nd
C2-Naphthalenes	nd	nd	tr	tr	tr	nd	tr	nd	nd	nd	nd
C3-Naphthalenes	nd	nd	nd	tr	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd	tr	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	trc	nd	nd	nd	nd	nd	nd	nd
C1-Fluorenes	nd	nd	nd	nd	nd	nd	nd	nd	tr	nd	tr
C2-Fluorenes	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	nd	tr	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	tr	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	na	tr	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	tr	12	tr	nd	nd	nd	nd	nd	tr
C1-Phenanthrenes	nd	nd	nd	trc	tr	nd	nd	nd	nd	nd	nd
C2-Phenanthrenes	nd	nd	tr	tr	tr	nd	nd	nd	nd	nd	nd
C3-Phenanthrenes	nd	nd	na	tr	nd	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	tr	tr	nd	nd	nd	nd	nd	nd
Fluoranthene	tr	tr	2.9	32	9.2	tr	tr	nd	tr	tr	tr
Pyrene	tr	tr	5.8	51	15	tr	tr	nd	tr	tr	tr
Benz(a)anthracene	nd	nd	tr	12	tr	tr	nd	nd	nd	nd	nd
Chrysene	nd	nd	2.4	12	tr	tr	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	tr	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	tr	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	tr	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	tr	tr	11	120	24	tr	tr	nd	tr	tr	tr
Total Alkylated PAH	nd	nd	tr	tr	tr	nd	tr	nd	tr	nd	tr
Total PAH	tr	tr	11	120	24	tr	tr	nd	tr	tr	tr
FFPI	na	na	na	0.05	na	na	na	na	na	na	na
Saturated Hydrocarbons											
Resolved	100	100	270	630	nd	nd	nd	nd	nd	nd	nd
Unresolved	1,000	1,000	1,900	nd	nd	nd	nd	nd	nd	nd	nd
Total	1,100	1,200	2,200	630	nd	nd	nd	nd	nd	nd	nd
Ratio Resolved/Total	0.09	0.08	0.12	1.00	na	na	na	na	na	na	na

Table D.26. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Emeline Pass, October 1989.

Analyte	EP	EAST							WEST		
	0†	100	250	400	550	700*	1000	1300	-300	-450	-600
MDL	3.4	8.7	2.6	4.1	1.2	2.3	2.3	2.7	2.4	4.3	5.3
Naphthalene	nd	nd	tr	nd	3.2	tr	nd	3.1	tr	4.5	tr
C1-Naphthalenes	tr	nd	nd	nd	2.2	nd	nd	4.1	tr	tr	tr
C2-Naphthalenes	tr	nd	tr	nd	trc	nd	tr	trc	3.5	tr	tr
C3-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	tr	nd	tr	tr	tr	tr	tr	nd	tr
C5-Naphthalenes	nd	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	trc	nd	nd	nd	trc	nd	nd
C1-Fluorenes	nd	nd	tr	nd	nd	nd	nd	nd	nd	nd	tr
C2-Fluorenes	tr	nd	tr	nd	tr	tr	nd	tr	nd	tr	tr
C3-Fluorenes	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr
Dibenzothiophene	nd	nd	nd	nd	tr	nd	nd	nd	nd	nd	tr
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	tr	nd	nd	nd	tr	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	tr	nd	nd	nd	tr	tr	nd
Phenanthrene	tr	nd	tr	nd	5.8	tr	nd	11	11	8.0	tr
C1-Phenanthrenes	nd	nd	nd	nd	3.6	nd	nd	3.9	16	trc	tr
C2-Phenanthrenes	tr	nd	tr	nd	tr	nd	nd	nd	20	tr	tr
C3-Phenanthrenes	tr	nd	tr	nd	tr	nd	nd	nd	tr	tr	nd
Anthracene	nd	nd	nd	nd	tr	nd	nd	tr	nd	tr	tr
Fluoranthene	tr	tr	13	nd	8.2	tr	tr	14	19	16	tr
Pyrene	tr	10	18	tr	13	tr	3.5	23	27	29	tr
Benz(a)anthracene	nd	tr	8.2	nd	6.1	nd	tr	trc	9.5	tr	tr
Chrysene	nd	tr	12	tr	8.0	nd	tr	trc	13	tr	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	tr	10	51	tr	44	tr	3.5	51	80	58	tr
Total Alkylated PAH	tr	tr	tr	tr	5.8	tr	tr	8.0	39	tr	tr
Total PAH	tr	10	51	tr	50	tr	3.5	59	119	58	tr
FFPI	na	0.00	0.00	na	0.20	na	0.00	0.25	0.31	0.15	na
Saturated Hydrocarbons											
Resolved	nd	340	260	80	480	160	320	580	720	570	280
Unresolved	nd	760	940	590	1,600	490	880	820	240	1,700	1,500
Total	nd	1,100	1,200	670	2,100	640	1,200	1,400	960	2,300	1,800
Ratio Resolved/Total	na	0.31	0.22	0.12	0.23	0.25	0.27	0.41	0.75	0.25	0.16

Table D.27. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Eugene Island, May 1989.

Analyte	EI	EIA					EIB		
	0†	-50	-100*	-250	-500	-1,000	200	300	500
MDL	19	9.7	18	17	6.8	18	25	25	23
Naphthalene	tr	25	tr	tr	9.3	tr	tr	tr	tr
C1-Naphthalenes	trc	390	trc	tr	22	trc	trc	trc	trc
C2-Naphthalenes	33	38	tr	nd	trc	tr	trc	nd	nd
C3-Naphthalenes	500	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	630	nd	nd	tr	tr	nd	tr	nd	nd
C5-Naphthalenes	580	tr	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	tr
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	tr	nd	trc	nd	trc	nd	nd
C1-Fluorenes	tr	tr	nd	nd	tr	nd	62	nd	nd
C2-Fluorenes	110	tr	nd	tr	nd	nd	nd	nd	nd
C3-Fluorenes	130	tr	tr	tr	nd	nd	nd	nd	nd
Dibenzothiophene	nd	nd	tr	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	tr	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	37	21	tr	19	20	tr	25	tr	tr
C1-Phenanthrenes	73	trc	tr	tr	trc	tr	tr	nd	nd
C2-Phenanthrenes	nd	tr	tr	tr	tr	nd	nd	nd	nd
C3-Phenanthrenes	nd	tr	tr	tr	tr	nd	nd	nd	nd
Anthracene	nd	nd	tr	nd	tr	nd	tr	nd	nd
Fluoranthene	23	20	23	tr	28	20	37	trc	tr
Pyrene	tr	22	22	17	27	23	29	trc	23
Benz(a)anthracene	nd	tr	21	tr	21	tr	tr	tr	tr
Chrysene	nd	tr	18	tr	20	tr	tr	tr	37
Benzo(b)fluoranthene	nd	nd	tr	nd	24	tr	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	tr	nd	tr	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	tr	nd	6.8	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	60	88	82	36	160	43	91	tr	60
Total Alkylated PAH	2,100	430	tr	tr	22	tr	62	tr	tr
Total PAH	2,100	520	82	36	180	43	150	tr	60
FFPI	0.88	0.90	0.07	0.26	0.23	0.00	0.14	na	0.00
Saturated Hydrocarbons									
Resolved	29,000	14,000	1,600	900	2,800	1,700	9,600	2,400	2,100
Unresolved	91,000	25,000	7,900	9,100	3,200	1,500	21,000	7,200	7,600
Total	120,000	39,000	9,500	10,000	6,000	3,200	31,000	9,600	9,700
Ratio Resolved/Total	0.24	0.36	0.17	0.09	0.47	0.53	0.31	0.25	0.22

Table D.28. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Eugene Island, November 1989.

Analyte	EI	EIA					EIB				
	0†	50	100	250	500	1,000	200	300*	500	700	1,000
MDL	19	6.6	8.8	16	24	11	7.3	11	22	23	14
Naphthalene	43	9.9	tr	tr	tr	tr	12	tr	tr	tr	tr
C1-Naphthalenes	130	21	trc	trc	trc	trc	34	tr	trc	trc	trc
C2-Naphthalenes	380	36	tr	tr	tr	trc	116	tr	nd	trc	tr
C3-Naphthalenes	890	nd	nd	nd	nd	nd	890	nd	nd	nd	nd
C4-Naphthalenes	tr	tr	tr	tr	tr	tr	1,300	tr	nd	tr	tr
C5-Naphthalenes	780	tr	tr	tr	nd	nd	960	tr	tr	nd	tr
Acenaphthylene	nd	tr	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	tr	nd
Fluorene	nd	trc	nd	tr	nd	trc	nd	nd	nd	nd	nd
C1-Fluorenes	tr	tr	tr	tr	tr	tr	140	tr	nd	nd	nd
C2-Fluorenes	370	tr	tr	nd	nd	tr	220	nd	tr	tr	tr
C3-Fluorenes	tr	tr	nd	tr	tr	tr	210	tr	tr	tr	tr
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	tr	tr	tr	tr	19	tr	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	tr	nd	nd	nd	nd
C3-Dibenzothiophenes	tr	nd	nd	tr	nd	nd	tr	tr	nd	nd	nd
Phenanthrene	53	24	28	22	trc	17	33	19	tr	26	tr
C1-Phenanthrenes	100	tr	trc	tr	trc	tr	tr	tr	nd	tr	tr
C2-Phenanthrenes	83	tr	nd	tr	tr	tr	tr	tr	nd	nd	nd
C3-Phenanthrenes	tr	nd	nd	nd	nd	nd	tr	tr	nd	nd	nd
Anthracene	nd	tr	tr	nd	nd	nd	13	tr	nd	tr	nd
Fluoranthene	48	22	41	21	tr	19	16	21	23	30	16
Pyrene	47	20	31	20	tr	17	12	21	tr	24	16
Benz(a)anthracene	tr	tr	17	tr	tr	tr	tr	tr	trc	tr	trc
Chrysene	tr	tr	tr	tr	tr	tr	tr	tr	trc	tr	trc
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	190	76	120	63	tr	53	86	60	23	80	32
Total Alkylated PAH	2,700	57	tr	tr	tr	tr	3,900	tr	tr	tr	tr
Total PAH	2,900	130	120	63	tr	53	4,000	60	23	80	32
FFPI	0.90	0.59	0.12	0.17	na	0.16	0.95	0.16	0.00	0.16	0.00
Saturated Hydrocarbons											
Resolved	100,000	2,300	800	1,400	1,100	1,100	34,000	2,900	1,200	1,600	900
Unresolved	110,000	13,000	6,900	8,600	5,200	6,400	110,000	22,000	6,800	13,000	4,900
Total	210,000	15,000	7,700	10,000	6,300	7,500	140,000	25,000	8,000	15,000	5,800
Ratio Resolved/Total	0.48	0.15	0.10	0.14	0.17	0.15	0.24	0.12	0.15	0.11	0.16

Table D.29. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from East Timbalier Island, May 1989.

Analyte	T1 -150	T2 -80	T3 -100	T4 0	T5 110	T6 250	T7 330	T8 360	T9 580	T10 -150	T11 -320	T12 0	T13 -450	T14 140	T15 280
MDL	6.5	4.6	8.9	7.8	5.2	7.4	19	8.5	14	10	8.6	16	7.5	11	8.3
Naphthalene	tr	tr	20	nd	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr
C1-Naphthalenes	trc	nd	130	nd	tr	tr	tr	26	trc	trc	tr	trc	tr	tr	trc
C2-Naphthalenes	9.7	9.8	1,300	50	tr	14	tr	300	tr	nd	tr	tr	nd	tr	trc
C3-Naphthalenes	nd	nd	5,600	950	nd	180	360	2,200	tr	nd	nd	nd	nd	tr	nd
C4-Naphthalenes	tr	nd	4,900	1,200	tr	450	1,100	2,300	290	340	tr	tr	tr	740	tr
C5-Naphthalenes	nd	nd	3,200	1,100	tr	390	960	1,700	570	300	tr	tr	nd	750	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	trc	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	20	nd	nd	nd	trc	tr	nd	nd
Fluorene	nd	nd	47	nd	nd	nd	nd	17	nd	nd	nd	trc	nd	nd	trc
C1-Fluorenes	tr	nd	240	tr	45	58	120	65	73	nd	nd	tr	tr	tr	tr
C2-Fluorenes	tr	nd	540	360	tr	85	140	290	130	tr	tr	tr	tr	tr	64
C3-Fluorenes	tr	tr	410	290	tr	130	240	340	140	150	nd	43	tr	170	nd
Dibenzothiophene	nd	tr	25	nd	nd	nd	nd	tr	nd	nd	nd	tr	nd	nd	nd
C1-Dibenzothiophenes	tr	nd	190	29	nd	15	44	150	nd	nd	nd	tr	nd	17	tr
C2-Dibenzothiophenes	nd	nd	380	110	nd	60	230	290	tr	tr	tr	tr	nd	90	tr
C3-Dibenzothiophenes	nd	nd	240	130	tr	50	400	190	tr	tr	nd	tr	nd	tr	tr
Phenanthrene	tr	tr	110	8.1	5.2	14	20	38	37	20	14	88	11	24	39
C1-Phenanthrenes	tr	nd	640	75	nd	33	130	220	tr	nd	tr	24	nd	tr	8.4
C2-Phenanthrenes	tr	nd	830	270	tr	170	680	530	120	tr	tr	tr	nd	180	tr
C3-Phenanthrenes	tr	nd	420	160	tr	90	690	260	50	40	nd	tr	nd	80	tr
Anthracene	nd	nd	tr	nd	tr	tr	nd	17	22	nd	tr	tr	tr	tr	23
Fluoranthene	tr	tr	36	19	9.8	37	160	62	53	38	16	170	22	32	67
Pyrene	8.2	tr	22	18	9.7	25	130	56	46	44	15	140	25	24	59
Benz(a)anthracene	tr	tr	tr	tr	tr	tr	31	40	tr	tr	tr	95	tr	tr	40
Chrysene	tr	tr	40	27	tr	38	68	73	tr	19	tr	100	tr	tr	70
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	150	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	63	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	8.2	tr	300	72	25	110	410	320	160	120	45	810	58	80	300
Total Alkylated PAH	9.7	9.8	19,000	4,700	45	1,700	5,100	8,900	1,400	830	tr	67	tr	2,000	72
Total PAH	18	9.8	19,000	4,800	70	1,800	5,500	9,200	1,500	950	45	870	58	2,100	370
FFPI	0.54	0.00	0.95	0.94	0.11	0.83	0.84	0.91	0.57	0.31	0.16	0.07	0.09	0.85	0.08
Saturated Hydrocarbons															
Resolved	970	100	65,000	6,300	470	5,000	15,000	28,000	6,800	3,400	1,500	2,400	300	5,400	3,400
Unresolved	6,200	800	190,000	44,000	5,000	32,000	140,000	140,000	52,000	46,000	15,000	27,000	6,700	51,000	23,000
Total	7,200	900	250,000	50,000	5,500	37,000	150,000	170,000	59,000	49,000	16,000	29,000	7,000	56,000	26,000
Ratio Resolved/Total	0.13	0.11	0.26	0.13	0.09	0.14	0.10	0.16	0.12	0.07	0.09	0.08	0.04	0.10	0.13

Table D.30. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Romere Pass, October 1989.

Analyte	RP	NORTH				SOUTH		
	0†	250	550	750*	1,000	-100	-450	-750
MDL	8.8	12	10	8.8	17	14	21	6.5
Naphthalene	tr	nd	tr	29	22	tr	tr	6.5
C1-Naphthalenes	tr	trc	trc	150	130	trc	tr	trc
C2-Naphthalenes	tr	trc	trc	880	350	trc	nd	nd
C3-Naphthalenes	tr	nd	nd	3,400	1,400	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	tr	tr	nd	nd	nd
C5-Naphthalenes	tr	nd	tr	1,700	1,500	nd	nd	tr
Acenaphthylene	nd	nd	nd	tr	30	tr	nd	nd
Acenaphthene	nd	nd	nd	tr	nd	nd	nd	nd
Fluorene	tr	trc	nd	32	62	tr	nd	trc
C1-Fluorenes	tr	240	tr	110	tr	tr	tr	nd
C2-Fluorenes	tr	nd	nd	430	tr	nd	nd	nd
C3-Fluorenes	tr	nd	tr	300	370	nd	nd	tr
Dibenzothiophene	tr	trc	nd	tr	tr	tr	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	15	nd	nd	nd	nd
C2-Dibenzothiophenes	tr	nd	nd	tr	tr	nd	nd	nd
C3-Dibenzothiophenes	tr	nd	nd	tr	tr	nd	nd	nd
Phenanthrene	tr	trc	10	86	85	18	tr	8.0
C1-Phenanthrenes	tr	nd	tr	320	140	trc	tr	nd
C2-Phenanthrenes	tr	nd	tr	430	230	tr	tr	tr
C3-Phenanthrenes	tr	nd	tr	230	180	tr	tr	nd
Anthracene	tr	trc	nd	13	tr	nd	nd	nd
Fluoranthene	tr	tr	tr	58	89	22	trc	8.1
Pyrene	tr	trc	tr	51	74	18	trc	7.8
Benz(a)anthracene	tr	tr	tr	40	38	trc	tr	tr
Chrysene	tr	tr	tr	55	65	21	trc	tr
Benzo(b)fluoranthene	tr	nd	nd	110	nd	tr	nd	nd
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	tr	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	tr	tr	10	470	470	79	tr	30
Total Alkylated PAH	tr	240	tr	8,000	4,300	tr	tr	tr
Total PAH	tr	240	10	8,400	4,800	79	tr	30
FFPI	na	0.00	0.50	0.90	0.84	0.11	na	0.35
Saturated Hydrocarbons								
Resolved	1,700	370	1,400	78,000	24,000	1,800	860	nd
Unresolved	39,000	2,600	28,000	130,000	65,000	12,000	2,200	nd
Total	41,000	3,000	29,000	210,000	89,000	14,000	3,100	nd
Ratio Resolved/Total	0.04	0.12	0.05	0.37	0.27	0.13	0.28	na

Table D.31. Hydrocarbon concentrations (ppb, dry wt.) in surface sediments from Empire Waterway, November 1989

Analyte	EW1 -1,250	EW2 -950	EW3 -550	EW4 -250	EW6 -1,280	EW7 -960	EW8 -550	EW9* 550	EW10 650	EW11 -1,330
MDL	17	13	30	22	36	20	15	11	110	26
Naphthalene	tr	tr	tr	tr	nd	tr	trc	tr	nd	tr
C1-Naphthalenes	trc	31	nd	trc	nd	tr	tr	trc	nd	nd
C2-Naphthalenes	nd	32	nd	trc	nd	nd	nd	tr	nd	nd
C3-Naphthalenes	nd	tr	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	tr	nd	nd	nd	tr	nd	nd
C5-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	tr	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	tr	nd	nd	nd	nd	nd	tr	nd	nd
Fluorene	nd	trc	nd	trc	nd	nd	nd	24	nd	nd
C1-Fluorenes	nd	tr	nd	nd	nd	nd	nd	tr	nd	nd
C2-Fluorenes	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C3-Fluorenes	nd	nd	nd	tr	nd	nd	nd	tr	nd	nd
Dibenzothiophene	nd	tr	nd	nd	nd	nd	nd	tr	nd	nd
C1-Dibenzothiophenes	nd	tr	nd	tr	nd	nd	nd	tr	nd	nd
C2-Dibenzothiophenes	nd	tr	nd	tr	nd	nd	tr	tr	nd	nd
C3-Dibenzothiophenes	tr	nd	nd	tr	nd	nd	tr	tr	nd	nd
Phenanthrene	tr	34	tr	31	nd	tr	tr	39	tr	tr
C1-Phenanthrenes	tr	tr	tr	48	nd	trc	trc	tr	nd	tr
C2-Phenanthrenes	tr	tr	tr	140	tr	tr	tr	tr	nd	tr
C3-Phenanthrenes	tr	tr	tr	100	tr	nd	tr	tr	nd	tr
Anthracene	nd	tr	nd	tr	nd	tr	nd	23	nd	nd
Fluoranthene	27	25	trc	44	trc	20	22	72	tr	tr
Pyrene	29	21	trc	49	trc	21	25	80	tr	tr
Benz(a)anthracene	17	tr	tr	37	trc	trc	trc	38	nd	tr
Chrysene	24	tr	tr	41	42	trc	trc	56	nd	tr
Benzo(b)fluoranthene	tr	nd	nd	tr	nd	nd	nd	52	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	35	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	45	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	97	80	tr	200	42	41	47	460	tr	tr
Total Alkylated PAH	tr	63	tr	290	tr	tr	tr	tr	nd	tr
Total PAH	97	140	tr	490	42	41	47	460	tr	tr
FFPI	0.00	0.56	na	0.57	0.00	0.00	0.00	0.04	na	na
Saturated Hydrocarbons										
Resolved	2,100	2,200	3,600	1,800	6,100	3,400	2,600	1,900	nd	1,400
Unresolved	6,400	6,600	8,400	34,000	48,000	8,600	9,400	16,000	nd	1,900
Total	8,500	8,800	12,000	36,000	54,000	12,000	12,000	18,000	nd	3,300
Ratio Resolved/Total	0.25	0.25	0.30	0.05	0.11	0.28	0.22	0.11	na	0.42

Table D.32. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF400, February 1989.

Analyte	PF400 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-27cm
MDL	19	31	25	25	19	18
Naphthalene	31	tr	tr	tr	nd	tr
C1-Naphthalenes	20	tr	tr	tr	tr	tr
C2-Naphthalenes	400	420	350	410	75	620
C3-Naphthalenes	3,100	4,200	3,500	3,800	1,100	6,500
C4-Naphthalenes	5,300	6,400	5,600	5,500	1,900	8,100
C5-Naphthalenes	1,800	4,900	4,500	4,400	1,700	6,800
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	tr	tr	tr	nd	28
Fluorene	47	tr	tr	tr	tr	33
C1-Fluorenes	250	tr	140	240	tr	350
C2-Fluorenes	500	810	890	700	330	1200
C3-Fluorenes	890	na	1000	810	630	1200
Dibenzothiophene	tr	tr	tr	tr	tr	tr
C1-Dibenzothiophenes	180	190	140	190	100	300
C2-Dibenzothiophenes	1,000	730	470	510	320	730
C3-Dibenzothiophenes	1,200	680	500	530	380	670
Phenanthrene	nd	39	25	30	tr	tr
C1-Phenanthrenes	660	620	440	430	100	770
C2-Phenanthrenes	2,300	1,700	1,100	1,400	570	1,800
C3-Phenanthrenes	2,400	1,100	710	1,000	480	1,000
Anthracene	nd	tr	tr	30	tr	tr
Fluoranthene	180	100	65	84	43	88
Pyrene	150	93	60	91	47	90
Benzanthracene	74	80	50	90	38	60
Chrysene	230	280	230	270	81	200
Benzo(b)fluoranthene	nd	tr	tr	tr	tr	tr
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	tr	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	710	590	430	600	210	500
Total Alkylated PAH	20,000	22,000	19,000	20,000	7,700	30,000
Total PAH	21,000	22,000	20,000	21,000	7,900	31,000
FFPI	0.92	0.91	0.92	0.91	0.92	0.93
Saturated Hydrocarbons						
Resolved	32,000	35,000	33,000	44,000	4,900	34,000
Unresolved	460,000	540,000	460,000	580,000	130,000	540,000
Total	490,000	570,000	490,000	630,000	140,000	580,000
Ratio Resolved/Total	0.07	0.06	0.07	0.07	0.04	0.06

Table D.33. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF600N, February 1989.

Analyte	PF600N							
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-33cm
MDL	24	16	24	22	26	28	27	29
Naphthalene	nd	tr	tr	tr	nd	tr	tr	nd
C1-Naphthalenes	41	tr	tr	tr	42	28	tr	tr
C2-Naphthalenes	940	380	190	400	1,000	800	360	900
C3-Naphthalenes	6,400	3,700	2,800	3,200	5,400	5,600	3,100	5,900
C4-Naphthalenes	5,000	4,500	4,300	4,300	5,200	6,100	3,800	6,100
C5-Naphthalenes	tr	3,700	3,500	2,800	5,400	4,000	3,300	3,300
Acenaphthylene	nd	tr	nd	nd	nd	tr	nd	nd
Acenaphthene	nd	17	tr	tr	tr	tr	tr	tr
Fluorene	77	tr	nd	nd	42	tr	tr	34
C1-Fluorenes	500	120	130	tr	130	200	150	180
C2-Fluorenes	1,600	650	660	480	870	600	610	760
C3-Fluorenes	1,400	580	720	480	1,000	840	380	810
Dibenzothiophene	27	tr	nd	tr	tr	30	nd	31
C1-Dibenzothiophenes	460	110	100	99	260	290	170	300
C2-Dibenzothiophenes	1,400	380	520	350	590	620	150	630
C3-Dibenzothiophenes	1,500	390	620	300	460	520	360	590
Phenanthrene	nd	19	tr	tr	93	35	tr	tr
C1-Phenanthrenes	1,500	93	190	390	960	580	210	690
C2-Phenanthrenes	3,900	870	1,300	860	1,600	1,800	1,000	1,500
C3-Phenanthrenes	3,400	770	1,100	430	800	1,000	760	1,000
Anthracene	nd	tr	tr	tr	tr	tr	tr	tr
Fluoranthene	190	46	93	65	72	82	70	64
Pyrene	190	tr	100	51	60	84	57	66
Benz(a)anthracene	94	27	nd	tr	tr	120	58	110
Chrysene	340	190	140	67	82	230	140	320
Benzo(b)fluoranthene	nd	56	nd	30	nd	100	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	920	360	330	210	350	680	330	630
Total Alkylated PAH	28,000	16,000	16,000	14,000	24,000	23,000	14,000	23,000
Total PAH	29,000	17,000	16,000	14,000	24,000	24,000	15,000	23,000
FFPI	0.92	0.94	0.94	0.93	0.93	0.92	0.93	0.92
Saturated Hydrocarbons								
Resolved	57,000	31,000	25,000	21,000	67,000	51,000	30,000	51,000
Unresolved	520,000	290,000	310,000	180,000	370,000	490,000	270,000	480,000
Total	580,000	320,000	330,000	200,000	440,000	540,000	300,000	530,000
Ratio Resolved/Total	0.10	0.10	0.08	0.11	0.15	0.09	0.10	0.10

Table D.34. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF800N, February 1989.

Analyte	PF800N								
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm	35-38cm
MDL	21	29	79	27	6.3	8.2	7.0	6.8	6.1
Naphthalene	37	tr	nd	tr	7.0	tr	tr	trc	7.3
C1-Naphthalenes	150	62	tr	nd	8.1	tr	tr	tr	trc
C2-Naphthalenes	850	630	330	82	180	260	110	140	160
C3-Naphthalenes	3,200	3,800	2,200	980	1,500	1,400	860	960	1,200
C4-Naphthalenes	920	4,800	3,600	1,800	2,100	2,100	1,600	1,600	2,000
C5-Naphthalenes	1,100	4,600	2,600	1,600	560	nd	nd	180	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	tr	tr	nd	nd	nd	nd	nd	nd
Fluorene	77	59	tr	tr	23	11	nd	nd	10
C1-Fluorenes	410	370	tr	tr	94	90	tr	75	100
C2-Fluorenes	630	840	800	290	380	190	370	240	350
C3-Fluorenes	720	970	630	690	450	390	300	270	220
Dibenzothiophene	31	38	tr	nd	17	12	nd	tr	8.3
C1-Dibenzothiophenes	240	260	120	67	130	100	75	93	120
C2-Dibenzothiophenes	670	640	tr	340	430	360	240	320	320
C3-Dibenzothiophenes	860	690	tr	490	490	500	230	410	350
Phenanthrene	180	52	tr	45	180	24	10	23	29
C1-Phenanthrenes	1,200	860	740	240	350	290	180	210	250
C2-Phenanthrenes	2,000	1,600	2,000	1,200	1,100	1,100	590	710	680
C3-Phenanthrenes	1,800	1,200	820	1,300	1,200	1,000	600	710	710
Anthracene	27	tr	tr	nd	57	20	10	13	19
Fluoranthene	110	79	95	130	310	90	69	110	75
Pyrene	110	92	110	120	220	86	67	100	80
Benzanthracene	46	33	nd	33	93	34	18	40	22
Chrysene	140	150	130	110	130	87	56	74	55
Benzo(b)fluoranthene	nd	nd	nd	nd	50	nd	36	50	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	32	nd	24	25	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	tr	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	760	500	340	440	1,100	360	290	440	310
Total Alkylated PAH	15,000	21,000	14,000	9,100	9,000	7,800	5,200	5,900	6,400
Total PAH	16,000	22,000	14,000	9,500	10,000	8,100	5,400	6,400	6,800
FFPI	0.90	0.92	0.89	0.90	0.82	0.91	0.88	0.87	0.90
Saturated Hydrocarbons									
Resolved	68,000	27,000	14,000	9,200	10,000	13,000	11,000	13,000	15,000
Unresolved	300,000	250,000	270,000	160,000	120,000	130,000	99,000	120,000	120,000
Total	370,000	280,000	280,000	170,000	130,000	140,000	110,000	130,000	130,000
Ratio Resolved/Total	0.18	0.10	0.05	0.05	0.08	0.09	0.10	0.10	0.12

Table D.35. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF900N, February 1989.

Analyte	PF900N								
	0-2cm	2-5cm	5-10cm	10--15cm	15-20cm*	20-25cm	25-30cm	30-35cm	35-40cm
MDL	2.5	5.8	2.9	9.0	5.0	18	11	4.1	11
Naphthalene	tr	tr	tr	nd	tr	tr	tr	tr	tr
C1-Naphthalenes	tr	nd	trc	nd	trc	nd	nd	trc	nd
C2-Naphthalenes	tr	nd	nd	nd	tr	nd	nd	tr	nd
C3-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	tr	tr	tr	tr	tr	nd	tr	tr
C5-Naphthalenes	nd	tr	tr	nd	tr	tr	tr	80	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	tr	nd	nd
Acenaphthene	nd	nd	nd	nd	tr	tr	tr	nd	nd
Fluorene	tr	trc	nd	nd	trc	tr	tr	tr	tr
C1-Fluorenes	nd	tr	tr	tr	tr	nd	tr	nd	tr
C2-Fluorenes	nd	tr	tr	tr	tr	nd	tr	70	nd
C3-Fluorenes	nd	tr	nd	tr	nd	nd	tr	tr	tr
Dibenzothiophene	tr	nd	nd	nd	tr	nd	nd	tr	nd
C1-Dibenzothiophenes	trc	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	trc	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	tr	nd
Phenanthrene	10	21	7.5	11	79	nd	tr	13	tr
C1-Phenanthrenes	tr	trc	trc	nd	27	tr	nd	nd	nd
C2-Phenanthrenes	trc	nd	tr	nd	26	nd	nd	22	nd
C3-Phenanthrenes	tr	nd	nd	nd	27	nd	nd	24	nd
Anthracene	3.5	tr	tr	tr	22	nd	nd	nd	nd
Fluoranthene	23	41	16	32	220	55	95	40	17
Pyrene	20	37	15	31	210	70	98	39	27
Benz(a)anthracene	10	19	8.5	tr	87	350	11	15	tr
Chrysene	11	19	11	tr	84	280	43	19	tr
Benzo(b)fluoranthene	8.0	nd	nd	nd	120	nd	12	21	nd
Benzo(k)fluoranthene	6.0	nd	nd	nd	tr	nd	tr	nd	nd
Benzo(a)pyrene	7.4	nd	nd	nd	56	nd	tr	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	tr	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	tr	nd	nd	nd	nd
Total Parent PAH	99	140	57	74	900	750	260	150	44
Total Alkylated PAH	tr	tr	tr	tr	120	tr	tr	200	tr
Total PAH	99	140	57	74	1,000	750	260	350	44
FFPI	0.05	0.08	0.07	0.07	0.11	0.00	0.00	0.27	0.00
Saturated Hydrocarbons									
Resolved	480	300	400	200	1,100	680	760	1,300	720
Unresolved	1,700	nd	1,100	600	7,500	4,700	6,000	9,700	6,100
Total	2,200	300	1,500	800	8,700	5,400	6,800	11,000	6,800
Ratio Resolved/Total	0.22	1.00	0.27	0.25	0.13	0.13	0.11	0.12	0.11

Table D.36. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF1000N, February 1989.

Analyte	PF1000N								
	0-2cm	2-5cm*	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm	35-38cm
MDL	3.6	7.0	9.7	8.0	11	16	6.6	12	8.4
Naphthalene	5.1	tr	tr	tr	tr	tr	tr	tr	tr
C1-Naphthalenes	15	trc	tr	tr	tr	nd	trc	tr	nd
C2-Naphthalenes	6.2	trc	tr	tr	tr	nd	trc	nd	nd
C3-Naphthalenes	33	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	tr	tr	tr	nd	tr	tr	tr	tr	tr
C5-Naphthalenes	tr	tr	tr	tr	tr	tr	120	tr	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	trc	nd	nd	nd	nd	nd	nd	trc	nd
Fluorene	nd	tr	nd	nd	nd	nd	nd	nd	nd
C1-Fluorenes	tr	tr	tr	nd	nd	nd	nd	nd	nd
C2-Fluorenes	tr	tr	59	tr	nd	tr	71	tr	tr
C3-Fluorenes	36	tr	79	79	nd	130	tr	tr	tr
Dibenzothiophene	nd	nd	nd	nd	nd	tr	nd	nd	nd
C1-Dibenzothiophenes	tr	tr	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	7.0	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	11	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	18	35	24	30	tr	130	11	nd	18
C1-Phenanthrenes	22	tr	tr	tr	nd	tr	nd	nd	nd
C2-Phenanthrenes	60	tr	65	tr	nd	nd	nd	nd	nd
C3-Phenanthrenes	44	tr	tr	tr	76	nd	tr	nd	tr
Anthracene	3.7	tr	13	tr	nd	tr	tr	nd	nd
Fluoranthene	54	98	110	54	79	530	39	34	44
Pyrene	56	87	96	50	61	350	43	33	35
Benz(a)anthracene	13	30	61	tr	17	37	11	tr	11
Chrysene	19	74	80	tr	29	130	25	tr	16
Benzo(b)fluoranthene	15	tr	130	nd	nd	120	nd	nd	nd
Benzo(k)fluoranthene	8.2	tr	nd	nd	nd	tr	nd	nd	nd
Benzo(a)pyrene	tr	tr	tr	nd	nd	tr	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	190	320	510	130	190	1,300	130	66	130
Total Alkylated PAH	230	tr	200	79	76	130	190	tr	tr
Total PAH	430	320	720	210	260	1,400	320	66	130
FFPI	0.52	0.05	0.13	0.11	0.29	0.05	0.04	0.00	0.07
Saturated Hydrocarbons									
Resolved	2,100	1,200	1,300	1,400	1,300	840	1,800	620	670
Unresolved	2,200	3,600	19,000	15,000	20,000	8,000	10,000	15,000	7,100
Total	4,300	4,700	20,000	16,000	21,000	8,800	12,000	16,000	7,800
Ratio Resolved/Total	0.49	0.26	0.07	0.09	0.06	0.10	0.15	0.04	0.09

Table D.37. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF600S, February 1989.

Analyte	PF600S								
	0-2cm	2-5cm*	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm*	35-39cm
MDL	9.9	23	14	15	4.2	6.8	8.5	7.3	17
Naphthalene	tr	tr	tr	tr	tr	tr	tr	tr	tr
C1-Naphthalenes	trc	nd	tr	nd	tr	28	tr	tr	nd
C2-Naphthalenes	trc	tr	tr	nd	6.8	87	52	tr	tr
C3-Naphthalenes	trc	tr	260	nd	60	830	410	tr	250
C4-Naphthalenes	nd	tr	350	360	400	1,200	1,000	730	1,600
C5-Naphthalenes	nd	810	2,000	550	410	750	740	1,400	2,200
Acenaphthylene	nd	tr	nd	nd	nd	tr	tr	nd	nd
Acenaphthene	nd	tr	37	nd	9.0	42	120	43	32
Fluorene	nd	nd	nd	nd	nd	35	68	20	17
C1-Fluorenes	tr	tr	72	nd	tr	110	88	tr	tr
C2-Fluorenes	tr	tr	180	260	61	210	180	120	360
C3-Fluorenes	160	390	530	tr	95	220	230	260	390
Dibenzothiophene	nd	nd	nd	nd	nd	nd	tr	nd	nd
C1-Dibenzothiophenes	15	nd	35	nd	9.2	31	37	tr	54
C2-Dibenzothiophenes	150	nd	200	nd	39	110	160	120	290
C3-Dibenzothiophenes	330	nd	300	74	68	120	170	170	tr
Phenanthrene	14	tr	25	16	32	42	84	23	33
C1-Phenanthrenes	tr	tr	tr	nd	23	52	119	tr	23
C2-Phenanthrenes	300	530	450	tr	81	250	350	280	570
C3-Phenanthrenes	610	710	620	110	70	260	330	270	430
Anthracene	12	tr	18	nd	16	20	33	15	67
Fluoranthene	110	150	150	54	57	59	140	63	150
Pyrene	110	150	130	45	48	54	88	46	120
Benz(a)anthracene	38	tr	110	tr	47	38	94	46	52
Chrysene	70	tr	160	tr	71	58	150	80	85
Benzo(b)fluoranthene	nd	nd	120	nd	39	nd	49	tr	nd
Benzo(k)fluoranthene	nd	nd	tr	nd	24	nd	37	nd	nd
Benzo(a)pyrene	nd	nd	41	nd	31	nd	37	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	15	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	350	300	790	120	390	350	900	330	560
Total Alkylated PAH	1,600	2,400	5,000	1,400	1,300	4,300	3,900	3,300	6,200
Total PAH	1,900	2,700	5,800	1,500	1,700	4,600	4,800	3,700	6,700
FFPI	0.80	0.81	0.71	0.64	0.48	0.83	0.64	0.73	0.75
Saturated Hydrocarbons									
Resolved	3,600	9,100	15,000	1,800	3,700	14,000	15,000	6,500	15,000
Unresolved	110,000	180,000	260,000	68,000	51,000	150,000	190,000	89,000	160,000
Total	110,000	185,000	270,000	70,000	55,000	160,000	200,000	95,000	170,000
Ratio Resolved/Total	0.03	0.05	0.06	0.03	0.07	0.09	0.08	0.07	0.09

Table D.38. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF400, February 1990.

