# TABLE 1 REMAINING SEGMENTS POST APRIL 2004 RAO B 120 RELEASE BUZZARDS BAY, MASSACHUSETTS

Segment ID	Segment Name	Town	Degree of Oiling	Oil Ranking Score
E1-11	Scraggy Neck South	Bourne	Moderate	1.00
E1-13	Nye's Neck	Falmouth	Heavy	2.92
E1-14	New Silver Beach (sunset pt)	Falmouth	Moderate	<1.00
E1-15	Crow Point	Falmouth	Heavy	<1.00
E3-06	Uncatena Island	Gosnold	Moderate	2.00
W1B-12	Warren Point (MA)	Wareham	Moderate	3.00
W1B-15	Wareham River East Shore	Wareham	Moderate	1.80
W1B-31	Great Hill Point	Marion	Moderate	3.00
W1B-33	Piney Point South	Marion	Moderate	3.00
W1C-01	Butler's Point	Marion	Moderate	3.00
W1C-02	Planting Island Causeway	Marion	Heavy	3.00
W1C-04	Blankinship Cove	Marion	Moderate	1.46
W1C-05	Sippican Harbor East	Marion	Moderate	3.00
W1C-10	Silver Shell Beach	Marion	Moderate	<1.00
W1C-11	Sippican Harbor West	Marion	Very Light	<1.00
W1C-12	Converse Point East	Marion	Moderate	2.63
W1D-01	Aucoot Cove	Mattapoisett	Moderate	1.46
W1D-03	Holly Woods / Hiller Cove	Mattapoisett	Moderate	2.00
W1D-04	Holly Woods / Peases Point	Mattapoisett	Moderate	2.23
W1D-05	Point Connett Beach	Mattapoisett	Heavy	2.00
W1E-01	Nye Cove / Strawberry Cove	Mattapoisett	Light	1.33
W1E-02	Strawberry Cove	Mattapoisett	Light	1.46
W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28
W1E-04	Crescent Beach	Mattapoisett	Heavy	3.92
W1E-05	Mattapoisett Harbor East	Mattapoisett	Moderate	1.26
W1E-06	Mattapoisett Town Beach	Mattapoisett	Moderate	3.00
W1F-01	Brandt Beach	Mattapoisett	Heavy	2.49
W1F-02	Brandt Island West (Howards Beach)	Mattapoisett	Heavy	3.34
W1F-03	Brandt Island East	Mattapoisett	Heavy	3.07
W1F-04	Brandt Island Cove	Mattapoisett	Heavy	2.19
W1F-05	Mattapoisett Neck West	Mattapoisett	Heavy	3.77
W1F-06	Mattapoisett Neck South	Mattapoisett	Heavy	2.74
W1F-07	Mattapoisett Shores	Mattapoisett	Moderate	2.94
W1F-08	Mattapoisett Neck East	Mattapoisett	Heavy	1.08
W1F-09	Mattapoisett Harbor North	Mattapoisett	Moderate	1.00
W1G-00	Ram Island	Mattapoisett	Heavy	4.00
W2A-01	Fort Phoenix	Fairhaven	Moderate	1.79
W2A-02	Harbor View	Fairhaven	Heavy	3.00
W2A-03	Pope's Beach	Fairhaven	Moderate	3.00
W2A-04	Manhattan Ave	Fairhaven	Heavy	3.65

# TABLE 1 REMAINING SEGMENTS POST APRIL 2004 RAO B 120 RELEASE BUZZARDS BAY, MASSACHUSETTS

Segment ID	Segment Name	Town	Degree of Oiling	Oil Ranking Score
W2A-05	Sunset Beach	Fairhaven	Moderate	2.00
W2A-06	Silver Shell Beach	Fairhaven	Light	2.00
W2A-07	Sconticut Neck West	Fairhaven	Heavy	2.17
W2A-08	Wilbur Point	Fairhaven	Moderate	2.40
W2A-09	Sconticut Neck East	Fairhaven	Heavy	3.00
W2A-10	Long Island and Causeway South	Fairhaven	Heavy	3.44
W2A-11	West Island West	Fairhaven	Heavy	3.95
W2A-12	Rocky Point to East Cove (Town Beach)	Fairhaven	Heavy	1.19
W2A-13	East Cove	Fairhaven	Light	1.00
W2A-14	Pine Creek to North Point	Fairhaven	Moderate	3.00
W2A-19	Shaw Cove	Fairhaven	Heavy	2.23
W2B-05	Fort Taber	New Bedford	Moderate	1.44
W3A-01	Mishaum Point East	Dartmouth	Heavy	1.05
W3A-02	Salters Point West	Dartmouth	Moderate	3.00
W3A-03	Pier Beach (Salter's Point)	Dartmouth	Moderate	2.44
W3A-04	Salters Point East	Dartmouth	Light	2.00
W3A-05	Round Hill Beach West	Dartmouth	Heavy	2.14
W3A-06	Round Hill Beach East	Dartmouth	Heavy	2.77
W3B-02	Mishaum Point West	Dartmouth	Heavy	3.65
W3C-03	Barney's Joy (W of barbed)	Dartmouth	Heavy	4.00
W3C-04	Barney's Joy (E of barbed)	Dartmouth	Heavy	2.60
W3C-06	Demarest Lloyd State Park Marsh	Dartmouth	Very Light	1.00
W3D-07	Gooseberry Neck West	Westport	Moderate	2.05

# TABLE 2 BURIED OIL INSPECTIONS AND SHELLFISH BED EVALUATIONS JULY 23, 2004-DECEMBER 31, 2004 BARGE B120 SPILL BUZZARDS BAY, MASSACHUSETTS

