

Appendix A

Station location and collection methodology for Year 01

Station Collection		Latitude			Longitude			Core Types and Number Collected			
Number	Date	Degrees	Mins.	Secs.	Degrees	Mins.	Secs.	L	S	R	V
1	2/12/82	25	38	31.8	80	11	39.0	2			
2	2/12/82	25	39	52.5	80	10	51.8	2			
3	2/12/82	25	41	14.1	80	10	30.8	2			
4	2/12/82	25	43	28.0	80	9	25.8	2			
5	2/12/82	25	44	13.5	80	11	1.6	1	2		
6	2/12/82	25	43	21.5	80	11	14.2	2			
7	2/12/82	25	42	23.0	80	11	35.2	2			
8	2/12/82	25	40	52.0	80	12	29.8	2			
9	2/12/82	25	38	25.4	80	13	39.8	2			
10	2/12/82	25	38	35.8	80	15	40.6		4		
11	2/12/82	25	40	20.8	80	14	19.0		3		
12	2/19/82	25	36	57.0	80	10	46.2	2			
13	2/19/82	25	35	31.2	80	9	4.1	2			
14	2/19/82	25	33	58.9	80	10	21.0	2			
15	2/19/82	25	32	59.4	80	10	0.0	2			
16	2/19/82	25	31	15.6	80	10	35.0	2			
17	2/19/82	25	31	10.0	80	14	10.9	2			
18	2/19/82	25	31	10.0	80	14	42.8	2			
19	2/19/82	25	32	45.1	81	14	10.6	2			
20	2/19/82	25	34	24.9	80	16	45.8		2		
21	2/19/82	25	33	2.4	80	16	7.2	2			
22	2/19/82	25	35	26.0	80	14	40.0	2			
23	2/26/82	25	42	27.9	80	12	22.8	2			
24	2/26/82	25	43	21.5	80	12	6.0	2			
25	2/26/82	25	44	5.0	80	12	4.0	2			
26	2/26/82	25	44	40.8	80	11	15.6	2			
27	2/26/82	25	44	36.9	80	10	58.8	2			
28	2/26/82	25	44	36.7	80	10	43.4	2			
29	2/26/82	25	43	27.9	80	10	0.0	2			
30	2/26/82	25	44	6.9	80	9	6.4	2			
31	2/26/82	25	43	46.2	80	9	9.0	2			
32	3/12/82	25	47	11.5	80	9	48.4	2			
33	3/12/82	25	46	41.6	80	9	52.8	2			
34	3/12/82	25	46	59.3	80	8	48.1	2			
35	3/12/82	25	47	49.2	80	9	42.7	2			
36	3/12/82	25	47	19.3	80	10	51.8	2			
37	3/12/82	25	48	9.1	80	10	21.4	2			
38	3/12/82	25	48	49.4	80	10	32.2	2			
39	3/12/82	25	49	16.7	80	10	12.6		3		
40	3/12/82	25	49	49.2	80	9	0.6	2			
41	3/12/82	25	48	45.5	80	8	53.2	2			
42	3/12/82	25	50	9.1	80	8	40.6	2			
43	3/12/82	25	50	5.2	80	9	26.8	2			

Station Collection		Latitude			Longitude			Core Types and Number Collected			
Number	Date	Degrees	Mins.	Secs.	Degrees	Mins.	Secs.	L	S	R	V
44	3/12/82	25	50	23.4	80	10	5.6		2		
45	3/12/82	25	49	36.2	80	10	35.0		2		
46	3/19/82	25	55	45.3	80	7	47.8	2	1		
47	3/19/82	25	55	1.1	80	7	32.8	2			
48	3/19/82	25	54	7.8	80	7	45.0	2			
49	3/19/82	25	54	6.5	80	7	49.2	2			
50	3/19/82	25	53	55.7	80	7	39.4		2		
51	3/19/82	25	54	0.0	80	8	34.6	2			
52	3/19/82	25	53	45.3	80	8	5.6	2			
53	3/19/82	25	53	3.7	80	8	33.6	2	1		
54	3/19/82	25	53	21.9	80	9	1.6	2	1		
55	3/19/82	25	52	13.0	80	9	17.0	2			
56	4/16/82	25	47	42.5	80	14	40.1			2	
57	4/16/82	25	47	26.1	80	14	13.9			2	
58	4/16/82	25	47	10.3	80	13	40.0			2	
59	4/16/82	25	46	56.0	80	12	54.8			2	
60	4/16/82	25	46	41.1	80	12	26.1			2	
61	4/16/82	25	46	10.3	80	11	56.6		2		
62	4/16/82	25	46	11.8	80	11	17.4		2		
63	4/21/82	25	44	1.4	80	13	37.1	1		1	
64	4/21/82	25	44	52.9	80	13	52.9			2	
65	4/21/82	25	43	1.4	80	14	14.3		2		
66	4/21/82	25	42	21.4	80	14	45.7			2	
67	4/21/82	25	42	7.1	80	14	49.9	2			
68	4/21/82	25	41	32.9	80	15	0.0			2	
69	4/21/82	25	38	31.4	80	15	24.3	2			
70	4/23/82	25	42	28.1	80	10	41.4		2		1
71	4/23/82	25	40	5.2	80	10	46.2		2		1
72	4/23/82	25	37	29.4	80	17	59.9		2		1
73	4/23/82	25	40	32.5	80	15	25.7		2		1
74	4/28/82	25	46	14.0	80	10	50.4		2		1
75	4/28/82	25	45	46.8	80	8	23.0	2	1		
76	4/28/82	25	45	7.8	80	9	17.6		2	1	
77	4/30/82	25	52	13.0	80	8	2.9		2	1	
78	4/30/82	25	52	26.2	80	9	23.4		2	1	
79	4/30/82	25	51	28.7	80	9	23.4		2	1	
80	4/30/82	25	48	56.1	80	8	45.9		2	1	
81	4/30/82	25	49	33.9	80	9	14.7		2	1	
82	5/10/82	25	32	11.2	80	18	41.2	2			
83	5/10/82	25	31	7.5	80	14	5.0		2	1	
84	5/10/82	25	31	14.0	80	11	28.2		2	1	
85	5/10/82	25	22	59.2	80	15	51.4		2	1	
86	5/11/82	25	28	55.1	80	15	44.3		2		
87	5/11/82	25	30	12.9	80	17	48.6		2		
88	5/11/82	25	31	14.0	80	17	44.3		2		
89	5/11/82	25	30	35.1	80	14	21.4	1	1		
90	5/11/82	25	29	27.5	80	13	7.1	2			
91	5/11/82	25	29	36.6	80	10	46.2	1	1		

Station Collection		Latitude			Longitude			Core Types and Number Collected			
Number	Date	Degrees	Mins.	Secs.	Degrees	Mins.	Secs.	L	S	R	V
92	5/11/82	25	28	17.4	80	11	29.9		2		
93	5/11/82	25	27	11.2	80	11	49.9		2		
94	5/11/82	25	25	37.7	80	13	42.9	2			
95	5/11/82	25	23	54.5	80	14	12.9	2			
96	5/11/82	25	23	40.3	80	13	57.1	1	1		
97	5/11/82	25	24	2.3	80	15	18.6		2		
98	5/11/82	25	25	41.6	80	15	4.3		2		
99	5/11/82	25	26	36.1	80	17	15.7	2			
100	5/11/82	25	26	34.8	80	19	50.0	2			
101	5/13/82	25	32	3.4	80	19	31.4			2	
102	5/13/82	25	31	7.5	80	19	55.7			2	
103	5/13/82	25	29	21.0	80	20	21.4			2	
104	5/13/82	25	28	38.2	80	20	20.0		2		
105	5/13/82	25	26	10.0	80	20	10.0			2	
106	5/13/82	25	26	51.7	80	20	0.0	2			
107	5/13/82	25	24	19.7	80	19	44.3	2			
108	5/13/82	25	23	36.9	80	19	7.1		2		
109	5/13/82	25	24	22.3	80	17	57.1		2		
110	5/13/82	25	25	10.4	80	19	34.3	2			
111	5/13/82	25	26	41.3	80	19	20.0		2		
112	5/13/82	25	27	46.2	80	20	10.0			2	
113	5/16/82	25	22	12.5	80	16	51.4	2			
114	5/16/82	25	22	12.5	80	16	44.3		2		
115	5/16/82	25	21	56.9	80	16	44.3		2		
116	5/16/82	25	21	15.3	80	15	20.0	2			
117	5/16/82	25	20	36.4	80	15	17.1	2			
118	5/16/82	25	20	32.5	80	16	31.4	2			
119	5/16/82	25	20	32.5	80	18	24.3		2		
120	5/16/82	25	19	6.8	80	17	30.0			2	
121	5/16/82	25	17	41.0	80	20	5.7	2			
122	5/16/82	25	17	50.1	80	23	52.9		2		
123	5/16/82	25	19	21.0	80	20	32.9	2			
124	5/16/82	25	20	42.9	80	20	00.0			2	
125	5/16/82	25	22	15.1	80	18	44.3		2		
126	5/16/82	25	22	34.5	80	17	31.4	2			
127	5/18/82	25	27	44.9	80	19	35.7		2		
128	5/18/82	25	27	42.3	80	17	38.6		2		
129	5/18/82	25	27	8.6	80	15	0.0		2		
130	5/18/82	25	28	21.3	80	15	18.6		2		
131	5/18/82	25	35	0.0	80	13	41.4	2			
132	5/18/82	25	36	10.1	80	13	1.4	2			
133	5/18/82	25	39	19.7	80	12	8.6	2			
134	5/18/82	25	44	21.0	80	12	35.7			2	
135	5/27/82	25	48	49.4	80	10	58.6			2	
136	5/27/82	25	50	26.0	80	10	18.0			2	
137	5/27/82	25	50	46.8	80	10	44.3			2	
138	5/27/82	25	51	17.9	80	7	34.3			1	
139	5/27/82	25	50	22.1	80	7	21.4			2	

Station Collection		Latitude			Longitude			Core Types and Number Collected			
Number	Date	Degrees	Mins.	Secs.	Degrees	Mins.	Secs.	L	S	R	V
140	5/27/82	25	49	33.5	80	7	25.7			2	
141	5/27/82	25	48	3.9	80	7	35.7			2	
142	5/27/82	25	49	33.5	80	8	4.3			2	
143	5.27/82	25	48	32.5	80	8	2.9			2	
144	5/27/82	25	47	25.7	80	8	42.9			2	
145	5/29/82	25	58	31.2	80	7	27.1			2	
146	5/29/82	25	57	49.6	80	7	24.3			2	
147	5/29/82	25	56	39.0	80	7	41.4	1	1		
148	5/29/82	25	55	44.4	80	9	1.4			1	
149	5/29/82	25	56	0.0	80	8	40.0			2	
150	5/29/82	25	56	31.2	80	8	31.4			2	
151	5/29/82	25	56	18.2	80	7	54.3		2		1
152	5/29/82	25	54	2.6	80	8	2.9		2		
153	5/29/82	25	52	40.3	80	7	48.6	1	1		
154	5/29/82	25	52	14.3	80	8	12.9	1	1		
155	5/29/82	25	51	48.3	80	8	37.1	2			
156	5/29/82	25	50	15.6	80	8	14.3	2			

L = Long Core
 S = Short Core
 R = Remote Core
 V = Vibra Core

Appendix B

Station location and collection methodology for Year 02

Collection Date, Type of Sample, Location and Coring Method Employed

Station Number	Collection Date	Sample Type	Latitude			Longitude			Core Types and Number Collected		
			Degrees	Mins.	Secs.	Degrees	Mins.	Secs.	R	S	D
201	6/1/83	S	25	40	15	80	0	20			1
202	6/1/83	S	25	43	50	80	3	50			1
203	6/1/83	S	25	46	5	30	5	20			1
205	7/18/83	W	25	46	14	80	11	8			
206	7/18/83	W	25	46	10	80	11	26			
207	7/18/83	W	25	46	41	80	12	28			
208	7/18/83	W	25	47	2	80	13	8			
209	7/18/83	W	25	47	9	80	13	38			
210	7/18/83	W	25	47	4	30	13	56			
211	7/18/83	W	25	48	21	80	15	32			
212	7/18/83	W	25	47	39	80	15	23			
213	7/18/83	S	25	47	39	80	15	23	1		
214	7/19/83	S	25	47	41	80	14	44	1		
215	7/18/83	S	25	47	42	80	14	41	1		
216	7/18/83	S	25	47	4	80	13	56	1		
217	7/19/83	S	25	47	9	80	13	38	1		
213	7/18/83	S	25	46	45	80	12	27	1		
219	7/18/83	S	25	46	26	80	12	6	1		
220	7/18/83	S	25	46	11	80	11	32	1		
221	7/18/83	W	25	46	14	80	11	8			
222	7/22/83	W	25	50	40	80	10	41			
223	7/22/83	S	25	50	40	80	10	41	1		
224	7/22/83	W	25	50	40	80	10	26			
225	7/22/83	S	25	50	40	80	10	26	1		
226	7/22/83	W	25	50	46	80	10	44			
227	7/22/83	W	25	50	46	90	11	4	1		
228	7/22/83	S	25	50	46	80	11	4	1		
229	7/22/83	S	25	50	42	80	10	35	1		
230	7/22/83	W	25	49	50	80	9	11			
231	7/22/83	W	25	09	41	80	46	10			
232	8/2/83	W&S	25	32	13	80	20	9	1		
233	8/2/83	W&S	25	32	10	80	19	50	1		
234	8/2/83	W&S	25	31	40	80	18	24	1		
235	8/2/83	W	25	31	10	80	14	11			
236	8/2/83	W	25	35	0	80	13	41			
237	8/2/83	W	25	42	57	80	10	36			
238	8/5/83	W&S	25	29	21	80	20	51	1		
239	8/5/83	S	25	29	21	80	20	48		1	
240	9/5/83	W&S	25	29	21	80	20	34	1		
241	8/5/93	W&S	25	32	13	80	19	35	1		
242	9/5/33	W&S	25	32	34	80	19	51	1		

Station Number	Collection Date	Sample Type	Latitude			Longitude			Core Types and Number Collected		
			Degrees	Mins.	Secs.	Degrees	Mins.	Secs.	R	S	D
243	8/5/83	S	25	32	36	80	19	53		1	
244	9/5/83	S	25	32	38	80	19	53		1	
245	8/5/83	S	25	32	23	80	19	48	1		
246	8/5/83	W&S	25	32	13	80	19	43	1		
247	9/5/83	W&S	25	39	56	80	16	48	1		

S = Sediment sample

W = Surface water sample

R = Remote core

S = Short core

D = Dredge sampler (Peterson type)

Appendix C

Literature review

[NOTE: THIS LITERATURE SEARCH WAS PERFORMED AT THE TIME OF PUBLICATION IN 1982 AND RESULTS ARE NOW OBSOLETE. THE SEARCH STRATEGIES CAN BE USED TO REPRODUCE THE SEARCH IF NECESSARY.]

CHEMICAL ABSTRACT SERVICE (CA SEARCH) (1980 - 1981)

User 15897 Date: 8apr82 Time:10:02:33 File: 4

	Set Items	Description
1	9722	PETROLEUM/DE
2	7424	HYDROCARBONS/DE
3	1091	1 AND 2
4	1	POLYCLIC
5	19532	AROMATIC
6	0	4 AND 5 AND 2
7	1341	POLYCYCLIC
8	960	7 AND 5 AND 2
9	101	PAH
10	6	PHC
11	2043	9 OR 10 OR 3 OR 8
12	0	BISCAYNE(W)BAY
13	0	12 AND 11
14	2699	MARINE
15	3799	SEDIMENTS/DE
16	53	14 AND 15 AND 11
17	2614	FISH/DE
18	343	MOLLUSK/DE
19	154	CRUSTACEAN/DE
20	3035	17 OR 18 OR 19
21	21	11 AND 20
22	51	16 NDT 21
23	19	21 NDT 16
24	154	BENTHIC
25	61	FORAMINIFERA/DE
26	0	24 AND 25 AND 11

Print 16/3/1-53

Print 23/111 - 19

Search Time: 0.09111

Prints: 72

Descs.: 16

CHEMICAL ABSTRACT SERVICE (CA SEARCH) (1977 - 1979)

User 15897 Date: 8apr82 Time:10:02:33 File: 104

	Set Items	Description
1	13721	PETROLEUM/DE
2	10025	HYDROCARBONS/DE
3	1809	1 AND 2
4	0	POLYCLIC
5	27788	AROMATIC
6	0	4 AND 5 AND 2
7	1224	POLYCYCLIC
8	779	7 AND 5 AND 2
9	41	PAH
10	5	PHC
11	2571	9 OR 10 OR 3 OR 8
12	1	BISCAYNE(W)BAY
13	0	12 AND 11
14	3387	MARINE
15	4648	SEDIMENTS/DE
16	32	14 AND 15 AND 11
17	3847	FISH/DE
18	397	MOLLUSK/DE
19	160	CRUSTACEAN/DE
20	4305	17 OR 18 OR 19
21	28	11 AND 20
22	29	16 NDT 21
23	25	21 NDT 16
24	168	BENTHIC
25	79	FORAMINIFERA/DE
26	0	24 AND 25 AND 11
27	57	16 OR 21

Print 27/3/1-57

Search Time: 0.082

Prints: 57

Descs.: 15

CHEMICAL ABSTRACT SERVICE (CA SEARCH) (1972 - 1976)

User 15897 Date: 8apr82 Time:10:16:14 File: 3

	Set Items	Description
1	15886	PETROLEUM/DE
2	13047	HYDROCARBONS/DE
3	1941	1 AND 2
4	1	POLYCLIC
5	47161	AROMATIC
6	1	4 AND 5 AND 2
7	1280	POLYCYCLIC
8	442	7 AND 5 AND 2
9	37	PAH
10	2	PHC
11	2387	9 OR 10 OR 3 OR 8
12	1	BISCAYNE(W)BAY
13	0	12 AND 11
14	3444	MARINE
15	3679	SEDIMENTS/DE
16	12	14 AND 15 AND 11
17	4645	FISH/DE
18	390	MOLLUSK/DE
19	167	CRUSTACEAN/DE
20	5092	17 OR 18 OR 19
21	11	11 AND 20
22	12	16 NDT 21
23	11	21 NDT 16
24	105	BENTHIC
25	36	FORAMINIFERA/DE
26	0	24 AND 25 AND 11
27	23	16 OR 21

Print 27/3/1-53

Search Time: 0.068

Prints: 23

Descs.: 16

BIOSIS PREVIEWS (1977 - 1982)

User 15897 Date: 8apr82 Time:9:32:19 File: 5

	Set Items	Description
1	1014	PETROLEUM
2	3429	HYDROCARBON?
3	3572	HYDRO(W)CARBON?
4	59	PHC
5	291	1 AND (2 OR 3 OR 4)
6	21	BISCAYNE(W)BAY
7	0	6 AND 5
8	25851	CC+07512
9	14548	SEDIMENT?
10	30	8 AND 9 AND 5
11	0	POLYCLIC(W)AROMATIC(W)HYDROCARBO [ERROR IN ORIGINAL SEARCH]
12	413	PAH
13	5408	11 OR 12 OR 2 OR 3
14	134	13AND 8 AND 9
15	104	14 NOT 10
16	694	POLYCYCLIC
17	780	POLY(W)CYCLIC
18	4532	AROMATIC
19	737	(16 OR 17) AND 18 AND (2 OR 3)
20	15	(12 OR 19) AND 8 AND 9
21	15787	FISH
22	35637	BC = 8527
23	42	(21 OR 22) AND 5
24	1012	19 OR 12
25	31	(21 OR 22) AND 24
26	30	23 OR 25
27	377	SHELLFISH?
28	89370	BC=75?
29	17748	BC=617
30	66	(27 OR 28 OR 29) AND 5
31	27	(27 OR 28 OR 29) AND (19 OR 12)
32	89	30 OR 31
33	73	32 NOT 26
34	2221	BENTHIC
35	1524	FORAMINEFER?
36	152	34 AND 35
37	0	36 AND 5
38	3	(2 OR 3) AND 36

Print 26/3/1-70

Print 33/3/1-73

Search Time: 0.175

Prints: 143

Descs.: 11

BIOSIS PREVIEWS (1969 - 1976)

User 15897 Date: 8apr82 Time:9:32:19 File: 5

	Set Items	Description
1	674	PETROLEUM
2	260	HYDROCARBON?
3	3095	HYDRO(W)CARBON?
4	1	PHC
5	142	1 AND (2 OR 3 OR 4)
6	19	BISCAYNE(W)BAY
7	0	6 AND 5
8	38102	CC+07512
9	6729	SEDIMENT?
10	10	8 AND 9 AND 5
11	1	POLYCLIC(W)AROMATIC(W)HYDROCARBO [ERROR IN ORIGINAL SEARCH]
12	19	PAH
13	3229	11 OR 12 OR 2 OR 3
14	35	13AND 8 AND 9
15	25	14 NOT 10
16	48	POLYCYCLIC
17	457	POLY(W)CYCLIC
18	1919	AROMATIC
19	152	(16 OR 17) AND 18 AND (2 OR 3)
20	3	(12 OR 19) AND 8 AND 9
21	13482	FISH
22	45567	BC = 8527
23	10	(21 OR 22) AND 5
24	168	19 OR 12
25	5	(21 OR 22) AND 24
26	15	23 OR 25
27	429	SHELLFISH?
28	126854	BC=75?
29	22344	BC=617
30	29	(27 OR 28 OR 29) AND 5
31	2	(27 OR 28 OR 29) AND (19 OR 12)
32	34	30 OR 31
33	29	32 NOT 26
34	1124	BENTHIC
35	1852	FORAMINEFER?
36	38	34 AND 35
37	0	35 AND 5
38	0	(2 OR 3) AND 36
39	55	10 OR 20 OR 26 OR 33

Print 39/3/1-55

Search Time: 0.142

Prints: 55

Descs.: 24

OCEANIC ABSTRACTS (1964 - 1982)

User 15897 Date: 8apr82 Time:10:23:21 File: 28

	Set Items	Description
1	1486	PETROLEUM/DE
2	865	HYDROCARBONS/DE
3	237	1 AND 2
4	264	POLYCLIC [ERROR IN ORIGINAL SEARCH]
5	142	AROMATIC
6	0	4 AND 5 AND 2
7	7	POLYCYCLIC
8	37	7 AND 5 AND 2
9	23	PAH
10	2	PHC
11	278	9 OR 10 OR 3 OR 8
12	74	BISCAYNE BAY
13	0	12 AND 11
14	7944	SEDIMENT?
15	80	14 AND 11
16	6431	FISH/DE
17	1737	CRUSTACEA/DE
18	1347	MOLLUSCA/DE
19	27	(16 OR 17 OR 18) AND 11
20	78	BENTHIC FORAMINIFERA
21	0	20 AND 11
22	101	15 OR 19

Print 22/3/1-101

Search Time: 0.055

Prints: 101

Descs.: 12

POLLUTION ABSTRACTS (1970 - 1981)

User 15897 Date: 8apr82 Time:10:23:21 File: 28

	Set Items	Description
1	791	PETROLEUM/DE
2	1863	HYDROCARBONS/DE
3	189	1 AND 2
4	0	POLYCLIC [ERROR IN ORIGINAL SEARCH]
5	1482	AROMATIC
6	0	4 AND 5 AND 2
7	180	POLYCYCLIC
8	115	7 AND 5 AND 2
9	222	PAH
10	2	PHC
11	444	9 OR 10 OR 3 OR 8
12	23	BISCAYNE BAY
13	0	12 AND 11
14	3051	MARINE
15	2448	SEDIMENT?
16	32	14 AND 15 AND 11
17	1998	FISH/DE
18	335	CRUSTACEA?
19	457	MOLLUSC?
20	2566	17 OR 18 OR 19
21	58	20 AND 11
22	347	BENTHIC
23	12	FORAMINIFER?
24	0	22 AND 23 AND 11
25	81	16 OR 21

Print 25/3/1-81

Search Time: 0.077

Prints: 81

Descs.: 15

Appendix D

Detailed summary of aliphatic (f₁) hydrocarbon determinations for Year 01
 (Values are not corrected for percent recovery)

[NOTE: THE FONT SIZE USED IN THIS SECTION OF THE DOCUMENT WAS APPROXIMATELY 5. ERRORS IN TRANSCRIPTION MAY HAVE OCCURRED DUE TO FONT SIZE AND ILLEGIBILITY OF THE COPY OF THE DOCUMENT USED FOR RESCUE. QUESTIONABLE TRANSCRIPTIONS ARE NOTED WITH A QUESTION MARK. THE COPY OF DOCUMENT USED TO GENERATE THIS DOCUMENT IS ARCHIVED AT THE NOAA/NMFS/SEFSC LIBRARY IN MIAMI.]

BISCAYNE BAY HYDROCARBON STUDY

ALIPHATIC HYDROCARBONS

SAMPLE: 1
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 14.30
 SAMPLE SIZE INJECTED (μL): 1.9
 DATE ANALYZED: 11/09/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	3498	.0017	5.9466	.2189	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.2189	

SAMPLE: 2
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 19.08
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/13/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .2256
C15	2119	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	164	.0008	.0000	.0000	
PRISTANE	727	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	438	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	11061	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	1292	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	2621	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	19530	.0017	1.8836	.6815	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.6815	

SAMPLE: 5
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 29.82
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/09/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 2.9733
C14	0	.0008	.0000	.0000	C17/PRIST .0691
C15	873	.0008	.0000	.0000	C18/PHYT .5688
C16	0	.0008	.0000	.0000	
C17	100	.0011	.0000	.0000	
PRISTANE	1448	.0022	.0000	.0000	
C18	277	.0009	.0000	.0000	
PHYTANE	487	.0019	.0000	.0000	
C19	1237	.0008	.0000	.0000	
C20	314	.0009	.0000	.0000	CPI 2.3326
ANDROSTANE	0	.0016	.0000	.0000	
C21	996	.0010	.0000	.0000	
C22	555	.0012	.0000	.0000	RECOVERY %
C23	858	.0008	.0000	.0000	ANDROSTANE .0000
C24	1244	.0021	.0000	.0000	
C25	1511	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	16993	.0016	11.3488	.4735	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.4735	

SAMPLE: 6
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.90
 SAMPLE SIZE INJECTED (μL): 1.5

DATE ANALYZED: 08/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0012	.0000	.0000	RESOL/UNRESOL .3799
C13	0	.0014	.0000	.0000	PRIST/PHYT .5127
C14	0	.0011	.0000	.0000	C17/PRIST 2.3368
C15	975	.0015	1.4625	.0238	C18/PHYT 2.4303
C16	1688	.0013	2.1944	.358	
C17	2269	.0016	3.6304	.0592	
PRISTANE	971	.0040	3.8840	.0633	
C18	4603	.0014	6.4442	.1050	
PHYTANE	1894	.0039	7.3866	.1204	
C19	7231	.0016	11.5696	.1886	
C20	6025	.0014	8.4350	.1375	CPI 1.5853
ANDROSTANE	0	.0016	.0000	.0000	
C21	12606	.0017	21.4302	.3493	
C22	4794	.0015	7.1910	.1172	RECOVERY %
C23	4182	.0015	6.2730	.1022	ANDROSTANE .0000
C24	1446	.0017	2.4582	.0401	
C25	2153	.0030	6.4590	.1053	
C26	0	.0000	.0000	.0000	
C27	0	.0000	.0000	.0000	
C28	0	.0000	.0000	.0000	
C29	0	.0000	.0000	.0000	
C30	0	.0000	.0000	.0000	
RESOLVED	65983	.0016	26.2336	1.8427	
UNRESOLVED	173666	.0016	277.8656	4.5292	
TOTAL				6.3719	

SAMPLE: 7
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 24.84
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/17/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	3179	.0008	2.5432	.0902	RESOL/UNRESOL	.4578
C13	1357	.0008	1.0856	.0385	PRIST/PHYT	.6725
C14	2352	.0008	1.8816	.0667	C17/PRIST	.2167
C15	3440	.0008	2.7520	.0976	C18/PHYT	.5106
C16	268	.0008	.2144	.0076		
C17	117	.0011	.1287	.0046		
PRISTANE	540	.0022	1.1880	.0421		
C18	410	.0069	.3690	.0131		
PHYTANE	803	.0019	1.5257	.0541		
C19	2458	.0001	1.9664	.0697		
C20	539	.0009	.4851	.0172	CPI	1.7465
ANDROSTANE	0	.0016	.0000	.0000		
C21	1064	.0010	1.0640	.0377		
C22	2065	.0012	2.4780	.0879	RECOVERY %	
C23	2684	.0008	2.1472	.0782	ANDROSTANE	.0000
C24	2615	.0021	5.4915	.1948		
C25	3287	.0027	8.8749	.3148		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	53823	.0016	42.6320	2.7248		
UNRESOLVED	117575	.0016	188.1200	6.6719		
TOTAL				9.3966		

SAMPLE: 8
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 25.13
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/17/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	100	.0008	.0000	.0000	PRIST/PHYT	.9431
C14	0	.0008	.0000	.0000	C17/PRIST	.3359
C15	0	.0008	.0000	.0000	C18/PHYT	.5796
C16	0	.0008	.0000	.0000		
C17	217	.0008	.1736	.0036		
PRISTANE	646	.0022	1.4212	.0298		
C18	397	.0016	.6352	.0133		
PHYTANE	685	.0020	1.3700	.0287		
C19	1641	.0010	1.6410	.0344		
C20	396	.0013	.5148	.0108	CPI	8.9808
ANDROSTANE	0	.0017	.0000	.0000		
C21	11631	.0011	12.7941	.2680		
C22	927	.0013	1.2051	.0252	RECOVERY %	
C23	1182	.0012	1.4184	.0297	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	776	.0020	1.5520	.0325		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	19220	.0017	1.2274	.5017		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.5017		

SAMPLE: 9
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 24.47
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	622	.0011	.6842	.0147	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	622	.0017	.0000	.0147	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.0147	

SAMPLE: 10
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 36.96
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/30/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	896	.0016	1.4336	.0204		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	320	.0013	.4160	.0059	CPI	1.5728
ANDROSTANE	0	.0017	.0000	.0000		
C21	2025	.0011	2.2275	.0317		
C22	379	.0013	.4927	.0070	RECOVERY %	
C23	1092	.0012	1.3104	.0187	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	1639	.0020	3.2780	.0467		
C26	1429	.0029	4.1441	.0590		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	20516	.0017	21.6512	.4977		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.4977		

SAMPLE: 11
INTERNAL STANDARD
ANDROSTANE (μL): 0.0
DRY WEIGHT EXTRACTED (G): 8.66
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/19/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 73.3930
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .9472
C16	604	.0008	.4832	.0294	
C17	0	.0008	.0000	.0000	
PRISTANE	54164	.0022	119.1608	7.2421	
C18	699	.0016	1.1184	.0680	
PHYTANE	738	.0020	1.4760	.0897	
C19	3238	.0010	3.2380	.1968	
C20	2026	.0013	2.6338	.1601	CPI 2.5755
ANDROSTANE	0	.0017	.0000	.0000	
C21	16520	.0011	17.8750	1.0864	
C22	4191	.0013	5.4483	.3311	RECOVERY %
C23	9544	.0012	11.4528	.6960	ANDROSTANE .0000
C24	8251	.0017	14.0267	.8525	
C25	11586	.0020	23.1720	1.4083	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	119800	.0017	5.9466	13.0394	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				13.0394	

SAMPLE: 12
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 17.22
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/23/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .3648
C13	0	.0008	.0000	.0000	PRIST/PHYT 6.2874
C14	0	.0008	.0000	.0000	C17/PRIST 1.0603
C15	0	.0008	.0000	.0000	C18/PHYT 3.4253
C16	0	.0008	.0000	.0000	
C17	580	.0008	.4640	.0142	
PRISTANE	547	.0022	1.2034	.0368	
C18	298	.0016	.4768	.0146	
PHYTANE	87	.0020	.1740	.0053	
C19	234	.0010	.2340	.0072	
C20	326	.0013	.4238	.0130	CPI 18.3363
ANDROSTANE	0	.0017	.0000	.0000	
C21	10260	.0011	11.2860	.3449	
C22	902	.0013	1.1726	.0358	RECOVERY %
C23	2378	.0012	2.8536	.0872	ANDROSTANE .0000
C24	376	.0017	.9792	.0299	
C25	1171	.0020	2.3420	.0716	
C26	0	.0029	.0000	.0000	
C27	20953	.0095	199.0535	6.0839	
C28	0	.0076	.0000	.0000	
C29	2967	.0124	36.7908	1.1245	
C30	0	.0050	.0000	.0000	
RESOLVED	75286	.0017	57.8119	9.6358	
UNRESOLVED	206358	.0017	350.8086	10.7222	
TOTAL				20.3580	

SAMPLE: 13
 INTERNAL STANDARD
 ANDROSTANE (μ L): 0.0
 DRY WEIGHT EXTRACTED (G): 25.60
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 11/01/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0422
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	1834	.0008	1.4672	.0302	C17/PRIST	.0000
C15	1494	.0008	1.1952	.0246	C18/PHYT	.7018
C16	1592	.0008	1.2736	.0262		
C17	6889	.0008	5.5112	.1133		
PRISTANE	0	.0022	.0000	.0000		
C18	579	.0016	.9264	.0190		
PHYTANE	825	.0020	1.6500	.0339		
C19	112	.0010	.1120	.0023		
C20	1838	.0013	2.3894	.0491	CPI	2.0928
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	3733	.0012	4.4796	.0921	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	24848	.0017	10.1184	.5987		
UNRESOLVED	588415	.0017	1000.3055	20.5655		
TOTAL				21.1642		

SAMPLE: 14
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 16.03
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/28/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	1382	.0022	3.0404	.0998	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	870	.0010	.8700	.0286	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	1174	.0011	1.2914	.0424	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	619	.0012	.7428	.0244	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	7305	.0017	5.5420	.3771	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.3771	

SAMPLE: 15
INTERNAL STANDARD
ANDROSTANE (μL): 0.0
DRY WEIGHT EXTRACTED (G): 13.80
SAMPLE SIZE INJECTED (μL): 1.5

DATE ANALYZED: 09/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.5598
C15	1422	.0008	1.1376	.9434 ?	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	309	.0021	.3399	.0230		
PRISTANE	552	.0022	1.2144	.0463		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	1179	.0008	.9432	.0360		
C20	0	.0009	.0000	.0000	CPI	3.6167
ANDROSTANE	0	.0016	.0000	.0000		
C21	166	.0010	.1660	.0063		
C22	785	.0012	.9420	.0359	RECOVERY %	
C23	1653 ?	.0008	1.0824	.0413	ANDROSTANE	.0000
C24	684	.0021	1.4364	.0548		
C25	884	.0027	2.3868	.0910		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	9827	.0016	3.9888	.5201		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.5201		

SAMPLE: 16
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 9.93
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	1755	.0008	1.4040	.0744		
PRISTANE	0	.0022	.0000	.0000		
C18	342	.0016	.5472	.0290		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	5.1316
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	2808	.0017	1.2087	.1675		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.1675		

SAMPLE: 17
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 14.86
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/14/82
SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0011	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	654	.0008	.5232	.0095		
C20	124	.0009	.1116	.0020	CPI	1.6899
ANDROSTANE	0	.0016	.0000	.0000		
C21	370	.0010	.3700	.0066		
C22	148	.0012	.1776	.0031	RECOVERY %	
C23	3779	.0008	3.0232	.0535	ANDROSTANE	.0000
C24	3359	.0021	7.0539	.1249		
C25	1333	.0027	3.5991	.0637		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	12522	.0016	4.4080	.3412		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.3412		

SAMPLE: 18
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 23.94
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI .0000
ANDROSTANE	0	.0016	.0000	.0000	
C21	0	.0010	.0000	.0000	
C22	927	.0012	1.1124	.0245	RECOVERY % ANDROSTANE .0000
C23	0	.0008	.0000	.0000	
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	927	.0016	5.9466	.0245	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.0245	

SAMPLE: 19
INTERNAL STANDARD
ANDROSTANE (μL): 0.0
DRY WEIGHT EXTRACTED (G): 16.83
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/24/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	706	.0008	.5648	.0177	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 3.0282
C14	730	.0008	.5840	.0183	C17/PRIST .0000
C15	1589	.0008	1.2712	.0398	C18/PHYT 3.9061
C16	2930	.0008	2.3440	.0733	
C17	100	.0008	.0800	.0025	
PRISTANE	4839	.0022	10.6458	.3329	
C18	6242	.0016	9.9872	.3123	
PHYTANE	1598	.0020	3.1960	.0999	
C19	8788	.0010	8.7880	.2748	
C20	7401	.0013	9.6213	.3009	CPI .9986
ANDROSTANE	0	.0017	.0000	.0000	
C21	9837	.0011	10.8207	.3364	
C22	4586	.0013	5.9618	.1864	RECOVERY %
C23	5349	.0012	6.4188	.2007	ANDROSTANE .0000
C24	1653	.0017	2.8101	.0879	
C25	1532	.0020	3.0640	.0958	
C26	3690	.0029	10.7010	.3346	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	78588	.0017	28.9306	3.2610	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				3.2610	

SAMPLE: 20
INTERNAL STANDARD
ANDROSTANE (μL): 0.0
DRY WEIGHT EXTRACTED (G): 27.61
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/07/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	8281	.0022	18.2182	.3473	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	1	.0009	.0009	.0000	CPI 12.0559
ANDROSTANE	370000	.0016	592.0000	11.2850	
C21	8266	.0010	8.2660	.1576	
C22	856	.0012	1.0272	.0196	RECOVERY %
C23	6829	.0008	5.4632	.1041	ANDROSTANE 12.0559
C24	0	.0021	.0000	.0000	
C25	15322	.0027	41.3694	.7886	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	1666	.0051	8.4966	.1620	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	48350	.0016	21.4064	1.7966	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				1.7966	

SAMPLE: 21
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 36.29
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 11/01/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .1453
C13	0	.0008	.0000	.0000	PRIST/PHYT 30.3806
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	1530	.0008	.0000	.0000	C18/PHYT .8161
C16	1114	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	67107	.0022	.0000	.0000	
C18	1087	.0016	.0000	.0000	
PHYTANE	1332	.0020	.0000	.0000	
C19	3835	.0010	.0000	.0000	
C20	1292	.0013	.0000	.0000	CPI 3.3332
ANDROSTANE	0	.0017	.0000	.0000	
C21	7632	.0011	.0000	.0000	
C22	1081	.0013	.0000	.0000	RECOVERY %
C23	2249	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	95859	.0017	12.9200	2.6843	
UNRESOLVED	659607	.0017	1121.3319	16.2627	
TOTAL				18.9472	

SAMPLE: 22
 INTERNAL STANDARD
 ANDROSTANE (μ L): 0.0
 DRY WEIGHT EXTRACTED (G): 40.50
 SAMPLE SIZE INJECTED (μ L): 1.5

DATE ANALYZED: 08/18/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0012	.0000	.0000	RESOL/UNRESOL .0190
C13	0	.0014	.0000	.0000	PRIST/PHYT .0000
C14	0	.0011	.0000	.0000	C17/PRIST .0000
C15	0	.0015	.0000	.0000	C18/PHYT .0000
C16	0	.0013	.0000	.0000	
C17	0	.0016	.0000	.0000	
PRISTANE	0	.0040	.0000	.0000	
C18	0	.0014	.0000	.0000	
PHYTANE	0	.0039	.0000	.0000	
C19	0	.0016	.0000	.0000	
C20	0	.0014	.0000	.0000	CPI .0000
ANDROSTANE	0	.0016	.0000	.0000	
C21	0	.0017	.0000	.0000	
C22	1011	.0015	.0000	.0250	RECOVERY %
C23	0	.0015	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0030	.0000	.0000	
C26	0	.0000	.0000	.0000	
C27	0	.0000	.0000	.0000	
C28	0	.0000	.0000	.0000	
C29	0	.0000	.0000	.0000	
C30	0	.0000	.0000	.0000	
RESOLVED	1755	.0016	1.1904	.0446	
UNRESOLVED	92236	.0016	147.5776	2.4293	
TOTAL				2.4738	

SAMPLE: 23
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 3564
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0296
C13	0	.0008	.0000	.0000	PRIST/PHYT 2.6680
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	2761	.0008	2.2088	.0326	C18/PHYT .0413
C16	1406	.0008	1.1248	.0166	
C17	0	.0008	.0000	.0000	
PRISTANE	3446	.0022	7.5812	.1120	
C18	53	.0016	.0848	.0013	
PHYTANE	1282	.0020	2.5640	.0379	
C19	4710	.0010	4.7100	.0696	
C20	1031	.0013	1.3403	.0198	CPI 2.8271
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	1390	.0013	1.8070	.0267	RECOVERY %
C23	3498	.0012	4.1976	.0620	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	22908	.0017	5.6627	.4619	
UNRESOLVED	772631	.0017	1313.4727	19.3968	
TOTAL				19.8587	

SAMPLE: 25
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 36.24
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/17/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .1675
C13	0	.0008	.0000	.0000	PRIST/PHYT 1.2998
C14	439	.0008	.3512	.0051	C17/PRIST 18.5584
C15	806	.0008	.6448	.0094	C18/PHYT 1.4280
C16	387	.0008	.3096	.0045	
C17	12230	.0011	13.4530	.1954	
PRISTANE	659	.0022	1.4498	.0211	
C18	724	.0009	.6516	.0095	
PHYTANE	507	.0019	.9633	.0140	
C19	2499	.0008	1.9992	.0290	
C20	265	.0009	.2385	.0035	CPI 8.5087
ANDROSTANE	0	.0016	.0000	.0000	
C21	3007	.0010	3.0070	.0437	
C22	198	.0012	.2376	.0035	RECOVERY %
C23	1584	.0008	1.2672	.0184	ANDROSTANE .0000
C24	812	.0021	1.7052	.0248	
C25	3913	.0027	10.5597	.1534	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	84459	.0016	90.2896	1.8463	
UNRESOLVED	504278	.0016	806.8464	11.7179	
TOTAL				13.5642	

SAMPLE: 26
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.65
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/23/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	436	.0008	.3488	.0045	RESOL/UNRESOL .0962
C13	0	.0008	.0000	.0000	PRIST/PHYT 5.4893
C14	585	.0008	.4680	.0061	C17/PRIST .0000
C15	1028	.0008	.8224	.0106	C18/PHYT 1.1277
C16	921	.0008	.7368	.0095	
C17	0	.0008	.0000	.0000	
PRISTANE	5632	.0022	12.3904	.1604	
C18	1157	.0016	1.8512	.0240	
PHYTANE	1026	.0020	2.0520	.0266	
C19	2541	.0010	2.5410	.0329	
C20	857	.0013	1.1141	.0144	CPI 2.2789
ANDROSTANE	0	.0017	.0000	.0000	
C21	6390	.0011	7.0290	.0910	
C22	1622	.0013	2.1086	.0273	RECOVERY %
C23	1759	.0012	2.1108	.0273	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	37988	.0017	23.8578	.7436	
UNRESOLVED	394936	.0017	671.3912	8.6298	
TOTAL				9.4364	

SAMPLE: 27
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 30.20
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 5.5496
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT 1.3014
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	1565	.0022	3.4430	.0600	
C18	367	.0016	.5872	.0102	
PHYTANE	282	.0020	.5640	.0098	
C19	939	.0010	.9390	.0164	
C20	551	.0013	.7163	.0125	CPI 2.1683
ANDROSTANE	0	.0017	.0000	.0000	
C21	2101	.0011	2.3111	.0403	
C22	484	.0013	.6292	.0110	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	3498	.0017	8.0597	.3006	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.3006	

SAMPLE: 28
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 26.03
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/09/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0011	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	0	.0008	.0000	.0000		
C20	0	.0009	.0000	.0000	CPI	1.8426
ANDROSTANE	0	.0016	.0000	.0000		
C21	276	.0010	.2760	.0056		
C22	324	.0012	.3888	.0079	RECOVERY %	
C23	321	.0008	.2568	.0052	ANDROSTANE	.0000
C24	0	.0021	.0000	.0000		
C25	0	.0027	.0000	.0000		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	1426	.0016	.0800	.0350		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.0350		

SAMPLE: 29
INTERNAL STANDARD
ANDROSTANE (μL): 0.0
DRY WEIGHT EXTRACTED (G): 23.99
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/03/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .2176
C14	0	.0008	.0000	.0000	C17/PRIST 3.2252
C15	0	.0008	.0000	.0000	C18/PHYT 2.3617
C16	0	.0008	.0000	.0000	
C17	487	.0011	.5357	.0118	
PRISTANE	151	.0022	.3322	.0073	
C18	1639	.0009	1.4751	.0324	
PHYTANE	694	.0019	1.3186	.0289	
C19	2787	.0008	2.2296	.0489	
C20	2755	.0009	2.4795	.0544	CPI 1.2551
ANDROSTANE	0	.0016	.0000	.0000	
C21	3927	.0010	3.9270	.0862	
C22	2486	.0012	2.9832	.0654	RECOVERY %
C23	3265	.0008	2.6120	.0573	ANDROSTANE .0000
C24	2316	.0021	4.8636	.1067	
C25	5475	.0027	14.7825	.3243	
C26	3505	.0034	11.9170	.2614	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	47868	.0016	29.4096	1.7302	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				1.7302	

SAMPLE: 30
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 43.64
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/27/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	902	.0008	.7216	.0087	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	902	.0017	5.9466	.0087	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.0087	

SAMPLE: 31
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 24.76
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/24/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	1093	.0008	.8744	.0186	RESOL/UNRESOL	.0000
C13	739	.0008	.5912	.0126	PRIST/PHYT	.0000
C14	722	.0008	.5776	.0123	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	505	.0008	.4040	.0086		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	.7626
ANDROSTANE	0	.0017	.0000	.0000		
C21	732	.0011	.8052	.0171		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	1633	.0012	1.9596	.0417	ANDROSTANE	.0000
C24	8337	.0017	14.1729	.3013		
C25	3299	.0020	6.5980	.1403		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	121787	.0017	178.0359	4.3368		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				4.3368		

SAMPLE: 32
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 40.28
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/24/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	648	.0008	.5184	.0068	RESOL/UNRESOL .5024
C13	648	.0008	.5184	.0068	PRIST/PHYT 2.7322
C14	575	.0008	.4600	.0060	C17/PRIST .3202
C15	2151	.0008	1.7208	.0225	C18/PHYT 1.3526
C16	1487	.0008	1.1896	.0155	
C17	908	.0008	.7264	.0095	
PRISTANE	2836	.0022	6.2392	.0815	
C18	1404	.0016	2.2464	.0294	
PHYTANE	1038	.0020	2.0760	.0271	
C19	669	.0010	.6690	.0087	
C20	3394	.0013	4.4122	.0577	CPI 4.8078
ANDROSTANE	0	.0017	.0000	.0000	
C21	5030	.0011	5.5330	.0723	
C22	4447	.0013	5.7811	.0755	RECOVERY %
C23	8364	.0012	10.0368	.1311	ANDROSTANE .0000
C24	2740	.0017	4.6580	.0609	
C25	7299	.0020	14.5980	.1907	
C26	10211	.0029	29.6119	.3869	
C27	72627	.0095	689.9565	9.0153	
C28	498	.0076	1.7848	.0495	
C29	21325	.0124	264.4300	3.4552	
C30	0	.0050	.0000	.0000	
RESOLVED	280449	.0017	224.6550	16.6443	
UNRESOLVED	554958	.0017	946.4286	12.3272	
TOTAL				28.9715	

SAMPLE: 33
 INTERNAL STANDARD
 ANDROSTANE (μL): 500.0
 DRY WEIGHT EXTRACTED (G): 10.51
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/09/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .1976
C16	268	.0008	.2144	.1070	
C17	4592	.0011	5.0512	.2530	
PRISTANE	0	.0022	.0000	.0000	
C18	375	.0009	.3375	30169.0000	
PHYTANE	1898	.0019	3.6062	.1806	
C19	2027	.0008	1.6216	.0812	
C20	931	.0009	.8379	.0420	CPI 4.9639
ANDROSTANE	223340	.0016	357.3440	17.8945	
C21	13026	.0010	13.0260	.6523	
C22	675	.0012	.8100	.0406	RECOVERY %
C23	1589	.0008	1.2712	.0637	ANDROSTANE 37.6152
C24	1309	.0021	2.7489	.1377	
C25	3764	.0027	10.1628	.5089	
C26	1478	.0034	5.0252	.2517	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	42390	.0016	.0000	3.0771	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				3.0771	

SAMPLE: 34
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 33.71
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0288
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT 1.8420
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	641	.0008	.5769	.0090	
C20	348	.0009	.6612	.0103	CPI 2.4652
ANDROSTANE	910	.0016	.7280	.0114	
C21	531	.0010	.4779	.0075	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	3244	.0008	3.2440	.0506	ANDROSTANE .0000
C24	1081	.0021	1.2972	.0203	
C25	1400	.0027	1.1200	.0175	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	10101	.0016	3.1136	.1752	
UNRESOLVED	350755	.0016	561.2080	8.7622	
TOTAL				8.9373	

SAMPLE: 35
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 35.05
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/12/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 7.2197
C14	1131	.0008	.9048	.0136	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	1084	.0008	.8672	.0130	
C17	0	.0008	.0000	.0000	
PRISTANE	1906	.0022	4.1932	.0630	
C18	0	.0016	.0000	.0000	
PHYTANE	264	.0020	.5280	.0079	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	5300	.0017	1.5555	.1209	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.1209	

SAMPLE: 36
 INTERNAL STANDARD
 ANDROSTANE (μ L): 0.0
 DRY WEIGHT EXTRACTED (G): 41.28
 SAMPLE SIZE INJECTED (μ L): 1.5

DATE ANALYZED: 08/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0012	.0000	.0000	RESOL/UNRESOL .0311
C13	0	.0014	.0000	.0000	PRIST/PHYT .0000
C14	0	.0011	.0000	.0000	C17/PRIST .0000
C15	0	.0015	.0000	.0000	C18/PHYT .0000
C16	0	.0013	.0000	.0000	
C17	0	.0016	.0000	.0000	
PRISTANE	826	.0040	3.3040	.0534	
C18	0	.0014	.0000	.0000	
PHYTANE	0	.0039	.0000	.0000	
C19	1549	.0016	2.4784	.0400	
C20	0	.0014	.0000	.0000	CPI .0000
ANDROSTANE	0	.0016	.0000	.0000	
C21	845	.0017	1.4365	.0232	
C22	0	.0015	.0000	.0000	RECOVERY %
C23	0	.0015	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0030	.0000	.0000	
C26	0	.0000	.0000	.0000	
C27	0	.0000	.0000	.0000	
C28	0	.0000	.0000	.0000	
C29	0	.0000	.0000	.0000	
C30	0	.0000	.0000	.0000	
RESOLVED	3676	.0016	.7296	.1284	
UNRESOLVED	118114	.0016	188.9824	3.0520	
TOTAL				3.1804	

SAMPLE: 38
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.89
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/09/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	2896	.0008	2.3168	.0298	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	975	.0008	.7800	.0100	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	38710	.0017	59.2263	.8022	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.8022	

SAMPLE: 40
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 16.74
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/24/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	1093	.0008	.8744	.0275	RESOL/UNRESOL .0000
C13	987	.0008	.7896	.0248	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	2643	.0017	.9571	.0824	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.0824	

SAMPLE: 41
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 33.15
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/13/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1536	.0008	1.2288	.0195	RESOL/UNRESOL .0455
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	2.4080	.0382	C17/PRIST .0000
C15	3010	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI .0000
ANDROSTANE	0	.0016	.0000	.0000	
C21	0	.0010	.0000	.0000	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	0	.0008	.0000	.0000	ANDROSTANE .0000
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	8342	.0016	6.0736	.1542	
UNRESOLVED	183374	.0016	293.3984	4.6582	
TOTAL				4.8124	

SAMPLE: 42
 INTERNAL STANDARD
 ANDROSTANE (μ L): 0.0
 DRY WEIGHT EXTRACTED (G): 19.77
 SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 11/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	961	.0008	.7688	.0389	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	853	.0008	.6824	.0345	C17/PRIST .0000
C15	1394	.0008	1.1520	.0564	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	3447	.0008	2.7576	.1395	
PRISTANE	0	.0022	.0000	.0000	
C18	297	.0016	.4752	.0240	
PHYTANE	0	.0020	.0000	.0000	
C19	1847	.0010	1.8470	.0934	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	3804	.0011	4.1844	2117.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	4814	.0020	9.6280	.4870	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	19572	.0017	3.6635	1.2707	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.2707	

SAMPLE: 43
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 17.10
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/03/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 8.2500
C14	344	.0008	.2752	.0085	C17/PRIST .4169
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	743	.0011	.8173	.2520	
PRISTANE	1782	.0022	3.9204	.1207	
C18	0	.0009	.0000	.0000	
PHYTANE	216	.0019	.4104	.0126	
C19	751	.0008	.6008	.1850	
C20	0	.0009	.0000	.0000	CPI .1341
ANDROSTANE	0	.0016	.0000	.0000	
C21	697	.0010	.6970	.0215	
C22	4242	.0012	5.0904	.1567	RECOVERY %
C23	1217	.0008	.9736	.0300	ANDROSTANE .0000
C24	4856	.0021	10.1976	.3139	
C25	1749	.0027	4.7223	.1453	
C26	29026	.0034	98.6884	3.0375	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	556962	.0016	16.5424	4.3994	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				4.3994	

SAMPLE: 44
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 41.58
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED:10/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	15.3658
ANDROSTANE	0	.0017	.0000	.0000		
C21	1009	.0011	1.1099	.0140		
C22	298	.0013	.3874	.0049	RECOVERY %	
C23	3570	.0012	4.2840	.0542	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	27889	.0017	39.1204	.2189		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.2189		

SAMPLE: 45
 INTERNAL STANDARD
 ANDROSTANE (μ L): 0.0
 DRY WEIGHT EXTRACTED (G): 37.63
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/02/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	2107	.0008	1.6856	.0236	RESOL/UNRESOL .1102
C13	421	.0008	.3368	.0047	PRIST/PHYT .3493
C14	1581	.0008	1.2648	.0177	C17/PRIST 5.4702
C15	332	.0008	.2656	.0037	C18/PHYT .2635
C16	549	.0008	.4392	.0061	
C17	1559	.0011	1.7149	.0240	
PRISTANE	285	.0022	.6270	.0088	
C18	215	.0009	.1935	.0027	
PHYTANE	816	.0019	1.5504	.0217	
C19	1094	.0008	.8752	.0122	
C20	609	.0009	.5481	.0077	CPI 1.8722
ANDROSTANE	0	.0016	.0000	.0000	
C21	3243	.0010	3.2430	.0454	
C22	2664	.0012	3.1968	.0447	RECOVERY %
C23	4877	.0008	3.9060	.0546	ANDROSTANE .0000
C24	4393	.0021	9.2253	.1290	
C25	7217	.0027	19.4859	.2725	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	41739	.0016	15.6432	.8979	
UNRESOLVED	378614	.0016	605.7824	8.4728	
TOTAL				9.3707	

SAMPLE: 46
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 18.49
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED:10/13/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .6088
C14	1065	.0008	.8520	.0243	C17/PRIST .1622
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	773	.0008	.6184	.0176	
C17	344	.0008	.2752	.0078	
PRISTANE	2121	.0022	4.6662	.1328	
C18	0	.0016	.0000	.0000	
PHYTANE	3484	.0020	6.9680	.1983	
C19	2403	.0010	2.4030	.0684	
C20	2826	.0013	3.6738	.1046	CPI .7712
ANDROSTANE	0	.0017	.0000	.0000	
C21	850	.0011	.9350	.0266	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	28280	.0017	24.5038	1.2779	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.2779	

SAMPLE: 47
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 28.43
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/13/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0681
C13	0	.0008	.0000	.0000	PRIST/PHYT .9712
C14	0	.0008	.0000	.0000	C17/PRIST .1874
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	202	.0011	.2222	.0041	
PRISTANE	1078	.0022	2.3716	.0439	
C18	0	.0009	.0000	.0000	
PHYTANE	1110	.0019	2.1090	.0390	
C19	0	.0008	.0000	.0000	
C20	2903	.0009	2.6127	.0484	CPI .0092
ANDROSTANE	0	.0016	.0000	.0000	
C21	0	.0010	.0000	.0000	
C22	19003	.0012	22.8036	.4222	RECOVERY % ANDROSTANE .0000
C23	0	.0008	.0000	.0000	
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	36234	.0016	19.1008	.9112	
UNRESOLVED	531785	.0016	850.8560	25.7516	
TOTAL				16.6628	

SAMPLE: 48
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 35.87
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0440
C13	0	.0008	.0000	.0000	PRIST/PHYT	.5510
C14	0	.0008	.0000	.0000	C17/PRIST	.8884
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	398	.0008	.3184	.0047		
PRISTANE	448	.0022	.9856	.0145		
C18	0	.0016	.0000	.0000		
PHYTANE	813	.0020	1.6260	.0239		
C19	315	.0010	.3150	.0046		
C20	723	.0013	.9399	.0138	CPI	1.4802
ANDROSTANE	0	.0017	.0000	.0000		
C21	1494	.0011	1.6434	.0241		
C22	768	.0013	.9984	.0146	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	14116	.0017	15.5669	.3286		
UNRESOLVED	320582	.0017	544.9894	7.9966		
TOTAL				8.3251		

SAMPLE: 49
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 11.12
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/03/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.6079
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0011	.0000	.0000		
PRISTANE	842	.0022	1.8524	.0877		
C18	0	.0009	.0000	.0000		
PHYTANE	1385	.0019	2.6315	.1246		
C19	578	.0008	.4624	.0219		
C20	235	.0009	.2115	.0100	CPI	1.9245
ANDROSTANE	0	.0016	.0000	.0000		
C21	355	.0010	.3550	.0168		
C22	3318	.0012	3.9816	.1885	RECOVERY %	
C23	7764	.0008	6.2122	.2940	ANDROSTANE	.0000
C24	6837	.0021	14.3577	.6796		
C25	16922	.0027	45.6894	2.1625		
C26	2922	.0034	9.9348	.4702		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	77731	.0016	58.5168	6.8253		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				6.8253		

SAMPLE: 51
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 21.10
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/12/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1758	.0008	1.4064	.0351	RESOL/UNRESOL .0842
C13	1213	.0008	.9704	.0242	PRIST/PHYT 16.6061
C14	1487	.0008	1.1896	.0297	C17/PRIST .0000
C15	1722	.0008	1.3776	.0344	C18/PHYT .0000
C16	508	.0008	.4064	.0101	
C17	0	.0008	.0000	.0000	
PRISTANE	3836	.0022	8.4392	.0215	
C18	0	.0016	.0000	.0000	
PHYTANE	231	.0020	.4620	.0115	
C19	8348 ?	.0010	3.3480	.0835	
C20	864 ?	.0013	.7852	.0196	CPI 2.2197
ANDROSTANE	0	.0017	.0000	.0000	
C21	2181	.0011	2.3991	.0598	
C22	688	.0013	.0000	.0000	RECOVERY %
C23	1524	.0012	.8256	.0206	ANDROSTANE .0000
C24	0	.0017	2.5908	.0646	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	28060	.0017	15.2320	.9836	
UNRESOLVED	383343 ?	.0017	566.6831	14.1353	
TOTAL				15.1189	

SAMPLE: 52
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 31.23
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0826
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI 3.6466 ?
ANDROSTANE	0	.0016	.0000	.0000	
C21	1389	.0010	1.3890	.0234	
C22	614	.0012	.7368	.0124	RECOVERY %
C23	850	.0008	.6800	.0115	ANDROSTANE .0000
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	11884	.0016	14.4496	.2908	
UNRESOLVED	143858	.0016	230.1728	3.8791	
TOTAL				4.1699	

SAMPLE: 53
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 36.62
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL 1.2407
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST 6.5346
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	1418	.0011	1.5598	.0224	
PRISTANE	217	.0022	.4774	.0069	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	986	.0008	.7888	.0113	
C20	215	.0009	.1935	.0028	CPI 12.7788
ANDROSTANE	0	.0016	.0000	.0000	
C21	8095	.0010	8.0950	.1163	
C22	680	.0012	.8160	.0117	RECOVERY %
C23	938	.0008	.7504	.0108	ANDROSTANE .0000
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	52862	.0016	64.5008	1.1093	
UNRESOLVED	42808	.0016	68.1728	.9798	
TOTAL				2.0891	

SAMPLE: 54
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.77
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/27/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	2.7474
C14	0	.0008	.0000	.0000	C17/PRIST	1.2739
C15	0	.0008	.0000	.0000	C18/PHYT	2.7526
C16	0	.0008	.0000	.0000		
C17	665	.0008	.5320	.0130		
PRISTANE	522	.0022	1.1484	.0282		
C18	523	.0016	.8368	.0205		
PHYTANE	190	.0020	.3800	.0093		
C19	774	.0010	.7740	.0190		
C20	620	.0013	.8060	.0198	CPI	1.8226
ANDROSTANE	0	.0017	.0000	.0000		
C21	934	.0011	1.0274	.0252		
C22	430	.0013	.5590	.0137	RECOVERY %	
C23	494	.0012	.5928	.0145	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	10378	.0017	8.8842	.3812		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.3812		

SAMPLE: 55
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 36.19
SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 11/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	1259	.0011	1.3849	.0383	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	1970	.0017	1.2087	.0717	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.0717	

SAMPLE: 56
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 38.36
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/21/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0469
C13	1927	.0008	1.5416	.0442	PRIST/PHYT .0151
C14	382	.0008	.3056	.0088	C17/PRIST 153.9881
C15	1296	.0008	1.0368	.0297	C18/PHYT .4328
C16	1107	.0008	.8856	.0254	
C17	12935	.0011	14.2285	.4079	
PRISTANE	84	.0022	.1848	.0053	
C18	2411	.0009	2.1399	.0622	
PHYTANE	5571	.0019	10.5849	.3034	
C19	2142	.0008	1.7136	.0491	
C20	1900	.0009	1.7100	.0490	CPI 2.6827
ANDROSTANE	0	.0016	.0000	.0000	
C21	512	.0010	.5130	.0147	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	603	.0008	.4824	.0138	ANDROSTANE .0000
C24	1437	.0021	3.0177	.0865	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	77952	.0016	73.0320	3.1936	
UNRESOLVED	1661693	.0016	2658.7088	76.2157	
TOTAL				79.4093	

SAMPLE: 57
INTERNAL STANDARD
ANDROSTANE (μL): 0.0
DRY WEIGHT EXTRACTED (G): 21.13
SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 08/28/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	1620	.0008	1.2960	.6130	RESOL/UNRESOL .0375
C13	1213	.0008	.9704	.0459	PRIST/PHYT .0674
C14	207	.0008	.1656	.0078	C17/PRIST 5.9368
C15	169	.0008	.1352	.0064	C18/PHYT .5436
C16	916	.0008	.7328	.0347	
C17	1502	.0011	1.6522	.0782	
PRISTANE	253	.0022	.5566	.0263	
C18	2040	.0009	1.8360	.0869	
PHYTANE	3753	.0019	7.1307	.3375	
C19	2641	.0008	2.1128	.0000	
C20	959	.0009	.8631	.0408	CPI 1.0714
ANDROSTANE	0	.0016	.0000	.0000	
C21	1108	.0010	1.1080	.0524	
C22	403	.0012	.4836	.0229	RECOVERY %
C23	526	.0008	.4208	.0139	ANDROSTANE .0000
C24	2157	.0021	4.5297	.2144	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	90706	.0016	113.9824	6.5299	
UNRESOLVED	5415684	.0016	3865.0944	182.9198	
TOTAL				189.4496	

SAMPLE: 58
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 22.99
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0360
C13	0	.0008	.0000	.0000	PRIST/PHYT 6.3298
C14	791	.0008	.6328	.0145	C17/PRIST .1391
C15	999	.0008	.7992	.0183	C18/PHYT .5069
C16	794	.0008	.6352	.0145	
C17	1660	.0011	1.8260	.0418	
PRISTANE	11938	.0022	26.2636	.6013	
C18	956	.0009	.8604	.0197	
PHYTANE	1886	.0019	3.5834	.0820	
C19	779	.0008	.6232	.0143	
C20	216	.0009	.1944	.0045	CPI 1.5803
ANDROSTANE	0	.0016	.0000	.0000	
C21	919	.0010	.9190	.0210	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	0	.0008	.0000	.0000	ANDROSTANE .0000
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	50271	.0016	46.9328	1.9063	
UNRESOLVED	1394938	.0016	2231.9008	51.0955	
TOTAL				53.0018	

SAMPLE: 59
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 33.70
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 09/2782
 SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0401
C13	0	.0008	.0000	.0000	PRIST/PHYT 1.4713
C14	0	.0008	.0000	.0000	C17/PRIST .1326
C15	1089	.0008	.8712	.0776	C18/PHYT .6613
C16	1110	.0008	.8880	.7910	
C17	681	.0008	.5548	.0485	
PRISTANE	5135	.0022	11.2970	1.0057	
C18	2308	.0016	3.6928	.3287	
PHYTANE	349	.0020	6.9800	.6214	
C19	459	.0010	4.5900	.4086	
C20	4607	.0013	5.9891	.5332	CPI 1.7717
ANDROSTANE	0	.0017	.0000	.0000	
C21	8163	.0011	8.9859	.7999	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	2407	.0012	2.8884	.2371	ANDROSTANE .0000
C24	1534	.0017	2.6078	.2321	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	66012	.0017	52.5134	9.0669	
UNRESOLVED	1647093	.0017	2800.0581249	2633	
TOTAL				258.3302	

SAMPLE: 60
INTERNAL STANDARD
ANDROSTANE (μ L): 0.0
DRY WEIGHT EXTRACTED (G): 27.02
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/12/82
SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1427	.0008	1.1416	.0667	RESOL/UNRESOL .0356
C13	1301	.0008	1.0408	.0608	PRIST/PHYT 1.9261
C14	4246	.0008	3.3968	.1985	C17/PRIST .0803
C15	6761	.0008	5.4088	.3161	C18/PHYT .8307
C16	3918	.0008	3.1344	.1832	
C17	653	.0008	.5224	.0305	
PRISTANE	8136	.0022	17.8992	1.0460	
C18	3509	.0016	5.6144	.3281	
PHYTANE	4224	.0020	8.4480	.4937	
C19	10414	.0010	10.4140	.6086	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	2070	.0011	2.2770	.1331	
C22	495	.0013	.6435	.0376	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	100999	.0017	91.5365	8.8518	
UNRESOLVED	2839348	.0017	4826.8915282	0.645	
TOTAL				290.9172	

SAMPLE: 61
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 20.36
SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/12/82
SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0276
C13	0	.0008	.0000	.0000	PRIST/PHYT 9.9393
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	323	.0008	.2584	.0635	C18/PHYT .0000
C16	1480	.0008	1.1840	.2908	
C17	0	.0008	.0000	.0000	
PRISTANE	11957	.0022	26.3054	6.4601	
C18	0	.0016	.0000	.0000	
PHYTANE	1203	.0020	3.4060	.5909	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .2182
ANDROSTANE	30703	.0017	52.1951	12.8180	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 52.1951
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	44439	.0017	50.1092	19.7110	
UNRESOLVED	1611967	.0017	2740.3439672	972.9725	
TOTAL				692.6884	

SAMPLE: 62
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 29.48
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0172
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	414	.0008	.3312	.0112	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	5138	.0022	11.3036	.3834		
C18	175	.0016	.2800	.0095		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	2.3657
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	15402	.0017	16.4475	.9621		
UNRESOLVED	893141	.0017	1518.3397	51.5041		
TOTAL				52.4661		

SAMPLE: 63
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 28.21
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/22/82
SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	1165	.0011	1.2815	.0239	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	3943	.0017	4.7226	.1120	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.1120	

SAMPLE: 64
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 30.34
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .1887
C14	0	.0008	.0000	.0000	C17/PRIST 1.4610
C15	1849	.0008	1.4792	.0257	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	225	.0008	.1800	.0031	
PRISTANE	154	.0022	.3388	.0059	
C18	0	.0016	.0000	.0000	
PHYTANE	816	.0020	1.6320	.0283	
C19	1507	.0010	1.5070	.0261	
C20	0	.0013	.0000	.0000	CPI 7.1264
ANDROSTANE	0	.0017	.0000	.0000	
C21	1572	.0011	1.7292	.0300	
C22	2617	.0013	3.4021	.0590	RECOVERY %
C23	3476	.0012	4.1712	.0724	ANDROSTANE .0000
C24	2035	.0017	3.4595	.0600	
C25	16686	.0020	33.3720	.5789	
C26	15212	.0029	44.4309	.7708	
C27	117020	.0095	1111.6900	19.2848	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	191270	.0017	47.5864	21.7704	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				21.7704	

SAMPLE: 65
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 31.13
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/28/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .2214
C14	0	.0008	.0000	.0000	C17/PRIST .9396
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	249	.0008	.1192	.0034	
PRISTANE	265	.0022	.5830	.0099	
C18	0	.0016	.0000	.0000	
PHYTANE	1197	.0020	2.3940	.0405	
C19	1231	.0010	1.2310	.0208	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	1010	.0011	1.1110	.0188	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	5879	.0017	3.2759	.1487	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.1487	

SAMPLE: 66
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 15.54
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/20/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.1351
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	2708	.0008	2.1664	.0734	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	2907	.0022	6.3954	.2166		
C18	574	.0016	.9184	.0311		
PHYTANE	0	.0020	.0000	.0000		
C19	1714	.0010	1.7140	.0581		
C20	3964	.0013	5.1532	.1745	CPI	2.6061
ANDROSTANE	0	.0017	.0000	.0000		
C21	5718	.0011	6.2898	.2130		
C22	2264	.0013	2.9432	.0997	RECOVERY %	
C23	5086	.0012	6.1032	.2067	ANDROSTANE	.0000
C24	5259	.0017	8.9403	.3028		
C25	16206	.0020	32.4120	1.0977		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	52557	.0017	10.4669	2.8281		
UNRESOLVED	388900	.0017	661.1300	22.3915		
TOTAL				25.2196		

SAMPLE: 67
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 43.19
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/28/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 1.0457
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	1746	.0008	1.3968	.0170	C18/PHYT .5734
C16	310	.0008	.2480	.0030	
C17	0	.0008	.0000	.0000	
PRISTANE	755	.0022	1.6610	.0202	
C18	414	.0016	.6624	.0081	
PHYTANE	722	.0020	1.4440	.0176	
C19	490	.0010	.4900	.0060	
C20	874	.0013	1.1362	.0138	CPI 1.3992
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	10174	.0017	8.2671	.1865	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.1865	

SAMPLE: 68
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 11.18
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/09/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .5243
C13	0	.0008	.0000	.0000	PRIST/PHYT 2.0991
C14	0	.0008	.0000	.0000	C17/PRIST .9764
C15	1605	.0008	1.2840	.0604	C18/PHYT 3.4180
C16	0	.0008	.0000	.0000	
C17	662	.0011	.7282	.0343	
PRISTANE	678	.0022	1.4916	.0702	
C18	1104	.0009	.9936	.0468	
PHYTANE	323	.0019	.6137	.0289	
C19	2165	.0008	1.7320	.0815	
C20	2757	.0009	2.4813	.1168	CPI 1.7947
ANDROSTANE	0	.0016	.0000	.0000	
C21	3314	.0010	3.3140	.1560	
C22	2046	.0012	2.4552	.1156	RECOVERY %
C23	2810	.0008	2.2480	.1058	ANDROSTANE .0000
C24	1682	.0021	4.1622	.1959	
C25	3602	.0027	9.7524	.4578	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	26581	.0016	5.6528	1.7363	
UNRESOLVED	50698	.0016	81.1168	3.8187	
TOTAL				5.5550	

SAMPLE: 69
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 39.75
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): .5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0466
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	849	.0008	.6792	.0045	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	442	.0013	.5746	.0038	CPI	2.9317
ANDROSTANE	0	.0017	.0000	.0000		
C21	3170	.0011	3.4870	.0231		
C22	2400	.0013	3.1200	.0207	RECOVERY %	
C23	4313	.0012	5.1756	.0343	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	15228	.0017	6.8918	.1319		
UNRESOLVED	326870	.0017	555.8790	3.6788		
TOTAL				3.8107		

SAMPLE: 70
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 32.68
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/11/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	4686	.0008	3.4788	.0604	RESOL/UNRESOL	.0000
C13	2951	.0008	2.3608	.0380	PRIST/PHYT	.9776
C14	4344	.0008	3.4752	.0560	C17/PRIST	.1881
C15	3135	.0008	2.5080	.0404	C18/PHYT	.1819
C16	967	.0008	.7736	.0125		
C17	566	.0008	.4528	.0073		
PRISTANE	3009	.0022	6.6198	.1066		
C18	560	.0016	.8960	.0144		
PHYTANE	3078	.0020	6.1560	.0991		
C19	1578	.0010	1.5780	.0254		
C20	574	.0013	.7462	.0120	CPI	1.3964
ANDROSTANE	0	.0017	.0000	.0000		
C21	793	.0011	.8723	.0140		
C22	629	.0013	.8177	.0132	RECOVERY %	
C23	855	.0012	1.0260	.0165	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	30866	.0017	5.3397	.6019		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.6019		

SAMPLE: 71
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 20.00
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	1787	.0008	1.4296	.0376	RESOL/UNRESOL	.0000
C13	687	.0008	.5496	.0145	PRIST/PHYT	.0000
C14	239	.0008	.1912	.0050	C17/PRIST	.0000
C15	3323	.0008	1.6584	.0700	C18/PHYT	.0000
C16	1261	.0008	1.0088	.0265		
C17	465	.0008	.3720	.0098		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	2021	.0020	4.0420	.1064		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	1.7618
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	1040	.0013	1.3520	.0356	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	37192	.0017	44.8273	1.4850		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				1.4850		

SAMPLE: 72
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 11.98
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 08/30/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .2726
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	265	.0011	.2915	.0128	
PRISTANE	972	.0022	2.1384	.0939	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI 5.4907
ANDROSTANE	0	.0016	.0000	.0000	
C21	692	.0010	.6920	.0304	
C22	1512	.0012	1.8144	.0797	RECOVERY %
C23	22073	.0008	17.6584	.7758	ANDROSTANE .0000
C24	11359	.0021	23.8539	1.0480	
C25	71061	.0027	191.8647	8.4292	
C26	7529	.0034	25.5986	1.1246	
C27	52945	.0065	344.1425	15.1192	
C28	6379	.0051	32.5329	1.4293	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	180652	.0016	9.3840	28.5551	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				28.5551	

SAMPLE: 73
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 39.47
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST 2.4381
C15	910	.0008	.7280	.0097	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	1497	.0011	1.6467	.0220	
PRISTANE	814	.0022	1.3508	.0180	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI 5.2380
ANDROSTANE	0	.0016	.0000	.0000	
C21	540	.0010	.5400	.0072	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	552	.0008	.4416	.0059	ANDROSTANE .0000
C24	668	.0021	1.4028	.0187	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	5460	.0016	1.0864	.0960	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.0960	

SAMPLE: 74
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 26.20
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/12/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	2794	.0022	6.1498	.1235	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	1048	.0011	1.1528	.0232	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	1944	.0012	2.3328	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0496	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	9140	.0017	5.7018	.3080	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.3080	

SAMPLE: 75
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 31.38
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0175
C13	0	.0008	.0000	.0000	PRIST/PHYT 38.4000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	2148	.0008	1.7184	.0865	C18/PHYT .0000
C16	316	.0008	.2528	.0127	
C17	0	.0008	.0000	.0000	
PRISTANE	2688	.0022	5.9136	.2976	
C18	0	.0016	.0000	.0000	
PHYTANE	70	.0020	.1400	.0070	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI 6.7975
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	18940	.0017	23.3206	1.5772	
UNRESOLVED	1085252	.0017	1844.9284	92.8313	
TOTAL				94.4085	

SAMPLE: 76
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 38.27
SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 11/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	2564	.0008	2.0512	.0536	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	7632	.0022	16.7904	.4387	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	2681	.0011	2.9491	.0771	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	2927	.0095	27.8065	.7266	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	16540	.0017	1.2512	1.3287	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.3287	

SAMPLE: 77
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 25.19
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/23/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	757	.0008	.6056	.0127	RESOL/UNRESOL .0976
C13	0	.0008	.0000	.0149	PRIST/PHYT .5725
C14	893	.0008	.7144	.0304	C17/PRIST 1.2224
C15	1821	.0008	1.4568	.0213	C18/PHYT .8530
C16	1276	.0008	1.0208	.0113	
C17	676	.0008	.5408	.0254	
PRISTANE	553	.0022	1.2166	.0275	
C18	824	.0016	1.3184	.0404	
PHYTANE	966	.0020	1.9320	.0247	
C19	1183	.0010	1.1830	.0176	
C20	647	.0013	.8411	.0000	CPI 4.8468
ANDROSTANE	0	.0017	.0000	.0307	
C21	1334	.0011	1.4674	.0000	
C22	0	.0013	.0000	.0267	RECOVERY %
C23	1064	.0012	1.2768	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0188	
C25	450	.0020	.9000	.0950	
C26	1568	.0029	4.5472	2.8696	
C27	14457	.0095	137.3415	.0000	
C28	0	.0076	.0000	1.1029	
C29	4257	.0124	52.7868	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	44847	.0017	20.6057	4.8005	
UNRESOLVED	459591	.0017	781.3047	16.3245	
TOTAL				21.1249	

