21
62931

ATTACHMENT F

TIDAL CYCLE FLUX MEASUREMENT DATA

(2397D)

SDMS DocID 62931

Table 1 Intensive tidal cycle survey estimates of PCB flux in the water column at the Coggeshall Street Bridge transect.

Reference	Survey Date	Tidal Range Newport, RI (m)	Net Seaward Flux/Tidal Cycle (kg/tidal Cycle)	Net Seaward PCB Flux (kg/yr) [705 cycles/yr]
Teeter (1988)	6 Mar 86	1.04	0.07	49.3
	24 Apr 86	1.65	2.36	1663.8
	5 Jun 86	1.04	2.22	1561.1
				Avg 1091.4
EPA (1983) (Corrected by Teeter)	10 Jan 83	1.33	0.82	578.1
	11 Jan 83	0.92	0.99	698.0
	11 Jan 83	1.18	0.91	641.5
				Avg 639.2
ASA (1989)	16 Nov 88	1.25	0.106 (AR 1242) 0.151*	106.5
	22 Nov 88	2.30	1.282 (AR 1242) 1.83	1290.1
	2 Dec 88	0.90	0.067 (AR 1242) 0.096	67.7
	9 Dec 88	1.80	0.082 (AR 1242) 0.117	82.5
	10 Jan 89	2.00	0.247 (AR 1242) 0.35	248.8
	8 Feb 89	2.30	0.107 (AR 1242) 0.153	107.9
				Avg 317.2

* Assume total PCB = 30% A-1254 + 70% A-1242

DRAFT

Table 2 Environmental conditions and PCB flux for intensive tidal cycle surveys.

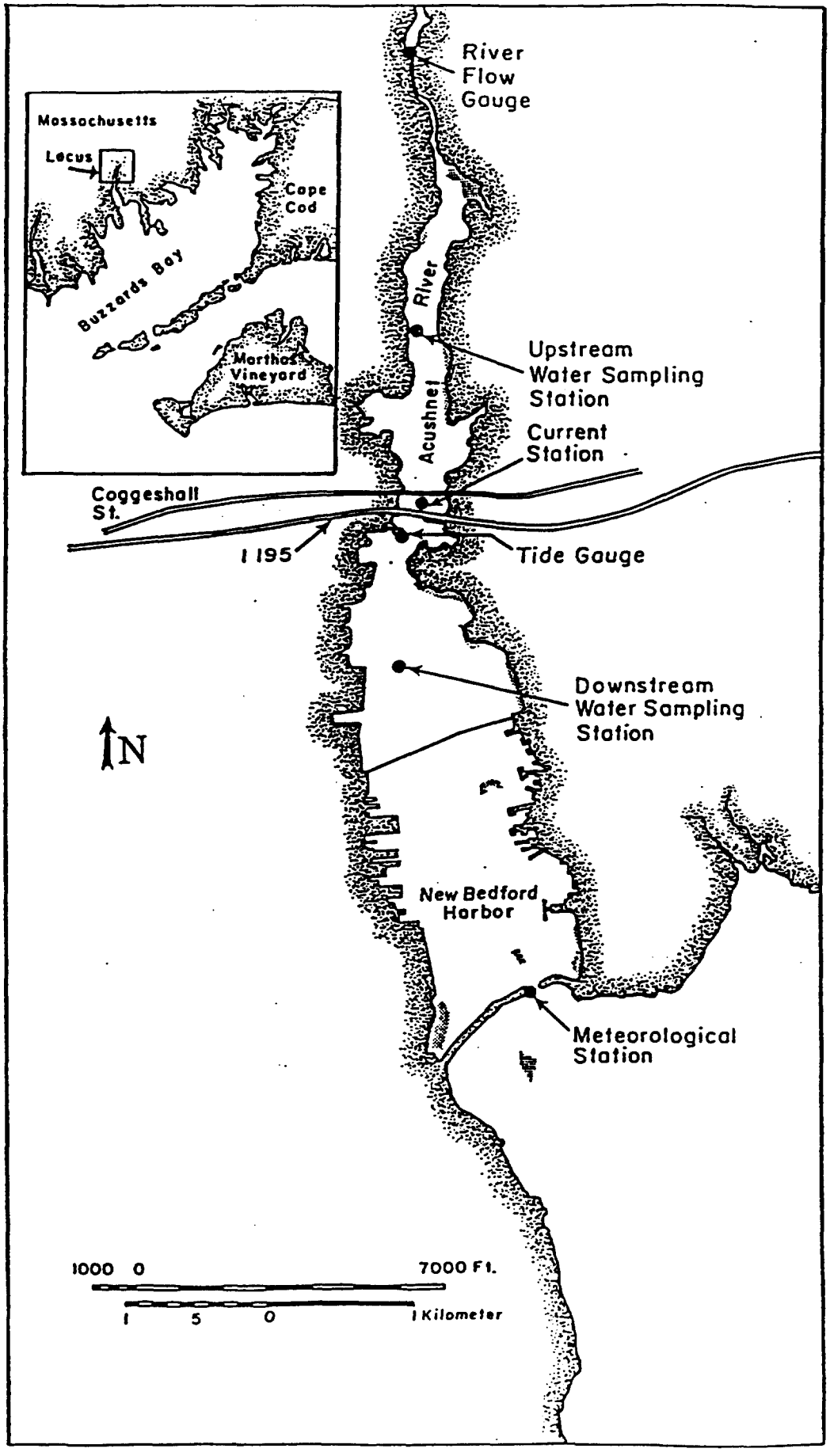
Reference	Survey Date	Tidal Range (m)	Wind Mean Speed (m/s)	Wind Direction	Maximum Current Speed (cm/s) First Flood	First Ebb	Second Flood	Second Ebb	Net Seaward PCB Flux (kg/yr)
Teeter (1988)	6 Mar 86	1.04	7.84	S	--	--	--	--	49.3
	24 Apr 86	1.65	2.80-11.2	NE	--	--	--	--	1663.8
	5 Jun 86	1.04	5.6	SW	--	--	--	--	1561.1
									Avg 1091.4
EPA (1983)	10 Jan 83	1.33	--	--	--	--	--	--	578.1
(Corrected by	11 Jan 83	0.92	--	--	37.49	57.30	29.26	44.81	698.0
Teeter)	11 Jan 83	1.18	--	--	--	--	--	--	641.5
									Avg 639.2
ASA (1989)	16 Nov 88	1.25	6.92	N/S	--	--	--	--	106.5
	15 Nov 88		7.41	W	--	--	--	--	
	14 Nov 88		12.21	WSW	--	--	--	--	
	13 Nov 88		13.38	S	--	--	--	--	
	22 Nov 88	2.30	12.03	NNW	20.00	-35.0	28.00	-30.0	1290.1
	21 Nov 88		21.99	WNW	--	--	--	--	
	20 Nov 88		12.62	SE	--	--	--	--	
	19 Nov 88		7.81	NNW	--	--	--	--	
	2 Dec 88	0.90	12.15	NW	42.0	32.0	38.00	32.0	67.7
					(52.0)*	(52.0)	(62.0)	(72.0)	
	1 Dec 88		7.02	W	--	--	--	--	
	30 Nov 88		10.30	WSW	--	--	--	--	
	29 Nov 88		11.81	W	--	--	--	--	
	9 Dec 88	1.81	6.86	NW/N	50.0	75.0	68.00	64.0	82.5
					(74.0)			(-77.0)	
	8 Dec 88		10.50	NW	--	--	--	--	
	7 Dec 88		12.38	SW	--	--	--	--	
	6 Dec 88		11.23	N/S	--	--	--	--	
	10 Jan 89	2.00	7.12	NW/S	54.0	88.0	82.00	84.0	248.8
					(70.0)			(-96.0)	
	9 Jan 89		10.76	WNW	--	--	--	--	
	8 Jan 89		14.11	N/SW	--	--	--	--	
	7 Jan 89		11.88	NE	--	--	--	--	
	8 Feb 89	2.30			74.2	100.5	69.0	93.2	107.9
							(79.4)	(-103.5)	Avg 317.25
	7 Feb 89		2.72	SE	--	--	--	--	
	6 Feb 89		2.26	S/ESE	--	--	--	--	
	5 Feb 89		4.29	SSW	--	--	--	--	