Inspection Date	Segment Number	Segment Name	Town	Degree of Oiling	Oil Ranking	Objective	Inspection Summary
7/26/2004	W3A-06	Round Hill Beach East	Неаvy	Heavy	2.77	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	5 trenches were advanced 6-10 inches deep and 6-10 feet long, and 5 areas were N41°32.365 W70°55.843, N41°32.358 W70°55.824, N41°32.392 W70°55.819, a
7/26/2004	W3C-02	Little Beach	Dartmouth	Light	1.00	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	11 trenches were advanced 6-14 inches deep and 8-15 feet long, and 17 areas we
7/26/2004	W3C-03	Barney's Joy (W of barbed)	Dartmouth	Heavy	4.00	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	8 trenches were advanced 12-18 inches deep and 6-12 feet long, and 10 areas we was observed on sand surface in one trench in the lower intertidal zone. Other ev
7/26/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	3.34	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	9 trenches were advanced 6-18 inches deep and 6-12 feet long, and 8 areas were inches deep in a 2-3 inches diameter area in the upper intertidal zone on Leisure one area raked offshore at N41°37.720 W70°49.350. Further evidence of buried Island about every 20 feet. A 2-inch diameter tarball was removed at N41°37.43 Brandt Island. Dime to quarter-size staining on jetties. Trace splatter was observ Dime-size tar patties were removed from the dune area at Leisure Shores.
7/27/2004	W1F-01	Brandt Beach	Mattapoisett	Heavy	2.49	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	7 trenches were advanced 8-18 inches deep and 5-35 feet long, and 7 areas were along the east bank of the channel in the middle intertidal zone near N41°37.692 flecks of oil and minor sheening. 4-6 patches of pin-head size splatters embedde removed. Few granular tarballs along the banks of the Howard Beach channel (ra the trenches.
7/27/2004	W1E-01	Nye Cove / Strawberry Cove	Mattapoisett	Light	1.33	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	9 trenches were made 5-10 inches deep and 4-8 feet long, and 7 areas were raked boulders in the upper intertidal zone about 5-30 feet apart between N41° 38.549 layer of marsh (1-4 inches in diameter) were observed within a 5x5 foot area at N
7/27/2004	W3C-04	Barney's Joy (E of barbed)	Dartmouth	Heavy	2.60	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	4 trenches were advanced 7-10 inches deep and 8-15 feet long, and 5 areas were and in boulder crevices (up to 24x24 square foot areas), primarily in the middle a N41° 30.567. Pea to quarter-size splatter sporadically observed in a 30-foot area N41° 30.712 W70° 58.265. Evidence of buried oil was not observed.
7/27/2001	W3A-02	Salters Point West	Dartmouth	Moderate	3.00	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	3 trenches were advanced 12-16 inches deep and 6-10 feet long, and 4 areas were Evidence of buried oil was not observed.
7/28/2004	W3A-03	Pier Beach (Salter's Point)	Dartmouth	Moderate	2.44	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	Trenches and offshore raking on rocky shoreline was not feasible. Tacky dime-s N41°31.882 W70°56.875. Evidence of buried oil was not observed.
7/28/2004	W3A-04	Salters Point East	Dartmouth	Light	2.00	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	7 trenches were advanced 8-15 inches deep and 10-15 feet long, and 4 areas were
7/28/2004	W3A-05	Round Hill Beach West	Dartmouth	Heavy	2.14	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	5 trenches were advanced 8-18 inches deep and 8-12 feet long, and 4 areas were wood at the segment endpoint in front of the raised parking lot. Further evidence
7/28/2004	W1F-06	Mattapoisett Neck South	Mattapoisett	Heavy	2.74	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	15 trenches were advanced 3-10 inches deep and 5-8 feet long, and 15 areas were the middle to intertidal zone. Pieces of road tar and asphalt was observed on the
7/29/2004	W1F-07	Mattapoisett Shores	Mattapoisett	Moderate	2.94	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	see above (W1F-06)
7/29/2004	E1-11	Scraggy Neck South	Bourne	Moderate	1.00	Buried oil/ shallow subsurface shellfish bed evaluation/ site reconniasance	18 trenches were made 3-12 inches deep and 5-20 feet long, and 17 areas were ra to 30 feet in diameter on cobbles and boulders and was observed along a 200-foo observed.

raked offshore. Trace splatter observed on rocks in the intertidal zone at and N41°32.428 W70°55.283. Evidence of buried oil was not observed.

re raked offshore. Evidence of oil was not observed.

re raked offshore. A single pinhead-size fleck of oil encircled with a rainbow sheen vidence of oil was not observed.

raked offshore. Buried oil mixed with sediment was delineated and removed 5-7 Shores Beach at N41°37.724 W70°49.433. An oil-stained cobble was observed in oil was not observed. Trace splatter was observed on the causeway to Brandt 8 W70°49.095 and further dried splatter staining toward southwest side of the ved cobbles surrounding a jetty, ranging from quarter-size to 4 inches in diameter.

raked offshore. A 1-2 mllimeter lens of sand with a rainbow sheen was observed W70°49.507 on Howard Beach. Surrounding trenches had very infrequent pinhead ed in the marsh in the middle intertidal zone at N41° 37.621 W70° 49.564 were anging 2 millimeters to 1 inch in diameter) were removed from the surface and in

l offshore. A trace amount of tacky splatter, dime to quarter-size, was observed on W70° 45.887 and N41° 38.480 W70° 45.892. Tar patties embedded in the top J41° 38.534 W70° 45.891. Evidence of buried oil was not observed.

raked offshore. Small clusters of hardened splatter were observed between cobbles and lower intertidal zones between W70° 59.215 N41° 30.581 and W70° 59.319 , primarily in the upper intertidal zone between N41° 30.546 W70° 59.108 and

e raked offshore. Very trace dime-size splatter stains were observed on cobbles.

ize splatter was observed in boulder crevices in the middle intertidal zone at

e raked offshore. Evidence of oil was not observed.

raked offshore. Trace stained dime-size splatter was observed on boulders and e of oil not observed.

e raked offshore. Trace splatter was observed on cobbles and boulders, primarily in rocky shoreline at the point. Evidence of buried oil was not observed.

aked offshore. Trace amounts of tar-like hardened splatter was observed in areas 5 ot stretch starting at N41° 39.682 W70° 38.863. Evidence of B120 oil was not

# TABLE 2 BURIED OIL INSPECTIONS AND SHELLFISH BED EVALUATIONS JULY 23, 2004-DECEMBER 31, 2004 BARGE B120 SPILL BUZZARDS BAY, MASSACHUSETTS