SAMPLE: 78
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 23.94
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/12/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	.0000
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	0	.0017	.0000	.0000		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.0000		

SAMPLE: 79
INTERNAL STANDARD
ANDROSTANE (μL): .0
DRY WEIGHT EXTRACTED (G): 25.02
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/28/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.5311
C15	752	.0008	.6016	.0127	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	802	.0008	.6416	.0135		
PRISTANE	1510	.0022	3.3220	.0699		
C18	1607	.0016	2.5712	.0541		
PHYTANE	0	.0020	.0000	.0000		
C19	674	.0010	.6740	.0142		
C20	319	.0013	.4147	.0087	CPI	1.7285
ANDROSTANE	0	.0017	.0000	.0000		
C21	1101	.0011	1.2111	.0255		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	19228	.0017	21.1871	.6442		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.6442		

SAMPLE: 80
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 27.50
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 08/31/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.2532
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.8347
C16	0	.0008	.0000	.0000		
C17	3001	.0011	3.3011	.0632		
PRISTANE	0	.0022	.0000	.0000		
C18	692	.0009	.6228	.0119		
PHYTANE	829	.0019	1.5751	.0301		
C19	6493	.0008	5.1944	.0994		
C20	565	.0009	.5085	.0097	CPI	3.5754
ANDROSTANE	0	.0016	.0000	.0000		
C21	7908	.0010	7.9080	.1513		
C22	495	.0012	.5940	.0114	RECOVERY %	
C23	20329	.0008	16.2632	.3113	ANDROSTANE	.0000
C24	4634	.0021	9.7314	.1862		
C25	17193	.0027	46.4211	.8884		
C26	8692	.0034	29.5528	.5656		
C27	63603	.0065	413.4195	7.9123		
C28	18073	.0051	92.1723	1.7641		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	0	.0016	125.7440	14.4116		
UNRESOLVED	231097	.0016	1458.3632	27.9113		
TOTAL	911477			42.3229		

SAMPLE: 81
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 16.41
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 08/24/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0011	.0000	.0000		
PRISTANE	852	.0022	1.8744	.0601		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	269	.0008	.2152	.0069		
C20	0	.0009	.0000	.0000	CPI	3.1869
ANDROSTANE	0	.0016	.0000	.0000		
C21	1118	.0010	1.1180	.0359		
C22	4622	.0012	5.5464	.1779	RECOVERY %	
C23	3049	.0008	2.4392	.0782	ANDROSTANE	.0000
C24	21	.0021	.0441	.0014		
C25	10361	.0027	27.9747	.8972		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	34440	.0016	22.6368	1.9837		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				1.9837		

SAMPLE: 82
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 19.23
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/14/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	2539	.0008	2.0312	.0556	C18/PHYT .0000
C16	773	.0008	.6184	.0169	
C17	0	.0008	.0000	.0000	
PRISTANE	1106	.0022	2.4332	.0666	
C18	618	.0016	.9888	.0271	
PHYTANE	0	.0020	.0000	.0000	
C19	1570	.0010	1.5700	.0430	
C20	0	.0013	.0000	.0000	CPI 7.1216
ANDROSTANE	238200	.0017	404.9400	11.0830	
C21	5284	.0011	5.8124	.1591	
C22	3039	.0013	3.9507	.1081	RECOVERY %
C23	16355	.0012	19.6236	.5371	ANDROSTANE 42.6253
C24	10493	.0017	17.8381	.4882	
C25	44660	.0020	89.3200	2.4446	
C26	0	.0029	.0000	.0000	
C27	26544	.0095	252.1680	6.9017	
C28	0	.0076	.0000	.0000	
C29	9325	.0124	115.6300	3.1647	
C30	0	.0050	.0000	.0000	
RESOLVED	138220	.0017	27.0572	14.7533	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				14.7533	

SAMPLE: 83
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 28.13
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 08/25/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	2957	.0008	2.3656	.0625	RESOL/UNRESOL .2022
C13	2038	.0008	1.6304	.0431	PRIST/PHYT 2.6464
C14	3338	.0008	2.6704	.0706	C17/PRIST .0000
C15	8030	.0008	6.4240	.1698	C18/PHYT .0000
C16	5869	.0008	4.6952	.1241	
C17	0	.0011	.0000	.0000	
PRISTANE	12377	.0022	27.2294	.7198	
C18	0	.0009	.0000	.0000	
PHYTANE	4677	.0019	9.3540	.2473	
C19	15832	.0008	15.8320	.4185	
C20	0	.0009	.0000	.0000	CPI 1.9308
ANDROSTANE	131680	.0016	233.8560	5.9176	
C21	11841	.0010	13.0251	.3443	
C22	9743	.0012	12.6659	.3348	RECOVERY %
C23	7192	.0008	8.6304	.2281	ANDROSTANE 23.5638
C24	4322	.0021	7.3474	.1942	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	113115	.0016	42.3283	4.0782	
UNRESOLVED	559347	.0016	950.8899	25.1365	
TOTAL				29.2127	

SAMPLE: 86
 INTERNAL STANDARD
 ANDROSTANE (μL): 500.0
 DRY WEIGHT EXTRACTED (G): 34.34
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/19/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	3804	.0008	3.0432	.0466	RESOL/UNRESOL .0000
C13	1402	.0008	1.1216	.0172	PRIST/PHYT .3574
C14	2701	.0008	2.1608	.0331	C17/PRIST 1.4074
C15	5178	.0008	4.1424	.0635	C18/PHYT 1.8640
C16	3621	.0008	2.8968	.0444	
C17	418	.0008	.3344	.0051	
PRISTANE	297	.0022	.6534	.0100	
C18	1549	.0016	2.4784	.0380	
PHYTANE	831	.0020	1.6620	.0255	
C19	6739	.0010	6.7390	.1033	
C20	1150	.0013	1.4950	.0229	CPI 1.6185
ANDROSTANE	203330	.0017	345.6610	5.2978	
C21	6330	.0011	6.9630	.1067	
C22	4943	.0013	6.4259	.0985	RECOVERY %
C23	5089	.0012	6.1068	.9360	ANDROSTANE 36.3854
C24	2819	.0017	4.7923	.0734	
C25	2008	.0020	4.0160	.0616	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	64810	.0017	27.0827	1.2585	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.2585	

SAMPLE: 87
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 34.22
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0745
C13	0	.0008	.0000	.0000	PRIST/PHYT 3.8113
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .6167
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	1959	.0022	4.3098	.0663	
C18	317	.0016	.5072	.0078	
PHYTANE	514	.0020	1.0280	.0158	
C19	3023	.0010	3.0230	.0465	
C20	0	.0013	.0000	.0000	CPI 2.1650
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	6091	.0013	7.9183	.1218	RECOVERY %
C23	18561	.0012	22.2732	.3426	ANDROSTANE .0000
C24	12827	.0017	21.8059	.3354	
C25	29830	.0020	59.6600	.9176	
C26	4513	.0029	13.0877	.2013	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	131210	.0017	91.0775	3.4558	
UNRESOLVED	1762186	.0017	2995.7162	46.0752	
TOTAL				49.5310	

SAMPLE: 88
 INTERNAL STANDARD
 ANDROSTANE (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 35.06
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/17/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0011	.0000	.0000		
PRISTANE	4764	.0022	10.4808	.1573		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	279	.0008	.2232	.0034		
C20	0	.0009	.0000	.0000	CPI	.6293
ANDROSTANE	0	.0016	.0000	.0000		
C21	894	.0010	.8940	.0134		
C22	1864	.0012	2.2368	.0336	RECOVERY %	
C23	0	.0008	.0000	.0000	ANDROSTANE	.0000
C24	0	.0021	.0000	.0000		
C25	0	.0027	.0000	.0000		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	8190	.0016	.6224	.2170		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.2170		

SAMPLE: 89
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 52.02
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/09/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS	
C12	400	.0008	.3200	.0032	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	652	.0008	.5216	.0053	C17/PRIST	.0000
C15	2087	.0008	1.6696	.0169	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	81	.0011	.0891	.0009		
PRISTANE	0	.0022	.0000	.0000		
C18	341	.0009	.3069	.0031		
PHYTANE	0	.0019	.0000	.0000		
C19	420	.0008	.3360	.0034		
C20	367	.0009	.3303	.0033	CPI	1.6443
ANDROSTANE	107680	.0016	172.2880	1.7431		
C21	403	.0010	.4030	.0041		
C22	459	.0012	.5508	.0056	RECOVERY %	
C23	0	.0008	.0000	.0000	ANDROSTANE	18.1356
C24	0	.0021	.0000	.0000		
C25	0	.0027	.0000	.0000		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	6350	.0016	1.8240	.0643		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.0643		

SAMPLE: 90
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 30.59
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/15/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	439	.0008	.3512	.0060	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 34.1230
C14	476	.0008	.3808	.0066	C17/PRIST .0000
C15	2276	.0008	1.8208	.0313	C18/PHYT 1.6623
C16	551	.0008	.4408	.0076	
C17	0	.0011	.0000	.0000	
PRISTANE	13035	.0022	28.6770	.4934	
C18	635	.0009	.5715	.0098	
PHYTANE	382	.0019	.7258	.0125	
C19	1275	.0008	1.0200	.0175	
C20	709	.0009	.6381	.0110	CPI 4.0347
ANDROSTANE	168570	.0016	265.7120	4.6405	
C21	8050	.0010	8.0500	.1385	
C22	890	.0012	1.0680	.0184	RECOVERY %
C23	818	.0008	.6544	.0113	ANDROSTANE 58.3907
C24	0	.0021	.0000	.0000	
C25	738	.0027	1.9926	.0543	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	37535	.0016	11.6176	.9981	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.9981	

SAMPLE: 92
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 27.59
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/15/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	2.9131
ANDROSTANE	0	.0017	.0000	.0000		
C21	5118	.0011	5.6298	.1074		
C22	2647	.0013	3.4411	.0656	RECOVERY %	
C23	2593	.0012	3.1116	.0594	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	16068	.0017	9.7070	.4176		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.4176		

SAMPLE: 93
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 30.64
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/13/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	2470	.0008	1.9760	.0339	RESOL/UNRESOL	.0000
C13	1928	.0008	1.5424	.0265	PRIST/PHYT	.0000
C14	452	.0008	.3616	.0062	C17/PRIST	1.5698
C15	11873	.0008	9.4984	.1632	C18/PHYT	.0000
C16	1393	.0008	1.1144	.0191		
C17	8397	.0008	6.7176	.1154		
PRISTANE	5349	.0022	11.7678	.2021		
C18	2876	.0016	4.6016	.0790		
PHYTANE	0	.0020	.0000	.0000		
C19	4540	.0010	4.5400	.0780		
C20	8726	.0013	11.3438	.1949	CPI	1.3312
ANDROSTANE	0	.0017	.0000	.0780		
C21	494	.0011	.5434	.0093		
C22	11319	.0013	14.7147	.2528	RECOVERY %	
C23	19088	.0012	22.9056	.3935	ANDROSTANE	.0000
C24	11498	.0017	19.5466	.3358		
C25	8487	.0020	16.9740	.2916		
C26	4906	.0029	14.2274	.2444		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	162245	.0017	99.3633	4.1524		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				4.1524		

SAMPLE: 94
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 21.16
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 08/23/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	1208	.0012	1.4496	.0361	RESOL/UNRESOL	.0000
C13	795	.0014	1.1130	.0277	PRIST/PHYT	.0000
C14	779	.0011	.8569	.0213	C17/PRIST	.0000
C15	0	.0015	.0000	.0000	C18/PHYT	.0000
C16	614	.0013	.7982	.0199		
C17	106	.0016	.1696	.0042		
PRISTANE	0	.0040	.0000	.0000		
C18	409	.0014	.5726	.0142		
PHYTANE	0	.0039	.0000	.0000		
C19	1230	.0016	1.9680	.0490		
C20	225	.0014	.3150	.0078	CPI	1.0513
ANDROSTANE	129380	.0016	207.0080	5.1489		
C21	0	.0017	.0000	.0000		
C22	0	.0015	.0000	.0000	RECOVERY %	
C23	0	.0015	.0000	.0000	ANDROSTANE	31.7903
C24	0	.0017	.0000	.0000		
C25	0	.0030	.0000	.0000		
C26	0	.0000	.0000	.0000		
C27	0	.0000	.0000	.0000		
C28	0	.0000	.0000	.0000		
C29	0	.0000	.0000	.0000		
C30	0	.0000	.0000	.0000		
RESOLVED	11887	.0016	10.4336	.4397		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.4397		

SAMPLE: 95
 INTERNAL STANDARD
 ANDROSTANE (μL): 500.0
 DRY WEIGHT EXTRACTED (G): 10.86
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 08/23/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	733	.0012	.8796	.0426	RESOL/UNRESOL .0000
C13	0	.0014	.0000	.0000	PRIST/PHYT .0000
C14	0	.0011	.0000	.0000	C17/PRIST 1.2849
C15	699	.0015	1.0485	.0508	C18/PHYT .0000
C16	0	.0013	.0000	.0000	
C17	478	.0016	.7648	.0371	
PRISTANE	372	.0040	1.4880	.0721	
C18	0	.0014	.0000	.0000	
PHYTANE	0	.0039	.0000	.0000	
C19	0	.0016	.0000	.0000	
C20	1202	.0014	1.6828	.0816	CPI 1.5033
ANDROSTANE	155750	.0016	249.2000	12.0772	
C21	630	.0017	1.0810	.0519	
C22	0	.0015	.0000	.0000	RECOVERY %
C23	0	.0015	.0000	.0000	ANDROSTANE 26.2316
C24	0	.0017	.0000	.0000	
C25	0	.0030	.0000	.0000	
C26	0	.0000	.0000	.0000	
C27	0	.0000	.0000	.0000	
C28	0	.0000	.0000	.0000	
C29	0	.0000	.0000	.0000	
C30	0	.0000	.0000	.0000	
RESOLVED	21018	.0016	27.0464	1.6468	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				1.6468	

SAMPLE: 96
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 22.71
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	3424	.0008	2.7392	.0635	RESOL/UNRESOL .1566
C13	1586	.0008	1.2688	.0294	PRIST/PHYT .5404
C14	1647	.0008	1.3176	.0305	C17/PRIST .0000
C15	5306	.0008	4.2448	.0994	C18/PHYT 1.6119
C16	4278	.0008	3.4224	.0793	
C17	0	.0008	.0000	.0000	
PRISTANE	408	.0022	.8976	.0208	
C18	1217	.0016	1.9472	.0451	
PHYTANE	755	.0020	1.5100	.0350	
C19	5705	.0010	5.7050	.1322	
C20	720	.0013	.9360	.0217	CPI 1.5461
ANDROSTANE	175660	.0017	298.6220	6.9207	
C21	5283	.0011	5.8113	.1347	
C22	4075	.0013	5.2975	.1228	RECOVERY %
C23	2510	.0012	5.0120	.0698	ANDROSTANE 31.4339
C24	2117	.0017	3.5989	.0834	
C25	1339	.0020	2.6780	.6210	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	55481	.0017	25.6887	1.6240	
UNRESOLVED	354379	.0017	602.4443	13.9620	
TOTAL				15.5860	

SAMPLE: 97
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 27.65
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	1954	.0008	1.5632	.0298	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	1770	.0008	1.4160	.0270	C17/PRIST	.0000
C15	3001	.0008	2.4008	.0457	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	23282	.0022	51.2204	.9750		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	1625	.0010	1.6250	.0309		
C20	0	.0013	.0000	.0000	CPI	4.2395
ANDROSTANE	0	.0017	.0000	.0000		
C21	2878	.0011	3.1658	.0603		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	43737	.0017	15.6859	1.4672		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				1.4672		

SAMPLE: 99
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 27.65
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	392	.0008	.3136	.0057	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	2200	.0008	1.7600	.0320	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	10587	.0022	23.2914	.4229	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	636	.0010	.6360	.0115	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	2625	.0011	2.8875	.0524	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	118863	.0017	174.1191	3.6856	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				3.6856	

SAMPLE: 100
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 13.18
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/16/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	211	.0008	.1688	.0067	C17/PRIST 11.8295
C15	650	.0008	.5200	.0208	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	8624	.0011	9.4864	.3788	
PRISTANE	729	.0022	1.6038	.0640	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	2767	.0008	2.2136	.0884	
C20	0	.0009	.0000	.0000	CPI 7.3951
ANDROSTANE	163880	.0016	262.2080	10.4707	
C21	5186	.0010	5.1860	.2071	
C22	441	.0012	.5292	.0211	RECOVERY %
C23	2166	.0008	1.7328	.6920	ANDROSTANE 27.6008
C24	2130	.0021	4.5990	.1837	
C25	1624	.0027	4.3848	.1751	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	31332	.0016	10.7904	1.6458	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL					1.6458

SAMPLE: 101
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 14.89
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/16/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1228	.0008	.9824	.0347	RESOL/UNRESOL .1214
C13	1787	.0008	1.4296	.0505	PRIST/PHYT .1406
C14	968	.0008	.7744	.0274	C17/PRIST 88.4088
C15	483	.0008	.3864	.0137	C18/PHYT 1.0703
C16	678	.0008	.5424	.0192	
C17	26169	.0011	28.7859	1.0175	
PRISTANE	296	.0022	.6512	.0230	
C18	2253	.0009	2.0277	.0717	
PHYTANE	2105	.0019	3.9995	.1424	
C19	3968	.0008	3.1744	.1122	
C20	4292	.0009	3.8628	.1365	CPI 3.2840
ANDROSTANE	153080	.0016	244.9280	8.6575	25.7819
C21	3260	.0010	3.2600	.1152	
C22	2508	.0012	3.0096	.1064	RECOVERY %
C23	5545	.0008	4.4360	.1568	ANDROSTANE .0000
C24	5662	.0021	11.8902	.4203	
C25	11230	.0027	30.3210	1.0718	
C26	0	.0034	.0000	.0000	
C27	1287	.0065	8.3655	.2957	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	111392	.0016	60.2768	5.9445	
UNRESOLVED	917566	.0016	1468.1056	51.8930	
TOTAL				57.8375	

SAMPLE: 102
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 10.21
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/14/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	2086	.0008	1.6688	.0860	RESOL/UNRESOL .2229
C13	771	.0008	.6168	.0318	PRIST/PHYT 54.4304
C14	463	.0008	.3704	.0191	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .5392
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	34019	.0022	74.8418	3.8580	
C18	337	.0009	.3033	.0156	
PHYTANE	625	.0019	1.1875	.0612	
C19	131	.0008	.1048	.0054	
C20	509	.0009	.4581	.0236	CPI 2.9030
ANDROSTANE	116650	.0016	186.6400	9.6211	
C21	1807	.0010	1.8070	.0931	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	523	.0008	.4184	.0216	ANDROSTANE 19.6463
C24	0	.0021	.0000	.0000	
C25	568	.0027	1.5336	.0791	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	59560	.0016	28.3536	5.7562	
UNRESOLVED	267242	.0016	427.5872	22.0417	
TOTAL				27.7979	

SAMPLE: 103
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 7.75
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/29/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .1004
C13	0	.0008	.0000	.0000	PRIST/PHYT 3.3879
C14	0	.0008	.0000	.0000	C17/PRIST 2.5776
C15	1818	.0008	1.4544	.0988	C18/PHYT .1291
C16	1092	.0008	.8736	.5930	
C17	33341	.0008	26.6728	1.8114	
PRISTANE	12935	.0022	28.4570	1.9326	
C18	493	.0016	.7888	.0536	
PHYTANE	3818	.0020	7.6360	.5186	
C19	4606	.0010	4.6060	.3128	
C20	2167	.0013	2.8171	.1913	CPI 8.7938
ANDROSTANE	129300	.0017	219.8100	14.9277	
C21	5353	.0011	5.8883	.3999	
C22	374	.0013	.4862	.0330	RECOVERY %
C23	1751	.0012	2.1012	.1427	ANDROSTANE 23.1379
C24	1247	.0017	2.1199	.1440	
C25	5753	.0020	11.5060	.7814	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	175289	.0017	170.9197	18.0867	
UNRESOLVED	1746770	.0017	2969.5090	201.6644	
TOTAL				219.7512	

SAMPLE: 104
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 24.2
 SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 08/18/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0012	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0014	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0011	.0000	.0000	C17/PRIST	.0000
C15	0	.0015	.0000	.0000	C18/PHYT	.0000
C16	0	.0013	.0000	.0000		
C17	0	.0016	.0000	.0000		
PRISTANE	0	.0040	.0000	.0000		
C18	0	.0014	.0000	.0000		
PHYTANE	0	.0039	.0000	.0000		
C19	0	.0016	.0000	.0000		
C20	0	.0014	.0000	.0000	CPI	.0000
ANDROSTANE	0	.0016	.0000	.0000		
C21	0	.0017	.0000	.0000		
C22	0	.0015	.0000	.0000	RECOVERY %	
C23	0	.0015	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0030	.0000	.0000		
C26	0	.0000	.0000	.0000		
C27	0	.0000	.0000	.0000		
C28	0	.0000	.0000	.0000		
C29	0	.0000	.0000	.0000		
C30	0	.0000	.0000	.0000		
RESOLVED	0	.0016	.0000	.0000		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.0000		

SAMPLE: 105
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 13.57
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/16/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1920	.0008	1.5360	.0596	RESOL/UNRESOL .0000
C13	1456	.0008	1.1648	.0452	PRIST/PHYT 75.6971
C14	1439	.0008	1.1512	.0446	C17/PRIST .0000
C15	655	.0008	.5240	.0203	C18/PHYT .6050
C16	1135	.0008	.9080	.0352	
C17	0	.0011	.0000	.0000	
PRISTANE	91215	.0022	200.6730	7.7832	
C18	729	.0009	.6561	.0254	
PHYTANE	1205	.0019	2.2895	.0888	
C19	1201	.0008	.9608	.0373	
C20	499	.0009	.4491	.0174	CPI 1.6404
ANDROSTANE	17427	.0016	278.8320	10.8146	
C21	1828	.0010	1.8280	.0709	
C22	921	.0012	1.1052	.0429	RECOVERY %
C23	4266	.0008	3.4128	.1324	ANDROSTANE 29.3507
C24	5429	.0021	11.4009	.4422	
C25	11082	.0027	29.9214	1.1605	
C26	0	.0034	.0000	.0000	
C27	5921	.0065	38.4865	1.4927	
C28	5947	.0051	30.3267	1.1763	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	162741	.0016	41.4268	14.2817	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				14.2817	

SAMPLE: 106
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 26.57
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	935	.0008	.7480	.0148	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	712	.0008	.5696	.0113	C17/PRIST .1576
C15	1468	.0008	1.1744	.0233	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	157	.0011	.1727	.0034	
PRISTANE	996	.0022	2.1912	.0434	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI .9337
ANDROSTANE	152280	.0016	243.6480	4.8263	
C21	246	.0010	.2460	.0049	
C22	446	.0012	.5352	.0106	RECOVERY %
C23	539	.0008	.4312	.0085	ANDROSTANE 25.6472
C24	1423	.0021	2.9883	.0592	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	10893	.0016	6.3536	.3053	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.3053	

SAMPLE: 107
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 8.02
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 08/24/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	573	.0022	1.2606	.0000	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI .0000
ANDROSTANE	0	.0016	.0000	.0000	
C21	0	.0010	.0000	.0000	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	0	.0008	.0000	.0000	ANDROSTANE .0000
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	16991	.0016	28.2688	1.8066	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				1.8066	

SAMPLE: 108
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 8.02
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 08/24/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	458	.0010	.4580	.0044		
C20	0	.0013	.0000	.0000	CPI	1.4708
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	14835	.0012	17.8020	.1722	ANDROSTANE	.0000
C24	10398	.0017	17.6766	.1710		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	55583	.0017	.0000	.0000		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.0000		

SAMPLE: 109
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 24.33
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	836	.0008	.6688	.0145	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 13.6067
C14	0	.0008	.0000	.0000	C17/PRIST .1289
C15	998	.0008	.7984	.0173	C18/PHYT 5.6494
C16	1564	.0008	1.2672	.0274	
C17	1561	.0011	1.7171	.0371	
PRISTANE	12110	.0022	26.6420	.5763	
C18	5028	.0009	4.5252	.0979	
PHYTANE	890	.0019	1.6910	.0366	
C19	4970	.0008	3.9760	.0860	
C20	6877	.0009	6.1893	.1339	CPI .8645
ANDROSTANE	0	.0016	.0000	.0000	
C21	1537	.0010	1.5370	.0332	
C22	2672	.0012	3.2064	.0694	RECOVERY %
C23	2533	.0008	2.0264	.0438	ANDROSTANE .0000
C24	0	.0021	.0000	.0000	
C25	2372	.0027	6.4044	.1385	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	71733	.0016	44.4240	2.2730	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				2.2730	

SAMPLE: 110
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 11.02
SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 11/09/82
SAMPLE VOLUME (ML): 1.0

C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	9296	.0008	7.4368	.6748		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	.0000
ANDROSTANE	145100	.0017	347.1800	22.4301		
C21	1647	.0011	1.8117	.1644		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	48.4380
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	14700	.0017	6.3869	1.4188		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				1.4188		

SAMPLE: 111
INTERNAL STANDARD
ANDROSTANE (μL): .0
DRY WEIGHT EXTRACTED (G): 21.93
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/25/82
SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0995
C15	1912	.0008	1.2960	.0734	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	298	.0008	.2384	.0114	
PRISTANE	2995	.0022	6.5890	.3163	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	684	.0010	.6840	.0328	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	3130	.0011	3.4430	.1653	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	17104	.0017	13.7445	1.2590	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.2590	

SAMPLE: 112
 INTERNAL STANDARD
 ANDROSTANE (μL): 500.0
 DRY WEIGHT EXTRACTED (G): 17.87
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 08/15/82
 SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	1709	.0012	2.0508	.0611	RESOL/UNRESOL .0000
C13	1036	.0014	1.4504	.0432	PRIST/PHYT .0000
C14	846	.0011	.9306	.0277	C17/PRIST 1.1629
C15	0	.0015	.0000	.0000	C18/PHYT .0000
C16	436	.0013	.5668	.0169	
C17	4534	.0016	7.2544	.2161	
PRISTANE	3899	.0040	15.5960	.4645	
C18	0	.0014	.0000	.0000	
PHYTANE	0	.0039	.0000	.0000	
C19	0	.0016	.0000	.0000	
C20	0	.0014	.0000	.0000	CPI 5.7348
ANDROSTANE	102640	.0016	164.2240	4.8915	
C21	1263	.0017	2.1471	.0640	
C22	0	.0015	.0000	.0000	RECOVERY %
C23	519	.0015	.7785	.0232	ANDROSTANE 17.2867
C24	0	.0017	.0000	.0000	
C25	0	.0030	.0000	.0000	
C26	0	.0000	.0000	.0000	
C27	0	.0000	.0000	.0000	
C28	0	.0000	.0000	.0000	
C29	0	.0000	.0000	.0000	
C30	0	.0000	.0000	.0000	
RESOLVED	22131	.0016	12.6224	1.2926	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				1.2926	

SAMPLE: 113
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 20.69
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/15/82
 SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	1156	.0011	1.2716	.0323		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	524	.0008	.4192	.0107		
C20	0	.0009	.0000	.0000	CPI	12.1085
ANDROSTANE	0	.0016	.0000	.0000		
C21	2013	.0010	2.0130	.0512		
C22	516	.0012	.6192	.0158	RECOVERY %	
C23	851	.0008	.6808	.0173	ANDROSTANE	.0000
C24	0	.0021	.0000	.0000		
C25	1704	.0027	4.6008	.1170		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	12656	.0016	9.4272	.4841		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.4841		

SAMPLE: 114
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 20.00
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST 1.7266
C15	1030	.0008	.8240	.0217	C18/PHYT .0000
C16	1328	.0008	1.0624	.0280	
C17	1105	.0008	.8840	.0233	
PRISTANE	640	.0022	1.4080	.0371	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	465	.0010	.4650	.0132	
C20	0	.0013	.0000	.0000	CPI 1.9578
ANDROSTANE	145490	.0017	347.3330	6.5088	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	6579	.0017	3.4187	.2122	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.2122	

SAMPLE: 115
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 17.03
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	5587	.0022	12.2914	.3799		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	.4191
ANDROSTANE	0	.0017	.0000	.0000		
C21	1798	.0011	1.9778	.0611		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	4290	.0017	7.2930	.2254		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	13175	.0017	2.5500	.7452		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.7452		

SAMPLE: 116
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 17.03
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	2124	.0008	1.6992	.0386	RESOL/UNRESOL .0000
C13	945	.0008	.7560	.0172	PRIST/PHYT .0000
C14	5571	.0008	4.4568	.1012	C17/PRIST .0000
C15	3144	.0008	2.5152	.0571	C18/PHYT .0000
C16	301	.0008	.2408	.0055	
C17	0	.0008	.0000	.0000	
PRISTANE	16341	.0022	35.9502	.8159	
C18	341	.0016	.5456	.0124	
PHYTANE	0	.0020	.0000	.0000	
C19	1389	.0010	1.3890	.0315	
C20	0	.0013	.0000	.0000	CPI .6266
ANDROSTANE	182110	.0017	309.5870	7.0263	
C21	0	.0011	.0000	.0000	
C22	2529	.0013	3.2877	.0746	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 32.5881
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	34627	.0017	3.3014	1.2288	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.2288	

SAMPLE: 117
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 25.25
SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 10/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	3155	.0022	8.9410	.2749		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	3540	.0013	4.6020	.1823	CPI	.4226
ANDROSTANE	0	.0017	.0000	.0000		
C21	2088	.0011	2.2968	.0910		
C22	1401	.0013	1.8213	.0721	RECOVERY % ANDROSTANE	.0000
C23	0	.0012	.0000	.0000		
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	11847	.0017	1.8277	.7322		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.7322		

SAMPLE: 118
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 12.68
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/11/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 5.3177
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	3281	.0022	7.2182	.2996	
C18	0	.0016	.0000	.0000	
PHYTANE	617	.0020	1.2340	.0512	
C19	2754	.0010	2.7540	.1143	
C20	1368	.0013	1.7784	.0738	CPI 2.4736
ANDROSTANE	139490	.0017	237.1330	9.8428	
C21	2522	.0011	2.7742	.1152	
C22	961	.0013	1.2493	.0519	RECOVERY %
C23	485	.0012	.5820	.0242	ANDROSTANE 24.9614
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	153400	.0017	240.4004	10.7086	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				10.7086	

SAMPLE: 119
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 32.14
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/29/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 1.1569
C14	0	.0008	.0000	.0000	C17/PRIST 23.0924
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	15241	.0008	12.1928	.1997	
PRISTANE	660	.0022	1.4520	.0238	
C18	0	.0016	.0000	.0000	
PHYTANE	306	.0020	.6120	.0100	
C19	1803	.0010	1.8030	.0295	
C20	670	.0013	.8710	.0143	CPI 29.3229
ANDROSTANE	0	.0017	.0000	.0000	
C21	23343	.0011	25.6773	.4205	
C22	739	.0013	.9607	.0157	RECOVERY %
C23	929	.0012	1.1148	.0183	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	61778	.0017	30.7479	1.2352	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.2352	

SAMPLE: 120
INTERNAL STANDARD
ANDROSTANE (μL): .0
DRY WEIGHT EXTRACTED (G): 5.50
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/29/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	640	.0008	.5120	.0490	PRIST/PHYT .0000
C14	309	.0008	.2472	.0237	C17/PRIST .0000
C15	161	.0008	.1288	.0123	C18/PHYT 1.7608
C16	517	.0008	.4136	.0396	
C17	26782	.0008	21.4256	2.0503	
PRISTANE	0	.0022	.0000	.0000	
C18	611	.0016	.9776	.0936	
PHYTANE	347	.0020	.6940	.0664	
C19	930	.0010	.9300	.0890	
C20	453	.0013	.5889	.0564	CPI 8.4400
ANDROSTANE	0	.0017	.0000	.0000	
C21	2329	.0011	2.5619	.2452	
C22	362	.0013	.4706	.0450	RECOVERY %
C23	2127	.0012	2.5524	.2442	ANDROSTANE .0000
C24	2046	.0017	3.4782	.3328	
C25	3306	.0020	6.6120	.6327	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	50000	.0017	15.4360	5.4573	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				5.4573	

SAMPLE: 121
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 10.69
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	2190	.0008	1.7520	.0863	RESOL/UNRESOL .0000
C13	1069	.0008	.8552	.0421	PRIST/PHYT 274.0333
C14	1463	.0008	1.1704	.0576	C17/PRIST .0000
C15	3943	.0008	3.1544	.1553	C18/PHYT .0000
C16	947	.0008	.7576	.0373	
C17	0	.0008	.0000	.0000	
PRISTANE	65768	.0022	144.6896	7.1237	
C18	790	.0016	1.2640	.0622	
PHYTANE	240	.0020	.4800	.0236	
C19	9801	.0010	9.8010	.4825	
C20	639	.0013	.8307	.0409	CPI 2.4271
ANDROSTANE	7851	.0017	13.3487	.6571	
C21	803	.0011	.8833	.0435	
C22	2886	.0013	3.7518	.1847	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	2203	.0029	6.3887	.3145	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	6053	.0124	75.0572	3.6954	
C30	0	.0050	.0000	.0000	
RESOLVED	126939	.0017	47.8448	14.7054	
UNRESOLVED	0	.0017	.0000	14.7054	
TOTAL				.0000	

SAMPLE: 122
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 20.00
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/07/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	3277	.0008	2.6216	.0690	RESOL/UNRESOL .0000
C13	1309	.0008	1.0472	.0276	PRIST/PHYT 12.8532
C14	2115	.0008	1.6920	.0445	C17/PRIST .0000
C15	291	.0008	.2328	.0061	C18/PHYT .0205
C16	226	.0008	.1808	.0048	
C17	274	.0008	.2192	.0058	
PRISTANE	13393	.0022	29.4646	.7754	
C18	0	.0016	.0000	.0000	
PHYTANE	1042	.0020	2.0840	.0548	
C19	2355	.0010	2.3550	.0620	
C20	0	.0013	.0000	.0000	CPI 3.9260
ANDROSTANE	201140	.0017	341.9380	8.9984	
C21	3662	.0011	4.0282	.1060	
C22	2254	.0013	2.9302	.0771	RECOVERY %
C23	3667	.0012	4.4004	.1158	ANDROSTANE 35.9935
C24	3890	.0017	6.6130	.1740	
C25	2523	.0020	5.0460	.1328	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	19231	.0124	238.4644	6.2754	
C30	0	.0050	.0000	.0000	
RESOLVED	280086	.0017	374.9809	17.7990	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				17.7990	

SAMPLE: 123
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 21.90
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	893	.0008	.7144	.0172	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	634	.0011	.6974	.0168		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	393	.0008	.3144	.0076		
C20	0	.0009	.0000	.0000	CPI	1.8186
ANDROSTANE	0	.0016	.0000	.0000		
C21	335	.0010	.3350	.0081		
C22	709	.0012	.8508	.0204	RECOVERY %	
C23	893	.0008	.7144	.0172	ANDROSTANE	.0000
C24	1022	.0021	2.1462	.0516		
C25	0	.0027	.0000	.0000		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	6656	.0016	2.8432	.2071		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				.2071		

SAMPLE: 124
 INTERNAL STANDARD
 ANDROSTANE (μL): 500.0
 DRY WEIGHT EXTRACTED (G): 9.45
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/09/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST 3.9584
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	3234	.0011	3.5574	.1981	
PRISTANE	817	.0022	1.7974	.1001	
C18	317	.0009	.2853	.0159	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	331	.0009	.2979	.0166	CPI .7668
ANDROSTANE	159670	.0016	255.4720	14.2285	
C21	165	.0010	.1650	.0092	
C22	1189	.0012	1.4268	.0795	RECOVERY %
C23	1212	.0008	.9696	.0540	ANDROSTANE 26.8918
C24	8222	.0021	17.2662	.9616	
C25	1096	.0027	2.9592	.1648	
C26	0	.0034	.0000	.0000	
C27	2006	.0065	13.0390	.7262	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	32503	.0016	22.2624	3.5659	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				3.5659	

SAMPLE: 125
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 26.34
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	1711	.0008	1.3688	.0274	RESOL/UNRESOL .2281
C13	832	.0008	.6656	.0133	PRIST/PHYT .1793
C14	964	.0008	.7712	.0154	C17/PRIST 15.4922
C15	1838	.0008	1.4704	.0294	C18/PHYT 1.7173
C16	819	.0008	.6552	.0131	
C17	4973	.0011	5.4703	.1093	
PRISTANE	321	.0022	.7062	.0141	
C18	3074	.0009	2.7666	.0555	
PHYTANE	1790	.0019	3.4010	.0680	
C19	0	.0008	.0000	.0000	
C20	2070	.0009	1.8630	.0372	CPI .9010
ANDROSTANE	0	.0016	.0000	.0000	
C21	267	.0010	.2670	.0053	
C22	1115	.0012	1.3380	.0267	RECOVERY %
C23	1786	.0008	1.4288	.2850	ANDROSTANE .0000
C24	4103	.0021	8.6163	.1722	
C25	1950	.0027	5.2850	.1052	
C26	780	.0034	3.6520	.0530	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	82219	.0016	86.1216	2.4942	
UNRESOLVED	360453	.0016	576.7248	44.5239	
TOTAL				14.0181	

SAMPLE: 126
 INTERNAL STANDARD
 ANDROSTANE (μ L): 500.0
 DRY WEIGHT EXTRACTED (G): 16.77
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/17/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	879	.0008	.7032	.0221	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	901	.0022	1.9822	.0622	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI .0000
ANDROSTANE	103670	.0016	165.8720	5.2058	
C21	3559	.0010	3.5590	.1117	
C22	0	.0012	.0000	.0000	RECOVERY %
C23	0	.0008	.0000	.0000	ANDROSTANE 17.4602
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	6642	.0016	2.0848	.2614	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.2614	

SAMPLE: 127
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 29.66
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT 11.7350
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	1730	.0008	1.3840	.0246	C18/PHYT 2.2686
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	3321	.0022	7.3062	.1296	
C18	642	.0016	1.0272	.0182	
PHYTANE	283	.0020	.5660	.0100	
C19	1396	.0010	1.3960	.0248	
C20	824	.0013	1.0712	.0190	CPI 2.4601
ANDROSTANE	151050	.0017	256.7850	4.5566	
C21	1461	.0011	1.6071	.0285	
C22	690	.0013	.8970	.0159	RECOVERY %
C23	717	.0012	.8604	.0153	ANDROSTANE 27.0300
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	12460	.0017	2.3732	.3281	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.3281	

SAMPLE: 127
 INTERNAL STANDARD
 ANDROSTANE (μL): 500.0
 DRY WEIGHT EXTRACTED (G): 29.66
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/01/82
 SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST 1.3633
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	1047	.0008	.8376	.0074	
PRISTANE	768	.0022	1.6896	.0150	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	1184	.0013	1.5392	.0137	CPI .8843
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	13894	.0017	18.5215	.2004	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.2004	

SAMPLE: 128
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 35.75
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 08/31/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .3441
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	847	.0008	.6776	.0100	C18/PHYT 2.1518
C16	311	.0008	.2488	.0037	
C17	46652	.0011	51.3172	.7555	
PRISTANE	0	.0022	.0000	.0000	
C18	964	.0009	.8676	.0128	
PHYTANE	448	.0019	.8512	.0125	
C19	1479	.0008	1.1832	.0174	
C20	787	.0009	.7083	.0104	CPI 13.0223
ANDROSTANE	0	.0016	.0000	.0000	
C21	25418	.0010	25.4180	.3742	
C22	2471	.0012	2.9652	.0437	RECOVERY %
C23	2236	.0008	1.7888	.0263	ANDROSTANE .0000
C24	1739	.0021	3.6519	.0538	
C25	5044	.0027	13.6188	.2005	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	113383	.0016	.0000	2.1093	
UNRESOLVED	329534	.0016	.0000	7.7623	
TOTAL				9.8716	

SAMPLE: 129
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 36.65
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	240	.0011	.2640	.0038	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	240	.0017	.0000	.0038	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.0038	

SAMPLE: 130
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 35.30
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.2640	.0038	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	2574	.0017	4.3758	.0652	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.0652	

SAMPLE: 132
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 23.54
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/16/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	1938	.0008	1.5504	.0347	RESOL/UNRESOL .0000
C13	1038	.0008	.8304	.0186	PRIST/PHYT .9743
C14	674	.0008	.5392	.0121	C17/PRIST 9.4376
C15	0	.0008	.0000	.0000	C18/PHYT .5716
C16	831	.0008	.6648	.0149	
C17	8928	.0011	9.8208	.2196	
PRISTANE	946	.0022	2.0812	.0465	
C18	555	.0009	.4995	.0112	
PHYTANE	971	.0019	1.8449	.0142	
C19	1154	.0008	.9232	0.0206 ?	
C20	987	.0009	.8883	.0199	CPI 4.2486
ANDROSTANE	212490	.0016	339.9840	7.6015	
C21	5696	.0010	5.6960	.1274	
C22	1242	.0012	1.4904	.0333	RECOVERY %
C23	1407	.0008	1.1256	.0252	ANDROSTANE 35.7878
C24	654	.0021	1.3734	.0307	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	2778	.0065	18.0570	.4037	
C30	0	.0064	.0000	.0000	
RESOLVED	37082	.0016	11.6258	1.3200	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				1.3200	

SAMPLE: 134
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 22.05
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/24/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	1271	.0008	1.0168	.0243	RESOL/UNRESOL	.3079
C13	1096	.0008	.8768	.0209	PRIST/PHYT	.0000
C14	947	.0008	.7576	.0181	C17/PRIST	.0000
C15	1965	.0008	1.5720	.0375	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	23946	.0022	52.6812	1.2575		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	3929	.0010	3.9290	.0938		
C20	4601	.0013	5.9813	.1428	CPI	3.4088
ANDROSTANE	0	.0017	.0000	.0000		
C21	10377	.0011	11.4147	.2725		
C22	687	.0013	.8931	.0213	RECOVERY %	
C23	1319	.0012	1.5828	.0378	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	2568	.0020	5.1360	.1226		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	71338	.0017	31.6744	2.8050		
UNRESOLVED	231681	.0017	393.8577	9.4011		
TOTAL				12.2061		

SAMPLE: 135
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 12.47
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/15/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0390
C13	0	.0008	.0000	.0000	PRIST/PHYT .8575
C14	0	.0008	.0000	.0000	C17/PRIST 18.8083
C15	0	.0008	.0000	.0000	C18/PHYT 1.3973
C16	0	.0008	.0000	.0000	
C17	5887	.0011	6.4757	.2733	
PRISTANE	313	.0022	.6886	.0291	
C18	510	.0009	.4590	.0194	
PHYTANE	365	.0019	.6935	.0293	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI 9.9220
ANDROSTANE	0	.0016	.0000	.0000	
C21	4697	.0010	4.6970	.1982	
C22	1017	.0012	1.2304	.0515	RECOVERY %
C23	2120	.0008	1.6960	.0716	ANDROSTANE .0000
C24	230	.0021	.4830	.0204	
C25	4729	.0027	12.7683	.5389	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	37420	.0016	28.0832	2.4169	
UNRESOLVED	958515	.0016	1533.6240	64.7290	
TOTAL				67.1459	

SAMPLE: 136
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 15.62
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/01/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	2424	.0008	1.9392	.0653	RESOL/UNRESOL .0331
C13	1980	.0008	1.5840	.0534	PRIST/PHYT .0000
C14	896	.0008	.7168	.0242	C17/PRIST .0000
C15	4941	.0008	3.9528	.1332	C18/PHYT 1.8531
C16	849	.0008	.6792	.0229	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	856	.0016	1.0496	.0354	
PHYTANE	354	.0020	.7080	.0239	
C19	1003	.0010	1.0030338	.0000	
C20	0	.0013	.0000	.0000	CPI 2.6460
ANDROSTANE	0	.0017	.0000	.0000	
C21	5077	.0011	5.5847	.1882	
C22	1005	.0013	1.3065	.0440	RECOVERY %
C23	5044	.0012	6.0528	.2039	ANDROSTANE .0000
C24	5677	.0017	9.6509	.3252	
C25	5989	.0020	11.9780	.4036	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	76889	.0017	69.6898	3.9051	
UNRESOLVED	3323458	.0017	3949.8786133	.0911	
TOTAL				136.9962	

SAMPLE: 137
 INTERNAL STANDARD
 ANDROSTANE (μL): 500.0
 DRY WEIGHT EXTRACTED (G): 17.23
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 08/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	738	.0012	.8856	.0271	RESOL/UNRESOL .0174
C13	0	.0014	.0000	.0000	PRIST/PHYT .0000
C14	216	.0011	.2376	.0073	C17/PRIST .0000
C15	0	.0015	.0000	.0000	C18/PHYT .0000
C16	0	.0013	.0000	.0000	
C17	0	.0016	.0000	.0000	
PRISTANE	10	.0040	.0400	.0012	
C18	0	.0014	.0000	.0000	
PHYTANE	0	.0039	.0000	.0000	
C19	0	.0016	.0000	.0000	
C20	0	.0014	.0000	.0000	CPI 2.1250
ANDROSTANE	183370	.0016	296.3920	8.9621	
C21	459	.0017	.7803	.0238	
C22	0	.0015	.0000	.0000	RECOVERY %
C23	0	.0015	.0000	.0000	ANDROSTANE 30.8834
C24	0	.0017	.0000	.0000	
C25	0	.0030	.0000	.0000	
C26	0	.0000	.0000	.0000	
C27	0	.0000	.0000	.0000	
C28	0	.0000	.0000	.0000	
C29	0	.0000	.0000	.0000	
C30	0	.0000	.0000	.0000	
RESOLVED	2859	.0016	2.2976	.1296	
UNRESOLVED	163958	.0016	262.3328	8.0133	
TOTAL				8.1429	

SAMPLE: 138
INTERNAL STANDARD
ANDROSTANE (μL): 500.0
DRY WEIGHT EXTRACTED (G): 40.63
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/02/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .1139
C13	0	.0008	.0000	.0000	PRIST/PHYT .4437
C14	0	.0008	.0000	.0000	C17/PRIST 3.7070
C15	3251	.0008	2.6008	.0337	C18/PHYT 3.1629
C16	523	.0008	.4181	.0054	
C17	949	.0011	1.0439	.0135	
PRISTANE	256	.0022	.5632	0..73	
C18	1825	.0009	1.6425	.0213	
PHYTANE	577	.0019	1.0963	.0142	
C19	2978	.0008	2.3824	.0309	
C20	3507	.0009	3.1563	.0409	CPI 1.5938
ANDROSTANE	178490	.0016	285.5840	3.6994	
C21	4555	.0010	4.5550	.0590	
C22	2701	.0012	3.2412	.0420	RECOVERY %
C23	3253	.0008	2.6024	.0337	ANDROSTANE 30.0615
C24	2637	.0021	5.5377	.0717	
C25	2853	.0027	7.7031	.0998	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	34961	.0016	8.1536	.5790	
UNRESOLVED	306882	.0016	491.0112	6.3605	
TOTAL				6.9395	

SAMPLE: 139
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 36.81
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/16/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0249
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	925	.0008	.7432	.0106	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0011	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0009	.0000	.0000	
PHYTANE	0	.0019	.0000	.0000	
C19	407	.0008	.3256	.0047	
C20	0	.0009	.0000	.0000	CPI 2.7930
ANDROSTANE	109170	.0016	174.6720	2.4975	
C21	1575	.0010	1.5750	.0225	
C22	636	.0012	.7632	.0109	RECOVERY %
C23	1002	.0008	.8026	.0115	ANDROSTANE 18.3865
C24	765	.0021	1.6065	.0230	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	6435	.0016	1.7936	.1088	
UNRESOLVED	258082	.0016	412.9312	5.9042	
TOTAL				6.0130	

SAMPLE: 140
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 26.55
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0478
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0011	.0000	.0000		
PRISTANE	640	.0022	1.4080	.0279		
C18	269	.0009	.2421	.0048		
PHYTANE	0	.0019	.0000	.0000		
C19	715	.0008	.5720	.0113		
C20	403	.0009	.3627	.0072	CPI	5.0142
ANDROSTANE	0	.0016	.0000	.0000		
C21	4493	.0010	4.4930	.0891		
C22	455	.0012	.5460	.0108	RECOVERY %	
C23	443	.0008	.3544	.0070	ANDROSTANE	.0000
C24	0	.0021	.0000	.0000		
C25	0	.0027	.0000	.0000		
C26	0	.0034	.0000	.0000		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	11466	.0016	6.4768	.2865		
UNRESOLVED	239763	.0016	383.6208	7.6047		
TOTAL				7.8913		

SAMPLE: 142
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 16.91
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 10/23/82
 SAMPLE VOLUME (ML): 1.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0422
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	1622	.0008	1.2976	.1150	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	1774	.0008	1.4208	.1260	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	3105	.0010	3.1050	.2753	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	7343	.0011	8.0773	.7161	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	786	.0012	.9432	.0836	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	23688	.0017	15.3952	2.6808	
UNRESOLVED	561505	.0017	954.5585	84.6240	
TOTAL				87.3048	

SAMPLE: 143
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 29.57
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/14/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	2029	.0008	1.6232	.0289	RESOL/UNRESOL .0000
C13	694	.0008	.5552	.0099	PRIST/PHYT .0000
C14	974	.0008	.7792	.0139	C17/PRIST 3.0108
C15	110	.0008	.0880	.0016	C18/PHYT .0000
C16	548	.0008	.4384	.0078	
C17	280	.0011	.3080	.0055	
PRISTANE	93	.0022	.2046	.0036	
C18	308	.0009	.2772	.0049	
PHYTANE	0	.0019	.0000	.0000	
C19	0	.0008	.0000	.0000	
C20	0	.0009	.0000	.0000	CPI .9701
ANDROSTANE	0	.0016	.0000	.0000	
C21	558	.0010	.5580	.0099	
C22	477	.0012	.5724	.0102	RECOVERY %
C23	596	.0008	.4768	.0085	ANDROSTANE .0000
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	13768	.0016	11.3616	.3069	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.3069	

SAMPLE: 144
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 34.88
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/23/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0357
C13	0	.0008	.0000	.0000	PRIST/PHYT 1.0302
C14	0	.0008	.0000	.0000	C17/PRIST .3115
C15	0	.0008	.0000	.0000	C18/PHYT .7977
C16	0	.0008	.0000	.0000	
C17	138	.0008	.1104	.0017	
PRISTANE	443	.0022	.9746	.0147	
C18	343	.0016	.5488	.0083	
PHYTANE	430	.0020	.8600	.0130	
C19	686	.0010	.6860	.0104	
C20	840	.0013	1.0920	.0165	CPI 10.7358
ANDROSTANE	0	.0017	.0000	.0000	
C21	14569	.0011	16.0259	.2418	
C22	331	.0013	.4303	.0065	RECOVERY %
C23	861	.0012	1.0332	.0156	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	28004	.0017	15.9171	.5685	
UNRESOLVED	783407	.0017	1331.7919	20.0958	
TOTAL				20.6644	

SAMPLE: 145
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 22.97
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1799	.0008	1.4392	.0330	RESOL/UNRESOL .0000
C13	744	.0008	.5952	.0136	PRIST/PHYT .0000
C14	916	.0008	.7328	.0168	C17/PRIST 5.4249
C15	2490	.0008	1.9920	.0456	C18/PHYT .0000
C16	236	.0008	.1888	.0043	
C17	1698	.0011	1.8678	.0428	
PRISTANE	313	.0022	.6886	.0158	
C18	361	.0009	.3249	.0074	
PHYTANE	0	.0019	.0000	.0000	
C19	859	.0008	.6872	.0157	
C20	1010	.0009	.9090	.0208	CPI 4.4271
ANDROSTANE	124450	.0016	199.1200	4.5625	
C21	7822	.0010	7.8220	.1792	
C22	722	.0012	.8664	.0199	RECOVERY %
C23	753	.0008	.6024	.0138	ANDROSTANE 20.9600
C24	0	.0021	.0000	.0000	
C25	0	.0027	.0000	.0000	
C26	0	.0034	.0000	.0000	
C27	0	.0065	.0000	.0000	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	23593	.0016	6.1920	.5707	
UNRESOLVED	0	.0016	.0000	.0000	
TOTAL				.5707	

SAMPLE: 146
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 6.50
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 09/07/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0011	.0000	.0000		
PRISTANE	435	.0022	.9570	.0775		
C18	0	.0009	.0000	.0000		
PHYTANE	0	.0019	.0000	.0000		
C19	0	.0008	.0000	.0000		
C20	0	.0009	.0000	.0000	CPI	.5694
ANDROSTANE	0	.0016	.0000	.0000		
C21	1163	.0010	1.1630	.0942		
C22	1477	.0012	1.7724	.1435	RECOVERY %	
C23	0	.0008	.0000	.0000	ANDROSTANE	.0000
C24	403	.0021	.8463	.0685		
C25	1765	.0027	4.7655	.3859		
C26	3262	.0034	11.0908	.8980		
C27	0	.0065	.0000	.0000		
C28	0	.0051	.0000	.0000		
C29	0	.0065	.0000	.0000		
C30	0	.0064	.0000	.0000		
RESOLVED	9073	.0016	.9088	1.7412		
UNRESOLVED	0	.0016	.0000	.0000		
TOTAL				1.7412		

SAMPLE: 147
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 17.25
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0835
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	328	.0022	.7216	.0220		
C18	210	.0016	.3360	.0103		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	8.2382
ANDROSTANE	0	.0017	.0000	.0000		
C21	56520	.0011	62.1720	1.8969		
C22	1374	.0013	1.7862	.0545	RECOVERY %	
C23	7395	.0012	8.8740	.2708	ANDROSTANE	.0000
C24	7225	.0017	12.2825	.3748		
C25	8655	.0020	17.3100	.5281		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	92660	.0017	18.6201	3.7255		
UNRESOLVED	1109525	.0017	1886.1925	57.5497		
TOTAL				61.2752		

SAMPLE: 148
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 25.42
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/15/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0589
C13	0	.0008	.0000	.0000	PRIST/PHYT 8.2854
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	468	.0008	.3744	.0078	C18/PHYT .3817
C16	1306	.0008	1.0448	.0216	
C17	0	.0011	.0000	.0000	
PRISTANE	6968	.0022	15.3296	.3174	
C18	321	.0009	.2889	.0060	
PHYTANE	841	.0019	1.5979	.0331	
C19	1165	.0008	.9320	.0193	
C20	320	.0009	.2880	.0060	CPI 1.7974
ANDROSTANE	0	.0016	.0000	.0000	
C21	4030	.0010	4.0300	.0834	
C22	738	.0012	.8856	.0183	RECOVERY %
C23	1960	.0008	1.5680	.0325	ANDROSTANE .0000
C24	3664	.0021	7.6944	.1593	
C25	2175	.0027	5.8725	.1216	
C26	0	.0034	.0000	.0000	
C27	1614	.0065	10.4910	.2172	
C28	0	.0051	.0000	.0000	
C29	0	.0065	.0000	.0000	
C30	0	.0064	.0000	.0000	
RESOLVED	40813	.0016	24.3888	1.5484	
UNRESOLVED	692350	.0016	1107.7600	22.9359	
TOTAL				24.4844	

SAMPLE: 149
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 19.74
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1181	.0008	.9448	.0252	RESOL/UNRESOL .1435
C13	160	.0008	.1280	.0034	PRIST/PHYT 6.5051
C14	1343	.0008	1.0744	.0286	C17/PRIST .0000
C15	3561	.0008	2.8488	.0760	C18/PHYT 1.1637
C16	1754	.0008	1.4032	.0374	
C17	0	.0008	.0000	.0000	
PRISTANE	10135	.0022	22.2970	.5945	
C18	1813	.0016	2.9008	.0773	
PHYTANE	1558	.0020	3.1160	.0831	
C19	3265	.0010	3.2650	.0871	
C20	606	.0013	.7878	.0210	CPI 9.0794
ANDROSTANE	0	.0017	.0000	.0000	
C21	68474	.0011	75.3214	2.0082	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	786	.0012	.9432	.0251	ANDROSTANE .0000
C24	2003	.0017	3.4051	.0908	
C25	1374	.0020	2.7480	.0733	
C26	1030	.0029	2.9870	.0796	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	150819	.0017	88.0192	5.6575	
UNRESOLVED	1050648	.0017	1786.1016	47.6218	
TOTAL				53.2792	

SAMPLE: 150
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 17.10
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	1288	.0022	2.8336	.0872		
C18	374	.0016	.5984	.0184		
PHYTANE	0	.0020	.0000	.0000		
C19	626	.0010	.6260	.0193		
C20	500	.0013	.6500	.0200	CPI	5.5333
ANDROSTANE	0	.0017	.0000	.0000		
C21	5776	.0011	6.3536	.1956		
C22	283	.0013	.3679	.0113	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	11944	.0017	5.2649	.5138		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.5138		

SAMPLE: 151
INTERNAL STANDARD
ANDROSTANE (μ L): 500.0
DRY WEIGHT EXTRACTED (G): 20.00
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 09/29/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1902	.0008	1.5216	.0400	RESOL/UNRESOL .0000
C13	881	.0008	.7048	.0185	PRIST/PHYT .0000
C14	1508	.0008	1.2064	.0317	C17/PRIST .0000
C15	191	.0008	.1528	.0040	C18/PHYT .0000
C16	1375	.0008	1.1000	.0289	
C17	790	.0008	.6320	.0166	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	1059	.0020	2.1180	.0557	
C19	1551	.0010	1.5510	.0408	
C20	1346	.0013	1.7498	.0460	CPI 2.7525
ANDROSTANE	129830	.0017	220.7110	5.8082	
C21	10238	.0011	11.2618	.2964	
C22	857	.0013	1.1141	.0293	RECOVERY %
C23	348	.0012	.4176	.0110	ANDROSTANE 23.2327
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	158948	.0017	232.7334	6.7438	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				6.7438	

SAMPLE: 152
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 25.12
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0810
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	1788	.0008	1.4304	.0300	C18/PHYT	.0000
C16	1971	.0008	1.5768	.0330		
C17	1000	.0008	.8000	.0168		
PRISTANE	0	.0022	.0000	.0000		
C18	3176	.0016	5.0816	.1065		
PHYTANE	0	.0020	.0000	.0000		
C19	8290	.0010	8.2900	.1737		
C20	6792	.0013	8.8296	.1850	CPI	1.3646
ANDROSTANE	0	.0017	.0000	.0000		
C21	6361	.0011	6.9971	.1466		
C22	4457	.0013	5.7941	.1214	RECOVERY %	
C23	4551	.0012	5.4612	.1144	ANDROSTANE	.0000
C24	2110	.0017	3.5870	.0752		
C25	3263	.0020	6.5260	.1367		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	49193	.0017	9.2378	1.3328		
UNRESOLVED	607353	.0017	1032.5001	21.6330		
TOTAL				22.9658		

SAMPLE: 153
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 27.44
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 10/12/82
 SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .1323
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	2337	.0008	1.8696	.0341	C17/PRIST .0000
C15	2702	.0008	2.1616	.0394	C18/PHYT 10.0116
C16	1772	.0008	1.4176	.0258	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	2593	.0016	4.1488	.0756	
PHYTANE	259	.0020	.5180	.0094	
C19	9917	.0010	9.9170	.1807	
C20	7441	.0013	9.6733	.1763	CPI 1.1583
ANDROSTANE	0	.0017	.0000	.0000	
C21	5753	.0011	6.3283	.1153	
C22	1718	.0013	2.2334	.0407	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	47086	.0017	21.4098	1.0874	
UNRESOLVED	355997	.0017	605.1949	11.0276	
TOTAL				12.1150	

SAMPLE: 154
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 26.99
SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 11/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	1898	.0008	1.5184	.0563		
PRISTANE	0	.0022	.0000	.0000		
C18	295	.0016	.4720	.0175		
PHYTANE	0	.0020	.0000	.0000		
C19	684	.0010	.8840	.0253		
C20	0	.0013	.0000	.0000	CPI	12.9186
ANDROSTANE	0	.0017	.0000	.0000		
C21	1229	.0011	1.3519	.0501		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	4690	.0017	.9928	.1860		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.1860		

SAMPLE: 155
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 26.14
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 09/27/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	4149	.0008	3.3192	.1270	RESOL/UNRESOL .1901
C13	2456	.0008	1.9648	.0752	PRIST/PHYT .7607
C14	5330	.0008	4.2640	.1631	C17/PRIST 3.3508
C15	1202	.0008	.9616	.0368	C18/PHYT 2.1063
C16	1627	.0008	1.3026	.0498	
C17	3525	.0008	2.8200	.1079	
PRISTANE	1052	.0022	2.3144	.0885	
C18	2913	.0016	4.6608	.1783	
PHYTANE	1383	.0020	2.7660	.1058	
C19	4064	.0010	4.0640	.1555	
C20	3894	.0013	5.0622	.1937	CPI 1.2036
ANDROSTANE	0	.0017	.0000	.0000	
C21	5861	.0011	6.4471	.2466	
C22	1888	.0013	2.4544	.0939	RECOVERY %
C23	2380	.0012	2.8560	.1093	ANDROSTANE .0000
C24	539	.0017	.9163	.0351	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	62284	.0017	34.0357	3.0684	
UNRESOLVED	327587	.0017	556.8979	21.3044	
TOTAL				24.3728	

SAMPLE: (301) C14-152-P2
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 11.20
SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 12/08/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1708	.0008	1.3672	.1221	RESOL/UNRESOL .0478
C13	0	.0008	.0000	.0000	PRIST/PHYT .2302
C14	1589	.0008	1.2712	.1135	C17/PRIST .0000
C15	1019	.0008	.8152	.0728	C18/PHYT 1.3730
C16	1820	.0008	1.4560	.1300	
C17	0	.0008	.0000	.0000	
PRISTANE	358	.0022	.7876	.0703	
C18	2135	.0016	3.4160	.3050	
PHYTANE	1555	.0020	3.1100	.2777	
C19	6245	.0010	6.2450	.5576	
C20	3890	.0013	5.0570	.4515	CPI .8838
ANDROSTANE	0	.0017	.0000	.0000	
C21	1675	.0011	1.8425	.1645	
C22	1535	.0013	1.9955	.1782	RECOVERY %
C23	755	.0012	.9060	.0809	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	29890	.0017	9.5285	3.3748	
UNRESOLVED	382470	.0017	650.1990	58.0535	
TOTAL				61.4283	

SAMPLE: (302) C14-72
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 11.17
SAMPLE SIZE INJECTED (μ L): 1.0

DATE ANALYZED: 11/08/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT 4.7665
C16	0	.0008	.0000	.0000	
C17	3483	.0008	2.7864	.2495	
PRISTANE	0	.0022	.0000	.0000	
C18	1840	.0016	2.9440	.2636	
PHYTANE	386	.0020	.7720	.0691	
C19	2208	.0010	2.2080	.1977	
C20	3374	.0013	4.3862	.3927	CPI 2.2420
ANDROSTANE	0	.0017	.0000	.0000	
C21	1626	.0011	1.7886	.1601	
C22	1954	.0013	2.5402	.2274	RECOVERY %
C23	6783	.0012	8.1396	.7287	ANDROSTANE .0000
C24	1663	.0017	4.5271	.4053	
C25	7941	.0020	15.8820	1.4218	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	43044	.0017	18.3362	5.7574	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				5.7574	

SAMPLE: (305) C14-74-P3
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 12.45
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	.0000
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	0	.0017	.0000	.0000		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.0000		

SAMPLE: (307) C14-80
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 23.39
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	.0000
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	0	.0017	.0000	.0000		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.0000		

SAMPLE: (306) C14-81
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 14.92
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	1683	.0017	2.8611	.2019	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	9521	.0017	13.3246	1.1419	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.1419	

SAMPLE: (308) C14-74-P2
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 3.88
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 10/23/82
SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	2055	.0008	1.6440	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.4460	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	0	.0017	.0000	.0000	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	5461	.0017	5.7902	2.0169	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				2.0169	

SAMPLE: (309) C14-152-P1
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 17.70
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	209	.0016	.3344	.0099	
PHYTANE	0	.0020	.0000	.0000	
C19	2482	.0010	2.4820	.0738	
C20	4448	.0013	5.7824	.1719	CPI .6331
ANDROSTANE	0	.0017	.0000	.0000	
C21	1676	.0011	1.8436	.0548	
C22	1716	.0013	2.2308	.0663	RECOVERY %
C23	1180	.0012	1.4160	.0421	ANDROSTANE .0000
C24	2056	.0017	3.4986	.1040	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	13796	.0017	.0459	.5243	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.5243	

SAMPLE: (309) C14-74-P1
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 6.49
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	419	.0016	.6704	.0544	
PHYTANE	0	.0020	.0000	.0000	
C19	3062	.0010	3.0620	.2483	
C20	2706	.0013	5.5178	.2853	CPI .9073
ANDROSTANE	0	.0017	.0000	.0000	
C21	2029	.0011	2.2319	.1810	
C22	2486	.0013	3.2318	.2621	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE .0000
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	11277	.0017	.9775	1.1103	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.1103	

SAMPLE: (311) C14-78-P1
INTERNAL STANDARD
ANDROSTANE (μ L): .0
DRY WEIGHT EXTRACTED (G): 5.70
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/20/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	6952	.0008	5.5616	.5135		
C17	0	.0008	.0000	.0000		
PRISTANE	2000	.0022	4.4000	.4063		
C18	1296	.0016	2.0736	.1915		
PHYTANE	0	.0020	.0000	.0000		
C19	1174	.0010	1.1740	.1084		
C20	466	.0013	.6058	.0559	CPI	.1219
ANDROSTANE	940	.0017	1.5980	.1476		
C21	0	.0011	.0000	.0000		
C22	920	.0013	1.1960	.1104	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	27258	.0017	24.5650	3.6543		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				3.6543		

SAMPLE: (312) C14-78-P2
 INTERNAL STANDARD
 ANDROSTANE (μL): .0
 DRY WEIGHT EXTRACTED (G): 8.17
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	245	.0020	.4900	.0316		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	1.8217
ANDROSTANE	1098	.0017	1.8666	.1202		
C21	1002	.0011	1.1022	.0710		
C22	1464	.0013	1.9032	.1226	RECOVERY %	
C23	1665	.0012	1.9980	.1287	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	9450	.0017	8.6258	.9096		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.9096		

SAMPLE: (318) SEA TROUT #1 (WHOLE)
 INTERNAL STANDARD
 ANDROSTANE (μ L): .0
 DRY WEIGHT EXTRACTED (G): 0.60
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS	
C12	0	.0008	.0000	.0000	RESOL/UNRESOL	.0000
C13	0	.0008	.0000	.0000	PRIST/PHYT	.0000
C14	0	.0008	.0000	.0000	C17/PRIST	.0000
C15	0	.0008	.0000	.0000	C18/PHYT	.0000
C16	0	.0008	.0000	.0000		
C17	0	.0008	.0000	.0000		
PRISTANE	0	.0022	.0000	.0000		
C18	0	.0016	.0000	.0000		
PHYTANE	0	.0020	.0000	.0000		
C19	0	.0010	.0000	.0000		
C20	0	.0013	.0000	.0000	CPI	.0000
ANDROSTANE	0	.0017	.0000	.0000		
C21	0	.0011	.0000	.0000		
C22	0	.0013	.0000	.0000	RECOVERY %	
C23	0	.0012	.0000	.0000	ANDROSTANE	.0000
C24	0	.0017	.0000	.0000		
C25	0	.0020	.0000	.0000		
C26	0	.0029	.0000	.0000		
C27	0	.0095	.0000	.0000		
C28	0	.0076	.0000	.0000		
C29	0	.0124	.0000	.0000		
C30	0	.0050	.0000	.0000		
RESOLVED	0	.0017	.0000	.0000		
UNRESOLVED	0	.0017	.0000	.0000		
TOTAL				.0000		

SAMPLE: (319) PINFISH (WHOLE)
 INTERNAL STANDARD
 ANDROSTANE (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.78
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	2876	.0008	2.3008	.6803	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	3019	.0008	2.4152	.7141	C17/PRIST .0000
C15	1937	.0008	1.5496	.4582	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .6416
ANDROSTANE	35246	.0017	59.9152	17.7168	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 63.0718
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	8740	.0017	1.5436	2.3090	
UNRESOLVED	0	.0017	.0000	2.3090	
TOTAL				.0000	

SAMPLE: (320) GREY SNAPPER (WHOLE)
INTERNAL STANDARD
ANDROSTANE (μ L): 50.0
DRY WEIGHT EXTRACTED (G): 1.78
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	514	.0008	.4112	.0913	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	4186	.0017	7.1162	1.5803	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 7.4907
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	7513	.0017	11.8983	2.7336	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				2.7336	

SAMPLE: (321) SCALLOPS (WHOLE)
 INTERNAL STANDARD
 ANDROSTANE (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.05
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	1674	.0008	1.3392	.6713	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	8078	.0022	17.7738	8.9092	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	52769	.0017	89.7073	44.9661	
C21	4842	.0011	5.3265	2.6698	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 94.4287
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	653840	.0017	1086.7165556	9703	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				556.9703	

SAMPLE: (322) TOADFISH (WHOLE)
 INTERNAL STANDARD
 ANDROSTANE (μ L): 50.0
 DRY WEIGHT EXTRACTED (G): 1.61
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	1237	.0008	.9896	.3235	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	21448	.0010	21.4480	7.0114	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	16831	.0017	28.6127	9.3536	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 30.1186
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	21628	.0017	6.7475	.0000	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL			6.7475	.0000	

SAMPLE: (323) SHRIMP (WHOLE)
 INTERNAL STANDARD
 ANDROSTANE (μ L): 50.0
 DRY WEIGHT EXTRACTED (G): 1.66
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	186	.0008	.1488	.0472	RESOL/UNRESOL .0000
C13	3524	.0008	2.8192	.8938	PRIST/PHYT .0000
C14	5183	.0008	4.1464	1.3146	C17/PRIST .0000
C15	2654	.0008	2.1232	.6732	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI 1.1920
ANDROSTANE	33371	.0017	56.7307	17.9869	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 59.7165
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	19489	.0017	13.4674	7.1988	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				7.1988	

SAMPLE: (324) GRUNT (WHOLE)
 INTERNAL STANDARD
 ANDROSTANE (μ L): 50.0
 DRY WEIGHT EXTRACTED (G): 1.93
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	1588	.0008	1.2704	.3464	RESOL/UNRESOL .0000
C13	4788	.0008	3.8304	1.0446	PRIST/PHYT .0000
C14	3080	.0008	2.4640	.6719	C17/PRIST .0000
C15	2869	.0008	2.2952	.6259	C18/PHYT .0000
C16	1097	.0008	.8776	.2393	
C17	0	.0008	.0000	.0000	
PRISTANE	10963	.0022	24.1186	6.5772	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI 1.8331
ANDROSTANE	45712	.0017	77.7104	21.1918	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 81.8004
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	32193	.0017	13.2736	13.1251	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				13.1251	

SAMPLE: (328) CRAB (HEPATO-PANCREAS)
 INTERNAL STANDARD
 ANDROSTANE (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.04
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	30264	.0017	51.4488	28.0368	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 54.1566
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	0	.0017	.0000	.0000	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.0000	

SAMPLE: (327) BLUE CRAB (CLAW MUSCLE)
 INTERNAL STANDARD
 ANDROSTANE (μL): 100.0
 DRY WEIGHT EXTRACTED (G): 0.65
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	78206	.0017	132.9519	107.6534	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 69.9747
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	7433	.0017	12.6361	10.2317	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				10.2317	

SAMPLE: (328) SCHOOL MASTER (WHOLE)
 INTERNAL STANDARD
 ANDROSTANE (μ L): 50.0
 DRY WEIGHT EXTRACTED (G): 0.87
 SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	2065	.0008	1.6520	.9994	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	323	.0008	.2584	.1563	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	38274	.0017	65.0658	39.3622	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 68.4903
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	2388	.0017	.0000	1.1557	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				1.1557	

SAMPLE: (329) SEA TROUT #2 (WHOLE)
INTERNAL STANDARD
ANDROSTANE (μL): 50.0
DRY WEIGHT EXTRACTED (G): 0.70
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/15/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	44880	.0017	76.2960	57.3654	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 80.3116
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	6711	.0017	11.4087	8.5780	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				8.5780	

SAMPLE: (330) STONE CRAB (CLAW MUSCLE)
 INTERNAL STANDARD
 ANDROSTANE (μL): 100.0
 DRY WEIGHT EXTRACTED (G): 0.45
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	0	.0008	.0000	.0000	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	81008	.0017	137.7136161	14.4232	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 772.4808
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	7254	.0017	12.3318	14.4232	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				14.4232	

SAMPLE: (331) BLUE CRAB (HEPATO-PANCREAS)
INTERNAL STANDARD
ANDROSTANE (μ L): 5.0
DRY WEIGHT EXTRACTED (G): 2.80
SAMPLE SIZE INJECTED (μ L): 1.9

DATE ANALYZED: 12/16/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μ G/G	RATIOS
C12	0	.0008	.0000	.0000	RESOL/UNRESOL .0000
C13	0	.0008	.0000	.0000	PRIST/PHYT .0000
C14	0	.0008	.0000	.0000	C17/PRIST .0000
C15	0	.0008	.0000	.0000	C18/PHYT .0000
C16	0	.0008	.0000	.0000	
C17	1729	.0008	1.3832	.1300	
PRISTANE	0	.0022	.0000	.0000	
C18	0	.0016	.0000	.0000	
PHYTANE	0	.0020	.0000	.0000	
C19	0	.0010	.0000	.0000	
C20	0	.0013	.0000	.0000	CPI .0000
ANDROSTANE	68797	.0017	116.9549	10.9920	
C21	0	.0011	.0000	.0000	
C22	0	.0013	.0000	.0000	RECOVERY %
C23	0	.0012	.0000	.0000	ANDROSTANE 761.5552
C24	0	.0017	.0000	.0000	
C25	0	.0020	.0000	.0000	
C26	0	.0029	.0000	.0000	
C27	0	.0095	.0000	.0000	
C28	0	.0076	.0000	.0000	
C29	0	.0124	.0000	.0000	
C30	0	.0050	.0000	.0000	
RESOLVED	1729	.0017	12.3318	.1300	
UNRESOLVED	0	.0017	.0000	.0000	
TOTAL				.1300	

Appendix E

Detailed summary of aromatic (f₂) hydrocarbon determinations for Year 01
 (Values are not corrected for percent recovery)

[NOTE: THE FONT SIZE USED IN THIS SECTION OF THE DOCUMENT WAS APPROXIMATELY 5. ERRORS IN TRANSCRIPTION MAY HAVE OCCURRED DUE TO FONT SIZE AND ILLEGIBILITY OF THE COPY OF THE DOCUMENT USED FOR RESCUE. QUESTIONABLE TRANSCRIPTIONS ARE NOTED WITH A QUESTION MARK. THE COPY OF DOCUMENT USED TO GENERATE THIS DOCUMENT IS ARCHIVED AT THE NOAA/NMFS/SEFSC LIBRARY IN MIAMI.]