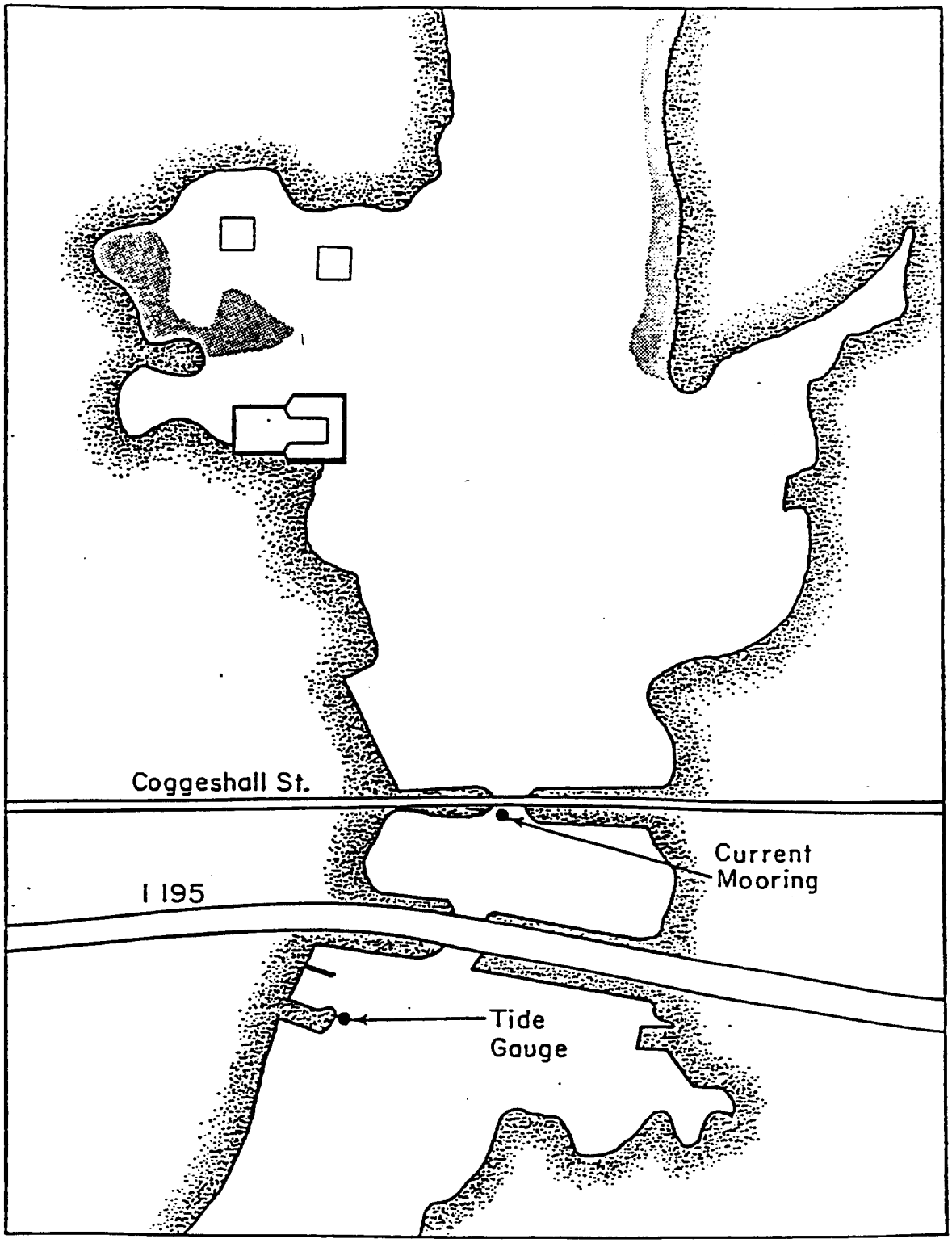
* Numbers in parenthesis refer to maximum seiching velocities observed.