Inspection Date	Segment Number	Segment Name	Town	Degree of Oiling	Oil Ranking	Objective	Inspection Summary
8/10/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	1/3/1900	Shoreline inspection and cleanup and potential buried oil check (followup from shoreline evauation on 7/27/04)	A total of 37 trenches (T) were excavated and 3 areas were raked 1-6 inches deep and were scattered in the lower, middle, and upper intertidal zones. T1-T9 were Beach Channel, including in the area where evidence of buried oil was observed oil-stained cobble removed 6 inches deep from T9 in the upper intertidal zone at Howard Beach channel. Channel banks were raked 2-6 inches deep, perpendicul W70°49.525. Flattened tarballs (2 centimeters- 2 inches in diameter) were remov from T15 in the upper intertidal zone at N41°37.696 W70°49.528. T20-T34 wer gravel areas starting at N41°37.689 W70°49.520 and N41°37.689 W70°49.518 w An additional 15 trenches were excavated on Leisure Shores Beach between the feet long and 8-16 inches deep and were scattered throughout the intertidal zone. buried oil mixed with sediment was removed from the upper intertidal zone at N- 7/27/04). The seem was removed and consisted of pockets of oil 1-6 inches in di inches deep. Several test pits were dug surrounding this area to delineate the extre exception of T47, between Brandt Island Road and the Brandt Island causeway, v intertidal zone.
8/11/2004	W2A-10	Long Island and Causeway South	Fairhaven	Heavy	3.44	Quantitative subtidal survey and sampling	3 continuous chain drags were completed on the west side of Hoppy's Landing. Ithrough LI-DS-S04) were taken ranging 15-25 feet below the water surface at N4N41°35.230 W70°50.401, respectively. 3 shallow subtidal sediment samples (ACN41°35.825 W70°50.471, N41°35.816 W70°50.496, and N41°35.747 W70°50.4 submitted for EPH analysis. Evidence of oil was not observed.
8/11/2004	W2A-03	Pope's Beach	Fairhaven	Moderate	3.00	Quantitative subtidal survey and sampling	5 continuous chain drags were completed. Evidence of oil was not observed. 4 s below water surface at N41°37.824 W70°53.116, N41°37.754 W70°52.964, N41 sample of PB-SS-S02 (labeled BSS-01) was taken at 8 feet deep; and 4 deep subbelow the water surface at N41°37.446 W70°53.120, N41°37.376 W70°52.956, I were submitted for EPH analysis. Evidence of oil was not observed.
8/11/2004	W2A-07	Sconticut Neck West	Fairhaven	Heavy	2.17	Quantitative subtidal survey and sampling	4 continuous chain drags were completed. Evidence of oil was not observed. 4 s feet below the water surface at N41°35.524 W70°51.628, N41°35.769 W70°51.8 duplicate sample of SN-SS-S03 (labeled BSS-S02) at 2 feet below the water surf collected ranging 15-18 feet below the water surface at N41°34.991 W70°52.180 W70°52.323, respectively. Samples were submitted for EPH analysis. Evidence
8/12/2004	W3C-05 and -06	Demarest Lloyd- mouth of Slocums River	Dartmouth	Very Light	1.00	Quantitative subtidal survey and sampling	5 continuous chain drags were completed. Evidence of oil was not observed. 4 sranging 3-4 feet below water surface at N41°32.223 W70°58.816, N41°31.993 W and 4 deep subtidal sediment samples (DL-DS-S01 through DL-DS-S04) were conversely N41°31.450 W70°58.267, N41°31.354 W70°58.365, and N41°31.207 W70°58.5 not observed.
8/31/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	1/3/1900	Inspection with MADEP for future delineation and cleanup activities	GeoInsight and DEP returned to the area of the beach where DEP had previously tarballs ranging from pinhead-size to 2 millimeter globules and rainbow sheen w Two samples (LS-OS-S01 and LS-OS-S02) of oil-impacted sediment were collect laboratory for fingerprint analysis. Delineating the extent of oil was warranted.
9/2/2004	W3C-04	Barney's Joy (E of barbed)	Dartmouth	Heavy	2.60	Quantitative subtidal survey and sampling	7 continuous chain drags were completed. Evidence of oil was not observed. The (N41°30'18.6" W70°59'12.3"). Evidence of oil in this area was not observed and subtidal sediment samples (BJ-SS-S01 through BJ-SS-S04) ranging 3-5 feet belo 20 feet below water surface were collected and sent to a laboratory for EPH analyses.

p on Howard Beach. Trenches ranged from 10-25 feet long and 6-15 inches deep, located within the sandy areas of the beach around peat bogs west of the Howard on 7/27/04. Buried oil was not observed, with the exception of a 2-inch diameter N41°37.688 W70°49.527. T10-T19 were located along and extended into the lar and diagonal to the ocean at N41°37.695 W70°49.529 to N41°37.695 ved from the surface of this channel. A pea-size tarball was removed 8 inches deep re located between the Howard Beach channel and the jetty with the channel. The were raked eastward 1-2 inches deep parallel to the shoreline.

jetty with the channel and the Brandt Island causeway. Trenches ranged from 5-20 An area in the upper intertidal zone was dug 20x3x2 feet, where a small seem of 41°37.721 W70°49.447 (in the vicinity of a pocket of buried oil removed on iameter ranging from 6-14 inches deep, with areas extending into a peat layer 6 ent of the impacted area. Further evidence of buried oil was not observed with the where a small cobble with tacky oil was removed (4 inches deep) in the lower

Evidence of oil was not observed. 4 deep subtidal sediment samples (LI-DS-S01 41°35.463 W70°50.614, N41°35.444 W70°50.744, N41°35.347 W70°02.443, and CD-S01 through ACD-03) were taken ranging 6-15 feet below the water surface at 82, respectively. Sampling was limited due to rocky coastline. Samples were

shallow subtidal samples (PB-SS-01 through PB-SS-04) were taken ranging 5-8 feet °37.654 W70°52.767, and N41°37.544 W70°52.460, respectively; 1 duplicate tidal samples (PB-DS-S01 through PB-DS-S04) were taken ranging 12-20 feet N41°37.255 W70°52.709, and N41°37.238 W70°52.597, respectively. Samples

shallow subtidal sediment samples (SN-SS-S01 through SN-SS-S04) ranging 2-4 871, N41°31.350 W70°58.267, and N41°31.547 W70°58.187, respectively; 1 face; and 4 deep subtidal sediment samples (SN-DS-S01 through SN-DS-S04) were 0, N41°35.264 W70°52.279, N41°35.532 W70°52.317, and N41°35.783 of oil was not observed.

shallow subtial sediment samples (DL-SS-S01 through DL-SS-S04) were collected V70°58.747, N41°31.753 W70°58.671, and N41°31.401 W70°58.832, respectively; ollected ranging 15-16 feet below water surface at N41°31.547 W70°58.184, 08, respectively. Samples were submitTed for EPH analysis. Evidence of oil was

v observed liquid-like oil in the middle intertidal zone of Leisure Shores. Small ere observed in the water where shallow test pits were dug in a 20x10 foot area. cted at N41°37.714 W70°49.432 and N41°37.710 W70°49.432 and submitted to a

e chain drag evaluation included a previous dive team survey location at collecting a sample was not feasible because of the rocky subtidal area. 4 shallow w water surface, and 4 deep samples (BJ-DS-S01 through BJ-DS-S02) ranging 12-ysis. Evidence of oil was not observed.

# TABLE 2 BURIED OIL INSPECTIONS AND SHELLFISH BED EVALUATIONS JULY 23, 2004-DECEMBER 31, 2004 BARGE B120 SPILL BUZZARDS BAY, MASSACHUSETTS