SAMPLE: 2
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 19.08
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/02/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	μG/G	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	2.8448	.0785	
DIBENZOTHIOPHENE	0	.0112	17.4160	.4804	RECOVERY %
PYRENE	0	.0136	27.7440	.7653	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	0	.0033	411.3483	12.6711	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				12.6711	

SAMPLE: 5
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 29.82
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/02/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL 1.1306
PHENANTHRENE	11717	.0112	131.2304	2.3162	
DIBENZOTHIOPHENE	4347	.0112	48.6864	.8593	RECOVERY %
PYRENE	1997	.0136	27.1592	.4794	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	206170	.0033	620.7597	14.6111	
UNRESOLVED	182353	.0033	601.7649	10.6210	
TOTAL				25.2321	

SAMPLE: 6
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.90
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/03/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL 2.6257
PHENANTHRENE	480	.0112	5.3760	.0692	
DIBENZOTHIOPHENE	1859	.0112	20.8208	.2679	RECOVERY %
PYRENE	1003	.0136	13.6408	.1755	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	1134275	.0033	3732.0789	48.5384	
UNRESOLVED	431991	.0033	1425.5703	18.3447	
TOTAL				66.8831	

SAMPLE: 7
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 14.84
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/04/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1380	.0112	15.4560	.5482	
DIBENZOTHIOPHENE	788	.0112	8.8256	.3130	RECOVERY %
PYRENE	1615	.0136	21.9640	.7790	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	120600	.0033	385.4961	15.3122	
UNRESOLVED	0	.0033	.0000	15.3122	
TOTAL				.2189	

SAMPLE: 8
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 25.13
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/03/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .4036
PHENANTHRENE	56	.0112	.6272	.0092	
DIBENZOTHIOPHENE	2985	.0112	33.4320	.4901	RECOVERY %
PYRENE	625	.0136	8.5000	.1246	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	218450	.0033	708.7872	11.0152	
UNRESOLVED	541208	.0033	1785.9864	26.1836	
TOTAL				37.1988	

SAMPLE: 9
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 24.47
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1049	.0112	11.7488	.2527	
DIBENZOTHIOPHENE	258	.0112	2.8896	.0622	RECOVERY %
PYRENE	671	.0136	9.1256	.1963	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	92431	.0033	298.4949	6.9313	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				6.9313	

SAMPLE: 10
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 36.96
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/04/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	524	.0122	6.3928	.0455	RESOL/UNRESOL .0548
PHENANTHRENE	1489	.0112	16.6768	.1187	
DIBENZOTHIOPHENE	4614	.0112	51.6768	.3679	RECOVERY %
PYRENE	2039	.0136	27.7304	.1974	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	22534	.0033	45.7644	1.0555	
UNRESOLVED	411513	.0033	1357.9929	9.6690	
TOTAL				10.7245	

SAMPLE: 11
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 8.66
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/28/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1095	.0112	12.2640	.3727	
DIBENZOTHIOPHENE	1683	.0112	18.8496	.3728	RECOVERY %
PYRENE	1139	.0136	15.4904	.4707	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	93316	.0033	295.0167	10.3811	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				10.3811	

SAMPLE: 12
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 17.22
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/03/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1734	.0112	19.4208	.5936	
DIBENZOTHIOPHENE	1596	.0112	17.8752	.5463	RECOVERY %
PYRENE	68	.0136	.9248	.0283	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	76260	.0033	240.4446	8.5172	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				8.5172	

SAMPLE: 13
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 25.60
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/03/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	6855	.0112	76.7780	1.5785	
DIBENZOTHIOPHENE	1745	.0112	19.5440	.4018	RECOVERY %
PYRENE	2560	.0136	34.8160	.7158	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	105621	.0033	311.7213	9.1048	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				9.1048	

SAMPLE: 14
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 16.03
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/05/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	793	.0112	8.8816	.2916	
DIBENZOTHIOPHENE	1742	.0112	19.5104	.6406	RECOVERY %
PYRENE	3983	.0136	54.1688	1.7785	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	112950	.0033	351.2256	14.2426	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				14.2426	

SAMPLE: 15
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 13.80
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/05/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	2534	.0112	28.3808	1.0824	
DIBENZOTHIOPHENE	1939	.0112	21.7168	.8283	RECOVERY %
PYRENE	516	.0136	7.0176	.2676	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	79882	.0033	247.1469	11.6042	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				11.6042	

SAMPLE: 16
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 9.93
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/04/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	1400	.0136	19.0400	1.0092	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	14330	.0033	75.6690	5.0198	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				5.0198	

SAMPLE: 17
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 14.86
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/26/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	906	.0122	11.0532	.1957	RESOL/UNRESOL .0000
PHENANTHRENE	14218	.0112	159.2416	2.8200	
DIBENZOTHIOPHENE	2577	.0112	28.8624	.5111	RECOVERY %
PYRENE	73928	.0136	1005.4208	17.8051	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	933301	.0033	2777.5176	70.5195	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				70.5195	

SAMPLE: 18
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 23.94
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/04/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	595	.0122	7.2590	.1596	RESOL/UNRESOL .0000
PHENANTHRENE	13873	.0112	155.3776	3.4159	
DIBENZOTHIOPHENE	798	.0112	8.9376	.1965	RECOVERY %
PYRENE	147	.0136	1.9992	.0440	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	182070	.0033	549.9681	15.9069	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.0000	

SAMPLE: 19
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 16.83
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/05/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .2890
PHENANTHRENE	1031	.0112	11.5472	.3611	
DIBENZOTHIOPHENE	737	.0112	8.2544	.2581	RECOVERY %
PYRENE	491	.0136	6.6776	.2088	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	86513	.0033	278.0382	9.5230	
UNRESOLVED	299371	.0033	987.9243	30.8948	
TOTAL				40.4179	

SAMPLE: 20
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 27.81
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/05/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	692	.0112	7.7504	.1477	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	42796	.0033	138.9432	2.7963	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.7963	

SAMPLE: 21
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 36.29
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/05/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	60 ?	.0112	1.0880	.0158	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	65994	.0033	217.5162	3.1704	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				3.1704	

SAMPLE: 22
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.50
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .2300 ?
PHENANTHRENE	14012	.0112	157.0352	1.0204	
DIBENZOTHIOPHENE	1626	.0112	18.2112	.1183	RECOVERY %
PYRENE	2091	.0136	28.4376	.1848	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	80080	.0033	205.7286	2.6603	
UNRESOLVED	348128	.0033	1148.8224	7.4647	
TOTAL				10.1250	

SAMPLE: 23
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 35.64
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	6796	.0112	76.1152	1.1240	
DIBENZOTHIOPHENE	1713	.0112	19.1856	.2836	RECOVERY %
PYRENE	1340	.0136	18.2240	.2691	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	93297	.0033	275.3784	5.7432	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				5.7432	

SAMPLE: 26
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.65
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/05/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	7428	.0112	83.1936	1.0771	
DIBENZOTHIOPHENE	936	.0112	10.4832	.1357	RECOVERY %
PYRENE	6496	.0136	129.1456	1.6721	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	202727	.0033	610.0611	10.7838	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				16.7838	

SAMPLE: 27
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 30.20
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/06/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	1253	.0136	17.0408	.2970	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	37210	.0033	118.6581	2.3649	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.3649	

SAMPLE: 28
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 26.03
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/06/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	30310	.0033	100.0230	2.0234	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.0234	

SAMPLE: 29
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 23.99
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/06/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	3794	.0112	42.4928	.9322	
DIBENZOTHIOPHENE	672	.0112	7.5268	.1651	RECOVERY %
PYRENE	7216	.0136	98.1376	2.1530	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	98610	.0033	286.8624	9.5439	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				9.5439	

SAMPLE: 30
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 43.64
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/06/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1087	.0112	17.1744 ?	.1468	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	45085	.0033	145.1934	1.8979	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				1.8979	

SAMPLE: 31
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 24.75
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	527	.0112	5.9024	.1255	
DIBENZOTHIOPHENE	362	.0112	4.0544	.0862	RECOVERY %
PYRENE	5451	.0136	74.1336	1.5758	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	234230	.0033	752.0370	17.7733	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				17.7733	

SAMPLE: 32
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.28
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL 1.1434
PHENANTHRENE	360	.0112	4.0320	.0527	
DIBENZOTHIOPHENE	8948	.0112	100.2176	1.3095	RECOVERY %
PYRENE	11637	.0136	158.2632	2.0679	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	740348	.0033	2374.0299	34.4502	
UNRESOLVED	647499	.0033	2136.7467	27.9197	
TOTAL				62.3698	

SAMPLE: 33
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 10.51
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/06/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	663	.0122	8.0886	.4051	RESOL/UNRESOL .0000
PHENANTHRENE	263	.0112	2.9546	.1475	
DIBENZOTHIOPHENE	1604	.0112	17.9648	.8996	RECOVERY %
PYRENE	3250	.0136	44.2000	2.2134	ANDROSTANE .6347
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	2010	.0030	6.0300	.3020	
RESOLVED	162636	.0033	517.6248	29.5870	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				29.5870	

SAMPLE: 34
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 33.71
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/06/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1386	.0112	15.5232	.2424	
DIBENZOTHIOPHENE	1633	.0112	18.2896	.2856	RECOVERY %
PYRENE	1420	.0136	19.3120	.3015	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	69622	.0033	215.1039	4.1879	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				4.1879	

SAMPLE: 35
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 35.05
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/08/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	2099	.0112	23.5088	.6707	
DIBENZOTHIOPHENE	1588	.0112	17.7856	.5074	RECOVERY %
PYRENE	2711	.0136	36.8696	1.0519	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	54688	.0033	159.3570	6.7766	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				6.7766	

SAMPLE: 36
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 41.28
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	4690	.0122	57.2180	.7295	RESOL/UNRESOL .4210
PHENANTHRENE	1650	.0112	18.4800	.2356	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	14080	.0136	191.4880	2.4415	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	71842	.0033	169.6926	5.5702	
UNRESOLVED	170651	.0033	563.1483	7.1801	
TOTAL				12.7502	

SAMPLE: 38
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.89
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	541	.0112	6.0582	.0780	
DIBENZOTHIOPHENE	1218	.0112	13.6416	.1756	RECOVERY %
PYRENE	3679	.0136	50.0344	.6440	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	71601	.0033	218.3379	3.7079	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				3.7079	

SAMPLE: 40
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 16.74
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/08/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	303	.0122	3.6966	.2208	RESOL/UNRESOL .0000
PHENANTHRENE	491	.0112	5.4992	.3285	
DIBENZOTHIOPHENE	8672	.0112	97.1264	5.8021	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	306956	.0033	981.7170	64.9964	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				64.9964	

SAMPLE: 41
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 33.15
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/27/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	289	.0112	3.2368	.0514	
DIBENZOTHIOPHENE	6335	.0112	70.9520	1.1265	RECOVERY %
PYRENE	3672	.0136	49.9392	.7929	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	122065	.0033	368.8377	7.8267	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				7.8267	

SAMPLE: 42
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 19.77
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	511	.0122	6.2342	.1660	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	737	.0136	10.0232	.2668	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	12246	.0033	36.2934	1.3990	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				1.3990	

SAMPLE: 43
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 17.10
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	685	.0112	7.6720	.2361	
DIBENZOTHIOPHENE	410	.0112	4.5920	.1413	RECOVERY %
PYRENE	1928	.0136	26.2208	.8070	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	180100	.0033	584.3541	19.1702	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				19.1702	

SAMPLE: 44
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 41.58
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	14213	.0136	193.2968	2.4467	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	120640	.0033	351.2091	6.8923	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				6.8923	

SAMPLE: 46
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 18.49
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/09/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1625	.0112	18.2000	.5181	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	990	.0136	13.4640	.3833	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	44400	.0033	137.8905	4.8263	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				4.8263	

SAMPLE: 47
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 28.43
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/27/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	520	.0112	5.8240	.1078	
DIBENZOTHIOPHENE	975	.0112	10.9200	.2022	RECOVERY %
PYRENE	1134	.0136	15.4224	.2855	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	44556	.0033	138.3591	3.1569	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				3.1569	

SAMPLE: 48
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 11.12
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0879
PHENANTHRENE	1185	.0112	13.0480	.1915	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	2906	.0136	39.5216	.5799	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	59945	.0033	184.3842	3.4768	
UNRESOLVED	681630	.0033	2249.3790	33.0048	
TOTAL				36.4816	

SAMPLE: 49
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 35.87
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/11/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	3318	.0112	37.1616	1.7589	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	1574	.0136	21.4064	1.0132	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	80329	.0033	248.9421	14.5546	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				14.5546	

SAMPLE: 51
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 31.23
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/27/82
 SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	31648	.0112	354.4576	8.8415	
DIBENZOTHIOPHENE	8701	.0112	97.4512	2.4308	RECOVERY %
PYRENE	48493	.0136	659.5048	16.4506	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	429523	.0033	1124.2473	55.7660	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				55.7660	

SAMPLE: 52
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 21.10
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	916	.0122	11.1752	.0942	RESOL/UNRESOL 1.0849
PHENANTHRENE	20951	.0112	234.6512	1.9773	
DIBENZOTHIOPHENE	35814	.0112	401.1168	3.3800	RECOVERY %
PYRENE	49467	.0136	672.7512	5.6689	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	573384	.0033	1538.5788	24.0851	
UNRESOLVED	528531	.0033	1744.1523	14.6970	
TOTAL				38.7821	

SAMPLE: 53
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 36.62
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	6732	.0112	75.3984	2.0580	
DIBENZOTHIOPHENE	2143	.0112	24.0016	.6554	RECOVERY %
PYRENE	621	.0136	8.4456	.2306	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	56485	.0033	155.0637	7.1794	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				7.1794	

SAMPLE: 54
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 40.77
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/28/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	2003	.0112	22.4336	1.4480	
DIBENZOTHIOPHENE	4729	.0112	52.9648	3.4187	RECOVERY %
PYRENE	5433	.0136	73.8888	4.7693	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	42190	.0033	99.0825	16.0315	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				16.0315	

SAMPLE: 55
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 36.19
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	179	.0112	2.0048	.0554	
DIBENZOTHIOPHENE	182	.0112	2.0384	.0563	RECOVERY %
PYRENE	5993	.0136	81.5048	2.2521	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	52309	.0033	151.6515	6.5543	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				6.5543	

SAMPLE: 56
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 18.36
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/29/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0548
PHENANTHRENE	144	.0112	1.6128	.2312	
DIBENZOTHIOPHENE	1117	.0112	12.5104	1.7931	RECOVERY %
PYRENE	17695	.0136	240.5420	34.4932	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	139640	.0033	398.2572	93.6006	
UNRESOLVED	2547092	.0033	8405.4034	1204.7648	
TOTAL				1298.3654	

SAMPLE: 57
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 21.13
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/09/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .1983
PHENANTHRENE	278	.0112	3.1136	.3878	
DIBENZOTHIOPHENE	719	.0112	8.0528	1.0029	RECOVERY %
PYRENE	5261	.0136	71.5496	8.9110	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	93024	.0033	286.3278	45.9616	
UNRESOLVED	469047	.0033	1547.8551	192.7734	
TOTAL				238.7350	

SAMPLE: 58
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 22.99
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 10/29/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0852
PHENANTHRENE	3278	.0112	36.7136	7.9847	
DIBENZOTHIOPHENE	698	.0112	7.8176	1.7002	RECOVERY %
PYRENE	11809	.0136	160.6024	34.9288	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	126569	.0033	365.5872	124.1237	
UNRESOLVED	1485153	.0033	.0000	1065.8992	
TOTAL			4901.0048	1190.0229	

SAMPLE: 59
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 33.70
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0750
PHENANTHRENE	442	.0112	4.9504	.7345	
DIBENZOTHIOPHENE	1071	.0112	11.9952	1.7797	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	45153	.0033	144.0120	23.8809	
UNRESOLVED	601668	.0033	1985.5044	294.5852	
TOTAL				318.4662	

SAMPLE: 60
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 27.02
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 10/28/82
 SAMPLE VOLUME (ML): 9.9

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .2778
PHENANTHRENE	871	.0112	9.7552	3.5743	
DIBENZOTHIOPHENE	3107	.0112	34.7984	14.7500	RECOVERY %
PYRENE	19140	.0136	260.3040	95.3741	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	212139	.0033	623.7693	340.2445	
UNRESOLVED	763542	.0033	2519.6886	923.2019	
TOTAL				1263.4464	

SAMPLE: 61
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 20.36
 SAMPLE SIZE INJECTED (μL): 0.5

DATE ANALYZED: 10/20/82
 SAMPLE VOLUME (ML): 1.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .2238
PHENANTHRENE	20049	.0112	224.5488	33.0868	
DIBENZOTHIOPHENE	10463	.0112	117.1856	17.2670	RECOVERY %
PYRENE	4547	.0136	61.8392	9.1119	ANDROSTANE 43.6014
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	24223	.0030	72.6690	10.7076	
RESOLVED	211470	.0033	582.1563	145.2451	
UNRESOLVED	944920	.0033	3118.2360	458.4650	
TOTAL				604.7101	

SAMPLE: 62
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 29.48
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .4724
PHENANTHRENE	406	.0112	4.5472	.4059	
DIBENZOTHIOPHENE	3794	.0112	42.4928	3.7932	RECOVERY %
PYRENE	17061	.0136	232.0296	20.7125	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	13252	.0030	.0000	3.5489	
RESOLVED	147420	.0033	416.3247	62.0755	
UNRESOLVED	312048	.0033	1029.7584	91.9230	
TOTAL				153.9985	

SAMPLE: 63
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 28.21
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/28/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .4492
PHENANTHRENE	? 23	.0112	10.3376	.1929	
DIBENZOTHIOPHENE	127	.0112	1.4224	.0265	RECOVERY %
PYRENE	? 236	.0136	125.6096	2.3435	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	287371	.0033	914.3805	19.6226	
UNRESOLVED	639698	.0033	2111.0034	39.3851	
TOTAL				59.0077	

SAMPLE: 64
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 30.34
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/26/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	589	.0112	6.5968	.1144	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	5326	.0136	72.4336	1.2565	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	42074	.0033	119.3247	3.4409	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				3.4409	

SAMPLE: 65
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 31.13
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/09/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	1362	.0033	4.4946	.3800	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.3800	

SAMPLE: 66
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 15.54
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/28/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1351	.0112	15.1312	.5125	
DIBENZOTHIOPHENE	4160	.0112	46.5920	1.5780	RECOVERY %
PYRENE	35168	.0136	478.2848	16.1988	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	304122	.0033	869.3619	47.7332	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				47.7332	

SAMPLE: 67
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 43.19
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/27/82
 SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	290	.0112	3.2480	.0792	RECOVERY %
PYRENE	982	.0136	13.3552	.3255	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	16175	.0033	49.1799	1.6033	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				1.6033	

SAMPLE: 68
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 11.18
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	355	.0136	4.8280	.4546	ANDROSTANE .0000
O-TERPHYNEL	1667	.0033	5.5011	.5179	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	0	.0033	-1.1715	.3443	
UNRESOLVED	30180	.0033	99.5940	9.3771	
TOTAL				9.7214	

SAMPLE: 69
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 39.75
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/27/82
 SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	691	.0112	7.7392	.3074	
DIBENZOTHIOPHENE	2123	.0112	23.7776	.9445	RECOVERY %
PYRENE	12000	.0136	163.2000	6.4826	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	93790	.0033	260.6208	18.0869	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				18.0869	

SAMPLE: 70
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 32.68
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/11/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	24754	.0033	81.6882	1.3156	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				1.3156	

SAMPLE: 72
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 11.98
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/11/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1592	.0112	17.8304	.7833	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	1059	.0136	14.4024	.6327	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	142109	.0033	460.2114	21.6345	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				21.6349	

SAMPLE: 73
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 39.47
SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	24200	.0033	79.8600	2.0233	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.0233	

SAMPLE: 74
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 39.47
SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	967	.0112	10.8304	.4134	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	17300	.0033	53.8989	2.4706	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.4706	

SAMPLE: 75
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 31.38
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/29/82
SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0559
PHENANTHRENE	179	.0112	3.1248	.1048	
DIBENZOTHIOPHENE	310	.0112	3.4720	.1165	RECOVERY %
PYRENE	6285	.0136	85.4760	2.8673	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	57742	.0033	167.8644	8.7195	
UNRESOLVED	1033659	.0033	3411.0747	114.4234	
TOTAL				123.1429	

SAMPLE: 76
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 31.38
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/29/82
SAMPLE VOLUME (ML): 2.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	0	.0033	.0000	.0000	
UNRESOLVED	30440	.0033	100.4520	1.3815	
TOTAL				1.3815	

SAMPLE: 77
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 23.94
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/20/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	337	.0122	4.1114	.0859	RESOL/UNRESOL .0000
PHENANTHRENE	7875	.0112	88.2000	1.8428	
DIBENZOTHIOPHENE	772	.0112	8.6464	.1807	RECOVERY %
PYRENE	37104	.0136	504.6144	10.5433	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	275198	.0033	756.0630	28.4498	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				28.4498	

SAMPLE: 78
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 25.19
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .4957
PHENANTHRENE	992	.0112	11.1104	.2443	
DIBENZOTHIOPHENE	163	.0112	1.8256	.0401	RECOVERY %
PYRENE	3149	.0136	42.8264	.9415	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	118424	.0033	376.5960	9.5053	
UNRESOLVED	238912	.0033	788.4096	17.3330	
TOTAL				26.8383	

SAMPLE: 79
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 25.02
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/11/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	2197	.0112	24.6064	.5176	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	7026	.0136	95.5536	2.0100	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	50790 ?	.0033	137.1711	5.4132	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				5.4132	

SAMPLE: 80
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 27.50
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .1290
PHENANTHRENE	530	.0112	5.9360	.1136	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	2525	.0136	34.3400	.6572	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	29518	.0033	87.3279	2.4422	
UNRESOLVED	228769	.0033	754.9377	14.4486	
TOTAL				16.8907	

SAMPLE: 81
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 16.41
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/27/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	416	.0112	4.6592	.1494	
DIBENZOTHIOPHENE	934	.0112	10.4608	.3355	RECOVERY %
PYRENE	18817	.0136	355.9112	8.2078	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	260090 ?	.0033	791.7459	34.0863	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				34.0863	

SAMPLE: 82
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 19.23
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/01/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	839	.0122	10.2358	.2801	RESOL/UNRESOL .0000
PHENANTHRENE	1700	.0112	19.0400	.5211	
DIBENZOTHIOPHENE	6700	.0112	75.0400	2.0538	RECOVERY %
PYRENE	33566	.0136	456.4976	12.4941	ANDROSTANE .3644
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	1154	.0030	3.4620	.0948	
RESOLVED	348908	.0033	1010.1399	42.9962	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				42.9962	

SAMPLE: 83
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 28.13
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/11/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	2246	.0112	25.1552	.4707	RECOVERY %
PYRENE	2976	.0136	40.4736	.7573	ANDROSTANE 1.1065
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	3504	.0030	10.5120	.1967	
RESOLVED	95204	.0033	296.9406	6.7837	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				3.7837	

SAMPLE: 84
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 19.91
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/11/82
 SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	723	.0112	8.0976	.2034	
DIBENZOTHIOPHENE	4462	.0112	49.9744	1.2550	RECOVERY %
PYRENE	4996	.0136	67.9456	1.7063	ANDROSTANE .8517
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	2839	.0030	8.5170	.2139	
RESOLVED	129053	.0033	392.2776	13.0160	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				13.0160	

SAMPLE: 86
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 34.34
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/31/82
 SAMPLE VOLUME (ML): 3.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	18600	.0033	81.3800	3.2928	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				3.2928	

SAMPLE: 87
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 34.22
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/26/82
 SAMPLE VOLUME (ML): 3.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	936	.0112	10.4832	.1612	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	2527	.0136	34.3672	.5286	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	50119	.0033	153.9648	3.0578	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				3.0578	

SAMPLE: 88
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 34.22
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/26/82
 SAMPLE VOLUME (ML): 3.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .2463
PHENANTHRENE	113	.0112	1.2656	.0190	
DIBENZOTHIOPHENE	8548	.0112	95.7376	1.4397	RECOVERY %
PYRENE	10888	.0136	148.0768	2.2267	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	185880	.0033	548.8923	11.9394	
UNRESOLVED	754766	.0033	2490.7278	37.4546	
TOTAL				49.3940	

SAMPLE: 89
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 52.02
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	2270	.0033	7.4918	.3790	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.3790	

SAMPLE: 90
INTERNAL STANDARDS
ANDROSTANE (μL): 500.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 30.59
SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	784	.0112	8.7808	.2870	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	2095	.0136	28.4920	.9314	ANDROSTANE 4.3800
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	7300	.0030	21.9000	.7159	
RESOLVED	66272	.0033	209.1969	8.0572	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				8.0572	

SAMPLE: 91
INTERNAL STANDARDS
ANDROSTANE (μL): 500.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 35.12
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	17421	.0033	57.4893	.4308	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.4308	

SAMPLE: 92
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 27.58
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	7212	.0033	23.7996	.4542	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.4542	

SAMPLE: 93
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 30.64
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	400	.0112	4.4800	.0770	
DIBENZOTHIOPHENE	2566	.0112	28.7392	.4937	RECOVERY %
PYRENE	5580	.0136	75.8800	1.3036	ANDROSTANE 1.0519
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	3331	.0030	9.9930	.1717	
RESOLVED	206400	.0033	652.9182	13.0896	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				13.0896	

SAMPLE: 94
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 21.16
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/02/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	226	.0112	2.5312	.0630	RECOVERY %
PYRENE	1746	.0136	23.7456	.5906	ANDROSTANE .3635
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	1151	.0030	3.4530	.0859	
RESOLVED	57648	.0033	18.7308	5.2235	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				5.2235	

SAMPLE: 95
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 10.86
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/03/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	20523	.0112	229.8576	11.1397	
DIBENZOTHIOPHENE	5362	.0112	60.0544	2.9105	RECOVERY %
PYRENE	6577	.0136	89.4472	4.3349	ANDROSTANE 2.4278
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	7688	.0030	23.0640	1.1178	
RESOLVED	149900	.0033	387.5454	37.1670	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				37.1670	

SAMPLE: 96
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 22.71
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	1523	.0122	18.5806	.4306	RESOL/UNRESOL .2366
PHENANTHRENE	1244	.0112	13.9328	.3229	
DIBENZOTHIOPHENE	7245	.0112	81.1440	1.8806	RECOVERY %
PYRENE	16646	.0136	226.3856	5.2466	ANDROSTANE .2387
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	756	.0030	2.2680	.0526	
RESOLVED	189848	.0033	538.5270	20.3613	
UNRESOLVED	802548	.0033	2648.4084	61.3782	
TOTAL				81.7395	

SAMPLE: 97
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 27.65
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/23/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1266	.0112	14.1792	.2699	
DIBENZOTHIOPHENE	290	.0112	3.2480	.0618	RECOVERY %
PYRENE	2979	.0136	40.5144	.7712	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	380880	.0033	1241.9385	24.7431	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				24.7431	

SAMPLE: 99
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 28.99
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/11/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .2861
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	906	.0030	2.7180	.0493	
RESOLVED	1120	.0033	3.6960	.0671	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.0671	

SAMPLE: 100
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 13.18
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1011	.0112	11.3232	.8591	
DIBENZOTHIOPHENE	9089	.0112	101.7968	7.7236	RECOVERY %
PYRENE	4207	.0136	57.2152	4.3411	ANDROSTANE 13.2120
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	22020	.0030	66.0600	5.0121	
RESOLVED	237072	.0033	735.1245	68.6995	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				68.6995	

SAMPLE: 101
INTERNAL STANDARDS
ANDROSTANE (μL): 500.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 14.89
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/31/82
SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	565	.0122	6.8930	.1218	RESOL/UNRESOL .7255
PHENANTHRENE	712	.0112	7.9744	.1409	
DIBENZOTHIOPHENE	1376	.0112	15.4112	.2724	RECOVERY %
PYRENE	4800	.0136	65.2800	1.1537	ANDROSTANE 4.2272
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	26772	.0030	80.3160	1.4195	
RESOLVED	210821	.0033	671.1144	13.5498	
UNRESOLVED	290595	.0033	958.9635	16.9482	
TOTAL				30.4980	

SAMPLE: 102
INTERNAL STANDARDS
ANDROSTANE (μL): 500.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 10.21
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/14/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	389	.0112	4.3568	.2246	
DIBENZOTHIOPHENE	2603	.0112	29.1536	1.5028	RECOVERY %
PYRENE	1152	.0136	15.6672	.8076	ANDROSTANE .1367
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	433	.0030	1.2990	.0670	
RESOLVED	77447	.0033	241.8999	15.0048	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				15.0048	

SAMPLE: 103
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 7.75
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	858	.0112	9.6096	.6526	
DIBENZOTHIOPHENE	369	.0112	4.1328	.2807	RECOVERY %
PYRENE	511	.0136	6.9496	.4720	ANDROSTANE .7437
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	2355	.0030	7.0650	.4798	
RESOLVED	75897	.0033	244.7247	18.0249	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				18.0249	

SAMPLE: 104
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 24.20
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/29/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .2417
PHENANTHRENE	346	.0112	3.8752	.0843	
DIBENZOTHIOPHENE	1145	.0112	12.8240	.2789	RECOVERY %
PYRENE	2713	.0136	36.8968	.8025	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	72600	.0033	225.7068	6.0744	
UNRESOLVED	300346	.0033	991.1418	21.5559	
TOTAL				27.6304	

SAMPLE: 105
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 13.57
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	12518	.0112	140.2018	5.4378	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE 2.2399
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	7093	.0030	21.2790	.8253	
RESOLVED	30700	.0033	60.0006	7.7649	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				7.7649	

SAMPLE: 106
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 26.57
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1236	.0112	13.8432	.2742	
DIBENZOTHIOPHENE	3681	.0112	41.2272	.8167	RECOVERY %
PYRENE	2720	.0136	36.9920	.7328	ANDROSTANE .3798
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	1202	.0030	3.6060	.0714	
RESOLVED	155511	.0033	819.9842	14.1047	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				14.1047	

SAMPLE: 107
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 8.02
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	13796	.0033	45.5268	2.9877	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.9877	

SAMPLE: 108
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 27.20
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/31/82
 SAMPLE VOLUME (ML): 5.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0128
PHENANTHRENE	523	.0112	5.8576	.5667	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	543	.0136	7.3848	.7145	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	27519	.0033	87.2949	9.7269	
UNRESOLVED	2142404	.0033	7069.9331	684.0106	
TOTAL				693.7374	

SAMPLE: 109
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 24.33
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	912	.0112	10.2144	.6629	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	1984	.0136	26.9824	1.7511	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	36660	.0033	111.4212	9.6449	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				9.6449	

SAMPLE: 110
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 11.02
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/31/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	968	.0122	11.8096	.5640	RESOL/UNRESOL .0000
PHENANTHRENE	239	.0112	2.6768	.1278	
DIBENZOTHIOPHENE	1143	.0112	12.8016	.6114	RECOVERY %
PYRENE	3624	.0136	49.2864	2.3539	ANDROSTANE 4.5221
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	14320	.0030	42.9600	2.0518	
RESOLVED	211565	.0033	678.4503	36.0600	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				36.0600	

SAMPLE: 111
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 27.20
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	6800	.0033	22.4400	.5386	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.5386	

SAMPLE: 112
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 17.87
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	340	.0112	3.8080	.1134	
DIBENZOTHIOPHENE	1179	.0112	13.2048	.3933	RECOVERY %
PYRENE	881	.0136	11.9816	.3569	ANDROSTANE .3584
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	1135	.0030	3.4050	.1014	
RESOLVED	37500	.0033	115.8300	4.3137	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				4.3137	

SAMPLE: 113
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 20.69
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	450	.0112	5.0400	.1282	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	779	.0136	10.5944	.2695	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	186100	.0033	610.0743	15.9169	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				15.9169	

SAMPLE: 114
INTERNAL STANDARDS
ANDROSTANE (μL): 500.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 20.00
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	324	.0112	3.6288	.0955	
DIBENZOTHIOPHENE	5008	.0112	56.0896	1.4760	RECOVERY %
PYRENE	31285	.0136	425.4760	11.1967	ANDROSTANE 1.5341
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	4858	.0030	14.5740	.3833	
RESOLVED	28227	.0033	-27.6870	12.0397	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				12.0397	

SAMPLE: 115
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 17.03
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	233	.0112	2.6096	.0807	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	25896	.0033	84.6879	2.6979	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.6979	

SAMPLE: 116
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 23.19
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/02/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	2586	.0112	28.9632	.6573	
DIBENZOTHIOPHENE	1750	.0112	19.6000	.4448	RECOVERY %
PYRENE	16556	.0136	225.1616	5.1102	ANDROSTANE .1481
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	469	.0030	1.4070	.0319	
RESOLVED	182192	.0033	532.2900	18.2932	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				18.2932	

SAMPLE: 117
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 25.25
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/26/82
SAMPLE VOLUME (ML): 4.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	395	.0112	4.4240	.3689	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	4221	.0136	57.4056	4.7863	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	61252	.0033	186.8988	10.7382	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				10.7382	

SAMPLE: 119
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 32.14
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/01/82
SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	462	.0112	5.1744	.2542	
DIBENZOTHIOPHENE	5199	.0112	58.2288	2.8606	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	16352	.0033	35.2803	4.8480	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				4.8480	

SAMPLE: 120
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 5.50
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	561	.0122	6.8442	.6549	RESOL/UNRESOL .0000
PHENANTHRENE	727	.0112	8.1424	.7792	
DIBENZOTHIOPHENE	1608	.0112	18.0096	1.7234	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	84953	.0033	270.8211	29.0734	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				29.0734	

SAMPLE: 121
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 10.69
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	429	.0112	4.8048	.2366	
DIBENZOTHIOPHENE	1235	.0112	13.8320	.6810	RECOVERY %
PYRENE	2417	.0136	35.5912	1.7523	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	67025	.0033	207.0552	12.8641	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				12.8641	

SAMPLE: 123
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 21.90
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/26/82
 SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1411	.0112	15.8032	.1899	
DIBENZOTHIOPHENE	2835	.0112	31.7520	.3815	RECOVERY %
PYRENE	10442	.0136	142.0112	1.7065	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	410659	.0033	1306.7043	17.9797	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				17.9797	

SAMPLE: 124
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 9.45
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	587	.0112	6.5744	.3662	
DIBENZOTHIOPHENE	1604	.0112	17.9648	1.0005	RECOVERY %
PYRENE	4432	.0136	60.2752	3.3570	ANDROSTANE 1.4795
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	4685	.0030	14.0550	.7828	
RESOLVED	113212	.0033	351.7437	24.3140	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				24.3140	

SAMPLE: 125
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 26.34
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1433	.0112	16.0496	.6093	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	2542	.0136	34.5712	1.3125	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	40955	.0033	133.0340	6.5549	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				6.5549	

SAMPLE: 126
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 26.34
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	552	.0136	7.5072	.2356	ANDROSTANE 9.4674
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	29980	.0030	89.9400	2.8227	
RESOLVED	71300	.0033	233.4684	7.5629	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				7.5629	

SAMPLE: 127
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 29.66
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/01/82
 SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	827	.0112	9.2624	.0822	
DIBENZOTHIOPHENE	11560	.0112	129.4720	1.1487	RECOVERY %
PYRENE	11144	.0136	151.5584	1.3447	ANDROSTANE .0804
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	509	.0030	1.5270	.0135	
RESOLVED	429265	.0033	1338.9222	14.4552	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				14.4552	

SAMPLE: 128
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 35.75
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/14/82
 SAMPLE VOLUME (ML): 0.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	7800	.0033	25.7400	.3789	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.3789	

SAMPLE: 129
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 36.65
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	13851	.0033	45.7083	.6564	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.6564	

SAMPLE: 130
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 35.30
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	11432	.0033	37.7256	.5625	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				.5625	

SAMPLE: 132
INTERNAL STANDARDS
ANDROSTANE (μL): 500.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 25.54
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/14/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	2718	.0112	30.4418	.6806	
DIBENZOTHIOPHENE	9809	.0112	109.8608	1.4563	RECOVERY %
PYRENE	11221	.0136	152.6056	3.4120	ANDROSTANE 8.1900
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	25935	.0030	77.8050	1.7396	
RESOLVED	660494	.0033	2101.2618	52.5297	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				53.5297	

SAMPLE: 134
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 22.05
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	683	.0112	7.6496	.1826	
DIBENZOTHIOPHENE	2334	.0112	26.1408	.6240	RECOVERY %
PYRENE	2288	.0136	31.1168	.7427	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	601774	.0033	1968.3477	48.5322	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				48.5322	

SAMPLE: 135
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 12.47
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	453	.0122	5.5266	.2333	RESOL/UNRESOL .0000
PHENANTHRENE	1021	.0112	11.4352	.4826	
DIBENZOTHIOPHENE	1089	.0112	12.1968	.5148	RECOVERY %
PYRENE	5142	.0136	69.9312	2.9516	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	113700	.0033	349.7835	18.9454	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				18.9454	

SAMPLE: 136
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 15.62
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	2280	.0122	27.8160	.9373	RESOL/UNRESOL .0000
PHENANTHRENE	1564	.0112	17.5168	.5902	
DIBENZOTHIOPHENE	1564	.0112	17.5168	.5902	RECOVERY %
PYRENE	5464	.0136	74.3104	2.5039	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	363006	.0033	1182.0423	43.7766	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				43.7766	

SAMPLE: 137
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 17.23
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/28/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	911	.0112	10.2032	.3117	
DIBENZOTHIOPHENE	3789	.0112	42.4368	1.2963	RECOVERY %
PYRENE	2383	.0136	32.4088	.9900	ANDROSTANE 2.4098
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	7631	.0030	22.8930	.6993	
RESOLVED	131273	.0033	409.8270	15.1167	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				15.1167	

SAMPLE: 139
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 36.81
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/13/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	709	.0122	8.6498	.1237	RESOL/UNRESOL .0000
PHENANTHRENE	661	.0112	7.4032	.1059	
DIBENZOTHIOPHENE	858	.0112	9.6096	.1374	RECOVERY %
PYRENE	2398	.0136	32.3128	.4663	ANDROSTANE .6395
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	2025	.0030	6.0750	.0869	
RESOLVED	88769	.0033	277.6719	4.8034	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				4.8034	

SAMPLE: 140
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 26.55
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .4953
PHENANTHRENE	1232	.0112	13.7984	.2735	
DIBENZOTHIOPHENE	2785	.0112	31.1920	.6183	RECOVERY %
PYRENE	20214	.0136	274.9104	5.4497	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	262772	.0033	787.1853	21.9464	
UNRESOLVED	530482	.0033	1750.5906	34.7030	
TOTAL				56.6494	

SAMPLE: 142
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 16.92
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/28/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1814	.0112	20.3168	.6320	
DIBENZOTHIOPHENE	2080	.0112	23.2960	.7246	RECOVERY %
PYRENE	6321	.0136	85.9656	2.6741	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	127362	.0033	386.5851	16.0559	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				16.0559	

SAMPLE: 143
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 29.57
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	262	.0112	2.9344	.0522	
DIBENZOTHIOPHENE	10327	.0112	115.6624	2.0587	RECOVERY %
PYRENE	1903	.0136	25.8808	25.8808	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	165770	.0033	505.8174	11.5746	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				11.5746	

SAMPLE: 144
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 34.88
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/29/82
 SAMPLE VOLUME (ML): 3.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1983	.0112	22.2096	1.1729	
DIBENZOTHIOPHENE	208	.0112	2.3296	.1230	RECOVERY %
PYRENE	2618	.0136	35.6048	1.8804	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	61857	.0033	188.2584	13.1188	
UNRESOLVED	0	.0033	.0000	13.1188	
TOTAL				.0000	

SAMPLE: 145
 INTERNAL STANDARDS
 ANDROSTANE (μL): 500.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 22.97
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/21/82
 SAMPLE VOLUME (ML): 3.5

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	16693	.0112	186.9616	4.2839	
DIBENZOTHIOPHENE	1962	.0112	21.9744	.5035	RECOVERY %
PYRENE	25491	.0136	346.6776	7.9435	ANDROSTANE 7.2761
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	23041	.0030	69.1230	1.5838	
RESOLVED	227917	.0033	606.4443	36.6264	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				36.6264	

SAMPLE: 147
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 17.25
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/01/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	602	.0112	6.7424	.2057	
DIBENZOTHIOPHENE	649	.0112	7.2688	.2218	RECOVERY %
PYRENE	8277	.0136	112.5672	3.4345	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	111578	.0033	336.7650	14.1371	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				14.1371	

SAMPLE: 148
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 25.42
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	573	.0122	6.9906	.8250	RESOL/UNRESOL .7618
PHENANTHRENE	16433	.0112	184.0496	21.7210	
DIBENZOTHIOPHENE	102520	.0112	1148.2240	135.5103	RECOVERY %
PYRENE	40194	.0136	546.6384	64.5128	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	584408	.0033	1401.4704	387.9669	
UNRESOLVED	767107	.0033	2531.4531	298.7553	
TOTAL				686.7222	

SAMPLE: 149
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 19.74
 SAMPLE SIZE INJECTED (μL): 1.0

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 4.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	0	.0033	.0000	.0000	
UNRESOLVED	8660	.0033	28.5780	5.7909	
TOTAL				5.7909	

SAMPLE: 150
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 17.10
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 3.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	376	.0136	7.8336	.7233	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	0	.0033	-1.9008	.5478	
UNRESOLVED	8913	.0033	29.4129	2.7159	
TOTAL				3.2637	

SAMPLE: 151
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 20.00
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	950	.0112	10.6400	.2800	RECOVERY %
PYRENE	13563	.0136	184.4568	4.8541	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	2326	.0030	6.9780	.1836	
RESOLVED	0	.0033	229.0893	11.1628	
UNRESOLVED	83934	.0033	.0000	.0000	
TOTAL				11.1628	

SAMPLE: 152
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 25.12
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/12/82
SAMPLE VOLUME (ML): 4.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	8134	.0033	26.7762	2.2441	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.2441	

SAMPLE: 153
INTERNAL STANDARDS
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 0.0
DRY WEIGHT EXTRACTED (G): 27.44
SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/23/82
SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	588	.0112	6.5856	.1263	
DIBENZOTHIOPHENE	422	.0112	4.7264	.0907	RECOVERY %
PYRENE	526	.0136	7.1536	.1372	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	222143 ?	.0033	728.0031	14.3177	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				14.3177	

SAMPLE: 154
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 26.99
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/22/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	441	.0136	5.9976	.1170	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	20740	.0033	66.9867	1.4232	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				1.4232	

SAMPLE: (301) C14-152-P2
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 11.X0 ?
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	657	.0112	7.3584	.3458	
DIBENZOTHIOPHENE	3620	.0112	49.2320	2.3135	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	47940	.0033	144.0879	9.4304	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				9.4304	

SAMPLE: (305) C14-74-P3
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 12.45
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	16899	.0033	55.7667	2.3575	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				2.3575	

SAMPLE: (302) C14-72
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 11.17
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL 1.2906
PHENANTHRENE	317	.0112	3.5504	.1673	
DIBENZOTHIOPHENE	14185	.0112	158.8720	7.4858	RECOVERY %
PYRENE	4979	.0136	67.7144	3.1906	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	330430	.0033	1026.1317	59.1937	
UNRESOLVED	256027	.0033	844.8891	39.8101	
TOTAL				99.0038	

SAMPLE: (308) C14-74-P2
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 3.88
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/23/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1002	.0112	11.2224	1.5223	
DIBENZOTHIOPHENE	2308	.0112	25.8496	3.5065	RECOVERY %
PYRENE	6370	.0136	86.6320	11.7515	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	94173	.0033	278.8269	54.6027	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				54.6027	

SAMPLE: (309) C14-152-P1
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 17.70
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	2950	.0112	33.0400	.9825	
DIBENZOTHIOPHENE	984	.0112	11.0208	.3277	RECOVERY %
PYRENE	8162	.0136	111.0032	3.3007	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	81697	.0033	229.6833	11.4406	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				11.4406	

SAMPLE: (306) C14-81
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 14.92
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/23/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	5980	.0136	81.3280	2.8698	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	126150	.0033	396.5610	16.8579	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				16.8579	

SAMPLE: (307) C14-80
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 23.39
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 10/25/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	22300	.0033	73.5900	1.6559	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				1.6559	

SAMPLE: (312) C14-78-P2
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 8.17
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	972	.0112	10.8864	.7013	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	25400	.0033	80.6124	5.8944	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				5.8944	

SAMPLE: (310) C14-74-P1
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 6.49
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/15/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	4782	.0112	53.5584	4.3434	
DIBENZOTHIOPHENE	935	.0112	10.4720	.8492	RECOVERY %
PYRENE	4525	.0136	61.5400	4.9907	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	63792 ?	.0033	176.7150	24.5143	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				24.5143	

SAMPLE: (311) C14-78-P1
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 0.0
 DRY WEIGHT EXTRACTED (G): 5.70
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 11/18/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	1744	.0112	19.5328	1.8036	
DIBENZOTHIOPHENE	623	.0112	6.9776	.6443	RECOVERY %
PYRENE	2233	.0136	30.3688	2.8041	ANDROSTANE .0000
O-TERPHYNEL	0	.0033	.0000	.0000	O-TERPHYNEL .0000
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	46860	.0033	139.4580	18.1290	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				18.1290	

SAMPLE: (318) SEA TROUT #1 (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 0.60
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	4625	.0033	15.2625	13.3882	O-TERPHYNEL 16.0658
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	21185	.0033	69.9105	61.3250	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				61.3250	

SAMPLE: (319) PINFISH (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.78
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/10/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	14743	.0033	48.6519	14.3855	O-TERPHYNEL 51.2125
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	15580	.0033	51.4140	15.2022	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				15.2022	

SAMPLE: (319) GREY SNAPPER (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 2.37
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	1297	.0122	15.8234	3.5140	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	16054	.0033	52.9782	11.7651	O-TERPHYNEL 55.7665
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	36009	.0033	114.5496	28.9525	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				28.9525	

SAMPLE: (321) SCALLOPS (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.03
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	10376	.0033	34.2408	17.1633	O-TERPHYNEL 36.0429
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	32585	.0033	107.5305	53.9000	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				53.9000	

SAMPLE: (322) TOADFISH (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.61
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	13120	.0033	43.2960	14.1536	O-TERPHYNEL 45.5747
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	17480	.0033	90.6840	29.6450	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				29.6450	

SAMPLE: (323) SHRIMP (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.66
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	1880	.0033	5.5440	1.7578	O-TERPHYNEL 5.8358
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	49458	.0033	163.2114	51.7474	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				51.7474	

SAMPLE: (324) GRUNT (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 1.93
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/14/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	3584	.0122	43.7248	11.9239	RESOL/UNRESOL .0000
PHENANTHRENE	1705	.0112	19.0960	5.2075	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	2778	.0136	37.7808	10.3029	ANDROSTANE .0000
O-TERPHYNEL	13047	.0033	43.0551	11.7412	O-TERPHYNEL 45.3212
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	22463	.0033	47.5068	40.3895	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				40.3895	

SAMPLE: (326) STONE CRAB (HEPATO-PANCREAS) DATE ANALYZED: 12/15/82
INTERNAL STANDARDS SAMPLE VOLUME (ML): 1.0
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 50.0
DRY WEIGHT EXTRACTED (G): 1.04
SAMPLE SIZE INJECTED (μL): 1.9

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	17813	.0033	58.7829	29.7484	O-TERPHYNEL 61.8767
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	38386	.0033	126.6738	64.1062	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				64.1062	

SAMPLE: (327) BLUE CRAB (CLAW MUSCLE) DATE ANALYZED: 12/15/82
INTERNAL STANDARDS SAMPLE VOLUME (ML): 1.0
ANDROSTANE (μL): 0.0
O-TERPHYNEL (μL): 50.0
DRY WEIGHT EXTRACTED (G): 0.65
SAMPLE SIZE INJECTED (μL): 1.9

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	3453	.0122	42.1266	34.1106	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	1491	.0136	20.2776	16.4191	ANDROSTANE .0000
O-TERPHYNEL	33796	.0033	111.5268	90.3051	O-TERPHYNEL 117.3966
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	129359	.0033	410.5695	382.9746	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				382.9746	

SAMPLE: (328) SCHOOL MASTER (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 0.87
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	3892	.0112	43.5904	26.3705	RECOVERY %
PYRENE	6772	.0136	92.0992	55.7164	ANDROSTANE .0000
O-TERPHYNEL	11197	.0033	36.9501	22.3534	O-TERPHYNEL 38.8948
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	107560	.0033	319.7568	275.5272	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				275.5272	

SAMPLE: (329) SEA TROUT #2 (WHOLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 0.87
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	10064	.0033	33.2112	24.9708	O-TERPHYNEL 34.9592
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	19193	.0033	63.3369	47.6217	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				47.6217	

SAMPLE: (330) BLUE CRAB (HEPATO-PANCREAS)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 2.80
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	110	.0112	1.2320	.2316	
DIBENZOTHIOPHENE	988	.0112	11.0656	2.0800	RECOVERY %
PYRENE	10171	.0136	138.3256	26.0011	ANDROSTANE .0000
O-TERPHYNEL	13015	.0033	42.9495	8.0732	O-TERPHYNEL 45.2100
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	645348	.0033	2092.4607	421.6323	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				421.6323	

SAMPLE: (330) STONE CRAB (CLAW MUSCLE)
 INTERNAL STANDARDS
 ANDROSTANE (μL): 0.0
 O-TERPHYNEL (μL): 50.0
 DRY WEIGHT EXTRACTED (G): 0.45
 SAMPLE SIZE INJECTED (μL): 1.9

DATE ANALYZED: 12/16/82
 SAMPLE VOLUME (ML): 1.0

COMPOUND	AREA	RESPONSE FACTOR	NG	$\mu\text{G/G}$	RATIOS
NAPHTHALENE	0	.0122	.0000	.0000	RESOL/UNRESOL .0000
PHENANTHRENE	0	.0112	.0000	.0000	
DIBENZOTHIOPHENE	0	.0112	.0000	.0000	RECOVERY %
PYRENE	0	.0136	.0000	.0000	ANDROSTANE .0000
O-TERPHYNEL	10096	.0033	33.3168	38.9670	O-TERPHYNEL 35.0703
ANDROSTANE	0	.0030	.0000	.0000	
RESOLVED	39602	.0033	130.6866	152.8498	
UNRESOLVED	0	.0033	.0000	.0000	
TOTAL				152.8498	

Appendix F

Detailed summary of aliphatic (f_1) hydrocarbon determinations for Year 02

(Values are not corrected for percent recovery)

[NOTE: ALL VALUES OTHER THAN RESPONSE FACTORS WERE ROUNDED OFF TO TWO DECIMAL FIGURES. THE USE OF A SLASH TO DISTINGUISH BETWEEN A ZERO AND A LETTER "O" RESULTED IN DIFFICULTIES IN DISTINGUISHING BETWEEN ZERO AND A NUMBER EIGHT. THE FONT SIZE USED IN THIS SECTION OF THE DOCUMENT WAS APPROXIMATELY 5. ERRORS IN TRANSCRIPTION MAY HAVE OCCURRED DUE TO FONT SIZE AND ILLEGIBILITY OF THE COPY OF THE DOCUMENT USED FOR RESCUE. QUESTIONABLE TRANSCRIPTIONS ARE NOTED WITH A QUESTION MARK. CAUTION SHOULD BE TAKEN WHEN USING THIS DATA SET. THE COPY OF DOCUMENT USED TO GENERATE THIS DOCUMENT IS ARCHIVED AT THE NOAA/NMFS/SEFSC LIBRARY IN MIAMI.]

Sample: 201A-1
 Data analyzed: Nov 20, 1983
 Int. Std. (μg): 101
 Dry weight (g): 27.53 ?
 Inject. volume (μL): 2 ?
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt. 0.83
C15	4R	.00047	862 ?	0.X ?	0.01	C17/Prist. 1.25
C16	5R	.00051	0	0	0	C18/Phyt. 1.60
C17	6R	.00059	1608	0.94	0.03	
Pristane	7R	.00056	1847 ?	0.75	0.02	
C18	8R	.00077	1002 ?	1.45	0.04	
Phytane	9R	.00077	1028 ?	0.99	0.03	
C19	10R	.00121	2377 ?	2.88	0.08	n-Alkanes
Androstane	11R	.00178	72449	128.96	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI 2.90
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 63.84
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	84734		
Resolved - known peaks	9187		0.20
Resolved - unknown peaks	3898	5.51	0.15
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.36

Sample: 201A-2
 Data analyzed: Nov 7, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18.31 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.75
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00058	0	0	0	
C13	2R	.00055	0	0	0	Resol./Unres.
C14	3R	.00256	0	0	0	Prist./Phyt.
C15	4R	.00059	0	0	0	C17/Prist.
C16	5R	.00060	0	0	0	C18/Phyt.
C17	6R	.00062	3331	0.21	0.02	
Pristane	7R	.00061	0	0	0	
C18	8R	.00065	394	0.26	0.03	
Phytane	9R	.00063	0	0	0	
C19	10R	.00070	1866 ?	0.75	0.07	n-Alkanes
Androstane	11R	.00049	113010	55.37	Int. std.	
C20	12R	.00066	0	0	0	Homol. Ser.
C21	13R	.00064	3920	2.51	0.25	CPI 2.09
C22	14R	.00067	465	0.31	0.03	
C23	15R	.00068	754	0.51	0.05	
C24	16R	.00092	0	0	0	
C25	17R	.00115	2148	2.47	0.25	% Recovery 47.97
C26	18R	.00201	0	0	0	
C27	19R	.00654	0	0	0	
C28	20R	.01083	0	0	0	
C29	21R	.03578	0	0	0	
C30	22R	.00709	0	0	0	

TOTALS

Resolved for all peaks	129810		
Resolved - known peaks	9078		0.70
Resolved - unknown peaks	6922	3.39	0.31
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			1.04

Sample: 201A-3
 Data analyzed: Nov 8, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.39 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres.
C14	3R	.00066	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist. 0.72
C16	5R	.00068	0	0	0	C18/Phyt.
C17	6R	.00069	881	0.61	0.03	
Pristane	7R	.00068	1250	0.85	0.04	
C18	8R	.00069	0	0	0	
Phytane	9R	.00069	0	0	0	
C19	10R	.00071	612	0.43	0.02	n-Alkanes
Androstane	11R	.00057	224390	127.90	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	717	0.62	0.03	CPI 2.60
C22	14R	.00109	624	0.68	0.04	
C23	15R	.00143	1193	1.79	0.08	
C24	16R	.00195	0	0	0	
C25	17R	.00243	302	0.73	0.03	% Recovery 79.15
C26	18R	.00348	658	2.29	0.18 ?	
C27	19R	.00787	1417	11.15	0.59 ?	
C28	20R	.00596	381	2.27	0.10 ?	
C29	21R	.01686	0	0	0	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	246580		
Resolved - known peaks	8035		0.97
Resolved - unknown peaks	14155	8.07	0.37
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			1.34

Sample: 202A-1
 Data analyzed: Nov 30?, 1983
 Int. Std. (μg): 101
 Dry weight (g): 38.68 ?
 Inject. volume (μL): 2
 Sample volume (mL): 0.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt.
C15	4R	.00047	0	0	0	C17/Prist.
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00059	0	0	0	
Pristane	7R	.00056	0	0	0	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	0	0	0	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	72359	128.80	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 31.68
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	113368		
Resolved - known peaks	0		0
Resolved - unknown peaks	41001	72.98	1.87
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			1.87

Sample: 222A-2
 Data analyzed: Nov. 30. 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.89
 Inject. volume (μL): ?
 Sample volume (mL): 1.7
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt.
C15	4R	.00047	0	0	0	C17/Prist.
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00059	0	0	0	
Pristane	7R	.00056	0	0	0	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	0	0	0	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	18681 ?	19.01	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 16.00
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	11463		
Resolved - known peaks	0		0
Resolved - unknown peaks	802	1.43	0.42
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.42

Sample: 202A-3
 Data analyzed: Nov. 09. 1983
 Int. Std. (μg): 101
 Dry weight (g): 21.04
 Inject. volume (μL): 2
 Sample volume (mL): 1.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00054	0	0	0	
C13	2R	.00054	0	0	0	Resol./Unres.
C14	3R	.00252	0	0	0	Prist./Phyt.
C15	4R	.00056	0	0	0	C17/Prist.
C16	5R	.00056	0	0	0	C18/Phyt.
C17	6R	.00057	0	0	0	
Pristane	7R	.00056	0	0	0	
C18	8R	.00061	0	0	0	
Phytane	9R	.0006	0	0	0	
C19	10R	.00068	0	0	0	n-Alkanes
Androstane	11R	.00063	75662 ?	47.67	Int. std.	
C20	12R	.00088	0	0	0	Homol. Ser.
C21	13R	.00117	0	0	0	CPI
C22	14R	.00171	0	0	0	
C23	15R	.00224	0	0	0	
C24	16R	.00322	0	0	0	
C25	17R	.00422	0	0	0	% Recovery 29.58
C26	18R	.00627	0	0	0	
C27	19R	.01283	0	0	0	
C28	20R	.01054	0	0	0	
C29	21R	.01033	0	0	0	
C30	22R	.01219	0	0	0	

TOTALS

Resolved for all peaks	78973 ?		
Resolved - known peaks	0		0
Resolved - unknown peaks	3311	2.08	0.21
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.21

Sample: 203A-1 ?
 Data analyzed: Nov. 30. 1983
 Int. Std. (μg): 101
 Dry weight (g): 56.89
 Inject. volume (μL): 2
 Sample volume (mL): 0.4
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt.
C15	4R	.00047	0	0	0	C17/Prist.
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00059	0	0	0	
Pristane	7R	.00056	0	0	0	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	0	0	0	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	45987	81.86	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI 2.68
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 16.21
C26	18R	.01902	0	0	0	
C27	19R	.02416	2142	51.76	1.12	
C28	20R	.01562	1238	19.34	0.42	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	112898		
Resolved - known peaks	3388 ?		1.54
Resolved - unknown peaks	62723	111.65	2.42
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			3.96

Sample: 203A-2
 Data analyzed: Dec. 1. 1983
 Int. Std. (μg): 101
 Dry weight (g): 43.83
 Inject. volume (μL): 2
 Sample volume (mL): 1.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt. 0
C15	4R	.00047	0	0	0	C17/Prist.
C16	5R	.00051	244	0.14	0.14	C18/Phyt. 0
C17	6R	.00059	177	0.14 ?	0.11	
Pristane	7R	.00056	0	0	0	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	744	0.45	0.47	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	3450 ?	2.17	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI 0.73
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 1.35
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	9399	
Resolved - known peaks	1165	0.73
Resolved - unknown peaks	4784	3.01 ?
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		3.92

Sample: 202A-3
 Data analyzed: Dec. 1, 1983
 Int. Std. (μg): 101 ?
 Dry weight (g): 33.81 ?
 Inject. volume (μL): 2
 Sample volume (mL): 0.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt.
C15	4R	.00047	0	0	0	C17/Prist.
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00059	0	0	0	
Pristane	7R	.00056	0	0	0	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	0	0	0	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	2686	4.17	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 0.52
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	3162		
Resolved - known peaks	0		0
Resolved - unknown peaks	576	0.92	0.66
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.66

Sample: D-1A-1
 Data analyzed: Nov. 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 49.49
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt.
C15	4R	.00047	0	0	0	C17/Prist.
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00059	948	0.56	0.82	
Pristane	7R	.00056	0	0	0	
C18	8R	.00077	1638	1.26	0.84	
Phytane	9R	.00077	0	0	0	
C19	10R	.00121	1773	2.15	0.87	n-Alkanes
Androstane	11R	.00178	33375	59.49	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	8854	37.63	1.29	CPI 1.74
C22	14R	.00743	1839	7.72	0.27	
C23	15R	.01000	4859	40.59 ?	1.39	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 29.41
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	58413		
Resolved - known peaks	18311		2.07
Resolved - unknown peaks	6727	11.97	0.41
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.50 ?

Sample: D-1A-3
 Data analyzed: Nov. ?, 1983
 Int. Std. (μg): 101
 Dry weight (g): 26.95 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.25 ?
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres.
C14	3R	.00066	0	0	0	Prist./Phyt. 0.48
C15	4R	.00068	0	0	0	C17/Prist. 3.54
C16	5R	.00068	0	0	0	C18/Phyt. 0.36
C17	6R	.00069	1328	0.92	0.83	
Pristane	7R	.00068	378	0.26	0.81	
C18	8R	.00069	283	0.19	0.89	
Phytane	9R	.00069	782	0.54	0.83	
C19	10R	.00071	1772	1.26	0.85	n-Alkanes
Androstane	11R	.00057	172260	98.19	Int. std.	
C20	12R	.00078	788	0.61	0.82	Homol. Ser.
C21	13R	.00087	48239	41.97	1.68	CPI 0.96
C22	14R	.00109	813	0.87	0.83	
C23	15R	.00143	512	0.73	0.93 ?	
C24	16R	.00195	1691	3.30	0.13	
C25	17R	.00243	0	0	0	% Recovery 68.76
C26	18R	.00348	0	0	0	
C27	19R	.00787	0	0	0	
C28	20R	.00596	1172	6.99	0.27	
C29	21R	.01686	419	6.73	0.26	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	249728		
Resolved - known peaks	58169		2.46
Resolved - unknown peaks	19291	11.00	0.42
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			2.88

Sample: D-2A-1
 Data analyzed: Nov. 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 64.3
 Inject. volume (μL): 2
 Sample volume (mL): 1.4 ?
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt.
C15	4R	.00047	0	0	0	C17/Prist. 0.48
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00059	1218	0.72	0.01	
Pristane	7R	.00056	2698	1.58 ?	0.82	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	0	0	0	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	63094 ?	112.31	Int. std.	
C20	12R	.00219	3528	7.73	0.11	Homol. Ser.
C21	13R	.00425	38194	162.32	2.27	CPI 0.96
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 77.84
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	125148 ?		
Resolved - known peaks	45630		2.49
Resolved - unknown peaks	16416	29.22	0.40 ?
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons

Sample: D-2A-2
 Data analyzed: Nov. 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 47.15
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00052	0	0	0	
C13	2R	.00050	0	0	0	Resol./Unres.
C14	3R	.00050	0	0	0	Prist./Phyt.
C15	4R	.00054	0	0	0	C17/Prist. 0.34
C16	5R	.00054	1667	0.91	0.82	C18/Phyt.
C17	6R	.00065	996	0.65	0.81	
Pristane	7R	.00061	3186	1.89	0.84	
C18	8R	.00082	229	0.19	0.88 ?	
Phytane	9R	.00080	0	0	0	
C19	10R	.00124	734	0.91	0.82	n-Alkanes
Androstane	11R	.00166	67384	111.86	Int. std.	
C20	12R	.00229	0	0	0	Homol. Ser.
C21	13R	.00394	30537	128.32	2.39	CPI 1.80
C22	14R	.00676	0	0	0	
C23	15R	.00999	0	0	0	
C24	16R	.01470	0	0	0	
C25	17R	.01818	0	0	0	% Recovery 83.86
C26	18R	.02215	0	0	0	
C27	19R	.04560	0	0	0	
C28	20R	.02388	0	0	0	
C29	21R	.02586	0	0	0	
C30	22R	.02716	0	0	0	

TOTALS

Resolved for all peaks	114998		
Resolved - known peaks	37291		2.40
Resolved - unknown peaks	18315	17.12	0.33
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			2.72

Sample: D-2A-3
 Data analyzed: Nov. 9, 1983
 Int. Std. (μg): 101 ?
 Dry weight (g): 33.94
 Inject. volume (μL): 2
 Sample volume (mL): 1.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00054	297	0.16	0.89	
C13	2R	.00054	158	0.09	0.88 ?	Resol./Unres.
C14	3R	.00252	0	0	0	Prist./Phyt.
C15	4R	.00056	195	0.19	0.00 ?	C17/Prist.
C16	5R	.00056	632	0.35	0.01	C18/Phyt. 0.73
C17	6R	.00057	2058	1.17	0.85 ?	
Pristane	7R	.00056	0	0	0	
C18	8R	.00061	365	0.22	0.0 ?	
Phytane	9R	.00060	586	0.30	0.01	
C19	10R	.00068	1132	0.77	0.03	n-Alkanes
Androstane	11R	.00063	116838	73.60 ?	Int. std.	
C20	12R	.00088	543	0.48	0.02 ?	Homol. Ser.
C21	13R	.00117	0	0	0	CPI 1.96
C22	14R	.00171	522	0.89	0.04 ?	
C23	15R	.00224	433	1.01	0.04 ?	
C24	16R	.00322	0	0	0	
C25	17R	.00422	694	2.93	0.12	% Recovery 45.55
C26	18R	.00627	183	1.15	0.04 ?	
C27	19R	.01283	0	0	0	
C28	20R	.01054	0	0	0	
C29	21R	.01033	0	0	0	
C30	22R	.01219	0	0	0	

TOTALS

Resolved for all peaks	194138		
Resolved - known peaks	7718		
Resolved - unknown peaks	69598	0.39	
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons		2.16	

Sample: D-3A-1
 Data analyzed: Nov. 30, 1983
 Int. Std. (μg): 101 ?
 Dry weight (g): 71.86
 Inject. volume (μL): 2
 Sample volume (mL): 1.4
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt. 0.42
C15	4R	.00047	0	0	0	C17/Prist. 0.45
C16	5R	.00051	0	0	0	C18/Phyt. 0
C17	6R	.00059	842	0.50	0.08 ?	
Pristane	7R	.00056	1973	1.18	0.82	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	3385	2.61	0.84 ?	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	50878 ?	98.55 ?	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	27121	115.26	1.81	CPI 1.08 ?
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 62.76
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	91684		
Resolved - known peaks	33321		1.88
Resolved - unknown peaks	7413	13.20	0.21 ?
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			2.08 ?

Sample: D-3A-2
 Data analyzed: Nov. 9, 1983
 Int. Std. (μg): 182 ?
 Dry weight (g): 42.67 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.5 ?
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00054	0	0	0	
C13	2R	.00054	0	0	0	Resol./Unres.
C14	3R	.00252	0	0	0	Prist./Phyt. 2.11
C15	4R	.00056	0	0	0	C17/Prist. 1.21
C16	5R	.00056	0	0	0	C18/Phyt. 0.70
C17	6R	.00057	1267	0.72	0.02 ?	
Pristane	7R	.00056	1863	0.59	0.02 ?	
C18	8R	.00061	322	0.20	0.01 ?	
Phytane	9R	.00060	469	0.28	0.01 ?	
C19	10R	.00068	1441	0.98	0.83 ?	n-Alkanes
Androstane	11R	.00063	121778	76.72	Int. std.	
C20	12R	.00088	0	0	0	Homol. Ser.
C21	13R	.00117	51452	60.20	1.86	CPI 0.63
C22	14R	.00171	390 ?	0.67	0.03 ?	
C23	15R	.00224	438	1.02 ?	0.03 ?	
C24	16R	.00322	11861	38.19	1.18	
C25	17R	.00422	0	0	0	% Recovery 56.97
C26	18R	.00627	0	0	0	
C27	19R	.01283	0	0	0	
C28	20R	.01054	0	0	0	
C29	21R	.01033	0	0	0	
C30	22R	.01219	0	0	0	

TOTALS

Resolved for all peaks	209148 ?	
Resolved - known peaks	68703 ?	
Resolved - unknown peaks	18667	3.17
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		3.54

Sample: D-3A-3
 Data analyzed: Nov. 9, 1983
 Int. Std. (μg): 101
 Dry weight (g): 41.03
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00054	0	0	0	
C13	2R	.00054	0	0	0	Resol./Unres.
C14	3R	.00252	0	0	0	Prist./Phyt.
C15	4R	.00056	0	0	0	C17/Prist. 2.15
C16	5R	.00056	156	0.09 ?	0.00 ?	C18/Phyt.
C17	6R	.00057	1091	0.62	0.83	
Pristane	7R	.00056	516	0.29	0.22 ?	
C18	8R	.00061	167	0.10	0.00 ?	
Phytane	9R	.00060	0	0	0	
C19	10R	.00068	1281 ?	0.82	0.84	n-Alkanes
Androstane	11R	.00063	71599	45.11 ?	Int. std.	
C20	12R	.00088	0	0	0	Homol. Ser.
C21	13R	.00117	0	0	0	CPI 0.20
C22	14R	.00171	0	0	0	
C23	15R	.00224	0	0	0	
C24	16R	.00322	0	0	0	
C25	17R	.00422	0	0	0	% Recovery 44.66
C26	18R	.00627	0	0	0	
C27	19R	.01283	0	0	0	
C28	20R	.01054	394	4.15	0.23	
C29	21R	.01033	0	0	0	
C30	22R	.01219	244	2.97	0.16	

TOTALS

Resolved for all peaks	115958	
Resolved - known peaks	3769	
Resolved - unknown peaks	48582	0.49
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		1.89

Sample: JU-JETTIES A-1
 Data analyzed: Nov. 8, 1983
 Int. Std. (μg): 101
 Dry weight (g): 42.53
 Inject. volume (μL): 2
 Sample volume (mL): 1.3
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 1.74
C14	3R	.00066	0	0	0	Prist./Phyt. 1.68
C15	4R	.00068	727	0.49	0.01 ?	C17/Prist. 0.21
C16	5R	.00068	763	0.52	0.01 ?	C18/Phyt. 0.32
C17	6R	.00069	376	0.26	0.01 ?	
Pristane	7R	.00068	1845	1.25	0.03 ?	
C18	8R	.00069	342	0.24	0. ?	
Phytane	9R	.00069	1077	0.74	0.82 ?	
C19	10R	.00071	1021	1.29	0.03 ?	n-Alkanes
Androstane	11R	.00057	152680	87.03	Int. std.	
C20	12R	.00078	1198	0.93	0.03 ?	Homol. Ser.
C21	13R	.00087	6974	6.87	0.17	CPI 3.45
C22	14R	.00109	1759	1.92	0.05 ?	
C23	15R	.00143	2332	3.33	0.01 ?	
C24	16R	.00195	1917	3.74	0.10 ?	
C25	17R	.00243	3213	7.81	0.21	% Recovery 56.81
C26	18R	.00348	1087 ?	3.78	0.10 ?	
C27	19R	.00787	3522	27.72	0.76	
C28	20R	.00596	655	3.98 ?	0.11	
C29	21R	.01686	1612	25.89	0.71 ?	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	266360		
Resolved - known peaks	31212		2.45
Resolved - unknown peaks	82468	47.01 ?	1.28
Unresolved (UCM)	137909 ?	78.61 ?	2.15
Total aliphatic hydrocarbons			5.88

Sample: JU-JETTIES A-1
 Data analyzed: Nov. 8, 1983
 Int. Std. (μg): 101
 Dry weight (g): 37.82
 Inject. volume (μL): 2
 Sample volume (mL): 1.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 1.73
C14	3R	.00066	0	0	0	Prist./Phyt. 0.77
C15	4R	.00068	0	0	0	C17/Prist. 2.30
C16	5R	.00068	0	0	0	C18/Phyt. 0.66
C17	6R	.00069	2618	1.81	0.85 ?	
Pristane	7R	.00068	1156	0.79	0.82 ?	
C18	8R	.00069	978	0.67	0.82 ?	
Phytane	9R	.00069	1482	1.82	0.83 ?	
C19	10R	.00071	2895 ?	1.49	0.84 ?	n-Alkanes
Androstane	11R	.00057	172958	98.58	Int. std.	
C20	12R	.00078	435	0.34	0.01 ?	Homol. Ser.
C21	13R	.00087	1038 ?	0.90	0.02 ?	CPI 4.18
C22	14R	.00109	1596	1.74	0.05 ?	
C23	15R	.00143	2261	3.23	0.09 ?	
C24	16R	.00195	1441	2.81	0.08 ?	
C25	17R	.00243	2117	5.14	0.14	% Recovery 61.00 ?
C26	18R	.00348	1001 ?	3.76	0.10	
C27	19R	.00787	1728	13.60	0.37	
C28	20R	.00596	903 ?	5.38	0.15	
C29	21R	.01686	2434	39.90	1.86	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	257278	
Resolved - known peaks	23355	2.26
Resolved - unknown peaks	60965 ?	34.75 0.94
Unresolved (UCM)	118501 ?	67.55 1.83
Total aliphatic hydrocarbons		4.99

Sample: JU-JETTIES A-3
 Data analyzed: Nov. 8, 1983
 Int. Std. (μg): 101
 Dry weight (g): 40.56 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 1.47
C14	3R	.00066	0	0	0	Prist./Phyt. 2.45
C15	4R	.00068	0	0	0	C17/Prist. 0.22
C16	5R	.00068	0	0	0	C18/Phyt. 0.80 ?
C17	6R	.00069	597	0.41	0.01 ?	
Pristane	7R	.00068	2710	1.84	0.06 ?	
C18	8R	.00069	877	0.61 ?	0.02 ?	
Phytane	9R	.00069	1892 ?	0.75	0.02 ?	
C19	10R	.00071	668	0.47	0.01 ?	n-Alkanes
Androstane	11R	.00057	146180 ?	83.32	Int. std.	
C20	12R	.00078	1844 ?	0.81	0.02 ?	Homol. Ser.
C21	13R	.00087	6141	5.34	0.16	CPI 2.83
C22	14R	.00109	1470 ?	1.60 ?	0.05 ?	
C23	15R	.00143	2884 ?	2.98	0.09 ?	
C24	16R	.00195	1756	3.42	0.18	
C25	17R	.00243	2231	5.42	0.16	% Recovery 61.87
C26	18R	.00348	618	2.16	0.06 ?	
C27	19R	.00787	2987	22.88	0.68	
C28	20R	.00596	438	2.56	0.07 ?	
C29	21R	.01686	1113	17.87	0.53	
C30	22R	.01579	193	3.85	0.09 ?	