DRAFT

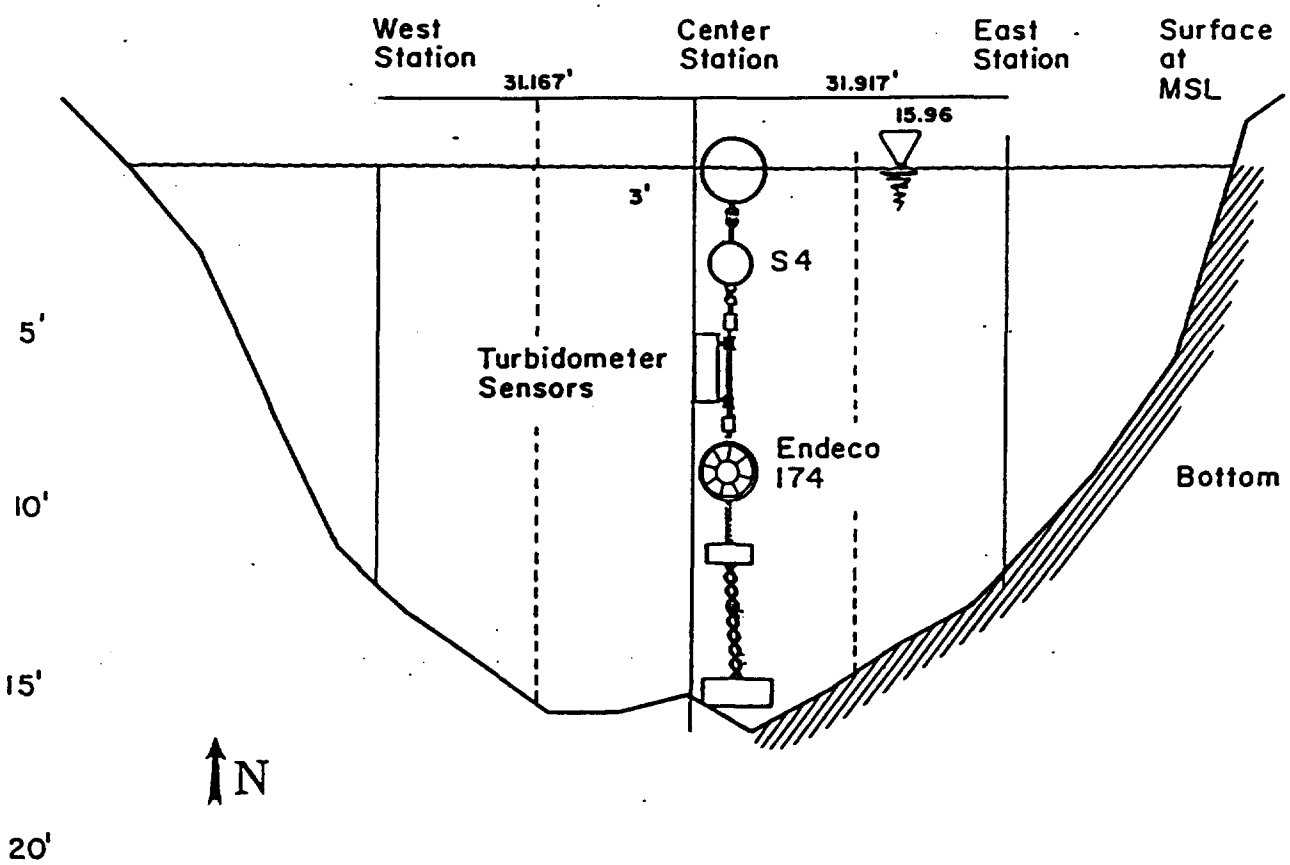
MEASUREMENTS OF PCB TRANSPORT FROM UPPER NEW BEDFORD HARBOR

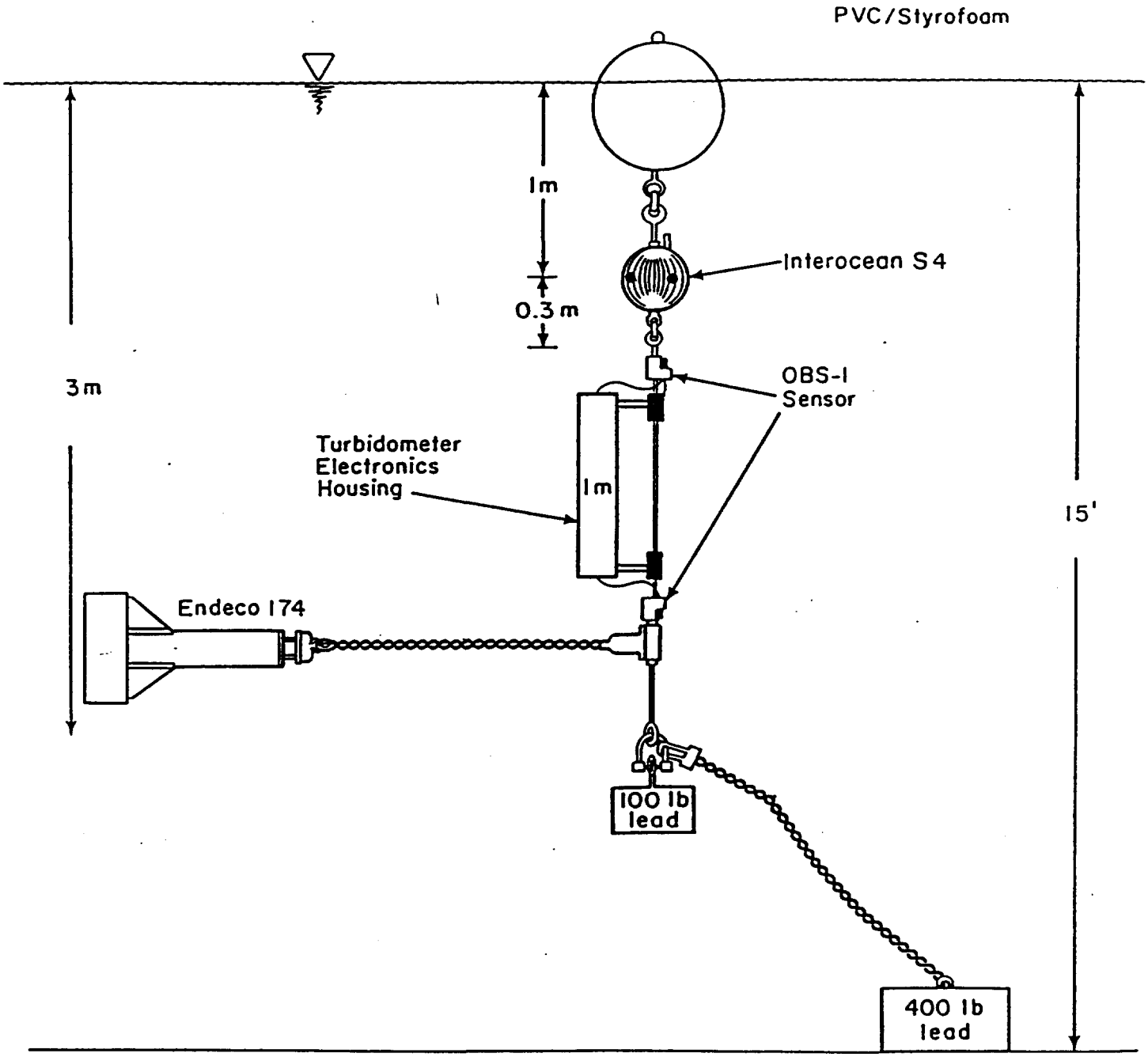
DRAFT


River
Flow
Gauge
Massachusetts
Locus
Cape
Cod
Buzzards Bay
Martha's
Vineyard
River
Acushnet
Upstream
Water Sampling
Station
Current
Station
Coggeshall
St.
I 195
Tide Gauge
Downstream
Water Sampling
Station
N
New Bedford
Harbor
Meteorological
Station
1000 0
7000 Ft.
1 5 0
1 Kilometer


Coggeshall St.
Current
Mooring
I 195
Tide
Gauge

DOWNSTREAM SIDE, COGGESHALL STREET




PVC/Styrofoam
1m
0.3 m
Interocean S4
OBS-I
Sensor
3m
Turbidometer
Electronics
Housing
1m
15'
Endeco 174
100 lb
lead
400 lb
lead

TIDAL CYCLE FLUX MEASUREMENT DATA

```
*
*************************************
* NEWBEDFORD HARBOR PCB FLUX SURVEYS *
*  APPLIED SCIENCE ASSOCIATES, INC.  *
*************************************
*
          *******
          * KEY *
          *******
```

COLUMN HEADERS :