Inspection Date	Segment Number	Segment Name	Town	Degree of Oiling	Oil Ranking	Objective	Inspection Summary
9/8/2004	W1F-02	Brandt Island West	Mattapoisett	Неаvy	1/3/1900	Delineate extent of particulate oil on Leisure Shores (continued inspection from 8/31/04)	In response to the detection of particulate oil in this area, a total of 113 trenches a intertidal zone between N41°37.714' W70°49.461', N41°37.699' W70°49.453', N was found to be discontinuous, with oil encountered in approximately 40 percent approximately 1-2 millimeters in diameter were observed floating on the water su globules (5-7 millimeters in diameter) were observed. The number of oil particles some oil was removed with oil-absorbent pads. A weathered oil sample was take between N41° 37.685 W70° 49.510 and N41° 37.703 W70° 49.475. The sample
9/9/2004	W2A-11	West Island West	Fairhaven	Heavy	3.95	Shoreline inspection	Buried oil was found and removed in a 5x4 foot sandy area in the upper intertida be within a 10x20 foot area. Several slightly weathered tarballs were found surro diameter) was observed on the boulders and jetties on the north portion of the seg was removed at N41° 35.057 W70° 49.700. Old pavement and hardened granula
9/10/2009	W2A-11	West Island West	Fairhaven	Heavy	3.95	Continue delineation of buried oil found on 9/9/04	Elevated tacky splatter (ranging 5 millimeters-1 centimeter in diameter) sporadio 4 tarballs (2-4 inches in diameter and up to 4 inches thick) were removed in the u N41°35.552 W70°50.186. The tarballs and the stained sand surrounding the tarb
9/22/2004	W2A-11	West Island West	Fairhaven	Heavy	3.95	Continue delineation of buried oil found on 9/9/04	Delineation of previously found tarballs and buried oil in the sandy upper intertic inch and 0.25" deep and one area 3x3 inch and 3 inches deep of soft tacky oil wit 50.189.
9/23/2004	W2A-10	Long Island and Causeway South	Fairhaven	Heavy	3.44	Post cleanup boom changeout	Existing boom did not need to be replaced. Fleet removed boom for offsite dispo
11/9/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	3.34	Survey shoreline profile	Six transects perpendicular to the shoreline were surveyed using an auto level for in the supratidal area to the water's edge. Elevation measured every five feet. The that occurs in this localized area throughout the seasons.
12/8/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	3.34	Survey shoreline profile	Continued survey activities of six transects perpendicular to the shoreline were su
12/29/2004	W2A-10	Long Island and Causeway South	Fairhaven	Heavy	3.44	Post cleanup inspection	An area of pavement (20x30-foot area) was observed in the lower intertidal zone from 8x2 inches to 2x3 foot areas. The pavement was tacky and potent when dis Landing peninsula, consisting of 2x2 foot and 5x5 foot areas in the marsh grass is pavement.

aligned in a grid pattern were excavated to delineate the extent of oil within the N41°37.719' W70°49.426', and N41°37.713' W70°49.421'. In general, the oiling t of the trenches. Small pinhead to pepper flake size particles, measuring urface within the trenches and were often surrounded by a rainbow sheen. Few is observed in the individual trenches ranged from 1 to 6 oil particles per trench and en from the edge of the marsh islands on Howard Beach in the lower intertidal zone was a composite of small tarballs embedded in the marsh soil.

Il zone at N41° 35.554 W70° 50.188. The extent of the buried oil was determined to ounding the buried oil area. Additionally, sporadic tacky splatter (5mm to 1 cm in gment. A tarball adhered to a boulder in the upper intertidal zone (2 inch diameter) ated oil splatter was observed in between boulders in the upper intertidal zone.

cally located in upper intertidal zone was observed on northwest side of west island. upper intertidal zone of the rocky shoreline between N41°35.057 W70° 9.760 and balls was also removed.

dal area. Extent of oil determined to be 7x10 feet and 3-4"deep, with two areas 1x1 thin a 32x20-foot area between N41° 35.560 W70° 50.104 and N41° 35.558 W70°

osal.

r the elevation of the existing beach profile. The transects begin in the marsh grass his is the first of a monthly survey to evaluate the extent of erosion and accretion

urveyed using an auto level to measure the elevation of the existing beach profile.

e at N41'35.644 W70'50.595. The area consisted of patches of pavement ranging sturbed. Another area of pavement was observed on the southeast tip of the Hoppy's in the lower intertidal zone. A slight sheen was observed in a tidal pool near the

# TABLE 3 SUMMARY OF W1F-02 SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W1F-02 **BRANDT ISLAND WEST, MATTAPOISETT**

														МС	P Method 1 Stan	dards	NOAA Effects Range- Low
	Analyte	LS-OS-S01	LS-OS-S02	HB-SED-01	HB-SED-02	HB-SED-03	HB-SED-04	HB-SED-05	HB-SED-06	HB-SED-07	HB-SED-08	HB-SED-09	HB-DUP-01	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	for Marine Sediments (ERL)
	Sample Date	8/31/2004	8/31/2004	12/9/2004	12/9/2004	12/9/2004	12/9/2004	12/9/2004	12/9/2004	12/9/2004	12/9/2004	12/9/2004	12/9/2004				
ЕРН		GAI															
	C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	NA	NA	ND(33)	ND(34)	ND(34)	ND(34)	ND(33)	ND(33)	ND(34)	ND(35)	ND(35)	ND(51)	1,000	1,000	1,000	NA
	C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	NA	NA	ND(33)	ND(34)	ND(34)	ND(34)	ND(33)	ND(33)	ND(34)	ND(35)	ND(35)	ND(51)	2,500	2,500	2,500	NA
	C11-C22 Aromatic Hydrocarbons	NA	NA	ND(33)	ND(34)	ND(34)	ND(34)	ND(33)	ND(33)	ND(34)	ND(35)	ND(35)	ND(51)	200	800	800	NA
PAH (ppm)		B&B	B&B	B&B	B&B	B&B	B&B	В&В	B&B	B&B	B&B	B&B	B&B				
ur ,	Naphthalene	0.1410	0.0316	0.0001j	0.0002	0.0002	0.0001j	0.0001j	0.0001j	0.0002	0.0002	0.0002	0.0002	4	100	100	0.16
	2-Methylnaphthalene	0.2210	0.0069	0.0001j	0.0001j	0.0002j	0.0001j	0.0001j	0.0002j	0.0002j	0.0002j	0.0002j	0.0002j	4	500	500	0.07
	Acenaphthylene	0.1150	0.0030	0.0001j	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.0001j	ND(0.2)	0.0001j	100	100	100	0.044
	Acenaphthene	0.5520	0.0081	0.0001j	0.0001j	0.0001j	ND(0.1)	0.0001j	0.0001j	ND(0.1)	ND(0.1)	0.0002	0.0002	20	1,000	1,000	0.016
	Fluorene	0.9730	0.0194	0.0001j	ND(0.2)	0.0001j	ND(0.2)	ND(0.2)	0.0001j	ND(0.2)	0.0003	0.0001j	ND(0.2)	400	1,000	1,000	0.019
	Phenanthrene	4.3900	0.1210	0.0002	0.0001j	0.0007	0.0002	0.0002	0.0003	0.0003	0.0007	0.0005	0.0003	700	1,000	100	0.24
	Anthracene	0.5540	0.0188	0.0001j	ND(0.2)	0.0001j	ND(0.2)	ND(0.2)	ND(0.2)	0.0001j	0.0007	ND(0.2)	ND(0.2)	1,000	1,000	1,000	0.0853
	Fluoranthene	0.5760	0.0239	0.0005	0.0002j	0.0007	0.0002j	0.0004	0.0003	0.0006	0.0023	0.0004	0.0006	1,000	1,000	1,000	0.6
	Pyrene	3.3100	0.1520	0.0007	0.0003	0.0029	0.0004	0.0005	0.0004	0.0035	0.0126	0.0005	0.0013	700	700	700	0.665
	Benzo(a)anthracene	2.7800	0.1160											0.7	0.7	0.7	0.261
	Chrysene	5.4200	0.2640	0.0013	0.0004	0.0036	0.0009	0.001	0.0005	0.0123	0.0182	0.0004	0.0011	7	7	7	0.384
	Benzo(b)fluoranthene	0.6810	0.0326	0.0005	0.0004	0.0009	0.0004	0.0006	0.0004	0.0031	0.004	0.0005	0.0009	0.7	0.7	0.7	NA
	Benzo(k)fluoranthene	0.1270	0.0063	0.0002j	0.0001j	0.0002j	0.0001j	0.0001j	0.0001j	0.0004	0.0004	0.0001j	0.0001j	7	7	7	NA
	Benzo(a)pyrene	1.4700	0.0777	0.0003	0.0003	0.001	0.0005	0.0003	0.0003	0.0043	0.0059	0.0003	0.0007	0.7	0.7	0.7	0.430
	Indeno(1,2,3-c,d)pyrene	0.1610	0.0110	0.0002j	0.0001j	0.0002j	0.0002j	0.0002j	0.0002j	0.0005	0.0008	0.0002j	0.0004	0.7	0.7	0.7	NA
	Dibenzo(a,h)anthracene	0.2800	0.0148	0.0001j	0.0001j	0.0001j	0.0002	0.0001j	0.0001j	0.0006	0.0007	ND(0.2)	0.0001j	0.7	0.7	0.7	0.0634
	Benzo(g,h,i)perylene	0.3280	0.0211	0.0002	0.0002	0.0003	0.0003	0.0002	0.0003	0.0011	0.0014	0.0002	0.0005	1,000	1,000	1,000	NA
	Total PAH	22.0790	0.9282	0.005	0.003	0.012	0.004	0.004	0.004	0.029	0.050	0.004	0.007	NA	NA	NA	4.022