TOTALS

Resolved for all peaks	231870		
Resolved - known peaks	25931		2.16
Resolved - unknown peaks	59759	34.86	1.82
Unresolved (UCM)	126441	72.87	2.15
Total aliphatic hydrocarbons			5.33

Sample: JU-ATL. B. A-2
 Data analyzed: Nov. 9?, 1983
 Int. Std. (μg): 101 ?
 Dry weight (g): 10.93 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres.
C14	3R	.00066	0	0	0	Prist./Phyt. ?
C15	4R	.00068	1003 ?	0.68	0.89	C17/Prist.
C16	5R	.00068	1065 ?	0.72	0.89	C18/Phyt. 1.33
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	0	0	0	
C18	8R	.00069	649	0.45	0.06 ?	
Phytane	9R	.00069	488	0.34	0.04 ?	
C19	10R	.00071	918	0.65	0.08 ?	n-Alkanes
Androstane	11R	.00057	129258 ?	73.67	Int. std.	
C20	12R	.00078	374	0.29	0.04 ?	Homol. Ser.
C21	13R	.00087	676	0.59	0.07 ?	CPI 2.08 ?
C22	14R	.00109	1387 ?	1.42	0.18	
C23	15R	.00143	1284	1.84	0.24	
C24	16R	.00195	880	1.72	0.22	
C25	17R	.00243	791	1.92	0.24	% Recovery 54.71
C26	18R	.00348	623	2.17	0.27	
C27	19R	.00787	1223	9.63	1.29 ?	
C28	20R	.00596	0	0	0	
C29	21R	.01686	0	0	0	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	149228	
Resolved - known peaks	11281	2.81
Resolved - unknown peaks	8689	4.95
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		3.43

Sample: JU-ATL. BCH. A-3
 Data analyzed: Nov. 8, 1983
 Int. Std. (μg): 101
 Dry weight (g): 12.13
 Inject. volume (μL): 2
 Sample volume (mL): 1.3
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres.
C14	3R	.00066	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00068	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	0	0	0	
C18	8R	.00069	0	0	0	
Phytane	9R	.00069	0	0	0	
C19	10R	.00071	0	0	0	n-Alkanes
Androstane	11R	.00057	36930	21.05	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	0	0	0	CPI 13.79
C22	14R	.00109	396	0.43	0.17	
C23	15R	.00143	718	1.03	0.40 ?	
C24	16R	.00195	502 ?	0.98	0.39	
C25	17R	.00243	1184	2.88	1.14	% Recovery 13.55
C26	18R	.00348	0	0	0	
C27	19R	.00787	1976	15.55	6.15	
C28	20R	.00596	0	0	0	
C29	21R	.01686	0	0	0	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	45786		
Resolved - known peaks	4776		8.25
Resolved - unknown peaks	4880	2.33	0.92
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			9.17

Sample: ? N6A A-1
 Data analyzed: Nov. 22, 1983
 Int. Std. (μg): ?
 Dry weight (g): 53. ?
 Inject. volume (μL): 2 ?
 Sample volume (mL): 1.5 ?
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	0	0	0	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	73911	67.26	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	3683	6.87	0.18	CPI 1
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 49.94
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	81694		
Resolved - known peaks	3683		0.18
Resolved - unknown peaks	4100 ?	3.73	0.10 ?
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.27

Sample: JU N6A A-2
 Data analyzed: Nov. 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 67.9
 Inject. volume (μL): 2
 Sample volume (mL): 1.3
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00088	0	0	0	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	4225	3.84	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	0	0	0	CPI
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 2.47
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	7812		
Resolved - known peaks	0		0
Resolved - unknown peaks	3587	3.26	1.26
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			1.26

Sample: JU N6A-A-1
 Data analyzed: Nov. 28, 1983
 Int. Std. (μg): 121 ?
 Dry weight (g): 67.9
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00048	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00243 ?	0	0	0	Prist./Phyt.
C15	4R	.00044	0	0	0	C17/Prist.
C16	5R	.00045	0	0	0	C18/Phyt.
C17	6R	.00049	0	0	0	
Pristane	7R	.00049	0	0	0	
C18	8R	.00062	0	0	0	
Phytane	9R	.00062	0	0	0	
C19	10R	.00090	0	0	0	n-Alkanes
Androstane	11R	.00120	21238 ?	25.48	Int. std.	
C20	12R	.00165	0	0	0	Homol. Ser.
C21	13R	.00252	0	0	0	CPI
C22	14R	.00463	0	0	0	
C23	15R	.00810	0	0	0	
C24	16R	.00969	0	0	0	
C25	17R	.01140	0	0	0	% Recovery 37.84
C26	18R	.01274 ?	0	0	0	
C27	19R	.02305 ?	0	0	0	
C28	20R	.01311	0	0	0	
C29	21R	.01427	0	0	0	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	30257 ?		
Resolved - known peaks	0		0
Resolved - unknown peaks	9827 ?	10.53	0.63
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.63

Sample: 205A
 Data analyzed: Sep. 12, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.8
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00070	0	0	0	
C13	2R	.00066	0	0	0	Resol./Unres.
C14	3R	.00069	2198	1.51	0.04 ?	Prist./Phyt.
C15	4R	.00073	4367	3.17	0.08 ?	C17/Prist.
C16	5R	.00071	0	0	0	C18/Phyt.
C17	6R	.00073	517	0.37	0.01 ?	
Pristane	7R	.00072	0	0	0	
C18	8R	.00074	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00076	0	0	0	n-Alkanes
Androstane	11R	.00063	369198	232.59	Int. std.	
C20	12R	.00084	0	0	0	Homol. Ser.
C21	13R	.00084	1846	0.88	0.02 ?	CPI 0.86
C22	14R	.00096	0	0	0	
C23	15R	.00106	0	0	0	
C24	16R	.00141	396	0.56	0.01 ?	
C25	17R	.00209	1805 ?	2.18 ?	0.06 ?	% Recovery 92.11
C26	18R	.00538	0	0	0	
C27	19R	.01519	227	3.45	0.08 ?	
C28	20R	.02389	368	8.68 ?	0.20 ?	
C29	21R	.04701	0	0	0	
C30	22R	.05692	0	0	0	

TOTALS

Resolved for all peaks	389810		
Resolved - known peaks	10189?	0.50	
Resolved - unknown peaks	18512	6.62256	0.16
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons		0.66	

Sample: 206A
 Data analyzed: Sep. 12, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00070	0	0	0	
C13	2R	.00066	0	0	0	Resol./Unres.
C14	3R	.00069	0	0	0	Prist./Phyt.
C15	4R	.00073	0	0	0	C17/Prist.
C16	5R	.00071	0	0	0	C18/Phyt.
C17	6R	.00073	0	0	0	
Pristane	7R	.00072	0	0	0	
C18	8R	.00074	1773	1.31	0.11	
Phytane	9R	.00075	0	0	0	
C19	10R	.00076	0	0	0	n-Alkanes
Androstane	11R	.00063	184848 ?	65.54	Int. std.	
C20	12R	.00084	0	0	0	Homol. Ser.
C21	13R	.00084	581 ?	0.43	0.03 ?	CPI 1.86
C22	14R	.00096	0	0	0	
C23	15R	.00106	0	0	0	
C24	16R	.00141	0	0	0	
C25	17R	.00209	1343	2.81	0.25	% Recovery 32.45
C26	18R	.00538	0	0	0	
C27	19R	.01519	0	0	0	
C28	20R	.02389	0	0	0	
C29	21R	.04701	0	0	0	
C30	22R	.05692	0	0	0	

TOTALS

Resolved for all peaks	109828 ?	
Resolved - known peaks	3617	0.39
Resolved - unknown peaks	1363	0.86 / 0.87
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		0.46

Sample: 207A
 Data analyzed: Sep. 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres.
C14	3R	.00066	1661	1.89	0.08 ?	Prist./Phyt.
C15	4R	.00068	5021 ?	3.46	0.03 ?	C17/Prist.
C16	5R	.00068	10245	6.86	0.05 ?	C18/Phyt.
C17	6R	.00069	24412	17.88	0.12	
Pristane	7R	.00068	12453	8.71	0.06 ?	
C18	8R	.00069	17693	13.27	0.10	
Phytane	9R	.00069	11339	8.27	0.07 ?	
C19	10R	.00071	22157	16.17	0.12	n-Alkanes
Androstane	11R	.00057	1310608 ?	773.25	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	18195 ?	7.85	0.06 ?	CPI 1.27
C22	14R	.00109	8255	6.69	0.05 ?	
C23	15R	.00143	5787	4.86	0.04 ?	
C24	16R	.00195	6913	6.36	0.05 ?	
C25	17R	.00243	4966	4.82	0.04 ?	% Recovery 76.56
C26	18R	.00348	3228	4.78	0.03 ?	
C27	19R	.00787	1266	5.84	0.04 ?	
C28	20R	.00596	0	0	0	
C29	21R	.01686	0	0	0	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	1522988 ?	
Resolved - known peaks	145583 ?	0.84
Resolved - unknown peaks	66797	39.42
Unresolved (UCM)	978952	572.86
Total aliphatic hydrocarbons		5.28

Sample: 208A
 Data analyzed: Sep 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 10
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 0.95
C14	3R	.00066	0	0	0	Prist./Phyt. 0.49
C15	4R	.00068	0	0	0	C17/Prist. 2.27
C16	5R	.00068	0	0	0	C18/Phyt. 2.18
C17	6R	.00069	4196	2.94	0.84	
Pristane	7R	.00068	1852	1.30	0.82	
C18	8R	.00069	7454	5.60	0.88	
Phytane	9R	.00069	3643	2.66	0.84	
C19	10R	.00071	11787	8.68	0.13	n-Alkanes
Androstane	11R	.00057	635720	375.87	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	8101	6.24	0.89	CPI 0.24
C22	14R	.00109	7998	6.47	0.90	
C23	15R	.00143	4868	4.14	0.86	
C24	16R	.00195	4768	4.39	0.87	
C25	17R	.00243	30121 ?	29.22	0.44	% Recovery 37.14
C26	18R	.00348	1770	2.58	0.03 ?	
C27	19R	.00787	1342	5.34	0.08 ?	
C28	20R	.00596	13631	61.34	0.92	
C29	21R	.01686	1888	21.24	0.32	
C30	22R	.01579	3676	250.97	3.75	

TOTALS

Resolved for all peaks	815688 ?	
Resolved - known peaks	187887 ?	6.18
Resolved - unknown peaks	72793	42.95
Unresolved (UCM)	72793	484.78
Total aliphatic hydrocarbons		14.87

Sample: 209A
 Data analyzed: Sep 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 0.30
C14	3R	.00066	0	0	0	Prist./Phyt. 1.23
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00068	1901	1.27	0.02 ?	C18/Phyt. 0.96
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	5753	4.03	0.05	
C18	8R	.00069	4283	3.15	0.04	
Phytane	9R	.00069	4460	3.28	0.04	
C19	10R	.00071	3612	2.64	0.04	n-Alkanes
Androstane	11R	.00057	697170	411.33	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	3148	2.42	0.03	CPI 3.28
C22	14R	.00109	2533	2.05	0.03	
C23	15R	.00143	1718	1.47	0.02	
C24	16R	.00195	1097	1.01	0.01	
C25	17R	.00243	27580	26.75	0.37	% Recovery 48.73
C26	18R	.00348	155	0.23	0.00	
C27	19R	.00787	0	0	0	
C28	20R	.00596	0	0	0	
C29	21R	.01686	0	0	0	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	769918	
Resolved - known peaks	56172	0.66
Resolved - unknown peaks	16568	9.78 0.13
Unresolved (UCM)	330952	195.26 2.66
Total aliphatic hydrocarbons		3.46

Sample: 210A
 Data analyzed: Sep 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18 ?
 Inject. volume (μL): 1.1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 0.23
C14	3R	.00066	0	0	0	Prist./Phyt. 0.37
C15	4R	.00068	3558	2.45	0.01	C17/Prist. 22.18
C16	5R	.00068	3247	2.17	0.01	C18/Phyt. 1.02 ?
C17	6R	.00069	44002	38.80	0.17	
Pristane	7R	.00068	1991	1.39	0.01	
C18	8R	.00069	5878	3.80	0.03	
Phytane	9R	.00069	5128	3.74	0.02	
C19	10R	.00071	5932	4.33	0.02	n-Alkanes
Androstane	11R	.00057	1753700?	1034.68	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	11105	8.56	0.05	CPI 3.28
C22	14R	.00109	3118	2.53	0.01	
C23	15R	.00143	17361	14.76	0.08 ?	
C24	16R	.00195	1347	1.24	0.00	
C25	17R	.00243	1849	1.79	0.00	% Recovery 93.13
C26	18R	.00348	564	0.82	0.00	
C27	19R	.00787	0	0	0	
C28	20R	.00596	0	0	0	
C29	21R	.01686	0	0	0	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	1979500 ?	
Resolved - known peaks	104256	0.43
Resolved - unknown peaks	121544	71.72 0.39
Unresolved (UCM)	1125476	664.03 ? 3.60 ?
Total aliphatic hydrocarbons		4.42

Sample: 211A
 Data analyzed: Sep 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 10
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres.
C14	3R	.00059	0	0	0	Prist./Phyt. 0.75
C15	4R	.00062	0	0	0	C17/Prist.
C16	5R	.00053	0	0	0	C18/Phyt. 0.58
C17	6R	.00065	0	0	0	
Pristane	7R	.00065	984	0.64	0.02	
C18	8R	.00067	741	0.50	0.01	
Phytane	9R	.00066	1294	0.85	0.02	
C19	10R	.00072	0	0	0	n-Alkanes
Androstane	11R	.00056	359480	201.40 ?	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	551	0.39	0.01	CPI 22.88
C22	14R	.00076	596	0.45	0.01	
C23	15R	.00078	542	0.42	0.01	
C24	16R	.00074	646	0.48	0.01	
C25	17R	.00089	77669	69.13	1.93	% Recovery 19.93
C26	18R	.00119	1848 ?	1.24	0.03	
C27	19R	.00319	0	0	0	
C28	20R	.00406	0	0	0	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	448260	
Resolved - known peaks	84863	
Resolved - unknown peaks	4717	2.06
Unresolved (UCM)	4717	2.64 0.07 ?
Total aliphatic hydrocarbons		2.14

Sample: 212A
 Data analyzed: Sep 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 0.22
C14	3R	.00066	0	0	0	Prist./Phyt. 2.25
C15	4R	.00068	0	0	0	C17/Prist. 2.39 ?
C16	5R	.00068	1553	1.13	0.00 ?	C18/Phyt. 2.12
C17	6R	.00069	7908	6.25	0.05	
Pristane	7R	.00068	3710	2.78 ?	0.02	
C18	8R	.00069	2870	2.55	0.02	
Phytane	9R	.00069	1435	1.29	0.01	
C19	10R	.00071	2521	2.92	0.02	n-Alkanes
Androstane	11R	.00057	703578 ?	745.78	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	1259	3.12	0.02	CPI 5.81
C22	14R	.00109	764	3.36	0.02	
C23	15R	.00143	0	0	0	
C24	16R	.00195	0	0	0	
C25	17R	.00243	6120	46.88	0.35	% Recovery 73.84
C26	18R	.00348	0	0	0	
C27	19R	.00787	0	0	0	
C28	20R	.00596	0	0	0	
C29	21R	.01686	0	0	0	
C30	22R	.01579	0	0	0	

TOTALS

Resolved for all peaks	739550		
Resolved - known peaks	28140		0.53
Resolved - unknown peaks	7878	8.34	0.86
Unresolved (UCM)	343333	363.93	2.74
Total aliphatic hydrocarbons			3.33

Sample: 221A
 Data analyzed: Sep 9, 1983
 Int. Std. (μg): 101
 Dry weight (g): 10 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00076	0	0	0	
C13	2R	.00073	0	0	0	Resol./Unres.
C14	3R	.00072	0	0	0	Prist./Phyt.
C15	4R	.00077	0	0	0	C17/Prist. 0.62
C16	5R	.00072	0	0	0	C18/Phyt.
C17	6R	.00083	910	0.76	0.03	
Pristane	7R	.00078	1573	1.23	0.04	
C18	8R	.00052	0	0	0	
Phytane	9R	.00081	0	0	0	
C19	10R	.00083	0	0	0	n-Alkanes
Androstane	11R	.00065	248860 ?	156.04	Int. std.	
C20	12R	.00089	0	0	0	Homol. Ser.
C21	13R	.00089	952	0.85	0.03	CPI 0.63
C22	14R	.00098	455	0.46	0.02	
C23	15R	.00108	445	0.48	0.02	
C24	16R	.00129	0	0	0	
C25	17R	.00134	10879	14.58	0.52	% Recovery 77.25
C26	18R	.00308	0	0	0	
C27	19R	.00943	0	0	0	
C28	20R	.01199	0	0	0	
C29	21R	.01925	0	0	0	
C30	22R	.04623	544	25.15	0.90	

TOTALS

Resolved for all peaks	271178		
Resolved - known peaks	15758		1.56
Resolved - unknown peaks	15352	9.98	0.36
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			1.92

Sample: 222A
 Data analyzed: Sep 9, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18 ?
 Inject. volume (μL): 2
 Sample volume (mL): 0.8
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00076	0	0	0	
C13	2R	.00073	0	0	0	Resol./Unres.
C14	3R	.00072	0	0	0	Prist./Phyt.
C15	4R	.00077	0	0	0	C17/Prist.
C16	5R	.00072	0	0	0	C18/Phyt.
C17	6R	.00083	0	0	0	
Pristane	7R	.00078	0	0	0	
C18	8R	.00052	0	0	0	
Phytane	9R	.00081	0	0	0	
C19	10R	.00083	0	0	0	n-Alkanes
Androstane	11R	.00065	68054	44.24	Int. std.	
C20	12R	.00089	0	0	0	Homol. Ser.
C21	13R	.00089	378	0.34	0.84	CPI 1.15
C22	14R	.00098	512	0.58	0.86 ?	
C23	15R	.00108	0	0	0	
C24	16R	.00129	145	0.19	0.82	
C25	17R	.00134	8154	10.93	1.39	% Recovery 17.52
C26	18R	.00308	0	0	0	
C27	19R	.00943	0	0	0	
C28	20R	.01199	33	0.40	0.05 ?	
C29	21R	.01925	0	0	0	
C30	22R	.04623	182	8.41	1.86	

TOTALS

Resolved for all peaks	79341		
Resolved - known peaks	9404		2.63
Resolved - unknown peaks	1883	1.22	0.16
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			2.79

Sample: 224A
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres.
C14	3R	.00059	0	0	0	Prist./Phyt. 1.70
C15	4R	.00062	1423	0.88	0.01	C17/Prist. 2.65
C16	5R	.00053	4425	2.34	0.02	C18/Phyt.
C17	6R	.00065	7549	4.91	0.03	
Pristane	7R	.00065	2846	1.85	0.01	
C18	8R	.00067	0	0	0	
Phytane	9R	.00066	1649	1.09	0.01	
C19	10R	.00072	0	0	0	n-Alkanes
Androstane	11R	.00056	1417508	? 793.8	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	709	0.50	0.00	CPI 1.75
C22	14R	.00076	897	0.68	0.00	
C23	15R	.00078	1064	0.83	0.01	
C24	16R	.00074	1398	1.03	0.01	
C25	17R	.00089	968	0.85	0.01	% Recovery 39.30
C26	18R	.00119	0	0	0	
C27	19R	.00319	0	0	0	
C28	20R	.00406	0	0	0	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	1481500		
Resolved - known peaks	22912		0.11
Resolved - unknown peaks	41088	23.00 ?	0.16
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.27

Sample: 226A
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres. 0.43
C14	3R	.00059	0	0	0	Prist./Phyt. 3.33
C15	4R	.00062	2368	1.47	0.00 ?	C17/Prist. 0.42
C16	5R	.00053	1427	0.76	0.00?	C18/Phyt. 1.36
C17	6R	.00065	1618	1.85	0.01	
Pristane	7R	.00065	3860	2.51	0.02	
C18	8R	.00067	1526	1.82	0.01	
Phytane	9R	.00066	1143	0.75	0.00	
C19	10R	.00072	1810	0.72	0.00	n-Alkanes
Androstane	11R	.00056	1651000?	924.56	Int. std.	
C20	12R	.00076	1582	1.20	0.01	Homol. Ser.
C21	13R	.00071	1119	0.79	0.00	CPI 0.45
C22	14R	.00076	1163	0.88	0.01	
C23	15R	.00078	1335	1.04	0.01	
C24	16R	.00074	849	0.63	0.00	
C25	17R	.00089	6685	5.95	0.03	% Recovery 91.54
C26	18R	.00119	655	0.78	0.00	
C27	19R	.00319	655	2.98	0.01	
C28	20R	.00406	883	3.58	0.02	
C29	21R	.01024	0	0	0	
C30	22R	.02731	785	19.25	0.12	

TOTALS

Resolved for all peaks	1685900 ?	
Resolved - known peaks	28583	0.28
Resolved - unknown peaks	6317	3.54
Unresolved (UCM)	204048 ?	114.27
Total aliphatic hydrocarbons		0.98

Sample: 227A
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres. 0.08 ?
C14	3R	.00059	0	0	0	Prist./Phyt. .040
C15	4R	.00062	0	0	0	C17/Prist. 5.14
C16	5R	.00053	2803	1.49	0.01	C18/Phyt. 0.98
C17	6R	.00065	6815	3.91	0.05	
Pristane	7R	.00065	1169	0.76	0.01	
C18	8R	.00067	2849	1.90	0.02	
Phytane	9R	.00066	2951	1.95	0.03	
C19	10R	.00072	5151	3.71	0.04	n-Alkanes
Androstane	11R	.00056	964468	540.10	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	5127	3.65	0.04	CPI 0.94
C22	14R	.00076	4602	3.50	0.04	
C23	15R	.00078	2579	2.81	0.02	
C24	16R	.00074	1801	1.33	0.01	
C25	17R	.00089	1073	0.95	0.01	% Recovery 53.48
C26	18R	.00119	2287	2.72	0.03	
C27	19R	.00319	725	2.31	0.02	
C28	20R	.00406	749	3.85	0.03	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	1060500		
Resolved - known peaks	39881		0.35
Resolved - unknown peaks	56159	31.45	0.33
Unresolved (UCM)	1400000	? 784	8.14
Total aliphatic hydrocarbons			8.82

Sample: 232A ?
 Data analyzed: Sep 9, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.6
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00076	0	0	0	
C13	2R	.00073	0	0	0	Resol./Unres.
C14	3R	.00072	0	0	0	Prist./Phyt.
C15	4R	.00077	5949	4.58	0.08	C17/Prist. 0.89
C16	5R	.00072	0	0	0	C18/Phyt.
C17	6R	.00083	1189	0.99	0.02	
Pristane	7R	.00078	1416	1.10	0.02	
C18	8R	.00052	0	0	0	
Phytane	9R	.00081	0	0	0	
C19	10R	.00083	0	0	0	n-Alkanes
Androstane	11R	.00065	478630	311.19	Int. std.	
C20	12R	.00089	0	0	0	Homol. Ser.
C21	13R	.00089	0	0	0	CPI 32.97
C22	14R	.00098	477	0.47	0.01	
C23	15R	.00108	372	0.40	0.01	
C24	16R	.00129	0	0	0	
C25	17R	.00134	7047	9.44	0.18	% Recovery 92.41
C26	18R	.00308	0	0	0	
C27	19R	.00943	0	0	0	
C28	20R	.01199	0	0	0	
C29	21R	.01925	0	0	0	
C30	22R	.04623	0	0	0	

TOTALS

Resolved for all peaks	583168		
Resolved - known peaks	16450		0.31
Resolved - unknown peaks	8080	5.25	0.89
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.40

Sample: 235A
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00070	0	0	0	
C13	2R	.00066	0	0	0	Resol./Unres.
C14	3R	.00069	0	0	0	Prist./Phyt.
C15	4R	.00073	0	0	0	C17/Prist.
C16	5R	.00071	0	0	0	C18/Phyt.
C17	6R	.00073	0	0	0	
Pristane	7R	.00072	0	0	0	
C18	8R	.00074	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00076	1036	0.79	0.28	n-Alkanes
Androstane	11R	.00063	25861	15.79	Int. std.	
C20	12R	.00084	0	0	0	Homol. Ser.
C21	13R	.00084	282	0.17	0.06	CPI 1.39
C22	14R	.00096	471	0.45	0.16	
C23	15R	.00106	172	0.18	0.56 ?	
C24	16R	.00141	0	0	0	
C25	17R	.00209	296	0.62	0.22	% Recovery 7.82
C26	18R	.00538	119	0.65	0.23	
C27	19R	.01519	0	0	0	
C28	20R	.02389	0	0	0	
C29	21R	.04701	0	0	0	
C30	22R	.05692	0	0	0	

TOTALS

Resolved for all peaks	40476	
Resolved - known peaks	2296	1.01
Resolved - unknown peaks	13119	8.26
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		3.96

Sample: 231A
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres. 1.46
C14	3R	.00059	0	0	0	Prist./Phyt. 2.56
C15	4R	.00062	0	0	0	C17/Prist. 0.25
C16	5R	.00053	3164	1.68	0.03	C18/Phyt. 1.02
C17	6R	.00065	1383	0.85	0.01	
Pristane	7R	.00065	5140	3.34	0.06	
C18	8R	.00067	1995	1.34	0.02	
Phytane	9R	.00066	1977	1.34	0.02	
C19	10R	.00072	1029	0.74	0.01	n-Alkanes
Androstane	11R	.00056	605338 ?	338.98	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	1259	0.89	0.01	CPI 1.95
C22	14R	.00076	1515	1.15	0.02	
C23	15R	.00078	1728	1.35	0.02	
C24	16R	.00074	1429	1.06 ?	0.02	
C25	17R	.00089	56713	58.47	0.83	% Recovery 33.56
C26	18R	.00119	1398	1.66	0.03	
C27	19R	.00319	1058	3.38	0.06	
C28	20R	.00406	5375	21.62	0.36	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	727790		
Resolved - known peaks	85083 ?		1.51
Resolved - unknown peaks	37377	20.93	0.35 ?
Unresolved (UCM)	137381	76.93	1.27
Total aliphatic hydrocarbons			3.13

Sample: 232A
 Data analyzed: Sep 15. 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00071	0	0	0	
C13	2R	.00068	0	0	0	Resol./Unres. 0.38
C14	3R	.00066	2813	1.86	0.03	Prist./Phyt. 1.03
C15	4R	.00068	11542	7.96	0.16	C17/Prist. 1.16
C16	5R	.00068	12034	8.86	0.16	C18/Phyt. 1.44
C17	6R	.00069	25688 ?	17.92	0.36	
Pristane	7R	.00068	22005 ?	15.40	0.39	
C18	8R	.00069	28563	21.42	0.43	
Phytane	9R	.00069	20412	14.98 ?	0.30	
C19	10R	.00071	35144	25.65	0.51	n-Alkanes
Androstane	11R	.00057	474998	280.24	Int. std.	
C20	12R	.00078	0	0	0	Homol. Ser.
C21	13R	.00087	13435	10.34	0.21	CPI 0.54
C22	14R	.00109	9621	7.79	0.16	
C23	15R	.00143	4156	3.53	0.08	
C24	16R	.00195	1862	1.71	0.03	
C25	17R	.00243	3698	3.56	0.07	% Recovery 27.75
C26	18R	.00348	0	0	0	
C27	19R	.00787	0	0	0	
C28	20R	.00596	0	0	0	
C29	21R	.01686	0	0	0	
C30	22R	.01579	1126	76.87	0	

TOTALS

Resolved for all peaks	889390		
Resolved - known peaks	192003 ?		4.35
Resolved - unknown peaks	222397	131.21	2.63
Unresolved (UCM)	1556198	918.15	18.38
Total aliphatic hydrocarbons			25.36

Sample: 233A
 Data analyzed: Sep 8, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00072	0	0	0	
C13	2R	.00071	0	0	0	Resol./Unres.
C14	3R	.00072	0	0	0	Prist./Phyt. 1.31
C15	4R	.00077	1575	1.21	0.84	C17/Prist. 1.46
C16	5R	.00065	8782	5.70	0.19	C18/Phyt. 1.71
C17	6R	.00076	8111	6.16	0.21	
Pristane	7R	.00076	5546	4.21	0.14	
C18	8R	.00078	7048	5.50	0.19	
Phytane	9R	.00079	4062	3.21	0.19	
C19	10R	.00077	7371	5.68	0.19	n-Alkanes
Androstane	11R	.00061	270848 ?	164.72	Int. std.	
C20	12R	.00081	902	0.73	0.02	Homol. Ser.
C21	13R	.00078	3349	2.61	0.09	CPI 1.07
C22	14R	.00083	2618	2.17	0.07	
C23	15R	.00107 ?	2085	2.23	0.08	
C24	16R	.00149	836	1.25	0.04	
C25	17R	.00224	2132	4.78	0.16	% Recovery 20.39
C26	18R	.00204	807	1.65	0.06	
C27	19R	.01220	553	6.75	0.23	
C28	20R	.01432	545	7.80	0.27	
C29	21R	.02287	0	0	0	
C30	22R	.03534	0	0	0	

TOTALS

Resolved for all peaks	429550		
Resolved - known peaks	56322		2.90
Resolved - unknown peaks	103188	62.95	2.14
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			4.24

Sample: 234A
 Data analyzed: Sep 8, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00072	0	0	0	
C13	2R	.00071	0	0	0	Resol./Unres.
C14	3R	.00072	0	0	0	Prist./Phyt.
C15	4R	.00077	0	0	0	C17/Prist.
C16	5R	.00065	3151	2.05 ?	0.17	C18/Phyt.
C17	6R	.00076	0	0	0	
Pristane	7R	.00076	0	0	0	
C18	8R	.00078	0	0	0	
Phytane	9R	.00079	871	0.69	0.06	
C19	10R	.00077	0	0	0	n-Alkanes
Androstane	11R	.00061	109258	66.64	Int. std.	
C20	12R	.00081	0	0	0	Homol. Ser.
C21	13R	.00078	0	0	0	CPI 0.48
C22	14R	.00083	454	0.38	0.03	
C23	15R	.00107 ?	0	0	0	
C24	16R	.00149	485	0.72	0.06	
C25	17R	.00224	488	0.90	0.08	% Recovery 8.25
C26	18R	.00204	205 ?	0.42	0.04	
C27	19R	.01220	278	3.39	0.29	
C28	20R	.01432	821	11.76	0.99	
C29	21R	.02287	136	3.11	0.26	
C30	22R	.03534	0	0	0	

TOTALS

Resolved for all peaks	129968		
Resolved - known peaks	6801		1.98
Resolved - unknown peaks	13909	8.48	0.71
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			2.69

Sample: 236A
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00070	0	0	0	
C13	2R	.00066	0	0	0	Resol./Unres.
C14	3R	.00069	0	0	0	Prist./Phyt.
C15	4R	.00073	0	0	0	C17/Prist.
C16	5R	.00071	0	0	0	C18/Phyt.
C17	6R	.00073	0	0	0	
Pristane	7R	.00072	0	0	0	
C18	8R	.00074	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00076	0	0	0	n-Alkanes
Androstane	11R	.00063	13902	8.76	Int. std.	
C20	12R	.00084	0	0	0	Homol. Ser.
C21	13R	.00084	0	0	0	CPI 0.26
C22	14R	.00096	0	0	0	
C23	15R	.00106	0	0	0	
C24	16R	.00141	0	0	0	
C25	17R	.00209	1047 ?	2.12	1.40	% Recovery 4.34
C26	18R	.00538	0	0	0	
C27	19R	.01519	0	0	0	
C28	20R	.02389	0	0	0	
C29	21R	.04701	0	0	0	
C30	22R	.05692	0	0	0	

TOTALS

Resolved for all peaks	23660	
Resolved - known peaks	1193	6.73
Resolved - unknown peaks	8565	3.46
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		10.18

Sample: 237A
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres.
C14	3R	.00059	0	0	0	Prist./Phyt.
C15	4R	.00062	0	0	0	C17/Prist.
C16	5R	.00053	0	0	0	C18/Phyt. 1.26
C17	6R	.00065	541	0.35	0.00	
Pristane	7R	.00065	0	0	0	
C18	8R	.00067	1336	0.89	0.02	
Phytane	9R	.00066	1078	0.71	0.02	
C19	10R	.00072	2274	1.64	0.04	n-Alkanes
Androstane	11R	.00056	396818	221.77	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	2153	1.53	0.04	CPI 1.20
C22	14R	.00076	1564	1.19	0.03	
C23	15R	.00078	1039	0.81	0.02	
C24	16R	.00074	588	0.44	0.01	
C25	17R	.00089	9568	8.52	0.22	% Recovery 21.96
C26	18R	.00119	0	0	0	
C27	19R	.00319	0	0	0	
C28	20R	.00406	1861	7.56	0.19	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	442760		
Resolved - known peaks	22002		0.60
Resolved - unknown peaks	24748	15.26	0.35
Unresolved (UCM)			
Total aliphatic hydrocarbons			0.95

Sample: 238A ?
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres. 0.19 ?
C14	3R	.00059	0	0	0	Prist./Phyt.
C15	4R	.00062	0	0	0	C17/Prist.
C16	5R	.00053	0	0	0	C18/Phyt.
C17	6R	.00065	2676	1.93	0.03	
Pristane	7R	.00065	0	0	0	
C18	8R	.00067	881	0.60	0.00	
Phytane	9R	.00066	0	0	0	
C19	10R	.00072	1404 ?	1.01 ?	0.02	n-Alkanes
Androstane	11R	.00056	592060 ?	331.55	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	1210	0.86	0.01	CPI 1.58
C22	14R	.00076	2813 ?	1.53	0.03	
C23	15R	.00078	2884 ?	1.56	0.03	
C24	16R	.00074	1440	1.06	0.02	
C25	17R	.00089	2287 ?	1.96	0.03	% Recovery 32.83
C26	18R	.00119	1686	2.01	0.03	
C27	19R	.00319	695	2.22	0.04	
C28	20R	.00406	0	0	0	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	646428		
Resolved - known peaks	16516		0.25
Resolved - unknown peaks	37844	21.19	0.36
Unresolved (UCM)	567500 ?	329 ?	5.57
Total aliphatic hydrocarbons			6.18

Sample: 240A-1
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres.
C14	3R	.00059	0	0	0	Prist./Phyt.
C15	4R	.00062	0	0	0	C17/Prist.
C16	5R	.00053	4862	2.58	0.12	C18/Phyt.
C17	6R	.00065	0	0	0	
Pristane	7R	.00065	3233	2.10	0.90	
C18	8R	.00067	0	0	0	
Phytane	9R	.00066	0	0	0	
C19	10R	.00072	2267	1.63	0.07	n-Alkanes
Androstane	11R	.00056	465310	260.57	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	1298	0.92	0.04	CPI 0.62
C22	14R	.00076	812	0.62	0.03	
C23	15R	.00078	831	0.65	0.03	
C24	16R	.00074	573	0.42	0.02	
C25	17R	.00089	8788	7.81	0.34	% Recovery 25.58
C26	18R	.00119	782	0.94	0.05	
C27	19R	.00319	0	0	0	
C28	20R	.00406	3044	12.36	0.53	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	527628	
Resolved - known peaks	26471	1.29
Resolved - unknown peaks	35839	20.87
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		2.16

Sample: 241A-1
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres.
C14	3R	.00059	1485	0.02	0.06	Prist./Phyt.
C15	4R	.00062	1625	1.01	0.07 ?	C17/Prist.
C16	5R	.00053	0	0	0	C18/Phyt.
C17	6R	.00065	915	0.59	0.04	
Pristane	7R	.00065	0	0	0	
C18	8R	.00067	0	0	0	
Phytane	9R	.00066	0	0	0	
C19	10R	.00072	0	0	0	n-Alkanes
Androstane	11R	.00056	275538	154.30	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	551	0.39	0.02	CPI 0.48
C22	14R	.00076	492	0.37	0.03	
C23	15R	.00078	468	0.37	0.03	
C24	16R	.00074	688	0.51	0.04	
C25	17R	.00089	3865	3.44	0.25	% Recovery 15.28
C26	18R	.00119	0	0	0	
C27	19R	.00319	0	0	0	
C28	20R	.00406	2429	9.86	0.72	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	306140	
Resolved - known peaks	12438	1.26
Resolved - unknown peaks	18172	18.18
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		2.00

Sample: 242A
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00070	0	0	0	
C13	2R	.00066	0	0	0	Resol./Unres.
C14	3R	.00069	0	0	0	Prist./Phyt.
C15	4R	.00073	0	0	0	C17/Prist.
C16	5R	.00071	0	0	0	C18/Phyt.
C17	6R	.00073	0	0	0	
Pristane	7R	.00072	0	0	0	
C18	8R	.00074	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00076	0	0	0	n-Alkanes
Androstane	11R	.00063	52687	33.19	Int. std.	
C20	12R	.00084	0	0	0	Homol. Ser.
C21	13R	.00084	0	0	0	CPI
C22	14R	.00096	0	0	0	
C23	15R	.00106	0	0	0	
C24	16R	.00141	0	0	0	
C25	17R	.00209	0	0	0	% Recovery 24.65
C26	18R	.00538	0	0	0	
C27	19R	.01519	0	0	0	
C28	20R	.02389	0	0	0	
C29	21R	.04701	0	0	0	
C30	22R	.05692	0	0	0	

TOTALS

Resolved for all peaks	62716			
Resolved - known peaks	0			
Resolved - unknown peaks	10029	6.32	1.06 ?	
Unresolved (UCM)	0	0	0	
Total aliphatic hydrocarbons			1.06 ?	

Sample: 246A-2
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00066	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres.
C14	3R	.00059	0	0	0	Prist./Phyt.
C15	4R	.00062	0	0	0	C17/Prist.
C16	5R	.00053	0	0	0	C18/Phyt.
C17	6R	.00065	0	0	0	
Pristane	7R	.00065	0	0	0	
C18	8R	.00067	0	0	0	
Phytane	9R	.00066	0	0	0	
C19	10R	.00072	0	0	0	n-Alkanes
Androstane	11R	.00056	501430 ?	280.80 ?	Int. std.	
C20	12R	.00076	0	0	0	Homol. Ser.
C21	13R	.00071	756	0.54	0.02	CPI 4.65
C22	14R	.00076	508	0.39	0.02	
C23	15R	.00078	848	0.66	0.03	
C24	16R	.00074	596	0.44	0.02	
C25	17R	.00089	2926	2.60 ?	0.10	% Recovery 27.80
C26	18R	.00119	0	0	0	
C27	19R	.00319	797	2.54	0.10	
C28	20R	.00406	0	0	0	
C29	21R	.01024	0	0	0	
C30	22R	.02731	0	0	0	

TOTALS

Resolved for all peaks	513568		
Resolved - known peaks	6431		0.29
Resolved - unknown peaks	5699	3.19	0.13
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.41

Sample: 247A-1
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00044	0	0	0	Prist./Phyt.
C15	4R	.00047	0	0	0	C17/Prist.
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00059	0	0	0	
Pristane	7R	.00056	0	0	0	
C18	8R	.00077	0	0	0	
Phytane	9R	.00077	0	0	0	
C19	10R	.00121	0	0	0	n-Alkanes
Androstane	11R	.00178	359480	201.31	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI 0.15
C22	14R	.00743	509	0.39	0.02	
C23	15R	.01000	480 ?	0.32	0.02	
C24	16R	.01213	562	0.42	0.02	
C25	17R	.01479	1406	1.62	0.07	% Recovery 19.93
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	2524	10.25 ?	0.57	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	368300 ?	
Resolved - known peaks	5489	0.71
Resolved - unknown peaks	3331	1.87 0.10 ?
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		0.81

Sample: 213A (0-5)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 49.32
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.9
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00045	0	0	0	Resol./Unres. 0.38
C14	3R	.00046	0	0	0	Prist./Phyt. 1.36
C15	4R	.00048	0	0	0	C17/Prist. 1.54
C16	5R	.00046	1133	0.52	0.56	C18/Phyt.
C17	6R	.00055	675	0.37	0.40	
Pristane	7R	.00056	278	0.16	0.17	
C18	8R	.00069	924	0.64	0.69	
Phytane	9R	.00069	601 ?	0.41	0.45	
C19	10R	.00096	818 ?	0.78	0.84	n-Alkanes
Androstane	11R	.00116	1642	1.90 ?	Int. std.	
C20	12R	.00156	428	0.67	0.72	Homol. Ser. CPI 0.05 ?
C21	13R	.00248	0	0	0	
C22	14R	.00422	0	0	0	
C23	15R	.00568	0	0	0	
C24	16R	.00796	0	0	0	
C25	17R	.00947	0	0	0	% Recovery 7.17
C26	18R	.01174	0	0	0	
C27	19R	.02049	0	0	0	
C28	20R	.01217	1460	17.77	19.10	
C29	21R	.01846	0	0	0	
C30	22R	.01200	0	0	0	

TOTALS

Resolved for all peaks	10741		
Resolved - known peaks	6309	22.92	
Resolved - unknown peaks	2790	3.24	3.48
Unresolved (UCM)			
Total aliphatic hydrocarbons		26.40	

Sample:
 Data analyzed:
 Int. Std. (μg):
 Dry weight (g):
 Inject. volume (μL):
 Sample volume (mL):
 Int. std.

Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00054	1401	0.76	0.58	
C13	2R	.00054	2015	1.09	0.83	Resol./Unres. 0.16
C14	3R	.00252	1525	0.81	0.62	Prist./Phyt. 2.74
C15	4R	.00056	2371	1.33	1.01	C17/Prist. 0.27
C16	5R	.00056	2173	1.22	0.93	C18/Phyt. 0.60
C17	6R	.00057	3363	1.92	1.47	
Pristane	7R	.00056	12789	7.16	5.48	
C18	8R	.00061	2531	1.54	1.18	
Phytane	9R	.00060	4360	2.62	2.00	
C19	10R	.00068	2785	1.89	1.45	n-Alkanes
Androstane	11R	.00063	14802	9.32	Int. std.	
C20	12R	.00088	1178	1.04	0.79	Homol. Ser.
C21	13R	.00117	774	0.91	0.69	CPI 2.22
C22	14R	.00171	0	0	0	
C23	15R	.00224	0	0	0	
C24	16R	.00322	0	0	0	
C25	17R	.00422	0	0	0	% Recovery 36.93
C26	18R	.00627	0	0	0	
C27	19R	.01283	0	0	0	
C28	20R	.01054	0	0	0	
C29	21R	.01033	495	5.11	3.90	
C30	22R	.01219	0	0	0	

TOTALS

Resolved for all peaks	159840		
Resolved - known peaks	37760		20.92
Resolved - unknown peaks	107278	67.59	51.62
Unresolved (UCM)	953013	600.40 ?	458.59
Total aliphatic hydrocarbons			531.13

Sample: 214A (20-25)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 21.84
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00045	0	0	0	Resol./Unres. 0.16
C14	3R	.00046	3384	1.52	0.58	Prist./Phyt. 2.70
C15	4R	.00048	2490	1.20	0.39	C17/Prist. 0.10
C16	5R	.00046	968	0.44	0.15	C18/Phyt. 0.91
C17	6R	.00055	1164	0.65	0.21	
Pristane	7R	.00056	18994	6.16	2.03	
C18	8R	.00069	3024	2.09	0.69	
Phytane	9R	.00069	3389	2.28	0.75	
C19	10R	.00096	836	0.00 ?	0.26	n-Alkanes
Androstane	11R	.00116	12091	14.03	Int. std.	
C20	12R	.00156	0	0	0	Homol. Ser.
C21	13R	.00248	0	0	0	CPI 0.65
C22	14R	.00422	0	0	0	
C23	15R	.00568	0	0	0	
C24	16R	.00796	0	0	0	
C25	17R	.00947	0	0	0	% Recovery 41.66
C26	18R	.01174	0	0	0	
C27	19R	.02049	0	0	0	
C28	20R	.01217	0	0	0	
C29	21R	.01846	0	0	0	
C30	22R	.01200	0	0	0	

TOTALS

Resolved for all peaks	138488 ?	
Resolved - known peaks	26809 ?	4.99
Resolved - unknown peaks	100220 ?	116.26 38.33
Unresolved (UCM)	729912	846.70 279.18
Total aliphatic hydrocarbons		322.50

Sample: 215A (0-5)
 Data analyzed: Nov 9, 1983
 Int. Std. (μg): 101
 Dry weight (g): 26.84
 Inject. volume (μL): 0.5
 Sample volume (mL): 12
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00054	0	0	0	
C13	2R	.00054	0	0	0	Resol./Unres. 0.12
C14	3R	.00252	0	0	0	Prist./Phyt. 0.15
C15	4R	.00056	286 ?	0.12	0.13	C17/Prist. 0.78
C16	5R	.00056	392	0.22	0.25	C18/Phyt. 1.17
C17	6R	.00057	317	0.18	0.20	
Pristane	7R	.00056	414	0.23	0.25	
C18	8R	.00061	2994	1.83	2.08 ?	
Phytane	9R	.00060	2612	1.57	1.72	
C19	10R	.00068	2460	1.67	1.83	n-Alkanes
Androstane	11R	.00063	5450	3.43	Int. std.	
C20	12R	.00088	1260	1.11	1.22	Homol. Ser.
C21	13R	.00117	1757	2.01	2.25	CPI 0.77
C22	14R	.00171	0	0	0	
C23	15R	.00224	0	0	0	
C24	16R	.00322	0	0	0	
C25	17R	.00422	0	0	0	% Recovery 81.59
C26	18R	.00627	0	0	0	
C27	19R	.01283	0	0	0	
C28	20R	.01054	0	0	0	
C29	21R	.01033	0	0	0	
C30	22R	.01219	0	0	0	

TOTALS

Resolved for all peaks	77057		
Resolved - known peaks	12412		9.84
Resolved - unknown peaks	59195	37.29	48.87
Unresolved (UCM)	508392	378.69	406.26
Total aliphatic hydrocarbons			456.98

Sample: 216A (0-5)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 14.92
 Inject. volume (μL): 0.5
 Sample volume (mL): 7.2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00045	0	0	0	Resol./Unres. 0.21
C14	3R	.00046	1455	0.67	1.28	Prist./Phyt. 1.11
C15	4R	.00048	4014	1.93	3.46	C17/Prist. 0.29
C16	5R	.00046	2689	1.29	2.15	C18/Phyt. 0.26
C17	6R	.00055	4685	2.58	4.62	
Pristane	7R	.00056	15692	8.79	15.76	
C18	8R	.00069	2864	1.98	3.54	
Phytane	9R	.00069	11458	7.99	14.18	
C19	10R	.00096	6038	5.80	18.40	n-Alkanes
Androstane	11R	.00116	3254	3.77	Int. std.	
C20	12R	.00156	939	1.46	2.63	Homol. Ser. CPI 1.95
C21	13R	.00248	0	0	0	
C22	14R	.00422	0	0	0	
C23	15R	.00568	0	0	0	
C24	16R	.00796	0	0	0	
C25	17R	.00947	0	0	0	% Recovery 53.82
C26	18R	.01174	0	0	0	
C27	19R	.02049	0	0	0	
C28	20R	.01217	0	0	0	
C29	21R	.01846	0	0	0	
C30	22R	.01200	0	0	0	

TOTALS

Resolved for all peaks	165980		
Resolved - known peaks	49754		57.93
Resolved - unknown peaks	112892	130.95	234.85
Unresolved (UCM)	658358	763.69	1369.61
Total aliphatic hydrocarbons			1662.40

Sample: 217A (0-5)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 33.57
 Inject. volume (μL): 0.5
 Sample volume (mL): 4
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00052	0	0	0	
C13	2R	.00050	0	0	0	Resol./Unres. 0.14
C14	3R	.00050	657	0.32	0.15	Prist./Phyt. 0.24
C15	4R	.00054	789	0.38	0.18	C17/Prist. 0.37
C16	5R	.00054	1876	0.58	0.27	C18/Phyt. 0.66
C17	6R	.00065	441	0.29	0.13	
Pristane	7R	.00061	1275	0.78	0.36	
C18	8R	.00082	2613	2.14	1.08	
Phytane	9R	.00080	4875	3.26	1.53	
C19	10R	.00124	2445	3.03	1.42	n-Alkanes
Androstane	11R	.00166	3870 ?	6.42	Int. std.	
C20	12R	.00229	623	1.43	0.67	Homol. Ser.
C21	13R	.00394	0	0	0	CPI 0.83
C22	14R	.00676	0	0	0	
C23	15R	.00999	0	0	0	
C24	16R	.01470	0	0	0	
C25	17R	.01818	0	0	0	% Recovery 50.88
C26	18R	.02215	0	0	0	
C27	19R	.04560	0	0	0	
C28	20R	.02388	0	0	0	
C29	21R	.02586	0	0	0	
C30	22R	.02716	0	0	0	

TOTALS

Resolved for all peaks	63806		
Resolved - known peaks	13894		5.72
Resolved - unknown peaks	46842	76.43	35.79
Unresolved (UCM)	387390	643.87	301.17
Total aliphatic hydrocarbons			342.68

Sample: 218A-1 (0-5)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 39.29
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.8
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00045	0	0	0	Resol./Unres. 0.11
C14	3R	.00046	0	0	0	Prist./Phyt. 0.68
C15	4R	.00048	846	0.41	0.19 ?	C17/Prist. 1.01
C16	5R	.00046	2489	1.14	0.29	C18/Phyt. 0.61
C17	6R	.00055	1468	0.81	0.28	
Pristane	7R	.00056	1365	0.76	0.19	
C18	8R	.00069	1007	0.70	0.17	
Phytane	9R	.00069	1653	1.15	0.29	
C19	10R	.00096	587	0.56	0.14	n-Alkanes
Androstane	11R	.00116	8817	10.23	Int. std.	
C20	12R	.00156	0	0	0	Homol. Ser.
C21	13R	.00248	0	0	0	CPI 0.97
C22	14R	.00422	0	0	0	
C23	15R	.00568	0	0	0	
C24	16R	.00796	0	0	0	
C25	17R	.00947	0	0	0	% Recovery 36.46
C26	18R	.01174	0	0	0	
C27	19R	.02049	0	0	0	
C28	20R	.01217	0	0	0	
C29	21R	.01846	0	0	0	
C30	22R	.01200	0	0	0	

TOTALS

Resolved for all peaks	32201		
Resolved - known peaks	9415		1.39
Resolved - unknown peaks	13969	16.28	4.07
Unresolved (UCM)	173314	201.84	50.54
Total aliphatic hydrocarbons			56.00

Sample: 218A (20-25)
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 39.29
 Inject. volume (μL): 1.5
 Sample volume (mL): 4.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres. 0.18
C14	3R	.00044	0	0	0	Prist./Phyt. 0.22
C15	4R	.00047	1543	0.73	0.09	C17/Prist. 0.49
C16	5R	.00051	1868	0.55	0.07	C18/Phyt. 0.64
C17	6R	.00059	408 ?	0.25	0.03	
Pristane	7R	.00056	875	0.49	0.07	
C18	8R	.00077	1881	1.45	0.18	
Phytane	9R	.00077	2942	2.27	0.28	
C19	10R	.00121	1858	2.25	0.28	n-Alkanes
Androstane	11R	.00178	11650	20.74	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI 0.15
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 61.60
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	1213	18.95	2.35	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	119960		
Resolved - known peaks	11788		3.33
Resolved - unknown peaks	96530	171.82	21.30
Unresolved (UCM)	656598	1168.74	144.88
Total aliphatic hydrocarbons			169.52

Sample: 218A (60-65)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.17
 Inject. volume (μL): 0.5
 Sample volume (mL): 4.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	6984	3.21	3.05	
C13	2R	.00045	1354	0.69	0.58	Resol./Unres. 0.44
C14	3R	.00046	4461	2.85	1.96	Prist./Phyt. 1.97
C15	4R	.00048	2408	1.16	1.90	C17/Prist. 0.18
C16	5R	.00046	3411	1.57	1.49	C18/Phyt. 1.24
C17	6R	.00055	4508 ?	2.48	2.35	
Pristane	7R	.00056	24949	13.97	13.29	
C18	8R	.00069	12741	8.79	8.36	
Phytane	9R	.00069	18302 ?	7.11	6.76	
C19	10R	.00096	5478 ?	5.25	4.99	n-Alkanes
Androstane	11R	.00116	5335	6.19	Int. std.	
C20	12R	.00156	1489	2.32	2.21	Homol. Ser. CPI 0.64
C21	13R	.00248	0	0	0	
C22	14R	.00422	0	0	0	
C23	15R	.00568	0	0	0	
C24	16R	.00796	0	0	0	
C25	17R	.00947	0	0	0	% Recovery 55.15
C26	18R	.01174	0	0	0	
C27	19R	.02049	0	0	0	
C28	20R	.01217	0	0	0	
C29	21R	.01846	0	0	0	
C30	22R	.01200	0	0	0	

TOTALS

Resolved for all peaks	445898		
Resolved - known peaks	78069		46.12
Resolved - unknown peaks	361686	419.56	398.79
Unresolved (UCM)	922581	1078.19	1017.23
Total aliphatic hydrocarbons			1462.15

Sample: 219A (0-5)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.15
 Inject. volume (μL): 0.5
 Sample volume (mL): 4.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00052	0	0	0	
C13	2R	.00050	0	0	0	Resol./Unres. 0.13
C14	3R	.00050	883	0.44	0.32	Prist./Phyt. 4.93
C15	4R	.00054	1088	0.59	0.43	C17/Prist. 0
C16	5R	.00054	774	0.42	0.30	C18/Phyt. 0.87
C17	6R	.00065	0	0	0	
Pristane	7R	.00061	9442	5.76	4.28	
C18	8R	.00082	1244	1.02	0.74	
Phytane	9R	.00080	1461	1.17	0.85	
C19	10R	.00124	0	0	0	n-Alkanes
Androstane	11R	.00166	4864	8.07	Int. std.	
C20	12R	.00229	0	0	0	Homol. Ser.
C21	13R	.00394	0	0	0	CPI 0.31
C22	14R	.00676	0	0	0	
C23	15R	.00999	0	0	0	
C24	16R	.01470	0	0	0	
C25	17R	.01818	0	0	0	% Recovery 71.95
C26	18R	.02215	0	0	0	
C27	19R	.04560	0	0	0	
C28	20R	.02388	0	0	0	
C29	21R	.02586	0	0	0	
C30	22R	.02716	0	0	0	

TOTALS

Resolved for all peaks	65705		
Resolved - known peaks	14892	6.85	
Resolved - unknown peaks	45949	76.28	55.63
Unresolved (UCM)	389736	646.96	471.88
Total aliphatic hydrocarbons		534.37	

Sample: 228A (0-5)
 Data analyzed: Nov 7, 1983
 Int. Std. (μg): 101
 Dry weight (g): 28.04
 Inject. volume (μL): 0.5
 Sample volume (mL): 4
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00058	0	0	0	
C13	2R	.00055	0	0	0	Resol./Unres. 0.16
C14	3R	.00256	715	0.41	0.13	Prist./Phyt. 2.00
C15	4R	.00059	1362	0.80	0.27	C17/Prist. 0.86
C16	5R	.00060	1965	1.18	0.40	C18/Phyt. 0.57
C17	6R	.00062	533	0.33	0.11	
Pristane	7R	.00061	8395	5.13	1.72	
C18	8R	.00065	2238	1.45	0.49	
Phytane	9R	.00063	4084	2.57	0.86	
C19	10R	.00070	3392	2.37	0.80	n-Alkanes
Androstane	11R	.00049	21941	10.75 ?	Int. std.	
C20	12R	.00066	2653	1.75	0.59	Homol. Ser. 2.09
C21	13R	.00064	2838	1.82	0.61	CPI
C22	14R	.00067	1386	0.93	0.31	
C23	15R	.00068	1853	1.27	0.42	
C24	16R	.00092	2698	2.48	0.83	
C25	17R	.00115	12465	14.33	4.00 ?	% Recovery 85.16
C26	18R	.00201	0	0	0	
C27	19R	.00654	0	0	0	
C28	20R	.01083	0	0	0	
C29	21R	.03578	0	0	0	
C30	22R	.00709	0	0	0	

TOTALS

Resolved for all peaks	162620 ?	
Resolved - known peaks	46578	12.33
Resolved - unknown peaks	94101	46.11 15.45
Unresolved (UCM)	1086511	532.40 178.37
Total aliphatic hydrocarbons		206.16

Sample: 223A (0-5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 28.04
 Inject. volume (μL): 0.5
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	5116	4.50 ?	0.90	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	19767	17.99	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	0	0	0	CPI
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 71.24
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	24883		
Resolved - known peaks	5116		0.90 ?
Resolved - unknown peaks	0	0	0
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.90 ?

Sample: 225A-1 (0-5)
 Data analyzed: Nov 13, 1983
 Int. Std. (μg): 101
 Dry weight (g): 25.25
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios	
C12	1R	.00052	170	0.08	0.00		
C13	2R	.00050	330	0.17	0.01	Resol./Unres.	1.26
C14	3R	.00050	138	0.87	0.00	Prist./Phyt.	5.79
C15	4R	.00054	1446	0.78	0.02	C17/Prist.	0.05
C16	5R	.00054	1032	0.56	0.01	C18/Phyt.	1.85
C17	6R	.00065	481	0.31	0.00		
Pristane	7R	.00061	10721	6.530	0.19		
C18	8R	.00082	2543	2.81	0.06		
Phytane	9R	.00080	1412	1.13	0.03		
C19	10R	.00124	1377	1.71	0.85	n-Alkanes	
Androstane	11R	.00166	84529	140.32	Int. std.		
C20	12R	.00229	681	1.56	0.04	Homol. Ser.	
C21	13R	.00394	3895	15.35	0.44	CPI	1.67
C22	14R	.00676	967	6.54	0.19		
C23	15R	.00999	1734	17.32	0.49		
C24	16R	.01470	236	3.47	0.10		
C25	17R	.01818	1381	25.19	0.72	% Recovery	69.46
C26	18R	.02215	574	12.71	0.36		
C27	19R	.04560	580	26.45	0.75		
C28	20R	.02388	389	9.29	0.26		
C29	21R	.02586	484	12.52	0.36		
C30	22R	.02716	302	8.28	0.23		

TOTALS

Resolved for all peaks	188370		
Resolved - known peaks	30564		4.32
Resolved - unknown peaks	72977	121.14	3.45
Unresolved (UCM)	131085	217.60	6.20
Total aliphatic hydrocarbons			13.99

Sample: 225A (25 - 30)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 19.97
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.25
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00052	0	0	0	
C13	2R	.00050	0	0	0	Resol./Unres.
C14	3R	.00050	0	0	0	Prist./Phyt.
C15	4R	.00054	0	0	0	C17/Prist.
C16	5R	.00054	0	0	0	C18/Phyt.
C17	6R	.00065	0	0	0	
Pristane	7R	.00061	0	0	0	
C18	8R	.00082	0	0	0	
Phytane	9R	.00080	0	0	0	
C19	10R	.00124	0	0	0	n-Alkanes
Androstane	11R	.00166	11129	18.47	Int. std.	
C20	12R	.00229	0	0	0	Homol. Ser.
C21	13R	.00394	0	0	0	CPI
C22	14R	.00676	0	0	0	
C23	15R	.00999	0	0	0	
C24	16R	.01470	0	0	0	
C25	17R	.01818	0	0	0	% Recovery 45.73
C26	18R	.02215	0	0	0	
C27	19R	.04560	0	0	0	
C28	20R	.02388	0	0	0	
C29	21R	.02586	630	16.29	4.47	
C30	22R	.02716	0	0	0	

TOTALS

Resolved for all peaks	17603		
Resolved - known peaks	630		4.47
Resolved - unknown peaks	5844	9.70	2.66
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			7.12

Sample: 225A (55 - 60)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9.69
 Inject. volume (μL): 0.5
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00052	0	0	0	
C13	2R	.00050	0	0	0	Resol./Unres.
C14	3R	.00050	0	0	0	Prist./Phyt.
C15	4R	.00054	0	0	0	C17/Prist.
C16	5R	.00054	0	0	0	C18/Phyt.
C17	6R	.00065	0	0	0	
Pristane	7R	.00061	812	0.50	0.36	
C18	8R	.00082	0	0	0	
Phytane	9R	.00080	0	0	0	
C19	10R	.00124	0	0	0	n-Alkanes
Androstane	11R	.00166	8412	13.96	Int. std.	
C20	12R	.00229	0	0	0	Homol. Ser.
C21	13R	.00394	0	0	0	CPI
C22	14R	.00676	0	0	0	
C23	15R	.00999	0	0	0	
C24	16R	.01470	0	0	0	
C25	17R	.01818	0	0	0	% Recovery 35.30
C26	18R	.02215	0	0	0	
C27	19R	.04560	0	0	0	
C28	20R	.02388	0	0	0	
C29	21R	.02586	0	0	0	
C30	22R	.02716	0	0	0	

TOTALS

Resolved for all peaks	12282 ?		
Resolved - known peaks	812		0.36
Resolved - unknown peaks	3058	5.08	3.71
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			4.87

Sample: 228A (0 - 5)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 39.81
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00052	0	0	0	
C13	2R	.00050	0	0	0	Resol./Unres.
C14	3R	.00050	0	0	0	Prist./Phyt.
C15	4R	.00054	0	0	0	C17/Prist. 0.40
C16	5R	.00054	0	0	0	C18/Phyt.
C17	6R	.00065	506	0.33	0.05	
Pristane	7R	.00061	1350	0.82	0.14	
C18	8R	.00082	0	0	0	
Phytane	9R	.00080	0	0	0	
C19	10R	.00124	0	0	0	n-Alkanes
Androstane	11R	.00166	9080	15.07	Int. std.	
C20	12R	.00229	0	0	0	Homol. Ser.
C21	13R	.00394	0	0	0	CPI
C22	14R	.00676	0	0	0	
C23	15R	.00999	0	0	0	
C24	16R	.01470	0	0	0	
C25	17R	.01818	0	0	0	% Recovery 44.77
C26	18R	.02215	0	0	0	
C27	19R	.04560	0	0	0	
C28	20R	.02388	0	0	0	
C29	21R	.02586	319	8.25	1.39	
C30	22R	.02716	0	0	0	

TOTALS

Resolved for all peaks	15069		
Resolved - known peaks	2175		1.58
Resolved - unknown peaks	3814	6.33	1.06
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			2.65

Sample: 229A (0 - 5)
 Data analyzed: Nov 16, 1983
 Int. Std. (μg): 101
 Dry weight (g): 14.54
 Inject. volume (μL): 0.5
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00067	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres. 0.89
C14	3R	.00060	0	0	0	Prist./Phyt.
C15	4R	.00060	0	0	0	C17/Prist.
C16	5R	.00256	1596	0.89	0.23	C18/Phyt.
C17	6R	.00065	2567	1.67	0.42	
Pristane	7R	.00064	0	0	0	
C18	8R	.00077	0	0	0	
Phytane	9R	.00076	0	0	0	
C19	10R	.00102	0	0	0	n-Alkanes
Androstane	11R	.00119	22951	27.31	Int. std.	
C20	12R	.00168	0	0	0	Homol. Ser.
C21	13R	.00265	0	0	0	CPI 1.87
C22	14R	.00458	0	0	0	
C23	15R	.00630	0	0	0	
C24	16R	.00874	0	0	0	
C25	17R	.01079	0	0	0	% Recovery 54.08
C26	18R	.01383	0	0	0	
C27	19R	.02419	0	0	0	
C28	20R	.01448	0	0	0	
C29	21R	.01548	0	0	0	
C30	22R	.01689	0	0	0	

TOTALS

Resolved for all peaks	32716		
Resolved - known peaks	4163		0.65
Resolved - unknown peaks	5602	6.68	1.70
Unresolved (UCM)	121408	144.48	36.75
Total aliphatic hydrocarbons			39.09

Sample: 232A-1 (0 - 5)
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 38.32
 Inject. volume (μL): 0.5
 Sample volume (mL): 3
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00046	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres. 0.13
C14	3R	.00044	0	0	0	Prist./Phyt. 0.84
C15	4R	.00047	1116	0.52	0.11	C17/Prist. 0.25
C16	5R	.00051	1087	0.55	0.12	C18/Phyt. 0.12
C17	6R	.00059	3370	1.99	0.42	
Pristane	7R	.00056	14259	7.99	1.71	
C18	8R	.00077	1472	1.89	0.23	
Phytane	9R	.00077	12308	9.47	2.02	
C19	10R	.00121	3382	4.09	0.87	n-Alkanes
Androstane	11R	.00178	6932	12.34	Int. std.	
C20	12R	.00219	0	0	0	Homol. Ser.
C21	13R	.00425	0	0	0	CPI 4.09
C22	14R	.00743	0	0	0	
C23	15R	.01000	0	0	0	
C24	16R	.01213	0	0	0	
C25	17R	.01479	0	0	0	% Recovery 73.30
C26	18R	.01902	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.01562	0	0	0	
C29	21R	.01317	0	0	0	
C30	22R	.02331	0	0	0	

TOTALS

Resolved for all peaks	98322		
Resolved - known peaks	36936		5.49
Resolved - unknown peaks	5454	96.93	28.70 ?
Unresolved (UCM)	529912	943.24	201.484
Total aliphatic hydrocarbons			227.61

Sample: 223A (55 - 60)
 Data analyzed: Nov 16, 1983
 Int. Std. (μg): 101
 Dry weight (g): 15.73
 Inject. volume (μL): 0.5
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00067	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres. 0.16
C14	3R	.00060	0	0	0	Prist./Phyt. 7.85
C15	4R	.00060	5801	3.48	1.41	C17/Prist. 0.89
C16	5R	.00256	1275	0.71	0.29	C18/Phyt. .15
C17	6R	.00065	1551	1.01	0.41	
Pristane	7R	.00064	17241	11.03	4.48	
C18	8R	.00077	277	0.21	0.01 ?	
Phytane	9R	.00076	1850	1.41	0.57	
C19	10R	.00102	5707	5.82	02.36	n-Alkanes
Androstane	11R	.00119	13302	15.83	Int. std.	
C20	12R	.00168	1276	2.14	0.87	Homol. Ser. CPI 3.36
C21	13R	.00265	0	0	0	
C22	14R	.00458	0	0	0	
C23	15R	.00630	0	0	0	
C24	16R	.00874	0	0	0	
C25	17R	.01079	0	0	0	% Recovery 62.69
C26	18R	.01383	0	0	0	
C27	19R	.02419	0	0	0	
C28	20R	.01448	0	0	0	
C29	21R	.01548	0	0	0	
C30	22R	.01689	0	0	0	

TOTALS

Resolved for all peaks	141600		
Resolved - known peaks	34978		10.47
Resolved - unknown peaks	93320	111.05	45.04
Unresolved (UCM)	740762	881.51	357.56
Total aliphatic hydrocarbons			413.08

Sample: 233A (0 - 5)
 Data analyzed: Nov 16, 1983
 Int. Std. (μg): 101
 Dry weight (g): 15.86
 Inject. volume (μL): 0.5
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00067	0	0	0	
C13	2R	.00061	0	0	0	Resol./Unres. 0.02
C14	3R	.00060	0	0	0	Prist./Phyt. 1.33
C15	4R	.00060	0	0	0	C17/Prist.
C16	5R	.00256	0	0	0	C18/Phyt.
C17	6R	.00065	0	0	0	
Pristane	7R	.00064	2414	1.55	0.88 ?	
C18	8R	.00077	0	0	0	
Phytane	9R	.00076	1529	1.16	0.67	
C19	10R	.00102	0	0	0	n-Alkanes
Androstane	11R	.00119	9351	11.13	Int. std.	
C20	12R	.00168	0	0	0	Homol. Ser.
C21	13R	.00265	0	0	0	CPI
C22	14R	.00458	0	0	0	
C23	15R	.00630	0	0	0	
C24	16R	.00874	0	0	0	
C25	17R	.01079	0	0	0	% Recovery 44.87
C26	18R	.01383	0	0	0	
C27	19R	.02419	0	0	0	
C28	20R	.01448	0	0	0	
C29	21R	.01548	0	0	0	
C30	22R	.01689	0	0	0	

TOTALS

Resolved for all peaks	16483		
Resolved - known peaks	3943		1.55
Resolved - unknown peaks	3189	3.79	2.17
Unresolved (UCM)	230123	203.37	162.17
Total aliphatic hydrocarbons			165.89

Sample: 234A (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 24.6
 Inject. volume (μL): 1
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00053	0	0	0	
C13	2R	.00048	0	0	0	Resol./Unres.
C14	3R	.00046	0	0	0	Prist./Phyt. 5.28
C15	4R	.00049	0	0	0	C17/Prist. 0.12
C16	5R	.00051	0	0	0	C18/Phyt. 0.41
C17	6R	.00065	2735	1.78	0.12	
Pristane	7R	.00055	27381	15.86	1.05 ?	
C18	8R	.00073	1617	1.19	0.08	
Phytane	9R	.00072	3984	2.85	0.20	
C19	10R	.00118	3806	4.49	0.31	n-Alkanes
Androstane	11R	.00153	38458	58.85	Int. std.	
C20	12R	.00215	0	0	0	Homol. Ser.
C21	13R	.00389	1750	6.81	0.47	CPI 28.43
C22	14R	.00837	0	0	0	
C23	15R	.00994	1500	14.91	1.85	
C24	16R	.01442	0	0	0	
C25	17R	.01876	3515	65.94	4.60	% Recovery 87.39
C26	18R	.02116	0	0	0	
C27	19R	.02385	3004 ?	69.24	4.83	
C28	20R	.02295	0	0	0	
C29	21R	.02102	0	0	0	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	106188		
Resolved - known peaks	49212		12.72
Resolved - unknown peaks	18510	28.32	1.98
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			14.69

Sample: 238A (0 - 5)
 Data analyzed: Nov 20, 1983
 Int. Std. (μg): 101
 Dry weight (g): 33.66
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00053	0	0	0	
C13	2R	.00048	0	0	0	Resol./Unres. 1.20
C14	3R	.00046	0	0	0	Prist./Phyt. 2.41
C15	4R	.00049	0	0	0	C17/Prist. 0.26
C16	5R	.00051	0	0	0	C18/Phyt. 0
C17	6R	.00065	1280	0.83 ?	0.07 ?	
Pristane	7R	.00055	5729	3.15	0.28	
C18	8R	.00073	0	0	0	
Phytane	9R	.00072	1788	1.31	0.11	
C19	10R	.00118	1416	1.67	0.28	n-Alkanes
Androstane	11R	.00153	22447	34.34	Int. std.	
C20	12R	.00215	0	0	0	Homol. Ser.
C21	13R	.00389	2671	18.39	0.99	CPI 0.89
C22	14R	.00837	0	0	0	
C23	15R	.00994	0	0	0	
C24	16R	.01442	8740	0126.03	11.01	
C25	17R	.01876	0	0	0	% Recovery 34.00
C26	18R	.02116	0	0	0	
C27	19R	.02385	0	0	0	
C28	20R	.02295	0	0	0	
C29	21R	.02102	0	0	0	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	66467		
Resolved - known peaks	21624		12.53
Resolved - unknown peaks	22396	34.27	2.99
Unresolved (UCM)	97067	148.51	12.98
Total aliphatic hydrocarbons			28.50

Sample: 239A (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 24.01
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.4
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00053	0	0	0	
C13	2R	.00048	0	0	0	Resol./Unres.
C14	3R	.00046	0	0	0	Prist./Phyt.
C15	4R	.00049	0	0	0	C17/Prist.
C16	5R	.00051	0	0	0	C18/Phyt.
C17	6R	.00065	3221	2.09 ?	0.17	
Pristane	7R	.00055	0	0	0	
C18	8R	.00073	1219	0.89	0.08 ?	
Phytane	9R	.00072	0	0	0	
C19	10R	.00118	1079 ?	1.27	0.18 ?	n-Alkanes
Androstane	11R	.00153	34800 ?	53.24	Int. std.	
C20	12R	.00215	0	0	0	Homol. Ser.
C21	13R	.00389	0	0	0	CPI 3.78
C22	14R	.00837	0	0	0	
C23	15R	.00994	0	0	0	
C24	16R	.01442	0	0	0	
C25	17R	.01876	0	0	0	% Recovery 49.20 ?
C26	18R	.02116	0	0	0	
C27	19R	.02385	0	0	0	
C28	20R	.02295	0	0	0	
C29	21R	.02102	0	0	0	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	77558		
Resolved - known peaks	5519		0.34
Resolved - unknown peaks	37231	56.96	4.50 ?
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			4.84

Sample: 240A-1 (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 1.01 ?
 Inject. volume (μL): 1
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00048	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres. 0.25
C14	3R	.00243 ?	1774	0.76	0.23	Prist./Phyt. 14.12
C15	4R	.00044	1685	0.74	0.22	C17/Prist. 0.11
C16	5R	.00045	0	0	0	C18/Phyt. 3.23
C17	6R	.00049	2282 ?	1.88	0.32	
Pristane	7R	.00049	28276 ?	9.94	2.97	
C18	8R	.00062	3671	2.28	0.68	
Phytane	9R	.00062	1135	0.70	0.21	
C19	10R	.00090	4080	3.67	1.10 ?	n-Alkanes
Androstane	11R	.00120	25613	38.74	Int. std.	
C20	12R	.00165	0	0	0	Homol. Ser.
C21	13R	.00252	2196	3.62	1.88	CPI 0.62
C22	14R	.00463	0	0	0	
C23	15R	.00810	0	0	0	
C24	16R	.00969	994	9.63	2.87	
C25	17R	.01140	0	0	0	% Recovery 68.86
C26	18R	.01274 ?	0	0	0	
C27	19R	.02305 ?	0	0	0	
C28	20R	.01311	0	0	0	
C29	21R	.01427	0	0	0	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	180128		
Resolved - known peaks	38013		10.48
Resolved - unknown peaks	116494	139.79	41.72
Unresolved (UCM)	606158	727.39	217.10
Total aliphatic hydrocarbons			269.31

Sample: 240A ? (60 - 65)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 5.83
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.7
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	4265	3.75	3.45	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	20737	18.87	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	0	0	0	CPI
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 63.53
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	25082	
Resolved - known peaks	4265	3.45
Resolved - unknown peaks	0	0
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		3.45

Sample: 240A (120 - 125)
 Data analyzed: Nov 28?, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.77
 Inject. volume (μL): 1
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00048	0	0	0	
C13	2R	.00044	0	0	0	Resol./Unres.
C14	3R	.00243 ?	0	0	0	Prist./Phyt.
C15	4R	.00044	0	0	0	C17/Prist.
C16	5R	.00045	0	0	0	C18/Phyt.
C17	6R	.00049	0	0	0	
Pristane	7R	.00049	1744	0.85	0.22	
C18	8R	.00062	0	0	0	
Phytane	9R	.00062	0	0	0	
C19	10R	.00090	0	0	0	n-Alkanes
Androstane	11R	.00120	18023	21.63	Int. std.	
C20	12R	.00165	0	0	0	Homol. Ser.
C21	13R	.00252	0	0	0	CPI
C22	14R	.00463	0	0	0	
C23	15R	.00810	0	0	0	
C24	16R	.00969	0	0	0	
C25	17R	.01140	0	0	0	% Recovery 42.83
C26	18R	.01274 ?	0	0	0	
C27	19R	.02305 ?	0	0	0	
C28	20R	.01311	1236	16.20	4.26	
C29	21R	.01427	0	0	0	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	26744		
Resolved - known peaks	2980		4.48
Resolved - unknown peaks	5741	6.89	1.81
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			6.29

Sample: 241A (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 38.79 ?
 Inject. volume (μL): 1
 Sample volume (mL): 1.4
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00048	1136	0.55	0.04	
C13	2R	.00044	0	0	0	Resol./Unres. 0.69
C14	3R	.00243 ?	1243	0.53	0.04	Prist./Phyt. 7.41
C15	4R	.00044	860	0.38	0.03	C17/Prist. 0
C16	5R	.00045	997	0.45	0.03	C18/Phyt. 0.44
C17	6R	.00049	0	0	0	
Pristane	7R	.00049	19151	9.38	0.73	
C18	8R	.00062	908	0.56	0.04	
Phytane	9R	.00062	2042	1.27	0.10	
C19	10R	.00090	701	0.64	0.05	n-Alkanes
Androstane	11R	.00120	35366	42.44	Int. std.	
C20	12R	.00165	0	0	0	Homol. Ser.
C21	13R	.00252	1999	5.76	0.44	CPI 0.56
C22	14R	.00463	0	0	0	
C23	15R	.00810	0	0	0	
C24	16R	.00969	298	2.89	0.22	
C25	17R	.01140	793	9.85	0.70	% Recovery 50.83 ?
C26	18R	.01274 ?	0	0	0	
C27	19R	.02305 ?	0	0	0	
C28	20R	.01311	1414	18.54	1.43	
C29	21R	.01427	0	0	0	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	96607		
Resolved - known peaks	31542		3.86
Resolved - unknown peaks	29699	35.64	2.75
Unresolved (UCM)	103812	124.57	9.63
Total aliphatic hydrocarbons			16.25

Sample: 242A (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 32.82
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.6
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	13570	11.94	2.50 ?	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	16147	14.69	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	1681	2.77	0.58	CPI 1
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 46.55
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	31398	
Resolved - known peaks	15251	3.08
Resolved - unknown peaks	0	0
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		3.08

Sample: 242A (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 26.62
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.4
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	3686	3.43	0.86	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	4310	3.79	0.95	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	16611	15.12	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	0	0	0	CPI
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 41.91
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	25485		
Resolved - known peaks	7996		1.81
Resolved - unknown peaks	798	0.73	0.18
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			1.99

Sample: 244A (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 21.67
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres. ERROR
C14	3R	.00089	0	0	0	Prist./Phyt. 11.45
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	3052	2.53	0.61 ?	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	17665	15.55	3.74	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	1460	1.36	0.33	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	21270	19.36	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	4920	8.12	1.95	CPI 0.76
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 57.49
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	187770		
Resolved - known peaks	27097		6.63
Resolved - unknown peaks	139402	126.86	38.55
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			37.18

Sample: 245A (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 27.29
 Inject. volume (μL): 1.5
 Sample volume (mL): 2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00053	0	0	0	
C13	2R	.00048	0	0	0	Resol./Unres. 1.00
C14	3R	.00046	0	0	0	Prist./Phyt. 14.18
C15	4R	.00049	0	0	0	C17/Prist. 0
C16	5R	.00051	0	0	0	C18/Phyt. 0.38
C17	6R	.00065	0	0	0	
Pristane	7R	.00055	38720	21.39	1.26	
C18	8R	.00073	778	0.57	0.03	
Phytane	9R	.00072	2058	1.58	0.09	
C19	10R	.00118	2722	3.21	0.19	n-Alkanes
Androstane	11R	.00153	41080 ?	62.73	Int. std.	
C20	12R	.00215	0	0	0	Homol. Ser.
C21	13R	.00389	4641	18.05	1.07	CPI 18.42
C22	14R	.00837	0	0	0	
C23	15R	.00994	0	0	0	
C24	16R	.01442	0	0	0	
C25	17R	.01876	1767	33.15	1.96	% Recovery 82.81
C26	18R	.02116	0	0	0	
C27	19R	.02385	2642	60.90	3.59	
C28	20R	.02295	0	0	0	
C29	21R	.02102	3749	78.80	4.65	
C30	22R	.02160	0	0	0	

TOTALS

Resolved for all peaks	112448		
Resolved - known peaks	57085		12.83
Resolved - unknown peaks	15355	23.49	1.39
Unresolved (UCM)	158944	243.18	14.35
Total aliphatic hydrocarbons			28.57

Sample: 216A (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 35.49
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.9
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	0	0	0	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	15887	14.46	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	0	0	0	CPI
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 54.39
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	20623		
Resolved - known peaks	0		0
Resolved - unknown peaks	4736	4.31	0.85
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.85

Sample: 247A (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 37.36
 Inject. volume (μL): 0.5
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00086	0	0	0	
C13	2R	.00087	0	0	0	Resol./Unres.
C14	3R	.00089	0	0	0	Prist./Phyt.
C15	4R	.00092	0	0	0	C17/Prist.
C16	5R	.00093	0	0	0	C18/Phyt.
C17	6R	.00088	0	0	0	
Pristane	7R	.00068 ?	0	0	0	
C18	8R	.00096	0	0	0	
Phytane	9R	.00093	0	0	0	
C19	10R	.00087	0	0	0	n-Alkanes
Androstane	11R	.00091	15481	14.09 ?	Int. std.	
C20	12R	.00123	0	0	0	Homol. Ser.
C21	13R	.00165	0	0	0	CPI
C22	14R	.00249	0	0	0	
C23	15R	.00346	0	0	0	
C24	16R	.00515	0	0	0	
C25	17R	.00581	0	0	0	% Recovery 41.84
C26	18R	.00789	0	0	0	
C27	19R	.02125	0	0	0	
C28	20R	.01842	0	0	0	
C29	21R	.02600	0	0	0	
C30	22R	.01571	0	0	0	

TOTALS

Resolved for all peaks	16732		
Resolved - known peaks	0		0
Resolved - unknown peaks	1242	1.30 ?	0.22
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.22

Sample: 1A Butterfly ray
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 12.56
 Inject. volume (μL): 1.5
 Sample volume (mL): 0.9
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	1164	0.79	0.05	C17/Prist.
C16	5R	.00067	584	0.39	0.03	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	0	0	0	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	4171	3.71	0.25	n-Alkanes
Androstane	11R	.00092	118870	189.36	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	1431	2.78	0.19	CPI 0.08 ?
C22	14R	.00333	0	0	0	
C23	15R	.00409	0	0	0	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery 34.97 ?
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	68426	2281.69	155.40	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	248930		
Resolved - known peaks	67776		155.92
Resolved - unknown peaks	54284	49.94	3.40
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			159.33

Sample: 3A Catfish
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 12.12
 Inject. volume (μL): 2
 Sample volume (mL): 0.75
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres. 7.74
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	2542	1.73	0.10	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	8553	5.82	0.34	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	154190	141.85	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	47093	91.36	5.37	CPI 0.22
C22	14R	.00333	2330	7.79	0.46	
C23	15R	.00409	2249	19.00 ?	0.65	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery 52.67
C26	18R	.01131	0	0	0	
C27	19R	.02416	7979	192.77	11.32	
C28	20R	.03776	33287	1256.92	73.84	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	331370 ?	
Resolved - known peaks	104041 ?	92.88
Resolved - unknown peaks	73139	67.29 3.95
Unresolved (UCM)	229619	211.25 12.49
Total aliphatic hydrocarbons		108.44

Sample: 5A Grunt
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9.67
 Inject. volume (μL): 2
 Sample volume (mL): 0.75
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	0	0	0	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	117120	107.76	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	0	0	0	CPI 0.29
C22	14R	.00333	0	0	0	
C23	15R	.00409	0	0	0	
C24	16R	.00787	3526	24.93	2.42	
C25	17R	.01528	5844	89.30	8.66	% Recovery 40.01 ?
C26	18R	.01131	7620	86.18	8.35	
C27	19R	.02416	3055	72.81	7.15	
C28	20R	.03776	11858	447.76	43.40	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	156438		
Resolved - known peaks	31903		69.98
Resolved - unknown peaks	7487	6.81	0.66
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			70.64

Sample: 6A Pigfish
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18.52
 Inject. volume (μL): 2
 Sample volume (mL): 2.2
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	3168	2.15	0.07	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	181800 ?	166.52	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	0	0	0	CPI
C22	14R	.00333	0	0	0	
C23	15R	.00409	11361	55.56	1.82	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery181.40
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	2221508 ?	
Resolved - known peaks	14529	1.89
Resolved - unknown peaks	2025971	1863.89
Unresolved (UCM)	0	0
Total aliphatic hydrocarbons		62.93

Sample: 7A Shrimp
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 5.63
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	2915	1.98	0.33	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	118830	109.32	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	0	0	0	CPI 54.12
C22	14R	.00333	0	0	0	
C23	15R	.00409	0	0	0	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	121745		
Resolved - known peaks	2915		0.33
Resolved - unknown peaks	0	0	0
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0.33

Sample: 8A Crabs ?
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 11.42
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	0	0	0	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	8551	7.87	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	0	0	0	CPI
C22	14R	.00333	0	0	0	
C23	15R	.00409	0	0	0	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery 5.84
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	8551		
Resolved - known peaks	0		0
Resolved - unknown peaks	0	0	0
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0

Sample: 9A Blue Crabs
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 14.29
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	0	0	0	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	46178	42.48	Int. std.	
C20	12R	.00128	24168	30.94	5.15	Homol. Ser.
C21	13R	.00194	2342	4.54	0.76	CPI 0.21
C22	14R	.00333	17202	57.28	9.53	
C23	15R	.00409	3128	15.30	2.54	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery 31.55
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	135300		
Resolved - known peaks	46840		17.98
Resolved - unknown peaks	42282	38.90	6.47
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			24.45

Sample: 10A Bivalves
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 1.17
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	2548	1.73	2.15	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	75539	69.50	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	0	0	0	CPI 34.41
C22	14R	.00333	0	0	0	
C23	15R	.00409	0	0	0	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	98738 ?		
Resolved - known peaks	2548		2.15
Resolved - unknown peaks	12651	11.64	14.46
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			16.61

Sample: 11A Oysters
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 3.61
 Inject. volume (μL): 2
 Sample volume (mL): 1.1
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres.
C14	3R	.00065	0	0	0	Prist./Phyt.
C15	4R	.00068	0	0	0	C17/Prist.
C16	5R	.00067	0	0	0	C18/Phyt.
C17	6R	.00069	0	0	0	
Pristane	7R	.00068	0	0	0	
C18	8R	.00076	0	0	0	
Phytane	9R	.00075	0	0	0	
C19	10R	.00089	0	0	0	n-Alkanes
Androstane	11R	.00092	11805	10.86	Int. std.	
C20	12R	.00128	0	0	0	Homol. Ser.
C21	13R	.00194	0	0	0	CPI
C22	14R	.00333	0	0	0	
C23	15R	.00409	0	0	0	
C24	16R	.00787	0	0	0	
C25	17R	.01528	0	0	0	% Recovery 5.91
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	0	0	0	
C30	22R	.04882	0	0	0	

TOTALS

Resolved for all peaks	11805		
Resolved - known peaks	0		0
Resolved - unknown peaks	0	0	0
Unresolved (UCM)	0	0	0
Total aliphatic hydrocarbons			0

Sample: 12A Oysters, flat tree
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9.98
 Inject. volume (μL): 1
 Sample volume (mL): 0.9
 Int. std. Androstane

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
C12	1R	.00068	0	0	0	
C13	2R	.00064	0	0	0	Resol./Unres. 0.42
C14	3R	.00065	0	0	0	Prist./Phyt. 0.60
C15	4R	.00068	0	0	0	C17/Prist. 0.84 ?
C16	5R	.00067	0	0	0	C18/Phyt. 0.19
C17	6R	.00069	560	0.39	0.08	
Pristane	7R	.00068	12539	8.53	1.79	
C18	8R	.00076	2003	1.52	0.32	
Phytane	9R	.00075	18852	14.14	2.97	
C19	10R	.00089	5273	4.69	0.99	n-Alkanes
Androstane	11R	.00092	52376	48.19	Int. std.	
C20	12R	.00128	3766	4.82	1.01	Homol. Ser.
C21	13R	.00194	6514	12.64	2.65	CPI 1.82
C22	14R	.00333	2464	8.29	1.72	
C23	15R	.00409	2048	10.01 ?	2.10	
C24	16R	.00787	0	0	0	
C25	17R	.01528	428	6.54	1.37	% Recovery 42.94
C26	18R	.01131	0	0	0	
C27	19R	.02416	0	0	0	
C28	20R	.03776	0	0	0	
C29	21R	.04280	993	42.50 ?	8.93	
C30	22R	.04882	370	15.10 ?	3.17	

TOTALS

Resolved for all peaks	158040		
Resolved - known peaks	55810		27.11
Resolved - unknown peaks	49854	45.87	9.63
Unresolved (UCM)	457771	421.15	88.45
Total aliphatic hydrocarbons			125.20

Appendix G

Detailed summary of aromatic (f₂) hydrocarbon determinations for Year 02
 (Values are not corrected for percent recovery)

[NOTE: ALL VALUES OTHER THAN RESPONSE FACTORS WERE ROUNDED OFF TO TWO DECIMAL FIGURES. THE USE OF A SLASH TO DISTINGUISH BETWEEN A ZERO AND A LETTER "O" RESULTED IN DIFFICULTIES IN DISTINGUISHING BETWEEN ZERO AND A NUMBER EIGHT. THE FONT SIZE USED IN THIS SECTION OF THE DOCUMENT WAS APPROXIMATELY 5. ERRORS IN TRANSCRIPTION MAY HAVE OCCURRED DUE TO FONT SIZE AND ILLEGIBILITY OF THE COPY OF THE DOCUMENT USED FOR RESCUE. QUESTIONABLE TRANSCRIPTIONS ARE NOTED WITH A QUESTION MARK. CAUTION SHOULD BE TAKEN WHEN USING THIS DATA SET. THE COPY OF DOCUMENT USED TO GENERATE THIS DOCUMENT IS ARCHIVED AT THE NOAA/NMFS/SEFSC LIBRARY IN MIAMI.]