Analyte	PF400								
	0-2cm	2-5cm	5-10cm*	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm	35-40cm
MDL	50	43	54	55	53	33	41	31	45
Naphthalene	nd	nd	nd	tr	nd	nd	nd	nd	nd
C1-Naphthalenes	180	tr	nd	nd	nd	nd	nd	nd	nd
C2-Naphthalenes	3,500	1,300	1,900	76	nd	nd	nd	nd	nd
C3-Naphthalenes	20,000	8,800	14,000	2,100	nd	tr	1,100	520	2,300
C4-Naphthalenes	14,000	6,300	15,000	6,500	3,600	3,800	3,600	2,200	6,400
C5-Naphthalenes	18,000	7,700	14,000	4,600	6,200	4,400	4,400	4,000	4,900
Acenaphthylene	tr	nd	tr	nd	nd	nd	nd	nd	nd
Acenaphthene	tr	tr	110	170	nd	tr	nd	nd	nd
Fluorene	na	110	93	nd	nd	nd	nd	nd	nd
C1-Fluorenes	600	510	1,000	nd	tr	nd	210	nd	330
C2-Fluorenes	4,500	2,100	3,300	1,100	830	720	610	470	710
C3-Fluorenes	4,500	1,800	2,200	1,700	1,100	1,600	1,300	710	940
Dibenzothiophene	100	nd	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	1,200	490	360	nd	nd	56	nd	nd	120
C2-Dibenzothiophenes	2,900	960	1,100	420	260	350	780	350	1,000
C3-Dibenzothiophenes	2,800	850	860	570	260	290	1,100	620	1,000
Phenanthrene	340	nd	nd	nd	nd	nd	nd	nd	nd
C1-Phenanthrenes	3,600	1,100	1,300	nd	nd	45	nd	nd	280
C2-Phenanthrenes	8,000	2,200	3,100	1,100	730	460	1,600	850	2,000
C3-Phenanthrenes	5,400	1,600	1,700	920	800	460	2,000	1,300	1,400
Anthracene	tr	tr	nd	nd	nd	61	nd	nd	nd
Fluoranthene	280	87	110	100	72	80	180	110	120
Pyrene	250	110	110	140	74	83	180	91	110
Benz(a)anthracene	tr	tr	tr	tr	tr	tr	76	110	tr
Chrysene	630	360	270	310	170	tr	68	500	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	110	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	1,600	670	690	720	320	220	500	920	230
Total Alkylated PAH	89,000	36,000	60,000	19,000	14,000	12,000	17,000	11,000	21,000
Total PAH	91,000	36,000	61,000	20,000	14,000	12,000	17,000	12,000	22,000
FFPI	0.94	0.93	0.95	0.88	0.87	0.87	0.93	0.80	0.96
Saturated Hydrocarbons									
Resolved	320,000	140,000	150,000	94,000	82,000	53,000	40,000	21,000	49,000
Unresolved	1,400,000	790,000	850,000	660,000	580,000	460,000	430,000	290,000	440,000
Total	1,700,000	930,000	1,000,000	750,000	660,000	510,000	471,000	310,000	490,000
Ratio Resolved/Total	0.19	0.15	0.15	0.13	0.12	0.10	0.08	0.07	0.10

Table D.39. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF600N, February 1990.

Analyte	PF600N								
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm*	20-25cm	25-30cm	30-35cm	35-39cm
MDL	29	32	24	34	22	42	41	32	42
Naphthalene	76	nd	nd	nd	nd	52	nd	nd	nd
C1-Naphthalenes	440	120	nd	nd	tr	410	210	91	nd
C2-Naphthalenes	4,200	2,100	1,300	1,100	1,700	2,800	2,400	2,000	540
C3-Naphthalenes	16,000	9,700	9,600	4,700	8,900	8,800	9,800	8,800	3,000
C4-Naphthalenes	7,000	7,000	9,300	4,700	4,400	8,600	6,400	3,700	3,100
C5-Naphthalenes	8,700	7,900	8,500	4,400	7,700	4,900	7,500	6,000	3,300
Acenaphthylene	tr	nd	nd	nd	tr	nd	nd	nd	nd
Acenaphthene	tr	nd	nd	39	tr	nd	nd	nd	nd
Fluorene	na	190	76	100	180	190	130	140	nd
C1-Fluorenes	1,200	940	590	590	760	1,200	790	980	260
C2-Fluorenes	3,300	1,500	2,400	1,200	1,800	2,800	2,900	2,400	980
C3-Fluorenes	2,500	590	1,100	550	1,300	3,300	2,600	2,800	650
Dibenzothiophene	110	65	43	82	tr	45	tr	tr	nd
C1-Dibenzothiophenes	790	430	320	420	340	310	500	280	180
C2-Dibenzothiophenes	1,900	690	570	470	580	1,200	1,700	1,400	890
C3-Dibenzothiophenes	1,500	490	410	960	420	1,500	1,900	1,200	1,000
Phenanthrene	530	tr	nd	nd	65	360	260	80	nd
C1-Phenanthrenes	3,200	1,200	450	930	1,100	2,200	2,800	1,900	510
C2-Phenanthrenes	3,700	1,500	960	1,800	1,500	5,000	5,700	3,600	2,400
C3-Phenanthrenes	2,300	490	430	850	490	4,300	4,900	2,600	2,200
Anthracene	tr	nd	tr	nd	nd	nd	nd	39	nd
Fluoranthene	120	41	65	78	55	250	200	110	160
Pyrene	140	38	44	95	44	240	220	150	180
Benz(a)anthracene	tr	tr	tr	tr	tr	410	tr	84	tr
Chrysene	360	190	120	82	58	46	400	260	170
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	1,300	520	350	470	400	1,600	1,200	860	510
Total Alkylated PAH	57,000	35,000	36,000	23,000	31,000	47,000	50,000	38,000	19,000
Total PAH	58,000	35,000	36,000	23,000	31,000	49,000	51,000	39,000	20,000
FFPI	0.93	0.94	0.96	0.93	0.94	0.91	0.92	0.92	0.93
Saturated Hydrocarbons									
Resolved	380,000	84,000	57,000	87,000	62,000	140,000	130,000	73,000	68,000
Unresolved	920,000	470,000	310,000	340,000	290,000	690,000	820,000	570,000	400,000
Total	1,300,000	550,000	370,000	430,000	350,000	830,000	950,000	640,000	470,000
Ratio Resolved/Total	0.29	0.15	0.15	0.20	0.18	0.17	0.14	0.11	0.14

Table D.40. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF800N, February 1990.

Analyte	PF800N						
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-31cm
MDL	9.4	8.0	4.2	9.2	10	8.5	8.0
Naphthalene	tr	nd	nd	tr	tr	tr	tr
C1-Naphthalenes	tr	nd	tr	tr	tr	tr	tr
C2-Naphthalenes	68	tr	9.9	tr	tr	tr	tr
C3-Naphthalenes	560	190	160	tr	tr	340	330
C4-Naphthalenes	nd	540	860	420	850	400	930
C5-Naphthalenes	tr	300	420	370	810	1,300	1,300
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	9.4	25	nd	nd	nd
Fluorene	tr	nd	nd	13	nd	nd	nd
C1-Fluorenes	tr	nd	tr	nd	nd	81	tr
C2-Fluorenes	230	130	100	170	360	140	230
C3-Fluorenes	250	100	85	140	190	250	290
Dibenzothiophene	nd	nd	5.4	nd	nd	nd	nd
C1-Dibenzothiophenes	40	18	19	nd	nd	33	25
C2-Dibenzothiophenes	150	40	110	74	92	200	140
C3-Dibenzothiophenes	130	tr	100	98	130	160	120
Phenanthrene	34	11	8.7	110	tr	nd	12
C1-Phenanthrenes	160	56	35	63	14	38	34
C2-Phenanthrenes	270	160	190	220	280	270	260
C3-Phenanthrenes	120	77	140	110	180	200	180
Anthracene	tr	tr	tr	37	nd	nd	nd
Fluoranthene	47	34	26	150	34	35	37
Pyrene	40	28	23	100	27	27	29
Benz(a)anthracene	tr	tr	tr	89	nd	tr	tr
Chrysene	39	tr	18	150	nd	32	tr
Benzo(b)fluoranthene	nd	nd	nd	190	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	180	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	160	74	90	1,000	60	94	78
Total Alkylated PAH	2,000	1,600	2,200	1,700	2,900	3,400	3,800
Total PAH	2,100	1,700	2,300	2,700	3,000	3,500	3,900
FFPI	0.87	0.84	0.89	0.37	0.91	0.92	0.92
Saturated Hydrocarbons							
Resolved	14,000	18,000	11,000	6,500	5,000	8,700	12,000
Unresolved	50,000	42,000	52,000	550,000	48,000	76,000	77,000
Total	64,000	60,000	63,000	61,000	53,000	85,000	89,000
Ratio Resolved/Total	0.22	0.30	0.17	0.11	0.09	0.10	0.13

Table D.41. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF900N, February 1990.

Analyte	PF900N 0-2cm	2-5cm	5-10cm	10-15cm	15-19cm
MDL	10	4.5	6.5	4.6	12
Naphthalene	tr	5.5	tr	tr	nd
C1-Naphthalenes	tr	tr	tr	nd	nd
C2-Naphthalenes	29	59	nd	nd	nd
C3-Naphthalenes	tr	340	nd	nd	nd
C4-Naphthalenes	nd	370	nd	tr	tr
C5-Naphthalenes	tr	290	nd	tr	tr
Acenaphthylene	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd
Fluorene	trc	14	nd	nd	nd
C1-Fluorenes	tr	61	nd	nd	nd
C2-Fluorenes	tr	80	tr	tr	tr
C3-Fluorenes	80	tr	tr	tr	tr
Dibenzothiophene	nd	6.3	nd	nd	nd
C1-Dibenzothiophenes	tr	22	nd	nd	nd
C2-Dibenzothiophenes	tr	72	nd	nd	nd
C3-Dibenzothiophenes	tr	72	nd	nd	nd
Phenanthrene	43	24	nd	tr	81
C1-Phenanthrenes	40	67	nd	nd	nd
C2-Phenanthrenes	75	140	nd	nd	nd
C3-Phenanthrenes	tr	100	nd	nd	nd
Anthracene	68	11	nd	nd	22
Fluoranthene	35	54	trc	19	120
Pyrene	28	46	7.7	23	120
Benz(a)anthracene	trc	19	nd	12	51
Chrysene	trc	28	nd	tr	78
Benzo(b)fluoranthene	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd
Total Parent PAH	170	210	7.7	54	470
Total Alkylated PAH	220	1,700	tr	tr	tr
Total PAH	400	1,900	7.7	54	470
FFPI	0.46	0.80	0.00	0.00	0.09
Saturated Hydrocarbons					
Resolved	12,000	19,000	2,800	330	1,100
Unresolved	26,000	39,000	2,500	330	8,300
Total	38,000	58,000	5,300	660	9,400
Ratio Resolved/Total	0.32	0.33	0.53	0.50	0.12

Table D.42. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF1000N, February 1990.

Analyte	PF1000N				
	0-2cm	2-5cm	5-10cm	10-15cm	15-19cm
MDL	4.1	5.0	3.9	6.1	9.7
Naphthalene	tr	nd	nd	9.6	tr
C1-Naphthalenes	tr	17	tr	9.0	nd
C2-Naphthalenes	78	190	tr	14	tr
C3-Naphthalenes	220	690	nd	tr	nd
C4-Naphthalenes	nd	960	tr	tr	tr
C5-Naphthalenes	tr	530	tr	tr	nd
Acenaphthylene	nd	nd	nd	nd	nd
Acenaphthene	20	nd	nd	17	nd
Fluorene	21	30	nd	11	nd
C1-Fluorenes	tr	nd	tr	tr	nd
C2-Fluorenes	110	320	nd	nd	nd
C3-Fluorenes	120	160	tr	53	tr
Dibenzothiophene	6.6	5.6	tr	nd	nd
C1-Dibenzothiophenes	10	18	nd	tr	nd
C2-Dibenzothiophenes	64	91	nd	nd	nd
C3-Dibenzothiophenes	94	68	nd	tr	nd
Phenanthrene	64	38	8.6	12	nd
C1-Phenanthrenes	85	96	tr	trc	nd
C2-Phenanthrenes	140	170	nd	31	nd
C3-Phenanthrenes	92	86	tr	tr	nd
Anthracene	20	tr	nd	nd	nd
Fluoranthene	97	57	19	21	tr
Pyrene	96	44	20	23	10
Benz(a)anthracene	37	tr	trc	nd	nd
Chrysene	45	tr	trc	nd	nd
Benzo(b)fluoranthene	32	nd	nd	nd	nd
Benzo(k)fluoranthene	14	nd	nd	nd	nd
Benzo(a)pyrene	23	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	19	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd
Total Parent PAH	500	180	48	94	10
Total Alkylated PAH	1,000	3,400	tr	110	tr
Total PAH	1,500	3,600	48	200	10
FFPI	0.61	0.88	0.09	0.47	0.00
Saturated Hydrocarbons					
Resolved	50,000	29,000	1,700	26,000	8,500
Unresolved	110,000	49,000	7,400	38,000	14,000
Total	160,000	78,000	9,100	64,000	22,000
Ratio Resolved/Total	0.31	0.37	0.19	0.41	0.39

Table D.43. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station PF600S, February 1990.

Analyte	PF600S							
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm*	30-36cm
MDL	13	21	7.9	12	13	9.8	11	12
Naphthalene	tr	tr	tr	tr	tr	tr	tr	tr
C1-Naphthalenes	trc	nd	tr	nd	nd	nd	nd	tr
C2-Naphthalenes	tr	nd	tr	nd	nd	nd	nd	nd
C3-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	tr	nd	nd	nd	nd	tr	tr
C5-Naphthalenes	nd	tr	nd	tr	420	tr	tr	860
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	nd	nd	nd
C1-Fluorenes	84	nd	tr	nd	nd	nd	nd	nd
C2-Fluorenes	160	tr	nd	tr	nd	110	tr	nd
C3-Fluorenes	80	tr	84	nd	nd	tr	tr	280
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	tr	nd	nd	tr	tr	nd	nd	nd
C3-Dibenzothiophenes	tr	nd	tr	72	tr	tr	tr	tr
Phenanthrene	19	nd	21	18	nd	nd	tr	15
C1-Phenanthrenes	nd	nd	nd	nd	tr	nd	nd	nd
C2-Phenanthrenes	tr	nd	nd	69	tr	nd	nd	nd
C3-Phenanthrenes	tr	tr	tr	120	130	tr	tr	tr
Anthracene	nd	nd	nd	tr	nd	tr	nd	nd
Fluoranthene	43	83	59	53	66	74	61	53
Pyrene	33	77	66	72	51	57	83	62
Benz(a)anthracene	tr	37	38	42	44	tr	32	35
Chrysene	46	43	54	82	86	28	34	tr
Benzo(b)fluoranthene	nd	nd	67	87	nd	nd	tr	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	140	240	310	350	250	160	210	170
Total Alkylated PAH	320	tr	84	260	550	110	tr	1,100
Total PAH	470	240	390	620	800	270	210	1,300
FFPI	0.07	0.00	0.03	0.44	0.34	0.00	0.00	0.05
Saturated Hydrocarbons								
Resolved	3,800	4,700	3,300	3,600	59,000	2,200	2,400	4,400
Unresolved	55,000	95,000	62,000	78,000	61,000	41,000	49,000	91,000
Total	59,000	100,000	65,000	82,000	120,000	43,000	51,000	95,000
Ratio Resolved/Total	0.06	0.05	0.05	0.04	0.49	0.05	0.05	0.05

Table D.44. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR2, February 1989.

Analyte	BR2 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm*	25-30cm	30-35cm	35-41cm
MDL	5.2	6.5	12	8.1	19	16	20	19	14
Naphthalene	5.8	tr	tr	tr	tr	tr	nd	tr	tr
C1-Naphthalenes	11	tr	nd	tr	nd	tr	tr	tr	nd
C2-Naphthalenes	76	22	13	tr	tr	tr	tr	tr	tr
C3-Naphthalenes	1,100	330	nd	nd	nd	170	tr	nd	nd
C4-Naphthalenes	1,600	900	240	250	tr	900	1,400	630	nd
C5-Naphthalenes	380	1,200	250	tr	tr	1,500	1,300	840	730
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	12	nd	nd	nd	nd	nd	nd	nd
C1-Fluorenes	120	61	tr	47	nd	88	tr	70	tr
C2-Fluorenes	180	tr	nd	nd	nd	220	250	89	120
C3-Fluorenes	210	280	tr	210	nd	370	210	92	270
Dibenzothiophene	12	14	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	130	68	nd	nd	nd	tr	nd	nd	nd
C2-Dibenzothiophenes	370	240	71	35	nd	230	tr	tr	92
C3-Dibenzothiophenes	320	310	110	140	120	440	tr	tr	110
Phenanthrene	40	20	26	11	tr	47	50	28	nd
C1-Phenanthrenes	230	54	nd	nd	tr	31	nd	nd	nd
C2-Phenanthrenes	560	410	170	140	150	500	320	300	tr
C3-Phenanthrenes	500	430	210	240	480	850	230	250	85
Anthracene	17	15	tr	nd	tr	15	25	nd	nd
Fluoranthene	74	96	79	75	110	170	190	83	81
Pyrene	65	81	68	63	100	tr	150	35	61
Benz(a)anthracene	26	45	33	37	28	41	tr	tr	tr
Chrysene	45	42	44	46	36	280	tr	tr	tr
Benzo(b)fluoranthene	22	nd	nd	nd	35	49	nd	nd	nd
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	57	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	310	330	250	230	310	660	420	150	140
Total Alkylated PAH	5,800	4,300	1,100	1,100	750	5,300	3,700	2,300	1,400
Total PAH	6,100	4,600	1,300	1,300	1,100	6,000	4,100	2,400	1,500
FFPI	0.89	0.85	0.71	0.71	0.71	0.77	0.60	0.81	0.67
Saturated Hydrocarbons									
Resolved	29,000	7,000	2,000	2,100	2,600	12,000	11,000	8,600	8,400
Unresolved	130,000	61,000	36,000	38,000	65,000	130,000	89,000	100,000	100,000
Total	160,000	68,000	38,000	40,000	68,000	140,000	100,000	110,000	110,000
Ratio Resolved/Total	0.18	0.10	0.05	0.05	0.04	0.09	0.11	0.08	0.08

Table D.48. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR4, February 1989.

Analyte	BR4 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm	35-41cm
MDL	7.5	26	18	23	24	19	19	28	22
Naphthalene	18	nd	nd	nd	nd	nd	nd	tr	tr
C1-Naphthalenes	45	45	tr	tr	tr	tr	140	360	310
C2-Naphthalenes	390	420	190	320	tr	450	2,200	3,300	3,100
C3-Naphthalenes	4,400	4,800	2,400	2,800	1,200	4,500	12,000	13,000	12,000
C4-Naphthalenes	4,500	5,800	4,500	3,700	3,400	5,900	9,200	10,000	7,700
C5-Naphthalenes	1,700	4,200	2,700	2,200	2,400	5,200	6,900	7,300	4,800
Acenaphthylene	nd	nd	nd	nd	nd	nd	19	nd	nd
Acenaphthene	nd	59	nd	nd	nd	nd	21	36	53
Fluorene	42	77	nd	nd	nd	nd	76	87	66
C1-Fluorenes	260	350	140	110	260	170	470	520	460
C2-Fluorenes	510	540	430	390	160	710	710	660	740
C3-Fluorenes	550	810	400	300	230	400	910	810	700
Dibenzothiophene	33	40	20	nd	nd	22	40	64	35
C1-Dibenzothiophenes	360	200	130	86	56	270	460	540	420
C2-Dibenzothiophenes	810	550	340	250	290	650	940	940	920
C3-Dibenzothiophenes	670	470	280	160	180	500	600	670	580
Phenanthrene	100	94	26	nd	nd	59	130	380	260
C1-Phenanthrenes	780	810	290	230	71	230	1,100	1,400	1,200
C2-Phenanthrenes	1,400	1,300	880	700	700	1,100	1,900	2,100	1,900
C3-Phenanthrenes	980	600	470	300	490	680	920	820	1,000
Anthracene	30	51	nd	nd	tr	24	39	32	540130
Fluoranthene	130	170	83	45	66	230	80	110	59
Pyrene	120	110	50	51	50	190	94	88	tr
Benzanthracene	42	tr	tr	nd	tr	170	150	tr	tr
Chrysene	66	tr	tr	tr	tr	210	160	tr	nd
Benzo(b)fluoranthene	68	nd	nd	nd	nd	130	nd	nd	nd
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	tr	nd	nd	nd
Benzo(a)pyrene	tr	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	tr	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	650	600	180	96	120	1,000	810	800	660
Total Alkylated PAH	17,000	21,000	13,000	12,000	9,400	21,000	38,000	42,000	36,000
Total PAH	18,000	21,000	13,000	12,000	9,600	22,000	39,000	43,000	37,000
FFPI	0.91	0.91	0.94	0.10	0.95	0.88	0.94	0.95	0.95
Saturated Hydrocarbons									
Resolved	55,000	110,000	44,000	28,000	28,000	41,000	160,000	250,000	280,000
Unresolved	170,000	280,000	170	130,000	150,000	230,000	490,000	560,000	560,000
Total	220,000	390,000	210,000	160,000	180,000	270,000	650,000	810,000	840,000
Ratio Resolved/Total	0.25	0.28	0.15	0.18	0.16	0.15	0.25	0.31	0.33

Table D.46. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR6, February 1989.

Analyte	BR6								
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm*	25-30cm	30-35cm	35-41cm
MDL	5.0	15	23	24	7.6	10	7.7	6.1	8.1
Naphthalene	6.4	tr	tr	tr	8.6	tr	tr	tr	tr
C1-Naphthalenes	tr	tr	tr	nd	8.0	tr	nd	7.1	tr
C2-Naphthalenes	61	24	tr	tr	tr	tr	10	13	60
C3-Naphthalenes	770	700	310	tr	tr	tr	170	160	660
C4-Naphthalenes	770	2,100	1,100	1,100	420	300	560	570	2,000
C5-Naphthalenes	770	850	690	640	1,100	630	1,200	610	70
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	tr	nd
Acenaphthene	nd	nd	nd	nd	11	nd	nd	6.9	tr
Fluorene	17	16	nd	nd	13	nd	nd	11	12
C1-Fluorenes	55	140	tr	tr	53	tr	37	39	45
C2-Fluorenes	220	280	tr	160	nd	95	61	tr	38
C3-Fluorenes	200	310	270	180	100	190	82	45	230
Dibenzothiophene	12	nd	nd	nd	8.6	nd	nd	nd	nd
C1-Dibenzothiophenes	140	96	41	31	16	tr	23	12	46
C2-Dibenzothiophenes	380	400	tr	tr	95	tr	90	70	250
C3-Dibenzothiophenes	360	490	tr	tr	130	200	80	100	220
Phenanthrene	42	38	33	tr	160	37	7.7	16	27
C1-Phenanthrenes	300	250	44	nd	94	tr	nd	24	49
C2-Phenanthrenes	700	810	280	170	210	260	160	180	370
C3-Phenanthrenes	590	880	170	180	160	255	130	270	400
Anthracene	17	28	28	36	27	tr	nd	tr	nd
Fluoranthene	100	150	84	100	230	100	42	45	65
Pyrene	85	130	75	82	180	78	37	37	57
Benz(a)anthracene	37	41	tr	tr	110	74	31	22	43
Chrysene	68	58	100	tr	190	90	62	33	61
Benzo(b)fluoranthene	30	tr	nd	nd	140	58	nd	23	nd
Benzo(k)fluoranthene	tr	nd	nd	nd	90	66	nd	nd	nd
Benzo(a)pyrene	tr	nd	nd	nd	97	tr	nd	nd	nd
Indeno(1,2,3-cd)pyrene	tr	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	410	460	320	220	1,300	500	180	190	270
Total Alkylated PAH	5,300	7,300	2,900	2,500	2,400	1,900	2,600	2,100	4,400
Total PAH	5,700	7,800	3,200	2,700	3,700	2,400	2,800	2,300	4,700
FFPI	0.86	0.86	0.72	0.64	0.39	0.60	0.79	0.81	0.88
Saturated Hydrocarbons									
Resolved	27,000	25,000	7,800	3,700	8,200	11,000	10,000	11,000	24,000
Unresolved	100,000	170,000	75,000	70,000	74,000	110,000	69,000	110,000	170,000
Total	130,000	190,000	83,000	74,000	82,000	120,000	79,000	120,000	190,000
Ratio Resolved/Total	0.21	0.13	0.09	0.05	0.10	0.09	0.13	0.09	0.13

Table D.47. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR8, February 1989.

Analyte	BR8 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm	35-38cm*
MDL	6.0	7.0	9.0	10	10	12	9.0	15	9.6
Naphthalene	24	tr	tr	tr	10	tr	11	tr	tr
C1-Naphthalenes	15	tr	tr	tr	tr	tr	tr	nd	11
C2-Naphthalenes	83	45	tr	tr	15	16	31	57	28
C3-Naphthalenes	860	300	nd	170	200	650	530	1,100	1,400
C4-Naphthalenes	1,900	910	340	1,000	910	1,300	1,400	1,900	2,700
C5-Naphthalenes	610	nd	580	1,200	570	1,600	1,200	2,400	2,400
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	tr
Acenaphthene	nd	nd	nd	nd	14	tr	12	nd	tr
Fluorene	20	21	nd	nd	24	20	21	nd	nd
C1-Fluorenes	96	tr	70	nd	tr	tr	96	tr	72
C2-Fluorenes	180	190	nd	100	150	130	260	590	200
C3-Fluorenes	240	230	160	300	180	310	210	550	280
Dibenzothiophene	13	13	nd	nd	13	16	13	25	tr
C1-Dibenzothiophenes	110	56	nd	25	37	160	89	110	130
C2-Dibenzothiophenes	310	260	50	420	150	420	290	340	350
C3-Dibenzothiophenes	340	320	140	620	150	350	270	320	260
Phenanthrene	58	28	17	tr	160	30	58	24	29
C1-Phenanthrenes	210	150	17	24	160	110	120	84	24
C2-Phenanthrenes	510	500	280	820	930	630	400	620	400
C3-Phenanthrenes	510	600	450	1,100	140	400	320	350	350
Anthracene	23	13	10	nd	45	tr	31	23	25
Fluoranthene	100	120	84	82	250	92	65	79	64
Pyrene	76	110	63	66	180	71	56	66	45
Benz(a)anthracene	29	40	39	22	120	36	20	88	58
Chrysene	56	48	41	39	140	76	45	100	120
Benzo(b)fluoranthene	tr	nd	23	nd	120	nd	nd	100	tr
Benzo(k)fluoranthene	nd	nd	nd	nd	85	nd	nd	nd	tr
Benzo(a)pyrene	nd	nd	nd	nd	89	nd	nd	nd	tr
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	400	390	280	210	1,300	340	330	510	340
Total Alkylated PAH	6,000	3,600	2,100	5,800	3,600	6,100	5,200	8,400	8,500
Total PAH	6,400	3,900	2,400	6,000	4,800	6,400	5,500	8,900	8,800
FFPI	0.87	0.83	0.77	0.93	0.60	0.88	0.86	0.85	0.90
Saturated Hydrocarbons									
Resolved	20,000	17,000	11,000	12,000	9,300	15,000	16,000	24,000	37,000
Unresolved	90,000	93,000	120,000	110,000	62,000	110,000	110,000	160,000	200,000
Total	110,000	110,000	130,000	120,000	71,000	120,000	130,000	180,000	240,000
Ratio Resolved/Total	0.18	0.15	0.08	0.10	0.13	0.13	0.12	0.13	0.15

Table D.48. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR9, February 1989.

Analyte	BR9							
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-37cm*
MDL	7.0	23	9.2	7.0	8.0	8.0	7.5	10
Naphthalene	10	trc	17	12	12	12	17	190
C1-Naphthalenes	10	nd	34	48	26	17	tr	660
C2-Naphthalenes	85	tr	120	140	100	65	47	710
C3-Naphthalenes	1,100	900	1,300	1,400	710	830	1,500	2,100
C4-Naphthalenes	1,600	2,300	2,000	1,900	1,700	1,500	3,900	3,000
C5-Naphthalenes	1,500	1,600	1,600	1,400	1,000	1,800	tr	2,300
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	22	9.0	nd	55	1,600
Fluorene	17	nd	19	25	24	tr	10	1,400
C1-Fluorenes	120	120	120	140	90	96	100	190
C2-Fluorenes	140	350	380	390	130	220	420	450
C3-Fluorenes	270	500	330	390	230	390	270	380
Dibenzothiophene	20	tr	13	16	17	tr	11	140
C1-Dibenzothiophenes	130	140	150	170	94	62	130	140
C2-Dibenzothiophenes	360	490	450	500	310	350	480	430
C3-Dibenzothiophenes	390	600	430	460	300	390	470	370
Phenanthrene	56	67	49	49	64	16	25	1,800
C1-Phenanthrenes	310	430	290	270	190	62	84	350
C2-Phenanthrenes	690	1,200	840	890	550	650	800	790
C3-Phenanthrenes	630	1,100	760	830	520	830	670	650
Anthracene	16	tr	32	30	26	9.8	19	150
Fluoranthene	99	140	120	170	120	100	130	310
Pyrene	89	130	94	140	95	80	92	190
Benzanthracene	30	46	52	45	27	37	48	67
Chrysene	42	67	74	71	49	47	81	120
Benzo(b)fluoranthene	tr	nd	tr	nd	tr	nd	47	140
Benzo(k)fluoranthene	tr	nd	nd	nd	tr	nd	nd	nd
Benzo(a)pyrene	tr	nd	nd	nd	nd	nd	nd	tr
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	380	450	470	580	440	300	540	6,100
Total Alkylated PAH	7,300	9,700	8,800	8,900	6,000	7,300	8,900	13,000
Total PAH	7,700	10,000	9,300	9,500	6,400	7,600	9,400	19,000
FFPI	0.88	0.88	0.88	0.87	0.85	0.91	0.89	0.59
Saturated Hydrocarbons								
Resolved	19,000	25,000	31,000	24,000	13,000	22,000	30,000	29,000
Unresolved	100,000	140,000	180,000	160,000	85,000	160,000	210,000	160,000
Total	120,000	165,000	210,000	180,000	98,000	180,000	240,000	190,000
Ratio Resolved/Total	0.16	0.15	0.15	0.13	0.13	0.12	0.13	0.15

Table D.49. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR11, February 1989.

Analyte	BR11							
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm*	20-25cm	25-30cm	30-36cm
MDL	6.8	9.8	12	11	7.9	12	17	15
Naphthalene	14	tr	tr	tr	tr	tr	tr	tr
C1-Naphthalenes	9.4	tr	tr	nd	tr	tr	nd	17
C2-Naphthalenes	12	24	tr	nd	trc	19	tr	43
C3-Naphthalenes	180	tr	nd	tr	tr	240	240	390
C4-Naphthalenes	610	280	260	750	690	770	800	1,800
C5-Naphthalenes	160	420	290	850	1,000	1,000	1,400	1,300
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	73	12	nd	nd
Fluorene	nd	nd	nd	nd	89	16	38	nd
C1-Fluorenes	86	66	tr	tr	61	55	tr	92
C2-Fluorenes	110	50	69	130	84	240	200	160
C3-Fluorenes	210	tr	100	110	140	210	240	190
Dibenzothiophene	trc	nd	nd	45	tr	nd	tr	nd
C1-Dibenzothiophenes	27	16	nd	16	20	33	35	57
C2-Dibenzothiophenes	140	tr	tr	300	150	220	140	160
C3-Dibenzothiophenes	180	tr	tr	270	180	230	tr	74
Phenanthrene	18	22	23	16	120	53	41	23
C1-Phenanthrenes	72	40	tr	16	tr	15	tr	28
C2-Phenanthrenes	280	160	160	300	180	160	230	280
C3-Phenanthrenes	340	130	130	290	170	220	tr	200
Anthracene	8.6	15	nd	tr	27	27	58	tr
Fluoranthene	54	44	64	69	87	100	93	61
Pyrene	47	43	35	61	66	88	83	43
Benz(a)anthracene	19	tr	tr	tr	43	tr	160	42
Chrysene	23	35	38	24	56	55	nd	75
Benzo(b)fluoranthene	nd	nd	nd	nd	tr	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	tr	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	tr	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	180	160	160	220	560	350	470	240
Total Alkylated PAH	2,400	1,200	1,000	3,000	2,700	3,400	3,300	4,800
Total PAH	2,600	1,300	1,200	3,200	3,200	3,800	3,800	5,000
FFPI	0.86	0.68	0.67	0.88	0.60	0.78	0.60	0.83
Saturated Hydrocarbons								
Resolved	8,000	3,600	3,000	6,000	8,600	12,000	11,000	13,000
Unresolved	46,000	37,000	48,000	70,000	80,000	110,000	89,000	87,000
Total	54,000	41,000	51,000	76,000	89,000	120,000	100,000	100,000
Ratio Resolved/Total	0.15	0.09	0.06	0.08	0.10	0.10	0.11	0.13

Table D.50. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR2, February 1990.

Analyte	BR2 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-32cm
MDL	10	12	10	10	14	7.6	9.2	8.8
Naphthalene	tr	16	14	tr	tr	tr	tr	tr
C1-Naphthalenes	tr	51	82	tr	nd	nd	nd	tr
C2-Naphthalenes	130	260	1,200	tr	tr	trc	tr	tr
C3-Naphthalenes	1,100	1,200	7,400	tr	220	210	180	nd
C4-Naphthalenes	tr	1,300	4,100	400	340	690	310	nd
C5-Naphthalenes	tr	1,500	2,900	970	850	580	810	260
Acenaphthylene	tr	nd	nd	nd	nd	nd	nd	14
Acenaphthene	nd	42	34	nd	nd	18	nd	nd
Fluorene	tr	60	91	nd	nd	27	nd	nd
C1-Fluorenes	tr	150	300	nd	nd	tr	nd	52
C2-Fluorenes	380	290	680	130	120	tr	tr	37
C3-Fluorenes	340	110	430	nd	tr	tr	89	nd
Dibenzothiophene	nd	28	79	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	58	310	tr	23	19	nd	nd
C2-Dibenzothiophenes	tr	190	360	90	60	85	tr	tr
C3-Dibenzothiophenes	tr	160	230	90	tr	85	tr	100
Phenanthrene	100	53	54	17	21	48	16	38
C1-Phenanthrenes	220	140	480	tr	44	30	nd	23
C2-Phenanthrenes	370	370	460	180	200	160	tr	55
C3-Phenanthrenes	230	160	140	100	140	60	tr	55
Anthracene	14	36	48	25	tr	18	nd	14
Fluoranthene	110	93	60	84	56	61	21	75
Pyrene	76	80	42	52	40	45	19	77
Benz(a)anthracene	52	79	tr	tr	nd	18	nd	75
Chrysene	76	160	120	tr	nd	tr	nd	59
Benzo(b)fluoranthene	tr	150	nd	nd	nd	nd	nd	100
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	430	800	540	180	120	240	56	450
Total Alkylated PAH	2,800	5,900	19,000	2,000	2,000	1,900	1,400	580
Total PAH	3,200	6,700	20,000	2,100	2,100	2,200	1,400	1,000
FFPI	0.80	0.77	0.94	0.73	0.84	0.74	0.80	0.35
Saturated Hydrocarbons								
Resolved	33,000	26,000	37,000	7,100	8,700	6,400	6,000	6,700
Unresolved	100,000	94,000	120,000	57,000	69,000	49,000	57,000	110,000
Total	140,000	120,000	160,000	64,000	78,000	55,000	63,000	120,000
Ratio Resolved/Total	0.24	0.22	0.23	0.11	0.11	0.12	0.10	0.06

Table D.51. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR4, February 1990.

Analyte	BR4							
	0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-34cm
MDL	16	21	26	30	11	8.5	16	5.7
Naphthalene	tr	nd	tr	tr	nd	nd	nd	nd
C1-Naphthalenes	trc	tr	nd	tr	tr	nd	nd	nd
C2-Naphthalenes	47	140	trc	400	270	nd	nd	nd
C3-Naphthalenes	1,400	2,500	960	3,100	1,700	nd	nd	nd
C4-Naphthalenes	2,300	3,500	2,300	2,700	1,700	nd	nd	nd
C5-Naphthalenes	1,300	3,000	2,100	3,700	1,400	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	trc	27	42	40	11	nd	nd	nd
Fluorene	nd	tr	nd	85	23	nd	nd	nd
C1-Fluorenes	140	290	nd	tr	120	nd	nd	nd
C2-Fluorenes	670	320	440	610	300	nd	nd	nd
C3-Fluorenes	770	350	nd	300	120	nd	nd	nd
Dibenzothiophene	nd	nd	nd	tr	nd	nd	nd	nd
C1-Dibenzothiophenes	66	180	53	140	130	nd	nd	nd
C2-Dibenzothiophenes	340	520	250	560	210	nd	nd	nd
C3-Dibenzothiophenes	370	460	120	500	140	nd	nd	nd
Phenanthrene	31	70	nd	94	17	nd	nd	nd
C1-Phenanthrenes	67	79	tr	280	96	nd	nd	nd
C2-Phenanthrenes	480	570	280	690	270	nd	nd	nd
C3-Phenanthrenes	340	380	200	440	90	nd	nd	nd
Anthracene	27	40	nd	59	15	trc	nd	nd
Fluoranthene	98	89	55	270	39	nd	nd	nd
Pyrene	57	80	54	170	22	nd	nd	nd
Benz(a)anthracene	tr	130	tr	98	trc	nd	nd	nd
Chrysene	trc	240	tr	170	trc	nd	nd	nd
Benzo(b)fluoranthene	tr	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	210	680	150	990	130	tr	nd	nd
Total Alkylated PAH	8,300	12,000	6,700	13,000	6,500	tr	tr	nd
Total PAH	8,500	13,000	6,900	14,000	6,700	tr	tr	nd
FFPI	0.93	0.88	0.93	0.85	0.95	na	na	na
Saturated Hydrocarbons								
Resolved	19,000	79,000	21,000	54,000	31,000	660	410	170
Unresolved	140,000	400,000	150,000	290,000	110,000	nd	2,400	nd
Total	160,000	480,000	170,000	340,000	140,000	660	2,800	170
Ratio Resolved/Total	0.12	0.16	0.12	0.16	0.22	1.00	0.15	1.00

Table D.52. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR6, February 1990.