NOTES:

Results in milligrams per kilogram (mg/kg).
GAI= Groundwater Analytical, Inc.

3. B&B= B&B Laboratories.

4. EPH: Extractable Petroleum Hydrocarbons.

5. Qualifiers: J=Below the MDL.

6. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

7. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

8. NA: Not Available.

9. Shaded cells exceed applicable NOAA ERLs.

W1F-01	Brandt Bea	ach			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/27/2004 (12:23-15:00) and (18:00- 19:30)	9:48/ 21:45	Buried Oil Inspection	Trench 1	41°37.492'	70°50.017'
			Trench 2	41°37.488'	70°49.979'
			Trench 3	41°37.495'	70°49.913'
			Trench 4	41°37.511'	70°49.755'
			Trench 5	41°37.530'	70°49.715'
			Trench 6	41°37.582'	70°49.648'
			Trench 7	41°37.598'	70°49.626'
		Shellfish Bed Inspection	Subtidal 1	41°37.488'	70°49.979'
			Subtidal 2	41°37.495'	70°49.913'
			Subtidal 3	41°37.511'	70°49.755'
			Subtidal 4	41°37.530'	70°49.715'
			Subtidal 5	41°37.582'	70°49.648'
			Subtidal 6	41°37.598'	70°49.626'
			Subtidal 7	41°37.676'	70°49.533'
9/27/2004	13:54	Buried Oil Inspection	Trench 1	41°37.684'	70°49.515'
			Trench 2	41°37.612'	70°49.587'
			Trench 3	41°37.656'	70°49.535'
			Trench 4	41°37.664'	70°49.540'

W1F-02	Brandt Islan	d West			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/27/2004	9:48/ 24:06	Buried Oil Inspection	Trench 1	41°37.692'	70°49.507'
(13:47 - 1500) and $(19:00 - 20:30)$			Trench 2	41°37.699'	70°49.483'
			Trench 3	41°37.713'	70°49.456'
			Trench 4	41°37.724'	70°49.433'
			Trench 5	41°37.721'	70°49.426'
			Trench 6	41°37.720'	70°49.411'
			Trench 7	41°37.720'	70°49.350'
			Trench 8	41°37.617'	70°49.187'
			Trench 9	41°37.587'	70°49.144'
			Trench 10	41°37.676'	70°49.533'
		Shellfish Bed Inspection	Subtidal 1	41°37.692'	70°49.507'
			Subtidal 2	41°37.699'	70°49.483'
			Subtidal 5	41°37.713'	70°49.456'
			Subtidal 6	41°37.724'	70°49.433'
			Subtidal 7	41°37.721'	70°49.426'
			Subtidal 8	41°37.720'	70°49.411'
			Subtidal 9	41°37.720'	70°49.350'
			Subtidal 10	41°37.617'	70°49.187'
			Subtidal 11	41°37.587'	70°49.144'
			Subtidal 12	41°37.531'	70°49.120'
			Subtidal 13	41°37.452'	70°49.121'
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
8/10/2004 (6:00 - 12:00)	9:42	Buried Oil Inspection	Trench 1	41°37.715'	70°49.455'
			Trench 2	41°37.712'	70°49.455'
			Trench 3	41°37.707'	70°49.455'
			Trench 4	41°37.711'	70°49.454'
			Trench 5	41°37.709'	70°49.454'
			Trench 6	41°37.716'	70°49.454'
		(buried oil 20'x3'x1.5')	Trench 7	41°37.721'	70°49.447'
		Ì.	Trench 8	41°37.714'	70°49.447'
			Trench 9	41°37.709'	70°49.443'
			Trench 10	41°37.717'	70°49.456'
			Trench 11	41°37.715'	70°49.438'
			Trench 12	41°37,714'	70°49.431'
			Trench 13	41°37 718'	70°49 415'
			Trench 14	41°37 721'	70°49 427'
			Trench 15	41°37.678'	70°49 543'
			Trench 16	41°37.676'	70°49.539'
			Trench 17	41 37.070	70 49.535
			Tronch 18	41 37.078	70 49.530
			Trench 10	41 37.077	70 49.334
			Trench 19	41°37.081	70°49.538
			Trench 20	41°37.680	70°49.531
			Trench 21	41°37.685	70°49.543'
			Trench 22	41°37.082	70°49.527
			Trench 23	41°37.688	/0°49.527'
			Trench 24	41°37.690'	/0°49.527'
			Trench 25	41°37.691'	70°49.'529
			Trench 26	41°37.693'	70°49.532'
			Trench 27	41°37.696'	70°49.528'
			Trench 28	41°37.693'	70°49.528'
			Trench 29	41°37.696'	70°49.528'
1			Trench 30	41°37.694'	70°49.524'