Sample: 2016-1 ?
 Data analyzed: Nov 10, 1983
 Int. Std. (µg): 101
 Dry weight (g): 27.93
 Inject. volume (µL): 0.5
 Sample volume (mL): 0.3
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	µg/g (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00126	1233	1.55	0.06	Resol./Unres.
Phenanthrene	3R	.00105	0	0	0	
o-Terphenyl	4R	.00128	78414 ?	90.13	Int. std.	
1-Methylphenanthrene	5R	.00163	0	0	0	
Pyrene	6R	.00532	0	0	0	
						% Recovery 52.54

TOTALS

Resolved for all peaks	76473			
Resolved - known peaks	1233		0.06	
Resolved - unknown peaks	4826	6.18	0.25	
Unresolved (UCM)	0	0	0	
Total aliphatic hydrocarbons		0.31		

Sample: 201B-2 ?
 Data analyzed: Nov 20, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18.31
 Inject. volume (μL): 2
 Sample volume (mL): 0.25
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	0	0	0	Resol./Unres.
Phenanthrene	3R	.00890	0	0	0	
o-Terphenyl	4R	.00100	189180	189.10	Int. std.	
1-Methylphenanthrene	5R	.00136	0	0	0	
Pyrene	6R	.00433	286	1.24	0.04	
						% Recovery 23.40

TOTALS

Resolved for all peaks	195478			
Resolved - known peaks	286	0.04		
Resolved - unknown peaks	6884	6.08	0.18	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.21

Sample: 201B-3 ?
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.39
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.9
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00069	0	0	0	
Dibenzothiophene	2R	.00112	0	0	0	Resol./Unres.
Phenanthrene	3R	.00095	0	0	0	
o-Terphenyl	4R	.00113	43882	49.59	Int. std.	
1-Methylphenanthrene	5R	.00163	0	0	0	
Pyrene	6R	.00654	0	0	0	
						% Recovery 62.19

TOTALS

Resolved for all peaks	49221			
Resolved - known peaks	0	0		
Resolved - unknown peaks	5339	6.03	0.71 ?	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.71 ?

Sample: 202B-1 ?
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 30.68
 Inject. volume (μL): 2
 Sample volume (mL): 0.8
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	0	0	0	Resol./Unres.
Phenanthrene	3R	.00890	1191	1.07	0.04 ?	
<i>o</i> -Terphenyl	4R	.00100	85426	85.43	Int. std.	
1-Methylphenanthrene	5R	.00136	2246	3.05	0.12	
Pyrene	6R	.00433	0	0	0	
						% Recovery 33.83

TOTALS

Resolved for all peaks	103370			
Resolved - known peaks	3437		0.16	
Resolved - unknown peaks	14587 ?		14.59	0.56
Unresolved (UCM)	0		0	0

Total aliphatic hydrocarbons 0.72

Sample: 203B-2 ?
 Data analyzed: Nov 14 1983
 Int. Std. (μg): 101
 Dry weight (g): 43.83 ?
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00087 ?	0	0	0	Resol./Unres.
Phenanthrene	3R	.00709	0	0	0	
<i>o</i> -Terphenyl	4R	.00084	14665	12.32	Int. std.	
1-Methylphenanthrene	5R	.00100	0	0	0	
Pyrene	6R	.00267	0	0	0	
						% Recovery 12.28

TOTALS

Resolved for all peaks	14665			
Resolved - known peaks	0		0	0
Resolved - unknown peaks	0		0	0
Unresolved (UCM)	0		0	0

Total aliphatic hydrocarbons 0

Sample: 203B-1 ?
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 56.89 ?
 Inject. volume (μL): 2
 Sample volume (mL): 0.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	0	0	0	Resol./Unres.
Phenanthrene	3R	.00890	0	0	0	
<i>o</i> -Terphenyl	4R	.00100	37845 ?	37.85	Int. std.	
1-Methylphenanthrene	5R	.00136	0	0	0	
Pyrene	6R	.00433	1160	5.02	0.27	
						% Recovery 9.37

TOTALS

Resolved for all peaks	52748 ?			
Resolved - known peaks	1160		0.24	
Resolved - unknown peaks	13743	13.74	0.64	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.88

Sample: 202B-3
 Data analyzed: Nov 10, 1983
 Int. Std. (μg): 101
 Dry weight (g): 21.04 ?
 Inject. volume (μL): 1
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00126	0	0	0	Resol./Unres.
Phenanthrene	3R	.00105	0	0	0	
<i>o</i> -Terphenyl	4R	.00128	14475	18.53	Int. std.	
1-Methylphenanthrene	5R	.00163	0	0	0	
Pyrene	6R	.00532	0	0	0	
						% Recovery 27.52

TOTALS

Resolved for all peaks	15286			
Resolved - known peaks	0		0	
Resolved - unknown peaks	731	0.94	0.24	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.24

Sample: 203B-3 ?
 Data analyzed: Nov 10, 1983
 Int. Std. (μg): 101
 Dry weight (g): 33.91
 Inject. volume (μL): 1
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00126	1101	1.49	0.22	Resol./Unres.
Phenanthrene	3R	.00105	0	0	0	
o-Terphenyl	4R	.00128	15591	19.96	Int. std.	
1-Methylphenanthrene	5R	.00163	0	0	0	
Pyrene	6R	.00532	0	0	0	
						% Recovery 29.64

TOTALS

Resolved for all peaks	19598		
Resolved - known peaks	1181	0.22	
Resolved - unknown peaks	2826	3.62	0.54
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.76

Sample: D-18-1
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 43.43 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	1374 ?	2.04	0.03	Resol./Unres.
Phenanthrene	3R	.00890	6944 ?	6.25	0.08	
o-Terphenyl	4R	.00100	156420 ?	156.32	Int. std.	
1-Methylphenanthrene	5R	.00136	3460 ?	4.71	0.06	
Pyrene	6R	.00433	1582 ?	4.65	0.09	
						% Recovery 77.39

TOTALS

Resolved for all peaks	336650 ?		
Resolved - known peaks	13760	0.26	
Resolved - unknown peaks	166570 ?	166.57	2.17
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 2.43

Sample: D-18-2
 Data analyzed: Nov 23, 1983
 Int. Std. (μg): 101
 Dry weight (g): 26.95
 Inject. volume (μL): 2
 Sample volume (mL): 1.4
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00054	2354	2.22	0.05	Resol./Unres.
Phenanthrene	3R	.00080	0	0	0	
o-Terphenyl	4R	.00121	13410	162.52	Int. std.	
1-Methylphenanthrene	5R	.00136	0	0	0	
Pyrene	6R	.00500	0	0	0	
						% Recovery 112.60

TOTALS

Resolved for all peaks	149880		
Resolved - known peaks	2354	0.05	
Resolved - unknown peaks	13216	15.99	0.37
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.42

Sample: D-20-1 ?
 Data analyzed: Nov 30, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 24.3 ?
 Inject. volume (μL): 2
 Sample volume (mL): 0.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	3295	3.79	0.81	Resol./Unres.
Phenanthrene	3R	.00890	25530	22.98	0.88	
o-Terphenyl	4R	.00100	486570	406.57 ?	Int. std.	
1-Methylphenanthrene	5R	.00136	11181	15.21	0.86 ?	
Pyrene	6R	.00433	4120	17.84	0.07 ?	
						% Recovery 108.6 ?

TOTALS

Resolved for all peaks	947880		
Resolved - known peaks	44137	0.23	
Resolved - unknown peaks	497173	497.17	1.93
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 2.15

Sample: D-20-2 ?
 Data analyzed: Nov 20, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 47.12
 Inject. volume (μL): 2 ?
 Sample volume (mL): 2.2 ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	1032	1.32	0.05	Resol./Unres.
Phenanthrene	3R	.00890	0	0	0	
o-Terphenyl	4R	.00100	50264	62.33	Int. std.	
1-Methylphenanthrene	5R	.00136	1036	1.33	0.05	
Pyrene	6R	.00433	0	0	0	
						% Recovery 67.86

TOTALS

Resolved for all peaks		78565			
Resolved - known peaks		2868			0.09
Resolved - unknown peaks		26233		32.53	1.11
Unresolved (UCM)		0		0	0

Total aliphatic hydrocarbons 1.21

Sample: D-20-3 ?
 Data analyzed: Nov 14, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 32.xx ?
 Inject. volume (μL): 2 ?
 Sample volume (mL): 1 ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00072	0	0	0	
Dibenzothiophene	2R	.00087	1291	1.12	0.04	Resol./Unres.
Phenanthrene	3R	.00709	0	0	0	
o-Terphenyl	4R	.00054	89014	75.44	Int. std.	
1-Methylphenanthrene	5R	.00100	1037	1.04	0.04	
Pyrene	6R	.00207	0	0	0	
						% Recovery 37.35

TOTALS

Resolved for all peaks		106568 ?			
Resolved - known peaks		2328			0.09
Resolved - unknown peaks		14418		12.11	0.48
Unresolved (UCM)		0		0	0

Total aliphatic hydrocarbons 0.56

Sample: D-30-1 ?
 Data analyzed: Nov 30, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 71.06
 Inject. volume (μL): 2
 Sample volume (mL): 1.4 ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	1106	1.27	0.01	Resol./Unres.
Phenanthrene	3R	.00890	10116	9.10	0.11	
o-Terphenyl	4R	.00100	120130	120.13	Int. std.	
1-Methylphenanthrene	5R	.00136	4153	5.65	0.06	
Pyrene	6R	.00433 ?	1754	7.59	0.09	
						% Recovery 83.26

TOTALS

Resolved for all peaks	348430		
Resolved - known peaks	17129	0.28	
Resolved - unknown peaks	211171	211.17	2.50
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 2.78

Sample: D-30-2 ?
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 42.67
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00019	0	0	0	
Dibenzothiophene	2R	.00238	1491	3.50	0.04	Resol./Unres.
Phenanthrene	3R	.00193	725	1.40	0.02	
o-Terphenyl	4R	.00221	82350	181.99	Int. std.	
1-Methylphenanthrene	5R	.00226	857	1.94	0.03	
Pyrene	6R	.00535	0	0	0	
						% Recovery 135.1

TOTALS

Resolved for all peaks	99815		
Resolved - known peaks	3053	0.09	
Resolved - unknown peaks	14412	31.86	0.41
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.50

Sample: D-30-3 ?
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 41.83
 Inject. volume (μL): 2
 Sample volume (mL): 2.4
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00069	0	0	0	
Dibenzothiophene	2R	.00112	0	0	0	Resol./Unres.
Phenanthrene	3R	.00095	0	0	0	
o-Terphenyl	4R	.00113	95522	187.94	Int. std.	
1-Methylphenanthrene	5R	.00163	1372	2.24	0.05	
Pyrene	6R	.00654	607	3.97	0.10	
						% Recovery 128.2

TOTALS

Resolved for all peaks	106640 ?			
Resolved - known peaks	1979		0.14	
Resolved - unknown peaks	9139	10.33	0.24	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.38

Sample: JU JETTIES B-1 ?
 Data analyzed: Nov 18, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 42.33 ?
 Inject. volume (μL): 1
 Sample volume (mL): 1.8
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00126	1994	2.51	0.12	Resol./Unres.
Phenanthrene	3R	.00105	0	0	0	
o-Terphenyl	4R	.00128	37946	48.58	Int. std.	
1-Methylphenanthrene	5R	.00163	636	1.04	0.06	
Pyrene	6R	.00532	1065	5.67	0.28	
						% Recovery 86.56

TOTALS

Resolved for all peaks	76988			
Resolved - known peaks	3695		0.46	
Resolved - unknown peaks	35347	45.24	2.21	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 2.66

Sample: JU JETTIES B-2 ?
 Data analyzed: Nov 18, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 37.82
 Inject. volume (μL): 2
 Sample volume (mL): 1.75
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00126	1059	1.33	0.05	Resol./Unres.
Phenanthrene	3R	.00105	1163	1.22	0.05	
o-Terphenyl	4R	.00128	53637	68.66	Int. std.	
1-Methylphenanthrene	5R	.00163	0	0	0	
Pyrene	6R	.00532	0	0	0	
						% Recovery 59.48

TOTALS

Resolved for all peaks	63598		
Resolved - known peaks	2222	0.10	
Resolved - unknown peaks	7739	9.91	0.39
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.49

Sample: JU JETTIES B-3 ?
 Data analyzed: Nov 18, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 40.56
 Inject. volume (μL): 1
 Sample volume (mL): 0.9
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00126	3806	4.80	0.11	Resol./Unres.
Phenanthrene	3R	.00105	0	0	0	
o-Terphenyl	4R	.00128	85324	109.21	Int. std.	
1-Methylphenanthrene	5R	.00163	5847	8.23	0.19	
Pyrene	6R	.00532	1978	10.52	0.24	
						% Recovery 97.32

TOTALS

Resolved for all peaks	139370		
Resolved - known peaks	10831 ?	0.54	
Resolved - unknown peaks	43215	55.32	1.26
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 1.80

Sample: JU ALT. B B-2 ?
 Data analyzed: Nov 18, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 10.93 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00126	0	0	0	Resol./Unres.
Phenanthrene	3R	.00105	0	0	0	
o-Terphenyl	4R	.00128	69734	89.26	Int. std.	
1-Methylphenanthrene	5R	.00163	0	0	0	
Pyrene	6R	.00532	0	0	0	
						% Recovery 66.28

TOTALS

Resolved for all peaks	75435			
Resolved - known peaks	0		0	
Resolved - unknown peaks	5701	7.30	0.76	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.76

Sample: JU N6A-B-1 ?
 Data analyzed: Nov 122, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 52.64?
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108 ?	0	0	0	Resol./Unres.
Phenanthrene	3R	.00096	2376	2.29	0.04	
o-Terphenyl	4R	.00121	93658	113.32	Int. std.	
1-Methylphenanthrene	5R	.00200	0	0	0	
Pyrene	6R	.00980	0	0	0	
						% Recovery 84.15

TOTALS

Resolved for all peaks	110138 ?			
Resolved - known peaks	2376		0.04	
Resolved - unknown peaks	14184 ?	17.07	0.28	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.32

Sample: JU N6A-B-2 ?
 Data analyzed: Nov 22, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 67.52
 Inject. volume (μL): 1.5
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108 ?	0	0	0	Resol./Unres.
Phenanthrene	3R	.00096	5336	5.12	0.06	
o-Terphenyl	4R	.00121	99424	120.30	Int. std.	
1-Methylphenanthrene	5R	.00200	5027	10.05	0.13	
Pyrene	6R	.00980	1582	15.50	0.19	
						% Recovery 79.41

TOTALS

Resolved for all peaks	260010 ?			
Resolved - known peaks	11945		0.38	
Resolved - unknown peaks	148641 ?	179.86	2.24	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 2.62

Sample: JU N6A-B-3 ?
 Data analyzed: Nov 22, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 67.90
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108 ?	0	0	0	Resol./Unres.
Phenanthrene	3R	.00096	0	0	0	
o-Terphenyl	4R	.00121	5168	6.24	Int. std.	
1-Methylphenanthrene	5R	.00200	0	0	0	
Pyrene	6R	.00980	0	0	0	
						% Recovery 4.64

TOTALS

Resolved for all peaks	20673 ?			
Resolved - known peaks	0		0	
Resolved - unknown peaks	15513	10.78	4.47	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 4.47

Sample: 205B
 Data analyzed: Sep 9, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00085	0	0	0	
Dibenzothiophene	2R	.00118	0	0	0	Resol./Unres.
Phenanthrene	3R	.00095	0	0	0	
o-Terphenyl	4R	.00098	538850	528.07	Int. std.	
1-Methylphenanthrene	5R	.00096	0	0	0	
Pyrene	6R	.00102	0	0	0	
						% Recovery 25.89

TOTALS

Resolved for all peaks	582310?			
Resolved - known peaks	0		0	
Resolved - unknown peaks	43460	42.59	4.58	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 4.58

Sample: 206B
 Data analyzed: Sep 8, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00085	0	0	0	
Dibenzothiophene	2R	.00118	0	0	0	Resol./Unres.
Phenanthrene	3R	.00095	0	0	0	
o-Terphenyl	4R	.00098	321510	315.08	Int. std.	
1-Methylphenanthrene	5R	.00096	0	0	0	
Pyrene	6R	.00102	0	0	0	
						% Recovery 77.23

TOTALS

Resolved for all peaks	923580 ?			
Resolved - known peaks	0		0	
Resolved - unknown peaks	602070	598.03	10.61	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 10.61

Sample: 207B
 Data analyzed: Sep 14, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	0	0	0	Resol./Unres.
Phenanthrene	3R	.00072	0	0	0	
<i>o</i> -Terphenyl	4R	.00073	725450	529.58	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	1357	1.29	0.01	
						% Recovery 51.92

TOTALS

Resolved for all peaks	703380			
Resolved - known peaks	1357		0.01	
Resolved - unknown peaks	56573	41.30	0.44	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.46

Sample: 208B
 Data analyzed: Sep 14, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	0	0	0	Resol./Unres.
Phenanthrene	3R	.00072	0	0	0	
<i>o</i> -Terphenyl	4R	.00073	627300	457.93	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	0	0	0	
						% Recovery 44.90

TOTALS

Resolved for all peaks	656240			
Resolved - known peaks	0		0	
Resolved - unknown peaks	28940	21.13	0.26	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.26

Sample: 209B
 Data analyzed: Sep 14, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	1937	1.74	0.01	Resol./Unres.
Phenanthrene	3R	.00072	0	0	0	
<i>o</i> -Terphenyl	4R	.00073	955160	697.27	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	1296	1.23	0.01	
						% Recovery 68.36

TOTALS

Resolved for all peaks	988660			
Resolved - known peaks	3233		0.02	
Resolved - unknown peaks	30267	22.09	0.18	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.20

Sample: 210B
 Data analyzed: Sep 14, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00089	0	0	0	
Dibenzothiophene	2R	.00126	1926	2.42	0.05	Resol./Unres. 10.11
Phenanthrene	3R	.00102	1316	1.34	0.03	
<i>o</i> -Terphenyl	4R	.00108	239900	259.09	Int. std.	
1-Methylphenanthrene	5R	.00123	5359	6.59	0.14	
Pyrene	6R	.00229	8435	19.32	0.42	
						% Recovery 25.40

TOTALS

Resolved for all peaks	2543000			
Resolved - known peaks	17036		0.65	
Resolved - unknown peaks	226064	2468.95	54.00	
Unresolved (UCM)	226910	247.11	5.40	

Total aliphatic hydrocarbons 60.05

Sample: 211B
 Data analyzed: Sep 15, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00089	0	0	0	
Dibenzothiophene	2R	.00126	977	1.23	0.02	Resol./Unres.
Phenanthrene	3R	.00102	0	0	0	
<i>o</i> -Terphenyl	4R	.00108	251240	271.34	Int. std.	
1-Methylphenanthrene	5R	.00123	0	0	0	
Pyrene	6R	.00229	0	0	0	
						% Recovery 26.60

TOTALS

Resolved for all peaks	1119600		
Resolved - known peaks	977	0.03	
Resolved - unknown peaks	867383	936.77	19.56
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 19.59

Sample: 212B
 Data analyzed: Sep 8, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00085	0	0	0	
Dibenzothiophene	2R	.00118	7110	8.39	0.69	Resol./Unres.
Phenanthrene	3R	.00095	0	0	0	
<i>o</i> -Terphenyl	4R	.00098	79563	77.97	Int. std.	
1-Methylphenanthrene	5R	.00096	0	0	0	
Pyrene	6R	.00102	0	0	0	
						% Recovery 38.22

TOTALS

Resolved for all peaks	790680		
Resolved - known peaks	7110	0.61	
Resolved - unknown peaks	704087	689.93	50.14
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 50.76

Sample: 221B
 Data analyzed: Sep 9, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.8
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00071	0	0	0	
Dibenzothiophene	2R	.00105	0	0	0	Resol./Unres.
Phenanthrene	3R	.00083	0	0	0	
o-Terphenyl	4R	.00088	267030	234.99	Int. std.	
1-Methylphenanthrene	5R	.00094	0	0	0	
Pyrene	6R	.00113	953	1.08	0.03	
						% Recovery 92.15

TOTALS

Resolved for all peaks	57120			
Resolved - known peaks	953		0.03	
Resolved - unknown peaks	304137	267.65	6.45	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 6.48

Sample: 222B
 Data analyzed: Sep 9, 1983 ?
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00071	0	0	0	
Dibenzothiophene	2R	.00105	0	0	0	Resol./Unres.
Phenanthrene	3R	.00083	0	0	0	
o-Terphenyl	4R	.00088	141450	124.48	Int. std.	
1-Methylphenanthrene	5R	.00094	0	0	0	
Pyrene	6R	.00113	1636	1.85	0.08	
						% Recovery 92.15

TOTALS

Resolved for all peaks	357580			
Resolved - known peaks	1636		0.08	
Resolved - unknown peaks	214494	188.75	8.59	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 8.68

Sample: 224B
 Data analyzed: Sep 9, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.35
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00071	0	0	0	
Dibenzothiophene	2R	.00105	0	0	0	Resol./Unres.
Phenanthrene	3R	.00083	0	0	0	
o-Terphenyl	4R	.00088	620100	545.69	Int. std.	
1-Methylphenanthrene	5R	.00094	0	0	0	
Pyrene	6R	.00113	0	0	0	
						% Recovery 93.62

TOTALS

Resolved for all peaks	835830			
Resolved - known peaks	0		0	
Resolved - unknown peaks	215730	189.84	1.97	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 1.97

Sample: 224B
 Data analyzed: Sep 9, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00071	0	0	0	
Dibenzothiophene	2R	.00105	0	0	0	Resol./Unres.
Phenanthrene	3R	.00083	0	0	0	
o-Terphenyl	4R	.00088	958110	843.14	Int. std.	
1-Methylphenanthrene	5R	.00094	0	0	0	
Pyrene	6R	.00113	1749	1.98	0.01	
						% Recovery 82.66

TOTALS

Resolved for all peaks	1331504			
Resolved - known peaks	17490		0.01	
Resolved - unknown peaks	371641	327.04	2.20	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 2.21

Sample: 227B
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	29993	26.99	0.08	Resol./Unres. 1.67
Phenanthrene	3R	.00072	17632	12.70	0.04 ?	
o-Terphenyl	4R	.00073	2557800	1867.19	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	0	0	0	
						% Recovery 91.53

TOTALS

Resolved for all peaks	3154700			
Resolved - known peaks	47625		0.12	
Resolved - unknown peaks	549275	400.98 ?	1.22	
Unresolved (UCM)	361667	264.02 ?	0.70	

Total aliphatic hydrocarbons 2.14

Sample: 230B
 Data analyzed: Sep 9, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 0.2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	0	0	0	Resol./Unres.
Phenanthrene	3R	.00072	0	0	0	
o-Terphenyl	4R	.00073	1054700?	928.14	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	0	0	0	
						% Recovery 98.99 ?

TOTALS

Resolved for all peaks	1313780			
Resolved - known peaks	0		0	
Resolved - unknown peaks	259000 ?	227.92	1.39	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 1.39

Sample: 231B
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	0	0	0	Resol./Unres.
Phenanthrene	3R	.00072	0	0	0	
<i>o</i> -Terphenyl	4R	.00073	1011000?	738.03	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	0	0	0	
						% Recovery 72.36

TOTALS

Resolved for all peaks	1173100 ?		
Resolved - known peaks	0	0	
Resolved - unknown peaks	162100 ?	118.33	0.91
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.91

Sample: 232B
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	709	0.64	0.01	Resol./Unres. 0.38
Phenanthrene	3R	.00072	978	0.70	0.01	
<i>o</i> -Terphenyl	4R	.00073	487790	356.09	Int. std.	
1-Methylphenanthrene	5R	.00077	1555	1.20	0.02	
Pyrene	6R	.00095	0	0	0	
						% Recovery 34.91

TOTALS

Resolved for all peaks	550850 ?		
Resolved - known peaks	3242	0.04	
Resolved - unknown peaks	59710 ?	43.59	0.69
Unresolved (UCM)	164762	120.28	1.91

Total aliphatic hydrocarbons 2.65

Sample: 233B
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00074	0	0	0	
Dibenzothiophene	2R	.00104	0	0	0	Resol./Unres.
Phenanthrene	3R	.00085	0	0	0	
<i>o</i> -Terphenyl	4R	.00090	162140	145.93	Int. std.	
1-Methylphenanthrene	5R	.00095	0	0	0	
Pyrene	6R	.00114	0	0	0	
						% Recovery 71.4 ?

TOTALS

Resolved for all peaks	178510 ?			
Resolved - known peaks	15634		0.69	
Resolved - unknown peaks	736	0.66	0.03	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.71

Sample: 234B
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00074	0	0	0	
Dibenzothiophene	2R	.00104	0	0	0	Resol./Unres.
Phenanthrene	3R	.00085	0	0	0	
<i>o</i> -Terphenyl	4R	.00090	51752	46.58	Int. std.	
1-Methylphenanthrene	5R	.00095	0	0	0	
Pyrene	6R	.00114	0	0	0	
						% Recovery 22.83

TOTALS

Resolved for all peaks	52258			
Resolved - known peaks	0		0	
Resolved - unknown peaks	506	0.46	0.06	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.06

Sample: 235B
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00074	0	0	0	
Dibenzothiophene	2R	.00104	0	0	0	Resol./Unres.
Phenanthrene	3R	.00085	0	0	0	
o-Terphenyl	4R	.00090	74913	67.42	Int. std.	
1-Methylphenanthrene	5R	.00095	0	0	0	
Pyrene	6R	.00114	0	0	0	
						% Recovery 33.05

TOTALS

Resolved for all peaks	78145			
Resolved - known peaks	0		0	
Resolved - unknown peaks	3232	2.91	0.24	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.24

Sample: 237B
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00074	0	0	0	
Dibenzothiophene	2R	.00104	0	0	0	Resol./Unres.
Phenanthrene	3R	.00085	0	0	0	
o-Terphenyl	4R	.00090	55859	50.27	Int. std.	
1-Methylphenanthrene	5R	.00095	0	0	0	
Pyrene	6R	.00114	0	0	0	
						% Recovery 24.64

TOTALS

Resolved for all peaks	63031			
Resolved - known peaks	0		0	
Resolved - unknown peaks	717	6.45	0.73	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.73

Sample: 238B
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00074	0	0	0	
Dibenzothiophene	2R	.00104	0	0	0	Resol./Unres.
Phenanthrene	3R	.00085	0	0	0	
o-Terphenyl	4R	.00090	81091	72.98	Int. std.	
1-Methylphenanthrene	5R	.00095	0	0	0	
Pyrene	6R	.00114	0	0	0	
						% Recovery 53.66

TOTALS

Resolved for all peaks	89614		
Resolved - known peaks	0	0	
Resolved - unknown peaks	8523	7.68	0.60
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.60

Sample: 240B-1
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 102
 Dry weight (g): 9
 Inject. volume (μL): 2
 Sample volume (mL): 1.25
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00074	0	0	0	
Dibenzothiophene	2R	.00104	0	0	0	Resol./Unres.
Phenanthrene	3R	.00085	0	0	0	
o-Terphenyl	4R	.00090	145350	130.82	Int. std.	
1-Methylphenanthrene	5R	.00095	0	0	0	
Pyrene	6R	.00114	0	0	0	
						% Recovery 80.16

TOTALS

Resolved for all peaks	148670		
Resolved - known peaks	0	0	
Resolved - unknown peaks	3320	2.99	0.26
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.26

Sample: 241B-1
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 102
 Dry weight (g): 9
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	811	0.73	0.01	Resol./Unres.
Phenanthrene	3R	.00072	0	0	0	
<i>o</i> -Terphenyl	4R	.00073	891040	650.46	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	0	0	0	
						% Recovery 63.77

TOTALS

Resolved for all peaks	980450			
Resolved - known peaks	811		0.01	
Resolved - unknown peaks	8599	6.28	0.11	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.12

Sample: 242B
 Data analyzed: Sep 12, 1983
 Int. Std. (μg): 102
 Dry weight (g): 18
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00074	0	0	0	
Dibenzothiophene	2R	.00104	0	0	0	Resol./Unres.
Phenanthrene	3R	.00085	0	0	0	
<i>o</i> -Terphenyl	4R	.00090	84395	75.96	Int. std.	
1-Methylphenanthrene	5R	.00095	0	0	0	
Pyrene	6R	.00114	0	0	0	
						% Recovery 55.85

TOTALS

Resolved for all peaks	86040			
Resolved - known peaks	0		0	
Resolved - unknown peaks	1645	1.48	0.11	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.11

Sample: 246B-1
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 102
 Dry weight (g): 9
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	3265	2.94	0.04	Resol./Unres.
Phenanthrene	3R	.00072	2974	2.14	0.03	
o-Terphenyl	4R	.00073	1168308?	847.02 ?	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	0	0	0	
						% Recovery 83.04 ?

TOTALS

Resolved for all peaks	1197200?			
Resolved - known peaks	6239		0.07	
Resolved - unknown peaks	38661	22.38	0.30	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.37

Sample: 247B-1
 Data analyzed: Sep 14, 1983
 Int. Std. (μg): 102
 Dry weight (g): 9
 Inject. volume (μL): 1
 Sample volume (mL): 0.1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00090	0	0	0	Resol./Unres.
Phenanthrene	3R	.00072	0	0	0	
o-Terphenyl	4R	.00073	328340	239.69	Int. std.	
1-Methylphenanthrene	5R	.00077	0	0	0	
Pyrene	6R	.00095	0	0	0	
						% Recovery 23.50

TOTALS

Resolved for all peaks	332590			
Resolved - known peaks	0		0	
Resolved - unknown peaks	4250	3.10	0.15	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 0.15

Sample: 213B ? (0 - 5)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 21.84
 Inject. volume (μL): 1.5
 Sample volume (mL): 2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00067	1595	1.39	0.11	Resol./Unres.
Phenanthrene	3R	.00709	50476	35.78	2.85	
o-Terphenyl	4R	.00084	69242	58.16	Int. std.	
1-Methylphenanthrene	5R	.00100	1064	1.06	0.08	
Pyrene	6R	.00207	17656	50.67	4.83	
						% Recovery 76.78

TOTALS

Resolved for all peaks	204593 ?			
Resolved - known peaks	78791 ?			7.87
Resolved - unknown peaks	64557	54.23		4.31
Unresolved (UCM)	0	0		0

Total aliphatic hydrocarbons 11.39

Sample: 214B ? (0 - 5)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 14.18 ?
 Inject. volume (μL): 1.5
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00067	1593	1.39	0.12	Resol./Unres. 0.49
Phenanthrene	3R	.00709	19596	13.89	1.22	
o-Terphenyl	4R	.00084	96424	81.00	Int. std.	
1-Methylphenanthrene	5R	.00100	2987	2.99	0.26	
Pyrene	6R	.00207	12297	35.29	3.10	
						% Recovery 53.46

TOTALS

Resolved for all peaks	244940?			
Resolved - known peaks	36473			4.79
Resolved - unknown peaks	112043	94.12		8.28
Unresolved (UCM)	357478	300.28		26.41 ?

Total aliphatic hydrocarbons 39.39

Sample: 214B ? (20 - 25)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 21.84
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.8
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00067	4509	3.92	0.31	Resol./Unres. 0.31
Phenanthrene	3R	.00709	2289	1.62	0.13	
<i>o</i> -Terphenyl	4R	.00084	69125	58.87	Int. std.	
1-Methylphenanthrene	5R	.00100	1446	1.45	0.11	
Pyrene	6R	.00207	2426	6.96	0.55	
						% Recovery 68.99

TOTALS

Resolved for all peaks	138150		
Resolved - known peaks	10678 ?	1.11	
Resolved - unknown peaks	58655	49.81	3.90
Unresolved (UCM)	238416	208.27 ?	15.96

Total aliphatic hydrocarbons 20.97

Sample: 215B ? (0 - 5)
 Data analyzed: Nov 9, 1983
 Int. Std. (μg): 101
 Dry weight (g): 26.84
 Inject. volume (μL): 1
 Sample volume (mL): 2
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00071	0	0	0	
Dibenzothiophene	2R	.00105	2624	2.76	0.33	Resol./Unres. 0.28
Phenanthrene	3R	.00083	0	0	0	
<i>o</i> -Terphenyl	4R	.00088	34931	30.74	Int. std.	
1-Methylphenanthrene	5R	.00094	2081	1.96	0.24	
Pyrene	6R	.00113	0	0	0	
						% Recovery 60.87

TOTALS

Resolved for all peaks	99070		
Resolved - known peaks	4705	0.58	
Resolved - unknown peaks	59434	52.30	6.40 ?
Unresolved (UCM)	227888	200.54 ?	24.55

Total aliphatic hydrocarbons 31.53

Sample: 216B ? (0 - 5)
 Data analyzed: Nov 23, 1983
 Int. Std. (μg): 101
 Dry weight (g): 14.92
 Inject. volume (μL): 1.5
 Sample volume (mL): 2.25
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00097	6228	6.84	1.74	
Dibenzothiophene	2R	.00128	10011	12.81	3.70	Resol./Unres. 1.71
Phenanthrene	3R	.00104	3082	3.12	0.90	
o-Terphenyl	4R	.00124	18954	23.58	Int. std.	
1-Methylphenanthrene	5R	.00128	1349	1.73	0.50	
Pyrene	6R	.00242	3536	8.56	2.46	
						% Recovery 34.91

TOTALS

Resolved for all peaks	319478		
Resolved - known peaks	24126	9.29	
Resolved - unknown peaks	276390	342.72	98.71
Unresolved (UCM)	176540	218.91 ?	63.05 ?

Total aliphatic hydrocarbons 171.06

Sample: 217B ? (0 - 5)
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 33.57
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.3
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073	0	0	0	
Dibenzothiophene	2R	.00067	2331	2.03	0.07	Resol./Unres. 0.59
Phenanthrene	3R	.00709	12162	8.62	0.29	
o-Terphenyl	4R	.00084	107540	90.33	Int. std.	
1-Methylphenanthrene	5R	.00100	8676	8.68	0.29	
Pyrene	6R	.00207	1502	4.31	0.14	
						% Recovery 77.51

TOTALS

Resolved for all peaks	288130		
Resolved - known peaks	24671	0.79	
Resolved - unknown peaks	155919	130.97	4.36
Unresolved (UCM)	311437	261.61	8.71

Total aliphatic hydrocarbons 13.86

Sample: 218B-1 ? (0 - 5)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 39.29
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00069	0	0	0	
Dibenzothiophene	2R	.00112	1987	2.23	0.06	Resol./Unres. 1.04
Phenanthrene	3R	.00095	14864	14.13	0.42 ?	
o-Terphenyl	4R	.00113	78296	88.47	Int. std.	
1-Methylphenanthrene	5R	.00163	1054	1.72	0.05 ?	
Pyrene	6R	.00654	3176	20.77	0.60 ?	
						% Recovery 87.60

TOTALS

Resolved for all peaks		135220			
Resolved - known peaks		21081			1.13
Resolved - unknown peaks		35843		40.50 ?	1.18
Unresolved (UCM)		67449		76.22	2.21
Total aliphatic hydrocarbons					4.52

Sample: 218B (20 - 25)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 33.91
 Inject. volume (μL): 1
 Sample volume (mL): 1.2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00069	0	0	0	
Dibenzothiophene	2R	.00112	7049	7.89	0.15	Resol./Unres. 1.63
Phenanthrene	3R	.00095	34338	32.62	0.62 ?	
o-Terphenyl	4R	.00113	138630 ?	156.65	Int. std.	
1-Methylphenanthrene	5R	.00163	3183	5.19	0.10	
Pyrene	6R	.00654	18090	65.99	1.25	
						% Recovery 186.1 ?

TOTALS

Resolved for all peaks		331070 ?			
Resolved - known peaks		54660			2.12
Resolved - unknown peaks		137780		155.69 ?	2.97
Unresolved (UCM)		145455		164.36	3.13
Total aliphatic hydrocarbons					8.29

Sample: 218B ? (60 - 65)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.17
 Inject. volume (μL): 1.5
 Sample volume (mL): 2
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00069	0	0	0	
Dibenzothiophene	2R	.00112	9732	10.90	1.05	Resol./Unres. 1.04
Phenanthrene	3R	.00095	12653	12.02	1.16	
<i>o</i> -Terphenyl	4R	.00113	53789	60.78 ?	Int. std.	
1-Methylphenanthrene	5R	.00163	3234	5.27	0.51 ?	
Pyrene	6R	.00654	2605	17.04?	1.65	
						% Recovery 80.24

TOTALS

Resolved for all peaks	297180		
Resolved - known peaks	28224	4.38	
Resolved - unknown peaks	215167	243.14	23.54
Unresolved (UCM)	244281	276.04	26.71
Total aliphatic hydrocarbons		54.62	

Sample: 219B (0 - 5)
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.15
 Inject. volume (μL): 2
 Sample volume (mL): 1.1
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	472	0.36	0.18	
Dibenzothiophene	2R	.00115	960	1.18	0.55	Resol./Unres. 0.27
Phenanthrene	3R	.00090	640	0.58	0.29	
<i>o</i> -Terphenyl	4R	.00100	11897	11.90	Int. std.	
1-Methylphenanthrene	5R	.00136	893	1.21	0.60	
Pyrene	6R	.00433	962	4.17	2.06	
						% Recovery 6.48

TOTALS

Resolved for all peaks	32951		
Resolved - known peaks	3927	3.67	
Resolved - unknown peaks	17127	17.13	8.48
Unresolved (UCM)	91202	91.20	45.15
Total aliphatic hydrocarbons		57.30	

Sample: 222B ? (0 - 5)
 Data analyzed: Nov 15, 1983
 Int. Std. (μg): 101
 Dry weight (g): 28.04 ?
 Inject. volume (μL): 1.5
 Sample volume (mL): 1.2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00069	0	0	0	
Dibenzothiophene	2R	.00112	4472	5.01	0.16	Resol./Unres. 1.26
Phenanthrene	3R	.00095	36055 ?	36.15	1.16	
o-Terphenyl	4R	.00113	98051	111.78 ?	Int. std.	
1-Methylphenanthrene	5R	.00163	2424	3.95	0.13	
Pyrene	6R	.00654	7101	46.44	1.50	
						% Recovery 58.48 ?

TOTALS

Resolved for all peaks	355108		
Resolved - known peaks	52853		2.95
Resolved - unknown peaks	204196	238.74	7.45
Unresolved (UCM)	225806	255.16	8.23

Total aliphatic hydrocarbons 18.63

Sample: 223B ? (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.57
 Inject. volume (μL): 2
 Sample volume (mL): 1.4
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108	1457	1.57	0.88	Resol./Unres.
Phenanthrene	3R	.00096	16821	18.87	0.88	
o-Terphenyl	4R	.00121	98002 ?	118.58	Int. std.	
1-Methylphenanthrene	5R	.00200	1766	3.53	0.17	
Pyrene	6R	.00980	5269	51.64	2.50	
						% Recovery 82.18

TOTALS

Resolved for all peaks	339728		
Resolved - known peaks	27313		3.63
Resolved - unknown peaks	214407	259.42	12.58
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 16.21

Sample: 225B (0 - 5)
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 25.25
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	669	0.76	0.03	Resol./Unres.
Phenanthrene	3R	.00090	3794	3.41	0.15	
o-Terphenyl	4R	.00100	91696	91.70	Int. std.	
1-Methylphenanthrene	5R	.00136	1116	1.52	0.07	
Pyrene	6R	.00433	2532	18.96	0.48	
						% Recovery 68.09

TOTALS

Resolved for all peaks	172840		
Resolved - known peaks	8111	0.73	
Resolved - unknown peaks	73833	73.83	3.19
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 3.91

Sample: 225B (25 - 30)
 Data analyzed: Nov 16, 1983
 Int. Std. (μg): 101
 Dry weight (g): 27.14
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108	2551	3.34	0.12	Resol./Unres.
Phenanthrene	3R	.00096	0	0	0	
o-Terphenyl	4R	.00121	75285	103.78	Int. std.	
1-Methylphenanthrene	5R	.00200	10	0	0	
Pyrene	6R	.00980	0	0	0	
						% Recovery 51.38

TOTALS

Resolved for all peaks	81181		
Resolved - known peaks	2551	0.12	
Resolved - unknown peaks	3425	4.73	0.17
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0.29

Sample: 225B (55 - 60)
 Data analyzed: Nov 16, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9.89
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00101 ?	2748	3.60 ?	0.18	Resol./Unres.
Phenanthrene	3R	.00114 ?	0	0	0	
o-Terphenyl	4R	.00126 ?	151050 ?	206.50 ?	Int. std.	
1-Methylphenanthrene	5R	.00216	488	1.05	0.05	
Pyrene	6R	.00957	0	0	0	
						% Recovery 103.2

TOTALS

Resolved for all peaks	213620 ?			
Resolved - known peaks	3206 ?		0.23	
Resolved - unknown peaks	59304 ?	91.84	4.01	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 4.24

Sample: 228B (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 39.81
 Inject. volume (μL): 2
 Sample volume (mL): 2.2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00097	0	0	0	
Dibenzothiophene	2R	.00128	588	0.75	0.05	Resol./Unres.
Phenanthrene	3R	.00104	1050	1.10	0.08	
o-Terphenyl	4R	.00124	28448	35.27	Int. std.	
1-Methylphenanthrene	5R	.00128	0	0	0	
Pyrene	6R	.00242	2006 ?	4.85	0.35	
						% Recovery 28.41 ?

TOTALS

Resolved for all peaks	50552 ?			
Resolved - known peaks	3644 ?		0.48	
Resolved - unknown peaks	18468 ?	22.91 ?	1.64 ?	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 2.72 ?

Sample: 229B (0 - 5)
 Data analyzed: Nov 16, 1983
 Int. Std. (μg): 101
 Dry weight (g): 14.54
 Inject. volume (μL): ?
 Sample volume (mL): ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00101 ?	5800	7.70	0.48	Resol./Unres.
Phenanthrene	3R	.00114 ?	2444	2.78 ?	0.18	
o-Terphenyl	4R	.00126 ?	79852	110.20 ?	Int. std.	
1-Methylphenanthrene	5R	.00216	2672	5.77	0.36	
Pyrene	6R	.00957	0	0	0	
						% Recovery 109.1

TOTALS

Resolved for all peaks	176120			
Resolved - known peaks	10996 ?		1.02	
Resolved - unknown peaks	85282 ?	117.69	7.42	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 8.44

Sample: 232B-1 (0 - 5)
 Data analyzed: Nov 30, 1983
 Int. Std. (μg): 101
 Dry weight (g): 78.72 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.8 ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	14972	17.22	0.50	Resol./Unres. 0.52
Phenanthrene	3R	.00090	108	0.90 ?	0.00 ?	
o-Terphenyl	4R	.00100	91185	91.11 ?	Int. std.	
1-Methylphenanthrene	5R	.00136	2251	3.06	0.08 ?	
Pyrene	6R	.00432	633	2.75	0.08	
						% Recovery 81.18

TOTALS

Resolved for all peaks	256680 ?			
Resolved - known peaks	17964		0.57	
Resolved - unknown peaks	147531	147.53	4.27	
Unresolved (UCM)	327273	327.27	9.47	

Total aliphatic hydrocarbons 14.49

Sample: 233B (0 - 5)
 Data analyzed: Nov 16, 1983
 Int. Std. (μg): 101
 Dry weight (g): 15.86
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00155	0	0	0	
Dibenzothiophene	2R	.00201 ?	21752	28.50	4.05	Resol./Unres. 1.34
Phenanthrene	3R	.00168 ?	0	0	0	
o-Terphenyl	4R	.00175	32455	44.79	Int. std.	
1-Methylphenanthrene	5R	.00203	3875	8.37	1.19	
Pyrene	6R	.00118 ?	1262	12.08	1.72	
						% Recovery 44.34

TOTALS

Resolved for all peaks	272220 ?		
Resolved - known peaks	26989 ?	6.96	
Resolved - unknown peaks	212876 ?	293.77?	41.77
Unresolved (UCM)	184751	254.96	36.25

Total aliphatic hydrocarbons 84.98

Sample: 238B? (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 32.56
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00062	0	0	0	
Dibenzothiophene	2R	.00093	2603	2.42	0.14	Resol./Unres.
Phenanthrene	3R	.00080	0	0	0	
o-Terphenyl	4R	.00117	42894	50.10 ?	Int. std.	
1-Methylphenanthrene	5R	.00161	1672	2.69	0.16	
Pyrene	6R	.00727	0	0	0	
						% Recovery 37.27

TOTALS

Resolved for all peaks	153500 ?		
Resolved - known peaks	4275	0.31	
Resolved - unknown peaks	106331 ?	124.41	7.44
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 7.74

Sample: 234B? (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 24.6
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00062	0	0	0	
Dibenzothiophene	2R	.00093	6494	6.03 ?	0.42	Resol./Unres.
Phenanthrene	3R	.00080	0	0	0	
o-Terphenyl	4R	.00117	49000 ?	58.36 ?	Int. std.	
1-Methylphenanthrene	5R	.00161	5473	8.81 ?	0.62	
Pyrene	6R	.00727	0	0	0	
						% Recovery 57.78

TOTALS

Resolved for all peaks	109950 ?		
Resolved - known peaks	11967	1.04 ?	
Resolved - unknown peaks	148103 ?	173.21	12.20 ?
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 13.24

Sample: 2xxB? (55 - 60) ?
 Data analyzed: Nov 14, 1983
 Int. Std. (μg): 101
 Dry weight (g): 15.73
 Inject. volume (μL): 2
 Sample volume (mL): 1.9 ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00073?	0	0	0	
Dibenzothiophene	2R	.00087?	3370	2.93 ?	0.32	Resol./Unres. 0.46
Phenanthrene	3R	.00709?	798	0.57	0.06	
o-Terphenyl	4R	.00064?	69360	50.26 ?	Int. std.	
1-Methylphenanthrene	5R	.00100?	2945	2.95 ?	0.32	
Pyrene	6R	.00207?	2096	6.31	0.92	
						% Recovery 54.60

TOTALS

Resolved for all peaks	204850 ?		
Resolved - known peaks	10009	1.63	
Resolved - unknown peaks	124681?	104.73	11.54
Unresolved (UCM)	311144	261.36	28.80 ?

Total aliphatic hydrocarbons 41.97

Sample: 239B (0 - 5)
 Data analyzed: Nov 25, 1983
 Int. Std. (μg): 101
 Dry weight (g): 24.01 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.25 ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00155	0	0	0	
Dibenzothiophene	2R	.00201 ?	0	0	0	Resol./Unres.
Phenanthrene	3R	.00168 ?	1560 ?	2.68 ?	0.09	
o-Terphenyl	4R	.00175	68958	120.68 ?	Int. std.	
1-Methylphenanthrene	5R	.00203	271	0.57	0.02 ?	
Pyrene	6R	.00118 ?	1659 ?	9.52	0.34	
						% Recovery 74.68

TOTALS

Resolved for all peaks 1704 ?
 Resolved - known peaks 3696 ? 0.45
 Resolved - unknown peaks 97766 ? 171.26 ? 5.96
 Unresolved (UCM) 0 0 0

Total aliphatic hydrocarbons 6.42

Sample: 242B-1 (0 - 5)
 Data analyzed: Nov 20, 1983 ?
 Int. Std. (μg): 101
 Dry weight (g): 11.01
 Inject. volume (μL): 2
 Sample volume (mL): 1.4
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00076	0	0	0	
Dibenzothiophene	2R	.00115	2399	2.64	0.21	Resol./Unres.
Phenanthrene	3R	.00090	16199	14.58	1.14	
o-Terphenyl	4R	.00100	116618	116.63 ?	Int. std.	
1-Methylphenanthrene	5R	.00136	190	0.26	0.02 ?	
Pyrene	6R	.00432	2412	10.45	0.02 ?	
						% Recovery 80.82 ?

TOTALS

Resolved for all peaks 400320 ?
 Resolved - known peaks 21101 2.20
 Resolved - unknown peaks 262609 ? 362.61 ? 20.66
 Unresolved (UCM) 0 0 0

Total aliphatic hydrocarbons 22.86

Sample: 242B (60 - 65)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 5.03 ?
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00105 ?	0	0	0	Resol./Unres.
Phenanthrene	3R	.00096	0	0	0	
o-Terphenyl	4R	.00121	94051	113.80 ?	Int. std.	
1-Methylphenanthrene	5R	.00200	0	0	0	
Pyrene	6R	.00980	0	0	0	
						% Recovery 112.7

TOTALS

Resolved for all peaks	123980			
Resolved - known peaks	0		0	
Resolved - unknown peaks	29929	36.21	5.51	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 5.51

Sample: 240B (120 - 125)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 17.72 ?
 Inject. volume (μL): 2
 Sample volume (mL): 1.9
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00155	0	0	0	
Dibenzothiophene	2R	.00201 ?	571	1.15	0.03	Resol./Unres.
Phenanthrene	3R	.00168 ?	805	1.49 ?	0.04	
o-Terphenyl	4R	.00175	115370	201.70 ?	Int. std.	
1-Methylphenanthrene	5R	.00228	0	0	0	
Pyrene	6R	.00528 ?	699	3.70	0.118	
						% Recovery 189.9

TOTALS

Resolved for all peaks	138670 ?			
Resolved - known peaks	2159 ?		0.18	
Resolved - unknown peaks	97766 ?	37.00 ?	1.04	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 1.22

Sample: 241B (0 - 5)
 Data analyzed: Nov 28, 1983
 Int. Std. (μg): 101
 Dry weight (g): 30. ? ?
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
.03 ?						
Naphthalene	1R	.00155	1139	1.76	0.04 ?	
Dibenzothiophene	2R	.00201 ?	1056 ?	2.52	0.05	Resol./Unres.
Phenanthrene	3R	.00168 ?	5300 ?	18.96 ?	0.19	
o-Terphenyl	4R	.00175	90433	158.26 ?	Int. std.	
1-Methylphenanthrene	5R	.00205 ?	8343	17.35	0.36	
Pyrene	6R	.00528 ?	2903	15.33	0.32	
						% Recovery 78.35

TOTALS

Resolved for all peaks	346500 ?			
Resolved - known peaks	15974 ?		0.95	
Resolved - unknown peaks	237093 ?	414.91 ?	8.60	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 9.55

Sample: 242B (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 32.02 ?
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108 ?	1724	1.86	0.06	Resol./Unres.
Phenanthrene	3R	.00096	5162	4.96	0.13	
o-Terphenyl	4R	.00121	94416	114.24 ?	Int. std.	
1-Methylphenanthrene	5R	.00200	1809	3.62	0.90 ?	
Pyrene	6R	.00980	667	6.54	0.18	
						% Recovery 113.1

TOTALS

Resolved for all peaks	178800			
Resolved - known peaks	9362		0.45	
Resolved - unknown peaks	75822	90.78	2.45	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 2.90

Sample: 247B ? (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 26.82 ?
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108 ?	0	0	0	Resol./Unres.
Phenanthrene	3R	.00096	2864	2.75	0.12	
o-Terphenyl	4R	.00121	75095 ?	94.49?	Int. std.	
1-Methylphenanthrene	5R	.00200	4171	8.24	0.33	
Pyrene	6R	.00980	1312	12.87	0.52	
						% Recovery 93.56

TOTALS

Resolved for all peaks	205440			
Resolved - known peaks	8348		0.96	
Resolved - unknown peaks	118997	143.99	5.78	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 6.74

Sample: 247B ? (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 26.82 ?
 Inject. volume (μL): 2
 Sample volume (mL): 2
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108 ?	1956 ?	2.14	0.14	Resol./Unres.
Phenanthrene	3R	.00096	25608 ?	24.58	1.64	
o-Terphenyl	4R	.00121	57704 ?	69.82	Int. std.	
1-Methylphenanthrene	5R	.00200	21811	43.62	2.91	
Pyrene	6R	.00980	4418	43.30	2.90	
						% Recovery 86.41

TOTALS

Resolved for all peaks	844420			
Resolved - known peaks	53815		7.59	
Resolved - unknown peaks	732901	886.81	59.20	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 66.78

Sample: 245B ? (0 - 5)
 Data analyzed: Nov 23, 1983
 Int. Std. (μg): 101
 Dry weight (g): 27 ?
 Inject. volume (μL): ?
 Sample volume (mL): ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00097	0	0	0	
Dibenzothiophene	2R	.00 ?	6294 ?	8.06 ?	0.15	Resol./Unres.
Phenanthrene	3R	.00104	0	0	0	
o-Terphenyl	4R	.00124 ?	155820 ?	193.22 ?	Int. std.	
1-Methylphenanthrene	5R	.00126	3942	5.05	0.10	
Pyrene	6R	.00242	528	1.30	0.20	
						% Recovery 95.65

TOTALS

Resolved for all peaks	312053 ?		
Resolved - known peaks	12734 ?	0.27	
Resolved - unknown peaks	145456 ?	138.36 ?	3.45
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 3.72

Sample: 246B ? (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): 35.49
 Inject. volume (μL): 2
 Sample volume (mL): 1.2 ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108	0	0	0	Resol./Unres.
Phenanthrene	3R	.00096	754	0.72 ?	0.08	
o-Terphenyl	4R	.00121	22278 ?	26.96 ?	Int. std.	
1-Methylphenanthrene	5R	.00200	1081	2.16	0.23	
Pyrene	6R	.00980	0	0	0	
						% Recovery 42.70 ?

TOTALS

Resolved for all peaks	57249 ?		
Resolved - known peaks	1835 ?	0.30	
Resolved - unknown peaks	33136 ?	14.89 ?	4.23
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 4.54

Sample: 247B ? (0 - 5)
 Data analyzed: Nov 22, 1983
 Int. Std. (μg): 101
 Dry weight (g): ?
 Inject. volume (μL): 2
 Sample volume (mL): ?
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00067	0	0	0	
Dibenzothiophene	2R	.00108	3908	4.312	0.07	Resol./Unres.
Phenanthrene	3R	.00096	0	0	0	
o-Terphenyl	4R	.00121	130820 ?	156.17 ?	Int. std.	
1-Methylphenanthrene	5R	.00200	2585	5.17	0.08 ?	
Pyrene	6R	.00980	0	0	0	
						% Recovery 109.6?

TOTALS

Resolved for all peaks	202280 ?			
Resolved - known peaks	6485		0.17	
Resolved - unknown peaks	65875 ?	78.75 ?	1.35	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 1.51

Sample: 1B Butterfly ray
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 13.56
 Inject. volume (μL): 2
 Sample volume (mL): 0.9
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
o-Terphenyl	4R	.00095	152760 ?	145.12 ?	Int. std.	
1-Methylphenanthrene	5R	.00145	445	0.65	0.03 ?	
Pyrene	6R	.00624	0	0	0	
						% Recovery 64.66

TOTALS

Resolved for all peaks	227450 ?			
Resolved - known peaks	445		0.03	
Resolved - unknown peaks	74245	20.53 ?	3.62	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 3.65

Sample: 3B Catfish
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 12.12
 Inject. volume (μL): 2
 Sample volume (mL): 1.1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	15383	9.03	0.54	
Dibenzothiophene	2R	.00093	2758	2.56	0.15	Resol./Unres.
Phenanthrene	3R	.00051	2361	1.91	0.12	
o-Terphenyl	4R	.00095	145428	138.15	Int. std.	
1-Methylphenanthrene	5R	.00145	4685	6.68	0.40	
Pyrene	6R	.00624	0	0	0	
						% Recovery 75.23

TOTALS

Resolved for all peaks	2892230 ?			
Resolved - known peaks	25027		1.22	
Resolved - unknown peaks	118783	112.84?	6.81	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 8.02

Sample: 5B Grunt
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9.67
 Inject. volume (μL): 2
 Sample volume (mL): 1
 Int. std. o-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
o-Terphenyl	4R	.00095	37947 ?	36.05 ?	Int. std.	
1-Methylphenanthrene	5R	.00145	0	0	0	
Pyrene	6R	.00624	0	0	0	
						% Recovery 17.85

TOTALS

Resolved for all peaks	46523 ?			
Resolved - known peaks	0		0	
Resolved - unknown peaks	8576	8.15 ?	2.36	
Unresolved (UCM)	0	0	0	

Total aliphatic hydrocarbons 2.36

Sample: 5B Pigfish
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 18.52
 Inject. volume (μL): 2
 Sample volume (mL): 3
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
<i>o</i> -Terphenyl	4R	.00095	40444 ?	38.42 ?	Int. std.	
1-Methylphenanthrene	5R	.00145	5804	8.42	1.19	
Pyrene	6R	.00624	0	0	0	
						% Recovery 57.06

TOTALS

Resolved for all peaks	234050 ?		
Resolved - known peaks	5804	1.19	
Resolved - unknown peaks	187582 ?	178.41 ?	25.32
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 26.52

Sample: 6B Shrimp
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 5.53
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
<i>o</i> -Terphenyl	4R	.00095	8024 ?	7.62	Int. std.	
1-Methylphenanthrene	5R	.00145	0	0	0	
Pyrene	6R	.00624	0	0	0	
						% Recovery 5.66

TOTALS

Resolved for all peaks	8024 ?		
Resolved - known peaks	0	0	
Resolved - unknown peaks	0	0	0
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0

Sample: 8B Crabs
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 11.42
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
<i>o</i> -Terphenyl	4R	.00095	7863 ?	7.47	Int. std.	
1-Methylphenanthrene	5R	.00145	2846	4.13	4.89	
Pyrene	6R	.00624	1495	9.33	11.05 ?	
						% Recovery 5.55

TOTALS

Resolved for all peaks	46042		
Resolved - known peaks	4341	15.93	
Resolved - unknown peaks	33836	32.15	38.06
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 53.99

Sample: 9B Blue crabs
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 14.29
 Inject. volume (μL): 2
 Sample volume (mL): 1.75
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
<i>o</i> -Terphenyl	4R	.00095	97706	92.83	Int. std.	
1-Methylphenanthrene	5R	.00145	36683	53.19	4.05	
Pyrene	6R	.00624	64353	401.56	30.58 ?	
						% Recovery 80.41

TOTALS

Resolved for all peaks	2375500		
Resolved - known peaks	101036	34.63	
Resolved - unknown peaks	2176758	2067.93	157.46
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 192.10 ?

Sample: 12B Bivalves
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 1.17
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
<i>o</i> -Terphenyl	4R	.00095	11553	10.98	Int. std.	
1-Methylphenanthrene	5R	.00145	0	0	0	
Pyrene	6R	.00624	0	0	0	
						% Recovery 8.15

TOTALS

Resolved for all peaks	11553		
Resolved - known peaks	0	0	
Resolved - unknown peaks	0	0	0
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 0

Sample: 11B Oysters
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 3.61
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
<i>o</i> -Terphenyl	4R	.00095	12562	11.93	Int. std.	
1-Methylphenanthrene	5R	.00145	0	0	0	
Pyrene	6R	.00624	9068 ?	56.50 ?	132.66	
						% Recovery 8.86

TOTALS

Resolved for all peaks	24100 ?		
Resolved - known peaks	9068	132.66	
Resolved - unknown peaks	2470	2.35	5.50
Unresolved (UCM)	0	0	0

Total aliphatic hydrocarbons 138.16

Sample: 12B Oysters, flat tree
 Data analyzed: Dec 4, 1983
 Int. Std. (μg): 101
 Dry weight (g): 9.98
 Inject. volume (μL): 2
 Sample volume (mL): 1.5
 Int. std. *o*-Terphenyl

Compounds	Ref. #	Response factor	Area	ng	$\mu\text{g/g}$ (corrected)	Ratios
Naphthalene	1R	.00059	0	0	0	
Dibenzothiophene	2R	.00093	0	0	0	Resol./Unres.
Phenanthrene	3R	.00051	0	0	0	
<i>o</i> -Terphenyl	4R	.00095	11298	10.73	Int. std.	
1-Methylphenanthrene	5R	.00145	4384	6.36	6.00	
Pyrene	6R	.00624	2463	15.37	14.58	
						% Recovery 7.96

TOTALS

Resolved for all peaks	59420 ?				
Resolved - known peaks	6847			28.50	
Resolved - unknown peaks	412.83		39.22	37.01	
Unresolved (UCM)	0		0	0	
Total aliphatic hydrocarbons				57.51	

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Coastal and Estuarine Data Archaeology and Rescue Program

1983 BISCAYNE BAY HYDROCARBON STUDY



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Miami, FL

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US Department of Commerce
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Administration
Silver Spring, MD



Miami-Dade County
Department of Environmental
Resources Management
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BISCAYNE BAY HYDROCARBON STUDY

FINAL REPORT

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PREFACE

This final report is the culmination of a two-year project designed to establish background levels of hydrocarbons to support oil spill impact assessment and determine possible sources of petroleum contamination in Biscayne Bay. The first year of the study supplied information on the distribution of hydrocarbons in the surface sediments and selected biota. The second year study used the previously developed database to select areas which indicated petroleum contamination. These areas were further evaluated by collecting and analyzing additional surface and subsurface sediments, biota and water.

This report contains all information collected during the two year project period. The information contained in this final report supersedes all other materials in previous quarterly and annual reports.

ABSTRACT

A two year, comprehensive, quantitative investigation was conducted to analyze and identify the spatial distribution of petrogenic and biogenic hydrocarbons in sediments, surface waters, fish and shellfish of Biscayne Bay, Florida.

The goal for the first year of the project was to establish baseline information to support oil spill impact assessment and clean-up. One hundred fifty-five sediment and eleven biota samples were collected. The areas sampled included the Miami River, Intracoastal Waterway, tidal flats, access canals and environmentally sensitive shorelines.

The second year of the study centered on areas exhibiting petroleum contamination. These areas included the Miami River, Little River, Goulds Canal, Black Creek and Military Canal. Surface and subsurface sediment, biota and surface water were collected.

Sample collection, analyses, and data handling for the two year project were conducted so that all information was court-competent and scientifically accurate. Chain of custody was maintained for all samples.

Total hydrocarbon content of surface sediments ranged from below detection limits to a high of 2663.44 pg/g. Several sample stations contained petroleum contamination. The majority of biota samples exhibited hydrocarbon concentrations and characteristics that indicated little, if any, petroleum contamination. Surface water samples ranged from 0.78 to 64.47 $\mu\text{g/L}$ and several samples contained petroleum hydrocarbons.

Our results indicate several areas of petroleum contamination. These areas are characterized by industrial complexes, port facilities, marinas, major boating routes and many of the major tributaries emptying into Biscayne Bay.

EXECUTIVE SUMMARY

Location of study area

Biscayne Bay is a large lagoonal system located along the southeast coast of Florida. The Bay extends from 25° 58' N to 25° 24' N latitude, covers approximately 573 km², and is almost entirely contained within Dade County. The Bay is unique in many ways. It offers a large, year-round protected body of water, with a great diversity of natural resources close to a major metropolitan area (Miami) and has retained to a large degree, in its southern extremities, a character of undisturbed tropical naturalness. The local economy is tourism based and dependent on climate and esthetics. The Bay plays a very important role in the economy by supplying esthetics and extensive recreational and commercial activities. The Bay contains within its boundaries the largest port (dollar value of imports and exports) in Florida and the Biscayne National Park.

The south Florida area is dominated by major vessel traffic routes which encompass both offshore corridors and the Intracoastal Waterway. During the late seventies a US Coast Guard survey revealed that in excess of one million tons of crude oil per day passed within 25 miles or less of the southern Florida coastline. In addition, over three million tons of cargo are shipped via the Intracoastal Waterway through Biscayne Bay. Fuel oil leads all of the commodities shipped by this route in volume.

The planned exploration for offshore oil and its increased production in the Gulf of Mexico, Caribbean Sea and Mexico, the continuous growth of the Dade County economy and its rapid movement towards becoming a major trade center has increased substantially the probability of collisions and groundings resulting in oil spills and inputs of urban petroleum compounds. The prospect of a major oil spill occurring in the southern Florida/Biscayne Bay area is so prominent that during 1981-82 the South Florida Regional Planning Council produced three documents to assist in response and clean-up. These are the "South Florida Oil Spill Response Handbook", "The Sensitivity of Coastal Environments and Wildlife to Spilled Oil in South Florida" and the "South Florida Oil Spill Sensitivity Atlas."

Purpose

The purpose of the two-year study was to supply the State of Florida Department of Natural Resources with a quantitative, court-competent database of the distribution of petroleum and naturally occurring hydrocarbons in the Biscayne Bay lagoonal system. This data will supply the needed background information to support oil spill clean-up and evaluation. The first year study was designed to provide information about the spatial distribution of hydrocarbons in the surface sediments and marine organisms of commercial and recreational value. These data were to be used to establish the present background levels and distribution of petroleum and naturally occurring hydrocarbons within the Bay and to assess any future contamination. In the event of an oil spill these data can supply the necessary information needed to determine its present and potential damage. The goal of the second year of the study was to investigate and further quantify those areas where petroleum contamination was found and to determine its possible sources. In addition to surface sediment, subsurface sediment, surface water and marine organisms were analyzed to accomplish this goal.

Results

During the two year duration of the study, 205 surface sediments, 27 surface water samples and 21 marine organisms were collected and analyzed for hydrocarbons. Sediment collection sites for the Year 01 study were selected by incorporating criteria relating to the physical,

chemical, and biological processes and man's historical, present and future usage of the Bay. The second year study focused on areas where high concentrations of petroleum contaminated sediment were detected.

The total hydrocarbon content in the surface sediments ranged from below detection limits to 2663.4 $\mu\text{g/g}$, surface waters ranged from 0.8 to 64.5 $\mu\text{g/L}$ and organism samples ranged from 0.3 to 600.8 $\mu\text{g/g}$. Only one organism sample collected during the two year project showed any petroleum contamination. These were flat tree oysters collected from a marina. Several of the surface water samples collected showed indications of petroleum contamination. These samples were always associated with canal systems. The sample containing the highest concentration was collected in the Miami River and the lowest came from Black Creek. The sediments were the best indicator of contamination since they are the ultimate sink for this pollutant. A review of the hydrocarbon content and indices for the sediment collected during the first year indicated that 52 samples showed characteristics of petroleum contamination. These areas were associated with two main usage patterns. 1) Areas associated with boats and ships, e.g. major transportation routes, moorings, cargo handling, and construction and maintenance. 2) Areas which receive runoff and other inputs from the highly urbanized regions of Dade County.

Four major study areas which showed high concentrations of petroleum hydrocarbons were investigated during the second year of the study. These included the Little River, Miami River, Black Creek/Goulds Canal, and Military Canal. Surface water, marine organisms and additional sediment samples were collected from these areas to assist in further characterizing the magnitude of pollution and determine its sources.

The Miami River sediment had the highest concentrations of hydrocarbons detected during the two year project. The River falls under both usage patterns referenced above. It is a major complex for handling cargo, ship maintenance and repair and also receives runoff from the highly urbanized downtown Miami area. In contrast to the Miami River would be the Little River experiences only minimal boat traffic but receives high inputs of runoff from urbanized Miami. This area also showed elevated levels of hydrocarbons of petroleum origin. Military Canal, which for all practical purposes receives no boat traffic, indicated elevated concentrations of hydrocarbons. This canal, located in the southern portion of Biscayne Bay, drains a major military establishment. The Black Creek/Goulds Canal area is characterized by two canals which converge before emptying into Biscayne Bay. During the Year 01 study, the sediment sample collected at the intersection of the two canals indicated petroleum contamination, after further investigation during Year 02 it was determined that the majority of the contaminants were coming from Goulds Canal. This canal receives the majority of the small boat traffic and contains two marinas.

The information gathered during the two-year study has established a baseline for the distribution of hydrocarbons in Biscayne Bay. This database will be most useful in future studies and for establishing levels of contamination from oil spills or other sources of petroleum contaminants. It has also established a benchmark from which future changes in the concentration and distribution of hydrocarbons can be compared.

1983 BISCAYNE BAY HYDROCARBON STUDY

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1. Introduction

1.1. Purpose

The purpose of this two-year study was to supply the State of Florida Department of Natural Resources with a quantitative, court-competent database of the distribution of petrogenic and biogenic hydrocarbons in the Biscayne Bay lagoonal system. This data was to supply the needed background information to support oil spill clean-up and evaluation. The first year study provided information about the spatial distribution of hydrocarbons in the surface sediments. In addition selected biota of commercial and recreational value were collected and analyzed. These data were used to establish the present background levels and distribution of petrogenic hydrocarbons within the Bay and can be used to assess future contamination. In the event of an oil spill, these data can supply the necessary information needed to determine its present and potential damage. The goal of the second year of the study was to investigate and further quantify those areas where petroleum contamination was found during the first year study and to determine their possible sources. Sediment, water and biota were collected and analyzed using gas chromatography and gas chromatography /mass spectroscopy.