Analyte	BR6 0-2cm**	2-5cm	5-10cm*	10-15cm	15-20cm	20-25cm	25-30cm	30-32cm
MDL	7.6	15	16	16	17	13	11	12
Naphthalene	16	tr	tr	16	tr	tr	tr	tr
C1-Naphthalenes	36	tr	tr	tr	tr	nd	nd	nd
C2-Naphthalenes	330	42	tr	51	29	nd	nd	nd
C3-Naphthalenes	2,200	930	630	1,100	1,400	500	700	tr
C4-Naphthalenes	150	1,200	1,600	2,900	2,500	1,900	2,900	1,700
C5-Naphthalenes	1,900	1,500	1,100	3,600	3,400	3,600	1,400	600
Acenaphthylene	nd	nd	tr	nd	tr	nd	nd	nd
Acenaphthene	tr	nd	nd	nd	21	nd	nd	nd
Fluorene	41	35	tr	57	17	nd	nd	nd
C1-Fluorenes	150	150	tr	190	130	200	tr	tr
C2-Fluorenes	490	110	tr	630	170	130	450	240
C3-Fluorenes	520	tr	tr	870	210	420	380	190
Dibenzothiophene	tr	nd	tr	32	nd	nd	nd	nd
C1-Dibenzothiophenes	140	97	43	140	tr	21	nd	nd
C2-Dibenzothiophenes	390	280	230	520	130	150	120	66
C3-Dibenzothiophenes	280	310	260	380	230	200	220	100
Phenanthrene	92	42	28	57	39	14	33	16
C1-Phenanthrenes	320	170	65	310	nd	nd	14	nd
C2-Phenanthrenes	500	510	410	820	400	250	210	100
C3-Phenanthrenes	270	280	350	530	340	170	190	130
Anthracene	29	nd	44	44	20	21	25	nd
Fluoranthene	82	89	230	180	160	48	61	33
Pyrene	60	69	190	130	140	43	37	27
Benz(a)anthracene	53	tr	120	94	450	tr	190	tr
Chrysene	94	tr	170	140	560	tr	210	tr
Benzo(b)fluoranthene	110	nd	tr	140	1,500	nd	530	nd
Benzo(k)fluoranthene	tr	nd	tr	nd	tr	nd	tr	nd
Benzo(a)pyrene	tr	nd	tr	nd	770	nd	400	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	470	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	130	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	250	nd	nd	nd
Total Parent PAH	580	240	780	890	4,500	130	1,500	76
Total Alkylated PAH	7,700	5,600	4,700	12,000	8,900	7,500	6,600	3,100
Total PAH	8,200	5,800	5,500	13,000	13,000	7,700	8,100	3,200
FFPI	0.87	0.89	0.71	0.80	0.36	0.92	0.50	0.86
Saturated Hydrocarbons								
Resolved	34,000	19,000	17,000	21,000	66,000	15,000	23,000	5,800
Unresolved	120,000	110,000	100,000	150,000	320,000	130,000	210,000	73,000
Total	150,000	130,000	120,000	170,000	390,000	140,000	230,000	79,000
Ratio Resolved/Total	0.23	0.15	0.14	0.12	0.17	0.11	0.10	0.07

Table D.53. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR8, February 1990.

Analyte	BR8							
	0-2cm	2-5cm	5-10cm	10-15cm*	15-20cm	20-25cm	25-30cm	30-35cm
MDL	11	15	13	10	11	12	13	9.5
Naphthalene	16	tr	tr	tr	tr	tr	tr	11
C1-Naphthalenes	23	trc	tr	tr	nd	nd	nd	trc
C2-Naphthalenes	190	290	150	27	trc	98	130	130
C3-Naphthalenes	1,000	2,100	1,300	490	590	920	1,300	700
C4-Naphthalenes	nd	2,900	1,200	1,000	1,800	240	1,500	930
C5-Naphthalenes	290	tr	1,400	1,300	2,300	1,300	2,400	870
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	tr	nd	nd	nd	22
Fluorene	27	29	nd	tr	nd	nd	nd	12
C1-Fluorenes	tr	tr	200	tr	nd	nd	tr	nd
C2-Fluorenes	290	550	160	290	220	370	550	200
C3-Fluorenes	160	180	220	tr	290	190	500	nd
Dibenzothiophene	15	21	17	tr	nd	nd	nd	nd
C1-Dibenzothiophenes	70	120	60	44	19	37	40	31
C2-Dibenzothiophenes	190	310	170	150	tr	70	150	70
C3-Dibenzothiophenes	160	240	100	tr	tr	tr	90	tr
Phenanthrene	63	81	57	34	17	40	52	48
C1-Phenanthrenes	210	270	210	81	tr	93	130	130
C2-Phenanthrenes	360	520	260	250	120	210	190	180
C3-Phenanthrenes	170	220	65	tr	70	tr	60	tr
Anthracene	tr	32	tr	tr	15	52	25	17
Fluoranthene	48	78	60	74	45	49	96	59
Pyrene	35	62	38	56	45	38	62	
Benz(a)anthracene	tr	tr	trc	tr	tr	tr	100	40
Chrysene	57	nd	trc	tr	tr	tr	130	tr
Benzo(b)fluoranthene	tr	tr	nd	tr	nd	nd	nd	nd
Benzo(k)fluoranthene	tr	nd	nd	tr	nd	nd	nd	nd
Benzo(a)pyrene	tr	nd	nd	tr	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	na	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	na	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	na	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	260	300	170	160	120	180	470	210
Total Alkylated PAH	3,100	7,700	5,500	3,600	5,400	3,500	7,000	3,200
Total PAH	3,400	8,000	5,700	3,800	5,500	3,700	7,500	3,500
FFPI	0.88	0.91	0.91	0.84	0.88	0.87	0.80	0.83
Saturated Hydrocarbons								
Resolved	41,000	28,000	18,000	13,000	11,000	15,000	2,600	16,000
Unresolved	89,000	99,000	64,000	61,000	84,000	80,000	140,000	70,000
Total	130,000	130,000	82,000	74,000	95,000	95,000	140,000	86,000
Ratio Resolved/Total	0.32	0.22	0.22	0.18	0.12	0.16	0.02	0.19

Table D.54. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR9, February 1990.

Analyte	BR9 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-34cm*
MDL	18	15	13	29	10	14	11	21
Naphthalene	65	23	tr	tr	12	22	20	29
C1-Naphthalenes	100	65	14	tr	31	160	130	150
C2-Naphthalenes	510	570	200	450	280	1,800	1,200	1,100
C3-Naphthalenes	2,700	4,200	1,700	5,400	1,800	8,400	5,600	5,100
C4-Naphthalenes	nd	4,000	2,900	12,000	1,700	5,000	5,400	5,000
C5-Naphthalenes	800	3,500	2,300	7,900	1,400	4,100	3,800	3,700
Acenaphthylene	nd	nd	nd	nd	tr	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	15	32	24	tr
Fluorene	84	60	19	tr	25	150	59	79
C1-Fluorenes	230	130	210	tr	220	610	440	tr
C2-Fluorenes	960	980	530	1,400	540	1,400	840	780
C3-Fluorenes	870	350	150	900	300	1,200	730	640
Dibenzothiophene	28	24	nd	nd	nd	15	23	38
C1-Dibenzothiophenes	170	180	70	160	110	450	280	360
C2-Dibenzothiophenes	400	300	180	910	300	780	700	630
C3-Dibenzothiophenes	230	100	110	810	240	490	440	630
Phenanthrene	150	130	31	66	38	260	160	180
C1-Phenanthrenes	630	330	150	260	96	1,200	780	770
C2-Phenanthrenes	990	400	320	880	400	1,500	1,100	1,200
C3-Phenanthrenes	480	110	120	820	260	700	600	560
Anthracene	24	21	16	nd	10	15	22	tr
Fluoranthene	97	83	51	93	55	120	81	120
Pyrene	75	56	53	87	63	96	69	120
Benz(a)anthracene	tr	tr	tr	87	31	71	82	tr
Chrysene	120	110	tr	160	57	110	130	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	160	86	tr
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	72	tr
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	tr
Indeno(1,2,3-cd)pyrene	na	nd	nd	nd	nd	nd	nd	tr
Dibenz(a,h)anthracene	na	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	na	nd	nd	nd	nd	nd	nd	tr
Total Parent PAH	640	510	170	490	310	1,100	830	570
Total Alkylated PAH	9,100	15,000	9,000	32,000	7,700	28,000	22,000	21,000
Total PAH	9,700	16,000	9,100	32,000	8,000	29,000	23,000	21,000
FFPI	0.88	0.92	0.92	0.94	0.92	0.91	0.91	0.93
Saturated Hydrocarbons								
Resolved	46,000	57,000	29,000	48,000	24,000	120,000	110,000	100,000
Unresolved	130,000	140,000	140,000	300,000	160,000	390,000	340,000	360,000
Total	180,000	200,000	170,000	350,000	180,000	510,000	450,000	460,000
Ratio Resolved/Total	0.26	0.29	0.17	0.14	0.13	0.24	0.24	0.22

Table D.55. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station BR11, February 1990.

Analyte	BR11 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm
MDL	11	12	11	13	11	8.3	12	11
Naphthalene	12	tr	tr	tr	tr	trc	tr	tr
C1-Naphthalenes	tr	tr	tr	tr	tr	tr	tr	nd
C2-Naphthalenes	trc	trc	tr	tr	tr	32	30	21
C3-Naphthalenes	nd	nd	nd	nd	nd	tr	nd	nd
C4-Naphthalenes	nd	tr	190	nd	nd	400	450	nd
C5-Naphthalenes	690	730	380	tr	440	nd	480	520
Acenaphthylene	nd	nd	nd	nd	nd	nd	15	28
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	tr	nd	nd
C1-Fluorenes	76	120	tr	tr	nd	74	78	140
C2-Fluorenes	130	nd	210	tr	nd	78	110	tr
C3-Fluorenes	tr	250	88	190	tr	190	nd	tr
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	80	tr	tr	nd	tr	70	tr	tr
C3-Dibenzothiophenes	tr	tr	tr	nd	tr	270	tr	tr
Phenanthrene	37	40	tr	28	19	8.8	nd	22
C1-Phenanthrenes	68	tr	16	nd	nd	nd	nd	nd
C2-Phenanthrenes	110	120	80	tr	90	190	tr	70
C3-Phenanthrenes	60	80	60	tr	70	40	tr	80
Anthracene	20	tr	tr	tr	nd	32	20	15
Fluoranthene	53	100	85	44	44	55	90	96
Pyrene	37	81	62	42	43	55	110	100
Benz(a)anthracene	trc	tr	tr	trc	tr	trc	61	63
Chrysene	84	74	34	trc	tr	trc	150	120
Benzo(b)fluoranthene	tr	nd	nd	nd	nd	nd	630	260
Benzo(k)fluoranthene	tr	nd	nd	nd	nd	nd	tr	tr
Benzo(a)pyrene	tr	nd	nd	nd	nd	nd	210	29
Indeno(1,2,3-cd)pyrene	na	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	na	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	na	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	240	300	180	110	110	150	1,300	730
Total Alkylated PAH	1,200	1,300	1,000	190	600	1,300	1,100	830
Total PAH	1,500	1,600	1,200	300	710	1,500	2,400	1,600
FFPI	0.56	0.44	0.44	0.12	0.64	0.81	0.02	0.20
Saturated Hydrocarbons								
Resolved	10,000	4,700	3,400	2,500	4,200	7,600	4,600	2,800
Unresolved	54,000	41,000	38,000	30,000	39,000	54,000	40,000	42,000
Total	64,000	46,000	41,000	32,000	43,000	62,000	45,000	45,000
Ratio Resolved/Total	0.16	0.10	0.08	0.08	0.10	0.12	0.10	0.06

Table D.56. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EP0, April 1989.

Analyte	EP0 0-2cm	EP0 2-5 cm	EP0 5-10 cm
MDL	11	6.6	6.2
Naphthalene	tr	tr	tr
C1-Naphthalenes	nd	nd	nd
C2-Naphthalenes	nd	tr	nd
C3-Naphthalenes	nd	nd	nd
C4-Naphthalenes	nd	nd	nd
C5-Naphthalenes	nd	nd	nd
Acenaphthylene	nd	nd	nd
Acenaphthene	nd	nd	nd
Fluorene	nd	nd	nd
C1-Fluorenes	nd	nd	nd
C2-Fluorenes	nd	nd	nd
C3-Fluorenes	nd	nd	nd
Dibenzothiophene	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd
Phenanthrene	nd	nd	nd
C1-Phenanthrenes	nd	nd	nd
C2-Phenanthrenes	nd	nd	nd
C3-Phenanthrenes	nd	nd	nd
Anthracene	nd	nd	nd
Fluoranthene	tr	tr	nd
Pyrene	tr	tr	trc
Benz(a)anthracene	nd	tr	nd
Chrysene	nd	tr	nd
Benzo(b)fluoranthene	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd
Total Parent PAH	tr	tr	tr
Total Alkylated PAH	nd	tr	nd
Total PAH	tr	tr	tr
FFPI	na	na	na
Saturated Hydrocarbons			
Resolved	100	nd	nd
Unresolved	1,000	nd	nd
Total	1,100	nd	nd
Ratio Resolved/Total	0.09	na	na

Table D.57. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of cores from Emeline Pass, October 1989.

Analyte	EP0 0-2cm	EP0 2-7cm	Mean*	EP100E 0-2cm	EP100E 2-8 cm	Mean*	EP450W 0-2cm	EP450W 2-6 cm	Mean*
MDL	3.4	2.5	3.0	8.7	3.5	6.1	4.3	4.9	4.6
Naphthalene	nd	tr	tr	nd	tr	tr	4.5	5.9	5.2
C1-Naphthalenes	tr	11	11	nd	tr	tr	tr	trc	tr
C2-Naphthalenes	tr	46	46	nd	nd	nd	tr	tr	tr
C3-Naphthalenes	nd	tr	tr	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	tr	tr	nd	tr	tr
C5-Naphthalenes	nd	tr	tr	tr	tr	tr	tr	tr	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	7.1	7.1	nd	nd	nd	nd	nd	nd
Fluorene	nd	8.7	8.7	nd	nd	nd	nd	tr	tr
C1-Fluorenes	nd	nd	nd	nd	nd	nd	nd	tr	tr
C2-Fluorenes	tr	tr	tr	nd	tr	tr	tr	tr	tr
C3-Fluorenes	tr	tr	tr	tr	nd	tr	tr	tr	tr
Dibenzothiophene	nd	tr	tr	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	tr	tr	nd	nd	tr	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	tr	nd	tr
Phenanthrene	tr	8.5	8.5	nd	tr	tr	8.0	11	9.5
C1-Phenanthrenes	nd	nd	nd	nd	nd	nd	trc	nd	tr
C2-Phenanthrenes	tr	tr	tr	nd	tr	tr	tr	tr	tr
C3-Phenanthrenes	tr	tr	tr	nd	nd	nd	tr	tr	tr
Anthracene	nd	nd	nd	nd	nd	nd	tr	nd	tr
Fluoranthene	tr	tr	tr	tr	6.2	6.2	16	13	15
Pyrene	tr	tr	tr	10	12	11	29	19	24
Benz(a)anthracene	nd	nd	nd	tr	tr	tr	tr	tr	tr
Chrysene	nd	nd	nd	tr	4.3	4.3	tr	tr	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	tr	24	24	10	23	16	58	49	53
Total Alkylated PAH	tr	57	57	tr	tr	tr	tr	tr	tr
Total PAH	tr	81	81	10	23	16	58	49	53
FFPI	na	0.75	0.75	na	0.00	0.00	0.15	0.23	0.19
Saturated Hydrocarbons									
Resolved	nd	160	160	340	340	340	570	510	540
Unresolved	nd	1,300	1,300	760	430	600	1,700	2,000	1,900
Total	nd	1,500	1,500	1,100	770	940	2,300	2,500	2,400
Ratio Resolved/Total	na	0.11	0.11	0.31	0.44	0.36	0.25	0.20	0.23

*using singular values when paired with "tr" or "nd."

Table D.58. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EI0, May 1989.

Analyte	EI0 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-35cm
MDL	19	10	17	9.1	21	16	11	9.2
Naphthalene	tr	tr	nd	9.6	tr	tr	18	tr
C1-Naphthalenes	trc	22	nd	17	trc	64	130	42
C2-Naphthalenes	33	32	nd	31	36	170	870	58
C3-Naphthalenes	500	430	nd	250	tr	970	2,200	tr
C4-Naphthalenes	630	nd	710	tr	tr	1,500	1,200	tr
C5-Naphthalenes	580	390	560	tr	tr	2,000	350	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	tr	tr	nd	nd	nd
C1-Fluorenes	tr	86	tr	tr	tr	150	88	tr
C2-Fluorenes	110	120	200	92	tr	150	220	tr
C3-Fluorenes	130	110	370	tr	tr	100	92	tr
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	tr
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	24	nd
C2-Dibenzothiophenes	nd	nd	tr	tr	tr	tr	tr	nd
C3-Dibenzothiophenes	nd	nd	tr	tr	tr	tr	tr	nd
Phenanthrene	37	20	nd	33	34	25	53	17
C1-Phenanthrenes	73	40	nd	tr	tr	nd	150	tr
C2-Phenanthrenes	nd	tr	nd	tr	tr	60	140	tr
C3-Phenanthrenes	nd	nd	nd	tr	tr	80	60	tr
Anthracene	nd	nd	nd	tr	nd	nd	nd	nd
Fluoranthene	23	19	nd	31	28	20	27	24
Pyrene	tr	22	nd	29	27	21	29	29
Benz(a)anthracene	nd	tr	nd	22	tr	tr	23	11
Chrysene	nd	tr	nd	29	tr	tr	34	20
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	60	61	nd	150	89	66	180	100
Total Alkylated PAH	2,100	1,200	1,800	390	36	5,200	5,500	100
Total PAH	2,100	1,300	1,800	540	130	5,300	5,700	200
FFPI	0.88	0.88	na	0.72	0.42	0.96	0.94	0.54
Saturated Hydrocarbons								
Resolved	29,000	2,800	2,300	5,100	5,700	26,000	65,000	1,400
Unresolved	91,000	27,000	37,000	31,000	71,000	180,000	160,000	15,000
Total	120,000	30,000	39,000	36,000	77,000	210,000	220,000	16,000
Ratio Resolved/Total	0.24	0.09	0.06	0.14	0.07	0.12	0.30	0.09

Table D.59. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EIA50, May 19

Analyte	EIA50 0-2cm	2-5cm*	5-10cm	10-15cm	15-20cm	20-25cm	25-31cm*
MDL	9.7	13	20	15	12	23	11
Naphthalene	25	17	tr	tr	13	tr	tr
C1-Naphthalenes	390	120	tr	trc	20	trc	trc
C2-Naphthalenes	38	tr	nd	tr	25	trc	tr
C3-Naphthalenes	nd	nd	tr	nd	nd	nd	nd
C4-Naphthalenes	nd	tr	nd	280	tr	tr	tr
C5-Naphthalenes	tr	240	280	180	nd	tr	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	trc	nd	tr	nd	nd	tr
C1-Fluorenes	tr	tr	tr	tr	tr	tr	tr
C2-Fluorenes	tr	tr	180	100	tr	tr	tr
C3-Fluorenes	tr	110	110	88	nd	tr	tr
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	tr	tr	tr	nd	tr	tr
C3-Dibenzothiophenes	tr	tr	tr	tr	tr	tr	tr
Phenanthrene	21	26	tr	22	34	25	23
C1-Phenanthrenes	trc	tr	nd	nd	trc	tr	tr
C2-Phenanthrenes	tr	tr	tr	tr	tr	tr	tr
C3-Phenanthrenes	tr	tr	tr	tr	tr	tr	tr
Anthracene	nd	tr	nd	nd	tr	nd	nd
Fluoranthene	20	33	28	35	69	47	63
Pyrene	22	30	25	34	68	49	57
Benz(a)anthracene	tr	tr	nd	tr	36	tr	tr
Chrysene	tr	tr	nd	tr	39	tr	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	65	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	na	nd	nd	na	nd
Dibenz(a,h)anthracene	nd	nd	na	nd	nd	na	nd
Benzo(g,h,i)perylene	nd	nd	na	nd	nd	na	nd
Total Parent PAH	88	110	53	91	320	120	140
Total Alkylated PAH	430	460	570	650	45	tr	tr
Total PAH	520	560	620	740	370	120	140
FFPI	0.90	0.66	0.00	0.12	0.20	0.10	0.08
Saturated Hydrocarbons							
Resolved	14,000	5,000	9,600	3,100	1,600	1,500	1,150
Unresolved	25,000	40,000	100,000	45,000	20,000	27,000	16,000
Total	39,000	45,000	110,000	48,000	22,000	28,000	18,000
Ratio Resolved/Total	0.36	0.11	0.09	0.06	0.07	0.05	0.06

Table D.60. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EI0, November

Analyte	EI0 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-33cm
MDL	19	8.1	8.9	12	8.6	9.7	7.1	9.6
Naphthalene	43	53	36	36	43	36	38	16
C1-Naphthalenes	130	170	120	360	170	120	180	30
C2-Naphthalenes	380	510	820	2,800	1,100	580	540	120
C3-Naphthalenes	890	1,200	2,200	10,000	4,400	1,700	1,300	580
C4-Naphthalenes	tr	910	2,200	5,700	2,200	2,000	1,000	850
C5-Naphthalenes	780	1,000	900	3,900	1,800	1,300	1,700	280
Acenaphthylene	nd	nd	nd	nd	15	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	7.6	nd
Fluorene	nd	na	na	42	na	nd	20	30
C1-Fluorenes	tr	tr	200	260	250	tr	85	150
C2-Fluorenes	370	90	100	530	75	tr	190	250
C3-Fluorenes	tr	nd	120	630	110	tr	100	120
Dibenzothiophene	nd	nd	nd	trc	nd	nd	tr	nd
C1-Dibenzothiophenes	nd	nd	nd	50	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	tr	tr	nd	nd	nd	nd
C3-Dibenzothiophenes	tr	tr	nd	tr	nd	nd	nd	nd
Phenanthrene	53	55	49	55	61	46	45	29
C1-Phenanthrenes	100	100	120	150	150	99	87	29
C2-Phenanthrenes	83	78	120	120	240	130	60	tr
C3-Phenanthrenes	tr	tr	tr	tr	130	tr	40	tr
Anthracene	nd	tr	nd	21	nd	nd	tr	nd
Fluoranthene	48	32	30	16	34	22	19	26
Pyrene	47	24	24	24	28	16	17	16
Benz(a)anthracene	tr	trc	tr	tr	nd	nd	41	nd
Chrysene	tr	44	tr	110	97	nd	66	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	na	na	nd	nd	na	na	na
Dibenz(a,h)anthracene	nd	na	na	nd	nd	na	na	na
Benzo(g,h,i)perylene	nd	na	na	nd	nd	na	na	na
Total Parent PAH	190	210	140	300	280	120	250	120
Total Alkylated PAH	2,700	4,100	6,900	25,000	11,000	5,900	5,300	2,400
Total PAH	2,900	4,300	7,000	25,000	11,000	6,100	5,500	2,500
FFPI	0.90	0.92	0.96	0.98	0.96	0.96	0.90	0.88
Saturated Hydrocarbons								
Resolved	100,000	89,000	130,000	98,000	160,000	78,000	69,000	25,000
Unresolved	110,000	81,000	150,000	270,000	300,000	110,000	130,000	95,000
Total	210,000	170,000	280,000	370,000	460,000	190,000	200,000	120,000
Ratio Resolved/Total	0.48	0.52	0.46	0.26	0.35	0.41	0.35	0.21

Table D.61. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EIA50, November 1989.

Analyte	EIA50 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm*	25-30cm	30-37cm
MDL	6.6	22	9.8	8.8	6.8	7.7	13	11
Naphthalene	9.9	tr	trc	9.5	13	tr	tr	tr
C1-Naphthalenes	21	tr	trc	10	13	trc	trc	trc
C2-Naphthalenes	36	tr	tr	trc	14	trc	tr	tr
C3-Naphthalenes	nd	nd	nd	nd	350	tr	nd	nd
C4-Naphthalenes	tr	tr	tr	tr	340	tr	tr	nd
C5-Naphthalenes	tr	tr	320	tr	nd	tr	tr	tr
Acenaphthylene	tr	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	trc	nd	nd	nd	nd	nd	nd	nd
C1-Fluorenes	tr	tr	tr	tr	nd	tr	nd	tr
C2-Fluorenes	tr	tr	100	tr	nd	tr	nd	tr
C3-Fluorenes	tr	tr	nd	tr	100	tr	tr	nd
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	24	tr	18	27	33	19	21	15
C1-Phenanthrenes	tr	nd	tr	tr	32	trc	nd	nd
C2-Phenanthrenes	tr	nd	tr	tr	49	tr	nd	nd
C3-Phenanthrenes	nd	nd	tr	nd	tr	tr	nd	nd
Anthracene	tr	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	22	53	35	31	35	21	28	21
Pyrene	20	44	29	36	37	20	31	27
Benz(a)anthracene	tr	tr	tr	tr	tr	tr	tr	nd
Chrysene	tr	tr	tr	27	57	tr	tr	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	na	na	na	na	na	na	na
Dibenz(a,h)anthracene	nd	na	na	na	na	na	na	na
Benzo(g,h,i)perylene	nd	na	na	na	na	na	na	na
Total Parent PAH	76	97	82	130	180	59	80	63
Total Alkylated PAH	57	tr	420	10	900	tr	tr	tr
Total PAH	130	97	500	140	1,100	59	80	63
FFPI	0.59	na	0.11	0.23	0.74	0.16	0.13	0.12
Saturated Hydrocarbons								
Resolved	2,300	7,900	4,000	960	13,000	1,600	1,100	880
Unresolved	13,000	54,000	34,000	7,900	36,000	20,000	6,500	12,000
Total	15,000	62,000	38,000	8,900	48,000	22,000	7,600	13,000
Ratio Resolved/Total	0.15	0.13	0.11	0.11	0.27	0.07	0.14	0.07

Table D.62. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EIA100, November 1989.

Analyte	EIA100 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm*	30-35cm	35-39cm
MDL	8.8	17	16	17	17	11	12	12	13
Naphthalene	tr	tr	tr	tr	tr	tr	tr	tr	tr
C1-Naphthalenes	trc	trc	trc	tr	nd	nd	tr	nd	tr
C2-Naphthalenes	tr	tr	tr	tr	nd	nd	tr	nd	nd
C3-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	tr	nd	tr	tr	tr	tr	tr	tr	tr
C5-Naphthalenes	tr	tr	tr	tr	tr	tr	tr	nd	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	tr	nd	nd	nd
C1-Fluorenes	tr	tr	tr	tr	tr	nd	tr	nd	tr
C2-Fluorenes	tr	nd	tr	tr	tr	tr	tr	tr	tr
C3-Fluorenes	nd	tr	tr	nd	nd	tr	tr	nd	nd
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	nd	tr
C1-Dibenzothiophenes	tr	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	28	tr	tr	tr	tr	tr	18	nd	14
C1-Phenanthrenes	trc	nd	nd	nd	nd	nd	tr	nd	nd
C2-Phenanthrenes	nd	tr	tr	nd	nd	nd	nd	nd	tr
C3-Phenanthrenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	tr	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	41	tr	22	24	tr	tr	17	tr	14
Pyrene	31	tr	trc	20	tr	tr	22	24	25
Benz(a)anthracene	17	nd	nd	nd	nd	nd	tr	nd	tr
Chrysene	tr	nd	nd	nd	nd	nd	tr	tr	trc
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	tr	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	na	na	na	na	na	na	nd	na
Dibenz(a,h)anthracene	nd	na	na	na	na	na	na	nd	na
Benzo(g,h,i)perylene	nd	na	na	na	na	na	na	nd	na
Total Parent PAH	120	tr	22	44	tr	tr	57	24	53
Total Alkylated PAH	tr	tr	tr	tr	tr	tr	tr	tr	tr
Total PAH	120	tr	22	44	tr	tr	57	24	53
FFPI	0.12	na	0.00	0.00	na	na	0.16	0.00	0.13
Saturated Hydrocarbons									
Resolved	800	1,000	1,400	880	130	140	1,100	700	500
Unresolved	6,900	24,000	16,000	26,000	11,000	4,800	8,600	10,000	11,000
Total	7,700	25,000	17,000	27,000	11,000	4,900	9,700	11,000	11,000
Ratio Resolved/Total	0.10	0.04	0.08	0.03	0.01	0.03	0.11	0.06	0.05

Table D.63. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EIA250, November 1989.

Analyte	EIA250 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm*	30-35cm	35-40cm
MDL	16	26	16	18	20	15	24	14	15
Naphthalene	tr	tr	trc	tr	tr	tr	tr	tr	tr
C1-Naphthalenes	trc	nd	nd	tr	tr	tr	tr	trc	trc
C2-Naphthalenes	tr	nd	nd	nd	tr	nd	nd	tr	tr
C3-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	tr	tr	tr	tr	tr	tr	tr	nd	tr
C5-Naphthalenes	tr	tr	tr	tr	tr	tr	tr	tr	tr
Acenaphthylene	nd	nd	tr	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	tr	nd	nd	nd	nd	nd	nd	tr	nd
C1-Fluorenes	tr	tr	tr	tr	tr	tr	tr	tr	tr
C2-Fluorenes	nd	tr	tr	tr	tr	tr	tr	tr	tr
C3-Fluorenes	tr	tr	tr	tr	tr	tr	tr	tr	tr
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	nd	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	tr	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	22	tr	tr	tr	21	tr	tr	20	28
C1-Phenanthrenes	tr	nd	nd	nd	nd	nd	nd	nd	nd
C2-Phenanthrenes	tr	nd	nd	nd	nd	nd	nd	tr	tr
C3-Phenanthrenes	nd	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	21	trc	18	tr	tr	tr	tr	26	29
Pyrene	20	tr	tr	nd	tr	tr	38	48	62
Benz(a)anthracene	tr	nd	nd	nd	nd	nd	tr	16	16
Chrysene	tr	nd	nd	nd	tr	nd	tr	17	25
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	na	na	na	na	na	na	na	na
Dibenz(a,h)anthracene	nd	na	na	na	na	na	na	na	na
Benzo(g,h,i)perylene	nd	na	na	na	na	na	na	na	na
Total Parent PAH	63	tr	18	tr	21	tr	38	127	160
Total Alkylated PAH	tr	tr	tr	tr	tr	tr	tr	tr	tr
Total PAH	63	tr	18	tr	21	tr	38	127	160
FFPI	0.17	na	0.00	na	0.50	na	na	0.08	0.09
Saturated Hydrocarbons									
Resolved	1,400	730	710	tr	1,000	450	1,300	2,400	1,600
Unresolved	8,600	6,800	8,300	11,000	10,000	7,100	18,000	17,000	17,000
Total	10,000	7,500	9,000	11,000	11,000	7,100	19,000	19,000	19,000
Ratio Resolved/Total	0.14	0.10	0.08	0.00	0.09	0.06	0.07	0.13	0.08

Table D.64. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EIA500, November 1989.

Analyte	EIA500 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-37cm
MDL	24	18	18	14	14	7.5	6.5	6.4
Naphthalene	tr	tr	tr	tr	tr	8.1	8.6	8.0
C1-Naphthalenes	tr	nd	nd	tr	nd	trc	trc	trc
C2-Naphthalenes	trc	nd	nd	nd	tr	tr	tr	tr
C3-Naphthalenes	nd	nd	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	tr	nd	nd	tr	tr	tr	tr	nd
C5-Naphthalenes	nd	nd	tr	tr	tr	tr	tr	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	tr	nd	nd	nd	nd	trc	tr
C1-Fluorenes	tr	nd	tr	tr	tr	nd	tr	nd
C2-Fluorenes	nd	tr	tr	tr	tr	tr	tr	nd
C3-Fluorenes	tr	nd	tr	tr	tr	tr	tr	nd
Dibenzothiophene	nd	trc	tr	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	trc	tr	tr	15	tr	12	18	18
C1-Phenanthrenes	trc	nd	nd	nd	nd	tr	tr	33
C2-Phenanthrenes	tr	nd	tr	nd	nd	nd	nd	tr
C3-Phenanthrenes	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd	nd	tr
Fluoranthene	tr	tr	25	23	16	13	18	17
Pyrene	tr	trc	21	25	21	23	27	26
Benz(a)anthracene	tr	nd	nd	tr	tr	tr	11	tr
Chrysene	tr	nd	tr	21	trc	8.2	18	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	tr	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	na	na	na	na	na	na
Dibenz(a,h)anthracene	nd	nd	na	na	na	na	na	na
Benzo(g,h,i)perylene	nd	nd	na	na	na	na	na	na
Total Parent PAH	tr	tr	46	84	37	64	100	69
Total Alkylated PAH	tr	tr	tr	tr	tr	tr	tr	33
Total PAH	tr	tr	46	84	37	64	100	100
FFPI	na	na	0.00	0.09	0.00	0.22	0.17	0.33
Saturated Hydrocarbons								
Resolved	1,100	1,200	1,500	1,600	1,500	1,200	910	390
Unresolved	5,200	3,000	11,000	6,100	7,600	9,800	5,000	3,600
Total	6,300	4,200	12,000	7,700	9,100	11,000	5,900	4,000
Ratio Resolved/Total	0.17	0.29	0.13	0.21	0.16	0.11	0.15	0.10

Table D.65. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station RP1000N October 1989.

Analyte	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-34 cm
MDL	17	4.1	11	7.0	10	8.7	5.6	8.6
Naphthalene	22	13	30	14	24	14	10	19
C1-Naphthalenes	130	23	30	16	trc	28	trc	52
C2-Naphthalenes	350	52	60	21	tr	80	15	32
C3-Naphthalenes	1,400	200	360	380	tr	740	trc	tr
C4-Naphthalenes	tr	220	990	1,300	670	1,000	170	270
C5-Naphthalenes	1,500	260	650	1,400	600	tr	130	tr
Acenaphthylene	30	nd	nd	tr	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	tr	nd	nd	nd	trc
Fluorene	62	nd	nd	nd	nd	tr	nd	trc
C1-Fluorenes	tr	na	tr	72	na	tr	na	na
C2-Fluorenes	tr	91	120	320	110	150	tr	96
C3-Fluorenes	370	tr	175	110	200	150	tr	tr
Dibenzothiophene	tr	tr	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	tr	tr	tr	tr	tr	nd	nd
C2-Dibenzothiophenes	tr	tr	tr	tr	tr	nd	nd	nd
C3-Dibenzothiophenes	tr	tr	tr	46	tr	tr	trc	tr
Phenanthrene	85	19	28	28	27	23	15	40
C1-Phenanthrenes	140	36	62	tr	tr	28	trc	40
C2-Phenanthrenes	230	41	150	92	46	49	trc	37
C3-Phenanthrenes	180	35	89	98	79	39	trc	75
Anthracene	tr	tr	tr	tr	nd	tr	nd	nd
Fluoranthene	89	25	41	34	45	22	15	38
Pyrene	74	23	51	32	38	21	15	39
Benz(a)anthracene	38	14	tr	34	tr	tr	13	28
Chrysene	65	27	59	45	30	tr	21	50
Benzo(b)fluoranthene	nd	120	75	nd	tr	tr	tr	44
Benzo(k)fluoranthene	nd	nd	tr	nd	tr	tr	tr	tr
Benzo(a)pyrene	nd	tr	tr	nd	nd	tr	tr	tr
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	tr	tr
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	tr	tr
Total Parent PAH	470	240	280	190	160	80	89	260
Total Alkylated PAH	4,300	960	2,700	3,900	1,700	2,300	320	600
Total PAH	4,800	1,200	3,000	4,000	1,900	2,300	400	860
FFPI	0.84	0.62	0.74	0.81	0.56	0.93	0.31	0.52
Saturated Hydrocarbons								
Resolved	24,000	8,300	9,900	8,800	3,900	11,000	3,400	3,200
Unresolved	65,000	26,000	67,000	71,000	51,000	68,000	19,000	14,000
Total	89,000	34,000	77,000	80,000	55,000	79,000	22,000	17,000
Ratio Resolved/Total	0.27	0.24	0.13	0.11	0.07	0.14	0.15	0.19

Table D.66. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EW2, November 1989.

Analyte	EW2 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm*
MDL	13	12	10	19	23	14
Naphthalene	tr	20	nd	tr	tr	tr
C1-Naphthalenes	31	trc	nd	nd	nd	nd
C2-Naphthalenes	32	nd	nd	nd	tr	nd
C3-Naphthalenes	tr	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	nd	nd	nd	nd	tr
C5-Naphthalenes	nd	nd	nd	nd	tr	nd
Acenaphthylene	nd	tr	nd	nd	nd	nd
Acenaphthene	tr	trc	nd	nd	nd	nd
Fluorene	trc	nd	nd	nd	nd	nd
C1-Fluorenes	tr	nd	nd	nd	nd	nd
C2-Fluorenes	nd	nd	tr	nd	tr	tr
C3-Fluorenes	nd	nd	nd	nd	nd	tr
Dibenzothiophene	tr	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	tr	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
Phenanthrene	34	tr	tr	tr	tr	tr
C1-Phenanthrenes	tr	nd	tr	nd	nd	tr
C2-Phenanthrenes	tr	nd	nd	nd	nd	nd
C3-Phenanthrenes	tr	nd	nd	nd	nd	nd
Anthracene	tr	nd	nd	nd	nd	nd
Fluoranthene	25	tr	tr	tr	tr	tr
Pyrene	21	trc	tr	tr	tr	tr
Benz(a)anthracene	tr	nd	tr	nd	trc	tr
Chrysene	tr	nd	tr	nd	trc	tr
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	80	20	tr	tr	tr	tr
Total Alkylated PAH	63	tr	tr	nd	tr	tr
Total PAH	140	20	tr	tr	tr	tr
FFPI	0.56	1.00	na	na	na	na
Saturated Hydrocarbons						
Resolved	2,200	tr	880	930	1,900	tr
Unresolved	6,600	nd	820	2,300	nd	nd
Total	8,800	tr	1,700	3,200	1,900	tr
Ratio Resolved/Total	0.25	na	0.52	0.29	1.00	na

Table D.67. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EW3, November 1989.

Analyte	EW3 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-23cm
MDL	30	21	17	17	12	21
Naphthalene	tr	tr	tr	nd	tr	tr
C1-Naphthalenes	nd	trc	nd	nd	tr	tr
C2-Naphthalenes	nd	trc	nd	nd	tr	tr
C3-Naphthalenes	nd	nd	nd	nd	nd	nd
C4-Naphthalenes	nd	tr	nd	nd	tr	nd
C5-Naphthalenes	nd	tr	tr	nd	tr	tr
Acenaphthylene	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd
Fluorene	nd	trc	nd	nd	nd	nd
C1-Fluorenes	nd	150	nd	nd	84	nd
C2-Fluorenes	nd	280	nd	nd	nd	tr
C3-Fluorenes	nd	nd	tr	nd	nd	nd
Dibenzothiophene	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
C3-Dibenzothiophenes	nd	nd	nd	nd	nd	nd
Phenanthrene	tr	tr	tr	nd	tr	tr
C1-Phenanthrenes	tr	79	nd	nd	nd	tr
C2-Phenanthrenes	tr	tr	nd	nd	nd	tr
C3-Phenanthrenes	tr	nd	nd	nd	tr	tr
Anthracene	nd	tr	nd	nd	tr	nd
Fluoranthene	trc	31	tr	tr	14	53
Pyrene	trc	38	tr	tr	17	51
Benz(a)anthracene	tr	tr	tr	nd	trc	27
Chrysene	tr	tr	tr	tr	trc	32
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	tr
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Total Parent PAH	tr	69	tr	tr	31	160
Total Alkylated PAH	tr	510	tr	tr	84	tr
Total PAH	tr	580	tr	tr	120	160
FFPI	na	0.27	na	na	0.00	0.00
Saturated Hydrocarbons						
Resolved	3,600	1,900	2,400	2,100	1,400	1,300
Unresolved	8,400	16,000	tr	nd	tr	7,700
Total	12,000	18,000	2,400	2,100	1,400	9,000
Ratio Resolved/Total	0.30	0.11	1.00	1.00	1.00	0.14

Table D.68. Hydrocarbon concentrations (ppb, dry wt.) in vertical sections of core from station EW4, November 1989.