W1F-02	Brandt Isla	nd West			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
8/10/2004 (6:00 - 12:00)	9:42	Buried Oil Inspection	Trench 31	41°37.693'	70°49.522'
			Trench 32	41°37.688'	70°49.525'
			Trench 33	41°37.687'	70°49.524'
			Trench 34	41°37.686'	70°49.523'
			Trench 35	41°37.687'	70°49.524'
			Trench 36	41°37.689'	70°49.523'
			Trench 37	41°37.689'	70°49.518'
			Trench 38	41°37.690'	70°49.515'
			Trench 39	41°37.694'	70°49.515'
			Trench 40	41°37.692'	70°49.506'
			Trench 41	41°37.693'	70°49.500'
			Trench 42	41°37.696'	70°49.496'
			Trench 43	41°37.695'	70°49.487'
			Trench 44	41°37.695'	70°49.488'
			Trench 45	41°37.701'	70°49.483'
			Trench 46	41°37.704'	70°49.470'
			Trench 47	41°37.712'	70°49.474'
			Trench 48	41°37.705'	70°49.472'
			Trench 49	41°37.717'	70°49.666'
			Rake 1	41°37.695'	70°49.529'
				41°37.685'	70°49.525'
			Rake 2	41°37.689'	70°49.520'
			Rake 3	41°37.689'	70°49.523'
				41°37.689'	70°49.518'
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
9/8/2004	11:21	Buried Oil Delineation	northwest endpoint	41°37.714'	70°49.461'
		(113 trenches)	southwest endpoint	41°37.699'	70°49.453'
			northeast endpoint	41°37.719'	70°49.426'
			southeast endpoint	41°37.713'	70°49.421'
9/23/2004	9:33	Cleanup Activities	northwest endpoint	41°37.714'	70°49.461'
		(Raking and trenching)	southwest endpoint	41°37.699'	70°49.453'
			northeast endpoint	41°37.719'	70°49.426'
			southeast endpoint	41°37.713'	70°49.421'
		(Concentrated 20'x20' area)	trenched area	41°37.712'	70°49.433'
			endpoint	41°37.713'	70°49.435'
			endpoint	41°37.709'	70°49.421'
			endpoint	41°37.714'	70°49.431'
			endpoint	41°37.710'	70°49.431'

W1F-02	Brandt Islan	d West			
9/27/2004	13:54	Buried Oil/ Post Cleanup Inspection	2 samples	41°37.712'	70°49.433'
		-	Trench 1	41°37.671'	70°49.535'
			Trench 2	41°37.694'	70°49.476'
			Trench 3	41°37.691'	70°49.468'
			Trench 4	41°37.692'	70°49.475'
			Trench 5	41°37.702'	70°49.460'
			Trench 6	41°37.722'	70°49.432'
			Trench 7	41°37.709'	70°49.442'
			Trench 8	41°37.719'	70°49.447'
			Trench 9	41°37.714'	70°49.465'
			Trench 10	41°37.703'	70°49.471'
			Trench 11	41°37.696'	70°49.485'
			Trench 12	41°37.691'	70°49.503'
			Trench 13	41°37.691'	70°49.522'
			Trench 14	41°37.683'	70°49.526'
			Trench 15	41°37.680'	70°49.537'
			Trench 16	41°37.690'	70°49.531'
			Trench 17	41°37.704'	70°49.422'
			Trench 18	41°37.701'	70°49.426'
			Trench 19	41°37.700'	70°49.427'
			Trench 20	41°37.697'	70°49.428'
			Trench 21	41°37.696'	70°49.431'
			Trench 22	41°37.695'	70°49.432'
			Trench 23	41°37.693'	70°49.433'
			Trench 24	41°37.692'	70°49.439'
			Trench 25	41°37.691'	70°49.438'
			Trench 26	41°37.691'	70°49.440'
			Trench 27	41°37.689'	70°49.444'
			Trench 28	41°37.689'	70°49.445'
			Trench 29	41°37.709'	70°49.427'
			Trench 30	41°37.705'	70°49.427'
			Trench 31	41°37.707'	70°49.427'
			Trench 32	41°37.705'	70°49.430'
			Trench 33	41°37.711'	70°49.430'
			Trench 34	41°37.711'	70°49.431'
			Trench 35	41°37.712'	70°49.429'
			Trench 36	41°37.714'	70°49.428'
			Trench 37	41°37.712'	70°49.430'
			Trench 38	41°37.715'	70°49.432'
			Trench 39	41°37.715'	70°49.433'
			Trench 40	41°37.714'	70°49.434'
			Trench 41	41°37.712'	70°49.433'
			Trench 42	41°37.711'	70°49.434'
			Trench 43	41°37.712'	70°49.432'
			Trench 44	41°37.714'	70°49.433'
			Trench 45	41°37.714'	70°49.431'
			Trench 46	41°37.714'	70°49.432'
			Trench 47	41°37.714'	70°49.430'
10/27/2004	14:20	Post Cleanup Inspection	Trench Area	41°37.712'	70°49.433'

W1E-01	Nye Co	ove/ Strawberry Cove			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/27/2004 (11:35 - 13:00)	9:48	Buried Oil Inspection	Trench 1	41°30.700'	70°46.101'
			Trench 2	41°38.724'	70°46.108'
			Trench 3	41°38.762'	70°46.111'
			Trench 4	41°38.806'	70°46.100'
			Trench 5	41°38.834'	70°46.087'
			Trench 6	41°38.879'	70°46.056'
			Trench 7	41°38.938'	70°45.973'
		Shellfish Bed Inspection	Subtidal 1	41°38.923'	71°45.845'
			Subtidal 2	41°38.945'	71°45.898'
			Subtidal 3	41°38.915'	71°45.008'
			Subtidal 4	41°38.837'	71°46.090'
			Subtidal 5	41°38.776'	71°46.105'
	Subtidal 6	41°38.790'	71°46.102'		
			Subtidal 7	41°38.667'	71°46.066'

W3C-04	Barne	y's Joy (east of barbed wi	ire)		
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/27/2004 (6:45 - 9:30)	9:48	Buried Oil Inspections	Trench 1	41°30.594'	70°59.346'
			Trench 2	41°30.576'	70°59.259'
			Trench 3	41°30.556'	70°59.146'
			Trench 4	41°30.547'	70°59.093'
		Shellfish Bed Inspections	Subtidal 1	41°30.878'	71°58.942'
			Subtidal 2	41°30.794'	71°58.885'
			Subtidal 3	41°30.671'	71°58.889'
5	Subtidal 4	41°30.586'	71°58.870'		
			Subtidal 5	41°30.558'	71°59.113'
			Subtidal 6	41°30.589'	71°59.337'

W3A-02	Salter	's Point West			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/28/2004 (6:45 - 9:30)	10:57	Buried Oil Inspection	Trench 1	41°31.661'	70°57.255'
			Trench 2	41°31.703'	70°57.186'
			Trench 3	41°31.737'	70°57.098'
			Trench 4	41°31.760'	70°57.054'
		Shellfish Inspection	Subtidal 1	41°31.661'	70°57.255'
			Subtidal 2	41°31.703'	70°57.186'
			Subtidal 3	41°31.737'	70°57.098'
			Subtidal 4	41°31.760'	70°57.054'

W3A-04	Salter	s Point East			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/28/2004 (9:30 - 10:30)	10:57	Buried Oil Inspection	Trench 1	41°31.972'	70°55.048'
		Shellfish Bed Inspection	Trench 2	41°32.985'	70°55.646'
			Trench 3	41°32.088'	70°56.820'
			Trench 4	41°33.912'	70°56.874'
			Subtidal 1	41°31.957'	71°56.848'
			Subtidal 2	41°31.960'	71°56.844'
			Subtidal 3	41°30.671'	71°56.857'
			Subtidal 4	41°30.586'	71°56.855'