1.2. History of Study Area

1.2.1. Background Information

Biscayne Bay is a large lagoonal system located on the southeast coast of Florida. The Bay is unique in many ways. It offers a large, year-round protected body of water, with a great diversity of natural resources, close to a major metropolitan area and has retained to a large degree, in its southern extremities, a character of undisturbed tropical naturalness. Economically the surrounding areas are dependent on the Bay. The local economy is tourism based and dependent on climate and esthetics (Thorhaug, 1977). The Bay plays a very important role in this economy by supplying esthetics and both extensive recreational and commercial activities. The Bay is unique in another very important area best defined as user awareness and concern. This is exemplified by the establishment of the Biscayne Bay Management Plan.

Since the founding of the City of Miami in 1896, the northern and central portions of the Bay have undergone extensive physical, biological and chemical alterations. These alterations are the direct result of unmanaged and inadequately planned urbanization, dredge and fill activities, channelization, water management techniques and changes in the natural shoreline. During the mid to late seventies, great concern arose as to the future of Biscayne Bay. Past uses of the shoreline had resulted in habitat destruction, water pollution and lack of public access. To rectify these problems and abate many of the future problems caused by the increasing use pressure of the Bay the Board of County Commissioners, in 1978, declared Biscayne Bay an "Aquatic Park and Conservation Area". In conjunction with the declaration, monies were appropriated to develop a management plan to guide the Bay's future and clarify and consolidate

the jurisdictional controls over the Bay and its shorelines. Since the completion of the management plan in March of 1981, the local county government has actively pursued establishing baseline data and the development and refinement of management protocols for the Bay.

The increasing growth of Dade County, the expansion of the Port of Miami for the purpose of handling more and larger shipping traffic, and increasing use of the port facilities of the Miami River have caused a constant increase in the input of anthropogenic petroleum products to the Bay and has substantially raised the possibilities of a major oil spill within the Bay proper.

A vessel traffic study conducted in 1976 by the U.S. Coast Guard showed an average of 38 oil-carrying tanker vessels per day transported over a million tons of crude oil per day within 5 to 25 miles of the southern Florida coastline.

The study also identified the major vessel traffic lanes. There are three crossing and merging areas located near southern Florida. The approximate location of these areas are: 13 miles south-southeast of Miami; 14 miles south of the Dry Tortugas; and 13 miles south-southeast of West Palm Beach. These areas, where major traffic lanes cross and merge, increase the possibility of collisions and spills.

Many vessels stay within coastal waters and utilize the Intracoastal Waterway (ICW) to avoid Gulf Stream currents and rough waters. Wilson (1975) estimated that 3 million tons of cargo were shipped via the ICW and Biscayne Bay. Fuel oil leads all of those commodities shipped in volume.

The recent planned exploration for offshore oil and the increased production in the Gulf of Mexico, Caribbean Sea and Mexico, the continuous growth of the Dade County economy and its rapid movement towards becoming a major trade center has unquestionably caused an increase in the tanker traffic off the southern Florida coast and within the coastal zone during the last several years. This substantially increases the probability of collisions, groundings and oil spills within southern Florida and the Biscayne Bay area.

1.2.2. Geography

Biscayne Bay is classified as a shallow, semi-tropical lagoon (Roessler and Beardsley, 1975). The Bay covers 573 km² (W. Campos, per. com.), is north-south tending, approximately 56 km in length and averages 8 km in width with a maximum width of about 16 km. The average depth is approximately 1.8 m with a maximum depth of 4 m (Roessler and Beardsley, 1975) except in dredged areas where depths are reported to exceed 12 m. The major tributaries are Arch Canal, Biscayne Canal, Little River, Miami River, Coral Gables Waterway, Snapper Creek, Black Creek, Goulds Canal, North Canal, Florida City Canal, and the Model Land Canal. The Miami River has the largest input into the Bay and averages 18 m³/sec (Wilson, 1975).

The Bay is bound on the north by Dumfoundling Bay, which was historically a shallow water marsh, and on the south by Card Sound. The western side includes the mainland (Miami and suburbs) and to the southwest the Everglades. The eastern border is formed by sedimentary barrier islands (Miami Beach) to the north, and to the south a tidal bar belt (Safety Valve) and a continuous line of bedrock islands (Florida Keys) (Wanless, 1976).

The system was originally a freshwater basin until about 4,000 years ago, when the gradual rise in sea level inundated the area. The majority of the freshwater input during this time was by overland flow and groundwater seepage from adjacent uplands. As recently as the 19th century, freshwater marshes bordered the western side and freshwater springs flowed within the Bay. The input of freshwater declined as upland areas were drained and overland flow was

altered by urban and agricultural development (Thorhaug, 1977). Accompanying this decrease in freshwater was an increase in saline water input caused by openings cut in the barrier islands to facilitate access to the Bay by ships. This resulted in an increase in the salinity of the Bay and a change from a typical bar-built estuary with a shoreline dominated by freshwater marshes to a subtropical lagoon with mangrove fringed shorelines.

For descriptive purposes the Bay is divided into three basins separated by both natural and man-made structures (Wilson, 1975). The north basin extends from Dumfoundling Bay south to the Rickenbacker Causeway; central basin from the Rickenbacker Causeway south to Featherbed Bank; the southern basin extends from Featherbed Bank to the Arsenicker Keys.

The north basin has been, for all practical purposes, totally developed. The area is bordered on the east by the barrier islands of Miami Beach and Virginia Key, and on the west by developed shorelines. In excess of 40% of this area has been either dredged or filled (Biscayne Bay Management Plan, 1981) and the shoreline is almost completely seawalled (Roessler and Beardsley, 1975). Located within this area is the Port of Miami and the Miami River where on and off loading of cargo, ship building and repair take place and many industrial complexes are located.

The central basin is commonly considered a transition zone between the heavily urbanized areas of the north basin and the relatively undeveloped southern portions of the Bay. This area contains several large marinas and is used for commercial and recreational purposes.

The southern basin is relatively pristine although several canal systems draining urban and agricultural areas empty into it. This area contains the Biscayne National Park. The Park was originally established in 1968 as the Biscayne National Monument and covers 390 km². Most of the mangrove shoreline is still relatively intact. The only prominent man-made structures visible from this area are the Cutler and Turkey Point power plants.

1.2.3. Climatic Conditions

The low latitude of southeastern Florida, and its proximity to the Atlantic Ocean and Gulf Stream, produce a subtropical marine climate characterized by very mild winters and warm summers. The mean annual air temperature for Miami is 24 °C (Veri *et al.*, 1975) and ranges from a low of 18 °C in January to a high of 32 °C in August. The average annual precipitation is 1524 mm (Buston, 1962) of which 73% falls during the summer months (May to October). Prevailing moderate winds are easterly and southeasterly and approach the mainland from over the water. These sea breezes help to temper the climate.

1.2.4. Ecology

Biscayne Bay is shallow throughout, vertical stratification is rare and circulation is predominantly one layer (Lee, 1975). The tides are semidiurnal and have a mean tidal range of 0.76 m at the Port of Miami entrance. This tidal amplitude decreases to the south reaching 0.22 m in Card Sound (Schneider, 1969). Input of coastal waters to the Bay occur through tidal channels (Baker's Haulover, Government Cut, Norris Cut, Bear Cut, The Safety Valve, Sands Cut, Caesar's Creek, Broad Creek and Angelfish Creek) along its eastern edge. The freshwater inputs are introduced via small mainland rivers, creeks, canals, groundwater percolation and rainfall.

Water temperatures average approximately 17 °C during the winter and 31 °C in the summer. Extremes measured during a 5 year study were 9 °C to 35 °C at shallow water stations (Roessler and Beardsley, 1975).

Salinity of the Bay is influenced by rainfall, although this relationship is modified when the flood gates of the numerous drainage canals are opened. During the wet season the salinity gradient of the Bay increases from west to east. This situation can be reversed though during periods of drought.

The bottom communities of the Bay have recently been surveyed extensively and mapped by the Dade County Department of Environmental Resources Management (G. Milano, pers. com.). This information reveals that the majority of the bay bottom consists of mixed seagrasses (*Thalassia testudinum*, *Syringodium filiforme* and *Halodule wrightii*). Other large areas of the bay bottom consist of a mixture of seagrasses and hard bottom communities (soft corals and/or sponges).

The Bay is populated with 468 species of fishes representing 71 families. Ninety species are of commercial importance, 89 are considered to be sport fishes, and 128 are important forage fishes. The commercial species are predominantly invertebrates, and include shrimp, spiny lobster, stone crab, and blue crab. Sport fishing consists mainly of the Spanish mackerel, grunts, crevalle jack, snappers, king mackerel, bluefish, sea trout, snook, tarpon and bonefish (de Sylva, 1970).

1.2.5. Economy

It was estimated in 1975 that the local marine industry, which includes shipping, cruise lines, boat manufacture, sales and service, shipyards, marinas, bait and tackle shops, etc., contribute 20% to the Dade County economy. This ranks it third in economic importance preceded by tourism and the airlines. Dade County's main harbor facilities are the Port of Miami and the Miami River. The Port of Miami leads all Florida ports in dollar value of imports and exports. In 1973, the combined ports handled in excess of 8 million tons of freight. Incoming cargo consists mainly of fuel oil and gasoline, foodstuffs and raw materials while outgoing cargo consists of manufactured goods, locally produced agricultural products and foodstuffs bound for Caribbean islands and Latin America. Approximately 3 million tons of freight is shipped between Jacksonville, Miami, and Key West via Biscayne Bay and the Intracoastal Waterway. Fuel oil leads all other commodities shipped via this route in volume.

The commercial fisheries of the Bay are dominated by the live bait shrimp industry which in 1975 had a wholesale value of \$640,000 followed by dead shrimp (\$23,700) (Wilson, 1975). Large quantities of shellfish are also landed in Dade County but the majority of these are caught in areas other than Biscayne Bay.

2. Methods

2.1. Study Area Location

Biscayne Bay is located along the southeast coast of Florida (Figure 1). The study area extended from Dumfoundling Bay (lat. 25° 58' N; long. 80° 15' W.) to Card Sound (lat. 25° 24' N; long. 80° 17' W). The study area is contained almost entirely within Dade County. Only its most northerly and southerly extremities extend into Broward and Monroe Counties, respectively.

2.1.1. Sample Station Locations

One hundred fifty-five stations were sampled for bottom sediments in Biscayne Bay during the first year of the study. Figure 1 presents their location and Appendix A gives the latitude, longitude and coring method used. The location of each sampling station was chosen by assessing multiple criteria relating to its usage by man and other biotic and abiotic parameters. A detailed description of the selection criteria used is presented in the following section.

Sampling stations for the second year of the study were located in the Little River, Miami River, Snapper Creek, Goulds Canal, Black Creek and Military Canal. These areas are outlined on Figure 2 and the sampling stations occupied for water and sediment collections are indicated. Appendix B lists the latitude, longitude, type of sample (water and/or sediment) and method of coring used. [FIGURE 2 IS MISSING IN THE ORIGINAL.]

2.1.2. Criteria for Station Selection

The sediment collection sites for the first year of the study were selected by incorporating criteria relating to the physical, chemical, and biological processes and man's historical, present and future usage of the Bay. The second year study focused on areas where petroleum contaminants had been identified during the first year of research.

The selection criteria for sample stations for the first year involved a review of the available scientific literature concerning hydrocarbons in general and Biscayne Bay in particular (see Appendix C). In addition, consultations with research faculty, local, county, state and federal agencies were conducted. These tasks produced a great deal of useful information which was synthesized into a set of selection criteria. These criteria are discussed below and summarized as to their relationship to the sample collection stations in Table 1.

2.1.2.1. Previous Studies and Dade County Water Quality Monitoring Stations

Previous studies of the pollution problems of Biscayne Bay have been centered within the confines of the northern basin (Hela *et al.*, 1957; McNulty, 1961, 1970; Austin, 1971; D'Amato, 1973; Buck, 1976; Sigel *et al.*, 1976; Voss, 1976; Thorhaug *et al.*, 1976; Waite, 1976). Although most of these studies are well documented this area has been extensively dredged and many of the sampling stations used in previous studies are no longer there. The areas not effected by dredging or other activities were incorporated within the sampling program.

In 1978, the Dade County Department of Environmental Resources Management began monitoring the water quality at 48 stations positioned throughout Biscayne Bay. To augment this database sample stations for this project were positioned on or near pre-existing county stations.

2.1.2.2. Oil Sensitivity Index

The distribution of oil-sensitive coastal resources in south Florida has been determined by the South Florida Regional Planning Council (1981) using a mapping system incorporating an Environmental Sensitivity Index (ESI) developed by Gundlack and Hayes (1978). The ESI integrates natural and man-made geomorphic features with biological and living resources (e.g., nesting sites, rookeries) information to rank environments by their sensitivity. The ranking ranges from 1 to 10, with 1 being the least sensitive (exposed vertical rocky shores and seawalls) and 10 (mangroves) being the most sensitive. Sampling stations have been established along shorelines with an ESI of 8 or higher (8 = sheltered rocky shores and seawalls, 9 = sheltered tidal flats, 10a = mangroves, 10b = sheltered mangroves).



Figure 1. Biscayne Bay study area and sampling station locations for the Year 01 study.

Table 1. Criteria used in selecting the first year's sediment sampling stations.

PS = previous studies; CS = Dade County water quality station; OSI = oil sensitivity index; ST = sediment type; VT = vegetation type; C = circulation; SI = supra and intertidal areas; BF = boating facilities; PBF = proposed boating facilities; DDR = boating departure and destination routes; PA = preferred anchorage; DED = dredge, spoil, erosional or depositional area; LU = land usage.

SELECTION CRITERIA

Sample #	PS	CS	SO	ST	VT	C	IS	BF	PBF	DDR	PA	DED	LU
1				X	X	X							
2				X	X	X							
3								X					X
4								X			X		
5		X		X	X					X			
6				X	X					X			
7				X	X					X			
8				X	X					X			
9				X	X					X			
10				X	X								
11				X	X								
12				X	X	X							
13			X	X	X	X							
14				X		X	X						
15				X	X	X							
16			X	X		X	X						
17	X	X								X		X	
18				X			X					X	
19										X			
20		X		X	X								
21				X	X								
22				X									
23										X			
24					X		X						
25						X				X			
26						X							
27						X				X		X	
28						X							
29				X	X								
30			X	X			X						
31				X									
32		X											X
33						X							X
34						X							X
35		X											X
36						X						X	
37				X			X					X	
38		X								X			
39				X		X	X						
40					X	X							

Table 1. Criteria used in selecting the first year's sediment sampling stations (cont).

PS = previous studies; CS = Dade County water quality station; OSI = oil sensitivity index; ST = sediment type; VT = vegetation type; C = circulation; SI = supra and intertidal areas; BF = boating facilities; PBF = proposed boating facilities; DDR = boating departure and destination routes; PA = preferred anchorage; DED = dredge, spoil, erosional or depositional area; LU = land usage.

SELECTION CRITERIA

Sample #	PS	CS	SO	ST	VT	C	IS	BF	PBF	DDR	PA	DED	LU
41	X				X	X							
42						X							
43				X		X	X						
44		X		X			X			X		X	X
45				X		X	X					X	
46		X		X						X			
47		X								X		X	
48				X			X					X	
49												X	
50		X				X							
51		X						X	X				X
52		X								X		X	
53						X				X			
54						X		X					X
55		X								X		X	
56	X										X		X
57	X										X		X
58	X										X		X
59	X										X		X
60	X										X		X
61	X										X		X
62		X										X	X
63								X		X	X		X
64								X	X	X	X	X	
65										X		X	
66		X						X	X	X			X
67			X				X						
68										X			X
69			X		X								
70	X			X									
71				X		X							
72	X						X			X		X	X
73							X	X	X	X			X
74	X			X	X								
75													X
76	X												
77	X					X	X					X	
78	X			X								X	
79	X			X								X	
80					X	X							

Table 1. Criteria used in selecting the first year's sediment sampling stations (cont).

PS = previous studies; CS = Dade County water quality station; OSI = oil sensitivity index; ST = sediment type; VT = vegetation type; C = circulation; SI = supra and intertidal areas; BF = boating facilities; PBF = proposed boating facilities; DDR = boating departure and destination routes; PA = preferred anchorage; DED = dredge, spoil, erosional or depositional area; LU = land usage.

Sample #	SELECTION CRITERIA												
	PS	CS	SO	ST	VT	C	IS	BF	PBF	DDR	PA	DED	LU
81				X	X	X							
82					X		X						
83	X												
84				X		X							
85				X	X								
86											X		
87				X		X							
88				X	X								
89				X	X						X		
90	X												
91			X			X					X		
92			X				X				X		
93		X	X					X			X		
94	X		X				X				X	X	
95		X		X	X	X	X				X		
96		X			X	X					X		
97											X		
98		X									X		
99			X	X	X		X						
100			X				X						
101		X						X	X	X			X
102													X
103		X											X
104			X				X						X
105													X
106													X
107			X				X						X
108			X				X						
109	X		X									X	X
110	X												
111											X		
112							X	X	X				X
113		X		X	X								
114		X		X	X						X		
115		X		X	X						X		
116			X			X							
117			X			X					X		
118	X		X				X						
119	X					X					X		
120				X	X								

Table 1. Criteria used in selecting the first year's sediment sampling stations (cont).

PS = previous studies; CS = Dade County water quality station; OSI = oil sensitivity index; ST = sediment type; VT = vegetation type; C = circulation; SI = supra and intertidal areas; BF = boating facilities; PBF = proposed boating facilities; DDR = boating departure and destination routes; PA = preferred anchorage; DED = dredge, spoil, erosional or depositional area; LU = land usage.

SELECTION CRITERIA

Sample #	PS	CS	SO	ST	VT	C	IS	BF	PBF	DDR	PA	DED	LU
121				X	X								
122										X			
123			X		X		X						
124													X
125			X	X	X		X						
126				X	X					X			
127							X			X			
128										X		X	
129				X	X					X			
130				X	X					X			
131										X			
132										X			
133	X	X		X						X			
134	X			X	X								
135						X						X	
136									X	X		X	X
137									X	X		X	X
138						X							X
139				X		X							X
140				X		X							X
141						X							X
142						X							X
143						X							X
144						X							X
145						X				X			X
146						X		X	X	X			
147		X								X			
148								X		X			X
149						X							X
150						X							X
151	X			X		X							
152	X			X								X	
153						X							X
154													X
155	X					X							X
156					X	X							

2.1.2.3. Sediment Type

Areas of the Bay exhibiting different sediment types were evaluated for sampling using three criteria. These were: thickness of substrate, amount of organic material, and particle size distribution.

The sediment depth in Biscayne Bay is highly variable and in many areas less than 1 m (Wanless, 1976). Sediment build-ups, which are present, form distinct patch-like accumulations and are controlled by several factors (i.e., wind, dredging, currents and storm events). Six major recent sediment regimes have been recognized by Wanless (1976) based on sediment type, body geometry and depositional controls. Areas representative of these regimes as well as transitional areas were sampled.

The deposition and incorporation of petroleum hydrocarbons into marine sediments is well established in the literature (Blumer and Sass, 1972; Clark, 1966; Farrington, 1980; LaFlamme and Hites, 1978; National Academy of Sciences, 1975; Zafiriou, 1973). The amount of *n*-alkanes sorbed by marine sediments has been shown by Meyers (1975) to be dependent on sediment particle size. The smaller the particle size the greater the sorption of hydrocarbons. Samples were collected which incorporated sediments of different particle sizes.

The affinity of petroleum hydrocarbons for organic compounds has been investigated by Meyers and Quinn (1973) who suggest that organic matter may mask sorption sites in sediment, thereby reducing the available surface area for sorption of petroleum components. Suess (1968) states that an organic material coating on particles will enhance the sorption process by providing a lipophilic layer. Thus the organic content of the sediment has an important effect on its uptake of petroleum. Sediment samples were collected from environments which contained variable concentrations of organic matter. These ranged from relatively organic-free quartz sands to highly organic peat substrates.

2.1.2.4. Vegetation Type

Forty-three percent of the Bay bottom is covered with seagrasses (Snedaker and Brook, 1976). The majority of the seagrasses are *Thalassia testudinum* (turtle grass), *Halodule wrightii* (Cuban shoal grass) and *Syringodium filiforme* (manatee grass). The primary functions of these plants are: 1) food source; 2) shelter and protection; 3) sediment stabilizer; and 4) a chemical sink in terms of nutrient cycling (Thorhaug *et al.*, 1976). The environmental health of Biscayne Bay is linked directly to these seagrass communities which are relatively sensitive to pollution. The effect of pollutants on seagrass often results in mortality, thus causing the whole community dependent on them to disappear (Thorhaug *et al.*, 1976). A representative number of samples incorporating different types to vegetation were included in the sampling program.

2.1.2.5. Circulation

The dominant exchange mechanisms within the Bay are wind and the semidiurnal tides (Lee and Rooth, 1973). Tidal current velocities through passes along the eastern side of Biscayne Bay average 25 to 100 cm/sec (Hela *et al.* 1957). Within the Bay, tidal currents are less than 50 cm/sec while portions of the southwestern margin appear isolated from tidal circulation (Weiss, 1948). Several nodal points of tidal convergence are recognized within North Bay, between 49th Street and 79th Street Causeways (Lee and Rooth, 1973). Samples from areas of maximum and minimum exchange were collected.

2.1.2.6. Supratidal and Intertidal Areas

The stranding of pelagic and coastal oil slicks and tar balls is generally restricted to supratidal and intertidal environments. Oil coverage in these environments is controlled by the slope of the exposed area, with maximum amount accumulating on gently sloping or flat surfaces. Sediment samples representative of major intertidal environments such as the Safety Valve, Featherbed Banks, Arsenicker Keys, Middle Ground Shoals and mangrove shorelines were collected.

2.1.2.7. Boating Facilities

A unique combination of climate, urban and physical geographic features permit year round public access to all types of boating related activities within Biscayne Bay. In 1975-1976, there were over 250,000 recreational boating trips made from Dade County, approximately 187,500 were made within the Bay (Austin, 1971). Support facilities such as marinas and launching ramps are an integral part of recreational as well as commercial activities. In 1981, there were 78 marinas and 5 ramps marginal to Biscayne Bay (Biscayne Bay Management Plan, 1981). In many instances, boat maintenance and repair operations release paint, oil and grease into bay waters. Boyd (1976) estimates that 1% of all coastal oil pollution results from the activity of marina facilities. Marinas, harbor facilities, and other marine related industries were sampled.

2.1.2.8. Proposed Boating Facilities

Dade County Department of Environmental Resources Management estimates that 42 additional support facilities and 42 additional marinas with wet berths for recreational and commercial boaters are planned for construction in Biscayne Bay. Seven are presently under construction. The location of existing and planned boating facilities were incorporated in sample site selection.

2.1.2.9. Boating Departure Routes and Destinations

The Intracoastal Waterway and privately dredged channels are major thoroughfares for industrial, commercial and recreational transport throughout Biscayne Bay. As stated earlier, 3 million tons of cargo were transported in this manner, with the majority of it being fuel oil (Wilson, 1975). Channel sediments, resuspended by boat wakes, prop wash and hull scrapes may incorporate surface oil slicks into bottom deposits. This mechanism may result in elevated concentrations of petroleum hydrocarbons between commonly traveled departure and destination routes. Sampling stations were established along all major marine routes.

2.1.2.10. Preferred Anchorage

The recreational features of Biscayne Bay accessible by boat are numerous. Most of these are located along the southern boundaries of the Bay. The preferred anchorages at these sites are of interest for monitoring the effects of recreational boating on petroleum hydrocarbon distribution.

2.1.2.11. Dredging, Spoil, Erosional and Depositional Areas

Man-made holes and canals marginal to Biscayne Bay appear to contain complete sequences of layered sediment that have accumulated since their construction (Harlem, 1979). Once sediments are deposited in the patchwork of deep dredge holes they are less susceptible to resuspension. It is likely these areas may be prominent sinks for pollutants in particulate form. Several of these areas were incorporated into the sampling program.

The scouring and redistribution of contaminated sediments is an important mechanism of pollutant transport. Dredging, winter cold fronts, and hurricanes are the principal agents of sediment transport within the Bay. The strong northerly winds of cold fronts cause the redistribution of fine sediments and the southward transport of unstabilized sands on the Bay bottom (Warzeski, 1976). The sedimentary effects of hurricanes are more pronounced due to the far greater energy of hurricane winds. These storms can remove or deposit centuries of sediment accumulations in one single event thus, the classification of environments as erosional or depositional is necessary to accurately interpret the spatial distribution of the sediment analysis. Samples from both erosional and depositional environments were collected.

2.1.2.12. Land Use

Between the years 1896 to 1950, the process of urban settlement about Biscayne Bay was rapid and often unplanned (Prestamo and Greenan, 1976). During these 54 years, the conversion of agricultural land to residential use established the present urban distribution pattern. Within the past 30 years the urban process has become the development of open land with very few cases of redevelopment. The effects of urbanization on surface hydrology have been two fold (Delleur, 1981). The first factor is the covering of parts of the catchment (substrate) with impervious surfaces such as roofs, streets, sidewalks and parking lots. Dust, dirt, sediments and pollutants of various kinds, settled from the atmosphere and generated by the urban activities, accumulate on these impervious areas between storm events and are eventually washed into the Bay by runoff during rains and storm events.

The second factor effecting the urban runoff process is a result of the improvement of the hydraulic efficiency of the drainage network through the straightening and lining of channels, construction of sewers and culverts. The increased flow velocities enhance the transport of suspended solids and pollutants. The pollutant loading at the downstream end (the Bay) of the urban runoff conveyance is thus increased. To assess the impact of urbanization, stations were located within and around urban developments and their drainage areas.

2.1.3. Collections

In the two-year program, sediment samples were collected by three different coring techniques: vibra, remote and push. During first year, in order to obtain a good spatial coverage of the Biscayne Bay lagoonal systems, a total of 156 cores were collected, this included 15 vibra cores, 47 remote cores, 62 short push cores, and 32 long push cores. In the second year, the goal was to investigate and to quantify the areas of high petroleum contamination found during the first year. Thus, 22 cores in three selected areas were obtained, 19 remote cores and 3 short push cores. Replicate cores within a square meter of each other were collected at every station during the first year study. The sediment samples for intercalibration were grab samples collected outside Biscayne Bay in deep water southeast of Miami. Except for intercalibration samples, Figure 3 indicates the steps followed for each core from collection to analysis. The intercalibration samples which were collected with a Peterson dredge, were placed in jars, covered with aluminum foil, capped, labeled and carried on ice from ship to freezer.

Biological samples were collected in cooperation with the Fisheries and Habitat Management of Biscayne Bay study conducted by the Rosenstiel School of Marine and Atmospheric Science and funded by the Dade County Department of Environmental Resources Management. All samples, after collection, were stored under lock and key, subsampled and analyzed using procedures, methodologies and quality assurance programs which guaranteed court competence and minimized contamination.

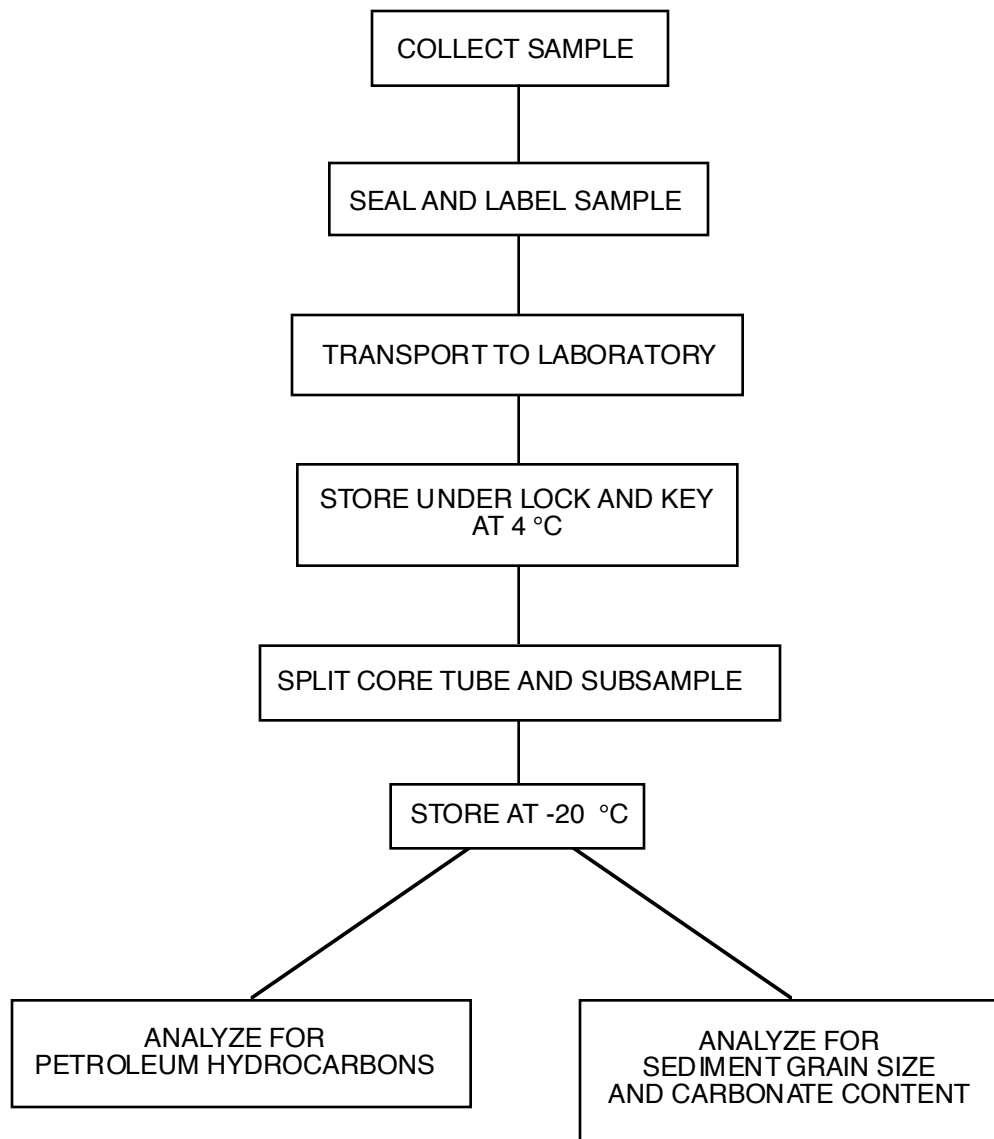


Figure 3. Flow diagram of sample collection and storage procedures.

The core tube assembly, used for all sediment collections, consisted of 7.6-cm diameter aluminum irrigation tubing, 7.8 cm diameter circular, aluminum liner plates, and 7.5-cm plastic core caps. Prior to use, all core tubes, after being cut to the appropriate length, and liner plates were washed with Alconox, rinsed with tap water and burned at 500 °C in a kiln to remove all organic contaminants. When cooled, the tubing was sealed by securing aluminum foil over both ends of the core tube. The circular liner plates were fitted into the caps and then secured to both ends of the core tube.

Short cores were obtained when sediment thickness was less than 20 cm. The tube was submerged and the core caps were removed. The short tubes were inserted by hand to bedrock, capped, withdrawn from the sediment and transported to the surface in an upright position.

Long 1.3-m push cores were collected by securing a pair of adjustable "T" handles near the top of the capped core tubes. The core caps were removed only when the apparatus was submerged below the surface (micro) layer. The tube was pushed into the sediment, the aluminum lined caps were placed over the top of the core tube prior to, and under the core tube bottom after removal from the sediment.

Areas that represented possible health hazards to divers were sampled by remote coring. This process involved the use of 1.3 m length of aluminum core tubing connected to a reusable extender, equipped with a one-way valve. The sampling device was pushed into no more than 1 m of sediment and the valve was closed by inserting a hexane-rinsed stainless steel sphere (7 cm diameter) into the extension tube. During the extraction of the core tube from the sediment the sphere created a vacuum which retained the sediment in the tube until capped at the surface. The remote coring method was preferred to Box coring and Grab sampling because, 1) possible sample exposure to contaminants emanating from the sampling vessel were eliminated; 2) possible sample exposure to surface films and water-borne pollutants that may be present at sample locations were eliminated; 3) the sample does not contact any lubricated moving parts; 4) undisturbed surface samples are easily and quantitatively obtained.

Sediment samples that required penetration to intercept deeper depositional layers predating anthropogenic impacts were attained by using a portable vibra core system (Lanesky, 1979). The system consisted of a vibrating head, mounted perpendicular to the top of a cleaned aluminum core tube, that initiated a low amplitude standing wave. This standing wave fluidized and displaced the sediments adjacent to the core tube and allowed it to pass through the sediment with minimal resistance. Core recovery averaged between 90 and 100%. Actual coring time ranged from 0.5 to 5 minutes. Preservation of fine laminations and cross stratification in x-ray radiographs and slabbed, impregnated cores showed that this technique gave minimal distortion along the core tube walls (Lanesky, 1979).

After collection the core tubes and caps were coded, sealed with tape, signed and dated. Any undue disturbance during this process necessitated repeating the procedure until intact samples were obtained.

At each station the latitude and longitude in degrees, minutes and seconds as well as the proximity of navigational and prominent landmarks, were recorded in permanently bound, waterproof field notebooks. Station number, sample number, date, time, water and air temperature, bottom type, salinity, water depth and coring method were also recorded. Prior to station departure, the supervising individual checked the log book and the sample to verify that they had been collected, identified and sealed correctly. At the end of each day's notes the page was signed and dated by the person who performed the work. The team leader checked all notes for accuracy, correct transfer of data, completeness, legibility and neatness.

Upon arrival at the laboratory the sealed and coded samples were transferred by project personnel to a core locker maintained at 4 °C, secured in an upright position and kept under lock and key.

Within 48 hours of collection the water above the sediment in the core tubes was removed with a large clean pipette. Once the water had been removed the core tubes were split by making two shallow longitudinal slices with an electrical circular saw. Samples for petroleum hydrocarbon analyses were collected by sub sampling from only the center of the core. This was done by removing a 5 cm long cylinder shaped subsample, with hexane rinsed stainless steel spatulas, and placing it on clean aluminum foil. An inner 2 cm diameter plug was removed by inserting a cleaned, organic-free 50 mL glass beaker through the center of the subsample. The sample was placed in a organic-free glass jar and covered with a foil lined screw top. It was then transferred to a locked freezer maintained at - 20 °C until extracted.

The thin layer from the outside of the remaining sediment was shaved away and the remains were placed in a similar glass container for sediment grain size and organic analysis. These samples were also stored at -20 °C in a locked freezer.

Biological samples for the duration of the two year project were collected in cooperation with Mr. Steve Berkeley, Principal Investigator for the Fisheries and Habitat Management of Biscayne Bay study. Samples were collected by trawl and traps in northern, central and southern areas of the Bay. In addition, during the second year study, samples were collected when available from the five study areas. Immediately upon collection samples were wrapped in aluminum foil, labeled (species, number, time, date, collection area and method), sealed in a plastic bag and placed on ice. After returning to the laboratory the samples were placed under lock and key in a freezer maintained at -20 °C until analysis could be completed.

The water samples, that were examined for hydrocarbons during the second year program, were collected in 19-liter glass bottles. To obtain these samples, the glass bottles were placed in a wooden frame, covered with a fitted wooden cover secured into place with eye bolts and stoppered with an aluminum covered stopper fitted with an eye-bolt. Before lowering this sampler into the sea, a lanyard was run through the eye bolts and secured to the winch cable, a long cord was fastened to the eye-bolt in the stopper and a lead weight was attached to the bottom of the frame. With the winch the BC (Brown-Corcoran) sampler was lowered into the sea to the desired depth, and the stopper was removed by pulling the cord. When the bottle was filled with water, the sampler was raised to just below the surface stoppered with an aluminum covered stopper, and then brought aboard. Here it was labeled, sealed and set aside for later analysis in the laboratory.

2.1.4. Quality Assurance

Great care was taken during the sampling and subsampling process to insure that contamination was kept to a minimum and chain of custody was maintained. This was accomplished by adhering to strict clean procedures, keeping all samples under lock and key and maintaining detailed field and laboratory records.

The core tubes were washed, rinsed in tap water and burned at 500 °C in a kiln to remove any sources of organic contamination. Immediately after being removed from the kiln the core tubes were sealed with clean aluminum foil. The foil was secured in place with plastic core caps lined with aluminum discs that had been cleaned using the same procedure as the core tubes. This insured a contaminant free container for sample collection.

During collection of the sediment samples the core tubes were kept sealed until they were fully submerged, this minimized any contamination by the water column and/or surface micro layer.

The collected cores were resealed with the foil and aluminum disc lined plastic core caps immediately after collection. Care was taken to keep the collected samples in a vertical position at all times to maintain its internal integrity. Immediately after being brought on board the support vessel the plastic caps were secured with tape to the core tube. This prevented the sample from falling out of the collection tube and also secured the sample against tampering. The core was labeled as to station number, top and bottom. Replicate cores were taken at each station within one meter of each other. This supplied a complete set of replicate cores from all the sampling stations should they be needed. The collected cores were under the direct responsibility and supervision of the field supervisor during collection and storage.

The samples were returned to the laboratory and transferred directly to a locked, refrigerated core locker. The samples were stored in an upright position until they could be subsampled. All materials coming into contact with the samples during subsampling were either hexane rinsed or burned at 500 °C to remove organic contaminants. The subsample fractions (for hydrocarbon, grain size and organic analysis) were stored in burned, glass screw top jars with aluminum foil liners. The jars were stored in a locked freezer at -20 °C until analysis could be performed.

Biota samples were collected using both trawl and traps. Immediately after removing the specimen from the collection device it was wrapped in clean aluminum foil and labeled as to time, date, method and location. The specimen was then placed in a plastic bag which was sealed with tape. This secured and the sample from any contamination and tampering. The sample was then placed on ice until transported to the laboratory. On arrival at the laboratory the samples were stored in a locked freezer maintained at -20 °C.

The water samples were brought to the laboratory and extracted immediately if possible. If there were more samples than could be extracted at once, they were kept sealed and stored in a cold room at 4 °C. Holding time was not more than 48 hours.

2.2. Sediment Grain Size Analysis

A representative subsample of the collected surface sediments was analyzed for grain-size fractions and distribution. The samples were freeze-dried in a Virtis Model No. 10-146-MB-BA freeze dryer. A representative subsample was obtained by recovering 35 ± 5 g from a Jones-type, H. W. Curtin sediment splitter. The samples were fractionated into three size classes, $>2000 \mu$ (gravel), 2000 to $>63 \mu$ (sand), and $<63 \mu$ (silt-clay) by mechanically dry sieving for 15 mins. through 2000- μ and 63- μ sieves.

The $>2000 \mu$ fraction (gravel) was dried at 105 °C to a constant weight, cooled to room temperature in a desiccator, weighed and archived. The $<63 \mu$ fraction was transferred into a labeled one-liter cylinder. The 2000 μ to $>63 \mu$ fraction was mixed with a 4% (w/v) solution of sodium hexametaphosphate and placed in a Bransonic 12 sonic bath for 15 mins. After sonification this fraction was rinsed onto a 63- μ sieve with one liter of distilled water. The particles which passed through the 63- μ sieve were combined with the $<63 \mu$ previously stored in the labeled, one liter cylinder. The $<63 \mu$ fraction was transferred to a labeled aluminum weighing dish, dried to a constant weight at 105 °C, cooled to room temperature in a desiccator, and weighed.

The weight of the $<63 \mu$ fraction was calculated by subtracting the sum of the $>2000 \mu$ and the 2000 μ - $>63 \mu$ fraction weights from the total sample weight. From this data, dry weight percentages for gravel ($>2000 \mu$), sand (2000 to $>63 \mu$), and silt-clay ($<63 \mu$) fractions were calculated.

2.3. Organic and Carbonate Content Analysis

The determination of the total organic matter and carbonate content of the sediments was performed by using a modified version of Galle and Runnel's (1960) weight loss on ignition process. The procedure uses a high temperature muffle furnace to oxidize both organic matter and carbonate. This method has been proven to be 100% efficient for the recovery of total organic matter and carbonate bearing minerals in modern marine sediments (Byers *et al.*, 1978; Dean, 1974). However, this analysis does not distinguish between magnesium (Mg), strontium (Sr) and calcium (Ca) bearing carbonate minerals. It has been reported (Wanless, 1976) that of the carbonate bearing minerals in Biscayne Bay, calcium carbonate (CaCO₃) is significantly more abundant. Therefore, all carbonate values are reported as percent calcium carbonate.

Freeze dried, representative quantitative subsamples were obtained by using a Jones-type, H. W. Curtin sediment splitter. The split samples were stored in clean 25 mL Erlenmeyer flasks, oven dried at 105 °C to a constant weight and cooled to room temperature in a desiccator. A sample of approximately 10 g was transferred into a ceramic crucible of known weight. The combined crucible and sediment was then weighed, and placed in a rack for ignition.

The samples were placed in a muffle furnace and ignited for 2 hours at 500 °C. They were then cooled in a desiccator to room temperature and weighed. The difference (i.e. weight loss) between this weight (minus the crucible weight) and the initial dry weight was the quantity of total organic matter (TOM) in the sediment (Equation 1).

$$\text{dry wt. sample} - \text{wt. after ignition at } 500 \text{ }^{\circ}\text{C} = \text{wt. total organic matter (TOM)} \quad (1)$$

The percent by weight of TOM in the sediment was calculated using Equation (2).

$$\frac{\text{wt. TOM}}{\text{dry wt.}} 100 = \% \text{ dry weight TOM} \quad (2)$$

The samples were then returned to the muffle furnace, ignited for one hour at 1000 °C, cooled in a desiccator to room temperature and weighed. The weight loss between 500 °C and 1000 °C was the amount of carbon dioxide (CO₂) evolved from the carbonate minerals in the samples. The weight of CO₂ evolved was converted to percent carbonate material by the following equations (3 - 5):

$$\text{wt. after } 500 \text{ }^{\circ}\text{C} - \text{wt. after } 1000 \text{ }^{\circ}\text{C} = \text{wt. CO}_2 \text{ evolved} \quad (3)$$

$$\frac{\text{wt. CO}_2}{0.44} = \text{wt. carbonate material} \quad (4)$$

where 0.44 is the atomic ratio of CO₂ in CaCO₃.

$$\frac{\text{wt. CaCO}_3}{\text{dry wt. sample}} 100 = \% \text{ dry wt. CaCO}_3 \quad (5)$$

Ten percent of each sample run were full procedural blanks. The blanks showed no weight changes during either the organic or the carbonate ignition procedure.

Twelve percent of the samples were run as replicates, to establish the precision of the method. The replicates were chosen to include samples of high and low percentages of both organic

matter and carbonate content. The organic matter ignitions had a mean variation of 0.3 percent with a standard deviation of 0.48. The carbonate ignitions had a mean variation of 2.1 percent and a standard deviation of 2.1.

Hirota and Szyper (1975) have shown that sediments with high (>50%) percentage of calcium carbonate can interfere with the accuracy of the organic measurements. The interference results from carbonate CO₂ evolution during the organic ignition (500 °C). For this reason a sample of pure CaCO₃ was run with every set of samples to determine the maximum limits of influence of CaCO₃ on organic matter (as Hirota and Szyper suggest).

Only 0.03 percent of the CaCO₃ standard was measured as organic carbon. However, no sample containing greater than 50% CaCO₃ had an organic content less than 1%; most containing greater than 2% TOM. Thus, the natural proportions of TOM and carbonate found in the sediments analyzed reduce the significance of this problem.

2.4. Hydrocarbon Analysis

2.4.1. Sediment

The methods used for the extraction of hydrocarbons were similar to those previously described (Blumer *et al.*, 1969; Farrington *et al.*, 1972; and Sleeter *et al.* 1974). Wet sediment (25 - 75 g) was weighed into cellulose thimble pre extracted with 1:1 benzene 0.5 N methanolic KOH solution. Five grams of sample were weighed onto a watch glass and placed in an oven at 105 °C for 3 hours for dry weight determination. Sediments were extracted and saponified by refluxing for 48 hours with the 1:1 benzene:0.5 N methanolic KOH solution. A plug of clean, light copper turnings was placed beneath the cellulose thimble to remove the elemental sulfur from the sample. A 0.5 mL volume of androstane and *o*-terphenyl (1 mg/mL) was added to each sample as an internal standard. Blanks were run with each set of 6 samples.

After 48 hours, the solution containing the extracted hydrocarbons was removed from the Soxhlet and poured into a 500 mL separatory funnel. Any residue left in the round bottom flask was washed with three small aliquots of hexane and these washings were added to the extract.

Three successive 50-mL volumes of hexane were shaken vigorously with the extracted methanol:benzene mixture, separating the aqueous and organic layer, the three successive hexane:benzene mixtures were then combined and the methanol aqueous phase was discarded.

The hexane-benzene mixture was washed first with organic free water (prepared by passing distilled water through a large XAD-2 resin column) and then with a saturated sodium chloride solution to remove trace amounts of methanolic KOH. The combined extracts were dried over 1 g of anhydrous sodium sulfate to remove residual water. The methanol and water was discarded. The extract was concentrated to 5 mL in a Kuderna-Danish apparatus using a water bath. The benzene-hexane concentrate was transferred into a 12-mL evaporator tube, then the concentrate was dried in a block heater under a stream of pure nitrogen gas. The dry sample was then diluted to 1 mL with hexane, placed in a 5 mL vial with a foil-lined screw top and stored under refrigeration at 4 °C.

An alumina-silica gel column was pre-wet with 12 mL of hexane and the sample was transferred onto a (10 x 1 cm) column packed with 1.25 cm of alumina over 2.5 cm of silica gel. Both the alumina and silica gels had been partially deactivated with 2% organic free water prior to packing. The aliphatic fraction (f₁) was eluted with 12 mL of hexane and a similar volume of benzene was used to remove the aromatic fraction from the column. Care was taken

not to allow the hexane level to go below the alumina layer during aliphatic elution. The aliphatic fraction was reduced to 1 mL on a block heater under stream of pure nitrogen gas, while the aromatic fraction (f_2) was brought to almost dryness and then diluted to 1 mL. The resultant samples were then stored in a refrigerator at 4 °C until they were analyzed by gas chromatography.

2.4.2. Tissue

The procedure for tissue analysis was similar to those described for the sediment and consisted essentially of saponification, separation into aliphatic and aromatic fractions and quantitative determination. However, in the case of tissue there was a slight change in the procedure for Soxhlet extraction as ethanolic KOH was used instead of 1:1 benzene: methanolic KOH. This reduced the possibility of ester formation.

The above procedure was used for tissue extraction during the first year study, however, it was found that more complete and faster extraction could be attained by placing the homogenized tissue in a round bottom flask, adding 150 mL of ethanolic KOH and extracting it for four hours under a reflux condenser. Thus, this procedure was used in the second year study. After the extraction, the mixture was poured into a separatory funnel and was extracted three times successively with 100 mL and two 50 mL portions of hexane. The alcoholic phase was then discarded, and the combined hexane extracts were washed free of caustic with organic free water and finally with saturated sodium chloride solution. The hexane extract was then poured from the separatory into an Erlenmeyer flask containing anhydrous sodium sulfate.

After drying the hexane extract was concentrated, separated into aliphatic (f_1) and aromatic (f_2) fractions on an alumina-silica gel column and again concentrated for gas chromatographic analysis as described previously.

The tissue sample was homogenized prior to extraction and copper was not necessary to remove sulfur from the tissue sample.

2.4.3. Water

In the laboratory, the 19-liter water samples were placed in a wooden frame over a large magnetic stirrer. The water sample was unsealed and the volume of each was adjusted to exactly 18 liters by siphoning down to the mark. The 100 μ L volume of androstane and *o*-terphenyl (1 mg/mL) was added to each water sample as an internal standard. Then a large egg-shaped spin bar and 500 mL of methylene chloride was added to each sample; the magnetic stirrer was turned on and the speed adjusted to give a deep vortex for good mixing.

After extracting in this manner for 24 hours, a glass siphon was inserted in each sample and the methylene chloride extract was drawn from the bottom of the water bottle into a separatory funnel. Then the siphon was raised and the water was drawn down. The siphon was then removed and the remaining water and methylene chloride poured into the separatory funnel.

The methylene chloride extract was separated from the water, dried over anhydrous sodium sulfate, and evaporated down in a Kuderna-Danish concentrator. The sample was picked up in hexane, separated from aliphatic (f_1) and aromatic (f_2) fractions on an alumina-silica gel column, concentrated on a block heater, and placed in vials by the same procedure as used for sediments.

2.4.4. Gas Chromatographic Analysis

A 1.0 to 2.0 μL volume of the concentrate was injected into a Tracor model 563 gas chromatograph. This gas chromatograph was equipped with dual flame ionization detectors and two fused quartz capillary columns. In the first year's program, a 15-m SE 54 and a 25-m SE 30 column were used for the determination of the aromatic and aliphatic compounds respectively. These columns were replaced with two 30-m J & W columns coated with SE 30 for better resolution in the second year's work. Hydrogen was used as the carrier gas and a flow of 30 mL/min. was maintained. For the first year's study, the chromatograph was set to maintain the injector and detector temperatures at 280 °C and the oven temperature was programmed from 60 °C to 300 °C at a rate of 10 °C/min after an initial hold of 2 minutes and a final hold of 300 °C for 10 minutes. The temperature programming was changed slightly for the second year's study and, in general, the injector and detector temperatures were maintained at 300 °C and the chromatograph was programmed for oven temperatures of 100 °C to 300 °C at 8 °C/min with no initial hold and a final hold of 5 minutes. A full description of conditions is shown in Table 2. All samples were injected in the splitless mode. Two Hewlett-Packard integrators model 3390A were programmed to record the retention time, areas under the peaks and to calculate the amounts of hydrocarbons from C_{12} - C_{30} . The integrators were calibrated with a standard mixture. The aliphatic mixture contained hydrocarbons from C_{12} through C_{30} including phytane, pristane and androstane. The calibration mixture used for the aromatics had naphthalene, phenanthrene, dibenzothiophene and pyrene as well as the internal standards *o*-terphenyl, 1-methylphenanthrene was added in the second year's study. The standard mixtures were run daily and the integrators were re calibrated as necessary.

The quantification of the chromatograms involved evaluating the known and unknown peaks, the internal standards and the unresolved complex mixture for their retention times and areas. Calibration mixtures were run to determine response factors (concentration injected divided by the area of peak). The integrators were programmed with time windows to detect all reference peaks in the C_{12} to C_{30} range and label them. In addition, it determined the area for all other peaks. The response factors for the internal standards, androstane for the aliphatics and *o*-terphenyl for the aromatics, were used to quantify the concentration of all unknown peaks and the unresolved complex mixture.

The intergrators were capable of integrating under only one set of parameters, therefore the unresolved complex mixture was quantified separately. This involved tracing the unresolved area on a sheet of paper, cutting it out, determining its area and correcting to units which were comparable to the other data generated by the integrator. The areas of the unresolved tracings were determined by a Hayashi Denko, Type AAM-5 Automatic Area Meter. This unit is a photoelectronic apparatus that automatically determines the area of any opaque or semitransparent material by the amount of light it reflects. The area was reported in cm^2 by the area meter, and converted to integrator units by a conversion factor. This information, the areas for the known and unknown peaks, the response factors, sample number, dry weight, volume injected, and final dilution volume were all entered into a computer program written to calculate and quantify this data. The program calculated the $\mu\text{g/g}$ concentration for all of the reference peaks, resolved (includes reference peaks and resolved unknown peaks), and unresolved (unresolved complex mixture) areas, total hydrocarbons, the carbon preference index (CPI), the percent recovery, and the following ratios; resolved/unresolved, pristane/phytane, C_{17} /pristane, and C_{18} /phytane. In the year-one program those samples that did not contain the internal standards were corrected to a standardized recovery.

Table 2. Gas chromatograph operating conditions for the second year study.

Descriptor	Column 1	Column 2
Column Type	SE-30	SE-30
Column length (m)	30	30
Column velocity (cm/sec)	41.7	41.4
Detector gases		
H ₂ (cc/min)	30	30
Air (SCHF)	1.0	1.0
Injection timer (sec)	30.5	30.5
Detector temperature (°C)	300	300
Injection port temperature (°C)	300	300
Temperature Program		
	Initial temperature 100 °C	
	Final temperature 300 °C	
	Program rate 8 °C/min	
	Initial hold 0 min	
	Final hold 5 min	

2.5. Radiocarbon Dating

To ensure the absence of any contamination during collection, transportation, subsampling, storage and analysis, sediment collected at a depth of 2 to 4 m were analyzed for hydrocarbons and ¹⁴C dated to ensure that they were pre anthropogenic. Ten samples representing both peat and shell substrates were collected. The samples were dated by the University of Miami, Beta Analytic, Inc. Sampling, storage, subsampling, and analysis followed the same procedures as all other sediment samples.

2.6. Computer Mapping

A computer program was used to graphically depict the spatially distributed information generated by this project and assist in its interpretation. The program, titled SYMAP, was developed by the laboratory for Computer Graphics and Spatial Analysis, Harvard Center for Environmental Design Studies, Graduate School of Design, Harvard University, Cambridge, MA. The package assigns values to the coordinate locations of data points or data zones, and can generate three basic types of maps; contour, proximal and conformant. For this study only the contour program was used. This program uses values assigned to a set of coordinate locations and interpolates between data points assuming a continuous variation exists between these points.

3. Intercalibration

Interlaboratory calibration exercises were carried out in the three laboratories (Mote Marine Laboratory, Jacksonville University and University of Miami) involved in hydrocarbon analysis during both years of the study. These exercises were undertaken to ensure the compatibility of results from all laboratories. Table 3 lists the samples exchanged during the two-year study.

Only the results from the offshore sediment samples are reported since all other intercalibration exercises have been completed and reviewed. Tables 4 and 5 presents the concentrations of the aliphatic and aromatic hydrocarbons and their key characteristics. Appendix F and G contains a more detailed report of the analyses. Figures 4, 5 and 6 show the chromatograms for the aliphatic fraction. As can be seen from the tables all of the samples contained very small amounts of hydrocarbons. This is what would be expected from a sample collected in non contaminated offshore environment. The only sample which showed any unusual characteristics was the Jetties sample collected by Jacksonville University. This sample contained a small UCM and had a homologous series from C₁₅-C₃₀.

4. Results and Discussion

4.1. Grain Size Analysis

Table 6 presents the distribution of grain sizes for the surface sediments. The data is reported on a percent dry weight basis for three size classes; gravel (>2000 μ), sand 2000 μ - >63 μ) and silt-clay (<63 μ).

The distribution of the gravel fraction ranged from 0 to 66 percent. The mean was 7.9 percent with a standard deviation of 11.19. Figure 7 is a histogram showing the distribution of samples analyzed. Sixty-eight percent of the samples were composed of 10 percent or less of gravel. The samples which contained high quantities of gravel were almost always associated with areas where spoil had been deposited or dredging had taken place. The percentage of sand in the sediments ranged from 1.3 percent to 98.4 percent. The mean value for the samples collected was 62.9 percent and the standard deviation was 25.00. Figure 8 is a histogram of the distribution of sand in the surface sediments. The majority of the samples contained in excess of 20 percent sand. The quantity of sand in the samples collected from the northern areas of the Bay showed a large variation which is most likely due to extensive dredging activities. The silt-clay fraction ranged from 0.6 to 98.7 percent. The mean was 29.18 percent and the standard deviation was 25.70. The silt-clay fraction accounted for less than 40 percent in most of the samples. The distribution for the silt-clay fraction is shown in Figure 9. There were 9 samples in which the silt-clay fraction exceeded 80 percent. These samples were distributed throughout the Bay. Several were associated with canal bottoms and dredge holes and two of the samples were collected from Featherbed Bank.

4.2. Organic and Carbonate Content

Table 7 presents the results of the organic matter and carbonate analyses of the surface sediments. Figures 10 and 11 are histograms of the organic matter and carbonate content of the sediments, respectively. The organic matter ranged from 0.17 percent to 33.22 percent. The mean value was 5.1 percent and the standard deviation was 5.10. The majority of the samples had organic contents of less than 8 percent. The samples with high organic matter content (>10%) were predominantly located in the southern areas of the Bay and usually associated with canal bottoms. Canals sampled in the northern areas of the Bay contained high

Table 3. Summary of intercalibration samples for the two-year study.

Originator	Sample
First Year	
Mote Marine Laboratory	South Louisiana Crude Oil Sediment spiked with Kuwait Crude Oil Tissue spiked with Kuwait Crude Oil Oyster Trout Mullet
Jacksonville University	Oyster Crab Sea Trout
University of Miami	Mullet spiked with #2 Fuel Oil
Second Year	
NOAA	Duwamish Sediment
Mote Marine Laboratory	D-1 D-2 D-3
Jacksonville University	Jetties Atlantic Beach
University of Miami	N6A 201 202 203

Table 4. Aliphatic hydrocarbon characterization of interlaboratory sediment samples collected during Year 02. All values are corrected for percent recovery and expressed on a dry weight bases.

Laboratory/ Sample	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
University of Miami												
201	1.08 (0.76)	2.6	ND	0.28	0.66	0.53	TD	0.02	0.09	ND	C ₁₇ -C ₂₈	2.53
202	0.83 (0.90)	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
203	3.94 (0.02)	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7
Mote Marine Laboratory												
D-1	3.19 (0.44)	2.2	ND	0.23	1.77	0.18	ND	0.03	1.44	0.12	C ₁₇ -C ₂₉	1.35
D-2	2.57 (0.35)	1.9	ND	ND	0.34	0.73	TD	0.02	1.52	ND	C ₁₂ -C ₂₅	1.30
D-3	2.50 (0.90)	2.0	ND	0.85	1.27	0.23	ND	0.01	1.22	ND	C ₁₇ -C ₃₀	0.61
Jacksonville University												
Jetties	5.40 (0.45)	3.3	1.65	1.63	0.91	0.59	0.01	0.02	0.12	0.77	C ₁₅ -C ₃₀	3.49
Atlantic Beach	6.30 (4.06)	8.3	ND	ND	ND	1.33	0.08	ND	0.07	ND	C ₁₅ -C ₂₇	2.07
N6A	0.72 (0.50)	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

* Mean and standard deviation of three replicates.
 ND = None Detected
 TD = Trace Detected

Table 5. Aromatic hydrocarbon characterization of interlaboratory sediment samples collected during year 02. All values corrected for percent recovery and expressed on a dry weight bases.

Laboratory/ Sample	Total f ₂ (µg/g)	Naphthalene	Dibenzo- thiophene	Phenan- threne	1-Methyl- phenanthrene	Pyrene
University of Miami						
202	1.05 (1.01)	ND	ND	0.01	0.04	ND
203	0.55 (0.43)	ND	0.07	ND	ND	0.03
Mote Marine Laboratory						
D-1	1.42 (1.42)	ND	0.04	0.04	0.03	0.04
D-2	1.35 (0.91)	ND	0.03	0.03	0.05	0.02
D-3	1.22 (1.35)	ND	0.02	0.04	0.05	0.06
Jacksonville University						
Jetties	1.65 (1.10)	ND	0.09	0.02	0.08	0.26
Atlantic Beach	0.76	ND	ND	ND	ND	ND
N6G	2.47 (2.08)	ND	ND	0.03	0.04	0.06

* Mean and standard deviation of three replicates.
 ND - None Detected



Figure 4. Chromatograms of aliphatic (f_1) fraction. Interlaboratory calibration - offshore sediment samples - University of Miami.

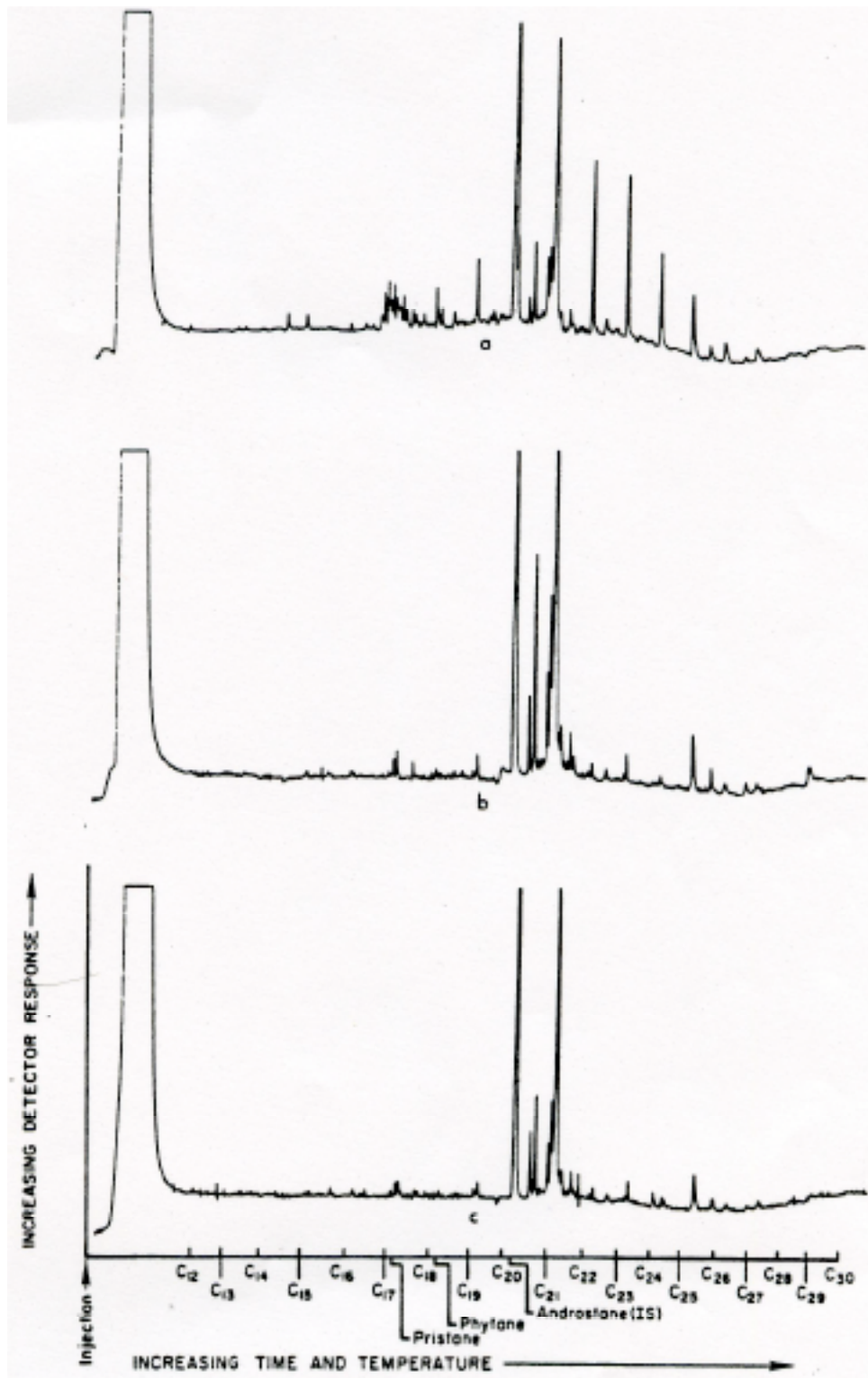


Figure 5. Chromatograms of aliphatic (f_1) fraction. Interlaboratory calibration - offshore sediment samples - Mote Marine Laboratory.

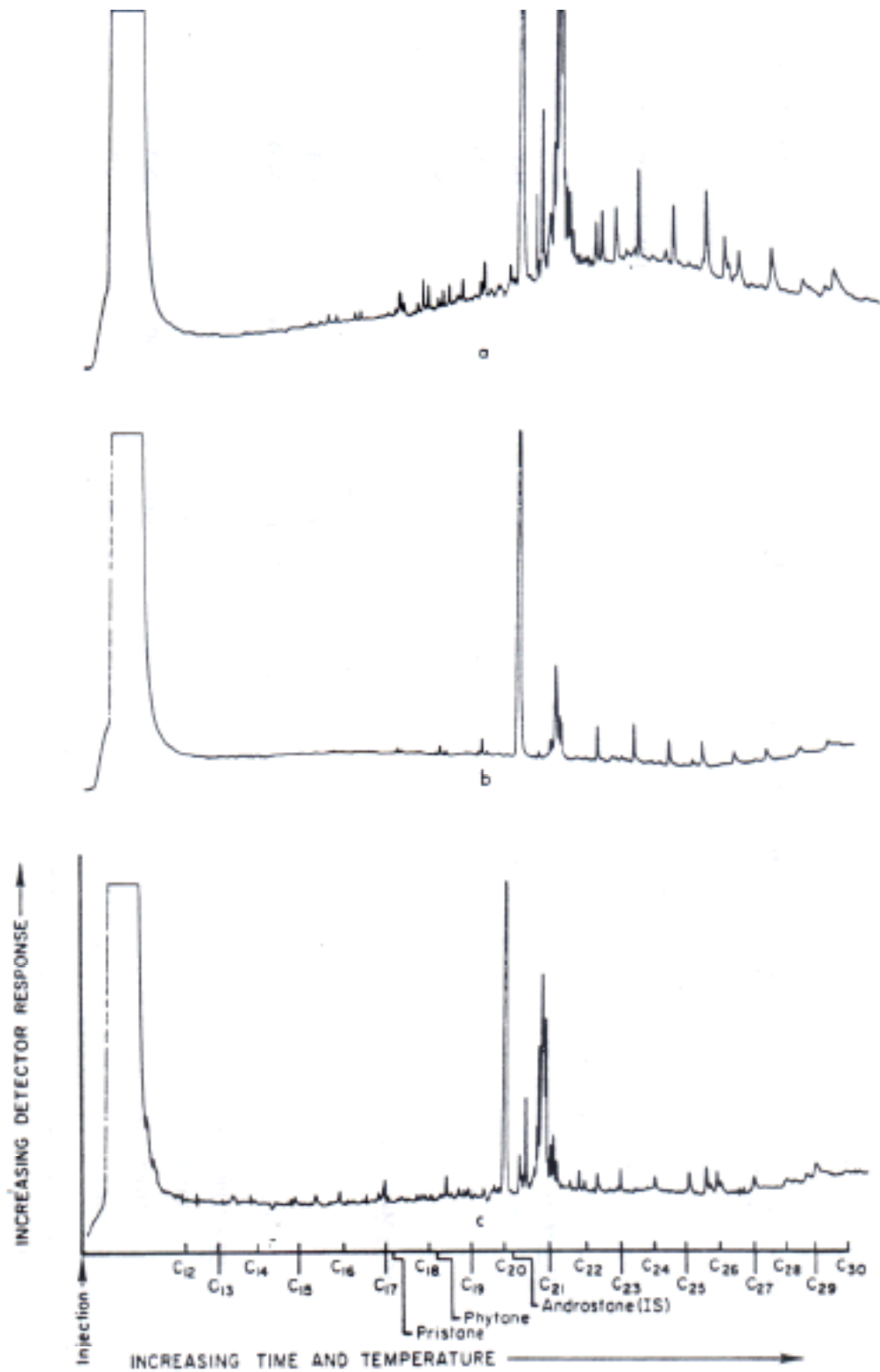


Figure 6. Chromatograms of aliphatic (f_1) fraction. Interlaboratory calibration - offshore sediment samples - Jacksonville University. a) Jetties samples, b) Atlantic Beach sample, c) sample N6A.

Table 6. Summary of surface sediment (0-5 cm depth) grain size analysis. All values are percent dry weight.

Sample #	Gravel (>2000 μ)	Sand (2000 - 63 μ)	SiltClay (<63 μ)
1	4.0	88.9	7.1
2	20.4	68.8	10.8
3	8.4	46.3	45.3
4	9.1	62.1	28.8
5	4.7	77.9	17.4
6	7.5	44.5	48.0
7	2.8	25.3	71.9
8	1.6	86.8	11.6
9	1.1	69.6	29.3
10	4.5	86.8	8.7
11	0.4	96.5	3.1
12	1.6	56.4	42.0
13	7.7	83.3	9.0
14	28.0	42.9	29.1
15	7.2	60.4	32.4
16	12.2	43.3	44.5
17	0.2	19.1	80.7
18	6.9	41.0	52.1
19	0.8	9.5	89.7
20	10.6	72.8	16.6
21	2.8	37.0	60.2
22	0.6	98.4	1.0
23	2.7	93.2	4.1
24	0.0	98.3	1.7
25	34.2	61.3	4.5
26	0.0	84.2	15.8
27	22.0	74.3	3.7
28	7.4	83.8	8.8
29	0.3	77.7	22.0
30	2.4	94.5	3.1
31	24.2	73.2	2.6
32	9.4	47.3	43.3
33	0.0	4.8	95.2
34	0.8	51.0	48.2
36	1.6	83.4	15.0
37	1.2	97.6	1.2
38	1.8	75.5	22.7
39	7.0	90.5	2.5
40	44.5	30.5	25.0
41	15.1	78.5	6.4
42	10.4	34.1	55.5
43	10.9	26.9	62.2
44	1.5	89.7	8.8
45	3.8	88.5	7.7

Table 6. Summary of surface sediment (0-5 cm depth) grain size analysis. All values are percent dry weight (cont.).

Sample #	Gravel (>2000 μ)	Sand (2000 - 63 μ)	SiltClay (<63 μ)
46	34.0	55.8	10.2
47	1.0	85.7	13.3
48	0.4	98.0	1.6
49	0.0	11.1	98.9
50	0.6	38.0	61.4
51	0.0	28.7	71.3
52	0.5	10.9	88.6
53	8.7	71.2	20.1
54	15.2	79.7	5.1
57	0.2	31.0	68.8
58	0.6	38.5	60.9
59	13.1	57.2	29.7
60	0.8	29.4	69.8
61	0.0	36.6	63.4
62	0.0	47.5	52.5
63	0.5	92.6	6.9
64	11.0	77.2	11.8
65	0.5	89.0	10.5
66	0.0	41.6	58.4
67	0.0	88.2	11.8
68	0.7	49.4	49.9
69	1.8	96.5	1.7
70	16.2	90.0	3.8
71	13.2	73.2	13.6
72	33.2	60.5	6.3
73	0.2	96.1	3.7
74	1.9	92.5	5.6
75	15.3	71.4	13.3
76	2.1	82.1	15.8
77	16.1	74.4	9.5
78	56.0	40.2	3.8
79	66.2	25.1	8.7
80	0.7	47.3	52.0
81	23.2	40.1	36.7
82	0.3	69.4	30.3
83	12.1	28.7	59.2
84	8.9	83.3	7.8
85	2.6	67.4	30.0
86	6.9	62.0	31.1
87	2.5	85.5	12.0
88	4.1	91.0	4.9
89	1.3	73.9	24.8
90	1.7	85.2	13.1
91	3.1	85.9	11.0
92	40.2	56.2	3.6

Table 6. Summary of surface sediment (0-5 cm depth) grain size analysis. All values are percent dry weight (cont.).

Sample #	Gravel (>2000 μ)	Sand (2000 - 63 μ)	SiltClay (<63 μ)
93	20.5	75.4	4.1
95	9.3	49.9	40.8
96	15.6	28.0	56.4
97	1.5	77.2	21.3
98	0.7	85.0	14.3
99	4.7	84.5	10.8
100	21.5	74.5	4.0
101	0.0	18.3	81.7
102	0.3	80.7	19.0
103	12.2	76.2	11.6
104	8.5	49.5	42.0
105	0.4	65.7	33.9
106	38.8	41.8	19.4
107	7.8	56.3	35.9
108	5.7	78.1	16.2
109	2.8	83.5	13.7
110	2.6	28.0	69.4
111	3.1	87.2	9.7
112	3.6	86.7	9.7
113	4.8	62.3	32.9
114	6.3	87.6	6.1
115	1.2	47.7	51.1
116	4.6	52.5	42.9
117	8.9	47.7	43.4
118	4.2	42.3	53.5
119	1.9	84.7	13.4
120	12.2	26.6	61.2
121	5.2	28.9	65.9
122	3.0	26.2	70.8
123	0.3	93.7	6.0
124	3.4	73.1	23.5
125	9.9	62.1	28.0
126	7.3	69.5	23.2
127	19.8	76.6	3.6
128	20.5	78.9	0.6
129	1.2	92.0	6.8
130	0.8	94.9	4.3
131	9.3	43.6	47.1
132	11.7	51.7	36.6
133	43.5	50.3	6.2
134	0.0	59.1	40.9
135	0.0	1.3	98.7
136	0.0	5.0	95.0
137	0.4	65.3	34.3
138	0.6	72.5	26.9

Table 6. Summary of surface sediment (0-5 cm depth) grain size analysis. All values are percent dry weight (cont.).

Sample #	Gravel (>2000 μ)	Sand (2000 - 63 μ)	SiltClay (<63 μ)
139	3.4	88.0	8.6
140	0.7	91.7	7.6
141	9.8	86.7	3.5
142	0.8	31.2	68.0
143	0.5	91.7	7.8
144	1.9	78.7	19.4
145	23.3	64.5	12.2
146	11.0	37.0	52.0
147	1.2	34.3	64.5
148	0.7	78.5	20.8
149	4.0	27.1	68.9
150	2.5	5.2	92.3
151	4.3	82.4	13.3
152	0.0	88.3	11.7
153	0.6	76.1	23.3
154	0.3	61.3	38.4
155	14.4	51.1	34.5
156	13.4	84.0	2.6

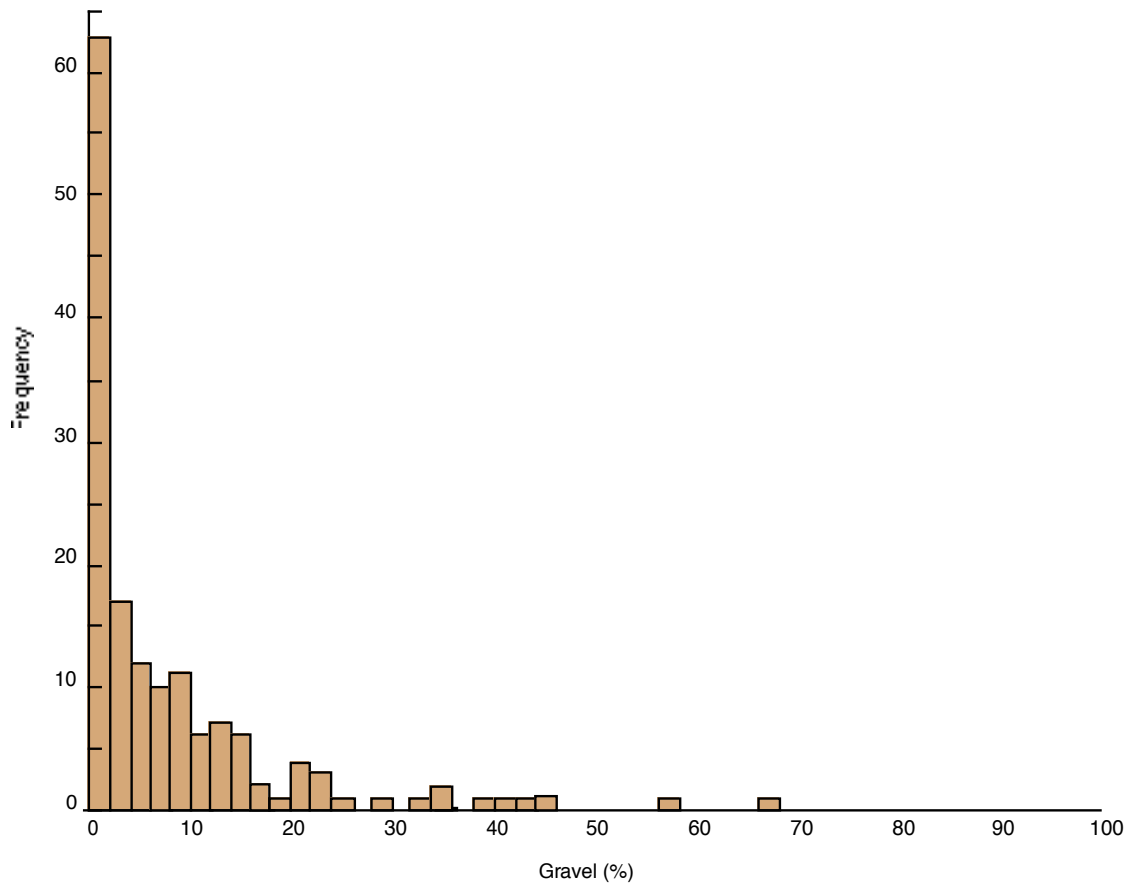


Figure 7. Histogram of percent gravel in surface sediments (0-5 cm).