Analyte	EW4 0-2cm	2-5cm	5-10cm	10-15cm	15-20cm	20-25cm	25-30cm	30-34cm*
MDL	22	43	30	32	20	9.9	36	9.1
Naphthalene	tr	tr	tr	tr	tr	tr	tr	10
C1-Naphthalenes	trc	tr	trc	trc	trc	trc	trc	tr
C2-Naphthalenes	trc	tr	trc	trc	26	tr	tr	tr
C3-Naphthalenes	nd	nd	tr	nd	nd	nd	nd	tr
C4-Naphthalenes	tr	tr	tr	nd	nd	tr	nd	tr
C5-Naphthalenes	nd	1,100	tr	tr	tr	tr	nd	tr
Acenaphthylene	nd	nd	nd	nd	tr	nd	nd	nd
Acenaphthene	nd	nd	trc	trc	tr	nd	nd	nd
Fluorene	trc	nd	31	trc	trc	nd	trc	trc
C1-Fluorenes	nd	nd	nd	nd	tr	nd	tr	tr
C2-Fluorenes	nd	tr	240	tr	tr	100	tr	tr
C3-Fluorenes	tr	nd	320	tr	nd	130	tr	tr
Dibenzothiophene	nd	nd	tr	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	tr	nd	nd	nd	nd	nd	nd	nd
C2-Dibenzothiophenes	tr	nd	nd	tr	nd	nd	nd	nd
C3-Dibenzothiophenes	tr	nd	nd	tr	nd	nd	nd	nd
Phenanthrene	31	tr	39	86	23	29	tr	27
C1-Phenanthrenes	48	57	120	140	43	41	trc	trc
C2-Phenanthrenes	140	400	310	260	tr	59	tr	tr
C3-Phenanthrenes	100	370	330	180	tr	55	tr	tr
Anthracene	tr	nd	tr	39	nd	nd	tr	tr
Fluoranthene	44	150	87	250	38	32	48	43
Pyrene	49	130	74	180	36	29	55	36
Benz(a)anthracene	37	83	tr	89	tr	nd	trc	17
Chrysene	41	100	36	120	22	nd	trc	37
Benzo(b)fluoranthene	tr	170	tr	tr	nd	nd	nd	tr
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd	nd	nd
Total Parent PAH	200	630	270	760	120	90	100	170
Total Alkylated PAH	290	1,900	1,300	580	69	390	tr	tr
Total PAH	490	2,600	1,600	1,300	190	480	100	170
FFPI	0.57	0.55	0.70	0.41	0.31	0.61	0.00	0.14
Saturated Hydrocarbons								
Resolved	1,800	1,900	2,400	1,400	1,500	1,900	2,200	2,900
Unresolved	34,000	65,000	50,000	34,000	18,000	15,000	11,000	13,000
Total	36,000	67,000	52,000	35,000	19,000	17,000	13,000	16,000
Ratio Resolved/Total	0.05	0.03	0.05	0.04	0.08	0.11	0.17	0.18

APPENDIX E

Trace Metal Concentrations in Surficial Sediments and Vertical Sediment Cores

Table E.1. Trace metal concentrations (ppm, dry wt.) in surface sediments from Pass Fourchon, February 1989.

Analyte	PF400 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200	PF600S -200
Al	17,000	18,000	17,000	1,900	3,000	12,000	11,000
Cr	13	12	11	1.2	3.8	8.9	8.8
V	17	19	17	1.1	4.0	11	17
Ni	29	150	nd	nd	3.4	46	19
Cu	18	24	18	0.80	5.0	15	15
Zn	140	200	140	20	31	78	76
As	9.3	10	6.7	nd	4.4	6.5	11
Cd	1.4	1.6	nd	0.36	0.58	0.56	1.1
Ba	660	1,300	1,000	50	41	210	170
Hg	nd	nd	nd	nd	nd	nd	2.0
Pb	12	15	12	2.2	7.7	8.9	11

Table E.2. Trace metal concentrations (ppm, dry wt.) in surface sediments from Pass Fourchon, May 1989.

Analyte	PF400 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
Al	16,000	20,000	10,000	330	1,200	10,000
Cr	13	12	7.2	1.6	2.2	10
V	19	18	9.4	1.5	4.1	23
Ni	26	19	7.4	4.4	8.3	19
Cu	19	20	14	0.70	3.4	15
Zn	160	140	73	14	25	78
As	9.0	11	6.0	0.70	3.1	14
Cd	1.9	1.3	nd	nd	nd	0.003
Ba	830	790	460	33	65	240
Hg	5.3	nd	4.3	1.1	0.90	0.17
Pb	14	16	10	2.0	4.2	10

Table E.3. Trace metal concentrations (ppm, dry wt.) in surface sediments from Pass Fourchon, October 1989.

Analyte	PF400 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
Al	3,100	4,700	17,000	4,700	5,700	1,300
Cr	11	16	10	4.5	5.0	3.9
V	51	44	11	6.6	7.1	6.4
Ni	3.7	190	14	11	22	10
Cu	5.8	10	20	6.3	12	8.1
Zn	170	160	73	53	53	45
As	48	33	5.8	5.7	6.5	5.0
Cd	3.9	0.0	0.0	0.0	0.5	0.0
Ba	1,300	800	150	150	160	120
Hg	0.00	3.7	3.2	0.84	3.3	1.3
Pb	1.4	23	14	6.5	7.3	5.8

Table E.4. Trace metal concentrations (ppm, dry wt.) in surface sediments from Pass Fourchon, February 1990.

Analyte	PF400 0†	PF600N 200	PF800N 400	PF900N 500	PF1000N 600	PF600S -200
Al	3,200	3,000	1,700	1,200	180	3,500
Cr	9.5	12	9.6	6.6	0.3	14
V	27	31	19	10	nd	29-
Ni	11	13	16	12	5.9	19
Cu	13	17	15	5.7	nd	15
Zn	170	200	84	45	7.8	110
As	20	31	20	5.1	nd	23
Cd	2.2	1.6	nd	0.34	0.029	0.010
Ba	3,300	2,900	630	530	11	520
Hg	nd	nd	nd	nd	nd	nd
Pb	18	23	14	8.0	2.3	16

Table E.5. Trace metal concentrations (ppm, dry wt.) in surface sediments from Bayou Rigaud, February 1989.

Analyte	BR1 500†	BR2 250	BR3 100	BR4 0	BR5 -100	BR6 -250	BR7 -500	BR8 150	BR9 0	BR10 -150	BR11 -300
Al	960	7,700	1,500	8,200	1,200	8,600	1,900	9,400	14,000	2,000	9,600
Cr	2.7	6.7	4.2	7.9	3.0	6.8	6.4	7.1	12	6.3	7.8
V	4.5	5.9	6.7	6.9	7.1	4.6	9.6	6.4	13	11	8.6
Ni	7.8	nd	9.3	nd	8.1	54	12	nd	16	13	12
Cu	4.6	11	11	15	10	14	16	15	14	14	12
Zn	26	56	55	69	53	68	56	78	98	62	63
As	9.3	2.4	15	3.6	17	2.7	17	3.8	8.0	21	5.5
Cd	0.27	12	0.53	0.53	0.30	0.66	0.33	0.57	1.1	0.44	1.5
Ba	130	260	480	350	270	230	270	210	280	270	230
Hg	nd	0.09	0.22	nd	nd	0.64	nd	0.36	0.71	nd	0.37
Pb	7.1	23	17	33	15	14	16	13	16	15	13

Table E.6. Trace metal concentrations (ppm, dry wt.) in surface sediments from Bayou Rigaud, May 1989.

Analyte	BR1 500†	BR2 250	BR3 100	BR4 0	BR 5 -100	BR6 -250	BR7 -500	BR8 150	BR9 0	BR10 -150	BR11 -300
Al	1,300	7,700	1,100	11,000	na	10,000	2,000	10,000	15,000	1,100	9,900
Cr	5.4	7.5	4.1	7.8	na	5.8	8.2	9.1	9.8	4.4	9.3
V	5.4	8.7	4.5	11	na	6.6	11	8.8	9.3	4.6	12
Ni	9.6	14	8.8	16	na	17	13	15	28	7.4	22
Cu	7.6	9.7	5.9	13	na	9.8	15	15	20	6.5	15
Zn	57	94	35	82	na	96	80	100	110	40	87
As	6.5	6.0	6.5	6.0	na	5.1	19	4.9	6.7	4.7	10
Cd	0.8	1.0	0.04	1.2	na	1.0	0.46	1.3	1.1	0.049	1.9
Ba	170	250	670	200	na	230	180	180	260	260	190
Hg	nd	nd	nd	0.13	na	0.43	nd	0.82	0.99	nd	0.22
Pb	11	13	7.8	24	na	28	18	15	38	9.0	15

Table E.7. Trace metal concentrations (ppm, dry wt.) in surface sediments from Bayou Rigaud, October 1989.

Analyte	BR1 500†	BR2 250	BR3 100	BR4 0	BR5 -100	BR6 -250	BR7 -500	BR8 150	BR9 0	BR10 -150	BR11 -300
Al	2,300	1,300	1,500	5,200	2,400	3,700	2,900	3,600	2,600	2,900	3,700
Cr	10	3.7	8.4	7.6	9.9	5.4	10	4.6	5.0	10	8.1
V	14	15	22	20	29	19	34	25	14	25	16
Ni	14	3.3	nd	8.8	nd	19	nd	15	14	15	13
Cu	11	7.6	12	29	18	15	18	21	18	17	32
Zn	79	52	84	93	78	220	99	120	98	81	120
As	10	6.7	26	nd	30	15	38	19	9.4	26	5.6
Cd	0.28	0.96	nd	1.6	nd	1.9	1.5	2.8	2.7	1.9	0.65
Ba	360	530	760	930	790	550	890	850	310	700	660
Hg	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pb	15	44	31	65	61	1,200	25	30	23	18	8.4

Table E.8. Trace metal concentrations (ppm, dry wt.) in surface sediments from Bayou Rigaud, February 1990.

Analyte	BR1 500†	BR2 250	BR3 100	BR4 0	BR5 -100	BR6 -250	BR7 -500	BR8 150	BR9 0	BR10 -150	BR11 -300
Al	1,400	1,800	1,300	3,700	1,800	2,100	1,400	2,900	2,400	1,500	5,700
Cr	5.3	5.8	5.7	14	6.4	5.7	5.4	12	9.7	6.1	54
V	6.0	13	6.8	21	7.2	15	5.4	14	13	6.2	44
Ni	9.9	12	13	21	15	30	11	11	12	12	54
Cu	7.5	9.7	9.3	16	13	14	140	17	14	12	19
Zn	33	52	55	79	61	72	58	73	72	54	130
As	1.5	8.7	4.9	12	9.9	19	6.4	26	20	7.8	29
Cd	0.014	0.38	0.26	0.59	0.16	10	0.18	0.59	0.54	0.47	0.64
Ba	46	770	210	610	380	620	190	350	440	190	25
Hg	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pb	9.6	21	14	210	13	170	21	21	22	13	36

Table E.9. Trace metal concentrations (ppm, dry wt.) in surface sediments from Emeline Pass, May 1989.

Analyte	EP	EAST							WEST	
	0†	100	250	400	550	700	1000	1300	-450	-600
Al	2,200	300	440	1,300	1,500	870	2,200	2,000	1,400	2,000
Cr	1.4	1.4	2.3	4.8	1.3	3.8	1.5	6.4	0.7	4.4
V	1.7	2.8	3.2	4.1	2.1	2.8	1.6	6.3	1.2	5.3
Ni	12	6.1	10	13	8.5	9.1	12	10	4.3	9.3
Cu	1.4	0.20	nd	3.8	0.90	3.2	nd	2.1	0.40	23
Zn	11	10	14	12	13	15	16	24	14	24
As	nd	0.40	nd	2.6	0.10	0.10	nd	nd	nd	nd
Cd	nd	nd	nd	0.49	0.10	0.53	nd	nd	0.02	2.4
Ba	17	15	17	15	24	15	18	35	16	19
Hg	nd	nd	0.20	nd	0.34	nd	nd	nd	nd	nd
Pb	2.3	2.1	2.5	nd	3.2	nd	2.5	0.10	2.6	0.10

Table E.10. Trace metal concentrations (ppm, dry wt.) in surface sediments from Emeline Pass, October 1989.

Analyte	EP	EAST							WEST		
	0†	100	250	400	550	700	1000	1300	-300	-450	-600
Al	150	150	270	130	610	780	260	350	220	440	240
Cr	nd	0.60	0.80	0.60	1.8	2.8	0.60	1.1	0.80	2.2	0.60
V	1.1	1.4	0.30	nd	0.40	1.0	nd	nd	nd	2.8	nd
Ni	3.5	6.0	5.9	4.8	6.9	8.8	8.5	7.0	7.4	7.4	5.9
Cu	0.60	0.50	0.40	0.30	1.9	4.4	nd	1.0	0.90	1.2	0.60
Zn	6.3	12	11	8.4	19	34	9.7	16	15	25	11
As	1.7	0.80	nd	nd	nd	0.90	nd	nd	nd	nd	nd
Cd	0.05	nd	0.01	nd	0.01	0.86	nd	0.11	nd	nd	nd
Ba	12	15	17	13	29	150	13	25	27	28	18
Hg	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pb	1.8	3.0	3.0	2.3	4.3	6.1	2.6	4.8	4.7	6.6	3.0

Table E.11. Trace metal concentrations (ppm, dry wt.) in surface sediments from Eugene Island, May 1989.

Analyte	EI	EIA					EIB		
	0†	-50	-100	-250	-500	-1000	200	300	500
Al	13,000	9,000	18,000	12,000	10,000	2,500	2,100	2,400	2,200
Cr	10	9.3	12	13	9.4	8.1	6.5	7.2	7.3
V	12	9.0	10	12	9.7	8.6	6.7	7.2	6.7
Ni	17	13	55	18	18	14	11	13	12
Cu	14	13	14	15	12	12	9.5	10	11
Zn	55	50	69	55	47	48	44	43	45
As	5.0	3.7	3.2	5.8	5.6	3.4	3.1	3.8	1.1
Cd	nd	0.14	0.15	nd	nd	0.10	0.28	0.04	0.22
Ba	270	140	95	83	76	51	110	85	73
Hg	nd	nd	nd	2.5	1.8	nd	nd	nd	nd
Pb	11	9.7	15	13	11	15	12	13	13

Table E.12. Trace metal concentrations (ppm, dry wt.) in surface sediments from Eugene Island, November 1989.

Analyte	EI	EIA					EIB				
	0†	-50	-100	-250	-500	-1000	200	300	500	700	1000
Al	7,300	8,100	3,300	9,200	7,200	2,400	2,000	1,800	2,600	2,200	1,800
Cr	24	23	13	27	27	9.6	6.7	7.1	9.7	7.6	6.9
V	36	30	13	30	33	6.2	7.5	7.8	5.8	8.0	7.6
Ni	42	33	17	67	29	25	27	18	15	17	14
Cu	25	17	15	27	22	12	10	11	12	10	9.1
Zn	110	110	59	91	100	56	46	45	51	46	42
As	27	40	11	29	29	nd	2.4	1.8	0.20	1.5	2.1
Cd	4.0	2.2	0.51	0.06	2.1	0.37	0.29	0.24	0.00	0.13	0.19
Ba	2,500	290	250	250	270	79	370	130	73	130	54
Hg	nd	nd	nd	1.9	nd	nd	nd	nd	nd	nd	nd
Pb	32	12	15	25	28	15	11	12	13	12	11

Table E.13. Trace metal concentrations (ppm, dry wt.) in surface sediments from East Timbalier Island, May 1989.

Analyte	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
	-150†	-80	-100	0	110	250	330	360	580	-150	-320	0	-450	140	280
Al	420	310	1,500	560	490	590	1,400	1,300	1,600	1,400	53	770	680	1,200	870
Cr	1.9	0.70	6.8	2.5	2.4	3.0	6.1	5.6	6.6	5.6	0.60	3.5	2.8	3.8	3.1
V	1.8	0.40	5.6	2.0	1.6	2.0	5.0	4.4	4.9	4.4	nd	2.3	3.8	4.5	4.3
Ni	19	4.5	11	7.0	7.7	7.0	9.8	8.7	10	9.9	0.90	12	6.3	7.4	6.4
Cu	1.1	0.40	17	2.3	1.2	1.9	9.1	8.4	10	7.0	0.60	3.2	2.8	6.6	6.0
Zn	15	12	85	24	25	27	77	59	51	42	6.5	29	20	31	27
As	1.20	nd	2.00	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.5	6.9	8.4
Cd	0.08	0.01	0.35	0.14	0.15	0.24	0.28	0.15	0.28	0.19	0.01	0.21	0.19	0.31	0.16
Ba	37	62	300	460	240	250	360	270	340	270	29	130	61	210	140
Hg	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pb	3.2	2.2	22	4.1	4.1	4.5	9.6	9.2	11	8.6	1.5	6.4	4.7	7.5	7.4

Table E.14. Trace metal concentrations (ppm, dry wt.) in surface sediments from Romere Pass, October 1989.

Analyte	RP0	NORTH				SOUTH		
	0†	250	550	750	1000	-100	-450	-750
Al	1,000	250	450	1,900	3,900	740	1,600	510
Cr	2.8	1.2	1.9	7.9	13	3.9	7.8	2.8
V	4.0	nd	nd	5.9	18	1.6	8.6	0.3
Ni	nd	6.9	8.8	25	14	21	20	6.1
Cu	3.6	0.8	1.9	11	15	3.3	8.1	2.8
Zn	24	18	21	51	86	26	41	21
As	nd	nd	nd	nd	nd	nd	0.60	nd
Cd	0.22	0.06	0.07	0.50	1.7	nd	0.40	0.21
Ba	38	21	28	122	120	37	76	31
Hg	nd	nd	nd	nd	nd	nd	nd	nd
Pb	6.3	3.7	4.0	12	17	5.3	10	4.0

Table E.15. Trace metal concentrations (ppm, dry wt.) in surface sediments from Empire Waterway, November 1989.

Analyte	EW1	EW2	EW3	EW4	EW6	EW7	EW8	EW9	EW10	EW11
	-1250†	-950	-550	-250	-1280	-960	-550	550	650	-1330
Al	2600	2000	3100	2800	1700	3200	3600	3300	3700	2300
Cr	10	4.6	14	10	6.5	15	10	16	4.1	8.5
V	9.2	30	40	27	4.7	38	35	29	14	7.2
Ni	15	nd	nd	nd	11	nd	nd	nd	5.3	12
Cu	14	13	20	17	9.5	17	14	19	19	14
Zn	55	75	83	76	39	68	60	68	28	48
As	15	36	50	37	4.1	39	45	24	73	9.3
Cd	0.13	nd	nd	0.27	nd	nd	nd	nd	0.02	0.05
Ba	58	68	130	97	43	190	130	140	47	51
Hg	nd	nd	nd	nd	nd	nd	nd	1.4	nd	nd
Pb	16	18	26	23	11	21	22	23	7.2	13

Table E.16. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station PF400, February 1989.

Analyte	PF400					
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-27 cm
Al	17,000	15,000	14,000	18,000	11,000	16,000
Cr	13	12	11	12	9.3	13
V	17	16	14	18	11	15
Ni	29	30	18	18	20	36
Cu	18	21	21	19	14	23
Zn	140	170	150	140	69	120
As	9.3	7.5	7.6	8.8	6.8	6.9
Cd	1.4	1.4	0.70	1.0	0.50	1.2
Ba	660	550	230	420	180	210
Hg	nd	nd	nd	nd	nd	0.19
Pb	12	12	11	11	8.6	13

Table E.17. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station PF600N, February 1989.

Analyte	PF600N							
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-33 cm
Al	18,000	17,000	20,000	14,000	18,000	15,000	15,000	13,000
Cr	12	11	14	11	14	14	15	13
V	19	18	21	16	17	16	24	15
Ni	150	430	47	26	41	nd	21	32
Cu	24	24	25	21	18	20	19	18
Zn	200	250	260	190	200	450	150	140
As	10	7.2	12	7.5	9.2	6.6	9.1	5.9
Cd	1.6	1.6	1.0	0.90	1.8	1.0	0.50	1.1
Ba	1,300	660	900	300	610	580	400	660
Hg	nd	nd	nd	nd	nd	nd	nd	nd
Pb	15	15	17	14	13	13	10	11

Table E.18. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station PF800N, February 1989.

Analyte	PF800N 0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-35 cm	35-38 cm
Al	17,000	15,000	14,000	14,000	12,000	11,000	15,000	11,000	9,800
Cr	11	10	9.0	10	9.6	11	12	9.4	10
V	17	14	13	12	13	12	13	9.9	9.6
Ni	nd	nd	1.3	10	63	3.2	nd	nd	0.5
Cu	18	16	15	15	16	15	16	16	15
Zn	140	140	120	130	120	120	130	130	110
As	6.7	7.7	6.5	6.6	6.3	4.4	3.3	2.8	3.4
Cd	nd	0.30	1.1	1.0	0.50	1.0	1.2	0.50	0.50
Ba	1,000	820	700	360	440	380	330	200	200
Hg	nd	0.22	nd	nd	nd	nd	0.030	nd	0.040
Pb	12	11	9.8	11	11	23	12	11	11

Table E.19. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station BR2, February 1989.

Analyte	BR2							
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-35 cm
Al	7,700	9,000	2,700	2,200	2,500	2,700	3,400	3,000
Cr	6.7	8.7	8.2	5.7	8.3	6.3	9.1	6.8
V	5.9	13	12	13	12	9.7	14	11
Ni	nd	14	17	12	12	11	21	12
Cu	11	14	7.4	9.8	9.1	10	11	11
Zn	56	74	45	42	57	43	50	59
As	2.4	9.5	16	25	20	14	21	20
Cd	12	0.16	0.40	2.1	1.7	0.77	7.5	0.27
Ba	260	200	390	330	360	420	340	390
Hg	0.09	0.96	nd	nd	nd	nd	nd	nd
Pb	23	22	29	15	17	13	15	19

Table E.20. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station BR4, February 1989.

Analyte	BR4							
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-35 cm
Al	8,200	14,000	5,500	3,700	4,800	4,000	5,000	3,600
Cr	7.9	9.4	13	8.5	13	9.2	14	9.1
V	6.9	9.7	20	17	20	17	19	14
Ni	nd	13	16	16	30	14	16	16
Cu	15	15	16	14	19	15	18	15
Zn	69	110	73	55	68	53	63	65
As	3.6	9.3	27	39	39	41	25	24
Cd	0.53	1.4	0.12	0.47	0.50	4.9	0.14	0.51
Ba	350	440	450	510	540	560	520	460
Hg	nd	2.3	nd	nd	nd	nd	nd	nd
Pb	33	101	78	12	16	12	13	12

Table E.21. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station BR6, February 1989.

Analyte	BR6							
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-35 cm
Al	8,600	13,000	3,200	3,500	3,700	3,000	3,900	2,700
Cr	6.8	8.7	9.8	8.5	9.7	8.0	11	7.3
V	4.6	7.9	12	9.8	11	8.5	9.6	7.5
Ni	54	17	12	14	26	12	12	12
Cu	14	18	16	13	14	14	14	12
Zn	68	72	61	56	85	67	69	67
As	2.7	7.4	13	11	8.7	8.4	nd	6.9
Cd	0.66	0.09	0.43	0.32	0.59	nd	nd	nd
Ba	230	260	440	460	320	390	390	330
Hg	0.64	1.0	nd	nd	nd	nd	nd	nd
Pb	14	15	15	19	17	15	20	69

Table E.22. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station BR8, February 1989.

Analyte	BR8							
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-37 cm
Al	9,400	13,000	4,600	4,400	7,000	4,800	7,200	5,200
Cr	7.1	12	13	11	23	15	23	13
V	6.4	11	14	15	28	25	34	30
Ni	nd	17	15	16	17	17	16	38
Cu	15	17	24	19	19	19	18	21
Zn	78	100	72	78	75	77	100	90
As	3.8	12	9.5	31	11	50	19	69
Cd	0.57	0.35	0.37	19	nd	0.29	0.26	0.43
Ba	210	200	380	450	490	380	620	450
Hg	0.36	1.5	nd	nd	nd	nd	nd	nd
Pb	13	39	14	15	15	18	14	15

Table E.23. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station BR9, February 1989.

Analyte	BR9							
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-37 cm
Al	14,000	17,000	6,800	4,300	6,400	4,400	6,500	4,900
Cr	12	9.0	19	12	19	11	20	15
V	13	9.9	28	19	26	15	24	17
Ni	16	19	20	12	16	15	16	16
Cu	14	21	20	17	16	18	19	21
Zn	98	76	82	73	89	64	79	75
As	8.0	12	21	39	2.4	21	5.0	19
Cd	1.1	0.01	0.31	0.54	0.51	0.25	0.23	0.32
Ba	276	276	901	363	577	380	426	287
Hg	0.71	1.3	nd	nd	nd	nd	nd	nd
Pb	16	25	14	13	16	21	14	14

Table E.24. Trace metal concentraions (ppm, dry wt.) in vertical sections of core from station EI0, November 1989.

Analyte	EI0							
	0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-35 cm
Al	7,300	5,300	4,300	5,000	3,600	4,600	4,400	6,200
Cr	24	16	9.4	12	8.5	12	9.6	15
V	36	25	15	15	12	15	14	18
Ni	42	310	14	20	13	18	18	21
Cu	25	22	16	16	13	16	16	17
Zn	110	60	48	57	45	52	50	74
As	27	41	17	13	9.9	13	14	15
Cd	7.9	0.52	0.56	0.53	0.38	0.55	0.86	0.58
Ba	2,500	590	810	890	790	620	400	390
Hg	nd	nd	nd	nd	nd	nd	nd	nd
Pb	33	14	9.9	11	15	9.9	9.9	12

Table E.25. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from Station EIA50, November 1989.

Analyte	EIA50 0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-35 cm
Al	8,100	5,600	6,300	4,100	4,300	2,600	4,200	3,400
Cr	23	11	15	10	11	6.1	11	8.5
V	30	19	19	14	12	8.6	11	9.2
Ni	33	21	19	15	15	8.4	14	11
Cu	17	20	20	17	16	11	17	14
Zn	110	49	61	47	50	34	57	52
As	40	24	22	12	nd	nd	0.10	nd
Cd	4.5	0.96	0.49	1.1	nd	nd	nd	0.75
Ba	290	500	240	150	180	110	160	130
Hg	nd	nd	nd	nd	nd	nd	nd	nd
Pb	24	12	12	11	10	7.2	13	12

Table E.26. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from Station EIA100, November 1989.

Analyte	EIA100 0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-35 cm
Al	3,300	5,600	5,300	4,600	2,900	2,800	3,000	7,400
Cr	13	14	11	12	6.3	7.9	8.7	20
V	13	17	13	13	9.3	7.2	9.2	24
Ni	17	14	15	17	14	9.2	13	24
Cu	15	22	19	16	15	8.5	15	20
Zn	59	65	57	55	39	34	74	75
As	11	2.0	1.1	0.48	nd	nd	nd	15
Cd	0.26	nd	nd	nd	nd	nd	nd	0.86
Ba	260	180	120	170	130	130	110	200
Hg	nd	nd	nd	nd	nd	nd	nd	nd
Pb	15	14	14	12	9.4	6.5	13	14

Table E.27. Trace metal concentrations (ppm,dry wt.) in vertical sections of core from station EW2, November 1989.

Analyte	EW2 0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm
Al	2,000	6,700	7,200	5,700	8,100	6,200
Cr	4.6	13	17	10	17	12
V	30	20	28	23	24	19
Ni	nd	22	19	21	22	21
Cu	13	24	22	23	24	23
Zn	75	65	65	55	73	61
As	36	18	18	43	18	31
Cd	nd	nd	0.65	0.27	0.36	0.53
Ba	69	97	94	82	85	99
Hg	nd	nd	nd	nd	nd	nd
Pb	18	9.8	9.4	9.6	11	10

Table E.28. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station EW3, November 1989.

Analyte	EW3 0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm
Al	3,100	7,300	4,100	7,100	5,800	8,700
Cr	14	19	10	17	11	26
V	40	33	15	25	18	38
Ni	nd	21	16	22	18	36
Cu	20	20	19	20	19	22
Zn	83	72	57	63	56	75
As	50	38	19	10	24	12
Cd	nd	0.23	0.46	0.88	0.28	0.30
Ba	130	140	87	160	150	250
Hg	nd	nd	nd	nd	nd	nd
Pb	24	14	9.1	9.3	8.9	11

Table E.29. Trace metal concentrations (ppm, dry wt.) in vertical sections of core from station EW4, November 1989.

Analyte	EW4 0-2 cm	2-5 cm	5-10 cm	10-15 cm	15-20 cm	20-25 cm	25-30 cm	30-34 cm
Al	2,800	10,000	10,000	6,900	6,800	7,800	9,700	6,800
Cr	10	27	32	17	22	23	31	17
V	27	36	52	25	29	30	46	29
Ni	nd	25	25	21	24	21	23	18
Cu	17	24	21	20	19	23	20	22
Zn	76	88	77	69	74	83	78	65
As	37	16	14	30	15	21	16	48
Cd	nd	nd	0.34	0.07	nd	0.42	0.36	nd
Ba	98	160	170	140	140	160	180	130
Hg	nd	nd	nd	nd	nd	nd	nd	nd
Pb	23	15	13	13	12	15	13	11

APPENDIX F

Radionuclide Activities in Near-Bottom Waters, Surficial Sediments and Vertical Sediment Cores

Table F.1. Radionuclides for near-bottom water samples at Pass Fourchon study site.

Date	Station	Pb-210 ($dpm \cdot l^{-1}$)	Total Radium ($dpm \cdot l^{-1}$)
Feb 89	PF600S	0.56	81
	PF400	3.11	106
	PF600N	2.04	69
	PF800N	0.36	87
	PF900N	1.78	71
	PF1000N	0.54	84
May 89	PF600S	0.12	43
	PF400	0.68	116
	PF600N	0.28	173
	PF800N	0.61	112
	PF900N	0.13	51
	PF1000N	0.48	62
Oct 89	PF600S	0.55	85
	PF400	0.03	97
	PF600N	0.10	129
	PF800N	0.06	141
	PF900N	0.13	91
	PF1000N	0.05	65
Feb 90	PF600S	0.12	109
	PF400	0.34	121
	PF600N	0.08	127
	PF800N	0.06	119
	PF900N	0.13	95
	PF1000N	0.05	51

Table F.2. Radionuclides for near-bottom water samples at Bayou Rigaud study site.

Date	Station	Pb-210 ($dpm \cdot l^{-1}$)	Total Radium ($dpm \cdot l^{-1}$)
Feb 89	BR11	0.01	17
	BR9	0.11	29
	BR8	nd	38
	BR6	0.13	41
	BR4	2.96	46
	BR2	0.09	59
May 89	BR11	0.60	29
	BR9	0.09	59
	BR8	1.02	42
	BR6	0.11	71
	BR4	0.23	67
	BR2	0.44	31
Oct 89	BR11	0.71	66
	BR9	0.17	29
	BR8	0.66	59
	BR6	0.07	71
	BR4	0.11	81
	BR2	0.44	67
Feb 90	BR11	0.06	50
	BR9	0.01	58
	BR8	0.16	65
	BR6	0.28	29
	BR4	0.22	75
	BR2	0.02	47

Table F.3. Radionuclides for near-bottom water samples at Emeline Pass and Eugene Island study areas.

Date	Station	Pb-210 ($dpm \cdot l^{-1}$)	Total Radium ($dpm \cdot l^{-1}$)
Apr 89	Emeline Pass		
	EP450W	0.67	1.6
	EP0	0.79	1.7
	EP100E	0.26	2.3
	EP250E	0.02	1.5
	EP550E	0.46	1.3
	EP1000E	0.40	1.6
Oct 89	Emeline Pass		
	EP450W	0.90	1.1
	EP0	0.52	1.3
	EP100E	0.26	1.1
	EP250E	0.38	0.9
	EP550E	0.62	0.8
	EP1000E	0.72	0.6
May 89	Eugene Island		
	EIA500	1.17	16
	EIA250	1.69	12
	EIA100	2.18	3.1
	EIA50	2.13	6.5
	EI0	1.85	8.1
Nov 89	Eugene Island		
	EIA500	0.02	6.6
	EIA250	0.03	5.7
	EIA100	0.03	1.1
	EIA50	0.09	6.1
	EI0	0.07	6.1

Table F.4. Radionuclides for near-bottom water samples at East Timbalier Island, Romere Pass and Empire Waterway study areas.

Date	Station	Pb-210 ($dpm \cdot l^{-1}$)	Total Radium ($dpm \cdot l^{-1}$)
May 89	East Timbalier		
	T1	0.07	51
	T4	0.12	49
	T6	0.06	55
	T7	0.51	89
	T9	0.10	43
	T10	0.02	47
	T11	0.15	32
	T12	0.02	51
	T14	0.55	--
	T15	0.19	--
Oct 89	Romere Pass		
	RP450S	0.96	5.7
	RP0	0.23	5.5
	RP550N	0.31	3.1
	RP1000N	0.41	7.3
Nov 89	Empire Waterway		
	EW7	0.15	66
	EW8	0.19	81
	EW9	0.09	92
	EW2	0.07	67
	EW3	0.35	65
	EW4	0.14	71

Table F.5. Radionuclides for surficial sediments as Pass Fourchon study site.

Date	Station	Pb-210 ($dpm \cdot g^{-1}$)
Feb 89	PF600S	3.23
	PF400	7.09
	PF600N	4.66
	PF800N	4.48
	PF900N	0.61
	PF1000N	1.65
May 89	PF600S	1.72
	PF500S	3.83
	PF400	6.69
	PF500N	5.63
	PF600N	5.16
	PF800N	1.97
	PF900N	1.11
	PF1000N	2.87
	PF1200N	1.03
Nov 89	PF600S	0.99
	PF400	4.12
	PF600N	2.11
	PF800N	2.13
	PF900N	0.34
	PF1000N	0.66
Feb 90	PF600S	1.39
	PF400	4.99
	PF600N	3.48
	PF800N	1.52
	PF900N	1.13
	PF1000N	0.50

Table F.6. Pb-210 for sediment vertical profiles at Pass Fourchon study site for February 1989.

Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)
PF600S		PF400		PF800N	
0-1	3.23	0-1	7.09	0-1	4.48
1-2	2.36	1-2	6.09	1-2	4.11
2-3	2.92	2-3	9.35	2-3	4.79
3-4	2.08	3-4	7.96	3-4	5.14
4-5	2.53	4-5	8.38	4-5	4.52
5-6	2.35	5-6	9.21	5-6	4.43
6-7	2.37	6-7	9.00	6-7	5.09
7-8	1.74	7-8	10.75	7-8	4.84
8-9	1.66	8-9	9.72	8-9	4.33
9-10	2.42	9-10	9.45	9-10	4.59
10-12	2.37	10-12	9.14		
12-14	2.14	12-14	9.78	Inventory	38.1
14-16	3.33	14-16	6.15		
16-18	1.62	16-18	3.47	PF900N	
18-20	2.18	18-20	3.39	1-2	0.61
20-22	3.10	20-22	8.16	3-4	1.53
36-38	3.50	22-24	3.45	5-6	0.74
38-40	3.05	24-26	4.06	7-8	1.56
40-42	3.74	26-28	7.05	9-10	1.85
42-44	4.26	28-30	4.78	18-20	0.59
44-46	5.22	30-32	9.27	26-28	1.25
46-48	4.56	32-34	7.12	36-38	1.82
48-50	3.56	34-36	6.25	40-42	1.89
50-52	5.35	36-38	6.99		
		38-40	6.38	Inventory	59.0
Inventory	111.60	40-42	8.16		
		42-44	10.34	PF1000N	
		44-46	7.45	0-1	1.65
		46-48	5.67	1-2	1.04
		48-50	7.57	2-3	2.27
				3-4	2.08
		Inventory	275.5	4-5	1.58
				5-6	3.03
		PF600N		6-7	5.27
		1-2	4.66	7-8	3.01
		10-12	4.22	8-9	2.22
		24-26	5.15	9-10	1.93
				14-16	4.30
		Inventory	97.3	18-20	3.94
				24-26	1.63
				28-30	2.40
				Inventory	88.9

Table F.7. Pb-210 for sediment vertical profiles at Pass Fourchon study site for May 1989, October 1989 and February 1990.

May 1989		October 1989		February 1990	
Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)
PF600S		PF600S		PF600S	
0-1	1.72	0-1	1.00	0-1	1.39
19-20	1.77	9-10	2.44	14-16	2.34
40-41	1.13	20-21	1.31	26-28	1.07
		29-30	0.94		
Inventory	50.5	Inventory	34.0	Inventory	35.6
PF400		PF400		PF400	
0-1	6.69	0-1	4.12	0-1	5.10
19-20	10.61	9-10	4.50	14-16	4.14
40-41	8.22	20-21	3.84	26-28	2.89
		36-37	6.03		
Inventory	279.0	Inventory	136.0	Inventory	90.7
PF600N		PF600N		PF600N	
0-1	5.16	0-1	2.11	0-1	3.48
23-24	5.71	22-24	2.11	20-22	3.49
44-45	5.61	44-46	2.79	40-42	6.30
Inventory	198.0	Inventory	86.3	Inventory	147.6
PF800N		PF800N		PF800N	
0-1	1.97	0-1	2.13	0-1	1.52
21-22	2.51	14-16	2.70	22-24	1.75
34-35	2.60	26-28	2.26	44-46	1.60
Inventory	66.1	Inventory	53.2	Inventory	59.5
PF900N		PF900N		PF900N	
0-1	1.11	0-1	0.34	0-1	1.13
		9-10	1.32	9-10	0.15
		30-31	1.04	18-20	0.79
		Inventory	22.3	Inventory	10.9
PF1000N		PF1000N		PF1000N	
0-1	2.87	0-1	0.66	0-1	0.50
1-2	3.54	16-18	0.83	6-7	0.06
2-3	1.22	32-34	0.62	10-12	0.21
3-4	2.12				
4-5	1.86	Inventory	19.0	Inventory	2.45
7-8	1.48				
14-15	1.12				
Inventory	44.2				

Table F.8. Radionuclides for surficial sediments at Bayou Rigaud study site.