W3A-05	Round H	ill Beach West			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/28/2004 (10:30 - 11:30)	10:57	Buried Oil Inspection	Trench 1	41°32.172'	71°56.847'
			Trench 2	41°32.302'	71°56.725'
			Trench 3	41°32.343'	71°56.683'
			Trench 4	41°32.395'	71°56.573'
		Shellfish Bed Inspection	Trench 5	41°32.420'	71°563466'
			Subtidal 1	41°32.104'	71°56.835
			Subtidal 2	41°32.146'	71°56.845'
			Subtidal 3	41°32.172'	71°56.847'
			Subtidal 4	41°32.302'	71°56.725'
			Subtidal 5	41°32.343'	71°56.683'
			Subtidal 6	41°32.395'	71°56.573'
			Subtidal 7	41°32.428'	71°56.346'

W1F-06 and W1F-07	Mattaj	poisett Neck South, and	Mattapoisett	Shores	
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/29/2004 (8:50 - 10:00)	12:15	Buried Oil Inspection	Trench 1	41°37.493'	70°48.429'
			Trench 2	41°37.510'	70°48.590'
			Trench 3	41°37.566'	70°48.386'
			Trench 4	41°37.607'	70°48.256'
			Trench 5	41°37.642'	70°48.230'
			Trench 6	41°37.697'	70°48.234'
			Trench 7	41°37.719'	70°48.154'
			Trench 8	41°37.807'	70°48.043'
			Trench 9	41°37.856'	70°47.996'
			Trench 10	41°37.952'	70°48.028'
			Trench 11	41°38.023'	70°48.048'
			Trench 12	41°38.466'	70°48.113'
			Trench 13	41°38.216'	70°48.125'
			Trench 14	41°38.259'	70°48.135'
			Trench 15	41°38.627'	70°48.529'
		Shellfish Bed Inspection	Subtidal 1	41°37.493'	70°48.429'
			Subtidal 2	41°37.510'	70°48.590'
			Subtidal 3	41°37.566'	70°48.386'
			Subtidal 4	41°37.607'	70°48.256'
			Subtidal 5	41°37.642'	70°48.230'
			Subtidal 6	41°37.697'	70°48.234'
			Subtidal 7	41°37.719'	70°48.154'
			Subtidal 8	41°37.807'	70°48.043'
			Subtidal 9	41°37.856'	70°47.996'
			Subtidal 10	41°37.952'	70°48.028'
			Subtidal 11	41°38.023'	70°48.048'
			Subtidal 12	41°38.466'	70°48.113'
			Subtidal 13	41°38.216'	70°48.125'
			Subtidal 14	41°38.259'	70°48.135'
			Subtidal 15	41°38.627'	70°48.529'

E1-11	Scrag	gy Neck South			
Date/ Time	Low	Objectives	Location	GPS Coordinates	GPS Coordinates
Z/20/2004 (0.45 2.20)	Tide		T 1.1	(Latitude)	(Longitude)
7/29/2004 (9:45 - 2:30)	12:15	Buried Oil Inspection	Trench I	41°39.924	70°39.212'
			Trench 2	41°39.888	70°39.193'
			Trench 3	41°39.851'	70°39.167'
			Trench 4	41°39.831'	70°39.152'
			Trench 5	41°39.812'	70°39.114'
			Trench 6	41°39.780'	70°39.047'
			Trench 7	41°39.750'	70°38.975'
			Trench 8	41°39.733'	70°38.955'
			Trench 9	41°39.711'	70°38.914'
			Trench 10	41°39.682'	70°38.863'
			Trench 11	41°39.790'	70°38.869'
			Trench 12	41°39.820'	70°38.929'
			Trench 13	41°39.845'	70°38.028'
			Trench 14	41°39.775'	70°38.152'
			Trench 15	41°39.742'	70°38.237'
		Shellfish Bed Inspection	Trench 16	41°39.715'	70°38.255'
			Trench 17	41°39.710'	70°38.295'
			Subtidal 1	41°39.924'	70°39.212'
			Subtidal 2	41°39.888'	70°39.193'
			Subtidal 3	41°39.831'	70°39.152'
			Subtidal 4	41°39.812'	70°39.114'
			Subtidal 5	41°39.786'	70°39.073'
			Subtidal 6	41°39.780'	70°39.047'
			Subtidal 7	41°39.753'	70°39.009'
			Subtidal 8	41°39.750'	70°38.975'
			Subtidal 9	41°39.733'	70°38.955'
			Subtidal 10	41°39.711'	70°38.914'
			Subtidal 11	41°39.682'	70°38.863'
			Subtidal 12	41°39.790'	70°38.869'
			Subtidal 13	41°39.820'	70°38.929'
			Subtidal 14	41°39.845'	70°38.028'
			Subtidal 15	41°39.821'	70°38.083'
			Subtidal 16	41°39.775'	70°38.152'
			Subtidal 17	41°39.742'	70°38.237'
			Si	Subtidal 18	41°39.715'
			Subtidal 19	41°39.710'	70°38.295'

W2A-11	West 1	Island West			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
9/9/2004	9:09	Shoreline Inspection	Trenched Area (5'x4')	41°35.552'	70°50.186'
9/10/2004	11:21	Buried Oil Inspection	Trenched Area (20'x10')	41°35.555'	70°50.187'
9/22/2004	8:07	Buried Oil Inspection	Trench Area (20' 30')	41°35.560'	70°50.104'
				41°35.558'	70°50.189'
				41°35.555'	70°50.187'
				41°35.361'	70°50.187'

W3A-06	Roun	d Hill Beach East			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/26/2004 (6:23 - 8:00)	8:42	Buried Oil Inspection	Trench 1	41°32.424'	70°56.275'
			Trench 2	41°32.435'	70°56.190'
			Trench 3	41°32.440'	70°56.138'
		Shellfish Bed Inspection	Trench 4	41°32.438'	70°56.058'
			Trench 5	41°32.424'	70°55.958'
			Subtidal 1	41°32.424'	70°56.275'
			Subtidal 2	41°32.435'	70°56.190'
			Subtidal 3	41°32.440'	70°56.138'
			Subtidal 4	41°32.438'	70°56.058'
			Subtidal 5	41°32.424'	70°55.958'

W3C-02	Little	Beach			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/26/2004 (7:40 - 11:00)	8:42	Buried Oil Inspection	Trench 1	41°30.485'	71°01.262'
			Trench 2	41°30.520'	71°01.234'
			Trench 3	41°30.553'	71°01.165'
			Trench 4	41°30.555'	71°01.145'
			Trench 5	41°30.618'	71°00.952'
			Trench 6	41°30.636'	71°00.770'
			Trench 7	41°30.652'	71°00.697'
			Trench 8	41°30.670'	71°00.517'
			Trench 9	41°30.705'	71°00.314'
			Trench 10	41°30.715'	71°00.235'
			Trench 11	41°30.710'	71°00.134'
		Shellfish Bed Inspection	Subtidal 1	41°30.486'	71°01.258'
			Subtidal 2	41°30.533'	71°01.202'
			Subtidal 3	41°30.557'	71°01.150'
			Subtidal 4	41°30.557'	71°01.080'
			Subtidal 5	41°30.266'	71°01.261'
			Subtidal 6	41°30.607'	71°01.984'
			Subtidal 7	41°30.614'	71°01.931'
			Subtidal 8	41°30.625'	71°00.855'
			Subtidal 9	41°30.637'	71°00.770'
			Subtidal 10	41°30.644'	71°00.707'
			Subtidal 11	41°30.661'	71°00.619'
			Subtidal 12	41°30.670'	71°00.561'
			Subtidal 13	41°30.684'	71°00.479'
			Subtidal 14	41°30.697'	71°00.364'
			Subtidal 15	41°30.705'	71°00.313'
			Subtidal 16	41°30.713'	71°00.220'
			Subtidal 17	41°30.704'	71°00.121'