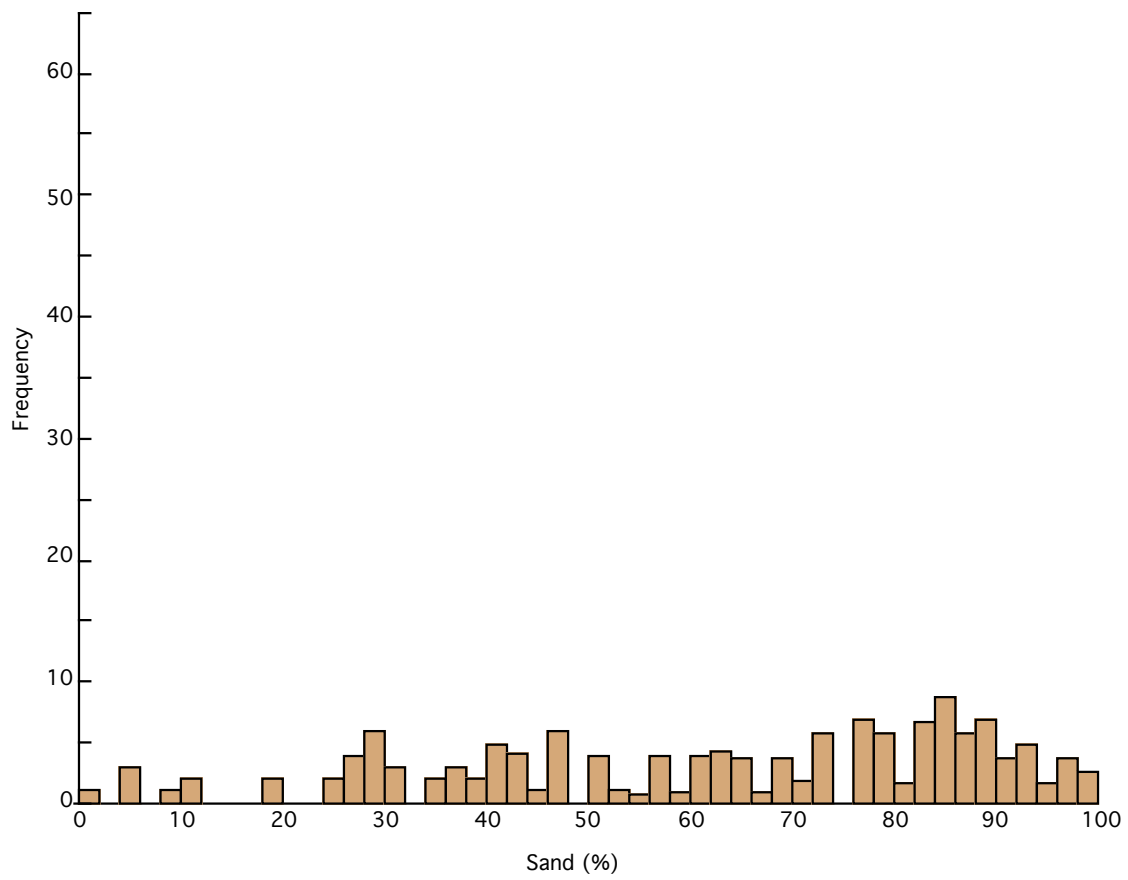


Figure 8. Histogram of percent sand in surface sediments (0-5 cm).

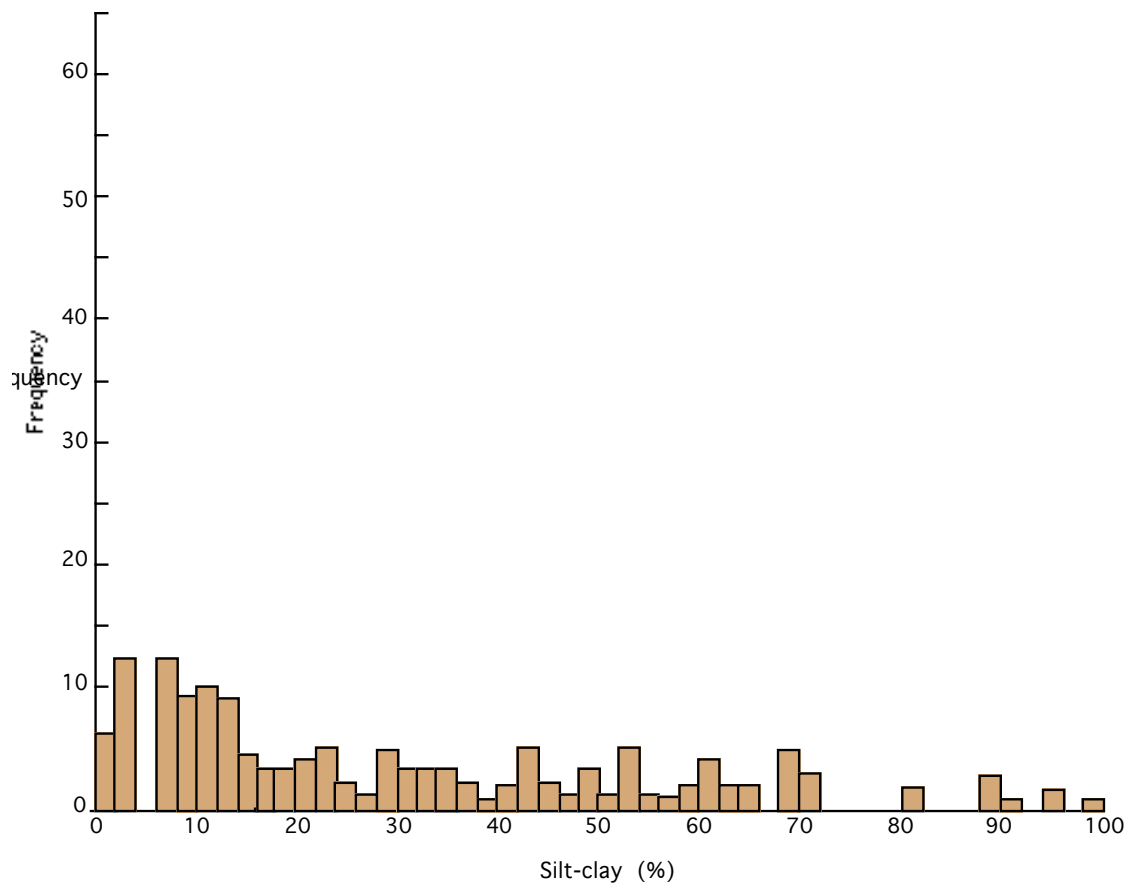


Figure 9. Histogram of percent silt-clay in surface sediments (0-5 cm).

Table 7. Summary of total organic matter and carbonate content of surface sediments (0-5 cm depth).

Sample	Organic Matter (% Dry Weight)	Carbonate (CaCO ₃) (% Dry Weight)
1	3.00	91.69
2	3.79	87.16
3	6.00	74.57
4	1.35	56.79
5	1.69	39.24
6	4.70	75.94
7	6.30	79.90
8	1.04	15.27
9	2.78	33.70
10	1.49	22.37
11	0.60	10.75
12	4.17	85.48
13	2.34	55.99
14	3.77	91.88
15	4.60	82.53
16	7.90	80.42
17	4.99	90.46
18	3.78	79.46
19	7.58	88.10
20	4.50	75.65
21	5.26	74.21
22	0.25	4.59
23	0.58	6.35
24	0.17	0.55
25	2.76	68.68
26	1.65	12.53
27	0.52	24.46
28	1.35	43.58
29	2.78	67.79
30	1.01	43.81
31	1.50	53.71
32	5.20	52.61
33	7.07	77.36
34	8.10	77.34
35	2.52	73.93
36	0.68	10.42
37	0.30	5.87
38	0.44	13.10
39	0.48	29.41
40	5.25	92.75
41	1.46	62.87
42	7.31	73.93
43	5.71	76.97
44	1.07	45.03
45	1.32	29.22

Table 7. Summary of total organic matter and carbonate content of surface sediments (0-5 cm depth) (cont.).

Sample	Organic Matter (% Dry Weight)	Carbonate (CaCO ₃) (% Dry Weight)
46	1.84	86.94
47	2.54	38.73
48	2.92	68.51
49	4.10	68.66
50	11.56	37.72
51	7.32	73.12
52	2.79	70.85
53	2.37	70.46
54	1.24	46.32
55	MD	MD
56	MD	MD
57	10.82	44.47
58	9.05	45.68
59	3.94	53.92
60	MD	MD
61	9.50	47.18
62	7.47	56.61
63	1.70	11.74
64	3.13	12.92
65	1.70	5.47
66	13.45	45.37
67	0.34	1.95
68	12.66	41.30
69	0.86	7.68
70	0.98	30.04
71	2.35	93.80
72	2.61	44.31
73	0.68	1.87
74	0.77	12.99
75	11.54	18.73
76	2.06	54.39
77	1.43	52.35
78	1.15	87.67
79	1.59	89.88
80	4.35	69.50
81	4.37	81.80
82	13.94	5.32
83	7.36	87.01
84	2.41	77.72
85	3.43	39.75
86	3.75	70.20
87	3.83	80.03
88	2.74	85.72
89	2.11	32.23
90	1.27	20.27

Table 7. Summary of total organic matter and carbonate content of surface sediments (0-5 cm depth) (cont.).

Sample	Organic Matter (% Dry Weight)	Carbonate (CaCO ₃) (% Dry Weight)
91	2.12	46.80
92	23.06	48.13
93	2.89	54.16
94	MD	MD
95	5.69	87.55
96	5.79	91.95
97	2.21	30.28
98	0.49	9.86
99	1.74	31.83
100	15.76	77.56
101	MD	MD
102	15.93	66.01
103	17.49	67.77
104	7.12	80.14
105	7.60	86.91
106	7.69	88.20
107	17.56	71.48
108	1.98	40.39
109	2.39	28.95
110	11.20	77.09
111	2.39	57.01
112	14.47	68.06
113	4.54	44.51
114	2.30	59.30
115	6.95	58.32
116	5.54	90.67
117	5.51	87.24
118	15.16	78.97
119	1.42	13.62
120	MD	MD
121	7.97	69.08
122	8.10	75.30
123	2.99	92.43
124	33.22	44.33
125	MD	MD
126	5.58	53.06
127	MD	MD
128	3.34	72.34
129	1.09	27.64
130	0.86	26.32
131	2.48	41.60
132	4.39	51.93
133	4.50	60.97
134	13.97	3.66
135	12.84	66.23

Table 7. Summary of total organic matter and carbonate content of surface sediments (0-5 cm depth) (cont.).

Sample	Organic Matter (% Dry Weight)	Carbonate (CaCO ₃) (% Dry Weight)
136	11.85	62.90
137	12.52	60.56
138	4.04	57.13
139	MD	MD
140	2.59	47.03
141	1.45	44.70
142	9.92	68.20
143	1.75	53.80
144	2.93	57.36
145	3.12	53.60
146	21.29	41.95
147	6.72	63.77
148	3.53	20.08
149	7.80	52.79
150	MD	MD
151	1.86	46.77
152	2.67	67.90
153	2.39	49.50
154	3.56	62.95
155	2.90	78.78
156	1.74	37.10

* MD - Missing Data

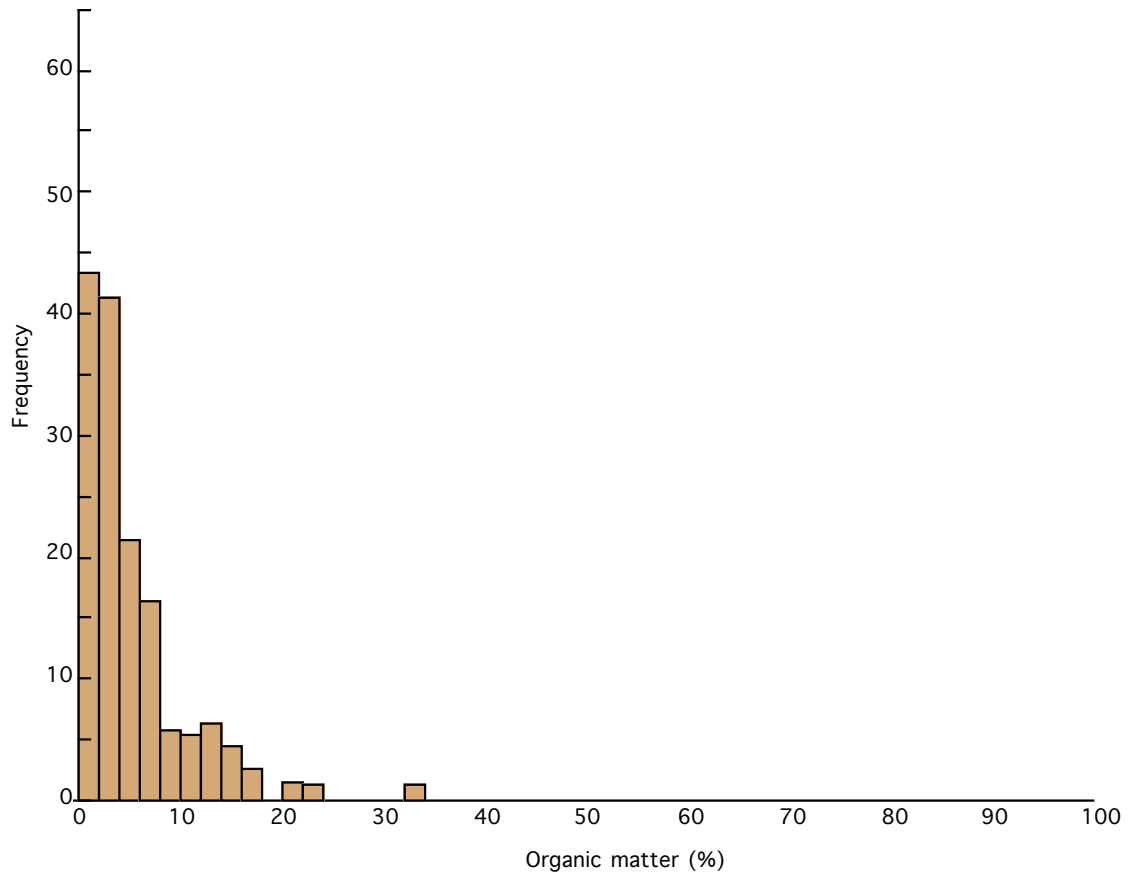


Figure 10. Histogram of percent organic matter in surface sediments (0-5 cm).

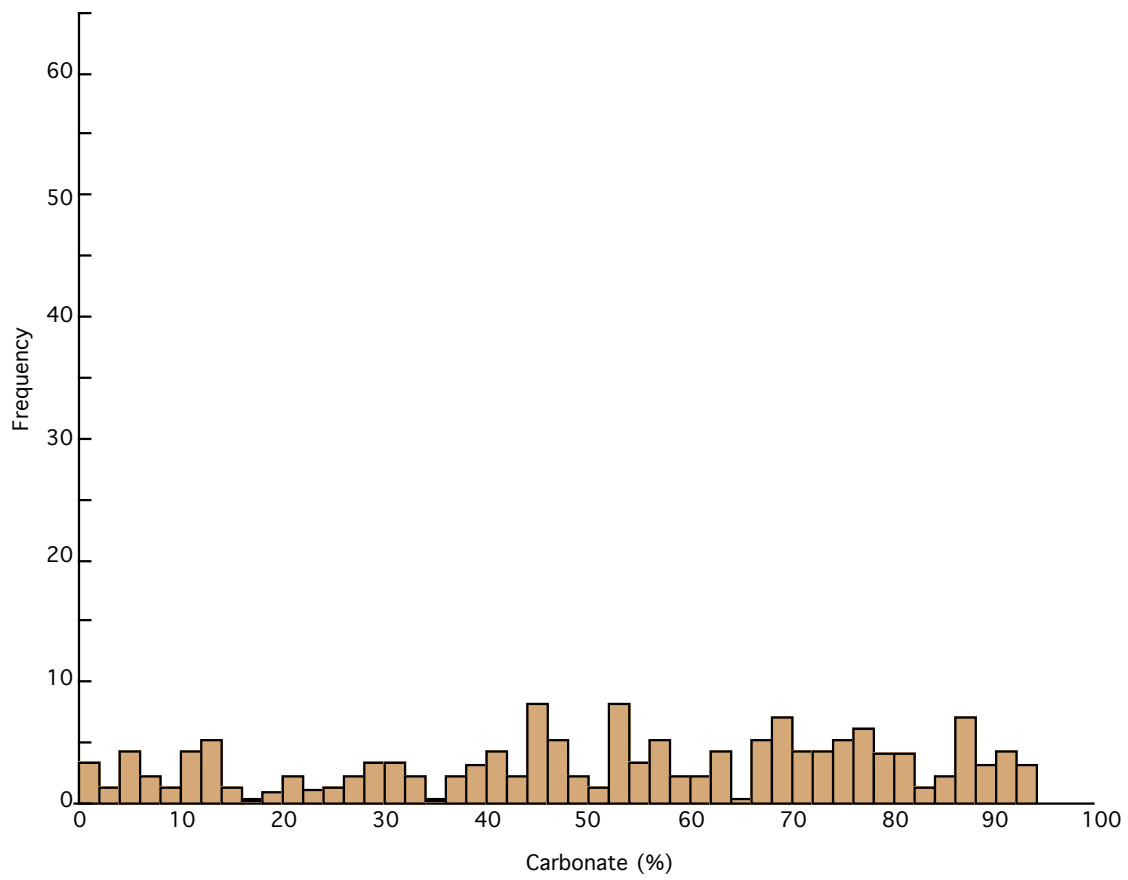


Figure 11. Histogram of percent carbonate material in surface sediments (0-5 cm).

concentrations of organic matter also. The other samples which indicated high organic content were collected from intertidal areas consisting of a mangrove peat substrate. Carbonate content ranged from 0.6 to 93.8 percent. The mean of the samples collected was 53.3 percent with a standard deviation of 26.12. Figure 11 shows that carbonate was relatively evenly distributed throughout the samples collected. The areas which exhibited the higher concentrations were distributed south of Key Biscayne along the west side of the Bay.

4.3. Radiocarbon Dating

Figure 12 is a descriptive profile of the collected cores showing the locations of the dated subsamples. Table 8 lists the location, sample number, depth of subsample and age in ^{14}C years. Table 9 and 10 lists the aliphatic and aromatic hydrocarbon values and indices for the dated samples. The dated material from cores 74, 78 and 152 showed that the oldest material was in the surface layers. This would be expected since all three of these cores were taken from spoil islands. The aliphatic hydrocarbons concentrations were all low except for sample 152-p2.

4.4. GC-MS Analyses

Gas chromatography-mass spectroscopy (GC-MS) analyses was performed by Dr. Edward S. Van Vleet, Associate Professor of Oceanography, Department of Marine Science, University of South Florida. Samples were analyzed using a Hewlett-Packard 5992B computerized GC-MS system equipped with a 30-m DB-5 fused silica capillary column. GC-MS system equipped with a 30-m DB-5 fused silica capillary column. GC-MS operating conditions were as follows:

Carrier gas: helium
Column flow rate: 2 mL/min
Injection port temperature: 240 °C
Spitless injection mode
Temperature program: 90-250 °C at 4 °C/min
Electron multiplier voltage: 1200 or 1400 eV
GC-MS run in selected ion monitoring mode
Dwell time: 100 msec/ion

Specific ions monitored included C_0 - C_3 naphthalenes, C_0 - C_3 phenanthrenes (plus anthracenes), C_0 - C_3 pyrenes, C_0 - C_2 benz[*a*]anthracenes and dibenzothiophene. Standard polycyclic aromatic hydrocarbons (PAH) mixtures were run each day for calculation of response factors. Analytical uncertainty in the quantitative GC-MS determinations was approximately $\pm 30\%$. Interpretation relative to petrogenic versus pyrogenic inputs was obtained by plotting the absolute abundance of the PAH homologs. Fifteen samples, collected during the second year of the study, were analyzed by GC-MS. These included seven sediments, six surface waters and two tissue samples. Table 11 lists the sample numbers, type, location and results of the GC-MS analyses.

The water samples were essentially free of the aromatic hydrocarbons that were monitored. Sample 227 contained peaks for C_2 -phenanthrene although they were at the limits of sensitivity for the instrumentation and are therefore questionable.

The two tissue samples did not show the normal range of PAHs expected from simple petrogenic or pyrogenic inputs. These samples show only one or two PAH components (C_2 - and/or C_3 -phenanthrenes in each case). The PAH homologs in the oyster tissue are believed to be of petrogenic origin. The catfish contained only one PAH component therefore its source was uncertain.

CORE DESCRIPTIONS FOR C-14 ANALYSIS

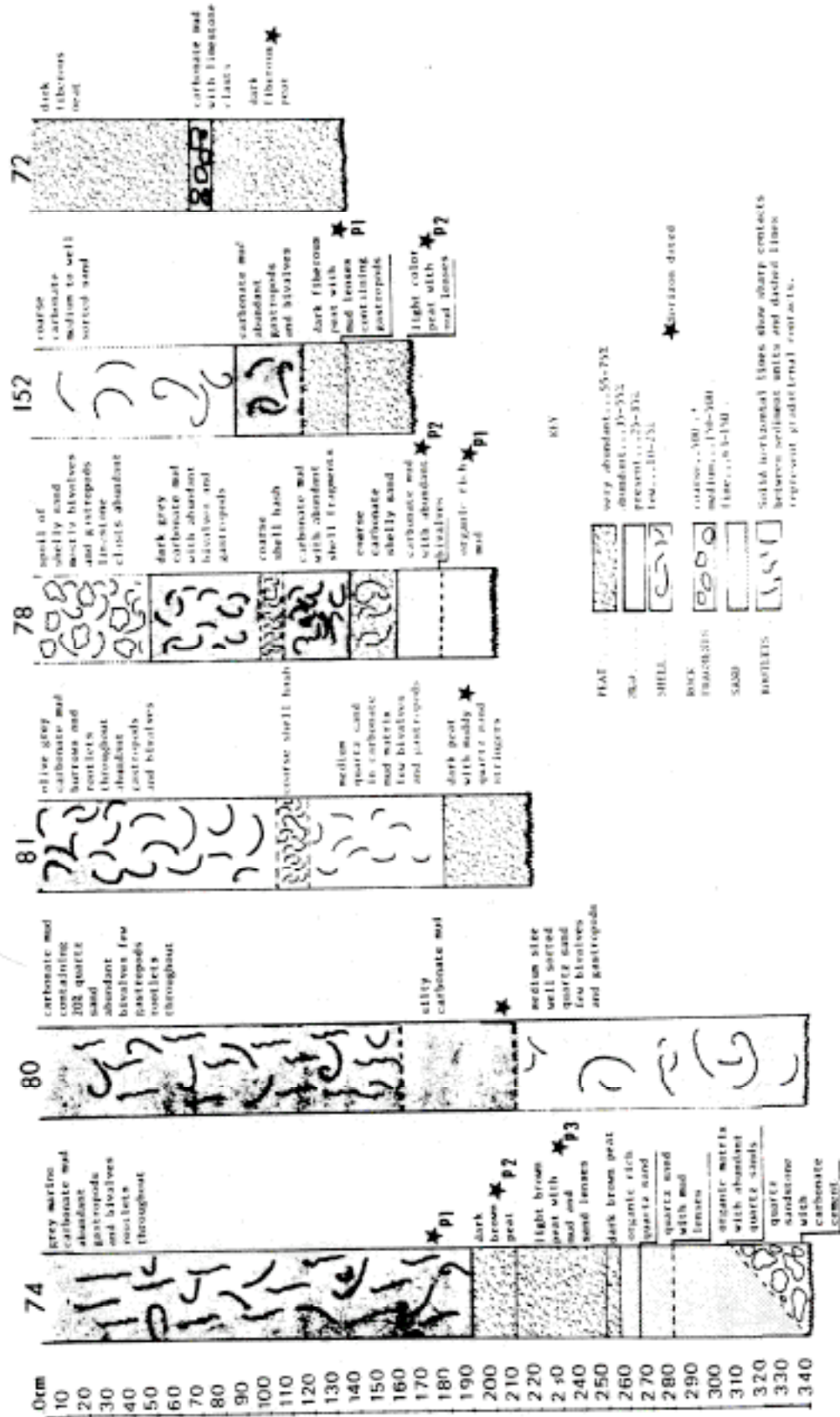


Figure 12a. Profile description of cores used in ¹⁴C dating.

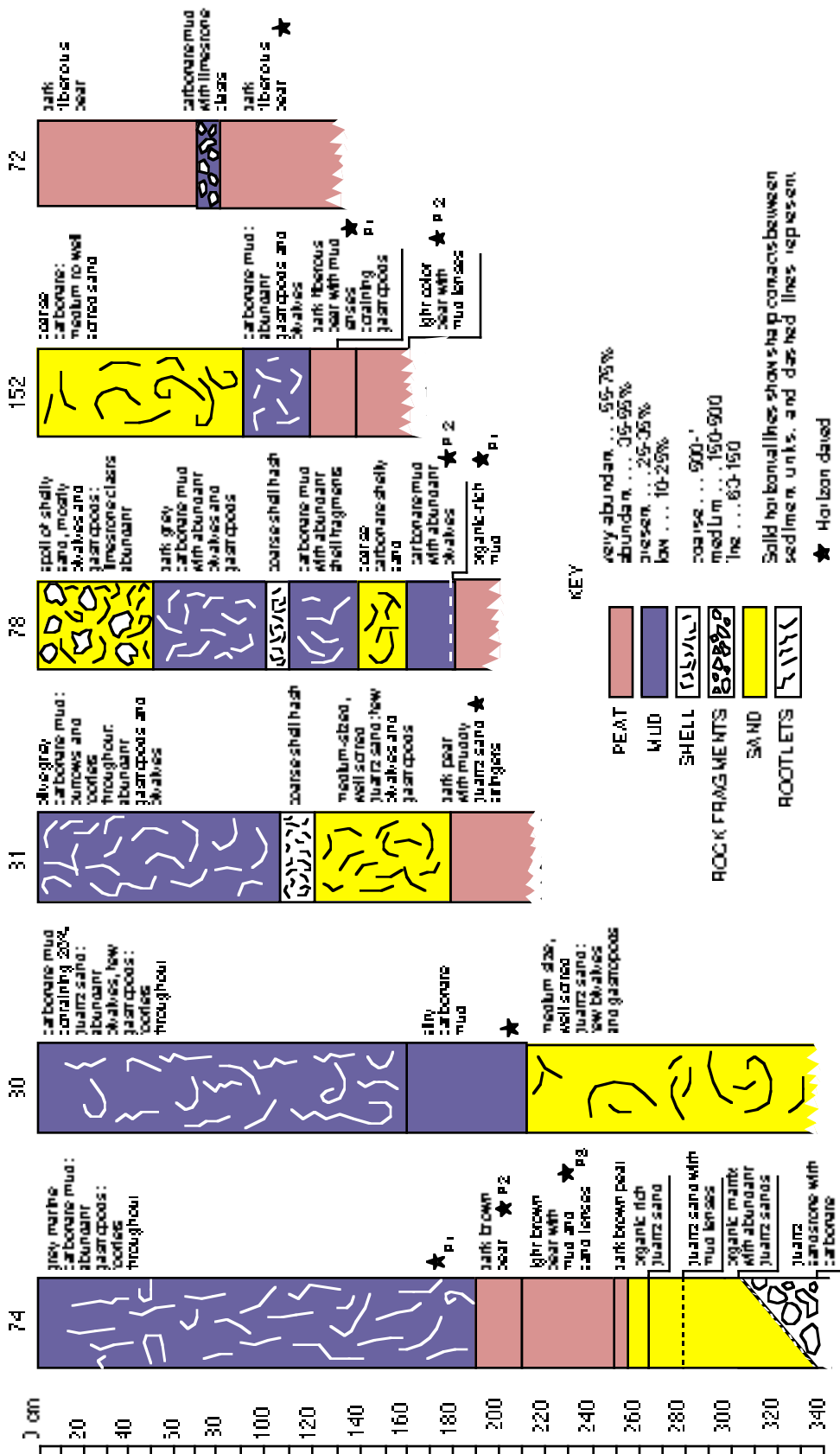


Figure 12b. Profile description of cores used for ¹⁴C dating.
 [RECONSTRUCTION.]

Table 8. Summary information for ¹⁴C dated sediment.

Core no.	University of Miami Laboratory Sample no.	Collection Location	Material dated	Midpoint of dated interval below sediment surface	Depth of sediment surface below mean sea level	Radiocarbon age ¹⁴ C years
72	UM-2670	North side of Key Channel	Chicken peat	2.36 m	1.5 m	3370 ± 80
74-p1	UM-2693	Spoil Bank 0.2 km ESE from the mouth of the Miami River	shell	3.40 m	1.1 m	4820 ± 90
74-p2	UM-2672		peat	3.70 m	1.1 m	4870 ± 90
74-p3	UM-2667		peat	4.00 m	1.1 m	3030 ± 120
78-p1	UM-2695	Spoil Island 0.7 km E of Biscayne Canal	shell	2.10 m	0.8 m	4550 + 110
78-p2	UM-2696		shell	2.30 m	0.8 m	1950 ± 60
80	UM-2694	2 km N from the NE corner of the Julia Tuttle Cswy.	shell	3.40 m	1.8 m	3240 ± 125
81	UM-2668	Central portion of the <i>Halimeda</i> flat between 79th St. and Julia Tuttle Cswy.	peat	2.95 m	1.6 m	5145 ± 110
152-p1	UM-2671	NE corner of Spoil Island 1.3 km east of Bakers Haulover Inlet	peat	2.10 m	1.5 m	4120 ± 80
152-p2	UM-2669		peat	2.50 m	1.5 m	3630 ± 80

Table 9. Aliphatic hydrocarbon characterization of ¹⁴C dated sediment samples. All values are corrected for percent recovery and expressed on a dry weight bases.

Laboratory/ Sample	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
72 (302)	20.32	0.06	ND	ND	ND	4.77	ND	0.88	0.56	ND	C ₁₇ -C ₂₅	2.24
74-p1 (310)	3.92	0.04	ND	ND	ND	ND	ND	ND	0.64	ND	C ₁₇ -C ₂₅	0.97
74-p2 (308)	7.12	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74-p3 (305)	ND	ND	ND	ND	ND	NI)	ND	ND	ND	ND	ND	ND
78-p1 (311)	12.90	0.01	ND	ND	ND	ND	ND	ND	ND	ND	C ₁₆ -C ₂₂	0.12
78-p2 (312)	3.21	0.15	ND	ND	ND	ND	ND	ND	0.25	ND	C ₁₂ -C ₂₃	1.82
80 (307)	ND	ND	ND	ND	ND	ND	ND	NI)	ND	ND	ND	ND
81 (306)	4.03	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
152-p1 (309)	1.85	0.04	ND	ND	ND	ND	ND	NI)	0.19	ND	C ₁₈ -C ₂₉	0.63
152-p2 (301)	216.84	6.51	0.08	0.23	ND	1.37	0.26	ND	0.58	ND	C ₁₂ -C ₂₃	0.89

ND - Not detected.

Table 10. Aromatic hydrocarbon characterization of ¹⁴C dated sediment samples. Values are corrected for percent recovery and expressed on a dry weight bases ($\mu\text{g/g}$).

Sample	Total f ₂	Napththalene	Phenanthrene	Dibenzothiophene	Pyrene
72 (302)	35.01	ND	0.06	2.65	1.13
74-p1 (310)	8.67	ND	1.54	0.30	1.76
74-p2 (308)	19.31	ND	0.53	1.24	4.16
74-p3 (305)	0.83	ND	ND	ND	ND
78-p1 (311)	10.80	ND	0.64	0.23	0.99
73-p2 (312)	2.08	ND	0.25	ND	ND
80 (307)	0.59	ND	ND	ND	ND
81 (306)	5.96	ND	ND	ND	ND
152-p1 (309)	4.05	ND	0.35	0.11	1.17
152-p2 (301)	3.33	ND	ND	0.12	0.82

* ND = None Detected

Table 11. Summary of GC-MS characterization of PAH homologs.

Sample type and number	Location	Total GC-MS Aromatics ($\mu\text{g/g}$)	Major Peaks*	Probable Major Source
Water				
208	Miami River	0.00	None	None
210	Miami River	0.00	None	None
227	Little River	0.11	C ₂ P	Uncertain
232	Goulds Canal	0.00	None	None
238	Military Canal	0.00	None	None
246	Black Creek	0.00	None	None
Tissue				
Catfish (<i>Arius felis</i>)	North Bay	0.4	C ₃ P	Uncertain
Flat tree oyster (<i>Isognomon alatus</i>)	Marina	3.0	C ₃ P, C ₂ P	Petrogenic
Sediment				
214 (0-5)	Miami River	13.5	Py, C ₃ Py	Pyrogenic
214 (20-25)	Miami River	3.9	Py, C ₃ Py	Mixed
225 (0-5)	Little River	0.2	Py, P, C ₃ p	Pyrogenic
225 (55-60)	Little River	0.2	C ₃ P, C ₂ P	Petrogenic
232 (0-5)	Goulds Canal	5.0	C ₃ N, C ₃ P	Petrogenic
232 (55-60)	Goulds Canal	13.2	C ₃ N, C ₃ P, Py	Mixed
240 (0-5)	Military Canal	0.5	C ₂ P, C ₁ P	Petrogenic

* N = Naphthalene; P = Phenanthrene; Py = Pyrene; C₁, C₂, C₃ = homolog number.

Sediments showed the best correlations of the three groups of samples analyzed. Generally there was good agreement between the total PAHs measured by GC and the PAHs measured by GC-MS. Figure 13 is a scattergram of this data including the regression line. The correlation coefficient (r) of this data is 0.87. This indicates that where high concentrations of total aromatics were found by GC high concentrations of the selected PAHs were also found by GC-MS. This is a good indication that the aromatic fractions are derived from petrogenic or pyrogenic sources. Sample 240 (0-5) appears to be anomalous. The GC-MS analysis of this sample indicated values much lower than those obtained by GC. This would indicate that most of the compounds in this sample are not PAHs.

In general, the correlation between the GC data and the GC-MS data was good for total aromatics. The correlations for individual compounds was poor. This poor correlation maybe explained by the misidentification by GC of the selected compounds, naphthalene, dibenzothiophene, phenanthrene, 1-methylphenanthrene and pyrene. GC-MS is generally considered to be a more selective detector for these compounds. The peaks identified by GC were either compounds that co-eluted or had very similar retention times. These compounds are believed to be complex pigments.

4.5. Hydrocarbon analysis and Distribution

Hydrocarbons in the marine environment are derived from three major sources. These are biogenic, naturally occurring hydrocarbons produced by terrestrial and marine organisms; pyrogenic, hydrocarbons generated by forest fires and industrial combustion; and petrogenic, hydrocarbons caused by petroleum contamination. These groups exhibit characteristic patterns which make their identification possible. Although when in combination these characteristics are diluted and positive quantification becomes much more difficult.

A great deal of work has been devoted to the development of the criteria for identification and separation of biogenic and petrogenic hydrocarbons. One of the most widely used and accepted is to separate the total extractable hydrocarbons into aliphatic (non-cyclic) and aromatic (unsaturated) fractions. The methodology for this was discussed previously. These fractions are then analyzed by GC-FID in conjunction with packed and/or capillary columns. The use of GC-MS for the quantification of the aromatic/olefinic fraction is of use in further establishing the sources of the hydrocarbons.

Although both fractions are useful for the identification of petroleum hydrocarbons the aliphatic has historically been used to a greater extent. The indices developed for this fraction are numerous. Table 12 lists those characteristics used by this project for the interpretation of the aliphatic chromatograms. These indices become somewhat ambiguous when the sample contains both hydrocarbons of biogenic and petrogenic origin. These mixtures obviously distort many of the indices.

The most reliable indicators found during this project were the Unresolved Complex Mixture (UCM) and the HCC/TOM ratio. Biogenic hydrocarbons in most sediments are few in number and simple in structure, whereas for petroleum the opposite is true. Petroleum compounds contain thousands of components, the majority of which are not easily resolved by capillary column gas chromatography. These unresolved compounds, when injected into a gas chromatograph, exhibit an inverted saucer effect. This has been accepted by many as a vital characteristic for the interpretation of gas chromatograms (NAS, 1975; Zafiriou, 1973; Zafiriou *et al.*, 1972; Farrington and Medeiros, 1975). The other index that proved very useful was the HCC/TOM ratio. This ratio is the total hydrocarbons as carbon divided by the organic content of the sample. The ratio was developed by Matsumoto (1982) for waters and modified by Baddour

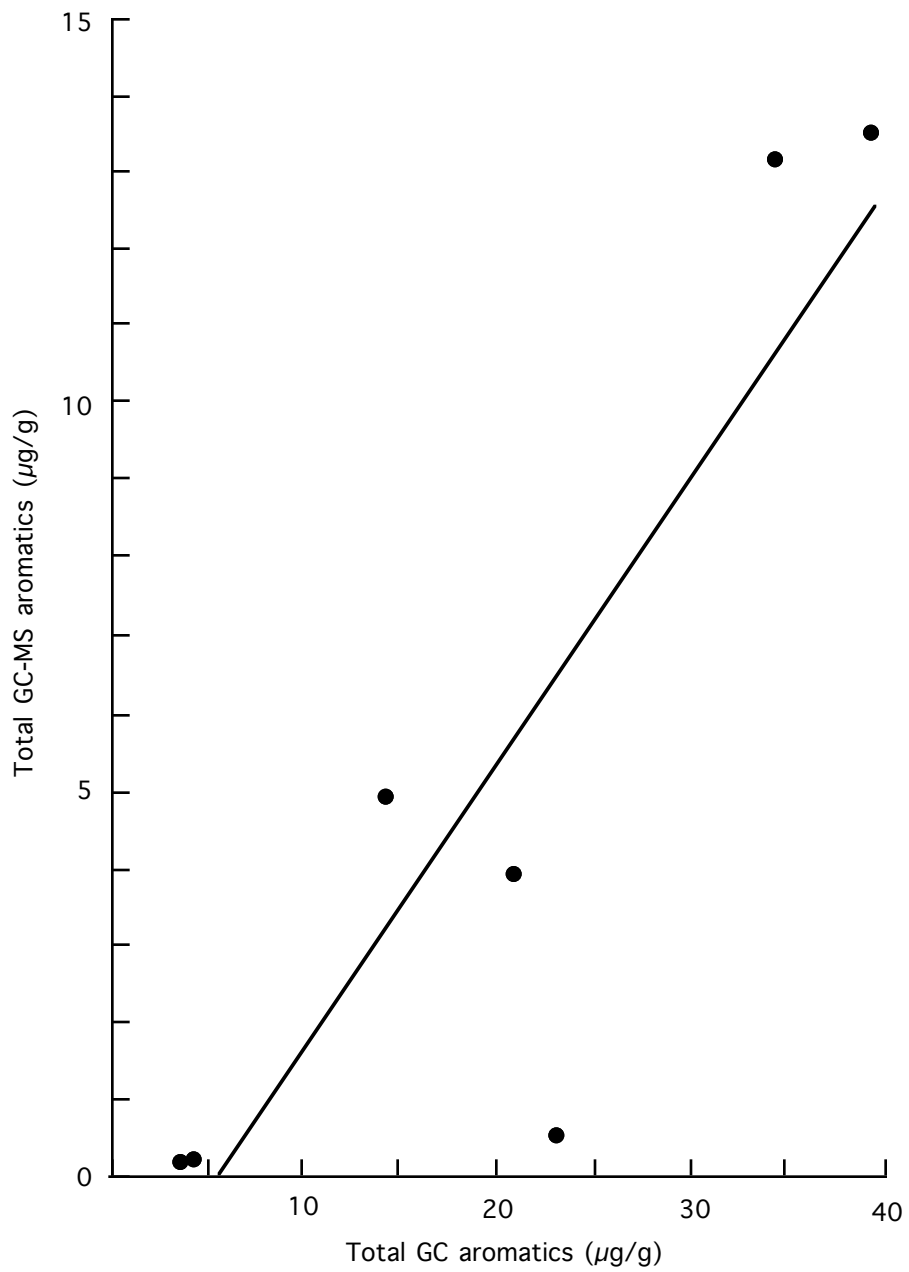


Figure 13. Scattergram of total PAHs (f2) measured by GC vs. PAHs measured by GC-MS.

Table 12. Criteria for distinguishing petrogenic from biogenic hydrocarbons.

CRITERION	PETROGENIC	BIOGENIC
1) Homologous Series	Wide boiling range (C ₁ to C ₆₀) Several series	Narrow boiling range (C ₁₅ to C ₃₅) Few series (2 or 3)
2) Odd-carbon predominance	Absent (CPI \approx 1)	Usually present over a narrow range (C ₁₅ , C ₁₇ and/or C ₁₉ often prominent)
3) Unresolved Complex Mixture (UCM)	Present, often dominant	Absent or barely detectable
4) Isoprenoid distribution	Appreciable pristane (C ₁₉), phytane (C ₂₀), C ₁₆ , C ₁₈	Pristane often abundant, no others detected
5) Pristane/Phytane ratio	1.5 to 2.5	100 or greater
6) Resolved/Unresolved Complex Mixture (Res/UCM)	1 but not zero	Infinite
7) Total hydrocarbon as carbon/total organic matter (HCC/TOM)	Larger ratio	Smaller ratio

(1983) and used for sediments. The original ratio HCC/TOC compared the total hydrocarbon as carbon (total hydrocarbon content x 0.851, as C₂₀H₄₂) to the total organic carbon content of the sample. Matsumoto (1982) states that usually hydrocarbons are minor constituents in living organisms, thus material contaminated with artificial hydrocarbons (e.g. petroleum products) would have a much higher ratio than those containing only natural hydrocarbons. Baddour modified the ratio by substituting total organic matter for total organic carbon. His results show that this ratio was quite reliable for the study of fuel spills around the Miami International Airport.

Tables 13 and 14 present a summary of the aliphatic and aromatic hydrocarbon content of the surface sediments collected during the first year of the project. The hydrocarbon concentrations presented in these tables have been corrected for percent recovery. Although only 22 percent of the samples analyzed during the first year contained internal standards for calculation of percent recovery, a mean value of 28.3 percent with a standard deviation of 8.60 was obtained from these data and used to correct all analyses. A more detailed listing of each sample analysis is given in Appendices D and E.

Table 13. Aliphatic hydrocarbon characterization of surface sediments collected during Year 01. All values are corrected for percent recovery and are expressed on a dry weight basis.

Laboratory	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.		
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI	
1	0.77	MD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	2.41	0.5	ND	ND	0.22	ND	0.16	0.01	1.18	ND	C ₁₅ -C ₂₅	ND	ND
5	1.67	0.2	ND	2.97	0.07	0.57	0.04	0.02	0.06	ND	C ₁₅ -C ₂₅	2.33	
6	22.53	1.0	0.37	0.51	2.33	2.43	0.08	0.20	1.23	ND	C ₁₅ -C ₂₅	1.58	
7	33.23	6.1	0.45	0.67	0.21	0.51	0.34	0.01	0.13	ND	C ₁₂ -C ₂₅	1.74	
8	1.77	0.1	ND	0.94	0.33	0.57	ND	0.01	0.94	ND	C ₁₇ -C ₂₅	9.98	
9	0.05	0.1	ND	ND	ND	ND	ND	ND	0.05	ND	ND	ND	ND
10	1.76	0.5	ND	ND	ND	ND	ND	ND	0.11	ND	C ₁₅ -C ₂₆	1.57	
11	46.11	12.6	ND	73.39	ND	0.94	ND	ND	3.84	ND	C ₁₆ -C ₂₅	2.57	
12	71.99	23.9	0.36	6.28	1.06	3.42	ND	0.05	1.21	3.97	C ₁₇ -C ₂₉	18.33	
13	74.84	23.2	0.04	ND	ND	0.70	0.08	0.40	ND	ND	C ₁₄ -C ₂₃	ND	
14	1.33	0.3	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND
15	1.83	0.4	ND	ND	0.55	ND	0.15	0.04	0.02	ND	C ₁₅ -C ₂₅	3.61	
16	0.59	0.3	ND	ND	ND	ND	ND	0.26	ND	ND	ND	5.13	
17	1.20	0.1	ND	ND	ND	ND	ND	ND	0.02	ND	C ₁₉ -C ₂₅	1.68	
18	0.09	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19	12.80	58.9	ND	3.02	0.02	3.90	0.14	0.01	1.19	ND	C ₁₅ -C ₂₅	0.99	
20	6.35	2.4	ND	ND	ND	ND	ND	ND	0.56	ND	C ₂₁ -C ₂₈	12.06	
21	67.00	34.6	0.14	50.38	ND	0.81	0.06	ND	0.43	ND	C ₁₅ -C ₂₃	3.33	
22	8.74	2.4	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23	70.22	8.8	0.02	2.68	ND	0.04	0.11	ND	ND	ND	C ₁₅ -C ₂₃	2.82	
24	47.96	1.3	0.16	1.29	18.55	1.42	0.03	0.69	0.15	ND	C ₁₅ -C ₂₃	8.50	
25	33.37	0.2	0.09	5.48	ND	1.12	0.03	ND	0.32	ND	C ₁₄ -C ₂₅	2.27	
26	23.22	6.1	0.09	5.49	ND	1.12	0.03	ND	0.22	ND	C ₁₂ -C ₂₃	2.28	
27	1.06	1.8	ND	5.54	ND	1.30	ND	ND	0.14	ND	C ₁₈ -C ₂₂	2.16	
28	0.12	0.2	ND	ND	ND	ND	ND	ND	0.01	ND	C ₂₁ -C ₂₃	1.84	
29	6.11	2.4	ND	0.21	3.22	2.35	ND	0.04	0.30	ND	C ₁₇ -C ₂₆	1.25	
30	0.03	4.6	ND	ND	ND	ND	ND	0.03	ND	ND	ND	ND	ND
31	15.36	1.0	ND	ND	ND	ND	ND	0.03	0.06	ND	C ₁₂ -C ₂₅	0.76	
32	102.45	21.3	0.50	1.73	0.32	1.35	0.07	0.03	0.25	12.21	C ₁₂ -C ₂₉	4.30	
33	10.88	1.1	ND	ND	ND	0.19	ND	0.89	2.30	ND	C ₁₆ -C ₂₆	4.96	
34	31.60	21.3	0.02	ND	ND	1.84	ND	ND	0.17	ND	C ₁₈ -C ₂₃	2.46	
35	0.42	0.2	ND	7.21	ND	ND	ND	ND	ND	ND	ND	ND	ND
36	11.24	2.5	0.03	ND	ND	ND	ND	ND	0.08	ND	ND	ND	ND
38	2.83	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40	0.29	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 13. Aliphatic hydrocarbon characterization of surface sediments collected during Year 01. All values are corrected for percent recovery and are expressed on a dry weight basis. (cont.)

Laboratory	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
41	17.01	6.1	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND
42	4.49	9.1	ND	ND	ND	ND	0.19	0.49	0.74	ND	C ₁₂ -C ₂₅	13.30
43	15.55	2.4	ND	8.25	0.41	ND	ND	0.08	0.07	ND	C ₁₄ -C ₂₆	0.13
44	2.01	0.8	ND	ND	ND	ND	ND	ND	0.04	ND	C ₂₁ -C ₂₃	15.36
45	33.13	7.4	0.11	0.34	5.47	0.26	0.01	0.08	0.16	ND	C ₁₂ -C ₂₅	1.87
46	4.51	4.0	ND	0.60	0.16	ND	ND	0.02	0.09	ND	C ₁₄ -C ₂₁	0.77
47	58.92	52.8	0.06	0.97	0.18	ND	ND	0.01	ND	ND	C ₁₇ -C ₂₂	0.01
48	29.44	2.3	0.04	0.55	0.88	ND	ND	0.01	0.08	ND	C ₁₇ -C ₂₂	1.48
49	24.13	4.7	ND	0.60	ND	ND	ND	ND	0.05	ND	C ₁₉ -C ₂₆	1.92
51	53.46	2.7	0.08	16.60	ND	ND	0.12	ND	0.21	ND	C ₁₂ -C ₂₄	2.21
52	14.74	3.8	0.08	ND	ND	ND	ND	ND	0.08	ND	C ₂₁ -C ₂₃	3.64
53	7.38	2.9	1.24	ND	6.53	ND	ND	0.07	0.41	ND	C ₁₇ -C ₂₃	12.77
54	1.34	0.2	ND	2.74	1.27	2.75	ND	0.04	0.08	ND	C ₁₇ -C ₂₃	1.82
55	0.25	1.1	ND	ND	ND	ND	ND	ND	0.13	ND	ND	ND
56	280.82	0.6	0.04	0.01	153.98	0.43	0.10	1.44	0.05	ND	C ₁₃ -C ₂₄	2.68
57	669.96	7.9	0.03	0.06	5.93	0.54	0.02	0.27	0.19	ND	C ₁₂ -C ₂₄	1.07
58	187.43	0.4	0.04	6.33	0.14	0.51	0.14	0.07	ND	ND	C ₁₄ -C ₂₁	1.58
59	913.55	8.1	0.04	1.47	0.13	0.66	0.27	0.17	2.82	ND	C ₁₅ -C ₂₄	1.77
60	1028.79	2.4	0.03	1.92	0.08	0.83	1.11	0.10	0.47	ND	C ₁₂ -C ₂₂	1.74
61	2449.60	11.4	0.02	9.93	ND	ND	0.22	ND	ND	ND	ND	0.21
62	185.54	3.4	0.01	ND	ND	ND	0.03	ND	ND	ND	ND	2.36
63	0.39	0.2	ND	ND	ND	ND	ND	ND	0.08	ND	ND	ND
64	76.98	63.3	ND	0.18	1.46	ND	0.09	0.01	0.10	ND	C ₁₅ -C ₂₇	7.12
65	0.52	3.9	ND	0.22	0.93	ND	ND	0.01	0.06	ND	C ₁₇ -C ₂₁	ND
66	89.18	5.3	0.13	ND	ND	ND	0.25	ND	0.75	ND	C ₁₅ -C ₂₅	2.60
67	0.65	1.2	ND	1.04	ND	0.57	0.06	ND	ND	ND	C ₁₅ -C ₂₀	1.39
68	19.64	5.7	0.52	2.09	0.97	3.41	0.21	0.12	0.55	ND	C ₁₅ -C ₂₅	1.79
69	13.47	2.1	0.04	ND	ND	ND	0.01	ND	0.08	ND	C ₁₅ -C ₂₃	2.93
70	2.12	4.5	ND	0.97	0.18	0.18	0.14	0.02	0.04	ND	C ₁₂ -C ₂₃	1.39
71	5.21	MD	ND	ND	ND	ND	0.24	0.03	ND	ND	C ₁₂ -C ₂₂	1.76
72	100.98	13.2	ND	ND	0.27	ND	ND	0.04	0.10	ND	C ₁₇ -C ₂₈	5.49
73	0.33	0.5	ND	ND	2.43	ND	0.03	0.07	0.02	ND	C ₁₅ -C ₂₄	5.23
74	1.08	1.2	ND	ND	ND	ND	ND	ND	0.08	ND	ND	ND
75	333.86	4.5	0.01	38.40	ND	ND	0.30	ND	ND	ND	ND	6.79
76	4.69	9.6	ND	ND	ND	ND	0.18	ND	0.27	ND	C ₁₅ -C ₂₇	ND
77	74.70	0.1	0.09	0.57	1.22	0.85	0.10	0.39	0.10	0.39	C ₁₂ -C ₂₉	4.84
78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79	2.27	1.2	ND	ND	0.53	ND	0.04	0.24	0.09	ND	C ₁₅ -C ₂₁	1.72
80	149.67	25.0	0.25	ND	ND	0.83	ND	0.22	0.53	ND	C ₁₇ -C ₂₈	3.57

Table 13. Aliphatic hydrocarbon characterization of surface sediments collected during Year 01. All values are corrected for percent recovery and are expressed on a dry weight basis. (cont.)

Laboratory	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
81	7.01	3.4	ND	ND	ND	ND	ND	ND	0.12	ND	C ₂₁ -C ₂₅	3.18
82	52.17	3.4	ND	ND	ND	ND	0.19	ND	0.56	11.19	C ₁₅ -C ₂₉	7.12
83	5.03	2.1	ND	1.31	ND	0.95	ND	ND	0.16	ND	C ₁₂ -C ₂₅	1.30
84	103.30	22.4	0.20	2.64	ND	ND	0.60	ND	1.18	ND	C ₁₂ -C ₂₄	1.93
86	4.45	3.8	ND	0.35	1.40	1.86	0.22	0.01	0.37	ND	C ₁₂ -C ₂₅	1.61
87	175.16	162.0	0.07	3.81	ND	0.61	ND	ND	ND	ND	C ₁₈ -C ₂₆	2.16
88	0.76	0.1	ND	ND	ND	ND	ND	ND	0.04	ND	ND	0.62
89	0.22	1.7	ND	ND	ND	ND	0.05	0.00	0.01	ND	C ₁₂ -C ₂₂	1.64
90	3.52	1.2	ND	34.12	ND	1.66	0.11	ND	0.48	ND	C ₁₂ -C ₂₅	4.03
92	1.47	9.2	ND	ND	ND	ND	ND	ND	0.37	ND	C ₂₁ -C ₂₃	2.91
93	14.68	3.2	ND	ND	1.56	ND	0.57	0.40	0.03	ND	C ₁₂ -C ₂₆	1.33
94	1.55	0.8	ND	ND	ND	ND	ND	0.01	ND	ND	C ₁₂ -C ₂₀	1.05
95	5.82	0.4	ND	ND	1.28	ND	0.17	0.13	0.18	ND	C ₁₂ -C ₂₁	1.50
96	55.11	1.9	0.15	0.54	ND	1.61	0.34	ND	0.47	ND	C ₁₂ -C ₂₅	1.54
97	5.18	0.2	ND	ND	ND	ND	0.16	ND	0.21	ND	C ₁₂ -C ₂₁	4.23
99	13.03	592.8	ND	ND	ND	ND	0.11	ND	ND	ND	C ₁₂ -C ₂₁	ND
100	5.82	0.2	ND	ND	11.82	ND	0.07	1.33	0.73	ND	C ₁₄ -C ₂₅	7.39
101	204.53	19.0	0.12	0.14	88.40	1.07	0.04	3.59	0.40	ND	C ₁₂ -C ₂₇	3.28
102	98.30	18.5	0.22	54.43	ND	0.53	ND	ND	0.32	ND	C ₁₂ -C ₂₅	2.90
103	777.12	121.9	0.10	3.38	2.57	0.12	0.34	6.40	1.41	ND	C ₁₅ -C ₂₅	9.79
104	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105	50.50	18.4	ND	75.69	ND	0.60	0.07	ND	0.25	ND	C ₁₂ -C ₂₈	1.64
106	1.07	0.2	ND	ND	0.15	ND	0.08	0.01	0.01	ND	C ₁₂ -C ₂₄	0.93
107	6.38	6.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108	2.96	0.1	ND	ND	ND	ND	ND	ND	ND	1.47	C ₁₉ -C ₂₄	ND
109	8.03	2.6	ND	13.60	0.12	5.64	0.06	0.13	0.11	ND	C ₁₂ -C ₂₅	0.86
110	5.01	0.4	ND	ND	ND	ND	ND	2.38	0.58	ND	ND	ND
111	4.45	23.3	ND	ND	0.09	ND	0.25	0.04	0.58	ND	C ₁₅ -C ₂₁	ND
112	4.57	3.0	ND	ND	1.16	ND	ND	0.76	0.22	ND	C ₁₂ -C ₂₃	5.73
113	1.71	0.3	ND	ND	ND	ND	ND	0.11	0.18	ND	C ₁₇ -C ₂₅	12.10
114	0.75	0.2	ND	ND	1.72	ND	0.07	0.08	ND	ND	C ₁₅ -C ₁₉	1.95
115	2.63	2.8	ND	ND	ND	ND	ND	ND	0.21	ND	ND	0.41
116	4.34	0.7	ND	ND	ND	ND	0.20	ND	ND	ND	C ₁₂ -C ₂₂	0.62
117	2.58	0.4	ND	ND	ND	ND	ND	ND	0.02	ND	ND	0.42
118	37.86	MD	ND	5.31	ND	ND	ND	ND	0.40	ND	C ₁₉ -C ₂₃	2.47
119	4.36	2.5	ND	2.15	23.09	ND	ND	0.70	1.48	ND	C ₁₇ -C ₂₃	29.32
120	19.29	1.9	ND	ND	ND	1.76	0.04	7.25	0.86	ND	C ₁₃ -C ₂₅	8.44

Table 13. Aliphatic hydrocarbon characterization of surface sediments collected during Year 01. All values are corrected for percent recovery and are expressed on a dry weight basis. (cont.)

Laboratory	Total* f ₁ (µg/g)	RATIOS					KEY HYDROCARBONS (µg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
121	52.00	11.4	ND	274.03	ND	3.29	0.54	ND	0.15	13.06	C ₁₂ -C ₂₉	2.42
122	62.94	MD	ND	12.95	0.02	ND	0.02	0.02	0.37	22.19	C ₁₂ -C ₂₉	3.92
123	0.73	0.1	ND	ND	ND	ND	0.06	0.05	0.02	ND	C ₁₅ -C ₂₄	1.31
124	12.61	1.5	ND	ND	3.95	ND	ND	0.70	0.03	ND	C ₁₇ -C ₂₇	0.76
125	49.57	21.4	0.22	0.17	15.49	1.71	0.10	0.38	0.04	ND	C ₁₂ -C ₂₆	0.90
126	0.92	0.3	ND	ND	ND	ND	ND	ND	0.39	ND	ND	ND
127	1.16	0.2	ND	11.73	ND	2.26	0.09	ND	0.10	ND	C ₁₅ -C ₂₃	2.46
128	34.90	260.6	0.34	ND	ND	2.15	0.03	2.67	1.32	ND	C ₁₅ -C ₂₅	13.02
129	0.01	0.1	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND
130	0.23	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
132	4.66	0.2	ND	0.97	9.43	0.57	ND	0.77	0.45	1.42	C ₁₂ -C ₂₉	4.24
134	43.16	2.5	0.30	ND	ND	ND	0.13	4.44	0.96	ND	C ₁₂ -C ₂₅	3.40
135	237.45	35.4	0.03	0.85	18.80	1.39	ND	0.96	0.70	ND	C ₁₇ -C ₂₅	9.92
136	484.47	31.3	0.03	ND	ND	1.95	0.47	ND	0.66	ND	C ₁₂ -C ₂₅	2.64
137	28.79	5.4	0.01	ND	ND	ND	ND	ND	0.08	ND	ND	2.21
138	24.50	ND	0.11	0.44	3.70	3.16	0.11	0.04	0.20	ND	C ₁₅ -C ₂₅	1.59
139	21.26	12.5	0.02	ND	ND	ND	0.03	ND	0.07	ND	C ₁₅ -C ₂₄	2.79
140	27.90	1.4	0.04	ND	ND	ND	ND	ND	0.31	ND	C ₁₈ -C ₂₃	5.01
142	308.74	54.4	0.04	ND	ND	ND	0.40	0.44	2.53	ND	C ₁₅ -C ₂₃	ND
143	1.09	0.3	ND	ND	3.01	ND	TD	0.01	0.03	ND	C ₁₂ -C ₂₃	0.97
144	73.07	15.6	0.03	1.03	0.31	7.97	ND	0.01	0.85	ND	C ₁₇ -C ₂₃	10.73
145	2.01	0.2	ND	ND	5.43	ND	0.16	0.15	0.63	ND	C ₁₂ -C ₂₃	4.42
146	4.29	ND	ND	ND	ND	ND	ND	ND	0.23	ND	C ₂₁ -C ₂₆	0.57
147	216.69	43.3	0.08	ND	ND	ND	ND	ND	6.70	ND	C ₁₈ -C ₂₅	8.23
148	86.58	0.3	0.05	8.28	ND	0.38	0.02	ND	0.29	ND	C ₁₅ -C ₂₇	1.79
149	188.41	92.0	0.14	6.50	ND	1.16	0.26	ND	7.10	ND	C ₁₂ -C ₂₆	9.07
150	1.81	1.6	ND	ND	ND	ND	N	ND	0.69	ND	C ₁₈ -C ₂₂	5.53
151	23.84	6.0	ND	ND	ND	ND	0.01	0.05	1.04	ND	C ₁₂ -C ₂₃	1.36
152	81.21	102.3	0.08	ND	ND	ND	0.10	0.05	0.51	ND	C ₁₅ -C ₂₅	1.36
153	42.84	8.6	0.13	ND	ND	10.01	0.13	ND	0.40	ND	C ₁₄ -C ₂₂	1.15
154	0.65	1.3	ND	ND	ND	ND	ND	0.19	0.17	ND	C ₁₇ -C ₂₁	12.91
155	86.19	MD	0.19	0.76	3.35	2.10	0.13	0.38	0.87	ND	C ₁₂ -C ₂₄	1.20

MD - Missing Data
 ND - None Detected.
 TD - Trace Detected

Table 14. Aromatic hydrocarbon characterization of surface sediments collected during Year 01. Values are corrected for percent recovery and are expressed on a dry weight basis.

Sample	Total f ₂	Napththalene	Phenanthrene	Dibenzothiophene	Pyrene
1	MD				
2	4.48	ND	0.03	0.17	0.27
5	8.92	ND	0.82	0.30	0.17
6	23.65	ND	0.02	0.09	0.06
7	5.42	ND	0.19	0.11	0.28
8	13.15	ND	TD	0.17	0.04
9	2.45	ND	0.09	0.02	0.07
10	3.79	TD	0.04	0.13	0.07
11	3.67	ND	0.13	0.20	0.17
12	3.01	ND	0.11	0.19	0.01
13	3.21	ND	0.56	0.14	0.25
14	5.04	ND	0.10	0.23	0.63
15	4.10	ND	0.38	0.29	0.09
16	1.78	ND	ND	ND	0.36
17	24.94	0.07	1.00	0.18	6.30
18	5.62	0.06	1.21	0.07	0.01
19	14.29	ND	0.13	0.09	0.07
20	0.99	ND	ND	0.05	ND
21	1.12	ND	ND	ND	TD
22	3.58	ND	0.36	0.04	0.06
23	2.03	ND	0.40	0.10	0.10
24	MD				
25	MD				
26	3.81	ND	0.38	0.05	0.59
27	0.84	ND	ND	ND	0.10
28	0.71	ND	ND	ND	ND
29	3.37	ND	0.33	0.06	0.76
30	0.67	ND	0.05	ND	ND
31	6.28	ND	0.04	0.03	0.56
32	22.06	ND	0.02	0.46	0.73
33	10.46	0.14	0.05	0.32	0.78
34	1.48	ND	0.08	0.10	0.11
35	2.40	ND	0.24	0.18	0.37
36	4.51	0.26	0.08	ND	0.86
38	1.31	ND	0.03	0.06	0.23
40	22.98	0.08	0.12	2.05	ND
41	2.77	ND	0.02	0.40	0.03
42	0.49	0.06	ND	ND	0.09
43	6.78	ND	0.08	0.05	0.28
44	2.44	ND	ND	ND	0.86
45	4.48	ND	ND	ND	1.47
46	1.71	ND	0.18	ND	0.14
47	1.12	ND	0.04	0.07	0.10
48	12.90	ND	0.07	ND	0.20
49	5.15	ND	0.62	ND	0.36

Table 14. Aromatic hydrocarbon characterization of surface sediments collected during Year 01. Values are corrected for percent recovery and are expressed on a dry weight basis. (cont).

Sample	Total f ₂	Napthalene	Phenanthrene	Dibenzothiophene	Pyrene
51	19.72	ND	3.13	0.86	5.82
52	3.88	0.03	0.70	1.20	2.00
53	2.54	ND	0.73	0.23	0.08
54	5.67	ND	0.51	1.21	1.69
55	2.32	ND	0.02	0.02	0.80
56	459.15	ND	0.08	0.63	12.20
57	84.43	ND	0.14	0.35	3.15
58	420.84	ND	2.82	0.60	12.35
59	112.62	ND	0.26	0.63	ND
60	446.80	ND	1.26	4.51	33.73
61	213.85	ND	11.70	6.11	3.22
62	54.46	ND	0.14	1.34	7.32
63	20.87	ND	0.07	TD	0.83
64	1.22	ND	0.04	ND	0.44
65	0.13	ND	ND	ND	ND
66	16.88	ND	0.18	0.56	5.73
67	0.57	ND	ND	0.03	0.15
68	3.44	ND	ND	ND	0.16
69	6.40	ND	0.11	0.33	2.29
70	0.46	ND	ND	ND	ND
71	MD				
72	7.65	ND	0.28	ND	0.22
73	0.72	ND	ND	ND	ND
74	0.87	ND	0.15	ND	ND
75	43.54	ND	0.04	0.04	1.01
76	0.49	ND	ND	ND	ND
77	10.06	0.03	0.65	0.06	3.73
78	9.49	ND	0.09	0.01	0.33
79	1.91	ND	0.18	ND	0.71
80	5.97	ND	0.04	ND	0.23
81	12.05	ND	0.05	0.12	2.90
82	15.20	0.10	0.18	0.73	4.42
83	2.40	ND	ND	0.17	0.27
84	4.60	ND	TD	0.44	0.60
86	1.16	ND	ND	ND	ND
87	1.08	ND	0.06	ND	0.19
88	17.47	ND	TD	0.51	0.79
89	0.13	ND	ND	ND	ND
90	2.85	ND	0.01	ND	0.33
92	0.16	ND	ND	ND	ND
93	4.63	ND	0.03	0.17	0.46
94	1.85	ND	ND	0.02	0.21
95	13.14	ND	3.94	1.03	1.53
96	28.91	1.52	0.11	0.67	1.86
97	8.75	ND	0.10	0.02	0.27

Table 14. Aromatic hydrocarbon characterization of surface sediments collected during Year 01. Values are corrected for percent recovery and are expressed on a dry weight basis. (cont).

Sample	Total f ₂	Napththalene	Phenanthrene	Dibenzothiophene	Pyrene
99	0.02	ND	ND	ND	ND
100	24.29	ND	0.30	2.73	1.54
101	10.78	0.04	0.05	0.10	0.41
102	5.31	ND	1.04	0.53	0.28
103	6.37	ND	0.23	0.10	0.17
104	9.77	ND	0.03	0.10	0.28
105	2.74	ND	ND	1.92	ND
106	4.99	ND	0.10	0.29	0.26
107	1.06	ND	ND	ND	ND
108	245.33	ND	0.20	ND	0.25
109	3.41	ND	0.23	ND	0.62
110	12.75	0.20	0.04	0.22	0.83
111	0.19	ND	ND	ND	ND
112	1.52	ND	0.04	0.14	0.13
113	5.63	ND	0.04	ND	0.10
114	4.26	ND	0.03	0.52	3.96
115	0.95	ND	ND	0.03	ND
116	6.47	ND	0.02	0.16	1.81
117	7.33	ND	0.13	ND	1.69
118	MD				
119	1.71	ND	0.09	1.01	ND
120	10.29	ND	0.28	0.61	ND
121	4.55	ND	0.08	0.24	0.62
122	MD				
123	6.36	ND	0.07	0.13	0.60
124	8.50	ND	0.13	0.36	1.19
125	2.32	ND	0.22	ND	0.46
126	2.67	ND	ND	ND	0.08
127	5.11	ND	0.03	0.41	0.48
128	0.13	ND	ND	ND	ND
129	0.23	ND	ND	ND	ND
130	0.20	ND	ND	ND	ND
132	18.93	ND	0.24	0.87	1.21
134	17.16	ND	0.06	0.22	0.26
135	6.70	0.08	0.17	0.18	1.04
136	15.48	0.33	0.21	0.21	0.89
137	5.34	ND	0.11	0.46	0.35
138	MD				
139	1.70	0.04	0.04	0.05	0.16
140	20.05	ND	0.10	0.22	1.93
142	5.68	ND	0.22	0.26	0.94
143	4.09	ND	0.02	0.73	0.16
144	4.64	ND	0.41	0.04	0.66
145	9.42	ND	1.51	0.18	2.81

Table 14. Aromatic hydrocarbon characterization of surface sediments collected during Year 01. Values are corrected for percent recovery and are expressed on a dry weight basis. (cont).

Sample	Total f ₂	Napththalene	Phenanthrene	Dibenzothiophene	Pyrene
147	5.00	ND	0.07	0.08	1.21
148	242.85	0.29	7.68	47.92	22.91
149	2.05	ND	ND	ND	ND
150	1.15	ND	ND	ND	0.26
151	3.95	ND	ND	0.10	1.72
152	0.79	ND	ND	ND	ND
153	5.06	ND	0.04	0.03	0.05
154	0.50	ND	ND	ND	0.04
155	MD				

MD - Missing Data
 TD - Trace Detected
 ND - None Detected

Figures 14 and 15 show the distribution of aliphatic hydrocarbons and the aromatic hydrocarbons. Several of the other indices were mapped (CPI, C_{17} /pristane, C_{18} /phytane and the resolved/unresolved). The mapping of these indices were of minimal use, added little to the interpretation of the distribution of hydrocarbons, and because of the high costs of reproducing them, are not presented.

To supplement the contour maps several of the indices were used to separate those samples containing only biogenic material from samples with petroleum contamination. It was found that the most useful index for this was the HCC/TOM ratio in conjunction with the resolved/unresolved (identifiable peaks/UCM) ratio. The HCC/TOM ratios were ranked in ascending order and using the resolved /unresolved and other indices (CPI, Pristane/Phytane, etc.) were separated into two groups, those that showed indications of petrogenic hydrocarbons and those that did not. Table 15 lists those samples, as per their location and concentrations, containing petroleum contamination.

The data collected from these stations was then compared for correlations using several regression equations. These included linear, exponential, logarithmic and power law. Total, aliphatic and aromatic hydrocarbons were compared to the three sediment grain sizes, organic and carbonate content, water salinity and temperature. This exercise showed no strong correlation between concentration of hydrocarbons and any of the other parameters. The strongest correlation existed between salinity and total hydrocarbons (correlation coefficient -0.54). Figure 16 presents a scattergram of the data and the regression line. Obviously salinity has no effect on the distribution of hydrocarbons. This relationship is a function of location to freshwater input.

Figures 14 and 15, and Table 15 indicate in general that many of the samples which contained petroleum contamination were associated with canals which receive runoff from large urbanized areas. This is further supported by the inverse relationship of salinity (freshwater input) to hydrocarbon content (the lower the salinity the higher the hydrocarbon concentration) shown in Figure 16.

The highest concentrations of hydrocarbons were found in the sediments of the Miami River. The highest concentration of aliphatics ($2449.60 \mu\text{g/g}$) was found at station 61, while the highest aromatic concentrations ($459.15 \mu\text{g/g}$) were at station 56, near the railroad bridge located at the most westerly point sampled.

Organisms were collected from several areas of the Bay and analyzed for petroleum contamination. Table 16 and 17 lists these results. There were no strong indication of contamination in any of the samples. Although this maybe an artifact of the small sample size extracted.

The main purpose of the second year of the study was to investigate areas where analyses indicated the presence of petroleum contamination. Four primary and one secondary study areas were chosen. The primary areas were: 1) the Little River; 2) the Miami River; 3) Black Creek-Goulds Canal area; 4) Military Canal. The secondary area was Snapper Creek. These areas were sampled for additional sediments, surface water and biota if available.

The Little River and the Miami River are located in the northern part of the Bay. The Little River is characterized by a residential community near its mouth while its upper areas receive runoff from city streets. The area is best characterized by inputs from urban runoff and a minimal input from boat traffic. The projected changes within this area will probably be minimal over the next several years. The Miami River receives a great deal of boat and ship

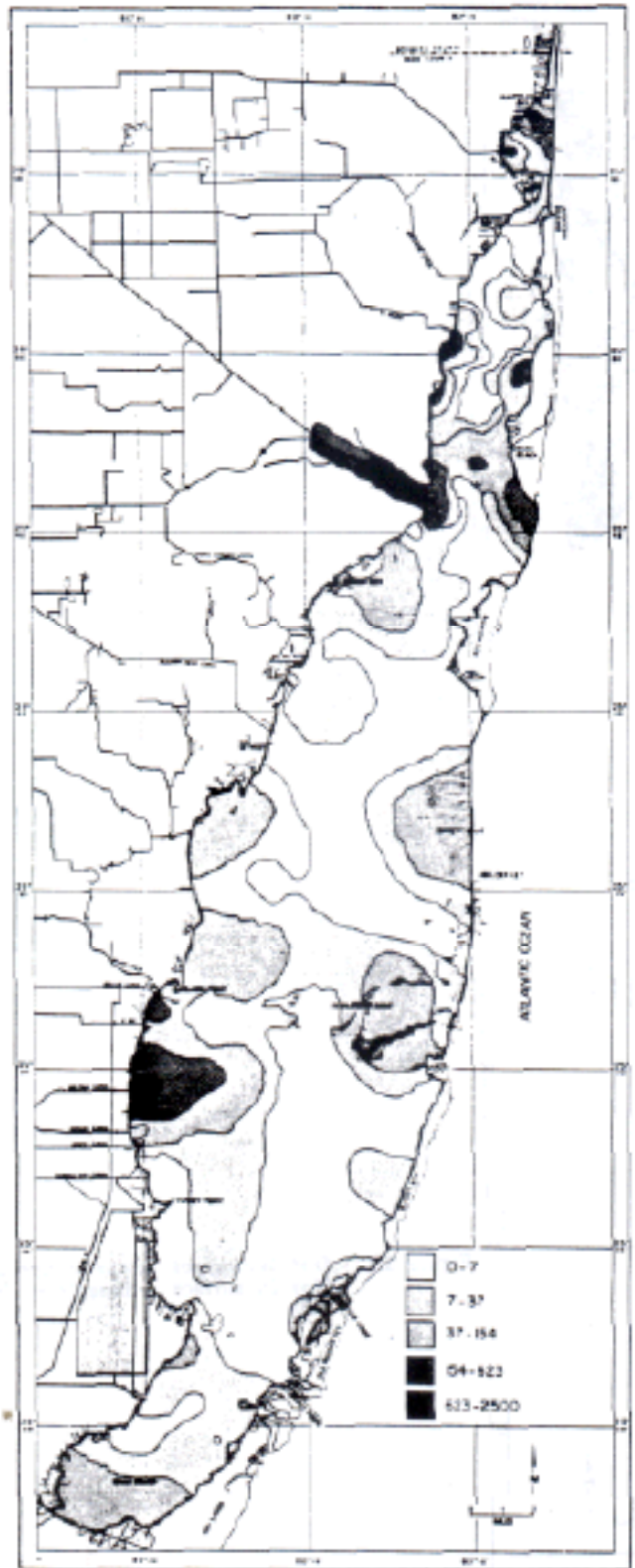


Figure 14a. Distribution of aliphatic hydrocarbons (f_1) in surface sediments of Biscayne Bay. [ORIGINAL]

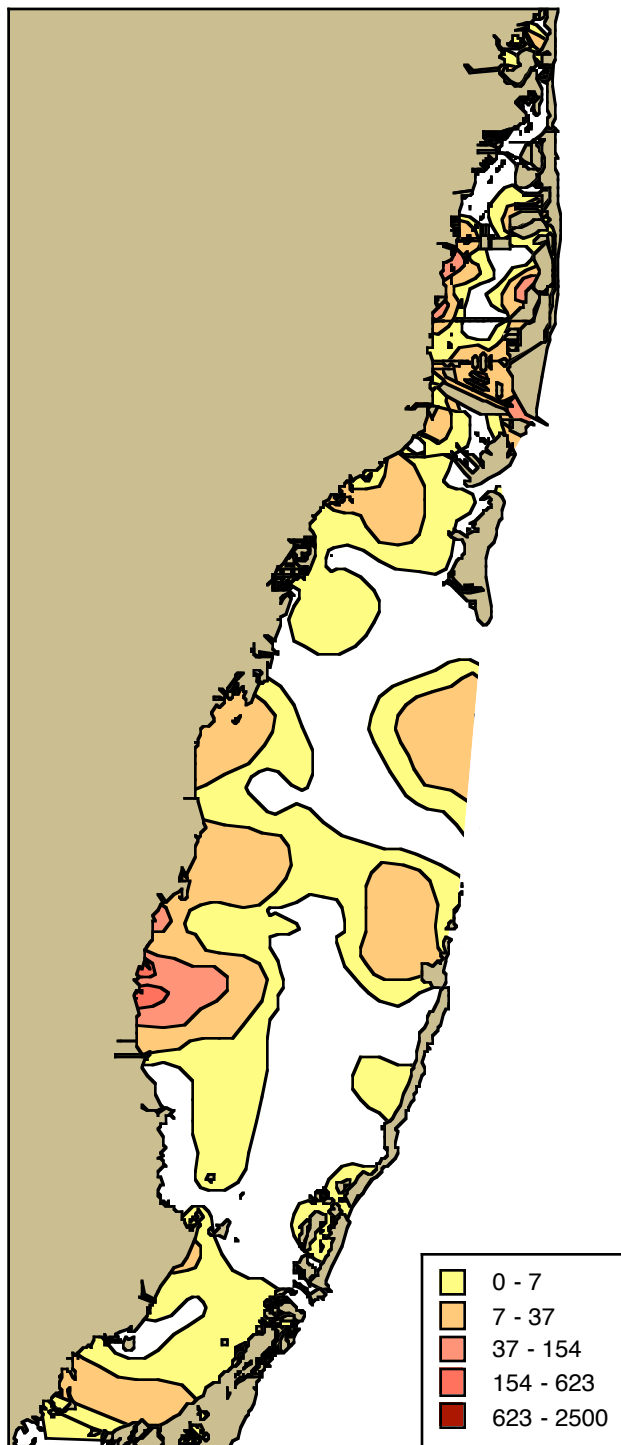


Figure 14b. Distribution of aliphatic hydrocarbons (f_1) in surface sediments of Biscayne Bay. [RECONSTRUCTION. HIGH VALUES UPSTREAM IN THE MIAMI RIVER ARE NOT SHOWN. LOCATION OF LAND MASSES RELATIVE TO HYDROCARBON DISTRIBUTIONS NOT CLEAR IN ORIGINAL.]