Station & Date	Pb-210 ($dpm \cdot g^{-1}$)	Station & Date	Pb-210 ($dpm \cdot g^{-1}$)
Feb 89		Oct 90	
BR11	3.85	BR11	2.78
BR9	4.15	BR9	1.72
BR8	4.02	BR8	1.62
BR6	2.44	BR6	1.15
BR4	3.85	BR4	1.23
BR2	2.43	BR2	1.19
May 89		Feb 90	
BR16	0.56	BR11	1.17
BR15	0.61	BR9	1.69
BR14	0.85	BR8	1.87
BR13	1.12	BR6	1.11
BR12	1.18	BR4	1.82
BR11	2.28	BR2	1.61
BR10	2.18		
BR9	2.11		
BR8	2.24		
BR7	1.63		
BR7A	2.01		
BR6	1.28		
BR6A	1.43		
BR5	1.76		
BR4	2.58		
BR3	1.78		
BR2	0.89		
BR1	0.79		
BR1A	0.76		
BR0	0.64		
BR0A	0.57		

Table F.9. Pb-210 for sediment vertical profiles at Bayou Rigaud study site for February 1989.

Station	Depth (cm)	Pb-210 ($dpm \cdot l^{-1}$)	Station	Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)
BR2	0-1	2.43	BR8	0-1	4.02
	1-2	3.13		1-2	3.98
	2-3	3.55		2-3	4.30
	3-4	3.03		3-4	4.15
	4-5	1.96		4-5	4.93
	5-6	2.61		5-6	4.71
	6-7	2.90		6-7	4.18
	7-8	3.41		7-8	4.25
	8-9	2.76		8-9	3.47
	9-10	3.31		9-10	4.15
	28-30	1.58		12-14	2.35
	56+	1.51		34-36	3.03
	Inventory	154.1		Inventory	114.2
BR4	0-1	3.85	BR9	0-1	4.15
	1-2	4.00		1-2	4.95
	2-3	3.60		2-3	5.52
	3-4	3.94		3-4	5.14
	4-5	3.85		4-5	4.03
	5-6	3.57		5-6	4.40
	6-7	4.78		6-7	4.64
	7-8	3.81		7-8	4.49
	8-9	4.86		8-9	4.57
	9-10	4.73		9-10	4.55
				14-16	1.97
	Inventory	139.8		34-36	2.64
				Inventory	118.9
BR6	0-1	2.44	BR11	0-1	3.85
	1-2	2.91		1-2	4.31
	2-3	3.09		2-3	3.76
	3-4	3.71		3-4	1.97
	4-5	3.76		4-5	2.83
	5-6	3.49		5-6	3.19
	14-16	1.27		6-7	3.13
	24-26	2.12		7-8	3.96
	52-54	2.08		8-9	3.52
				9-10	3.74
	Inventory	66.5		24-26	2.68
				44-46	3.17
				Inventory	131.2

Table F.10. Pb-210 for sediment vertical profiles at Bayou Rigaud study site for May 1989, October 1989 and February 1990.

May 1989		October 1989		February 1990	
Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station & Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)
BR2		BR2		BR2	
0-1	1.78	0-1	1.19	0-1	1.61
19-20	1.96	14-16	1.61	16-18	1.27
		30-32	1.94	30-32	2.01
Inventory	29.8				
		Inventory	40.0	Inventory	41.8
BR4		BR4		BR4	
0-1	2.58	0-1	1.23	0-1	1.82
13-14	2.64	16-18	1.74	12-14	1.50
26-27	3.33	32-34	3.17	24-26	0.96
Inventory	61.2	Inventory	55.3	Inventory	29.1
BR6		BR6		BR6	
0-1	1.28	0-1	1.15	0-1	1.11
21-22	2.41	16-18	1.74	12-14	1.67
44-45	2.17	32-34	1.65	24-26	1.67
Inventory	69.4	Inventory	41.2	Inventory	30.5
BR8		BR8		BR8	
0-1	2.24	0-1	1.62	0-1	1.87
19-20	2.24	20-22	2.06	22-24	2.56
40-41	2.53	38-40	2.58	44-46	2.12
Inventory	76.2	Inventory	66.5	Inventory	79.7
BR9		BR9		BR9	
0-1	2.10	0-1	1.72	0-1	1.69
30-31	2.82	17-19	2.13	16-18	2.38
		35-37	2.24	34-36	2.48
Inventory	60.8				
		Inventory	59.4	Inventory	63.4
BR11		BR11		BR11	
38-39	2.28	0-1	2.78	0-1	1.17
		22-24	1.99	18-20	1.62
Inventory	71.1	44-46	1.87	34-36	1.63
		Inventory	81.5	Inventory	41.8

Table F.11. Pb-210 for surficial sediments at all stations and sediment vertical profiles (for station EP0) at Emeline Pass study site.

Station	April 1989 Pb-210 ($dpm \cdot g^{-1}$)	October 1989 Pb-210 ($dpm \cdot g^{-1}$)
EP600W	0.77	1.07
EP450W	0.98	2.69
EP300W	0.61	0.91
EP0	0.20	1.46
EP100E	0.15	1.04
EP250E	0.13	2.10
EP450E	0.92	1.81
EP550E	0.18	1.13
EP700E	0.31	0.21
EP1000E	0.21	1.53
EP1300E	0.15	0.81

Section (cm)	Pb-210 ($dpm \cdot g^{-1}$)
EP0	
0-1	1.46
1-2	3.18
2-3	5.03
3-4	4.74
4-5	5.25
5-6	6.56
6-7	5.35
7-8	5.19
8-9	5.50
9-10	3.90
Inventory	40.5

Table F.12. Radionuclides for surficial sediments at Eugene Island study site.

Date	Station	Pb-210 ($dpm \cdot g^{-1}$)
May 89	EIA1000	1.86
	EIA500	1.29
	EIA250	1.99
	EIA100	2.19
	EIA50	2.04
	EI0	1.46
	EIB200	1.68
	EIB300	1.55
	EIB500	1.91
Nov 89	EIA1000	1.85
	EIA500	1.96
	EIA250	2.28
	EIA100	1.68
	EIA50	1.72
	EI0	2.69
	EIB200	1.93
	EIB300	2.17
	EIB500	2.45
	EIB700	2.11
	EIB1000	2.61

Table F.13. Pb-210 for sediment vertical profiles at Eugene Island study site.

May 1989			November 1989		
Station	Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station	Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)
EI0	0-1	1.46	EI0	0-1	2.69
	2-3	1.65		18-20	2.11
	4-5	2.39		38-40	1.15
	5-7	2.04			
	9-11	2.36		Inventory	62.9
	13-15	2.39			
	17-18	1.91			
	22-24	2.90			
	26-28	2.09			
	28-29	1.39			
	Inventory	48.9			
EIA50	0-1	2.04	EIA50	0-1	1.72
	13-14	2.45		20-22	2.28
	24-25	2.50		38-40	1.31
	Inventory	46.3		Inventory	56.4
EIA100	0-1	2.19	EIA100	0-1	1.68
	15-16	2.87		22-24	0.92
	26-27	1.18		46-48	1.81
	Inventory	44.6		Inventory	56.0
EIA250	0-1	1.99	EIA250	0-1	2.28
	17-18	2.32		22-24	1.60
	32-33	2.38		44-46	1.58
	Inventory	58.9		Inventory	66.7
EIA500	0-1	1.29	EIA500	0-1	1.96
	21-22	1.34		24-26	1.54
	42-43	1.79		48-50	1.19
	Inventory	50.7		Inventory	62.3

Table F.14. Radionuclides for surficial sediments at East Timbalier Island (T), Romere Pass (RP) and Empire Waterway (EW) study sites.

May 1989		October 1989		November 1989	
Station	Pb-210 ($dpm \cdot g^{-1}$)	Station	Pb-210 ($dpm \cdot g^{-1}$)	Station	Pb-210 ($dpm \cdot g^{-1}$)
T1	0.21	RP750S	0.65	EW11	1.87
T2	0.51	RP450S	0.92	EW6	1.21
T3	0.32	RP100S	0.71	EW7	2.50
T4	0.41	RP0	0.55	EW8	2.22
T5	0.73	RP250N	1.13	EW9	1.97
T6	0.17	RP550N	1.44	EW10	1.63
T7	0.58	RP750N	1.51	EW1	1.15
T8	0.36	RP1000N	1.57	EW2	1.26
T9	0.44			EW3	2.81
T10	0.63			EW4	2.27
T11	0.39				
T12	0.41				
T13	0.81				
T14	0.55				
T15	0.19				

Table F.15. Pb-210 for sediment vertical profiles at Romere Pass (RP) and Empire Waterway (EW) study sites.

October 1989			November 1989		
Station	Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)	Station	Depth (cm)	Pb-210 ($dpm \cdot g^{-1}$)
RP0	0-1	0.55	EW2	0-1	1.26
	12-14	0.92		8-9	1.20
	26-28	0.79		16-18	1.36
	Inventory	16.4		Inventory	18.2
RP450S	0-1	0.92	EW3	0-1	2.81
	7-8	3.06		10-12	1.25
	14-16	1.19		20-22	1.34
	Inventory	22.0		Inventory	31.1
RP550N	0-1	1.44	EW4	0-1	2.27
	6-7	0.70		24-14	2.88
				26-28	2.40
	Inventory	5.9			
				Inventory	54.5
RP1000N	0-1	1.57	EW7	0-1	2.50
	14-16	1.16		18-20	2.37
	26-28	0.96		38-40	2.49
	Inventory	27.5		Inventory	76.8
			EW8	0-1	2.22
				10-12	1.92
				22-24	1.05
				Inventory	32.6
			EW9	0-1	1.96
				9-10	1.56
				18-20	1.47
				Inventory	26.7

APPENDIX G

Benthic Community Data and Statistical Analyses

Table G.1. Benthic community parameters for Pass Fourchon study site. Number of replicates = 3. Values are mean ± standard error. [*Mediomastus* sp. has been clumped with *M. ambiseta*.]

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
02/89	400	0.0 ± 0.0	0.0 ± 0.0	*	*
02/89	600N	9.0 ± 6.0	120.0 ± 84.1	0.29 ± 0.09	0.12 ± 0.03
02/89	600S	6.0 ± 1.0	96.0 ± 38.9	0.27 ± 0.13	0.10 ± 0.04
02/89	800N	0.7 ± 0.3	0.7 ± 0.3	0.00 ± 0.00	*
02/89	900N	3.3 ± 0.9	5.0 ± 1.6	0.48 ± 0.13	0.29 ± 0.01
02/89	1000N	3.3 ± 0.3	4.0 ± 0.6	0.50 ± 0.06	0.29 ± 0.01
05/89	400	0.03 ± 0.3	0.3 ± 0.3	0.0	*
05/89	500N	0.0 ± 0.0	0.0 ± 0.0	*	*
05/89	500S	0.0 ± 0.0	0.0 ± 0.0	*	*
05/89	600N	0.0 ± 0.0	0.0 ± 0.0	*	*
05/89	600S	3.0 ± 0.6	22.0 ± 9.6	0.33 ± 0.04	0.22 ± 0.04
05/89	800N	0.0 ± 0.0	0.0 ± 0.0	*	*
05/89	900N	7.7 ± 0.9	24.3 ± 7.3	0.70 ± 0.03	0.24 ± 0.01
05/89	1000N	8.0 ± 1.0	80.0 ± 31.2	0.61 ± 0.04	0.21 ± 0.02
05/89	1200N	10.3 ± 3.7	93.3 ± 47.9	0.59 ± 0.13	0.20 ± 0.01
05/89	1000NE	20.0 ± 1.5	112.0 ± 47.8	0.97 ± 0.12	0.23 ± 0.03
05/89	1200NE	17.0 ± 2.5	117.3 ± 47.6	0.70 ± 0.06	0.17 ± 0.02
10/89	400	0.0 ± 0.0	0.0 ± 0.0	*	*
10/89	600N	1.3 ± 0.3	1.7 ± 1.0	0.08 ± 0.08	*
10/89	600S	3.3 ± 1.2	38.2 ± 22.1	0.13 ± 0.08	0.09 ± 0.04
10/89	800N	0.0 ± 0.0	0.0 ± 0.0	*	*
10/89	900N	7.0 ± 3.8	82.7 ± 47.8	0.48 ± 0.24	0.23 ± 0.03
10/89	1000N	5.7 ± 1.2	82.4 ± 47.6	0.68 ± 0.08	0.28 ± 0.01
02/90	400	0.3 ± 0.3	1.2 ± 0.7	0.00	*
02/90	600N	0.0 ± 0.0	0.0 ± 0.0	*	*
02/90	600S	11.7 ± 2.3	100.7 ± 58.2	0.25 ± 0.04	0.07 ± 0.01
02/90	800N	9.3 ± 3.5	52.5 ± 30.3	0.73 ± 0.11	0.25 ± 0.03
02/90	900N	3.0 ± 1.5	9.1 ± 5.2	0.30 ± 0.18	0.27 ± 0.03
02/90	1000N	9.0 ± 1.0	22.5 ± 13.0	0.50 ± 0.07	0.16 ± 0.02

*Cannot be calculated, zero values.

Table G.2. General linear model analysis of variance for Pass Fourchon study site, February 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (natural log transformed):					
Model	5	9.58	1.92	8.58	0.001
Error	12	2.68	0.22		
Corrected Total	17	12.27			
Number of Individuals (natural log transformed):					
Model	5	51.37	10.27	22.11	0.0001
Error	12	5.58	0.46		
Corrected Total	17	56.94			
* Diversity (H'):					
Model	4	0.38	0.96	3.14	0.07
Error	9	0.27	0.03		
Corrected Total	13	0.66			
** Evenness (J'):					
Model	3	0.09	0.03	12.43	0.002
Error	8	0.02	0.00		
Corrected Total	11	0.11			

* Cell sizes unequal due to missing values. Station 400 excluded from analysis due to zero species for all replicates.
** Stations 400 and 800N excluded from analysis due to zero values for all replicates.

Table G.3. General linear model analysis of variance for Pass Fourchon study site, May 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (natural log transformed):					
Model	10	47.46	4.75	53.64	0.0001
Error	22	1.95	0.09		
Corrected Total	32	49.41			
Number of Individuals (natural log transformed):					
Model	10	131.50	13.15	35.89	0.0001
Error	22	8.06	0.37		
Corrected Total	32	139.56			
* Diversity (H'):					
Model	6	1.06	0.18	8.94	0.0007
Error	12	0.24	0.02		
Corrected Total	18	1.29			
** Evenness (J'):					
Model	5	0.01	0.00	1.10	0.41
Error	12	0.02	0.00		
Corrected Total	17	0.03			

* Cell sizes unequal due to missing values. Stations 800N, 600N, 500N, 500S excluded from analysis due to zero species for all replicates.
** Stations 800N, 600N, 500N, 500S and 400 excluded from analysis due to zero values for all replicates.

Table G.4. General linear model analysis of variance for Pass Fourchon study site, October 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (natural log transformed):					
Model	5	10.56	2.11	8.30	0.001
Error	12	3.05	0.25		
Corrected Total	17	13.62			
Number of Individuals (natural log transformed):					
Model	5	34.65	6.93	8.54	0.001
Error	12	9.73	0.81		
Corrected Total	17	44.38			
* Diversity (H'):					
Model	3	0.74	0.25	4.16	0.047
Error	8	0.47	0.06		
Corrected Total	11	1.21			
** Evenness (J'):					
Model	3	0.05	0.02	12.51	0.02
Error	4	0.00	0.00		
Corrected Total	7	0.05			

* Stations 400 and 800N excluded from analysis due to zero species for all replicates.
** Cell sizes unequal due to missing values. Stations 400 and 800N excluded from analysis due to zero values for all replicates.

Table G.5. General linear model analysis of variance for Pass Fourchon study site, February 1990.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species:					
Model	5	18.09	3.62	20.24	0.0001
Error	12	2.14	0.18		
Corrected Total	17	20.23			
Number of Individuals (natural log transformed):					
Model	5	85.50	17.10	28.15	0.0001
Error	12	7.29	0.61		
Corrected Total	17	92.79			
* Diversity (H'):					
Model	4	0.61	0.15	4.07	0.04
Error	8	0.30	0.04		
Corrected Total	12	0.90			
** Evenness (J'):					
Model	3	0.07	0.02	14.69	0.002
Error	7	0.01	0.00		
Corrected Total	10	0.08			

* Cell sizes unequal due to missing values. Station 600N excluded from analysis due to zero species for all replicates.
** Cell sizes unequal due to missing values. Stations 600N and 400 excluded from analysis due to zero values for all replicates.

Table G.6. General linear model co-analysis of variance for Pass Fourchon study site, all sample periods combined for six stations.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (natural log transformed):					
Model	23	234.55	10.20	18.78	0.0001
Error	48	26.07	0.54		
Corrected Total	71	260.62			
Number of Individuals (natural log transformed):					
Model	23	234.55	10.20	18.78	0.0001
Error	48	26.07	0.54		
Corrected Total	71	260.62			
* Diversity (H'):					
Model	17	2.42	0.14	4.12	0.003
Error	31	1.07	0.03		
Corrected Total	48	3.49			
** Evenness (J'):					
Model	14	0.22	0.02	8.30	0.0001
Error	25	0.05	0.00		
Corrected Total	39	0.27			

* Cell sizes unequal due to missing values.

** Cell sizes unequal due to missing values. Station 400 excluded due to zero values in all replicates.

Table G.7. Benthic community parameters for Bayou Rigaud study site. Number of replicates = 3. Values are mean ± standard error. [*Mediomastus* sp. has been clumped with *M. ambiseta*.]

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
02/89	1	27.0 ± 3.5	330.0 ± 158.2	0.82 ± 0.09	0.18 ± 0.02
02/89	2	23.0 ± 7.8	510.7 ± 219.7	0.51 ± 0.06	0.12 ± 0.01
02/89	3	8.7 ± 1.7	170.0 ± 74.6	0.35 ± 0.07	0.12 ± 0.03
02/89	4	19.7 ± 2.0	473.0 ± 130.7	0.46 ± 0.05	0.11 ± 0.02
02/89	5	17.3 ± 3.2	251.3 ± 106.0	0.46 ± 0.06	0.12 ± 0.03
02/89	6	21.0 ± 1.7	839.3 ± 163.2	0.41 ± 0.01	0.10 ± 0.01
02/89	7	13.0 ± 2.1	714.3 ± 402.2	0.14 ± 0.06	0.04 ± 0.02
02/89	8	13.0 ± 1.5	419.3 ± 108.1	0.26 ± 0.04	0.07 ± 0.01
02/89	9	21.0 ± 1.0	1292.3 ± 247.1	0.21 ± 0.06	0.05 ± 0.01
02/89	10	23.7 ± 2.4	1413.7 ± 627.7	0.32 ± 0.14	0.07 ± 0.03
02/89	11	25.3 ± 1.8	766.0 ± 265.0	0.78 ± 0.04	0.17 ± 0.01
05/89	0	20.3 ± 0.9	277.0 ± 67.2	0.83 ± 0.01	0.19 ± 0.00
05/89	0A	10.7 ± 2.6	155.7 ± 18.7	0.57 ± 0.08	0.17 ± 0.01
05/89	1	17.7 ± 5.2	333.7 ± 162.6	0.61 ± 0.11	0.15 ± 0.03
05/89	1A	17.3 ± 5.3	410.3 ± 150.4	0.60 ± 0.05	0.15 ± 0.00
05/89	2	11.7 ± 1.2	467.7 ± 75.0	0.27 ± 0.03	0.08 ± 0.01
05/89	3	4.0 ± 2.0	85.3 ± 74.9	0.18 ± 0.05	0.15 ± 0.07
05/89	4	14.3 ± 0.3	618.7 ± 87.1	0.26 ± 0.01	0.07 ± 0.00
05/89	5	10.0 ± 0.0	190.7 ± 97.8	0.38 ± 0.07	0.11 ± 0.02
05/89	6	8.3 ± 0.3	251.0 ± 79.1	0.30 ± 0.03	0.10 ± 0.01
05/89	6A	9.0 ± 0.0	226.3 ± 29.3	0.28 ± 0.04	0.09 ± 0.01
05/89	7	10.7 ± 1.8	203.0 ± 80.2	0.41 ± 0.06	0.12 ± 0.02
05/89	7A	10.3 ± 1.9	232.0 ± 32.3	0.34 ± 0.04	0.10 ± 0.00
05/89	8	10.0 ± 0.0	264.3 ± 90.7	0.36 ± 0.07	0.11 ± 0.02
05/89	9	9.3 ± 1.7	350.3 ± 106.6	0.21 ± 0.01	0.07 ± 0.01
05/89	10	11.3 ± 0.9	294.0 ± 4.9	0.37 ± 0.05	0.10 ± 0.01
05/89	11	11.7 ± 2.7	179.0 ± 30.2	0.58 ± 0.09	0.17 ± 0.01
05/89	12	7.3 ± 1.5	107.0 ± 59.5	0.43 ± 0.07	0.16 ± 0.04
05/89	13	18.7 ± 2.6	255.0 ± 28.02	0.62 ± 0.06	0.15 ± 0.01
05/89	14	9.0 ± 0.0	129.7 ± 23.8	0.56 ± 0.04	0.18 ± 0.01
05/89	15	13.7 ± 2.8	161.3 ± 60.8	0.80 ± 0.05	0.22 ± 0.01
05/89	16	19.3 ± 5.8	129.0 ± 29.5	0.94 ± 0.23	0.22 ± 0.03
10/89	1	16.0 ± 2.6	231.3 ± 86.7	0.70 ± 0.04	0.18 ± 0.01
10/89	2	7.3 ± 1.5	88.3 ± 45.7	0.30 ± 0.18	0.10 ± 0.05
10/89	3	2.7 ± 0.3	58.7 ± 28.9	0.11 ± 0.04	0.08 ± 0.02
10/89	4	3.7 ± 2.7	33.7 ± 32.2	0.24 ± 0.04	0.17 ± 0.11
10/89	5	4.3 ± 0.7	74.3 ± 23.2	0.23 ± 0.09	0.11 ± 0.04
10/89	6	5.3 ± 0.9	29.0 ± 6.1	0.38 ± 0.03	0.16 ± 0.03
10/89	7	3.7 ± 1.2	12.3 ± 5.4	0.34 ± 0.09	0.20 ± 0.00
10/89	8	7.7 ± 0.7	48.3 ± 11.7	0.51 ± 0.06	0.17 ± 0.02
10/89	9	7.0 ± 1.2	63.0 ± 15.0	0.43 ± 0.07	0.16 ± 0.02
10/89	10	7.3 ± 1.7	45.3 ± 14.8	0.63 ± 0.12	0.22 ± 0.02
10/89	11	6.7 ± 2.6	35.7 ± 16.2	0.63 ± 0.18	0.27 ± 0.01

Table G.7 Continued.

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
02/90	1	17.7 ± 3.5	402.7 ± 160.7	0.33 ± 0.10	0.08 ± 0.02
02/90	2	18.0 ± 2.3	416.0 ± 249.9	0.57 ± 0.11	0.14 ± 0.03
02/90	3	8.7 ± 1.5	44.7 ± 17.4	0.61 ± 0.09	0.20 ± 0.04
02/90	4	5.3 ± 1.2	19.7 ± 3.9	0.50 ± 0.07	0.22 ± 0.01
02/90	5	14.7 ± 5.4	58.3 ± 39.1	0.96 ± 0.11	0.26 ± 0.01
02/90	6	25.7 ± 8.0	881.7 ± 407.2	0.42 ± 0.04	0.09 ± 0.01
02/90	7	5.3 ± 2.0	154.0 ± 133.6	0.21 ± 0.10	0.11 ± 0.04
02/90	8	5.0 ± 2.0	71.0 ± 59.0	0.24 ± 0.04	0.13 ± 0.04
02/90	9	13.7 ± 1.7	193.3 ± 110.7	0.58 ± 0.16	0.16 ± 0.05
02/90	10	19.0 ± 1.5	866.7 ± 150.6	0.35 ± 0.12	0.08 ± 0.03
02/90	11	21.0 ± 2.1	453.7 ± 86.3	0.50 ± 0.03	0.11 ± 0.01

Table G.8. General linear model analysis of variance for Bayou Rigaud study site, February 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (square root transformed):					
Model	10	14.55	1.45	4.07	0.003
Error	22	7.87	0.36		
Corrected Total	32	22.42			
Number of Individuals (natural log transformed):					
Model	10	13.19	1.32	1.88	0.10
Error	22	15.40	0.70		
Corrected Total	32	28.59			
Diversity (H'):					
Model	10	1.41	0.14	9.75	0.0001
Error	22	0.32	0.01		
Corrected Total	32	1.72			
Evenness (J'):					
Model	10	0.06	0.01	5.05	0.007
Error	22	0.03	0.00		
Corrected Total	32	0.08			

Table G.9. General linear model analysis of variance for Bayou Rigaud study site, May 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (square root transformed):					
Model	20	23.20	1.16	3.32	0.0005
Error	42	14.66	0.35		
Corrected Total	62	37.86			
Number of Individuals (natural log transformed):					
Model	20	26.41	1.32	2.32	0.01
Error	42	23.89	0.57		
Corrected Total	62	50.30			
Diversity (H'):					
Model	20	2.70	0.13	8.12	0.0001
Error	42	0.70	0.02		
Corrected Total	62	3.39			
Evenness (J'):					
Model	20	0.13	0.01	4.13	0.0001
Error	42	0.06	0.00		
Corrected Total	62	0.19			

Table G.10. General linear model analysis of variance for Bayou Rigaud study site, October 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (square root transformed):					
Model	10	14.02	1.40	3.23	0.01
Error	22	9.56	0.43		
Corrected Total	32	23.57			
Number of Individuals (natural log transformed):					
Model	10	24.43	2.44	2.49	0.04
Error	22	21.62	0.98		
Corrected Total	32	46.05			
Diversity (H'):					
Model	10	1.05	0.11	3.47	0.008
Error	22	0.64	0.03		
Corrected Total	32	1.69			
* Evenness (J'):					
Model	10	0.09	0.01	3.22	0.01
Error	21	0.06	0.00		
Corrected Total	31	0.15			

* Cell sizes unequal due to missing values.

Table G.11. General linear model analysis of variance for Bayou Rigaud study site, February 1990.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (square root transformed):					
Model	10	30.43	3.04	5.12	0.0007
Error	22	13.09	0.59		
Corrected Total	32	43.51			
Number of Individuals (natural log transformed):					
Model	10	54.81	5.48	4.46	0.002
Error	22	27.06	1.23		
Corrected Total	32	81.87			
Diversity (H'):					
Model	10	1.33	0.13	4.77	0.001
Error	22	0.61	0.03		
Corrected Total	32	1.94			
Evenness (J'):					
Model	10	0.11	0.01	3.64	0.01
Error	22	0.06	0.00		
Corrected Total	32	0.17			

Table G.12. General linear model co-analysis of variance for Bayou Rigaud study site, all sample periods combined for 11 stations.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (square root transformed):					
Model	43	130.61	3.04	7.39	0.001
Error	88	36.16	0.41		
Corrected Total	131	166.78			
Number of Individuals (natural log transformed):					
Model	43	216.21	5.03	5.46	0.001
Error	88	81.04	0.92		
Corrected Total	111	297.24			
* Diversity (H'):					
Model	43	4.60	0.11	5.18	0.0001
Error	87	1.80	0.02		
Corrected Total	130	6.40			
* Evenness (J'):					
Model	43	0.37	0.01	3.90	0.0001
Error	87	0.19	0.00		
Corrected Total	130				

* Cell sizes unequal due to missing values.

Table G.13. Benthic community parameters for Emeline Pass study site. Number of replicates = 3. Values are mean ± standard error.

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
04/89	0	1.0 ± 0.6	1.7 ± 0.8	0.15 ± 0.15	0.30
04/89	100E	0.0 ± 0.0	0.0 ± 0.0	*	*
04/89	250E	0.0 ± 0.0	0.0 ± 0.0	*	*
04/89	300W	0.7 ± 0.7	0.7 ± 0.7	0.30	0.30
04/89	400E	1.0 ± 0.6	2.3 ± 1.2	0.14 ± 0.14	0.28
04/89	450W	0.3 ± 0.3	0.7 ± 0.7	0.00	*
04/89	550E	0.7 ± 0.3	0.7 ± 0.3	0.00 ± 0.00	*
04/89	600W	0.3 ± 0.3	1.0 ± 1.0	0.00	*
04/89	700E	0.7 ± 0.3	0.7 ± 0.3	0.00 ± 0.00	*
04/89	1000E	0.7 ± 0.3	0.7 ± 0.3	0.00 ± 0.00	*
04/89	1300E	0.7 ± 0.3	1.0 ± 0.6	0.00 ± 0.00	*
10/89	0	2.0 ± 0.6	6.7 ± 1.5	0.25 ± 0.13	0.29 ± 0.01
10/89	100E	3.0 ± 0.0	5.0 ± 1.0	0.46 ± 0.01	0.29 ± 0.00
10/89	250E	2.0 ± 1.0	9.0 ± 4.0	0.14 ± 0.14	0.21
10/89	300W	2.0 ± 0.6	6.3 ± 2.3	0.22 ± 0.11	0.26 ± 0.04
10/89	400E	2.3 ± 0.3	6.3 ± 1.8	0.26 ± 0.6	0.21 ± 0.04
10/89	450W	2.7 ± 0.3	7.7 ± 2.7	0.31 ± 0.03	0.22 ± 0.02
10/89	550E	2.0 ± 0.6	6.3 ± 1.9	0.24 ± 0.12	0.28 ± 0.02
10/89	600W	1.7 ± 0.3	3.0 ± 1.2	0.16 ± 0.08	0.25 ± 0.03
10/89	700E	2.0 ± 0.6	2.3 ± 0.3	0.26 ± 0.14	0.30 ± 0.00
10/89	1000E	0.7 ± 0.3	0.7 ± 0.3	0.00 ± 0.00	*
10/89	1300E	3.0 ± 0.0	6.3 ± 1.5	0.38 ± 0.04	0.24 ± 0.03

* Cannot be calculated, zero values.

Table G.14. General linear model analysis of variance for Emeline Pass study site, April 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species:					
Model	10	3.52	0.35	0.72	0.69
Error	22	10.67	0.48		
Corrected Total	32	14.18			
Number of Individuals (natural log transformed):					
Model	10	2.66	0.27	0.83	0.61
Error	22	7.06	0.32		
Corrected Total	32	9.72			
* Diversity (H'):					
Model	8	0.12	0.01	1.10	0.47
Error	6	0.08	0.01		
Corrected Total	14	0.21			
** Evenness (J'):					

* Cell sizes unequal due to missing values.

** Missing values prevent analysis.

Table G.15. General linear model analysis of variance for Emeline Pass study site, October 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species:					
Model	10	12.85	1.28	1.70	0.14
Error	22	16.67	0.76		
Corrected Total	32	29.52			
Number of Individuals:					
Model	10	7.35	0.74	2.52	0.03
Error	22	6.42	0.29		
Corrected Total	32	13.78			
* Diversity (H'):					
Model	10	0.37	0.04	1.34	0.27
Error	21	0.58	0.03		
Corrected Total	31	0.95			
* Evenness (J'):					
Model	9	0.02	0.00	1.50	0.24
Error	13	0.02	0.00		
Corrected Total	22	0.04			

* Cell sizes unequal due to missing values.

Table G.16. General linear model co-analysis of variance for Emeline Pass study site, both sample periods combined.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species:					
Model	21	57.33	2.73	4.39	0.0001
Error	44	27.33	0.62		
Corrected Total	65	84.67			
Number of Individuals (natural log transformed):					
Model	21	34.59	1.65	5.37	0.0001
Error	44	13.48	0.31		
Corrected Total	65	48.07			
* Diversity (H'):					
Model	19	0.87	0.05	1.85	0.07
Error	27	0.67	0.02		
Corrected Total	46	1.53			
** Evenness (J'):					
Model	12	0.03	0.00	1.35	0.30
Error	13	0.02	0.00		
Corrected Total	25	0.05			

* Cell sizes unequal due to missing values.

** Cell sizes unequal due to missing values; station 1000E excluded due to zero values in all six replicates.

Table G.17. Benthic community parameters for Eugene Island study site. Number of replicates = 3. Values are mean ± standard error. [*Mediomastus* sp. has been clumped with *M. ambiseta*.]

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
05/89	0	1.7 ± 0.9	2.0 ± 1.2	0.38 ± 0.08	0.29 ± 0.01
05/89	A50	3.0 ± 1.0	3.0 ± 1.0	0.43 ± 0.13	0.30 ± 0.00
05/89	A100	4.7 ± 1.5	8.3 ± 3.2	0.57 ± 0.15	0.28 ± 0.01
05/89	A250	5.7 ± 0.3	7.3 ± 0.3	0.73 ± 0.03	0.29 ± 0.00
05/89	A500	6.3 ± 1.7	27.7 ± 4.7	0.41 ± 0.05	0.17 ± 0.01
05/89	A1000	5.0 ± 1.5	12.0 ± 2.1	0.54 ± 0.15	0.24 ± 0.02
05/89	B200	4.7 ± 0.9	14.7 ± 3.3	0.43 ± 0.10	0.19 ± 0.03
05/89	B300	3.0 ± 1.2	8.3 ± 5.0	0.25 ± 0.12	0.20 ± 0.04
05/89	B500	3.3 ± 0.9	30.3 ± 26.3	0.32 ± 0.07	0.23 ± 0.07
11/89	0	0.7 ± 0.7	0.7 ± 0.7	0.31	0.30
11/89	A50	1.0 ± 0.6	2.3 ± 1.4	0.11 ± 0.11	0.22
11/89	A100	3.7 ± 0.9	7.3 ± 1.9	0.48 ± 0.15	0.26 ± 0.03
11/89	A250	4.7 ± 0.9	27.3 ± 6.9	0.38 ± 0.06	0.18 ± 0.02
11/89	A500	8.0 ± 1.5	45.7 ± 11.7	0.55 ± 0.08	0.19 ± 0.02
11/89	A1000	5.7 ± 1.5	23.3 ± 5.5	0.56 ± 0.06	0.24 ± 0.02
11/89	B200	1.7 ± 0.7	2.3 ± 1.3	0.15 ± 0.15	0.29
11/89	B300	3.7 ± 0.3	20.7 ± 4.8	0.32 ± 0.04	0.17 ± 0.01
11/89	B500	6.3 ± 0.9	31.3 ± 10.3	0.54 ± 0.11	0.20 ± 0.04
11/89	B700	4.7 ± 0.9	24.3 ± 3.5	0.43 ± 0.04	0.21 ± 0.04
11/89	B1000	6.0 ± 0.6	16.7 ± 2.3	0.59 ± 0.03	0.23 ± 0.01

Table G.18. General linear model analysis of variance for Eugene Island study site, May 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species:					
Model	8	53.41	6.68	1.67	0.17
Error	18	72.00	4.00		
Corrected Total	26	125.41			
Number of Individuals (natural log transformed):					
Model	8	12.99	1.62	2.54	0.047
Error	18	11.50	0.64		
Corrected Total	26	24.49			
* Diversity (H'):					
Model	8	0.49	0.06	1.78	0.15
Error	17	0.59	0.03		
Corrected Total	25	1.08			
* Evenness (J'):					
Model	8	0.06	0.01	2.68	0.04
Error	16	0.04	0.00		
Corrected Total	24	0.10			

* Cell sizes unequal due to missing values.

Table G.19. General linear model analysis of variance for Eugene Island study site, November 1989.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species:					
Model	10	163.58	16.36	6.50	0.0001
Error	22	53.33	2.52		
Corrected Total	32	218.91			
Number of Individuals:					
Model	10	40.27	4.03	14.74	0.001
Error	22	6.01	0.27		
Corrected Total	32	46.28			
* Diversity (H'):					
Model	10	0.71	0.07	2.93	0.02
Error	19	0.46	0.02		
Corrected Total	29	1.17			
* Evenness (J'):					
Model	10	0.04	0.00	1.79	0.14
Error	16	0.03	0.00		
Corrected Total	26	0.07			

* Cell sizes unequal due to missing values.

Table G.20. General linear model co-analysis of variance for Eugene Island study site, both sample periods combined.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species:					
Model	17	205.26	12.07	3.60	0.0006
Error	36	120.67	3.35		
Corrected Total	53	325.93			
Number of Individuals:					
Model	17	51.14	3.01	6.26	0.0001
Error	36	17.30	0.48		
Corrected Total	53	68.44			
* Diversity (H'):					
Model	17	1.15	0.07	2.08	0.04
Error	32	1.04	0.03		
Corrected Total	49	2.18			
* Evenness (J'):					
Model	17	0.10	0.01	2.56	0.01
Error	29	0.06	0.00		
Corrected Total	45	0.16			

* Cell sizes unequal due to missing values.

Table G.21. Benthic community parameters for East Timbalier Island study site. Number of replicates = 3. Values are mean ± standard error. [*Mediomastus* sp. has been clumped with *M. ambiseta*.]

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
05/89	1	11.0 ± 1.2	229.7 ± 75.6	0.49 ± 0.3	0.14 ± 0.01
05/89	2	9.7 ± 0.9	63.0 ± 21.7	0.64 ± 0.08	0.10 ± 0.02
05/89	3	0.3 ± 0.3	0.3 ± 0.3	0.00	*
05/89	4	6.7 ± 0.3	105.7 ± 43.8	0.41 ± 0.10	0.15 ± 0.03
05/89	5	4.3 ± 0.3	84.3 ± 16.4	0.27 ± 0.03	0.13 ± 0.02
05/89	6	4.0 ± 0.0	14.0 ± 5.3	0.45 ± 0.11	0.22 ± 0.05
05/89	7	2.7 ± 0.3	31.0 ± 11.4	0.19 ± 0.11	0.13 ± 0.06
05/89	8	3.0 ± 0.0	25.0 ± 8.6	0.36 ± 0.01	0.23 ± 0.01
05/89	9	9.3 ± 1.2	164.7 ± 89.9	0.42 ± 0.08	0.13 ± 0.02
05/89	10	15.0 ± 2.0	948.3 ± 350.3	0.30 ± 0.09	0.07 ± 0.02
05/89	11	20.0 ± 4.4	282.0 ± 117.4	0.71 ± 0.09	0.17 ± 0.03
05/89	12	24.0 ± 5.9	427.0 ± 135.1	0.61 ± 0.14	0.13 ± 0.03
05/89	13	16.0 ± 0.0	38.7 ± 2.3	1.03 ± 0.04	0.26 ± 0.01
05/89	14	13.7 ± 1.5	592.7 ± 273.0	0.25 ± 0.09	0.07 ± 0.02
05/89	15	19.3 ± 0.9	859.0 ± 562.4	0.54 ± 0.22	0.13 ± 0.05

* Cannot be calculated, zero values.