- SAMPLE# - SAMPLE NUMBER
- SAMPLE ID - SAMPLE IDENTIFICATION
- TIME - TIME IN HOURS AND MINUTES (HHMM)
- WATERDEP - WATER DEPTH (METERS)
- SAMPLEDEP - SAMPLE DEPTH (METERS)
- TSS - TOTAL SUSPENDED SOLIDS (MG/L)
- AR1242 - PCB AROCLOR 1242 (PPB)
- AR1254 - PCB AROCLOR 1254 (PPB)

SAMPLE ID :

- 1-8 - RUN NUMBER
- CBB - CENTER BRIDGE BOTTOM
- CBM - CENTER BRIDGE MIDDLE
- CBS - CENTER BRIDGE SURFACE
- DNB - DOWNSTREAM BOTTOM
- DNM - DOWNSTREAM MIDDLE
- DNS - DOWNSTREAM SURFACE
- UPB - UPSTREAM BOTTOM
- UPM - UPSTREAM MIDDLE
- UPS - UPSTREAM SURFACE
- EBM - EAST BRIDGE MIDDLE
- WBM - WEST BRIDGE MIDDLE

DATA :

- ND - NOT DETECTABLE

Survey 1 -- 11/16/88

SAMPLE#	SAMPLE ID	TIME	WATERDEP (meters)	SAMPLEDEP (meters)	TSS (mg/l)	AR1242 (ppb)	AR1254 (ppb)
1	1CBB	900	4.6	3.6	4.6	ND	ND
2	1CBM	907		2.3	2.1	ND	ND
3	1CBS	910		0.9	12.2	ND	ND
4	1EBM	933	3.9	2.0	2.7	ND	ND
5	1WBM	954	3.0	1.5	2.0	ND	ND
6	1UPB	1000	1.7	1.1	4.1	ND	ND
7	1UPS	1005		0.3	3.1	1.50	ND
8	1DNB	1023	5.0	4.0	7.9	ND	ND
9	1DNS	1027		1.0	2.4	ND	ND
10	2CBB	1054	5.2	4.2	3.3	ND	ND
11	2CBM	1059		2.6	1.0	ND	ND
12	2CBS	1108		1.0	2.7	ND	ND
13	2EBM	1116	3.6	1.8	1.0	ND	ND
14	2WBM	1126	4.7	2.4	2.1	ND	ND
15	2UPB	1140	2.6	2.0	4.8	0.83	ND
16	2UPS	1144		0.5	5.2	1.00	ND
17	2DNB	1201	5.2	4.2	3.1	ND	ND
18	2DNS	1205		1.0	6.2	ND	ND
19	3CBB	1236	5.5	4.4	2.4	ND	ND

20	3CBM	1240		2.8	1.3	ND	ND
21	3CBS	1244		1.4	ND	ND	ND
22	3EBM	1250	4.7	2.4	1.4	ND	ND
23	3WBM	1257	4.7	2.4	2.4	ND	ND
24	3UPB	1307	2.8	2.3	2.0	1.20	ND
25	3UPS	1311		0.6	4.0	0.58	ND
26	3DNB	1326	7.0	5.5	1.7	ND	ND
27	3DNS	1330		1.5	3.3	ND	ND
28	4CBB	1409	5.1	4.0	1.0	ND	ND
29	4CBM	1414		2.6	ND	ND	ND
30	4CBS	1420		1.2	5.8	ND	ND
31	4EBM	1426	4.8	2.4	1.0	ND	ND
32	4WBM	1435	4.1	2.0	ND	ND	ND
33	4UPB	1445	2.2	1.8	2.4	1.20	ND
34	4UPS	1449		0.4	ND	1.60	ND
35	4DNB	1509	8.0	6.5	3.0	ND	ND
36	4DNS	1521		1.5	1.7	ND	ND
37	5CBB	1546	5.0	4.0	3.1	ND	ND
38	5CBM	1550		2.5	1.6	ND	ND
39	5CBS	1555		1.0	4.6	0.49	ND
40	5EBM	1603	3.6	1.8	1.6	0.51	ND
41	5WBM	1609	3.1	1.5	2.7	0.46	ND
42	5UPB	1621	2.1	1.6	4.0	2.00	ND
43	5UPS	1625		0.4	1.6	2.00	ND
44	5DNB	1639	7.5	6.0	3.0	ND	ND
45	5DNS	1643		1.5	30.0	ND	ND
46	6CBB	1711	4.5	3.6	11.0	0.54	ND
47	6CBM	1717		2.3	9.6	ND	ND
48	6CBS	1725		0.9	4.0	0.82	ND
49	6EBM	1733	3.9	2.0	ND	0.67	ND
50	6WBM	1743	3.0	1.5	ND	ND	ND
51	6UPB	1756	1.8	1.3	2.3	1.90	ND
52	6UPS	1800		0.4	1.3	2.30	ND
53	6DNB	1819	7.0	5.5	2.3	ND	ND
54	6DNS	1823		1.4	3.0	ND	ND
55	7CBB	1850	4.0	3.2	2.7	ND	ND
56	7CBM	1854		2.0	7.3	0.84	ND
57	7CBS	1858		0.8	2.6	0.66	ND
58	7EBM	1905	3.7	1.8	1.6	0.55	ND
59	7WBM	1914	3.6	1.8	3.0	0.68	ND
60	7UPB	1924	1.8	1.3	5.3	2.30	ND
61	7UPS	1930		0.4	1.3	2.10	ND
62	7DNB	1947	6.5	5.0	1.9	ND	ND
63	7DNS	1952		1.3	1.0	0.39	ND
64	8CBB	2018	4.3	3.4	2.0	0.56	ND
65	8CBM	2023		2.2	ND	0.51	ND
66	8CBS	2030		0.9	ND	ND	ND
67	8EBM	2039	3.7	1.8	1.6	0.40	ND
68	8WBM	2046	3.1	1.5	1.3	0.68	ND
69	8UPB	2058	1.7	1.2	1.6	2.10	ND
70	8UPS	2102		0.3	1.0	1.80	ND
71	8DNB	2116	4.0	3.2	2.8	ND	ND
72	8DNS	2121		0.8	8.3	0.66	ND