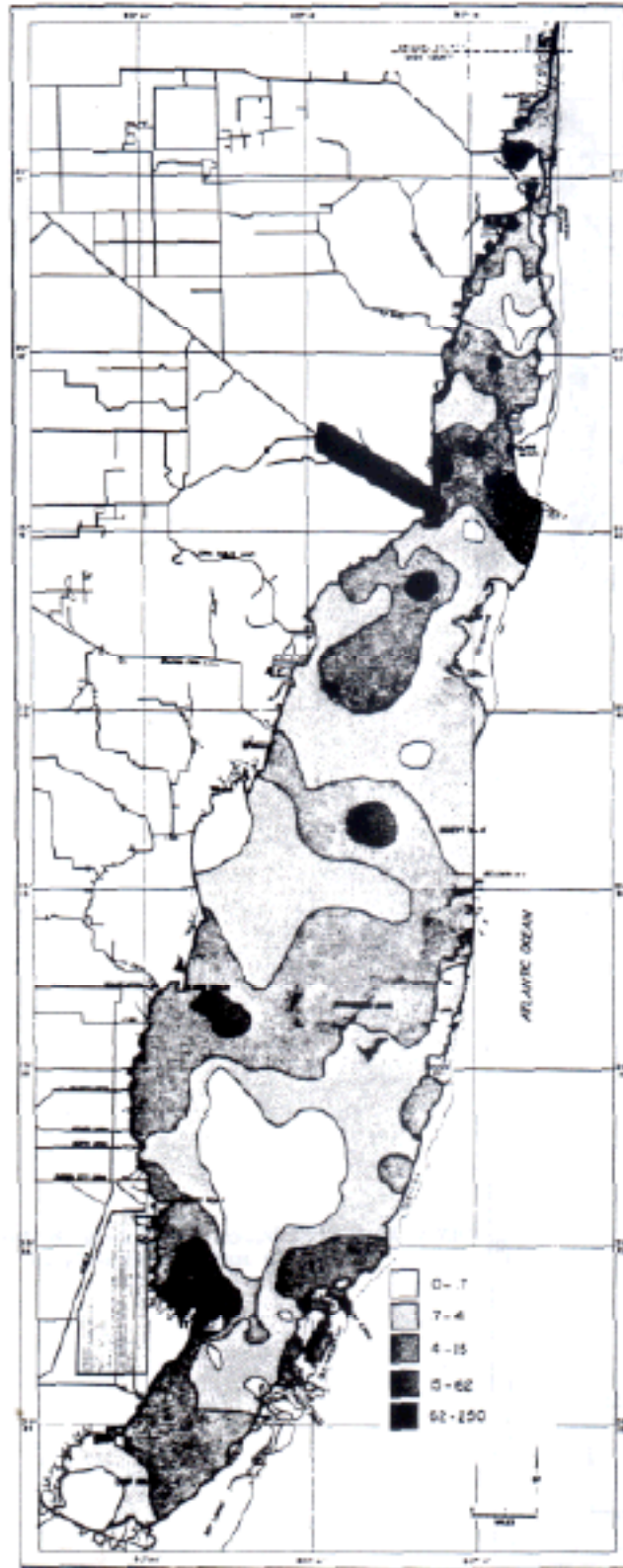


Figure 15a. Distribution of aromatic hydrocarbons (f₂) in surface sediments of Biscayne Bay. [ORIGINAL]

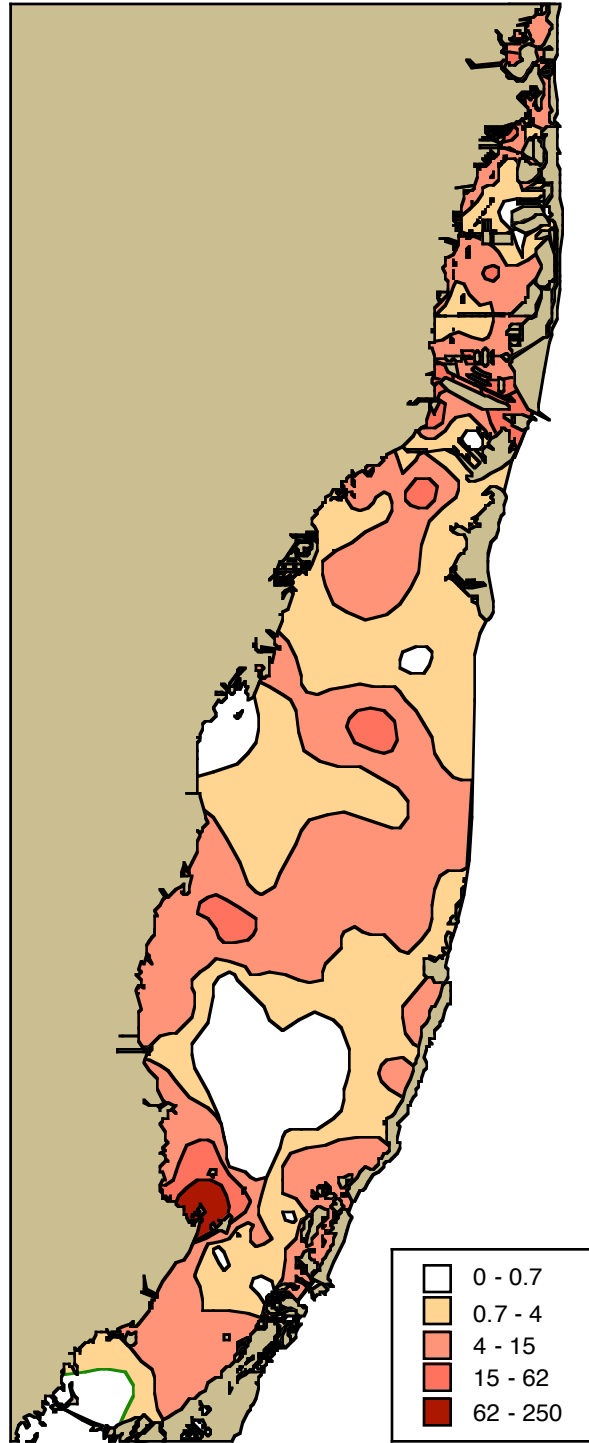


Figure 15b. Distribution of aromatic hydrocarbons (f_2) in surface sediments of Biscayne Bay. [RECONSTRUCTION. HIGH VALUES UPSTREAM IN THE MIAMI RIVER ARE NOT SHOWN. LOCATION OF LAND MASSES RELATIVE TO HYDROCARBON DISTRIBUTIONS NOT CLEAR IN ORIGINAL.]

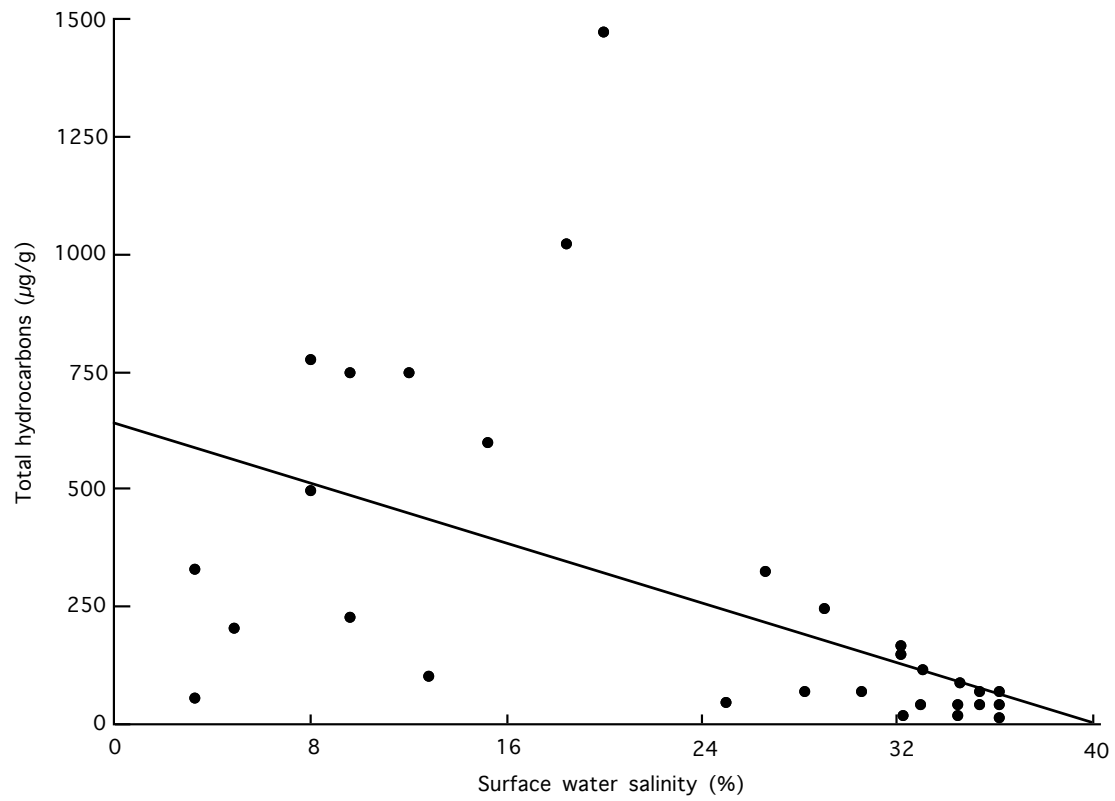


Figure 16. Scattergram of salinity vs. total hydrocarbons (aliphatic + aromatic).

Table 15. Surface sediment containing petroleum hydrocarbons collected during the first year of the study.

Sample	HCC/TOM	Resolved/ (x 10 ⁻²)	Total Hydrocarbons Unresolved	Location (μg/g)
Samples located north of Rickenbacker Causeway				
32	1.06	0.50	124.51	Between San Marino and Hibiscus Islands
34	0.28	0.02	33.08	Belle Isle
36	0.13	0.03	15.75	Westend Venetian Causeway
45	0.32	0.11	37.62	Spoil Island
47	0.51	0.06	60.04	Intracoastal Waterway
48	0.36	0.04	42.34	Spoil Area
49	0.24	ND	29.28	Intracoastal Waterway
51	0.62	0.08	73.18	Canal mouth
56	MD	0.04	739.97	Miami River
57	6.42	0.03	754.39	Miami River
58	5.18	0.04	608.27	Miami River
59	8.73	0.04	1026.17	Miami River
60	MD	0.03	1465.60	Miami River
61	22.67	0.02	2663.45	Miami River
62	2.04	0.01	240.00	Miami River
75	3.21	0.01	377.41	Loading area - Belcher Oil
77	0.72	0.09	84.76	Canal mouth
80	1.32	ND	155.64	West end of Julia Tuttle Causeway
135	2.08	0.03	244.15	Dredged hole
136	4.25	0.03	499.95	Little River
137	0.29	0.01	34.14	Little River
138	MD	0.11	MD	Normandy Waterway
142	2.67	0.04	314.42	Surprise Lake
144	0.66	0.03	77.71	Collins Canal
148	2.80	0.05	329.43	Junction of Royal Glades Canal and Oleta River
149	1.62	0.14	190.46	Maul Lake
153	0.41	0.13	47.90	Indian Creek
155	MD	0.19	MD	Biscayne Point

Table 15. Surface sediment containing petroleum hydrocarbons collected during the first year of the study (cont.).

Sample	HCC/TOM	Resolved/ (x 10 ⁻²)	Total Hydrocarbons Unresolved	Location (μg/g)
Samples Located South of Rickenbacker Causeway				
6	0.39	0.37	46.18	Intracoastal Waterway
7	0.33	0.45	38.65	Intracoastal Waterway
11	0.40	ND	47.78	East of Matheson Hammock
12	0.63	0.36	75.00	Safety Valve
13	0.67	0.04	78.06	Soldier Key
21	0.58	0.14	68.12	Northwest of Featherbed Bank - Black Ledge
22	0.10	0.01	12.32	North of Featherbed Bank - Black Ledge
23	0.61	0.02	72.25	Intracoastal Waterway
24	MD	0.16	MD	Shoal Area
25	MD	0.09	MD	Rickenbacker Causeway
64	0.66	ND	78.20	Dinner Key
66	0.90	0.13	106.06	Coral Gables Canal
68	0.20	0.52	23.08	Coral Gables Canal
84	0.92	0.20	107.90	Featherbed Bank
87	1.50	0.07	176.24	Southeast of Black Point
96	0.72	0.15	84.02	Caesar Creek
101	MD	0.12	215.32	Goulds Canal and Black Creek
102	0.88	0.22	108.61	C-102 Canal
103	6.67	0.10	783.49	Military Canal
105	0.45	ND	53.25	Mowry Canal
120	MD	ND	29.57	Key Largo
122	MD	ND	MD	Intracoastal Waterway
125	MD	0.22	51.89	South of Turkey Point
128	0.30	0.34	35.03	Turkey Point Power Plant Barge Canal

Table 16. Aliphatic hydrocarbon characterization of tissue samples collected during Year 01. All values are corrected for percent recovery and expressed on a dry weight bases.

Laboratory/ Sample	Total* f ₁ (µg/g)	f ₁ / f ₂	RATIOS				KEY HYDROCARBONS (µg/g)				n- ALKANES Homol.	
			Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
Sea Trout #1 (<i>Cynoscion arenarius</i>)												
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sea Trout #2 (<i>Cynoscion arenarius</i>)												
	10.68	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pinfish (<i>Lagodon rhomboides</i>)												
	3.66	23.0	ND	ND	ND	ND	0.73	ND	ND	ND	C ₁₂ -C ₁₅	0.64
Grey Snapper (<i>Lutjanus griseus</i>)												
	36.49	11.8	ND	ND	ND	ND	1.22	ND	ND	ND	ND	ND
Scallops (<i>Argopecten</i> spp.)												
	589.83	53.7	ND	ND	ND	ND	0.71	ND	2.82	ND	ND	ND
Toadfish (<i>Opsanus beta</i>)												
	22.40	6.7	ND	ND	ND	ND	1.07	ND	ND	ND	ND	ND
Shrimp (<i>Penaeus</i> spp.)												
	12.05	1.4	ND	ND	ND	ND	1.13	ND	ND	ND	C ₁₂ -C ₁₅	1.19
Grunt (<i>Haemulon</i> sp.)												
	16.04	2.5	ND	ND	ND	ND	0.76	ND	ND	ND	C ₁₂ -C ₁₆	1.83
Stone Crab (<i>Menippe mercenaria</i>)												
Hepatopancreas												
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Claw muscle												
	19.90	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Blue Crab (<i>Callinectes sapidus</i>)												
Hepatopancreas												
	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Claw muscle												
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
School Master (<i>Lutjanus apodus</i>)												
	1.68	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 17. Aromatic hydrocarbon characterization of tissue samples collected during Year 01. All values are corrected for percent recovery and expressed on a dry weight basis.

Sample	Total f ₂	Napththalene	Phenanthrene	Dibenzothiophene	Pyrene
Sea Trout #t (<i>Cynoscion arenarius</i>)	36.77	ND	ND	ND	ND
Sea Trout #2 (<i>Cynoscion arenarius</i>)	6.48	ND	ND	ND	ND
Pinfish (<i>Lagodon rhomboides</i>)	0.16	ND	ND	ND	ND
Grey Snapper (<i>Lutjanus griseus</i>)	3.08	0.63	ND	ND	ND
Scallops (<i>Argopecten</i> spp.)	10.99	ND	ND	ND	ND
Toadfish (<i>Opsanus beta</i>)	3.39	ND	ND	ND	ND
Shrimp (<i>Penaeus</i> spp.)	85.66	ND	ND	ND	ND
Grunt (<i>Haemulon</i> sp.)	6.32	2.63	1.49	ND	2.27
Stone Crab (<i>Menippe mercenaria</i>)					
Hepatopancreas	5.55	ND	ND	ND	ND
Claw muscle	32.47	ND	ND	ND	ND
Blue Crab (<i>Callinectes sapidus</i>)					
Hepatopancreas	91.47	ND	0.05	0.62	5.75
Claw muscle	29.27	5.81	ND	ND	2.90
School Master (<i>Lutjanus apodus</i>)	65.09	ND	ND	6.78	14.32

traffic and is a major area for on and off loading cargo, ship building, repair and refurbishing. The River was dredged in and widened 1933 (Austin, 1971) thus the accumulation of hydrocarbons in the sediment has been during a 50-year time span. This area was chosen because of its use as a port facility and intensive industrialization. In addition with the growing economy of Miami this area will receive greater pressure from ship traffic in the future.

The areas located in the southern area of the Bay are Snapper Creek, Black Creek - Goulds Canal, and Military Canal. Black Creek and Goulds Canal are both water-control canals which intersect before emptying into the Bay. The sample collected during the first year study was at this intersection and indicated petroleum contamination. The landward portion of Goulds Canal runs parallel to an abandoned landfill, and the Black Creek area is under development by Dade County. A proposed public park and marina are to be built there. Military Canal also showed elevated concentrations of hydrocarbons with indices characteristic of petroleum. This canal is also a water-control structure and receives no boat traffic. The canal drains from the Homestead Air Force Base and the surrounding communities. Snapper Creek was chosen because of its location in a predominantly residential area.

Nine areas were sampled for surface water in the Bay. Six of these areas were canals, one was the Port of Miami, and the other two were in open water located in northern and southern areas of the Bay. Five of these areas contained petroleum contamination in their surface waters. The areas were as follows: the Miami River, Little River, Goulds Canal, Military Canal, and Government Cut (Port of Miami). Tables 18 and 19 present the results of the hydrocarbon analysis of the surface waters. A detailed description of the analyses are presented in Appendices F and G.

The Miami River was sampled for surface waters during an ebbing tide. Samples were collected while progressively moving inland. This insured that different water masses were sampled. Samples 205, 206 and 221 were all taken in the mouth of the Miami River and show no indications of petroleum contamination. Sample 211 which was collected in the upper most reaches of the river (the railroad bridge) accessible by the collection vessel also showed no indication of contamination. Samples 207 to 210 and 212 all indicate petroleum contamination. Figure 17 shows the chromatograms of the aliphatic fraction for surface water samples 207 and 208.

The samples collected from the Little River showed basically the same pattern as those sampled from the Miami River. The samples collected in the north and south forks of the River (224 and 222, respectively) just before it enters the Bay show no indication of petroleum hydrocarbons. Although samples 226 and 227 collected landward contained petroleum hydrocarbons.

Samples collected from Goulds Canal and Military Canal showed the same trend as the other canals sampled. The concentration of petroleum in the surface waters increase as one moves inland. Figure 18 shows the chromatograms for the aliphatic fraction of the three samples collected in Goulds Canal, 232, 233, and 234. Figure 19 shows the chromatogram of the aliphatic fraction for sample 238 which was collected from Military Canal.

Table 20 and 21 presents the hydrocarbon characterization for the sediment samples. Six areas were sampled (Miami River, Little River, Goulds Canal, Black Creek, Military Canal, and Snapper Creek), and all contained petroleum contaminants except the Snapper Creek sample. The Miami River contained the highest concentrations of total hydrocarbons 1833.46 $\mu\text{g/g}$.

Table 18. Aliphatic hydrocarbon characterization of water samples collected during Year 02. All values are corrected for percent recovery.

Laboratory/ Sample	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
Miami River												
205	0.66	0.14	ND	ND	ND	0.08	0.01	ND	ND	ND	C ₁₄ -C ₂₈	0.37
206	0.46	0.04	ND	ND	ND	ND	ND	ND	ND	ND	C ₁₈ -C ₂₅	1.86
207	5.27	11.46	0.27	1.05	1.96	1.60	0.03	0.12	0.06	ND	C ₁₄ -C ₂₇	1.27
208	14.07	54.11	0.94	0.48	2.27	2.10	ND	0.04	0.09	0.31	C ₁₇ -C ₃₀	0.23
209	3.46	17.30	0.30	1.23	ND	0.96	ND	ND	0.03	ND	C ₁₆ -C ₂₆	3.28
210	4.42	0.07	0.23	0.37	22.10	1.01	0.01	0.17	0.05	ND	C ₁₅ -C ₂₆	3.28
211	2.13	0.11	ND	0.75	ND	0.58	ND	ND	0.01	ND	C ₁₈ -C ₂₆	22.88
212	3.33	0.06	0.22	2.25	2.31	2.12	ND	0.05	0.02	ND	C ₁₆ -C ₂₅	5.82
221	1.92	0.30	ND	ND	0.62	ND	ND	0.03	0.03	ND	C ₁₇ -C ₃₀	0.63
Little River												
222	2.79	0.32	ND	ND	ND	ND	ND	ND	0.04	ND	C ₂₁ -C ₃₀	1.14
224	0.27	0.14	ND	1.70	2.65	ND	0.01	0.03	TD	ND	C ₁₅ -C ₂₅	1.75
226	0.98	0.44	0.42	3.33	0.42	1.36	0.01	0.01	TD	ND	C ₁₅ -C ₃₀	0.45
227	8.82	4.12	0.08	0.39	5.14	0.98	ND	0.04	0.04	ND	C ₁₆ -C ₂₈	0.94
Goulds Canal												
232	25.36	9.57	0.38	1.03	1.16	1.44	0.16	0.36	0.21	ND	C ₁₄ -C ₃₀	0.54
233	4.24	5.89	ND	1.31	1.46	1.71	0.04	0.21	0.09	ND	C ₁₅ -C ₂₈	1.07
234	2.69	44.83	ND	ND	ND	ND	0.17	ND	ND	0.26	C ₁₆ -C ₂₉	0.43
Black Creek												
241	2.00	16.67	ND	ND	ND	ND	0.07	0.04	0.03	ND	C ₁₄ -C ₂₈	0.49
242	1.07	9.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
246	0.41	1.11	ND	ND	ND	ND	ND	ND	0.02	ND	C ₁₂ -C ₂₇	4.65
Military Canal												
238	6.17	10.28	0.11	ND	ND	ND	ND	0.03	0.01	ND	C ₁₇ -C ₂₇	1.58
240	2.16	8.31	ND	ND	ND	ND	ND	ND	ND	ND	C ₁₆ -C ₂₈	0.62
Snapper Creek												
247	0.81	5.4	ND	ND	ND	ND	ND	ND	ND	ND	C ₂₂ -C ₂₈	0.15
Government Cut												
231	3.13	3.44	1.46	2.56	0.25	1.02	ND	0.01	0.01	ND	C ₁₆ -C ₂₈	1.95

Table 18. Aliphatic hydrocarbon characterization of water samples collected during Year 02. All values are corrected for percent recovery (cont.).

Laboratory/ Sample	Total* f ₁ (μg/g)	f ₁ / f ₂	RATIOS				KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
			Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
Open Water-Northern Bay												
230	0.40	0.29	ND	ND	0.89	ND	0.08	0.02	ND	ND	C ₁₅ -C ₂₅	32.97
Open Water-Southern Bay												
235	3.95	16.46	ND	ND	ND	ND	ND	ND	0.06	Nd	C ₁₉ -C ₂₆	1.39
236	10.18	42.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26
237	0.95	1.30	ND	ND	ND	1.26	ND	0.01	0.04	ND	C ₁₇ -C ₂₈	1.11

ND = None Detected
TD = Trace Detected

Table 19. Aromatic hydrocarbon characterization for water samples collected during Year 02. All values are corrected for percent.

Sample	Total f ₂	Napthalene	Dibenzo= thiophene	Phenanthrene (µg/L)	1-Methyl= phenanthrene	Pyrene
Miami River						
205	4.57	ND	ND	ND	ND	ND
206	10.61	ND	ND	ND	ND	ND
207	0.46	ND	ND	ND	ND	0.01
208	0.26	ND	ND	ND	ND	ND
209	0.20	ND	0.01	ND	ND	0.01
210	60.05	ND	0.05	0.03	0.14	0.42
211	19.59	ND	0.02	ND	ND	ND
212	50.75	ND	0.61	ND	ND	ND
221	6.48	ND	ND	ND	ND	0.03
Little River						
222	8.68	ND	ND	ND	ND	0.03
224	1.97	ND	ND	ND	ND	ND
226	2.21	ND	ND	ND	ND	0.01
227	2.14	ND	0.08	0.04	ND	ND
Goulds Canal						
232	2.65	ND	0.01	0.01	0.02	ND
233	0.72	ND	ND	ND	ND	0.69
234	0.06	ND	ND	ND	ND	ND
Black Creek						
241	0.12	ND	0.01	ND	ND	ND
242	0.11	ND	ND	ND	ND	ND
246	0.37	ND	0.04	0.03	ND	ND
Military Canal						
238	0.60	ND	ND	ND	ND	ND
240	0.26	ND	ND	ND	ND	ND
Snapper Creek						
247	0.15	ND	ND	ND	ND	ND
Government Cut						
231	0.91	ND	ND	ND	ND	ND

Table 19. Aromatic hydrocarbon characterization for water samples collected during Year 02. All values are corrected for percent (cont.).

Sample	Total f ₂	Naphthalene	Dibenzo= thiophene	Phenanthrene (µg/L)	1-Methyl= phenanthrene	Pyrene
Open water-Northern Bay						
230	1.39	ND	ND	ND	ND	ND
Open Water-Southern Bay						
235	0.24	ND	ND	ND	ND	ND
236	0.24	ND	ND	ND	ND	ND
237	0.73	ND	ND	ND	ND	ND

ND = None detected.

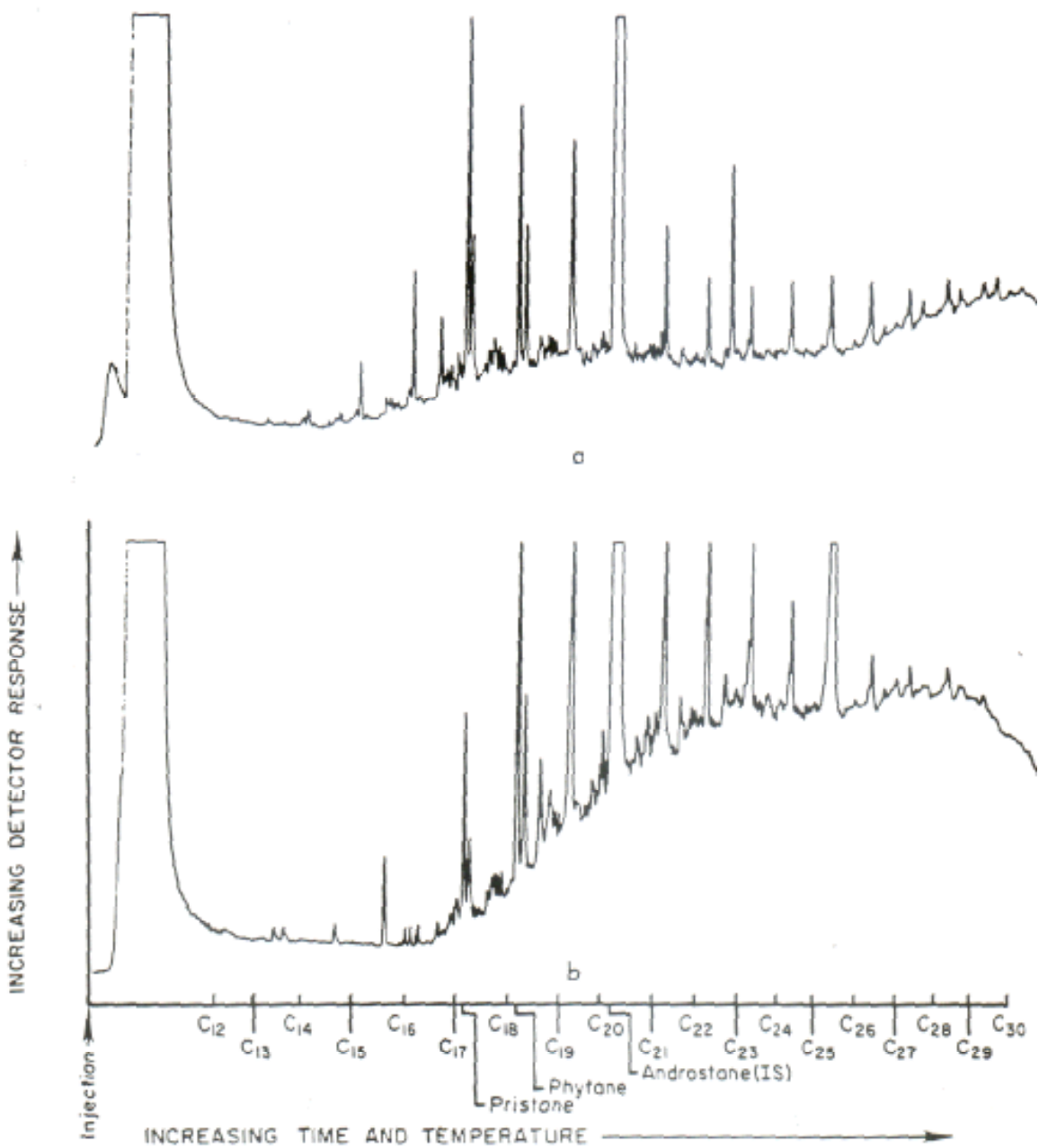


Figure 17. Chromatograms of aliphatic (f1) fraction. Surface water samples collected in the Miami River. a) sample #207, b) sample #208.

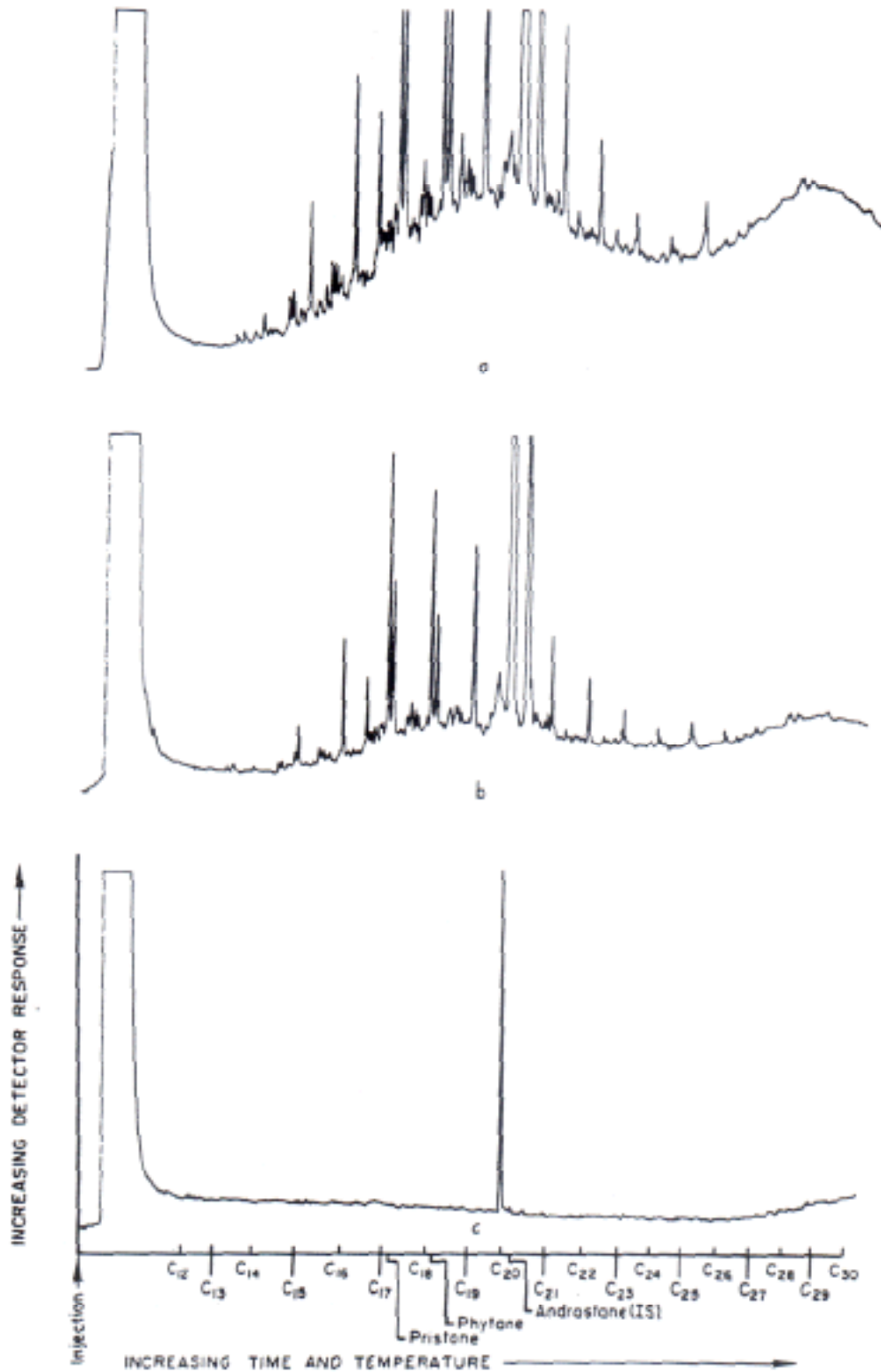


Figure 18. Chromatograms of aliphatic (f_1) fraction. Surface water samples collected in Goulds Canal.

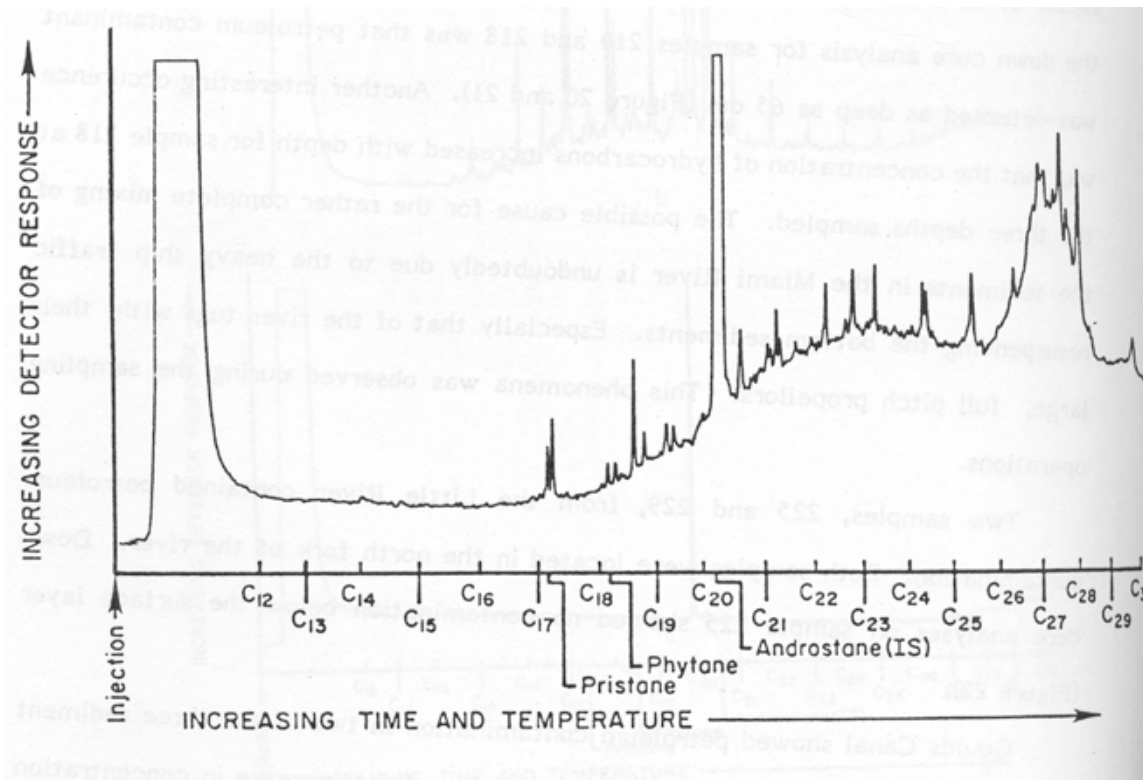


Figure 19. Chromatograms of aliphatic (f_1) fraction. Surface water sample #238 collected in Military Canal.

Table 20. Aliphatic hydrocarbon characterization of sediment samples collected during Year 02. All values are corrected for recovery and expressed on a dry weight basis.

Laboratory	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
Miami River												
213	(0-5) 26.40	2.3	ND	0.38	2.38	1.54	ND	0.40	ND	ND	C ₁₆ -C ₂₈	0.06
214	(0-5) 531.13	13.5	0.16	2.74	0.27	0.59	1.01	1.46	0.69	3.91	C ₁₂ -C ₂₉	2.22
	(20-25)322.50	15.4	0.16	2.70	0.10	0.91	0.39	0.21	ND	ND	C ₁₄ -C ₁₉	0.65
215	(0-5) 456.98	14.5	0.12	0.15	0.79	1.16	0.13	0.20	2.25	ND	C ₁₅ -C ₂₁	0.77
216	(0-5) 1662.40	9.7	0.21	1.11	0.29	0.25	3.46	4.62	ND	ND	C ₁₄ -C ₂₀	1.94
217	(0-5) 342.68	24.7	0.14	0.24	0.37	0.66	0.15	0.13	ND	ND	C ₁₄ -C ₂₀	0.83
218	(0-5) 55.99	12.4	0.11	0.67	1.06	0.61	0.10	0.21	ND	ND	C ₁₅ -C ₁₉	0.97
	(20-25)169.52	20.6	0.17	0.22	0.49	0.64	0.09	0.03	ND	ND	C ₁₅ -C ₂₈	0.15
	(60-65)1462.15	26.8	0.43	1.97	0.18	1.24	1.10	2.35	ND	ND	C ₁₂ -C ₂₀	0.64
219	(0-5) 534.37	9.3	0.13	4.93	0	0.87	0.43	ND	ND	ND	C ₁₄ -C ₁₈	0.31
220	(0-5) 206.15	11.1	0.16	1.99	0.06	0.57	0.27	0.11	0.61	ND	C ₁₄ -C ₂₅	2.09
Little River												
223	(0-5) 0.90	14.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
225	(0-5) 13.99	3.6	1.25	5.78	0.05	1.85	0.02	0.01	0.44	0.36	C ₁₂ -C ₃₀	1.67
	(25-30) 7.12	24.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(55-60) 4.07	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
228	(0-5) 2.65	1.2	ND	ND	0.40	ND	ND	0.06	ND	1.34	ND	ND
229	(0-5) 39.09	4.6	0.06	ND	ND	ND	ND	0.42	ND	ND	ND	1.37
Goulds Canal												
232	(0-5) 227.68	15.8	0.13	0.84	0.25	0.12	0.11	0.42	ND	ND	C ₁₅ -C ₁₉	4.00
	(55-60)413.08	9.9	0.16	7.84	0.09	0.15	0.29	0.41	ND	ND	C ₁₅ -C ₂₀	3.36
233	(0-5) 165.99	2.0	0.03	1.33	ND	ND	ND	ND	ND	ND	ND	ND
234	(0-5) 14.69	1.11	ND	5.28	0.12	0.41	ND	0.12	0.47	ND	C ₁₇ -C ₂₇	20.43

Table 20. Aliphatic hydrocarbon characterization of sediment samples collected during Year 02. All values are corrected for recovery and expressed on a dry weight basis (cont.).

Laboratory	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
Black Creek												
241 (0-5)	16.25	1.7	0.68	7.41	ND	0.44	0.03	ND	0.44	ND	C ₁₂ -C ₂₈	0.55
242 (0-5)	3.03	1.1	ND	ND	ND	ND	ND	0.59	ND	ND	ND	ND
243 (0-5)	1.99	0.3	ND	ND	ND	ND	0.86	ND	ND	ND	ND	ND
244 (0-5)	37.18	0.6	ND	11.45	ND	ND	ND	ND	1.95	ND	C ₁₆ -C ₂₁	0.76
245 (0-5)	23.57	7.6	0.99	14.18	ND	0.38	ND	ND	1.06	4.65	C ₁₈ -C ₂₉	10.42
246 (0-5)	0.35	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Military Canal												
239 (3-5)	29.50	3.7	1.20	2.41	0.26	ND	ND	0.07	0.91	ND	C ₁₇ -C ₂₄	0.09
239 (0-5)	4.84	0.8	ND	ND	ND	ND	ND	0.16	ND	ND	C ₁₇ -C ₁₉	3.7S
240 (0-5)	269.31	8.0	0.24	14.12	0.11	3.23	0.22	0.32	1.88	ND	ND	ND
(60-65)	3.45	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(120-125)	6.29	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Snapper Creek												
247 (0-5)	0.22	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = None Detected

Table 21. Aromatic hydrocarbon characterization of sediment samples collected during Year 02. All values corrected for percent recovery.

Sample	Total f ₂	Napththalene	Dibenzo= thiophene	Phenanthrene (µg/L)	1-Methyl= phenanthrene	Pyrene
Miami River						
213 (0-5)	11.38	ND	0.11	2.84	0.84	4.03
214 (0-5)	39.39	ND	0.12	1.22	0.26	3.10
(20-25)	20.96	ND	0.31	0.13	0.11	9.55
215 (0-5)	31.53	ND	0.34	ND	0.24	ND
216 (0-5)	171.06	1.74	3.69	0.90	0.50	2.46
217 (0-5)	13.86	ND	0.07	0.29	0.29	0.14
218 (0-5)	4.52	ND	0.06	0.41	0.05	0.60
(20-25)	8.21	ND	0.15	0.62	0.10	1.25
(60-65)	54.62	ND	1.05	1.16	0.51	1.65
219 (0-5)	57.30	0.18	0.55	0.28	0.60	2.06
220 (0-5)	18.62	ND	0.16	1.16	0.13	1.50
Little River						
223 (0-5)	16.20	ND	0.08	0.87	0.17	2.50
225 (0-5)	3.91	ND	0.03	0.15	0.07	0.48
(25-30)	0.29	ND	0.12	ND	ND	ND
(55-60)	4.24	ND	0.18	ND	0.05	ND
228 (0-5)	2.13	ND	0.05	0.08	ND	0.35
229 (0-5)	8.44	ND	0.48	0.17	0.36	ND
Goulds Canal						
232 (0-5)	14.40	ND	0.50	TD	0.09	0.08
(55-60)	41.97	ND	0.32	0.06	0.32	0.91
233 (0-5)	84.98	ND	4.05	ND	1.19	1.72
234 (0-5)	13.23	ND	0.42	ND	0.62	ND
Black Creek						
241 (0-5)	9.55	0.04	0.05	0.18	0.36	0.32
242 (0-5)	2.90	ND	0.05	0.13	0.10	0.18
243 (0-5)	6.74	ND	ND	0.11	0.33	0.52
244 (0-5)	66.79	ND	0.14	1.64	2.91	2.89
245 (0-5)	3.73	ND	0.15	ND	0.10	0.02
246 (0-5)	4.54	ND	ND	0.08	0.23	ND
Military Canal						
238 (0-5)	7.74	ND	0.14	ND	0.16	ND
239 (0-5)	6.42	ND	ND	0.09	0.02	0.34
240 (0-5)	22.86	ND	0.21	1.15	0.02	0.82
(60-65)	5.51	ND	ND	ND	ND	ND
(120-125)	1.22	ND	0.03	0.04	ND	0.10
Snapper Creek						
247 (0-5)	1.51	ND	0.07	ND	0.09	ND

TD - None Detected.
TM - Trace Detected.

All of the sediments collected from the Miami River contained petroleum hydrocarbons except sample 213 which was collected in the Tamiami Canal at the 37 Avenue bridge. The River had the highest concentrations of hydrocarbons by a factor of 10 than any other sampling sites. One of the very interesting results of the down core analysis for samples 214 and 218 was that petroleum contaminant was detected as deep as 65 cm (Figure 20 and 21). Another interesting occurrence was that the concentration of hydrocarbons increased with depth for sample 218 at the three depths sampled. The possible cause for the rather complete mixing of the sediments in the three depths sampled. The possible cause for the rather complete mixing of the sediments in the Miami River is undoubtedly due to the heavy ship traffic re suspending the bottom sediments. Especially that of the river tugs with their large, full pitch propellers. This phenomena was observed during the sampling operations.

Two samples, 225 and 229, from the Little River contained petroleum contamination. Both samples were located in the north fork of the river. Down core analyses on sample 225 showed no contamination below the surface layer (Figure 22).

Goulds Canal showed petroleum contamination in two of the three sediment samples collected. The contamination at depth and the increase in concentration with depth is also present in sample 232. The chromatograms for the aliphatic fraction, for both depths are presented in Figure 23. The same explanation for mixing applied to the Miami River cannot be used to explain the high concentrations of hydrocarbons at the greater depths in Goulds Canal. Sample 232 was obtained at the end of the Canal next to an earthen dike. A possible explanation for this is that the stagnation of the water caused by the dike had created a sink or that down canal sediment had been used as fill.

Only two samples collected from Black Creek showed any petroleum contamination. Sample 241 was located inland from the intersection of Black Creek and Goulds Canal and sample 245 was located in a large open basin used for boat launchings.

Two of the three samples collected from Military Canal contained petroleum contamination. Sample 240 which was subjected to down core analysis exhibited contamination only in the surface layer (Figure 24).

Biota analyses consisted of fish, shrimp, crabs, rays, bivalves and oysters. Tables 22 and 23 presents the aliphatic and aromatic data, respectively. The bivalves and oysters were collected from Black Creek, the flat tree oysters were collected from a marina located on Virginia Key, the other samples were collected from open areas of the Bay. The flat tree oyster was the only organism containing petroleum contamination. Figure 25 is the chromatogram of the aliphatic fraction for this sample.

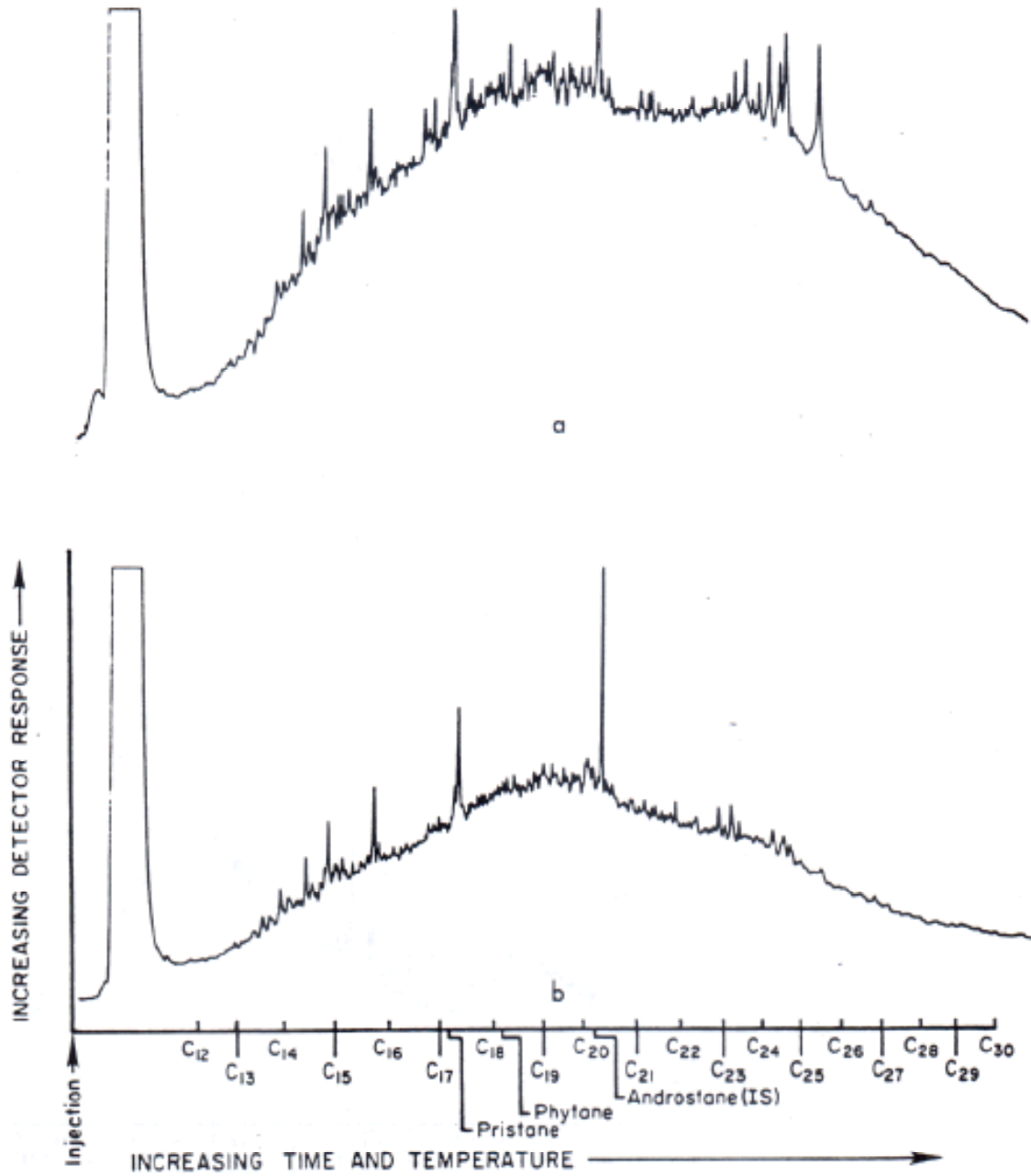


Figure 20. Chromatograms of aliphatic (f_1) fraction. Miami River sediment sample #214.

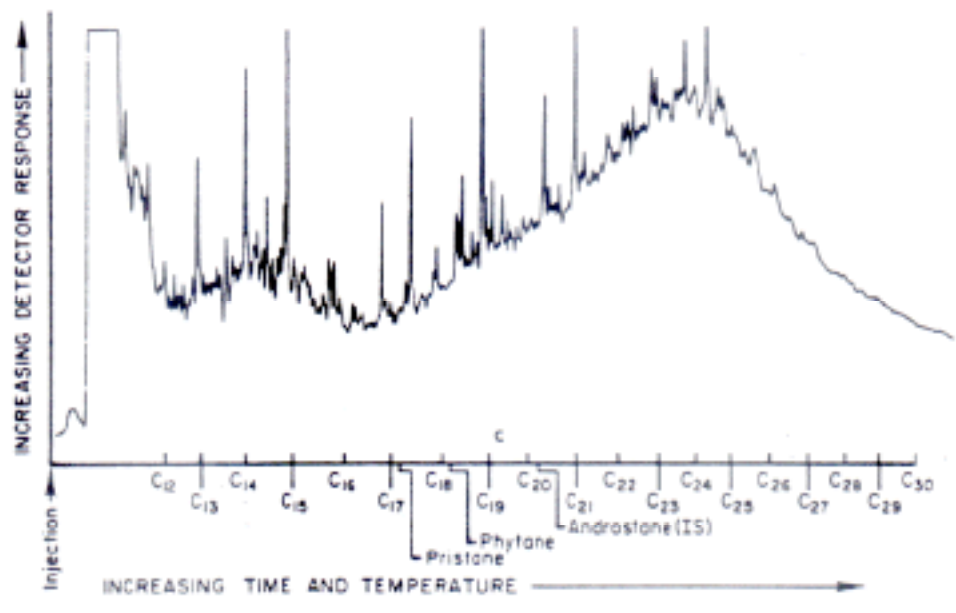
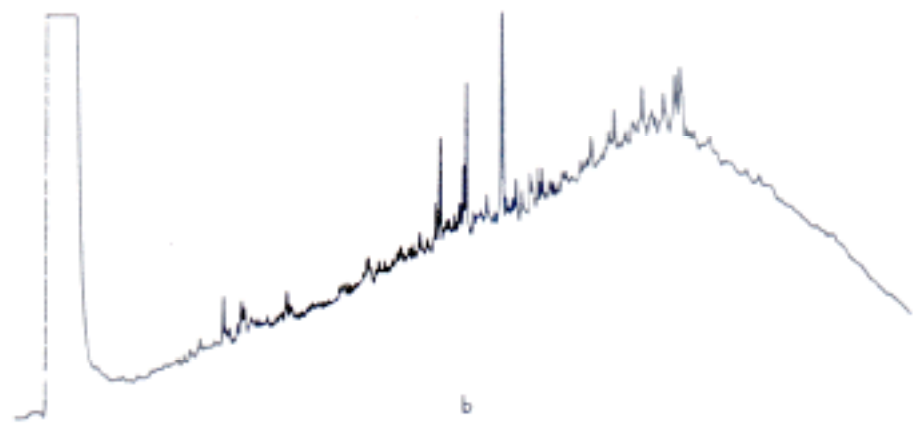
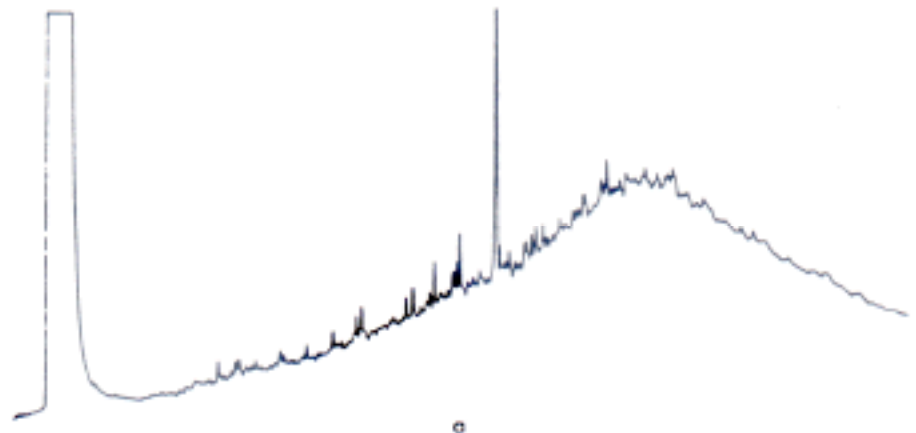


Figure 21. Chromatograms of aliphatic (f_1) fraction. Miami River sediment sample #218.

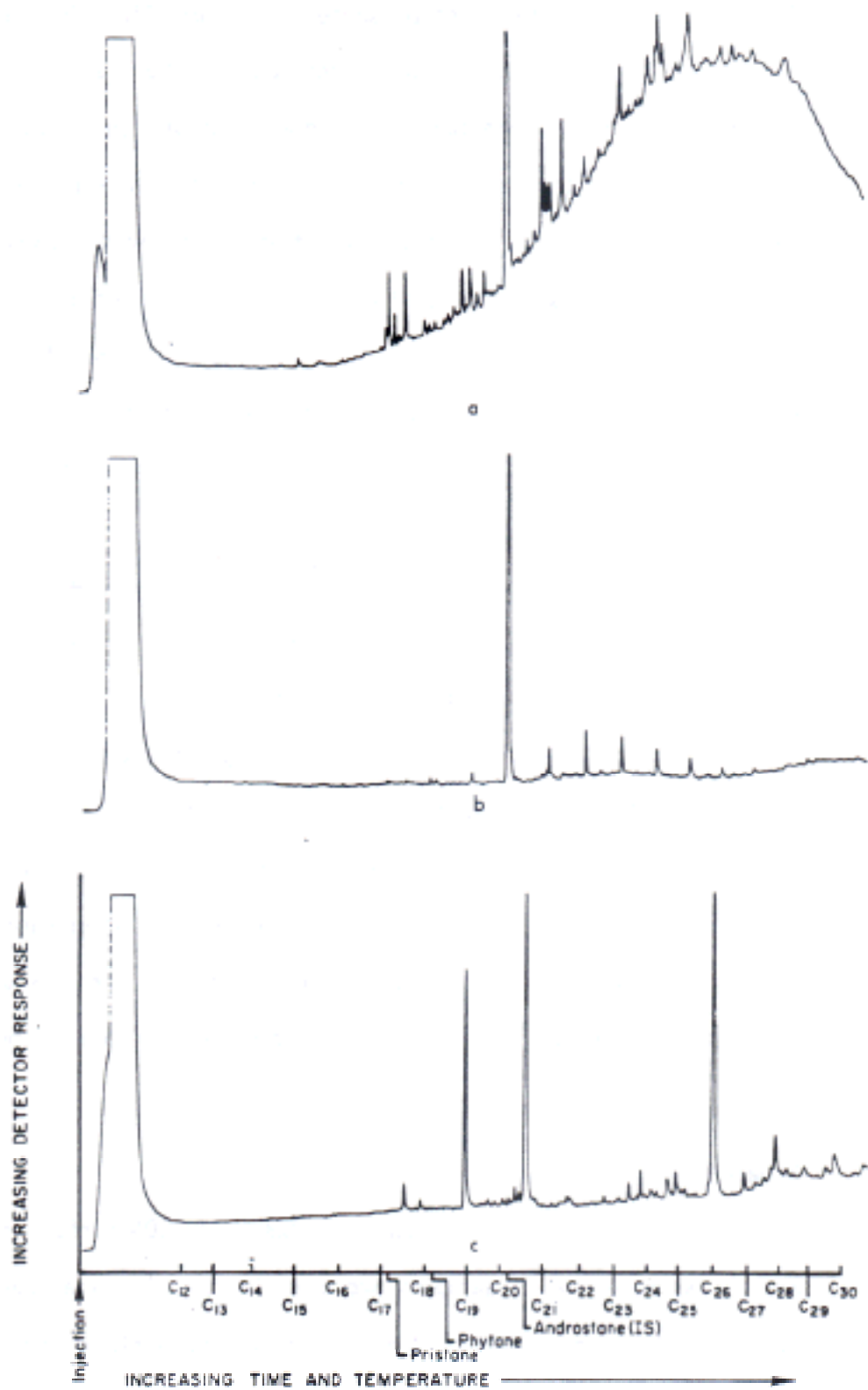


Figure 22. Chromatograms of aliphatic (f_1) fraction. Little River sediment sample #225.

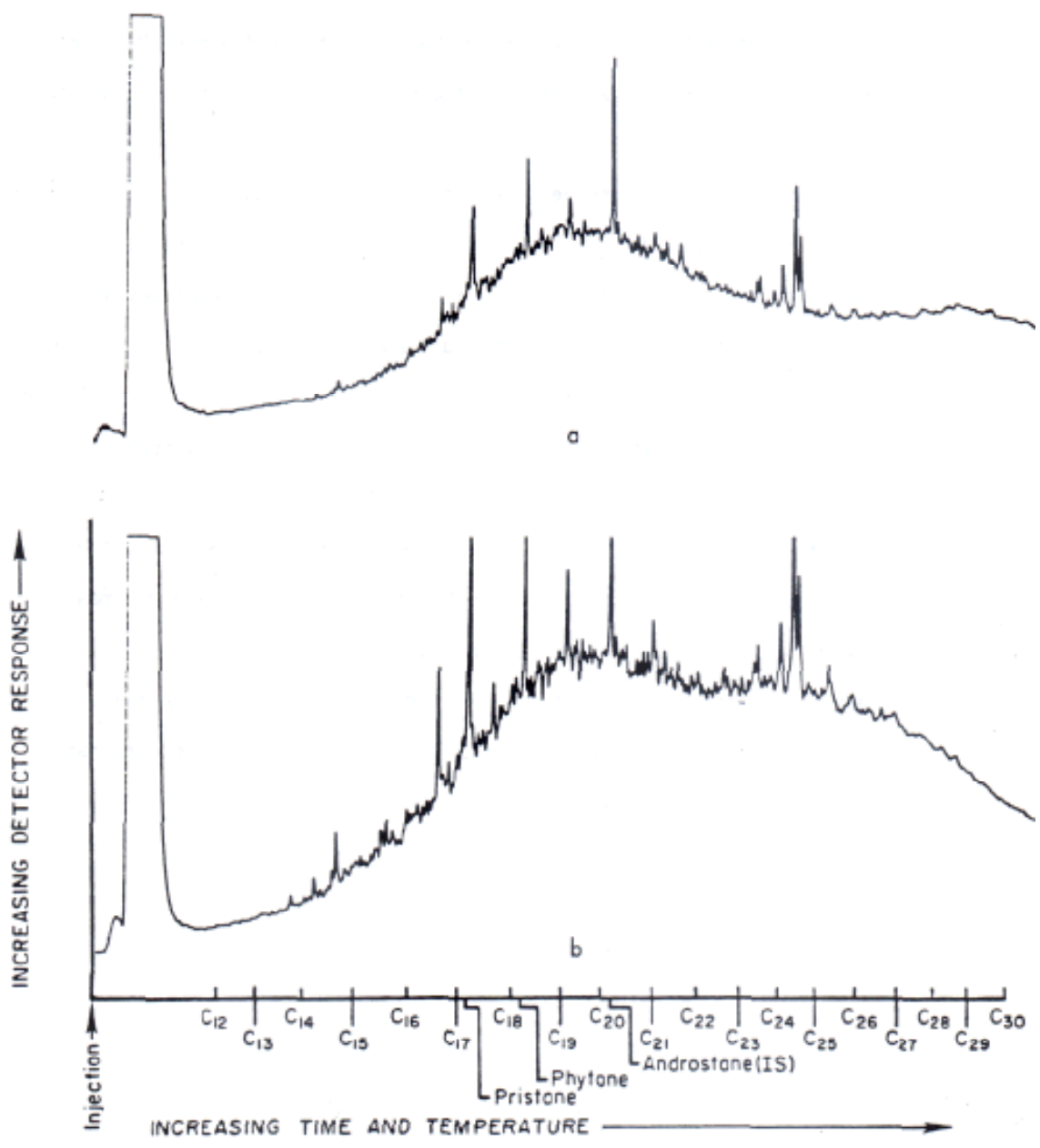


Figure 23. Chromatograms of aliphatic (f_1) fraction. Goulds Canal sediment sample #232.

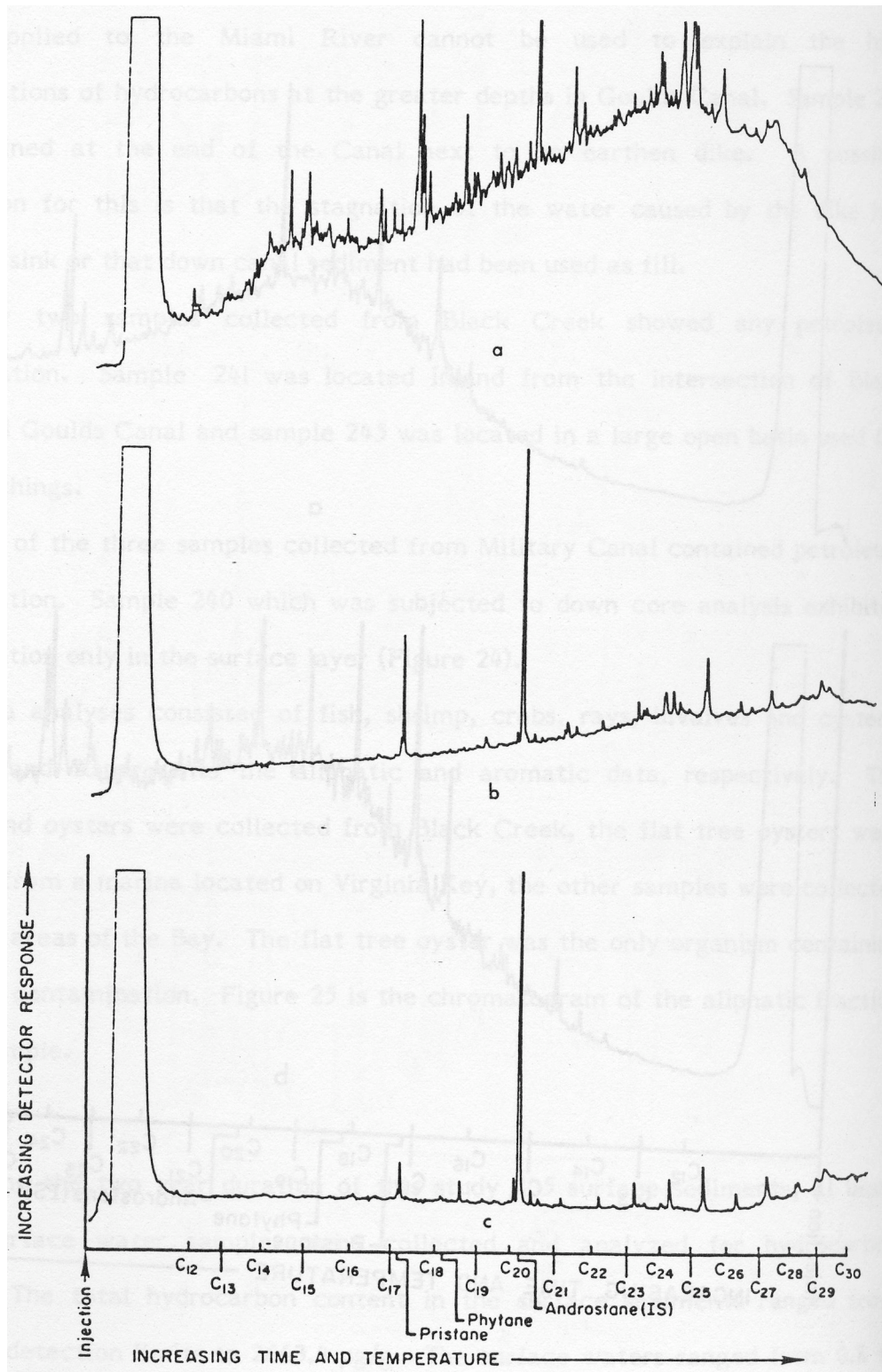


Figure 24. Chromatograms of aliphatic (f_1) fraction. Military Canal sediment sample #240. a) 0-5 cm depth, b) 60-65 cm depth, c) 120-125 cm.

Table 22. Aliphatic hydrocarbon characterization of tissue samples collected during Year 02. All values are corrected for percent recovery and expressed on a dry weight bases.

Laboratory/ Sample	Total* f ₁ (μg/g)	RATIOS					KEY HYDROCARBONS (μg/g)				n- ALKANES Homol.	
		f ₁ / f ₂	Resol. Unres	Prist./ Phyt.	C ₁₇ / Prist.	C ₁₈ / Phyt.	1500	1700	2085	2900	Ser.	CPI
Butterfly Ray (<i>Gymnura micrura</i>)	159.33	43.7	ND	ND	ND	ND	0.05	ND	0.19	ND	C ₁₅ -C ₂₈	0.01
Catfish (<i>Arius felis</i>)	108.44	13.5	7.74	ND	ND	ND	0.10	ND	5.37	ND	C ₁₅ -C ₂₈	0.22
Grunt (<i>Haemulon scururus</i>)	70.64	29.9	ND	ND	ND	ND	ND	ND	ND	ND	C ₂₄ -C ₂₈	0.29
Pigfish (<i>Orthopristis chrysopterus</i>)	62.93	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Shrimp (<i>Penaeus</i> sp.)	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Crab (<i>Callinectes ornatus</i>)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Blue Crab (<i>Callinectes sapiches</i>)	24.45	0.1	ND	ND	ND	ND	ND	0.76	ND	ND	C ₂₀ -C ₂₃	0.21
Mixed bivalves (<i>Mytilopsis leucophaeata</i> and <i>Brachidontes exustus</i>)	16.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oyster (<i>Crassostrea virginica</i>)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Flat Tree Oyster (<i>Isognomon alatus</i>)	125.20	2.8	0.41	0.60	0.04	0.11	ND	0.08	2.65	8.92	C ₁₇ -C ₃₀	0.22

ND = None Detected

Table 23. Aromatic hydrocarbon characterization of tissue samples collected during Year 02. All values are corrected for percent recovery and expressed on a dry weight bases.

Sample	Total f ₂ (µg/g)	Naphthalene	Dibenzo- thiophene	Phenan- threne	1-Methyl- phenanthrene	Pyrene
Butterfly Ray (<i>Gymnura micrura</i>)	3.65	ND	ND	ND	0.03	ND
Catfish (<i>Arius felis</i>)	8.02	0.54	0.15	0.11	0.40	ND
Grunt (<i>Haemulon scururus</i>)	2.36	ND	ND	ND	ND	ND
Pigfish (<i>Orthopristis chrysopterus</i>)	26.52	ND	ND	ND	1.19	ND
Shrimp (<i>Penaeus</i> sp.)	ND	ND	ND	ND	ND	ND
Crab (<i>Callinectes ornatus</i>)	53.99	ND	ND	ND	4.89	11.05
Blue Crab (<i>Callinectes sapiches</i>)	192.09	ND	ND	ND	4.05	30.58
Mixed bivalves (<i>Mytilopsis leucopacata</i> and <i>Brachidontes exustus</i>)	ND	ND	ND	ND	ND	ND
Oyster (<i>Crassostrea virginica</i>)	138.16	ND	ND	ND	ND	132.66
Flat Tree Oyster (<i>Isognomon alatus</i>)	57.51	ND	ND	ND	6.00	14.50

ND - None Detected

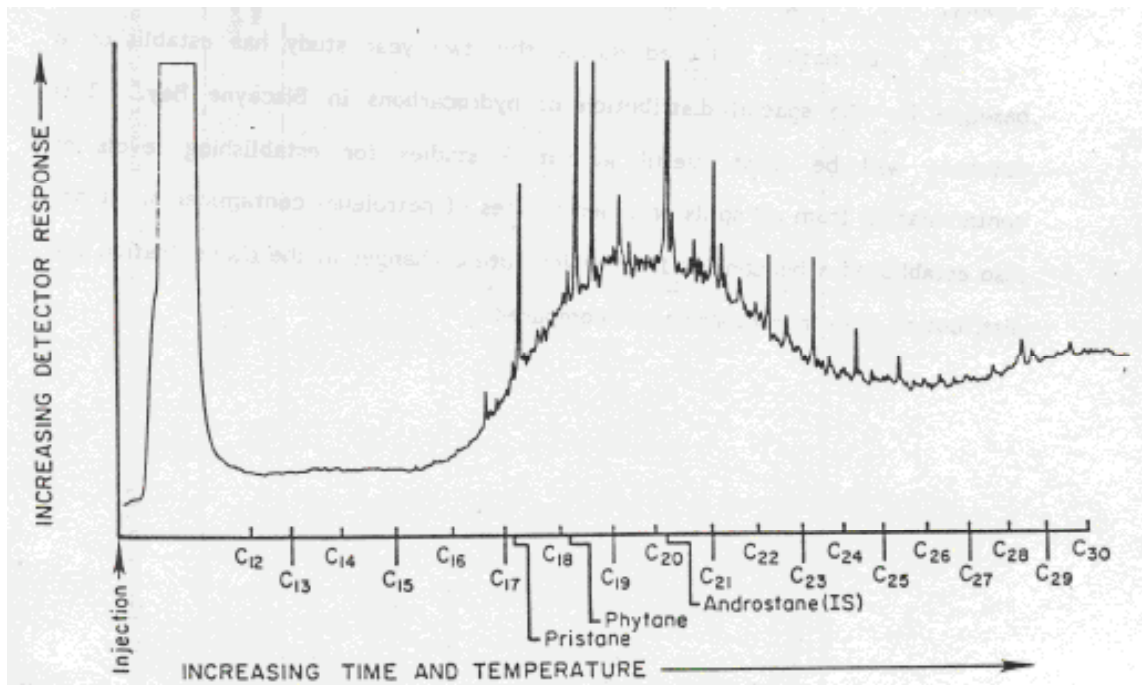


Figure 25. Chromatograms of aliphatic (f_1) fraction. Flat tree oyster collected from marina.

4.5. Summary

During the two year duration of this study 205 surface sediments, 21 biota and 27 surface water samples were collected and analyzed for hydrocarbon content. The total hydrocarbon content in the surface sediments ranged from below our detection limits to 2663.4 $\mu\text{g/g}$. The surface waters ranged from 0.8 to 64.5 $\mu\text{g/L}$ and the biota samples ranged from 0.3 to 600.8 $\mu\text{g/g}$. The samples containing the highest concentrations for both water and sediment were collected from the Miami River. The concentration of hydrocarbons found in the sediment of the Miami River are as high as those found in Chesapeake Bay, New York Bight (Table 24) and at least ten times greater than those in Charlotte Harbor and the St. Johns River.

The sediments were the best indicator of petroleum contamination since they are the ultimate sink for this pollutant. The surface sediment samples which contained petroleum contaminants were usually associated with two main usage patterns: 1) areas associated with boats and ships (e.g., major transportation routes, moorings, cargo handling, and construction and maintenance); and 2) areas which receive runoff and other inputs from highly urbanized regions of Dade County.

The information gathered during this two-year study has established a baseline for the spatial distribution of hydrocarbons in Biscayne Bay. This database will be most useful in future studies for establishing levels of contamination from oil spills or other sources of petroleum contaminants. It has also established a benchmark from which future changes in the concentration and distribution of hydrocarbons can be compared.

Table 24. Summary of petroleum hydrocarbon concentrations in surface sediments for different geographical areas.

Location	Total Hydrocarbons $\mu\text{g/g}$	Aliphatics $\mu\text{g/g}$	Aromatics $\mu\text{g/g}$	Citation
COASTAL AREAS				
Australia				
Western Port Bay (polluted area)	42	-	-	Burns and Smith, 1977
Western Port Bay (unpolluted area)	7	-	-	Burns and Smith, 1977
Bermuda				
South Shore inside boiler reefs	262	42	221	Sleeter, 1980
Chesapeake Bay	3200	1950	1210	Walker <i>et al.</i> , 1975
Dungeness Bay (Juan de Fuca)	-	3	30	Macleod <i>et al.</i> , 1977
English Channel	31	-	-	Tissier and Oudin, 1973
Narragansett Bay				
Providence River	2060	-	-	Farrington and Quinn, 1977
West Passage	263	-	-	Farrington and Quinn, 1977
Upper Bay	1990	1900	29	Zatrion, 1973
New York Bight	1346-2900	866-1800	479-1100	Farrington and Tripp, 1977
Orinoco Delta	59	30	28	Smith, 1954
Port Angeles H. (Juan de Fuca)	-	530	260	Macleod <i>et al.</i> , 1977
CONTINENTAL SHELF				
Bermuda	19	7	12	Sleeter, 1980
Black Sea	170	-	34	Shishenina <i>et al.</i> , 1974
California Shelf	-	36	64	Smith, 1954
Gulf of Mexico				
South Eastern area	5	3	2	Lytle and Lytle, 1977
Eastern area	2	2	2	Lytle and Lytle, 1977
North Central area	4	2	2	Gearing <i>et al.</i> , 1976

Table 24. Summary of petroleum hydrocarbon concentrations in surface sediments for different geographical areas (cont.).

Location	Total Hydrocarbons $\mu\text{g/g}$	Aliphatics $\mu\text{g/g}$	Aromatics $\mu\text{g/g}$	Citation
North Atlantic				
Hudson Canyon	16	5	11	Farrington and Tripp, 1977
Hudson Channel	81	35	60	Farrington and Tripp, 1977
Continental shelf	11	5	5	Farrington and Tripp, 1977
Continental slope	14	5	9	Farrington and Tripp, 1977
Norwegian Sea	11	-	3	Shishenina <i>et al.</i> , 1974
Scotian Shelf				
Halifax transect	2	-	-	Keizer <i>et al.</i> , 1977
Well sites	1	-	-	Keizer <i>et al.</i> , 1977
Sable Island	3	-	-	Keizer <i>et al.</i> , 1977
West Africa				
West of Cape Verde	33	20	12	Smith, 1954
Southwest of Cape Verde	29	17	13	Smith, 1954
ABYSSAL PLAIN and OPEN OCEAN				
Pacific	14-16	-	3	Shishenina <i>et al.</i> , 1974
Norwegian Sea	10	-	3	Shishenina <i>et al.</i> , 1974
North Atlantic	5	3	2	Farrington and Tripp, 1977
Canary Islands	12	2	10	Sleeter, 1980

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