Table G.22. General linear model analysis of variance for East Timbalier Island study site.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (natural log transformed):					
Model	14	27.88	1.99	42.77	0.0001
Error	30	1.40	0.05		
Corrected Total	44	29.28			
Number of Individuals (natural log transformed):					
Model	14	122.65	8.76	17.10	0.0001
Error	30	15.37	0.51		
Corrected Total	44	138.01			
* Diversity (H'):					
Model	14	2.16	0.15	5.16	0.0001
Error	28	0.84	0.03		
Corrected Total	42	3.00			
** Evenness (J'):					
Model	13	0.12	0.01	3.03	0.007
Error	28	0.09	0.00		
Corrected Total	41	0.21			

* Cell sizes unequal due to missing values.

** Cell sizes unequal due to missing values. Station T3 excluded from analysis due to zero values for all replicates.

Table G.23. Benthic community parameters for Romere Pass study site. Number of replicates = 3*. Values are mean ± standard error.

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
10/89	0	4.0 ± 0.6	20.7 ± 3.7	0.50 ± 0.05	0.25 ± 0.00
10/89	100S	4.3 ± 0.7	10.3 ± 1.8	0.52 ± 0.09	0.25 ± 0.01
10/89	250N	2.0 ± 0.6	4.0 ± 0.6	0.23 ± 0.12	0.27 ± 0.01
10/89	450S*	3.5 ± 1.5	7.0 ± 4.0	0.44 ± 0.16	0.27 ± 0.01
10/89	550N	3.7 ± 0.3	5.7 ± 1.5	0.53 ± 0.03	0.28 ± 0.01
10/89	750N	7.3 ± 1.9	23.3 ± 7.4	0.68 ± 0.09	0.24 ± 0.02
10/89	750S	4.7 ± 0.3	10.0 ± 1.5	0.61 ± 0.04	0.27 ± 0.01
10/89	1000N	5.3 ± 1.2	49.0 ± 13.4	0.44 ± 0.09	0.19 ± 0.01

* Replicate B excluded from station 450S.

Table G.24. General linear model analysis of variance for Romere Pass study site.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
* Number of Species (natural log transformed):					
Model	7	1.78	0.26	3.03	0.03
Error	15	1.27	0.08		
Corrected Total	22	3.05			
* Number of Individuals (natural log transformed):					
Model	7	11.54	1.65	8.43	0.0003
Error	15	2.93	0.20		
Corrected Total	22	14.47			
* Diversity (H'):					
Model	7	0.39	0.05	2.52	0.06
Error	15	0.31	0.02		
Corrected Total	22	0.68			
* Evenness (J'):					
Model	7	0.02	0.00	5.31	0.004
Error	14	0.01	0.00		
Corrected Total	21	0.02			

* Cell sizes unequal; station 450S, Replicate B excluded.

Table G.25. Benthic community parameters for Empire Waterway study site. Number of replicates = 3. Values are mean ± standard error. [*Mediomastus* sp. has been clumped with *M. ambiseta*; *Nassarius* sp. has been clumped with *N. vibex*.]

Date	Station	Number of Species	Number of Individuals	Diversity (H')	Evenness (J')
11/89	1	7.0 ± 1.0	40.0 ± 2.9	0.65 ± 0.07	0.23 ± 0.01
11/89	2	17.3 ± 4.3	62.3 ± 21.7	0.94 ± 0.11	0.24 ± 0.02
11/89	3	12.0 ± 0.6	119.3 ± 18.8	0.75 ± 0.07	0.21 ± 0.02
11/89	4	6.7 ± 0.3	29.3 ± 10.0	0.67 ± 0.00	0.24 ± 0.01
11/89	6	16.3 ± 2.3	124.3 ± 27.1	0.92 ± 0.01	0.23 ± 0.01
11/89	7	12.3 ± 0.9	197.3 ± 55.1	0.70 ± 0.04	0.19 ± 0.01
11/89	8	11.0 ± 1.2	253.3 ± 67.2	0.63 ± 0.04	0.18 ± 0.01
11/89	9	14.7 ± 3.7	88.3 ± 28.3	0.80 ± 0.07	0.21 ± 0.01
11/89	10	16.7 ± 0.7	128.3 ± 21.9	0.65 ± 0.03	0.16 ± 0.01
11/89	11	13.7 ± 0.9	272.7 ± 35.2	0.61 ± 0.02	0.16 ± 0.00

Table G.26. General linear model analysis of variance for Empire Waterway study site, stations near discharge point.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (natural log transformed):					
Model	5	0.33	0.07	1.56	0.24
Error	12	0.51	0.04		
Corrected Total	17	0.84			
Number of Individuals (natural log transformed):					
Model	5	3.13	0.63	4.12	0.02
Error	12	1.82	0.15		
Corrected Total	17	4.95			
Diversity (H'): (natural log transformed):					
Model	5	0.07	0.01	9.61	0.0007
Error	12	0.02	0.00		
Corrected Total	17	0.09			
Evenness (J'):					
Model	5	0.01	0.00	12.94	0.0002
Error	12	0.00	0.00		
Corrected Total	17	0.01			

Table G.27. General linear model analysis of variance for Empire Waterway study site, stations near abandoned discharge.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Number of Species (natural log transformed):					
Model	4	1.94	0.48	7.97	0.004
Error	10	0.60	0.06		
Corrected Total	14	2.53			
Number of Individuals (natural log transformed):					
Model	4	5.14	1.29	6.09	0.01
Error	10	2.11	0.21		
Corrected Total	14	7.26			
Diversity (H') (natural log transformed):					
Model	4	0.07	0.02	4.30	0.03
Error	10	0.04	0.00		
Corrected Total	14	0.11			
Evenness (J'):					
Model	4	0.00	0.00	0.99	0.46
Error	10	0.00	0.00		
Corrected Total	14	0.00			

APPENDIX H

Chemical Constituents of Oyster Tissues

Table H.1. Hydrocarbon concentrations (ppm, lipid) in control, reference and oysters deployed in Pass Fourchon for 14 days in April 1990.

Analyte	CTRL Ctrl	PFR1 Ref	PFR2 Ref	PF0* 0†	PF200 200	PF400* 400	PF600N 600	PF800N 800	PF1000N 1,000
MDL	0.20	0.16	0.36	0.44	0.23	0.31	0.31	0.21	0.20
Naphthalene	0.40	0.50	0.40	0.88	0.90	0.70	0.32	0.32	0.20
C1-Naphthalenes	1.4	0.70	0.40	2.8	4.0	2.2	1.1	1.1	tr
C2-Naphthalenes	3.9	1.1	tr	21	15	8.7	6.0	4.9	3.3
C3-Naphthalenes	6.4	4.1	4.7	120	65	29	19	17	29
C4-Naphthalenes	5.0	3.8	12	160	100	50	46	19	53
C5-Naphthalenes	10	tr	tr	150	91	56	32	33	48
Acenaphthylene	tr	nd	nd	tr	tr	tr	nd	nd	nd
Acenaphthene	0.40	tr	nd	2.0	0.90	0.85	trc	0.30	nd
Fluorene	0.40	0.30	trc	2.4	1.2	1.2	0.70	0.70	0.70
C1-Fluorenes	tr	1.1	tr	7.4	4.8	2.5	1.7	2.3	4.6
C2-Fluorenes	1.4	2.0	1.8	34	19	10	8.2	9.2	16
C3-Fluorenes	1.8	3.6	3.1	39	29	18	12	10	17
Dibenzothiophene	tr	tr	nd	1.6	0.80	0.40	0.32	0.23	0.30
C1-Dibenzothiophenes	0.60	0.70	0.50	14	6.9	4.1	3.0	2.7	4.1
C2-Dibenzothiophenes	1.9	3.0	2.4	44	23	14	11	8.3	8.9
C3-Dibenzothiophenes	2.5	3.2	2.7	34	23	17	12	8.7	9.7
Phenanthrene	0.80	0.40	0.40	8.0	3.6	1.4	1.2	1.2	1.4
C1-Phenanthrenes	1.4	1.8	1.5	45	23	12	10	8.1	9.4
C2-Phenanthrenes	3.6	4.7	4.8	100	61	38	26	21	21
C3-Phenanthrenes	2.5	3.6	2.5	66	47	38	24	17	13
Anthracene	tr	tr	nd	1.5	0.40	tr	tr	tr	nd
Fluoranthene	1.8	1.6	1.2	19	8.2	4.7	3.4	3.2	2.5
Pyrene	1.9	1.2	0.90	14	6.2	4.0	3.0	2.8	2.1
Benz(a)anthracene	0.30	0.20	tr	4.4	2.0	0.90	0.70	0.40	0.60
Chrysene	7.5	0.50	trc	13	6.7	5.1	1.8	1.3	0.80
Total Parent PAH	14	4.7	2.9	66	33	19	11	10	8.6
Total Alkylated PAH	42	33	36	840	510	300	210	160	240
Total PAH	56	38	39	900	540	320	220	170	250
FFPI	0.64	0.82	0.86	0.84	0.87	0.86	0.88	0.87	0.89
Saturated Hydrocarbons									
Resolved	79	63	60	430	240	91	65	94	220
Unresolved	600	600	580	2,700	1,700	1,200	880	800	980
Total	680	660	640	3,100	1,900	1,300	940	890	1,200
Ratio Resolved/Total	0.12	0.10	0.09	0.14	0.13	0.07	0.07	0.11	0.18

Table H.2. Hydrocarbon concentrations (ppm, lipid) in control, reference and oysters deployed in Pass Fourchon for 27 days in May 1990.

Analyte	CTRL Ctrl	PFR1 Ref	PFR2 Ref	PF0 0†	PF200 200	PF400 400	PF600N 600	PF800N 800	PF1000N 1000
MDL	0.10	0.32	0.26	0.14	0.19	0.19	0.28	0.15	0.15
Naphthalene	tr	tr	tr	0.38	0.50	tr	0.40	0.33	0.39
C1-Naphthalenes	tr	tr	trc	1.1	2.2	nd	0.77	0.63	0.82
C2-Naphthalenes	nd	nd	nd	4.4	14	2.2	1.7	0.41	0.39
C3-Naphthalenes	nd	nd	nd	33	87	23	12	8.4	8.3
C4-Naphthalenes	nd	15	7.0	53	95	32	23	22	23
C5-Naphthalenes	nd	15	6.1	47	62	33	45	19	17
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	0.56	0.78	0.21	nd	nd	nd
Fluorene	nd	nd	nd	0.56	1.3	0.37	0.32	0.60	0.38
C1-Fluorenes	nd	tr	tr	1.7	5.1	6.3	2.4	tr	1.9
C2-Fluorenes	1.4	5.1	2.7	11	21	18	5.8	5.6	3.8
C3-Fluorenes	1.5	9.8	3.5	14	24	20	10	9.1	8.2
Dibenzothiophene	nd	nd	nd	tr	0.41	0.19	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	3.5	5.4	1.8	1.6	0.85	0.94
C2-Dibenzothiophenes	tr	tr	tr	10	18	8.5	7.6	4.3	5.8
C3-Dibenzothiophenes	0.87	tr	tr	12	15	9.2	7.7	6.0	7.4
Phenanthrene	0.20	tr	tr	0.97	2.3	0.54	0.45	0.41	0.98
C1-Phenanthrenes	nd	nd	nd	7.8	18	5.2	5.9	2.3	3.2
C2-Phenanthrenes	0.74	4.4	1.8	28	51	19	21	12	11
C3-Phenanthrenes	1.1	3.0	1.4	22	40	21	18	11	12
Anthracene	nd	nd	nd	0.20	0.47	nd	nd	nd	nd
Fluoranthene	0.55	2.1	0.84	5.6	7.4	3.3	3.2	2.0	1.9
Pyrene	0.46	1.5	0.63	4.3	6.0	2.8	2.8	1.8	1.7
Benz(a)anthracene	tr	0.44	nd	1.4	1.4	0.76	0.62	0.41	0.55
Chrysene	tr	0.78	tr	3.0	5.2	2.0	2.0	0.93	0.92
Total Parent PAH	1.2	4.8	1.5	17	26	10	9.8	6.5	6.8
Total Alkylated PAH	5.6	52	23	250	460	200	160	100	100
Total PAH	6.8	57	24	270	480	210	170	110	110
FFPI	0.72	0.61	0.69	0.86	0.88	0.88	0.86	0.86	0.87
Saturated Hydrocarbons									
Resolved	69	130	62	200	270	260	180	160	180
Unresolved	460	970	440	1,400	1,600	1,700	1,200	940	1,100
Total	530	1,100	500	1,600	1,900	2,000	1,400	1,100	1,300
Ratio Resolved/Total	0.13	0.12	0.12	0.13	0.14	0.13	0.13	0.15	0.14

Table H.3. Hydrocarbon concentrations (ppm, lipid) in control, reference and oysters deployed in Bayou Rigaud for 14 days in April 1990.

Analyte	CTRL Ctrl	PFR1 Ref	PFR2 Ref	BR2 250†	BR4 0	BR6 -250	BR7 -500	BR9 -850	BR11* -1100
MDL	0.20	0.16	0.36	0.25	0.33	0.16	0.14	0.10	0.20
Naphthalene	0.40	0.50	0.40	tr	tr	0.34	0.34	0.34	tr
C1-Naphthalenes	1.4	0.70	0.40	1.0	1.7	0.68	1.4	1.1	0.43
C2-Naphthalenes	3.9	1.1	tr	8.8	9.4	4.2	7.1	4.8	3.4
C3-Naphthalenes	6.4	4.1	4.7	56	68	27	44	24	28
C4-Naphthalenes	5.0	3.8	12	82	80	40	54	25	40
C5-Naphthalenes	10	tr	tr	83	66	36	57	19	37
Acenaphthylene	tr	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	0.40	tr	nd	nd	nd	tr	nd	tr	nd
Fluorene	0.40	0.30	trc	0.52	nd	0.50	0.60	0.26	tr
C1-Fluorenes	tr	1.1	tr	3.7	4.8	1.2	3.7	0.86	1.8
C2-Fluorenes	1.4	2.0	1.8	nd	13	8.2	15	4.5	7.4
C3-Fluorenes	1.8	3.6	3.1	6.8	16	5.5	12	3.8	14
Dibenzothiophene	tr	tr	nd	0.46	0.54	0.26	0.24	0.25	nd
C1-Dibenzothiophenes	0.60	0.70	0.50	5.0	3.4	2.1	2.7	2.3	1.7
C2-Dibenzothiophenes	1.9	3.0	2.4	14	11	6.1	7.6	5.6	4.5
C3-Dibenzothiophenes	2.5	3.2	2.7	11	9.6	4.3	5.8	3.5	4.3
Phenanthrene	0.80	0.40	0.40	1.7	1.8	1.1	1.4	1.1	0.71
C1-Phenanthrenes	1.4	1.8	1.5	9.5	9.0	5.3	6.0	4.4	3.6
C2-Phenanthrenes	3.6	4.7	4.8	17	14	7.8	11	8.3	8.6
C3-Phenanthrenes	2.5	3.6	2.5	9.7	13	4.1	7.4	4.4	4.4
Anthracene	tr	tr	nd	tr	nd	nd	nd	nd	nd
Fluoranthene	1.8	1.6	1.2	2.0	2.0	1.2	1.6	1.1	1.4
Pyrene	1.9	1.2	0.90	1.3	1.7	0.76	1.1	0.76	1.0
Benz(a)anthracene	0.30	0.20	tr	tr	0.42	tr	tr	tr	tr
Chrysene	7.5	0.50	trc	0.52	0.76	tr	tr	tr	0.47
Total Parent PAH	14	4.7	2.9	6.5	7.2	4.2	5.3	3.8	4.0
Total Alkylated PAH	42	33	36	310	320	150	240	110	160
Total PAH	56	38	39	310	330	160	240	120	160
FFPI	0.64	0.82	0.86	0.93	0.93	0.91	0.93	0.92	0.91
Saturated Hydrocarbons									
Resolved	79	63	60	530	630	220	260	230	110
Unresolved	600	600	580	1,500	1,700	780	1,100	770	650
Total	680	660	640	2,000	2,300	1,000	1,400	1,000	760
Ratio Resolved/Total	0.12	0.10	0.09	0.27	0.27	0.22	0.19	0.23	0.14

Table H.4. Hydrocarbon concentrations (ppm, lipid) in control, reference and oysters deployed in Bayou Rigaud for 27 days in May 1990.

Analyte	CTRL Ctrl	PFR1 Ref	PFR2 Ref	BR2 250†	BR4 0	BR6 -250	BR7 -500	BR9* -850	BR11 -1100
MDL	0.10	0.32	0.26	0.19	0.18	0.37	0.23	0.26	0.21
Naphthalene	tr	tr	tr	tr	tr	tr	0.28	tr	0.29
C1-Naphthalenes	tr	tr	trc	nd	nd	nd	tr	nd	0.30
C2-Naphthalenes	nd	nd	nd	tr	0.90	tr	0.23	tr	0.34
C3-Naphthalenes	nd	nd	nd	2.5	16	nd	2.7	tr	2.3
C4-Naphthalenes	nd	15	7.0	12	44	14	8.3	4.3	5.4
C5-Naphthalenes	nd	15	6.1	14	42	tr	9.9	tr	16
Acenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd	nd	nd	tr	nd	nd	nd
C1-Fluorenes	nd	tr	tr	1.5	tr	tr	tr	tr	tr
C2-Fluorenes	1.4	5.1	2.7	tr	10	4.1	1.9	tr	3.5
C3-Fluorenes	1.5	9.8	3.5	4.4	12	tr	3.9	3.9	4.1
Dibenzothiophene	nd	nd	nd	nd	nd	nd	nd	nd	nd
C1-Dibenzothiophenes	nd	nd	nd	0.58	1.4	tr	0.66	0.76	0.61
C2-Dibenzothiophenes	tr	tr	tr	4.1	7.1	2.1	5.1	4.2	3.4
C3-Dibenzothiophenes	0.87	tr	tr	6.9	9.8	2.6	7.1	6.2	3.9
Phenanthrene	0.20	tr	tr	tr	0.47	0.94	0.47	tr	0.49
C1-Phenanthrenes	nd	nd	nd	1.6	3.1	0.40	2.0	1.6	1.7
C2-Phenanthrenes	0.74	4.4	1.8	5.5	11	4.9	8.3	6.0	4.8
C3-Phenanthrenes	1.1	3.0	1.4	5.7	11	5.8	9.2	6.0	4.1
Anthracene	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	0.55	2.1	0.84	0.85	0.98	0.82	0.87	0.75	0.96
Pyrene	0.46	1.5	0.63	0.48	0.83	0.59	0.76	0.61	0.71
Benz(a)anthracene	tr	0.44	nd	tr	0.32	tr	0.32	tr	tr
Chrysene	tr	0.78	tr	tr	0.50	tr	0.55	0.57	0.52
Total Parent PAH	1.2	4.8	1.5	1.3	3.1	2.4	3.3	2.1	3.0
Total Alkylated PAH	5.6	52	23	59	170	34	59	43	50
Total PAH	6.8	57	24	60	170	36	63	45	53
FFPI	0.72	0.61	0.69	0.92	0.93	0.89	0.90	0.90	0.87
Saturated Hydrocarbons									
Resolved	69	130	62	340	300	220	370	120	120
Unresolved	460	970	440	1,100	1,200	1,100	1,600	860	860
Total	530	1,100	500	1,400	1,500	1,300	2,000	980	980
Ratio Resolved/Total	0.13	0.12	0.12	0.24	0.20	0.17	0.19	0.12	0.12

Table H.5. Trace metal concentrations (ppm, dry wt.) in oysters deployed in Pass Fourchon and Bayou Rigaud for 14 days in April 1990.

Analyte	CONTROL	PFR1	PFR2	PF0	PF200	PF400	PF600N	PF800N	PF1000N
Al	2,600	4,100	3,900	5,500	3,800	5,500	5,000	5,700	4,500
Cr	3.8	6.4	5.9	8.4	5.8	7.0	5.9	7.6	6.0
V	16	85	85	130	91	120	88	91	84
Ni	3.9	4.5	4.3	5.4	3.5	5.0	3.6	4.4	2.8
Cu	47	59	79	37	93	40	70	47	31
Zn	1,500	2,100	3,200	1,600	3,400	1,300	2,400	1,500	1,200
As	54	190	170	220	170	200	170	180	170
Cd	1.9	2.3	10	2.2	2.6	2.2	2.1	2.1	1.6
Ba	39	53	400	65	39	20	30	61	180
Hg	nd	0.49	0.19	nd	0.30	0.50	nd	nd	nd
Pb	0.66	0.15	0.84	0.63	0.49	0.45	0.32	0.44	0.40

Analyte	BR2	BR4	BR6	BR7	BR9	BR11
Al	5,100	4,000	6,600	6,300	5,300	4,400
Cr	7.0	8.1	14	12	10	8.5
V	80	160	300	280	230	220
Ni	2.8	4.0	8.5	8.7	3.9	16
Cu	39	61	36	33	52	71
Zn	2,000	2,100	1,600	1,200	1,600	3,000
As	160	310	500	450	340	310
Cd	2.4	2.1	3.1	2.4	3.3	4.2
Ba	18	38	6.1	33	61	11
Hg	nd	nd	0.23	0.40	0.77	nd
Pb	0.53	0.52	0.44	0.36	0.54	0.54

Table H.6. Trace metal concentrations (ppm, dry wt.) in oysters deployed in Pass Fourchon and Bayou Rigaud for 14 days in April 1990.

Analyte	CONTROL	PFR1	PFR2	PF0	PF200	PF400	PF600N	PF800N	PF1000N
Al	nd	nd	nd	130,000	110,000	nd	29,000	79,000	nd
Cr	180	270	190	100	88	85	nd	nd	58
V	520	770	640	310	310	32	nd	nd	24
Ni	450	560	540	230	180	1.1	nd	nd	nd
Cu	950	1,500	1,300	670	660	1,500	1,200	1,200	1,800
Zn	170	390	320	44	130	160	77	170	290
As	1,900	2,600	1,900	970	1,000	100	nd	nd	nd
Cd	32	110	69	42	34	69	1.9	30	9.6
Ba	170	190	250	62	110	96	nd	140	160
Hg	260	370	270	120	120	43	nd	10	120
Pb	35	44	37	25	21	7.2	nd	nd	7.6

Analyte	BR2	BR4	BR6	BR7	BR9	BR11
Al	14,000	110,000	73,000	95,000	nd	nd
Cr	nd	55	nd	nd	130	nd
V	nd	5.9	nd	nd	220	nd
Ni	nd	37	nd	nd	320	nd
Cu	810	2,000	1,500	1,300	2,800	1,000
Zn	160	230	180	130	540	93
As	nd	nd	nd	nd	400	nd
Cd	18	38	77	19	41	9.9
Ba	nd	170	nd	10	72	nd
Hg	nd	280	240	370	1,300	260
Pb	nd	nd	nd	nd	nd	nd

APPENDIX I

Chemical Analyses Quality Assurance/Quality Control

Table I.1. Volatile hydrocarbon concentrations (µg/l) detected in duplicate water sample analyses.

Analyte	EP 4/89	DUP	MEAN	%DIFF	CONOCO 5/89	DUP	MEAN	%DIFF	T-1 5/89	DUP	MEAN	%DIFF
Benzene	150	170	160	13%	2,800	3,200	3,000	13%	3,500	3,600	3,600	3%
Toluene	130	150	140	14%	1,200	1,400	1,300	15%	820	810	810	1%
Ethylbenzene	17	16	17	4%	41	51	46	21%	23	22	22	5%
Xylenes	69	75	72	8%	310	390	350	23%	190	170	180	11%
Isopropylbenzene	3.3	3.6	3.5	8%	3.6	4.4	4.0	19%	2.5	2.6	2.5	2%
n-Propylbenzene	2.8	2.5	2.6	10%	2.7	3.1	2.9	13%	2.8	2.8	2.8	1%
1,3,5-Trimethylbenzene	7.6	7.5	7.6	2%	11	13	12	19%	9.5	9.4	9.4	0%
1,2,4-Trimethylbenzene	15	14	14	3%	28	34	31	20%	22	21	21	4%
Naphthalene	27	25	26	6%	20	22	21	13%	13	13	13	1%
Total Volatiles	420	460	440	9%	4,400	5,100	4,800	15%	4,600	4,700	4,700	2%
			Ave=	8%			Ave=	17%			Ave=	3%

Analyte	EI 5/89	DUP	MEAN	%DIFF	PF-2 STATE 10/89	DUP	MEAN	%DIFF	RP-1 OCS 10/89	DUP	MEAN	%DIFF
Benzene	4,200	4,400	4,300	5%	580	590	590	2%	560	590	580	5%
Toluene	970	1,000	1,000	3%	190	190	190	0%	220	240	230	9%
Ethylbenzene	20	24	22	17%	11	12	11	4%	13	14	13	4%
Xylenes	160	190	170	18%	78	79	78	1%	96	110	100	14%
Isopropylbenzene	1.8	2.2	2.0	18%	1.8	1.5	1.6	15%	3.3	4.3	3.8	25%
n-Propylbenzene	1.6	1.9	1.7	19%	1.5	1.8	1.7	17%	1.6	2.2	1.9	32%
1,3,5-Trimethylbenzene	5.3	6.8	6.0	25%	3.3	3.5	3.4	6%	6.1	7.0	6.5	13%
1,2,4-Trimethylbenzene	12	16	14	24%	8.6	8.0	8.3	7%	9.6	10	10	9%
Naphthalene	13	15	14	10%	13	13	13	0%	10	13	12	26%
Total Volatiles	5,400	5,700	5,500	5%	890	900	900	1%	920	990	960	7%
			Ave=	16%			Ave=	6%			Ave=	15%

Table I.2. Volatile hydrocarbon concentrations (µg/l) detected in duplicate water sample analyses.

Analyte	PF-1 OCS 2/90	DUP	MEAN	%DIFF	T11 5/89	DUP	MEAN	%DIFF	EIA50 5/89	DUP	MEAN	%DIFF
Benzene	3,400	3,300	3,300	3%	nd	nd	nd	na	nd	nd	nd	na
Toluene	770	760	760	1%	nd	nd	nd	na	nd	nd	nd	na
Ethylbenzene	17	16	16	5%	nd	nd	nd	na	nd	nd	nd	na
Xylenes	120	120	120	0%	nd	nd	nd	na	nd	nd	nd	na
Isopropylbenzene	1.7	1.6	1.6	4%	nd	nd	nd	na	nd	nd	nd	na
n-Propylbenzene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
1,3,5-Trimethylbenzene	2.8	3.0	2.9	6%	nd	nd	nd	na	nd	nd	nd	na
1,2,4-Trimethylbenzene	7.4	5.6	6.5	28%	nd	nd	nd	na	nd	nd	nd	na
Naphthalene	11	11	11	4%	nd	nd	nd	na	nd	nd	nd	na
Total Volatiles	4,300	4,200	4,200	2%	nd	nd	nd	na	nd	nd	nd	na
			Ave=	6%								

Analyte	PF600N 10/89	DUP	MEAN	%DIFF	RP0 10/89	DUP	MEAN	%DIFF	PF400 2/90	DUP	MEAN	%DIFF
Benzene	0.17	0.43	0.30	87%	1.2	1.2	1.2	7%	12	23	18	60%
Toluene	0.14	0.11	0.13	24%	0.89	0.73	0.81	20%	6.5	12	9.0	56%
Ethylbenzene	nd	nd	nd	na	0.07	0.06	0.07	15%	0.42	0.72	0.57	52%
Xylenes	nd	nd	nd	na	0.47	0.43	0.45	9%	2.9	4.9	3.9	54%
Isopropylbenzene	nd	nd	nd	na	nd	nd	nd	na	0.09	0.14	0.12	43%
n-Propylbenzene	nd	nd	nd	na	nd	nd	nd	na	0.07	0.11	0.09	44%
1,3,5-Trimethylbenzene	nd	nd	nd	na	nd	nd	nd	na	0.13	0.21	0.17	47%
1,2,4-Trimethylbenzene	nd	nd	nd	na	0.11	0.07	0.09	44%	0.26	0.47	0.37	58%
Naphthalene	nd	nd	nd	na	0.10	0.08	0.09	22%	0.34	0.56	0.45	48%
Total Volatiles	0.31	0.54	0.43	53%	2.9	2.5	2.7	13%	23	42	32	58%
			Ave=	55%			Ave=	20%			Ave=	51%

Table I.3. Recoveries of spiked volatile and semivolatile hydrocarbons in near-bottom water samples.

Analyte	PF1000N 2/89	PF600S 10/89	PF900N 10/89	BR4 10/89	RP1000N 10/89	EP250E 11/89	EIA500 11/89	EW7 11/89	EW8 11/89	PF800N 2/90	BR2 2/90	BR6 2/90	Ave
Benzene	92%	91%	95%	103%	115%	100%	93%	90%	117%	100%	97%	101%	100%
Toluene	93%	94%	98%	105%	117%	99%	102%	95%	98%	104%	92%	85%	98%
Ethylbenzene	94%	96%	96%	104%	114%	103%	94%	99%	101%	106%	97%	105%	101%
Xylenes	88%	91%	92%	103%	114%	99%	95%	94%	101%	105%	95%	110%	99%
Isopropylbenzene	95%	95%	95%	103%	114%	102%	93%	99%	100%	107%	99%	116%	101%
n-Propylbenzene	95%	95%	97%	105%	114%	104%	96%	100%	101%	109%	101%	118%	103%
1,3,5-Trimethylbenzene	95%	94%	96%	104%	113%	102%	94%	100%	101%	110%	103%	119%	103%
1,2,4-Trimethylbenzene	93%	93%	97%	103%	113%	100%	94%	101%	103%	109%	102%	110%	101%
Naphthalene	107%	116%	117%	125%	129%	100%	104%	110%	117%	133%	111%	110%	115%
Average	95%	96%	98%	106%	116%	101%	96%	99%	104%	109%	100%	108%	

Analyte	PF1000N 2/89	BR11 2/89	EP0 4/89	PF800N 5/89	BR6 5/89	T1 5/89	BR4 10/89	EP250E 10/89	RP0 10/89	EW9 11/89	EIA250 11/89	BR6 2/90	Ave
d8-Naphthalene	89%	115%	66%	94%	42%	71%	57%	56%	56%	60%	35%	33%	64%
d10-Acenaphthene	113%	144%	86%	140%	56%	95%	75%	69%	73%	66%	43%	58%	85%
d10-Phenanthrene	116%	117%	102%	113%	61%	95%	99%	110%	105%	87%	75%	79%	97%
d12-Chrysene	117%	74%	97%	44%	49%	74%	94%	85%	77%	83%	60%	36%	74%
d12-Perylene	103%	58%	126%	83%	57%	65%	83%	90%	84%	82%	68%	74%	81%
Naphthalene	50%	87%	51%	100%	42%	64%	42%	41%	44%	49%	36%	23%	52%
Acenaphthylene	57%	81%	61%	112%	55%	88%	74%	69%	75%	72%	59%	54%	71%
Acenaphthene	58%	90%	75%	112%	54%	91%	71%	67%	71%	74%	59%	51%	73%
Fluorene	63%	93%	74%	127%	60%	83%	93%	89%	92%	86%	76%	75%	84%
Phenanthrene	68%	89%	83%	106%	57%	82%	97%	113%	103%	100%	102%	70%	89%
Anthracene	49%	68%	66%	93%	50%	69%	97%	101%	98%	89%	99%	68%	79%
Fluoranthene	63%	70%	84%	72%	51%	84%	87%	104%	81%	94%	100%	39%	77%
Pyrene	65%	73%	84%	72%	53%	81%	94%	103%	82%	98%	102%	39%	79%
Benz(a)anthracene	62%	50%	84%	44%	52%	73%	89%	84%	75%	90%	83%	31%	68%
Chrysene	59%	47%	78%	35%	45%	67%	93%	89%	76%	86%	80%	31%	65%
Benzo(b)fluoranthene	na	na	na	na	na	na	75%	87%	79%	90%	84%	44%	76%
Benzo(k)fluoranthene	117%	81%	183%	70%	68%	70%	74%	86%	75%	77%	75%	46%	85%
Benzo(a)pyrene	55%	42%	117%	84%	65%	65%	76%	78%	77%	85%	78%	56%	73%
Indeno(1,2,3-cd)pyrene	74%	90%	121%	172%	107%	117%	66%	83%	73%	93%	97%	145%	103%
Dibenz(a,h)anthracene	78%	74%	98%	192%	104%	113%	72%	88%	79%	93%	92%	141%	102%
Benzo(g,h,i)perylene	65%	64%	105%	120%	94%	97%	67%	80%	72%	86%	88%	159%	91%
Average	76%	80%	92%	99%	61%	82%	80%	84%	78%	83%	76%	64%	

Table I.4. Semivolatile hydrocarbon concentrations (µg/l) detected in duplicate produced water sample analyses.

Analyte	EXXON-POST				EXXON				CONOCO			
	2/89	DUP	MEAN	% DIFF	5/89	DUP	MEAN	% DIFF	5/89	DUP	MEAN	% DIFF
MDL	0.53	0.47	0.50		0.16	0.19	0.18		0.27	0.28	0.28	
Naphthalene	47	47	47	0%	43	42	43	2%	67	67	67	0%
C1-Naphthalenes	18	17	18	7%	17	17	17	1%	46	44	45	4%
C2-Naphthalenes	8.6	8.3	8.4	3%	15	14	14	7%	57	61	59	7%
C3-Naphthalenes	4.8	3.6	4.2	27%	11	11	11	7%	110	120	110	5%
C4-Naphthalenes	tr	tr	tr	na	2.2	2.2	2.2	0%	52	54	53	4%
C5-Naphthalenes	nd	nd	nd	na	tr	tr	tr	na	37	39	38	5%
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	0.23	0.24	0.23	4%	0.95	1.2	1.0	20%
Fluorene	0.80	0.70	0.75	13%	1.3	1.2	1.3	12%	3.3	3.5	3.4	6%
C1-Fluorenes	tr	tr	tr	na	2.6	2.0	2.3	26%	8.9	9.2	9.0	3%
C2-Fluorenes	nd	nd	nd	na	2.2	1.2	1.7	59%	11	13	12	17%
C3-Fluorenes	tr	tr	tr	na	tr	tr	tr	na	13	15	14	14%
Dibenzothiophene	tr	tr	tr	na	0.29	0.28	0.29	3%	0.70	0.74	0.72	5%
C1-Dibenzothiophenes	tr	tr	tr	na	0.36	0.33	0.35	9%	2.9	3.2	3.0	10%
C2-Dibenzothiophenes	nd	nd	nd	na	0.33	0.32	0.32	3%	5.8	6.3	6.1	8%
C3-Dibenzothiophenes	nd	nd	nd	na	0.20	0.20	0.20	0%	5.9	6.3	6.1	6%
Phenanthrene	1.1	1.0	1.1	na	2.1	1.8	1.9	12%	5.5	5.5	5.5	1%
C1-Phenanthrenes	trc	trc	trc	na	1.4	1.3	1.4	9%	9.4	9.0	9.2	5%
C2-Phenanthrenes	tr	tr	tr	na	0.89	0.92	0.90	3%	12	12	12	2%
C3-Phenanthrenes	nd	nd	nd	na	0.42	0.41	0.42	2%	8.6	9.1	8.8	5%
Anthracene	nd	nd	nd	na	nd	nd	nd	na	0.33	0.62	0.47	63%
Fluoranthene	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
Pyrene	nd	nd	nd	na	nd	nd	nd	na	tr	0.30	tr	na
Benz(a)anthracene	trc	tr	tr	na	0.33	0.26	0.29	25%	nd	nd	nd	na
Chrysene	nd	nd	nd	na	nd	nd	nd	na	0.77	0.94	0.86	20%
Benzo(b)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	49	49	49		48	46	47		79	80	79	
Total Alkylated PAH	32	29	30		54	51	52		380	400	390	
Total PAH	81	78	79		100	97	99		460	480	470	
FFPI	0.98	0.98	0.98		0.96	0.96	0.96		0.96	0.96	0.96	
Saturated Hydrocarbons												
Resolved	54	42	48	25%	160	100	130	46%	1,800	2,000	1,900	11%
Unresolved	56	46	51		140	120	130		2,700	3,000	2,900	
Total	110	88	99	22%	300	220	260	31%	4,500	5,000	4,800	10%
			Ave=	14%			Ave=	13%			Ave=	10%

Table I.5. Semivolatile hydrocarbon concentrations (µg/l) detected in duplicate produced water sample analyses.

Analyte	RP-1 OCS				EI				PF-1 OCS			
	10/89	DUP	MEAN	% DIFF	10/89	DUP	MEAN	% DIFF	2/90	DUP	MEAN	% DIFF
MDL	0.38	0.47	0.43		0.30	0.23	0.27		0.44	0.29	0.37	
Naphthalene	23	24	23	2%	81	86	84	7%	86	82	84	4%
C1-Naphthalenes	43	42	42	1%	83	100	91	19%	81	98	89	18%
C2-Naphthalenes	99	98	99	2%	56	80	68	35%	65	85	74	27%
C3-Naphthalenes	230	190	210	19%	87	130	110	37%	76	86	81	12%
C4-Naphthalenes	160	140	150	13%	46	72	59	45%	37	42	40	13%
C5-Naphthalenes	73	74	74	1%	21	39	30	61%	19	20	19	5%
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	0.59	0.65	0.62	10%	0.48	0.87	0.68	58%	nd	nd	nd	na
Fluorene	2.3	2.5	2.4	8%	0.46	0.93	0.70	68%	1.7	2.8	2.2	48%
C1-Fluorenes	8.5	9.5	9.0	11%	1.9	1.9	1.9	2%	4.1	7.1	5.6	53%
C2-Fluorenes	13	17	15	26%	1.8	4.6	3.2	87%	5.5	8.8	7.2	46%
C3-Fluorenes	10	13	11	20%	1.2	4.8	3.0	118%	4.1	5.8	4.9	35%
Dibenzothiophene	0.77	0.76	0.77	1%	0.35	0.28	0.32	22%	1.0	1.1	1.1	7%
C1-Dibenzothiophenes	6.7	8.2	7.4	20%	0.99	1.4	1.2	37%	1.8	2.8	1.8	56%
C2-Dibenzothiophenes	8.4	8.8	8.6	5%	trc	1.6	trc	na	2.4	3.0	2.7	21%
C3-Dibenzothiophenes	6.4	6.6	6.5	4%	trc	1.4	trc	na	tr	tr	tr	na
Phenanthrene	7.2	6.2	6.7	15%	1.5	1.7	1.6	10%	5.1	4.5	4.8	14%
C1-Phenanthrenes	28	27	27	2%	3.3	4.4	3.8	29%	9.3	9.0	9.2	3%
C2-Phenanthrenes	33	26	29	23%	3.2	5.3	4.2	50%	6.2	7.7	7.0	22%
C3-Phenanthrenes	18	13	16	31%	1.4	1.8	1.6	26%	2.5	2.3	2.4	9%
Anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Fluoranthene	0.88	0.95	0.92	8%	tr	tr	tr	na	nd	nd	nd	na
Pyrene	0.75	0.75	0.75	0%	tr	tr	tr	na	nd	nd	nd	na
Benz(a)anthracene	0.50	0.35	0.43	35%	trc	trc	trc	na	nd	nd	nd	na
Chrysene	0.71	0.87	0.79	20%	trc	trc	trc	na	nd	nd	nd	na
Benzo(b)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	37	37	37		84	90	87		94	91	92	
Total Alkylated PAH	730	670	700		310	440	370		310	380	340	
Total PAH	770	710	740		390	530	460		410	470	440	
FFPI	0.95	0.95	0.95		0.99	0.99	0.99		0.97	0.98	0.97	
Saturated Hydrocarbons												
Resolved	6,500	6,600	6,500	2%	3,900	4,600	4,200	16%	3,200	2,200	2,700	39%
Unresolved	12,000	10,000	11,000		4,900	4,400	4,700		2,400	1,800	2,100	
Total	18,000	17,000	18,000	8%	8,800	9,000	8,900	2%	5,600	4,000	4,800	33%
			Ave=	11%			Ave=	38%			Ave=	24%

Table I.6. Semivolatile hydrocarbon concentrations (µg/l) detected in duplicate near-bottom water sample analyses.