Survey 2 -- 11/22/88

SAMPLE#	SAMPLE ID	TIME	WATERDEP (meters)	SAMPLEDEP (meters)	TSS (mg/l)	AR1242 (ppb)	AR1254 (ppb)
1	1CBB	717	5.70	4.50	4.0	ND	
2	1CBM	719		2.80	3.0	0.68	ND
3	1CBS	722		1.20	4.0	2.50	ND
4	1UPB	733	2.90	2.30	4.0	0.89	ND
5	1UPS	737		0.60	5.0	0.94	ND
6	1DNB	748	3.40	2.70	6.0	ND	ND
7	1DNS	752		0.70	ND	ND	ND
8	2CBM	841	4.70	2.40	4.0	1.50	ND
9	2UPM	851	2.20	1.10	4.0	0.91	ND
10	2DNM	902	3.30	1.60	4.0	0.61	ND
11	3CBB	1013	4.50	3.60	ND	1.70	ND
12	3CBM	1017		2.30	10.0	0.92	ND
13	3CBS	1020		0.90	5.0	2.10	ND
14	3UPB	1036	1.30	0.75	4.0	1.70	ND
15	3UPS	1040		0.25	4.0	0.68	ND
16	3DNB	1052	2.80	2.20	ND	2.20	ND
17	3DNS	1056		0.60	10.0	1.20	ND
18	4CBM	1144	4.00	2.00	6.0	1.90	ND
19	4UPM	1154	1.10	0.50	6.0	1.80	ND
20	4DNM	1202	2.50	1.20	14.0	1.10	ND
21	5CBB	1310	3.90	3.20	4.0	0.62	ND
22	5CBM	1313		2.00	16.0	0.73	ND
23	5CBS	1316		0.80	ND	1.40	ND
24	5UPB	1325	1.25	0.75	ND	1.30	ND
25	5UPS	1327		0.25	ND	2.50	ND
26	5DNB	1337	2.50	2.00	ND	0.81	ND
27	5DNS	1339		0.50	ND	1.40	ND
28	6CBM	1452	4.10	3.30	ND	ND	ND
29	6UPM	1505	1.70	0.80	ND	1.50	ND
30	6DNM	1515	3.00	1.50	ND	0.65	ND
31	7CBB	1610	5.00	4.00	ND	0.48	ND
32	7CBM	1613		2.50	3.0	0.54	ND
33	7CBS	1616		1.00	ND	0.59	ND
34	7UPB	1623	2.00	1.50	ND	1.20	ND
35	7UPS	1626		0.40	ND	1.00	ND
36	7DNB	1641	3.75	3.00	ND	ND	ND
37	7DNS	1644		0.75	ND	0.62	ND
38	8CBM	1750	5.50	2.80	3.0	ND	ND
39	8UPM	1804	2.50	1.25	8.0	0.90	ND
40	8DNM	1813	4.25	2.10	ND	0.54	ND

Survey 3 -- 12/2/88

SAMPLE#	SAMPLE ID	TIME	WATERDEP (meters)	SAMPLEDEP (meters)	TSS (mg/l)	AR1242 (ppb)	AR1254 (ppb)
1	1CBB	740	4.5	3.6	2.9	0.65	ND
2	1CBM	744		2.3	3.9	0.76	ND
3	1CBS	747		0.9	3.4	0.97	0.13
4	1UPB	817	1.4	0.9	3.3	1.93	0.24
5	1UPS	820		0.3	3.2	2.18	0.34
6	1DNB	756	2.9	2.3	3.8	0.45	ND
7	1DNS	800		0.6	2.6	0.56	0.12
8	2CBM	919	4.4	3.6	3.1	0.41	ND
9	2UPM	928	1.4	0.7	3.3	2.51	0.34
10	2DNM	949	2.7	1.5	13.0	0.66	0.44
11	3CBB	1041	4.5	3.6	4.3	0.39	ND
12	3CBM	1045		2.3	3.5	0.34	ND
13	3CBS	1047		0.9	3.1	0.51	ND
14	3UPB	1056	1.4	0.9	4.0	1.47	0.31
15	3UPS	1058		0.3	3.9	2.12	0.36
16	3DNB	1108	3.1	2.5	4.4	0.29	ND
17	3DNS	1110		0.6	3.4	0.23	ND
18	4CBM	1212	4.5	2.3	2.9	0.31	ND
19	4UPM	1220	1.6	0.8	4.0	0.94	0.12
20	4DNM	1229	2.7	1.4	4.6	0.21	ND
21	5CBB	1354	5.0	4.0	4.8	0.12	ND
22	5CBM	1356		2.5	4.6	0.21	ND
23	5CBS	1359		1.0	5.4	0.41	ND
24	5UPB	1409	1.9	1.4	3.5	0.42	ND
25	5UPS	1411		0.4	3.9	1.14	0.13
26	5DNB	1419	3.5	2.8	4.3	0.12	ND
27	5DNS	1421		0.7	3.9	ND	ND
28	6CBM	1511	5.0	2.5	2.9	0.22	ND
29	6UPM	1523	1.9	1.0	3.9	0.42	ND
30	6DNM	1532	3.5	1.8	4.7	0.49	ND
31	7CBB	1647	4.9	4.0	4.1	0.26	ND
32	7CBM	1649		2.5	3.7	0.33	ND
33	7CBS	1653		1.0	3.6	0.50	ND
34	7UPB	1702	1.5	1.0	4.7	1.38	0.36
35	7UPS	1704		0.3	3.8	1.33	0.29
36	7DNB	1714	3.2	2.7	4.8	0.19	ND
37	7DNS	1716		0.6	4.1	0.17	ND
38	8CBM	1810	4.5	2.2	4.5	0.58	ND
39	8UPM	1821	1.5	0.8	4.2	2.53	0.40
40	8DNM	1831	3.2	1.6	2.4	0.23	ND

Survey 4 -- 12/09/88

SAMPLE#	SAMPLE ID	TIME	WATERDEP (meters)	SAMPLEDEP (meters)	TSS (mg/l)	AR1242 (ppb)	AR1254 (ppb)
1	1CBB	754	5.5	4.4	4.3	0.10	ND
2	1CBM	756		2.8	4.6	0.11	ND
3	1CBS	759		1.1	4.5	0.26	ND
4	1UPB	810	3.0	2.4	4.5	0.26	0.10
5	1UPS	813		0.6	3.7	0.36	ND
6	1DNB	825	>6.0	5.5	4.6	0.07	ND
7	1DNS	827		1.2	3.6	0.20	ND
8	2CBM	930	5.4	2.7	4.5	0.25	ND
9	2UPM	942	2.7	1.4	3.8	0.24	ND
10	2DNM	953	>6.0	3.5	9.2	0.12	0.12
11	3BB	1057	4.75	3.8	4.7	0.19	ND
12	3CBM	1100		2.4	3.9	0.30	0.15
13	3CBS	1106		1.0	3.9	0.78	ND
14	3UPB	1116	1.9	1.4	4.3	0.51	0.15
15	3UPS	1119		0.4	4.6	ND	ND
16	3DNB	1128	3.0	2.4	5.4	ND	ND
17	3DNS	1130		0.6	4.9	0.30	0.12
18	4CBM	1235	4.2	2.1	5.2	0.64	0.20
19	4UPM	1244	1.1	0.5	6.7	1.30	0.21
20	4DNM	1304	2.8	1.4	4.8	0.33	0.15
21	5CBB	1359	4.1	3.3	4.9	0.27	ND
22	5CBM	1402		2.0	4.9	0.33	0.17
23	5CBS	1403		0.8	4.7	0.47	0.17
24	5UPB	1413	1.1	0.6	4.4	0.81	0.24
25	5UPS	1416		0.2	4.3	1.40	0.19
26	5DNB	1425	3.3	2.6	4.8	0.26	ND
27	5DNS			0.7	4.6	0.39	ND
28	6CBM	1528	4.3	2.2	4.8	0.25	0.14
29	6UPM	1538	1.6	0.8	4.6	0.92	0.16
30	6DNM	1549	2.9	1.5	4.3	0.25	ND
31	7CBB	1705	4.5	3.6	4.7	0.20	ND
32	7CBM	1708		2.3	5.3	0.26	ND
33	7CBS	1721		0.9	5.0	0.30	ND
34	7UPB	1733	2.2	1.7	5.1	0.21	0.11
35	7UPS	1735		0.4	4.0	0.80	0.15
36	7DNB	1745	3.5	2.8	4.9	0.14	ND
37	7DNS	1747		0.7	3.9	0.30	0.13
38	8CBM	1830	5.2	2.6	4.6	0.23	ND
39	8UPM	1840	2.3	1.1	3.7	0.33	0.14
40	8DNM	1849	3.9	2.0	4.1	0.14	ND