Analyte	PF400 2/89	DUP	MEAN	% DIFF	BR2 5/89	DUP	MEAN	% DIFF	EP0 4/89	DUP	MEAN	% DIFF
MDL	0.03	0.03	0.03		0.33	0.29	0.31		0.16	0.19	0.18	
Naphthalene	1.0	0.84	0.92	17%	nd	nd	nd	na	nd	nd	nd	na
C1-Naphthalenes	0.89	1.0	0.95	11%	nd	nd	nd	na	nd	nd	nd	na
C2-Naphthalenes	3.0	0.81	1.9	120%	nd	nd	nd	na	nd	nd	nd	na
C3-Naphthalenes	4.0	1.0	2.5	120%	nd	nd	nd	na	nd	nd	nd	na
C4-Naphthalenes	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na
C5-Naphthalenes	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthylene	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	0.15	0.03	0.09	133%	nd	nd	nd	na	nd	nd	nd	na
Fluorene	0.74	0.15	0.44	134%	nd	nd	nd	na	nd	nd	nd	na
C1-Fluorenes	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na
C2-Fluorenes	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na

Table I.7. Semivolatile hydrocarbon concentrations (µg/l) detected in duplicate near-bottom water sample analyses.

Analyte	PF600N 10/89	DUP	MEAN	% DIFF	EW7 11/89	DUP	MEAN	% DIFF	PF400 2/90	DUP	MEAN	% DIFF
MDL	0.04	0.03	0.04		0.07	0.06	0.07		0.04	0.05	0.04	
Naphthalene	nd	nd	nd	na	nd	nd	nd	na	0.72	0.78	0.75	8%
C1-Naphthalenes	nd	tr	tr	na	nd	nd	nd	na	0.96	1.06	1.0	10%
C2-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na	0.85	0.88	0.87	3%
C3-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na	1.6	1.6	1.6	0%
C4-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
C5-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
Fluorene	nd	nd	nd	na	nd	nd	nd	na	0.11	0.10	0.11	10%
C1-Fluorenes	nd	nd	nd	na	nd	nd	nd	na	0.21	tr	tr	na
C2-Fluorenes	nd	nd	nd	na	nd	nd	nd	na	0.18	tr	tr	na
C3-Fluorenes	nd	nd	nd	na	nd	nd	nd	na	0.16	tr	tr	na
Dibenzothiophene	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
C1-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na	0.04	tr	tr	na
C2-Dibenzothiophenes	tr	tr	tr	na	nd	nd	nd	na	tr	tr	tr	na
C3-Dibenzothiophenes	tr	tr	tr	na	nd	nd	nd	na	tr	tr	tr	na
Phenanthrene	nd	nd	nd	na	nd	nd	nd	na	0.10	0.11	0.11	10%
C1-Phenanthrenes	nd	nd	nd	na	nd	nd	nd	na	0.32	0.13	0.23	84%
C2-Phenanthrenes	tr	tr	tr	na	nd	nd	nd	na	0.36	0.33	0.35	9%
C3-Phenanthrenes	tr	tr	tr	na	nd	nd	nd	na	0.23	tr	0.23	na
Anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Fluoranthene	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
Pyrene	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
Benz(a)anthracene	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
Chrysene	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
Benzo(b)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	nd	nd	nd		nd	nd	nd		0.93	0.99	0.96	
Total Alkylated PAH	nd	tr	tr		nd	nd	nd		4.9	4.0	4.5	
Total PAH	nd	tr	tr		nd	nd	nd		5.8	5.0	5.4	
FFPI	na	na	na		na	na	na		0.94	0.96	0.95	
Saturated Hydrocarbons												
Resolved	3.2	3.5	3.4	9%	4.5	4.9	4.7	9%	29	37	33	24%
Unresolved	17	24	21		9.8	21	15		100	73	87	
Total	20	27	24	30%	14	26	20	57%	130	110	120	17%
			Ave=	19%			Ave=	33%			Ave=	17%

Table I.8. Hydrocarbon concentrations (ppm, lipid) in duplicate oyster samples deployed in Pass Fourchon.

Analyte	PF0 OYSI	DUP	MEAN	% DIFF	PF400 OYSI	DUP	MEAN	% DIFF
MDL	0.35	0.52	0.44		0.34	0.28	0.31	
Naphthalene	0.85	0.90	0.88	6%	0.90	0.50	0.70	57%
C1-Naphthalenes	2.6	2.9	2.8	11%	2.3	2.1	2.2	9%
C2-Naphthalenes	22	19	21	13%	8.5	8.9	8.7	5%
C3-Naphthalenes	120	120	120	0%	32	26	29	21%
C4-Naphthalenes	160	160	160	0%	45	55	50	20%
C5-Naphthalenes	150	150	150	0%	53	58	56	9%
Acenaphthylene	tr	tr	tr	na	tr	nd	tr	na
Acenaphthene	2.3	1.7	2.0	30%	0.70	1.0	0.85	35%
Fluorene	2.5	2.3	2.4	8%	1.1	1.2	1.2	9%
C1-Fluorenes	7.5	7.2	7.4	4%	2.2	2.7	2.5	20%
C2-Fluorenes	36	31	34	15%	11	9.7	10	13%
C3-Fluorenes	43	35	39	20%	16	20	18	22%
Dibenzothiophene	1.3	1.8	1.6	32%	0.40	0.40	0.40	0%
C1-Dibenzothiophenes	13	15	14	11%	4.4	3.8	4.1	15%
C2-Dibenzothiophenes	41	46	44	11%	15	13	14	14%
C3-Dibenzothiophenes	30	37	34	21%	18	16	17	12%
Phenanthrene	7.5	8.5	8.0	13%	1.5	1.3	1.4	14%
C1-Phenanthrenes	42	48	45	14%	13	11	12	14%
C2-Phenanthrenes	94	110	100	16%	40	36	38	11%
C3-Phenanthrenes	60	71	66	17%	38	37	38	3%
Anthracene	1.5	1.4	1.5	7%	tr	tr	tr	na
Fluoranthene	18	20	19	11%	4.8	4.6	4.7	4%
Pyrene	12	15	14	22%	4.0	3.9	4.0	3%
Benz(a)anthracene	4.1	4.6	4.4	11%	0.90	0.90	0.90	0%
Chrysene	12	14	13	15%	7.0	3.1	5.1	77%
Total Parent PAH	62	70	66		21	17	19	
Total Alkylated PAH	820	850	840		300	300	300	
Total PAH	880	920	900		320	320	320	
FFPI	0.84	0.84	0.84		0.87	0.88	0.87	
Saturated Hydrocarbons								
Resolved	340	520	430	42%	130	52	91	86%
Unresolved	2,200	3,200	2,700		1,500	950	1,200	
Total	2,500	3,700	3,100	39%	1,600	1,000	1,300	46%
			Ave=	15%			Ave=	21%

Table I.9. Hydrocarbon concentrations (ppm, lipid) in duplicate oyster samples deployed in Bayou Rigaud.

Analyte	BR11 OYSI	DUP	MEAN	% DIFF	BR9 OYSII	DUP	MEAN	% DIFF
MDL	0.18	0.21	0.20		0.36	0.15	0.26	
Naphthalene	0.27	tr	tr	na	tr	tr	tr	na
C1-Naphthalenes	0.30	0.56	0.43	60%	nd	nd	nd	na
C2-Naphthalenes	2.1	4.7	3.4	75%	tr	tr	tr	na
C3-Naphthalenes	19	37	28	64%	nd	2.9	tr	na
C4-Naphthalenes	37	43	40	15%	1.4	7.1	4.3	134%
C5-Naphthalenes	42	32	37	27%	tr	12	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na
Fluorene	nd	0.50	tr	na	nd	nd	nd	na
C1-Fluorenes	1.1	2.4	1.8	74%	tr	tr	tr	na
C2-Fluorenes	5.0	9.7	7.4	64%	4.7	tr	tr	na
C3-Fluorenes	11	16	14	37%	3.6	4.2	3.9	15%
Dibenzothiophene	nd	nd	nd	na	nd	nd	nd	na
C1-Dibenzothiophenes	2.0	1.3	1.7	44%	0.88	0.63	0.76	33%
C2-Dibenzothiophenes	4.3	4.6	4.5	7%	4.1	4.2	4.2	2%
C3-Dibenzothiophenes	4.7	3.9	4.3	19%	6.0	6.3	6.2	5%
Phenanthrene	0.63	0.78	0.71	21%	tr	0.19	tr	na
C1-Phenanthrenes	3.7	3.6	3.6	2%	1.3	2.0	1.6	40%
C2-Phenanthrenes	8.9	8.3	8.6	7%	5.7	6.3	6.0	10%
C3-Phenanthrenes	4.1	4.7	4.4	14%	4.6	7.3	6.0	45%
Anthracene	nd	nd	nd	na	nd	nd	nd	na
Fluoranthene	1.4	1.3	1.4	7%	0.88	0.61	0.75	36%
Pyrene	1.1	0.99	1.0	11%	0.68	0.54	0.61	23%
Benz(a)anthracene	tr	tr	tr	na	tr	0.23	tr	na
Chrysene	0.43	0.50	0.47	15%	0.61	0.53	0.57	14%
Total Parent PAH	3.8	4.1	4.0		2.2	2.1	2.1	
Total Alkylated PAH	150	170	160		32	53	43	
Total PAH	150	180	160		34	55	45	
FFPI	0.90	0.92	0.91		0.89	0.91	0.90	
Saturated Hydrocarbons								
Resolved	100	120	110	18%	120	120	120	0%
Unresolved	620	680	650		980	740	860	
Total	720	800	760	11%	1,100	860	980	24%
			Ave=	30%			Ave=	29%

Table I.10. Recoveries of spiked polynuclear aromatic hydrocarbons in oyster samples.

Analyte	PF400 OYS I	BR11 OYS I	BR9 OYS II	Average
d8-Naphthalene	31%	116%	167%	105%
d10-Acenaphthene	50%	152%	258%	153%
d10-Phenanthrene	48%	131%	320%	166%
d12-Chrysene	45%	98%	280%	141%
Naphthalene	19%	116%	91%	75%
Acenaphthylene	38%	101%	118%	86%
Acenaphthene	25%	140%	144%	103%
Fluorene	21%	131%	165%	106%
Phenanthrene	29%	105%	171%	102%
Anthracene	36%	95%	156%	95%
Fluoranthene	1%	75%	183%	86%
Pyrene	8%	72%	186%	88%
Benz(a)anthracene	32%	86%	183%	100%
Chrysene	-11%	80%	148%	72%
Average	27%	107%	184%	106%

Table I.11. Hydrocarbon concentrations (ppb, dry wt.) in field duplicate samples of sediments collected at Bayou Rigaud in October 1989 and February 1990 (*mean of replicate analyses of a single core sample).

Analyte	BR4 Oct. '89				BR9 Oct. '89				BR2 Feb. '90				BR6 Feb. '90			
	#1	#2*	MEAN	% DIFF	#1	#2	MEAN	% DIFF	#1	#2	MEAN	% DIFF	#1	#2	MEAN	% DIFF
MDL	14	13	14		10	11	11		10	10	10		7.9	7.2	7.6	
Naphthalene	tr	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na	14	17	16	19%
C1-Naphthalenes	26	42	34	47%	tr	tr	tr	na	tr	trc	tr	na	44	28	36	44%
C2-Naphthalenes	1,100	910	1,000	19%	19	tr	tr	na	110	150	130	31%	440	220	330	67%
C3-Naphthalenes	6,100	5,000	5,600	20%	370	tr	tr	na	1,100	1,100	1,100	0%	2,900	1,500	2,200	64%
C4-Naphthalenes	5,800	4,500	5,200	25%	840	490	670	53%	tr	nd	tr	na	150	nd	tr	na
C5-Naphthalenes	2,200	2,700	2,500	20%	1,000	510	760	65%	tr	710	tr	na	1,900	1,900	1,900	0%
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	tr	tr	na	nd	nd	nd	na
Acenaphthene	nd	55	tr	na	21	nd	tr	na	nd	nd	nd	na	nd	25	tr	na
Fluorene	48	71	60	39%	23	nd	tr	na	nd	37	tr	na	46	36	41	24%
C1-Fluorenes	150	180	170	18%	tr	tr	tr	na	tr	tr	tr	na	210	91	150	79%
C2-Fluorenes	590	500	550	17%	66	62	64	6%	410	340	380	19%	670	310	490	73%
C3-Fluorenes	320	400	360	22%	180	tr	tr	na	340	340	340	0%	720	320	520	77%
Dibenzothiophene	14	29	22	70%	14	nd	tr	na	nd	nd	nd	na	14	nd	tr	na
C1-Dibenzothiophenes	85	81	83	5%	23	13	18	56%	tr	23	tr	na	210	65	140	104%
C2-Dibenzothiophenes	90	110	100	20%	180	tr	tr	na	tr	tr	tr	na	520	260	390	67%
C3-Dibenzothiophenes	tr	tr	tr	na	150	tr	tr	na	tr	tr	tr	na	400	160	280	86%
Phenanthrene	60	160	110	91%	180	31	110	141%	67	140	100	71%	110	73	92	40%
C1-Phenanthrenes	540	440	490	20%	220	tr	tr	na	180	250	220	33%	450	190	320	81%
C2-Phenanthrenes	610	850	730	33%	500	170	340	99%	330	400	370	19%	700	290	500	83%
C3-Phenanthrenes	490	420	460	15%	260	100	180	89%	180	270	230	40%	370	160	270	79%
Anthracene	42	64	53	42%	92	14	53	147%	12	15	14	22%	22	35	29	46%
Fluoranthene	130	180	160	32%	400	61	230	147%	72	140	110	64%	94	69	82	31%
Pyrene	130	130	130	0%	310	55	180	140%	60	92	76	42%	80	40	60	67%
Benzanthracene	71	77	74	8%	150	38	94	119%	41	62	52	41%	51	54	53	6%
Chrysene	120	140	130	15%	180	tr	tr	na	63	89	76	34%	78	110	94	34%
Benzo(b)fluoranthene	160	tr	tr	na	100	tr	tr	na	tr	38	tr	na	110	110	110	0%
Benzo(k)fluoranthene	tr	tr	tr	na	160	nd	tr	na	nd	tr	tr	na	tr	tr	tr	na
Benzo(a)pyrene	tr	nd	tr	na	120	nd	tr	na	nd	nd	nd	na	tr	tr	tr	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	tr	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	tr	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	780	910	740		1,800	200	670		320	610	430		620	570	580	
Total Alkylated PAH	18,000	16,000	17,000		3,800	1,300	2,000		2,600	3,600	2,800		9,700	5,500	7,700	
Total PAH	19,000	17,000	18,000		5,600	1,500	2,700		3,000	4,200	3,200		10,000	6,100	8,200	
FFPI	0.90	0.88	0.90		0.49	0.62	0.49		0.83	0.76	0.80		0.89	0.82	0.87	
Saturated Hydrocarbons																
Resolved	140,000	120,000	130,000	20%	16,000	11,000	14,000	37%	34,000	31,000	33,000	9%	30,000	37,000	34,000	21%
Unresolved	290,000	260,000	270,000		76,000	46,000	61,000		110,000	99,000	100,000		110,000	120,000	120,000	
Total	430,000	370,000	400,000	15%	92,000	57,000	75,000	47%	140,000	130,000	140,000	7%	140,000	160,000	150,000	13%
			average=	27%			average=	88%			average=	29%			average=	50%

Table I.12. Hydrocarbon concentrations (ppb, dry wt.) in field duplicate samples of surface sediments collected at Pass Fourchon and Romere Pass.

Analyte	PF800N Feb. '90				RP0 Oct. '89			
	#1	#2	MEAN	% DIFF	#1	#2	MEAN	% DIFF
MDL	9.0	9.7	9.4		9.5	8.1	8.8	
Naphthalene	tr	tr	tr	na	tr	nd	tr	na
C1-Naphthalenes	tr	trc	tr	na	14	nd	tr	na
C2-Naphthalenes	57	79	68	32%	27	nd	tr	na
C3-Naphthalenes	530	580	560	9%	tr	nd	tr	na
C4-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na
C5-Naphthalenes	160	nd	tr	na	250	nd	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na
Fluorene	17	trc	tr	na	tr	nd	tr	na
C1-Fluorenes	tr	68	tr	na	tr	nd	tr	na
C2-Fluorenes	130	330	230	87%	tr	nd	tr	na
C3-Fluorenes	300	200	250	40%	77	nd	tr	na
Dibenzothiophene	nd	nd	nd	na	tr	nd	tr	na
C1-Dibenzothiophenes	49	46	48	6%	nd	nd	nd	na
C2-Dibenzothiophenes	130	160	150	21%	tr	nd	tr	na
C3-Dibenzothiophenes	100	160	130	46%	tr	nd	tr	na
Phenanthrene	35	32	34	9%	21	tr	tr	na
C1-Phenanthrenes	150	170	160	13%	35	tr	tr	na
C2-Phenanthrenes	240	300	270	22%	200	tr	tr	na
C3-Phenanthrenes	90	150	120	50%	210	nd	tr	na
Anthracene	tr	15	tr	na	tr	nd	tr	na
Fluoranthene	47	47	47	0%	22	tr	tr	na
Pyrene	35	44	40	23%	24	tr	tr	na
Benz(a)anthracene	tr	tr	tr	na	10	tr	tr	na
Chrysene	26	51	39	65%	17	tr	tr	na
Benzo(b)fluoranthene	nd	nd	nd	na	13	tr	tr	na
Benzo(k)fluoranthene	nd	nd	nd	na	tr	nd	tr	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	160	190	160		110	tr	tr	
Total Alkylated PAH	1,900	2,200	2,000		810	tr	tr	
Total PAH	2,100	2,400	2,100		920	tr	tr	
FFPI	0.86	0.86	0.87		0.81	na	na	
Saturated Hydrocarbons								
Resolved	13,000	15,000	14,000	14%	3,000	430	1,700	150%
Unresolved	44,000	56,000	50,000		65,000	14,000	39,000	
Total	57,000	71,000	64,000	22%	68,000	14,000	41,000	132%
			average=	29%			average=	141%

Table I.13. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of surface sediment samples collected at Bayou Rigaud in February and May, 1989.

Analyte	BR10 Feb. '89				BR12 May '89			
		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF
MDL	44	36	40		48	47	48	
Naphthalene	tr	tr	tr	na	tr	tr	tr	na
C1-Naphthalenes	tr	trc	tr	na	tr	trc	tr	na
C2-Naphthalenes	tr	tr	tr	na	trc	tr c	tr	na
C3-Naphthalenes	600	520	560	14%	tr	tr	tr	na
C4-Naphthalenes	1,300	1,400	1,400	7%	370	tr	tr	na
C5-Naphthalenes	nd	tr	tr	na	nd	tr	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	trc	trc	tr	na
Fluorene	trc	trc	tr	na	trc	trc	tr	na
C1-Fluorenes	tr	tr	tr	na	nd	540	tr	na
C2-Fluorenes	tr	tr	tr	na	nd	tr	tr	na
C3-Fluorenes	220	200	210	10%	nd	tr	tr	na
Dibenzothiophene	tr	tr	tr	na	trc	trc	tr	na
C1-Dibenzothiophenes	48	50	49	4%	trc	tr	tr	na
C2-Dibenzothiophenes	tr	tr	tr	na	nd	tr	tr	na
C3-Dibenzothiophenes	tr	tr	tr	na	nd	tr	tr	na
Phenanthrene	47	49	48	4%	tr	83	tr	na
C1-Phenanthrenes	120	170	150	34%	tr	tr	tr	na
C2-Phenanthrenes	tr	350	tr	na	tr	tr	tr	na
C3-Phenanthrenes	tr	tr	tr	na	tr	tr	tr	na
Anthracene	tr	tr	tr	na	tr	55	tr	na
Fluoranthene	61	75	68	21%	62	91	77	38%
Pyrene	71	76	74	7%	54	85	70	44%
Benzanthracene	tr	tr	tr	na	tr	trc	tr	na
Chrysene	tr	tr	tr	na	tr	trc	tr	na
Benzo(b)fluoranthene	nd	nd	nd	na	nd	tr	tr	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	tr	tr	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	180	200	190		120	310	150	
Total Alkylated PAH	2,300	2,700	2,300		490	850	tr	
Total PAH	2,500	2,900	2,500		610	1,200	150	
FFPI	0.77	0.80	0.75		0.00	0.13	0.00	
Saturated Hydrocarbons								
Resolved	11,000	10,000	11,000	10%	6,400	6,400	6,400	0%
Unresolved	92,000	90,000	89,000		42,000	41,000	42,000	
Total	100,000	100,000	100,000	0%	48,000	47,000	48,000	0%
			average=	15%			average=	21%

Table I.14. Hydrocarbon concentrations (ppb, dry wt.) in replicate analyses and duplicate laboratory extracts of surface sediment samples collected at Bayou Rigaud in October 1989 and February 1990.

Analyte	BR4 #2 Feb. '89				BR11 Oct. '89				BR3 Feb. '90				BR10 Feb. '90			
		REP	MEAN	% DIFF		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF
MDL	13	13	13		7.7	8.2	8.0		16	16	16		9.8	12	11	
Naphthalene	tr	14	tr	na	trc	tr	tr	na	17	18	18	6%	tr	tr	tr	na
C1-Naphthalenes	41	43	42	5%	tr	tr	tr	na	38	62	50	48%	trc	trc	trc	na
C2-Naphthalenes	860	950	910	10%	tr	tr	tr	na	2,000	2,100	2,100	5%	50	70	60	33%
C3-Naphthalenes	4,900	5,000	5,000	2%	nd	nd	nd	na	8,900	9,300	9,100	4%	440	350	400	23%
C4-Naphthalenes	4,300	4,700	4,500	9%	91	tr	tr	na	8,700	6,700	7,700	26%	tr	740	tr	na
C5-Naphthalenes	2,100	3,300	2,700	44%	110	tr	tr	na	5,000	2,400	3,700	70%	nd	560	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	52	58	55	11%	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Fluorene	67	74	71	10%	nd	tr	tr	na	nd	nd	nd	na	trc	trc	trc	na
C1-Fluorenes	160	190	180	17%	tr	58	tr	na	240	550	400	78%	tr	tr	tr	na
C2-Fluorenes	460	530	500	14%	tr	tr	tr	na	1,100	760	930	37%	290	tr	tr	na
C3-Fluorenes	360	430	400	18%	tr	tr	tr	na	1,200	550	880	74%	160	160	160	0%
Dibenzothiophene	25	33	29	28%	nd	tr	tr	na	18	tr	tr	na	nd	nd	nd	na
C1-Dibenzothiophenes	82	80	81	2%	nd	nd	nd	na	84	140	110	47%	15	tr	tr	na
C2-Dibenzothiophenes	100	120	110	18%	tr	nd	tr	na	160	200	180	22%	tr	nd	tr	na
C3-Dibenzothiophenes	tr	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na	tr	nd	tr	na
Phenanthrene	170	150	160	13%	19	24	22	23%	32	45	39	34%	36	54	45	40%
C1-Phenanthrenes	450	430	440	5%	tr	tr	tr	na	510	530	520	4%	120	110	110	4%
C2-Phenanthrenes	940	750	850	22%	tr	tr	tr	na	970	920	950	5%	240	170	210	34%
C3-Phenanthrenes	500	330	420	41%	tr	tr	tr	na	540	360	450	40%	86	58	72	39%
Anthracene	68	60	64	13%	5.3	38	22	151%	45	53	49	16%	11	23	17	71%
Fluoranthene	200	150	180	29%	67	62	65	8%	94	110	100	16%	46	50	48	8%
Pyrene	140	110	130	24%	65	58	62	11%	60	65	63	8%	29	36	33	22%
Benzanthracene	73	81	77	10%	20	24	22	18%	90	tr	tr	na	tr	tr	tr	na
Chrysene	130	140	140	7%	20	130	75	147%	140	tr	tr	na	62	tr	tr	na
Benzo(b)fluoranthene	tr	nd	tr	na	tr	42	tr	na	97	tr	tr	na	tr	tr	tr	na
Benzo(k)fluoranthene	tr	nd	tr	na	tr	nd	nd	na	tr	tr	tr	na	tr	tr	tr	na
Benzo(a)pyrene	nd	nd	nd	na	tr	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	na	na	na	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	na	na	na	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	na	na	na	na
Total Parent PAH	930	870	910		200	380	270		590	290	270		180	160	140	
Total Alkylated PAH	15,000	17,000	16,000		200	58	tr		29,000	25,000	27,000		1,400	2,200	1,000	
Total PAH	16,000	18,000	17,000		400	440	270		30,000	25,000	27,000		1,600	2,400	1,200	
FFPI	0.88	0.89	0.88		0.05	0.03	0.04		0.94	0.96	0.96		0.80	0.79	0.82	
Saturated Hydrocarbons																
Resolved	120,000	110,000	120,000	9%	2,700	4,100	3,400	41%	120,000	140,000	130,000	15%	15,000	16,000	16,000	6%
Unresolved	250,000	260,000	260,000		33,000	37,000	36,000		360,000	390,000	380,000		63,000	66,000	65,000	
Total	370,000	370,000	370,000	0%	36,000	41,000	39,000	13%	480,000	530,000	510,000	10%	78,000	82,000	80,000	5%
			average=	15%			average=	52%			average=	28%			average=	24%

Table I.15. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of vertical sediment core sections collected at Bayou Rigaud in February 1989 (*these values used in data table).

Analyte	BR9					BR11				BR11			
	30-37 cm	DUP	REP	MEAN	% RSD	5-10 cm	DUP*	MEAN	% DIFF	15-20 cm	DUP	MEAN	% DIFF
MDL	5.1	7.1	19	10		7.8	12	9.9		7.2	8.6	7.9	
Naphthalene	200	190	180	190	5%	8.1	tr	tr	na	12	tr	tr	na
C1-Naphthalenes	650	700	630	660	5%	tr	tr	tr	na	10	tr	tr	na
C2-Naphthalenes	640	710	690	680	5%	12	tr	tr	na	26	trc	trc	na
C3-Naphthalenes	2,100	2,300	1,800	2,100	12%	nd	nd	nd	na	120	tr	tr	na
C4-Naphthalenes	3,200	2,400	3,300	3,000	17%	nd	260	tr	na	500	880	690	55%
C5-Naphthalenes	tr	2,000	2,500	2,300	16%	660	290	480	78%	930	1,100	1,000	17%
Acenaphthylene	nd	nd	nd	nd	na	10	nd	tr	na	nd	nd	nd	na
Acenaphthene	1,400	1,700	1,700	1,600	11%	nd	nd	nd	na	76	70	73	8%
Fluorene	1,300	1,500	1,500	1,400	8%	17	nd	tr	na	94	84	89	11%
C1-Fluorenes	180	240	160	190	22%	89	tr	tr	na	67	55	61	20%
C2-Fluorenes	390	350	620	450	32%	190	69	130	93%	80	87	84	8%
C3-Fluorenes	280	420	430	380	22%	130	100	120	26%	130	150	140	14%
Dibenzothiophene	120	150	150	140	12%	tr	nd	tr	na	tr	15	tr	na
C1-Dibenzothiophenes	130	140	130	130	4%	19	nd	tr	na	22	18	20	20%
C2-Dibenzothiophenes	390	500	400	430	14%	170	tr	tr	na	140	150	150	7%
C3-Dibenzothiophenes	330	410	380	370	11%	150	tr	tr	na	160	200	180	22%
Phenanthrene	1,700	1,900	1,900	1,800	6%	46	23	35	67%	140	100	120	33%
C1-Phenanthrenes	310	370	390	360	12%	139	tr	tr	na	36	25	30	37%
C2-Phenanthrenes	720	850	800	790	8%	540	160	350	109%	160	190	180	17%
C3-Phenanthrenes	540	780	620	650	19%	200	130	170	42%	180	150	170	18%
Anthracene	130	160	170	150	14%	120	nd	tr	na	32	22	27	37%
Fluoranthene	220	330	370	310	25%	700	64	380	166%	100	74	87	30%
Pyrene	130	230	220	190	28%	480	35	260	173%	81	50	66	47%
Benz(a)anthracene	36	76	90	67	42%	540	tr	tr	na	46	40	43	14%
Chrysene	70	130	170	120	41%	580	38	310	175%	60	51	56	16%
Benzo(b)fluoranthene	tr	150	130	140	10%	370	nd	tr	na	37	nd	tr	tr
Benzo(k)fluoranthene	nd	nd	tr	nd	na	300	nd	tr	na	46	nd	tr	tr
Benzo(a)pyrene	tr	tr	nd	tr	na	390	nd	tr	na	37	nd	tr	tr
Indeno(1,2,3-cd)pyrene	nd	nd	nd	nd	na	230	nd	tr	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	nd	na	180	nd	tr	na	nd	nd	nd	na
Total Parent PAH	5,300	6,500	6,600	6,100		4,000	160	980		760	510	560	
Total Alkylated PAH	9,900	12,000	13,000	12,000		2,300	1,000	1,200		2,600	3,000	2,700	
Total PAH	15,000	19,000	19,000	19,000		6,300	1,200	2,200		3,300	3,500	3,300	
FFPI	0.61	0.59	0.56	0.58		0.23	0.67	0.36		0.57	0.63	0.60	
Saturated Hydrocarbons													
Resolved	31,000	26,000	30,000	29,000	9%	3,600	3,000	3,300	18%	9,400	7,700	8,600	20%
Unresolved	170,000	160,000	160,000	160,000		45,000	48,000	47,000		82,000	79,000	80,000	
Total	200,000	190,000	190,000	190,000	3%	49,000	51,000	50,000	4%	91,000	87,000	89,000	4%
				average=	15%			average=	87%			average=	22%

Table I.16. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of vertical sediment core sections collected at Bayou Rigaud in February 1989.

Analyte	BR2				BR6				BR8			
	20-25 cm	DUP	MEAN	% DIFF	20-25 cm	DUP	MEAN	% DIFF	35-38 cm	DUP	MEAN	% DIFF
MDL	19	12	16		8.9	11	10		9.4	9.7	9.6	
Naphthalene	tr	tr	tr	na	tr	tr	tr	na	trc	tr	tr	na
C1-Naphthalenes	tr	nd	tr	na	nd	tr	tr	na	11	10	11	10%
C2-Naphthalenes	tr	nd	tr	na	tr	20	tr	na	26	78	52	99%
C3-Naphthalenes	150	180	170	18%	tr	nd	tr	na	1,200	1,500	1,400	22%
C4-Naphthalenes	790	1,000	900	23%	210	390	300	60%	2,600	2,700	2,700	4%
C5-Naphthalenes	1,200	1,700	1,500	34%	490	760	630	43%	2,300	2,500	2,400	8%
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	tr	tr	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na	nd	10	tr	na
Fluorene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
C1-Fluorenes	100	75	88	29%	41	nd	tr	na	49	95	72	64%
C2-Fluorenes	370	75	220	133%	98	92	95	6%	150	250	200	50%
C3-Fluorenes	330	410	370	22%	150	230	190	42%	290	260	280	11%
Dibenzothiophene	nd	nd	nd	na	nd	nd	nd	na	nd	14	tr	na
C1-Dibenzothiophenes	nd	20	tr	na	nd	27	tr	na	120	150	140	22%
C2-Dibenzothiophenes	220	240	230	9%	tr	150	tr	na	350	340	350	3%
C3-Dibenzothiophenes	480	400	440	18%	90	300	200	108%	270	240	260	12%
Phenanthrene	63	30	47	71%	26	48	37	59%	22	36	29	48%
C1-Phenanthrenes	35	27	31	26%	nd	86	tr	na	19	90	55	130%
C2-Phenanthrenes	550	450	500	20%	210	310	260	38%	380	420	400	10%
C3-Phenanthrenes	930	760	850	20%	140	370	260	90%	350	350	350	0%
Anthracene	tr	15	tr	na	12	tr	tr	na	21	28	25	29%
Fluoranthene	170	160	170	6%	83	120	100	36%	62	66	64	6%
Pyrene	170	tr	tr	na	60	95	78	45%	46	43	45	7%
Benz(a)anthracene	36	45	41	22%	79	68	74	15%	46	70	58	41%
Chrysene	480	76	280	145%	98	82	90	18%	100	130	120	26%
Benzo(b)fluoranthene	51	46	49	10%	59	56	58	5%	tr	27	tr	na
Benzo(k)fluoranthene	78	36	57	74%	82	50	66	48%	tr	nd	tr	na
Benzo(a)pyrene	nd	nd	nd	na	nd	69	tr	na	tr	nd	tr	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	1,000	410	640		500	590	500		300	420	340	
Total Alkylated PAH	5,200	5,300	5,200		1,400	2,700	1,900		8,100	9,000	8,500	
Total PAH	6,200	5,700	5,900		1,900	3,300	2,400		8,400	9,400	8,800	
FFPI	0.70	0.84	0.78		0.48	0.67	0.60		0.90	0.88	0.89	
Saturated Hydrocarbons												
Resolved	13,000	10,000	12,000	26%	13,000	9,600	11,000	30%	37,000	37,000	37,000	0%
Unresolved	140,000	120,000	130,000		97,000	120,000	110,000		200,000	190,000	200,000	
Total	150,000	130,000	140,000	14%	110,000	130,000	120,000	17%	240,000	230,000	240,000	4%
			average=	38%			average=	41%			average=	28%

Table I.17. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of vertical sediment core sections collected at Bayou Rigaud in February 1990.

Analyte	BR6				BR8				BR9			
	5-10 cm	DUP	MEAN	% DIFF	10-15 cm	DUP	MEAN	% DIFF	30-34 cm	DUP	MEAN	% DIFF
MDL	15	17	16		10	10	10		11	31	21	
Naphthalene	tr	tr	tr	na	tr	tr	tr	na	19	38	29	67%
C1-Naphthalenes	tr	tr	tr	na	tr	tr	tr	na	130	170	150	27%
C2-Naphthalenes	tr	23	tr	na	30	24	27	22%	1,100	1,100	1,100	0%
C3-Naphthalenes	300	950	630	104%	580	400	490	37%	5,000	5,100	5,100	2%
C4-Naphthalenes	1,500	1,700	1,600	13%	1,400	640	1,000	75%	4,900	5,100	5,000	4%
C5-Naphthalenes	1,000	1,200	1,100	18%	1,600	900	1,300	56%	3,100	4,200	3,700	30%
Acenaphthylene	nd	20	tr	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	nd	22	tr	na	34	nd	tr	na
Fluorene	nd	23	tr	na	21	tr	tr	na	75	83	79	10%
C1-Fluorenes	tr	nd	tr	na	nd	tr	tr	na	370	tr	tr	na
C2-Fluorenes	110	tr	tr	na	260	320	290	21%	670	890	780	28%
C3-Fluorenes	tr	88	tr	na	tr	310	tr	na	490	790	640	47%
Dibenzothiophene	tr	tr	tr	na	17	tr	tr	na	30	46	38	42%
C1-Dibenzothiophenes	36	50	43	33%	47	40	44	16%	290	410	350	42%
C2-Dibenzothiophenes	220	240	230	9%	200	93	150	73%	480	780	630	48%
C3-Dibenzothiophenes	210	300	260	35%	140	tr	tr	na	530	730	630	32%
Phenanthrene	17	38	28	76%	48	19	34	87%	160	190	180	17%
C1-Phenanthrenes	61	69	65	12%	130	69	100	62%	590	910	750	17%
C2-Phenanthrenes	260	560	410	73%	310	180	250	53%	710	1,600	1,200	77%
C3-Phenanthrenes	300	400	350	29%	170	tr	tr	na	500	610	560	20%
Anthracene	33	54	44	48%	32	tr	tr	na	35	nd	tr	na
Fluoranthene	130	330	230	87%	110	37	74	99%	150	90	120	50%
Pyrene	100	280	190	95%	83	29	56	96%	140	92	120	41%
Benz(a)anthracene	71	170	120	82%	140	tr	tr	na	620	tr	tr	na
Chrysene	110	230	170	71%	290	tr	tr	na	630	tr	tr	na
Benzo(b)fluoranthene	nd	170	tr	na	560	nd	tr	na	1,300	nd	tr	na
Benzo(k)fluoranthene	nd	75	tr	na	120	nd	tr	na	tr	nd	tr	na
Benzo(a)pyrene	nd	140	tr	na	tr	nd	tr	na	690	nd	tr	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	130	nd	tr	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	400	nd	tr	na
Total Parent PAH	460	1,500	780		1,400	110	160		4,400	540	560	
Total Alkylated PAH	4,000	5,600	4,700		4,900	3,000	3,600		19,000	22,000	20,000	
Total PAH	4,500	7,100	5,500		6,300	3,100	3,800		23,000	23,000	21,000	
FFPI	0.74	0.63	0.71		0.52	0.86	0.84		0.67	0.93	0.93	
Saturated Hydrocarbons												
Resolved	14,000	20,000	17,000	35%	13,000	12,000	13,000	8%	110,000	92,000	100,000	18%
Unresolved	86,000	120,000	100,000		75,000	47,000	61,000		350,000	370,000	360,000	
Total	100,000	140,000	120,000	33%	88,000	59,000	74,000	39%	460,000	460,000	460,000	0%
			average=	50%			average=	53%			average=	29%

Table I.18. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of surface sediment samples collected at Pass Fourchon (*these values used in data table).