Survey 5 -- 1/10/89

SAMPLE#	SAMPLE ID	TIME	WATERDEP (meters)	SAMPLEDEP (meters)	TSS (mg/l)	AR1242 (ppb)	AR1254 (ppb)
1	1CBB	743	5.8	4.4	16.0	0.24	0.24
2	1CBM	747		2.8	11.0	0.30	0.22
3	1CBS	749		1.1	11.0	0.31	0.24
4	1UPB	758	2.7	1.7	18.0	0.74	0.39
5	1UPS	800		0.5	9.9	0.51	0.27
6	1DNB	810	4.4	5	13.0	0.14	0.15
7	1DNS	812		1.25	9.0	0.20	0.18
8	2CBM	919	5.6	3	12.0	0.23	0.21
9	2UPM	928	3.0	1.4	11.0	0.38	0.17
10	2DNM	937	4.4	2.5	11.0	0.15	0.21
11	3CBB	1044	5.8	4.7	13.0	0.33	0.18
12	3CBM	1048		3	12.0	0.34	0.21
13	3CBS	1053		1.2	11.0	0.34	0.18
14	3UPB	1102	2.25	2.4	13.0	0.41	0.29
15	3UPS	1104		0.6	9.5	0.74	0.33
16	3DNB	1115	3.2	6.0	12.0	0.15	0.12
17	3DNS	1117		1.5	8.4	0.24	0.10
18	4CBM	1213	4.2	2.5	10.0	0.34	0.16
19	4UPM	1221	1.7	1.0	11.0	0.64	0.24
20	4DNM	1232	2.4	2.2	14.0	0.30	0.17
21	5CBB	1342	3.8	3.6	12.0	0.51	0.22
22	5CBM	1345		2.3	13.0	1.10	0.61
23	5CBS	1346		0.9	14.0	1.30	0.63
24	5UPB	1354	1.5	0.9	27.0	2.70	0.60
25	5UPS	1357		0.3	6.2	3.00	0.48
26	5DNB	1407	2.8	3.1	13.0	0.48	0.15
27	5DNS	1409		0.8	12.0	ND	ND
28	6CBM	1516	4.0	2.0	14.0	1.20	0.55
29	6UPM	1525	1.7	0.6	23.0	3.80	0.96
30	6DNM	1538	3.0	3.1	11.0	0.43	0.21
31	7CBB	1644	4.4	3.3	13.0	0.65	0.31
32	7CBM	1645		2.0	13.0	0.65	0.43
33	7CBS	1647		0.8	11.0	0.81	0.47
34	7UPB	1654	2.25	0.9	14.0	3.30	0.59
35	7UPS	1656		0.3	7.6	2.50	0.49
36	7DNB	1705	2.2	4.4	13.0	0.32	0.19
37	7DNS	1707		1.1	9.1	0.46	0.29
38	8CBM	1814	6.2	2.3	13.0	0.59	0.28
39	8UPM	1821	2.5	0.8	10.0	2.10	0.52
40	8DNM	1829	3.0	1.8	9.3	0.40	0.27

SURVEY 6 -- 02/08/89

SAMPLE#	SAMPLE ID	TIME	WATERDEP (meters)	SAMPLEDEP (meters)	TSS (mg/L)	AR 1242 (ppb)	AR 1254 (ppb)
1	1CBB	854	5.8	4.6	5.8	0.12	ND
2	1CBM	857		2.9	6.5	0.18	ND
3	1CBS	900		1.2	6.4	0.22	ND
4	1UPB	913	2.7	2.2	6.6	0.25	ND
5	1UPS	915		0.5	7.8	0.33	0.21
6	1DNB	932	4.4	3.5	5.8	0.15	ND
7	1DNS	935		0.9	5.4	0.21	ND
8	2CBM	1020	5.6	2.8	6.8	0.29	0.17
9	2UPM	1036	3	1.5	8.3	0.35	0.24
10	2DNM	1053	4.4	2.2	5.6	0.14	ND
11	3BB	1202	5.8	4.6	6.3	0.26	0.15
12	3CBM	1205		2.9	6.5	0.34	0.11
13	3CBS	1208		1.2	11.0	0.39	0.15
14	2UPB	1216	2.25	1.75	9.9	0.90	0.25
15	3UPS	1218		0.45	13.0	3.20	0.55
16	3DNB	1231	3.2	2.6	30.0	0.49	0.32
17	3DNS	1232		0.6	10.0	0.37	0.27
18	4CBM	1330	4.2	2.1	11.0	0.67	0.29
19	4UPM	1340	1.7	0.85	9.6	2.30	0.37
20	4DNM	1358	2.4	1.2	7.8	0.37	0.22
21	5CBB	1503	3.8	3	9.6	0.66	0.24
22	5CBM	1505		1.9	8.0	0.68	0.25
23	5CBS	1507		0.8	8.5	0.73	0.26
24	5UPB	1515	1.5	1	8.5	2.60	0.73
25	5UPS	1517		0.3	4.3	1.10	0.23
26	5DNB	1531	2.8	2.3	6.9	0.41	0.38
27	5DNS	1534		0.5	8.8	0.33	0.23
28	6CBM	1625	4	2	9.0	0.49	0.37
29	6UPM	1636	1.7	0.8	12.0	1.90	0.32
30	6DNM	1651	3	1.5	9.8	0.41	0.15
31	7CBB	1800	4.4	3.6	8.2	0.49	0.24
32	7CBM	1802		2.2	9.4	0.49	0.18
33	7CBS	1804		0.9	9.0	0.48	ND
34	7UPB	1816	2.25	1.75	16.0	1.50	0.40
35	7UPS	1819		0.45	13.0	1.30	0.32
36	7DNB	1839	2.2	1.7	6.3	0.48	ND
37	7DNS	1841		0.4	6.2	0.30	0.30
38	8CBM	1936	6.2	3.1	7.4	0.36	0.16
39	8UPM	1947	2.5	1.25	9.8	0.62	0.22
40	8DNM	2000	3	1.5	7.1	0.29	ND