Analyte	PF1200NE May '89				PF600S May '89				PF800N Oct '89				PF1000N Feb '90			
		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF		DUP*	MEAN	% DIFF
MDL	21	6.2	14		17	13	15		15	10	13		3.8	4.1	4.0	
Naphthalene	nd	trc	tr	na	tr	tr	tr	na	tr	tr	tr	na	nd	tr	tr	na
C1-Naphthalenes	nd	nd	nd	na	tr	tr	tr	na	tr	trc	tr	na	tr	tr	tr	na
C2-Naphthalenes	trc	10	tr	na	19	49	34	88%	140	170	160	19%	2,300	78	1,200	187%
C3-Naphthalenes	nd	nd	nd	na	trc	tr	tr	na	1,300	1,700	1,500	27%	9,400	220	4,800	191%
C4-Naphthalenes	nd	tr	tr	na	tr	nd	tr	na	2,200	2,600	2,400	17%	nd	nd	nd	na
C5-Naphthalenes	nd	tr	tr	na	tr	390	tr	na	1,900	2,000	2,000	5%	nd	tr	tr	na
Acenaphthylene	nd	trc	tr	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	trc	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na	360	20	190	179%
Fluorene	trc	trc	trc	na	nd	nd	nd	na	nd	14	tr	na	280	21	150	172%
C1-Fluorenes	tr	tr	tr	na	tr	tr	tr	na	tr	170	tr	na	1,200	tr	tr	na
C2-Fluorenes	nd	tr	tr	na	130	tr	tr	na	130	270	200	70%	1,500	110	810	173%
C3-Fluorenes	nd	tr	tr	na	120	tr	tr	na	260	340	300	27%	2,400	120	1,300	181%
Dibenzothiophene	nd	trc	tr	na	nd	nd	nd	na	nd	nd	nd	na	5.6	6.6	6.1	16%
C1-Dibenzothiophenes	nd	tr	tr	na	tr	24	tr	na	41	29	35	34%	24	10	17	82%
C2-Dibenzothiophenes	nd	nd	nd	na	71	100	86	34%	tr	tr	tr	na	65	64	65	2%
C3-Dibenzothiophenes	nd	nd	nd	na	210	190	200	10%	nd	nd	nd	na	50	94	72	61%
Phenanthrene	tr	15	tr	na	22	44	33	67%	20	22	21	10%	38	64	51	51%
C1-Phenanthrenes	nd	tr	tr	na	28	50	39	56%	250	210	230	17%	77	85	81	10%
C2-Phenanthrenes	nd	tr	tr	na	360	270	320	29%	340	370	360	8%	30	140	85	129%
C3-Phenanthrenes	nd	tr	tr	na	470	360	420	27%	490	170	330	97%	50	92	71	59%
Anthracene	nd	nd	nd	na	nd	tr	tr	na	nd	nd	nd	na	9.1	20	15	75%
Fluoranthene	56	65	61	15%	92	110	100	18%	37	29	33	24%	53	97	75	59%
Pyrene	44	53	49	19%	90	89	90	1%	34	26	30	27%	42	96	69	78%
Benz(a)anthracene	tr	11	tr	na	40	41	41	2%	tr	tr	tr	na	32	37	35	14%
Chrysene	tr	13	tr	na	80	72	76	11%	tr	tr	tr	na	30	45	38	40%
Benzo(b)fluoranthene	nd	tr	tr	na	32	tr	tr	na	nd	nd	nd	na	76	32	54	81%
Benzo(k)fluoranthene	nd	nd	nd	na	tr	nd	tr	na	nd	nd	nd	na	nd	14	tr	na
Benzo(a)pyrene	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na	nd	23	tr	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	19	tr	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	100	160	110		360	360	340		91	91	84		930	500	680	
Total Alkylated PAH	tr	10	tr		1,400	1,400	1,100		7,000	8,000	7,500		17,000	1,000	8,500	
Total PAH	100	170	110		1,800	1,800	1,400		7,100	8,100	7,600		18,000	1,500	9,100	
FFPI	0.00	0.10	0.00		0.76	0.74	0.76		0.92	0.93	0.93		0.93	0.61	0.90	
Saturated Hydrocarbons																
Resolved	nd	1,300	tr	na	6,700	6,600	6,700	2%	22,000	19,000	21,000	15%	41,000	50,000	46,000	20%
Unresolved	nd	3,100	tr		110,000	100,000	110,000		140,000	120,000	130,000		79,000	110,000	95,000	
Total	nd	4,400	tr	na	120,000	110,000	120,000	9%	160,000	140,000	150,000	13%	120,000	160,000	140,000	29%
			average=	17%			average=	22%			average=	27%			average=	86%

Table I.19. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of vertical sediment core sections collected at Pass Fourchon in February 1989.

Analyte	PF600S				PF600S				PF900N				PF1000N			
	2-5 cm	DUP	MEAN	% DIFF	30-35 cm	DUP	MEAN	% DIFF	15-20 cm	DUP	MEAN	% DIFF	2-5 cm	DUP	MEAN	% DIFF
MDL	31	15	23		9.7	4.8	7.3		4.9	5.1	5.0		7.0	6.9	7.0	
Naphthalene	nd	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na	11	tr	tr	na
C1-Naphthalenes	nd	nd	nd	na	tr	tr	tr	na	trc	trc	trc	na	21	trc	trc	na
C2-Naphthalenes	tr	tr	tr	na	tr	14	tr	na	trc	tr	tr	na	8	trc	trc	na
C3-Naphthalenes	tr	450	tr	na	nd	170	tr	na	nd	nd	nd	na	nd	nd	nd	na
C4-Naphthalenes	610	nd	tr	na	1,200	260	730	129%	tr	tr	tr	na	tr	tr	tr	na
C5-Naphthalenes	880	730	810	19%	1,700	1,100	1,400	43%	tr	78	tr	na	tr	tr	tr	na
Acenaphthylene	nd	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	32	tr	na	46	40	43	14%	8.2	tr	tr	na	nd	nd	nd	na
Fluorene	nd	nd	nd	na	22	17	20	26%	9.1	trc	trc	na	tr	trc	tr	na
C1-Fluorenes	nd	tr	tr	na	tr	44	tr	na	tr	nd	tr	na	tr	tr	tr	na
C2-Fluorenes	tr	tr	tr	na	190	48	120	119%	tr	tr	tr	na	tr	tr	tr	na
C3-Fluorenes	370	410	390	10%	340	170	260	67%	nd	nd	nd	na	tr	37	tr	na
Dibenzothiophene	nd	nd	nd	na	nd	nd	nd	na	tr	tr	tr	na	nd	nd	nd	na
C1-Dibenzothiophenes	nd	nd	nd	na	nd	13	tr	na	nd	nd	nd	na	nd	tr	tr	na
C2-Dibenzothiophenes	nd	nd	nd	na	130	110	120	17%	nd	nd	nd	na	nd	nd	nd	na
C3-Dibenzothiophenes	nd	nd	nd	na	210	130	170	47%	nd	nd	nd	na	nd	nd	nd	na
Phenanthrene	tr	23	tr	na	30	15	23	67%	91	68	79	29%	23	46	35	67%
C1-Phenanthrenes	nd	53	tr	na	nd	26	tr	na	34	20	27	52%	tr	47	tr	na
C2-Phenanthrenes	450	610	530	30%	300	260	280	14%	24	27	26	12%	tr	60	tr	na
C3-Phenanthrenes	420	1,000	710	82%	280	260	270	7%	31	22	27	34%	tr	tr	tr	na
Anthracene	nd	19	tr	na	16	14	15	13%	24	20	22	20%	tr	11	tr	na
Fluoranthene	160	140	150	13%	70	55	63	24%	250	190	220	27%	55	140	98	87%
Pyrene	140	150	150	7%	51	41	46	22%	250	170	210	38%	53	120	87	77%
Benz(a)anthracene	tr	75	tr	na	52	39	46	29%	110	64	87	53%	24	35	30	37%
Chrysene	tr	110	tr	na	87	73	80	18%	90	79	84	12%	27	120	74	127%
Benzo(b)fluoranthene	nd	nd	nd	na	nd	31	tr	na	100	140	120	33%	nd	190	tr	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na	nd	190	tr	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na	47	65	56	32%	nd	tr	tr	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	30	nd	tr	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na	nd	nd	nd	na
Total Parent PAH	300	550	300		370	330	330		1,000	800	880		190	850	320	
Total Alkylated PAH	2,700	3,300	2,400		4,400	2,600	3,300		89	150	80		28	140	tr	
Total PAH	3,000	3,800	2,700		4,700	2,900	3,700		1,100	940	960		220	1,000	320	
FFPI	0.74	0.79	0.81		0.72	0.75	0.73		0.11	0.11	0.11		0.23	0.11	0.05	
Saturated Hydrocarbons																
Resolved	8,200	10,000	9,100	20%	5,400	7,600	6,500	34%	1,500	740	1,100	68%	1,100	1,200	1,200	9%
Unresolved	190,000	160,000	180,000		88,000	89,000	89,000		7,000	8,100	7,600		2,500	4,600	3,600	
Total	200,000	170,000	190,000	16%	93,000	97,000	95,000	4%	8,500	8,800	8,700	3%	3,600	5,800	4,700	47%
			average=	25%			average=	38%			average=	32%			average=	64%

Table I.20. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of vertical sediment core sections collected at Pass Fourchon in February 1990.

Analyte	PF400N				PF600N				PF600S			
	5-10 cm	DUP	MEAN	% DIFF	15-20 cm	DUP	MEAN	% DIFF	25-30 cm	DUP	MEAN	% DIFF
MDL	54	53	54		21	23	22		12	9.0	11	
Naphthalene	nd	nd	nd	na	nd	nd	nd	na	nd	tr	tr	na
C1-Naphthalenes	nd	nd	nd	na	tr	32	tr	na	nd	nd	nd	na
C2-Naphthalenes	1,900	2,000	2,000	5%	1,800	1,700	1,800	6%	nd	nd	nd	na
C3-Naphthalenes	13,000	14,000	14,000	7%	9,000	8,700	8,900	3%	nd	nd	nd	na
C4-Naphthalenes	16,000	13,000	15,000	21%	5,300	3,500	4,400	41%	tr	tr	tr	na
C5-Naphthalenes	13,000	14,000	14,000	7%	8,000	7,300	7,700	9%	tr	210	tr	na
Acenaphthylene	tr	55	tr	na	nd	32	tr	na	nd	nd	nd	na
Acenaphthene	100	120	110	19%	53	nd	tr	na	nd	nd	nd	na
Fluorene	56	130	93	80%	170	190	180	11%	nd	nd	nd	na
C1-Fluorenes	1,100	950	1,000	15%	590	920	760	44%	nd	nd	nd	na
C2-Fluorenes	3,000	3,600	3,300	18%	1,800	1,700	1,800	6%	50	nd	tr	na
C3-Fluorenes	2,400	2,000	2,200	18%	1,800	730	1,300	85%	nd	63	tr	na
Dibenzothiophene	nd	nd	nd	na	76	tr	tr	na	nd	nd	nd	na
C1-Dibenzothiophenes	350	640	500	59%	400	260	330	42%	nd	nd	nd	na
C2-Dibenzothiophenes	990	1,200	1,100	19%	710	450	580	45%	nd	nd	nd	na
C3-Dibenzothiophenes	920	790	860	15%	600	240	420	86%	54	tr	tr	na
Phenanthrene	nd	nd	nd	na	55	76	65	32%	nd	tr	tr	na
C1-Phenanthrenes	1,200	1,300	1,300	8%	1,200	900	1,100	29%	nd	nd	nd	na
C2-Phenanthrenes	2,700	3,400	3,100	23%	1,700	1,300	1,500	27%	nd	nd	nd	na
C3-Phenanthrenes	1,800	1,500	1,700	18%	630	340	490	60%	110	tr	tr	na
Anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Fluoranthene	110	100	110	10%	58	53	55	9%	73	49	61	39%
Pyrene	92	110	100	18%	46	43	44	7%	98	68	83	36%
Benz(a)anthracene	tr	tr	tr	na	tr	tr	tr	na	42	21	32	67%
Chrysene	250	290	270	15%	88	29	58	100%	33	35	34	6%
Benzo(b)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	tr	50	tr	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	610	800	680		540	420	400		250	220	210	
Total Alkylated PAH	58,000	58,000	58,000		34,000	28,000	31,000		210	270	tr	
Total PAH	59,000	59,000	59,000		34,000	29,000	31,000		460	500	210	
FFPI	0.95	0.94	0.95		0.94	0.94	0.94		0.40	0.00	0.00	
Saturated Hydrocarbons												
Resolved	170,000	130,000	150,000	27%	57,000	67,000	62,000	16%	2,700	2,100	2,400	25%
Unresolved	930,000	840,000	850,000		280,000	290,000	290,000		52,000	44,000	49,000	
Total	1,100,000	970,000	1,000,000	13%	340,000	360,000	350,000	6%	55,000	46,000	51,000	18%
			average=	21%			average=	33%			average=	32%

Table I.21. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of surface sediment samples collected at Eugene Island.

Analyte	EIA100 May '89				EIB300 Nov '89			
		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF
MDL	20	15	18		8.8	14	11	
Naphthalene	tr	tr	tr	na	9.3	trc	tr	na
C1-Naphthalenes	trc	trc	trc	na	trc	trc	tr	na
C2-Naphthalenes	tr	trc	tr	na	24	trc	tr	na
C3-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na
C4-Naphthalenes	nd	nd	nd	na	nd	tr	tr	na
C5-Naphthalenes	nd	nd	nd	na	nd	tr	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na
Fluorene	nd	trc	tr	na	nd	nd	nd	na
C1-Fluorenes	nd	nd	nd	na	nd	tr	tr	na
C2-Fluorenes	nd	nd	nd	na	nd	nd	nd	na
C3-Fluorenes	nd	tr	tr	na	tr	tr	tr	na
Dibenzothiophene	nd	tr	tr	na	nd	nd	nd	na
C1-Dibenzothiophenes	nd	nd	nd	na	tr	nd	tr	na
C2-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na
C3-Dibenzothiophenes	nd	nd	nd	na	tr	tr	tr	na
Phenanthrene	tr	17	tr	na	23	14	19	49%
C1-Phenanthrenes	nd	trc	tr	na	trc	nd	tr	na
C2-Phenanthrenes	tr	nd	tr	na	tr	nd	tr	na
C3-Phenanthrenes	tr	nd	tr	na	tr	nd	tr	na
Anthracene	nd	tr	tr	na	tr	nd	tr	na
Fluoranthene	23	23	23	0%	22	19	21	15%
Pyrene	20	24	22	18%	20	21	21	5%
Benz(a)anthracene	tr	21	tr	na	trc	tr	tr	na
Chrysene	tr	18	tr	na	trc	tr	tr	na
Benzo(b)fluoranthene	nd	tr	tr	na	nd	nd	nd	na
Benzo(k)fluoranthene	nd	tr	tr	na	nd	nd	nd	na
Benzo(a)pyrene	nd	17	tr	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	43	120	45		74	54	60	
Total Alkylated PAH	tr	tr	tr		24	tr	tr	
Total PAH	43	120	45		98	54	60	
FFPI	0.00	0.07	0.00		0.46	0.13	0.16	
Saturated Hydrocarbons								
Resolved	1,200	2,000	1,600	50%	3,300	2,400	2,900	32%
Unresolved	6,800	9,000	7,900		21,000	23,000	22,000	
Total	8,000	11,000	9,500	32%	24,000	25,000	25,000	4%
			average=	25%			average=	21%

Table I.22. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of vertical sediment core sections collected at Eugene Island in May 1989.

Analyte	EIA50 2-5 cm	DUP	MEAN	% DIFF	EIA50 25-31 cm	DUP	MEAN	% DIFF
MDL	14	11	13		14	8.8	11	
Naphthalene	15	18	17	18%	tr	11	tr	na
C1-Naphthalenes	110	130	120	17%	trc	27	trc	na
C2-Naphthalenes	tr	trc	tr	na	nd	22	tr	na
C3-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na
C4-Naphthalenes	nd	340	tr	na	tr	tr	tr	na
C5-Naphthalenes	200	270	240	30%	tr	tr	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na
Fluorene	trc	trc	trc	na	nd	trc	tr	na
C1-Fluorenes	nd	tr	tr	na	tr	tr	tr	na
C2-Fluorenes	65	tr	tr	na	tr	tr	tr	na
C3-Fluorenes	85	130	110	42%	tr	tr	tr	na
Dibenzothiophene	nd	nd	nd	na	nd	nd	nd	na
C1-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na
C2-Dibenzothiophenes	nd	tr	tr	na	tr	nd	tr	na
C3-Dibenzothiophenes	tr	tr	tr	na	tr	nd	tr	na
Phenanthrene	27	25	26	8%	21	25	23	17%
C1-Phenanthrenes	tr	tr	tr	na	tr	9.3	tr	na
C2-Phenanthrenes	tr	tr	tr	na	tr	tr	tr	na
C3-Phenanthrenes	tr	tr	tr	na	tr	tr	tr	na
Anthracene	nd	tr	tr	na	nd	nd	nd	na
Fluoranthene	43	23	33	61%	64	61	63	5%
Pyrene	38	22	30	53%	59	54	57	9%
Benz(a)anthracene	tr	tr	tr	na	tr	24	tr	na
Chrysene	tr	tr	tr	na	tr	41	tr	na
Benzo(b)fluoranthene	nd	nd	nd	na	nd	nd	nd	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	120	88	110		140	220	140	
Total Alkylated PAH	460	870	460		tr	59	tr	
Total PAH	580	950	570		140	280	140	
FFPI	0.59	0.73	0.66		0.07	0.28	0.08	
Saturated Hydrocarbons								
Resolved	5,600	4,400	5,000	24%	1,100	1,200	1,200	9%
Unresolved	46,000	34,000	40,000		20,000	13,000	16,000	
Total	52,000	38,000	45,000	31%	21,000	14,000	18,000	40%
			average=	31%			average=	16%

Table I.23. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of vertical sediment core sections collected at Eugene Island in November 1989 (*these values used in data table).

Analyte	EIA50				EIA100				EIA250				EIA 500			
	20-25 cm	DUP	MEAN	% DIFF	25-30 cm	DUP	MEAN	% DIFF	25-30 cm	DUP	MEAN	% DIFF	30-37cm*	DUP	MEAN	%DIFF
MDL	4.3	11	7.7		10	13	12		23	25	24		6.0	23	15	
Naphthalene	8.6	tr	tr	na	trc	tr	tr	na	tr	tr	tr	na	8.0	tr	tr	na
C1-Naphthalenes	10	trc	trc	na	trc	tr	tr	na	tr	tr	tr	na	trc	tr	tr	na
C2-Naphthalenes	22	trc	trc	na	tr	tr	tr	na	nd	nd	nd	na	tr	nd	tr	na
C3-Naphthalenes	150	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
C4-Naphthalenes	210	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na	nd	nd	nd	na
C5-Naphthalenes	170	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Fluorene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
C1-Fluorenes	tr	tr	tr	na	nd	tr	tr	na	tr	tr	tr	na	nd	nd	nd	na
C2-Fluorenes	120	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na	nd	nd	nd	na
C3-Fluorenes	tr	tr	tr	na	tr	tr	tr	na	tr	tr	tr	na	nd	tr	tr	na
Dibenzothiophene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
C1-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
C2-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
C3-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Phenanthrene	19	18	19	5%	21	15	18	33%	tr	tr	tr	na	18	tr	tr	na
C1-Phenanthrenes	34	trc	trc	na	tr	tr	tr	na	nd	nd	nd	na	33	nd	tr	na
C2-Phenanthrenes	31	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
C3-Phenanthrenes	tr	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
Fluoranthene	21	20	21	5%	13	21	17	47%	tr	24	tr	na	17	tr	tr	na
Pyrene	16	24	20	40%	15	28	22	60%	33	42	38	24%	26	tr	tr	na
Benz(a)anthracene	nd	tr	tr	na	tr	trc	tr	na	nd	trc	tr	na	tr	nd	tr	na
Chrysene	nd	19	tr	na	tr	20	tr	na	43	trc	tr	na	tr	nd	tr	na
Benzo(b)fluoranthene	nd	nd	nd	na	nd	33	tr	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Dibenz(a,h)anthracene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Benzo(g,h,i)perylene	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Total Parent PAH	65	81	59		49	120	57		76	66	38		69	tr	tr	
Total Alkylated PAH	740	tr	tr		tr	tr	tr		tr	tr	tr		33	tr	tr	
Total PAH	810	81	59		49	120	57		76	66	38		100	tr	tr	
FFPI	0.80	0.11	0.16		0.21	0.06	0.16		0.00	0.00	0.00		0.33	na	na	
Saturated Hydrocarbons																
Resolved	1,900	1,300	1,600	38%	1,000	1,200	1,100	18%	1,500	1,000	1,300	40%	390	100	250	118%
Unresolved	15,000	25,000	20,000		6,300	11,000	8,600		16,000	20,000	18,000		3,600	12,000	7,800	
Total	17,000	26,000	22,000	42%	7,300	12,000	9,700	49%	17,000	21,000	19,000	21%	4,000	12,000	8,000	100%
			average=	26%			average=	42%			average=	28%			average=	109%

Table I.24. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of samples collected at Empire Waterway in November 1989.

Analyte	EW9 Oct. '89				EW2 Oct. '89				EW4 Oct. '89			
	0-5 cm	DUP	MEAN	% DIFF	20-25 cm	DUP	MEAN	% DIFF	30-34 cm	DUP	MEAN	% DIFF
MDL	16	5.9	11		6.7	22	14		6.2	12	9.1	
Naphthalene	tr	tr	tr	na	tr	tr	tr	na	10	tr	tr	na
C1-Naphthalenes	trc	trc	trc	na	nd	nd	nd	na	20	tr	tr	na
C2-Naphthalenes	tr	18	tr	na	nd	nd	nd	na	32	tr	tr	na
C3-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
C4-Naphthalenes	320	nd	tr	na	tr	nd	tr	na	150	tr	tr	na
C5-Naphthalenes	nd	150	tr	na	nd	nd	nd	na	tr	tr	tr	na
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Acenaphthene	trc	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na
Fluorene	35	12	24	98%	nd	nd	nd	na	14	trc	trc	na
C1-Fluorenes	nd	tr	tr	na	nd	nd	nd	na	nd	tr	tr	na
C2-Fluorenes	nd	nd	nd	na	tr	nd	tr	na	tr	tr	tr	na
C3-Fluorenes	nd	84	tr	na	tr	nd	tr	na	tr	tr	tr	na
Dibenzothiophene	tr	nd	tr	na	nd	nd	nd	na	nd	nd	nd	na
C1-Dibenzothiophenes	tr	13	tr	na	nd	nd	nd	na	nd	nd	nd	na
C2-Dibenzothiophenes	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na
C3-Dibenzothiophenes	tr	tr	tr	na	nd	nd	nd	na	nd	nd	nd	na
Phenanthrene	49	28	39	55%	tr	nd	tr	na	31	23	27	30%
C1-Phenanthrenes	tr	68	tr	na	tr	nd	tr	na	16	trc	trc	na
C2-Phenanthrenes	tr	45	tr	na	nd	nd	nd	na	40	tr	tr	na
C3-Phenanthrenes	82	tr	tr	na	nd	nd	nd	na	44	tr	tr	na
Anthracene	29	17	23	52%	nd	nd	nd	na	nd	tr	tr	na
Fluoranthene	98	45	72	74%	tr	nd	tr	na	33	53	43	47%
Pyrene	100	59	80	52%	tr	nd	tr	na	31	41	36	28%
Benz(a)anthracene	45	31	38	37%	tr	nd	tr	na	18	16	17	12%
Chrysene	65	46	56	34%	tr	nd	tr	na	31	42	37	30%
Benzo(b)fluoranthene	33	71	52	73%	nd	nd	nd	na	nd	44	tr	na
Benzo(k)fluoranthene	25	45	35	57%	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	46	44	45	4%	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	na	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	na	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	na	nd	na
Total Parent PAH	530	400	460		tr	tr	tr		170	220	160	
Total Alkylated PAH	400	380	tr		tr	nd	tr		300	tr	tr	
Total PAH	930	780	460		tr	tr	tr		470	220	160	
FFPI	0.18	0.23	0.04		na	na	na		0.53	0.05	0.08	
Saturated Hydrocarbons												
Resolved	1,900	1,900	1,900	0%	950	tr	tr	na	3,300	2,400	2,900	32%
Unresolved	19,000	13,000	16,000		nd	nd	nd		9,700	16,000	13,000	
Total	21,000	15,000	18,000	33%	950	tr	tr	na	13,000	18,000	16,000	32%
			average=	47%			average=	na			average=	30%

Table I.25. Hydrocarbon concentrations (ppb, dry wt.) in duplicate laboratory extracts of surface sediment samples collected at Emeline Pass and Romere Pass in October 1989.

Analyte	EP700E				EP600W				RP750N			
		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF		DUP	MEAN	% DIFF
MDL	2.1	2.5	2.3		6.7	3.8	5.3		9.8	7.7	8.8	
Naphthalene	tr	tr	tr	na	tr	tr	tr	na	27	30	29	11%
C1-Naphthalenes	nd	nd	nd	na	nd	tr	tr	na	160	140	150	13%
C2-Naphthalenes	nd	nd	nd	na	nd	tr	tr	na	980	800	890	20%
C3-Naphthalenes	nd	nd	nd	na	nd	nd	nd	na	3,900	2,900	3,400	29%
C4-Naphthalenes	tr	nd	tr	na	tr	tr	tr	na	nd	2,800	tr	na
C5-Naphthalenes	tr	nd	tr	na	tr	nd	tr	na	2,500	950	1,700	90%
Acenaphthylene	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
Acenaphthene	nd	nd	nd	na	nd	nd	nd	na	15	nd	tr	na
Fluorene	nd	nd	nd	na	nd	nd	nd	na	34	30	32	13%
C1-Fluorenes	nd	nd	nd	na	tr	tr	tr	na	110	110	110	0%
C2-Fluorenes	nd	tr	tr	na	tr	tr	tr	na	370	490	430	28%
C3-Fluorenes	nd	tr	tr	na	nd	tr	tr	na	310	280	300	10%
Dibenzothiophene	nd	nd	nd	na	tr	tr	tr	na	tr	tr	tr	na
C1-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na	15	14	15	7%
C2-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
C3-Dibenzothiophenes	nd	nd	nd	na	nd	nd	nd	na	tr	nd	tr	na
Phenanthrene	tr	nd	tr	na	nd	tr	tr	na	85	86	86	1%
C1-Phenanthrenes	nd	nd	nd	na	nd	tr	tr	na	280	360	320	25%
C2-Phenanthrenes	nd	nd	nd	na	nd	tr	tr	na	410	450	430	9%
C3-Phenanthrenes	nd	nd	nd	na	nd	nd	nd	na	260	200	230	26%
Anthracene	nd	nd	nd	na	nd	tr	tr	na	12	13	13	8%
Fluoranthene	tr	nd	tr	na	tr	7.0	tr	na	52	64	58	21%
Pyrene	tr	tr	tr	na	tr	11	tr	na	40	62	51	43%
Benz(a)anthracene	nd	nd	nd	na	nd	tr	tr	na	34	46	40	30%
Chrysene	nd	nd	nd	na	nd	6.2	tr	na	63	46	55	31%
Benzo(b)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	150	62	110	83%
Benzo(k)fluoranthene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(a)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Indeno(1,2,3-cd)pyrene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Dibenz(a,h)anthracene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Benzo(g,h,i)perylene	nd	nd	nd	na	nd	nd	nd	na	nd	nd	nd	na
Total Parent PAH	tr	tr	tr		tr	24	tr		510	440	470	
Total Alkylated PAH	tr	tr	tr		tr	tr	tr		9,300	9,500	8,000	
Total PAH	tr	tr	tr		tr	24	tr		9,800	9,900	8,400	
FFPI	na	na	na		na	na	na		0.91	0.90	0.90	
Saturated Hydrocarbons												
Resolved	190	120	160	45%	100	460	280	129%	75,000	80,000	78,000	6%
Unresolved	230	740	490		1,800	1,100	1,500		140,000	130,000	130,000	
Total	420	860	640	69%	1,900	1,600	1,800	17%	210,000	210,000	210,000	0%
			average=	57%			average=	73%			average=	23%

Table I.26 Recoveries of spiked polynuclear aromatic hydrocarbons in vertical sediment core samples collected at Pass Fourchon.

Analyte	Feb. '89 PF600S 2-5 cm	PF600S 30-35 cm	PF800N 10-15 cm	PF900N 15-20 cm	PF1000N 2-5 cm	May '89 PF1200NE 0-5 cm	Oct. '89 PF800N 0-2 cm	Feb. '90 PF400N 5-10 cm	PF600N 15-20 cm	PF600S 25-30 cm	PF1000N 0-2 cm	AVERAGE
d8-Naphthalene	77%	85%	80%	95%	55%	45%	69%	39%	74%	87%	40%	68%
d10-Acenaphthene	73%	95%	84%	89%	64%	69%	81%	52%	120%	97%	57%	80%
d10-Phenanthrene	88%	90%	115%	106%	90%	111%	71%	35%	77%	103%	110%	91%
d12-Chrysene	59%	19%	117%	71%	88%	127%	38%	20%	54%	38%	37%	61%
d12-Perylene	52%	60%	158%	121%	63%	131%	59%	22%	55%	35%	67%	75%
Naphthalene	84%	62%	83%	68%	85%	85%	77%	85%	75%	62%	58%	75%
Acenaphthylene	85%	79%	96%	74%	95%	100%	85%	84%	84%	86%	74%	85%
Acenaphthene	91%	78%	106%	79%	100%	102%	92%	124%	119%	95%	74%	96%
Fluorene	106%	86%	124%	79%	126%	129%	96%	116%	97%	81%	99%	103%
Phenanthrene	101%	77%	93%	53%	110%	119%	97%	106%	83%	86%	61%	90%
Anthracene	94%	73%	106%	67%	94%	116%	86%	98%	81%	81%	84%	89%
Fluoranthene	89%	30%	106%	16%	100%	233%	47%	21%	33%	76%	91%	76%
Pyrene	82%	26%	109%	26%	107%	209%	39%	21%	36%	60%	92%	73%
Benz(a)anthracene	87%	64%	83%	59%	99%	133%	99%	120%	116%	75%	75%	92%
Chrysene	91%	57%	83%	56%	79%	120%	101%	127%	141%	55%	66%	89%
Benzo(b)fluoranthene	158%	52%	95%	95%	284%	113%	115%	212%	147%	81%	57%	128%
Benzo(k)fluoranthene	135%	59%	79%	132%	267%	103%	111%	112%	147%	67%	61%	116%
Benzo(a)pyrene	98%	65%	96%	128%	257%	99%	94%	0%	0%	76%	67%	89%
Indeno(1,2,3-cd)pyrene	102%	83%	117%	147%	377%	95%	111%	0%	0%	105%	106%	113%
Dibenz(a,h)anthracene	138%	73%	101%	137%	340%	97%	111%	0%	0%	76%	126%	109%
Benzo(g,h,i)perylene	114%	76%	100%	132%	320%	138%	93%	0%	0%	76%	121%	106%
AVERAGE	95%	66%	101%	87%	152%	118%	84%	66%	73%	76%	77%	91%

Table I.27. Recoveries of spiked polynuclear aromatic hydrocarbons in vertical sediment core samples collected at Bayou Rigaud.

Analyte	Feb. '89							Oct. '89		Feb. '90					
	BR2	BR6	BR8	BR9	BR9	BR11	BR11	BR4#2	BR11	BR3	BR6	BR8	BR9	BR10	AVERAGE
	20-25 cm	20-25 cm	35-38 cm	2-5 cm	30-37 cm	5-10 cm	15-20 cm	0-5 cm	0-5 cm	0-5 cm	5-10 cm	10-15 cm	30-34 cm	0-5 cm	
d8-Naphthalene	66%	63%	83%	39%	84%	61%	58%	36%	57%	40%	68%	92%	91%	0%	60%
d10-Acenaphthene	79%	79%	73%	76%	94%	83%	67%	40%	79%	0%	70%	108%	113%	0%	69%
d10-Phenanthrene	113%	75%	58%	90%	90%	89%	64%	41%	96%	43%	85%	118%	134%	70%	83%
d12-Chrysene	70%	15%	18%	88%	69%	34%	28%	19%	71%	11%	65%	84%	39%	19%	45%
d12-Perylene	37%	30%	64%	81%	75%	72%	81%	11%	52%	0%	78%	100%	41%	0%	52%
Naphthalene	87%	83%	82%	87%	83%	83%	86%	85%	91%	83%	80%	64%	61%	103%	86%
Acenaphthylene	90%	87%	90%	92%	70%	92%	102%	76%	102%	63%	100%	79%	75%	125%	87%
Acenaphthene	108%	95%	99%	104%	42%	98%	106%	107%	113%	-3%	106%	90%	132%	7%	100%
Fluorene	115%	103%	96%	115%	49%	107%	104%	168%	118%	111%	114%	105%	118%	170%	107%
Phenanthrene	102%	95%	106%	100%	30%	116%	109%	179%	107%	87%	95%	80%	79%	114%	108%
Anthracene	108%	106%	98%	103%	78%	109%	106%	586%	88%	2%	85%	86%	71%	2%	87%
Fluoranthene	98%	30%	51%	126%	17%	87%	76%	58%	100%	19%	54%	30%	0%	59%	56%
Pyrene	151%	24%	34%	134%	29%	77%	66%	53%	102%	-7%	51%	34%	0%	7%	64%
Benz(a)anthracene	98%	78%	83%	90%	60%	99%	100%	118%	87%	0%	71%	74%	89%	0%	84%
Chrysene	94%	85%	77%	95%	58%	108%	102%	129%	59%	56%	66%	88%	139%	143%	94%
Benzo(b)fluoranthene	102%	68%	77%	92%	51%	97%	89%	211%	110%	63%	203%	100%	71%	0%	94%
Benzo(k)fluoranthene	77%	58%	89%	92%	139%	82%	77%	214%	117%	35%	157%	81%	71%	0%	90%
Benzo(a)pyrene	99%	66%	84%	95%	98%	86%	85%	158%	86%	0%	180%	83%	107%	0%	81%
Indeno(1,2,3-cd)pyrene	93%	191%	90%	86%	0%	75%	89%	0%	55%	na	149%	60%	0%	na	72%
Dibenz(a,h)anthracene	79%	157%	79%	79%	0%	77%	76%	0%	132%	na	106%	57%	0%	na	65%
Benzo(g,h,i)perylene	79%	125%	73%	52%	0%	74%	76%	0%	58%	na	140%	33%	0%	na	59%
AVERAGE	93%	82%	76%	91%	58%	86%	83%	109%	89%	34%	101%	78%	68%	46%	78%

Table 1.28. Recoveries of spiked polynuclear aromatic hydrocarbons in vertical sediment core samples collected at Eugene Island.

Analyte	May '89 EIA50 25-31 cm	EIA500 0-2 cm	Nov '89 EIA50 20-25 cm	EIA100 25-30 cm	EIA250 25-30 cm	EIA-500 30-37 cm	EIB300 0-5 cm	AVERAGE
d8-Naphthalene	61%	58%	42%	42%	71%	67%	95%	62%
d10-Acenaphthene	70%	69%	0%	0%	0%	0%	102%	34%
d10-Phenanthrene	63%	78%	69%	82%	82%	96%	117%	84%
d12-Chrysene	17%	36%	52%	86%	73%	55%	134%	65%
d12-Perylene	6%	27%	0%	0%	0%	0%	183%	31%
Naphthalene	77%	76%	57%	58%	66%	55%	71%	66%
Acenaphthylene	50%	94%	34%	20%	16%	52%	83%	50%
Acenaphthene	91%	94%	0%	0%	0%	0%	80%	38%
Fluorene	100%	104%	100%	131%	84%	93%	97%	101%
Phenanthrene	103%	104%	74%	62%	91%	72%	83%	84%
Anthracene	86%	103%	0%	0%	0%	0%	86%	39%
Fluoranthene	71%	90%	78%	74%	94%	76%	83%	81%
Pyrene	79%	99%	0%	3%	-3%	9%	77%	38%
Benz(a)anthracene	91%	98%	0%	10%	0%	0%	94%	42%
Chrysene	100%	97%	83%	73%	84%	62%	86%	84%
Benzo(b)fluoranthene	186%	72%	40%	77%	66%	131%	74%	92%
Benzo(k)fluoranthene	91%	59%	18%	0%	26%	0%	74%	38%
Benzo(a)pyrene	0%	91%	0%	0%	0%	0%	77%	24%
Indeno(1,2,3-cd)pyrene	0%	174%	na	na	na	na	74%	83%
Dibenz(a,h)anthracene	0%	140%	na	na	na	na	63%	67%
Benzo(g,h,i)perylene	0%	162%	na	na	na	na	71%	78%
AVERAGE	64%	92%	36%	40%	42%	43%	91%	58%

Table I.29. Recoveries of spiked polynuclear aromatic hydrocarbons in vertical sediment core samples collected at Emeline Pass, Empire Waterway, Romere Pass and Timbalier Island.

Analyte	May '89 EP150E 0-2 cm	Oct. '89 EP700E 0-5 cm	EP600W 0-5 cm	Nov. '89 EW3 2-5 cm	EW4 30-34 cm	EW9 0-2 cm	Oct. '89 RP750N 0-5 cm	RP1000N 30-34 cm	May '89 T7 0-5 cm	AVERAGE
d8-Naphthalene	47%	141%	133%	64%	44%	63%	63%	45%	43%	71%
d10-Acenaphthene	58%	119%	98%	82%	0%	74%	13%	65%	63%	64%
d10-Phenanthrene	80%	108%	80%	149%	86%	94%	147%	63%	92%	100%
d12-Chrysene	93%	51%	77%	99%	50%	67%	67%	37%	92%	70%
d12-Perylene	108%	91%	158%	68%	0%	76%	0%	82%	88%	75%
Naphthalene	48%	81%	94%	77%	58%	75%	89%	86%	86%	77%
Acenaphthylene	60%	100%	119%	105%	35%	90%	27%	125%	89%	83%
Acenaphthene	55%	100%	113%	108%	0%	104%	58%	145%	101%	87%
Fluorene	63%	106%	113%	130%	100%	116%	147%	165%	112%	117%
Phenanthrene	75%	106%	119%	91%	69%	81%	98%	90%	106%	93%
Anthracene	84%	100%	113%	100%	0%	78%	5%	95%	109%	76%
Fluoranthene	93%	81%	88%	124%	80%	72%	114%	76%	161%	99%
Pyrene	89%	81%	94%	117%	-1%	60%	61%	76%	165%	82%
Benz(a)anthracene	96%	100%	119%	108%	-5%	73%	40%	76%	98%	78%
Chrysene	98%	100%	113%	108%	59%	75%	98%	70%	105%	92%
Benzo(b)fluoranthene	115%	69%	94%	77%	na	63%	80%	108%	107%	89%
Benzo(k)fluoranthene	100%	63%	88%	86%	na	58%	69%	90%	95%	81%
Benzo(a)pyrene	105%	81%	106%	80%	na	62%	0%	125%	97%	82%
Indeno(1,2,3-cd)pyrene	126%	156%	125%	133%	na	60%	73%	225%	120%	127%
Dibenz(a,h)anthracene	124%	150%	119%	133%	na	60%	77%	245%	103%	126%
Benzo(g,h,i)perylene	119%	163%	113%	149%	na	70%	62%	245%	151%	134%
AVERAGE	87%	102%	108%	104%	38%	75%	66%	111%	104%	88%

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.