W3C-03	Barne	y's Joy (W of barbed)			
Date/ Time	Low Tide	Objectives	Location	GPS Coordinates (Latitude)	GPS Coordinates (Longitude)
7/26/2004 (11:55- )	8:42	Buried Oil Inspection	Trench 1	41°30.722'	70°00.032'
			Trench 2	41°30.721'	70°59.949'
			Trench 3	41°30.705'	70°59.842'
			Trench 4	41°30.692'	70°59.416'
			Trench 5	41°30.689'	70°59.755'
			Trench 6	41°30.671'	70°59.645'
		Shellfish Bed Inspection	Trench 7	41°30.645'	70°59.527'
			Trench 8	41°30.624'	70°59.460'
			Subtidal 1	41°30.720'	71°00.033'
			Subtidal 2	41°30.721'	70°59.953'
			Subtidal 3	41°30.707'	70°59.864'
			Subtidal 4	41°30.702'	70°59.812'
			Subtidal 5	41°30.692'	70°59.756'
			Subtidal 6	41°30.682'	70°59.702'
			Subtidal 7	41°30.669'	70°59.617'
			Subtidal 8	41°30.649'	70°59.534'
			Subtidal 9	41°30.612'	70°59.416'

# TABLE 5 SUMMARY OF SUBTIDAL SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-07 SCONTICUT NECK WEST, FAIRHAVEN Sampling Date: 8/12/04

									MCP Method 1 Standards		NOAA Standards Marine Sediments		
Analyte	SN-SS-S01	SN-SS-S02	SN-SS-S03	SN-SS-S04	SN-DS-S01	SN-DS-S02	SN-DS-S03	SN-DS-S04	BSS-S02 (duplicate of SN-SS-S03)	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН													
C9-C18 Aliphatic Hydrocarbons	ND(38)	ND(37)	ND(36)	ND(37)	ND(37)	ND(36)	ND(34)	ND(43)	ND(35)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(38)	ND(37)	ND(36)	ND(37)	ND(37)	ND(36)	ND(34)	65	ND(35)	2,500	2,500	2,500	NA
C11-C22 Aromatic Hydrocarbons	ND(38)	ND(37)	ND(36)	ND(37)	ND(37)	ND(36)	ND(34)	ND(43)	ND(35)	200	800	800	NA
PAH by GC/MS-SIM by method 8270													
Naphthalene	ND(0.013)	ND(0.013)	0.015	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.016	ND(0.012)	4	100	100	0.160
2-Methylnapthalene	ND(0.013)	ND(0.013)	0.015	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.015	ND(0.012)	4	500	500	0.070
Acenaphthylene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	ND(0.014)	ND(0.012)	100	100	100	0.044
Acenaphthene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	ND(0.014)	ND(0.012)	20	1,000	1,000	0.016
Fluorene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	ND(0.014)	ND(0.012)	400	1,000	1,000	0.019
Phenanthrene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.015	ND(0.012)	700	1,000	100	0.240
Anthracene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	ND(0.014)	ND(0.012)	1,000	1,000	1,000	0.085
Fluoranthene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.040	ND(0.012)	1,000	1,000	1,000	0.600
Pyrene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.040	ND(0.012)	700	700	700	0.665
Benzo(a)anthracene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.023	ND(0.012)	0.7	0.7	0.7	0.261
Chrysene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.025	ND(0.012)	7	7	7	0.384
Benzo(b)fluoranthene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.019	ND(0.012)	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.024	ND(0.012)	7	7	7	0.430
Benzo(a)pyrene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	0.030	ND(0.012)	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	ND(0.014)	ND(0.012)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	ND(0.014)	ND(0.012)	0.7	0.7	0.7	0.063
Benzo(g,h)perylene	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.012)	ND(0.014)	ND(0.012)	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

ND(x) = constituent not detected at practical quantitation limits noted in parentheses.
PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

### TABLE 5 SUMMARY OF SUBTIDAL SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W3C-06 DEMAREST LLOYD STATE PARK MARSH, DARTMOUTH Sampling Date: 8/12/04

									MCP Method 1 Standards			NOAA Standards Marine Sediments
Analyte	DL-SS-S01	DL-SS-S02	DL-SS-S03	DL-SS-S04	DL-DS-S01	DL-DS-S02	DL-DS-S03	DL-DS-S04	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН												
C9-C18 Aliphatic Hydrocarbons	ND(35)	ND(36)	ND(38)	ND(38)	ND(36)	ND(40)	ND(38)	ND(39)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(35)	ND(36)	ND(38)	ND(38)	ND(36)	ND(40)	ND(38)	ND(39)	2,500	2,500	2,500	NA
C111-C22 Aromatic Hydrocarbons	ND(35)	ND(36)	ND(38)	ND(38)	ND(36)	ND(40)	ND(38)	ND(39)	200	800	800	NA
PAH by GC/MS-SIM by method 8270												
Naphthalene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	4	100	100	0.160
2-Methylnapthalene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	4	500	500	0.070
Acenaphthylene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	100	100	100	0.044
Acenaphthene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	20	1,000	1,000	0.016
Fluorene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	400	1,000	1,000	0.019
Phenanthrene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	700	1,000	100	0.240
Anthracene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	1,000	1,000	1,000	0.085
Fluoranthene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	1,000	1,000	1,000	0.600
Pyrene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	700	700	700	0.665
Benzo(a)anthracene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	0.7	0.7	0.7	0.261
Chrysene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	7	7	7	0.384
Benzo(b)fluoranthene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	7	7	7	0.430
Benzo(a)pyrene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	0.7	0.7	0.7	0.063
Benzo(g,h)perylene	ND(0.012)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.013)	ND(0.012)	ND(0.013)	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

### TABLE 5 SUMMARY OF SUBTIDAL SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W3C-04 BARNEY'S JOY (East of Barabed Wire), DARTMOUTH Sampling Date: 9/2/04

									MCP Method 1 Standards			NOAA Standards Marine Sediments
Analyte	BJ-SS-S01	BJ-SS-S02	BJ-SS-S03	BJ-SS-S04	BJ-DS-S01	BJ-DS-S02	BJ-DS-S03	BJ-DS-S04	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
EPH												
C9-C18 Aliphatic Hydrocarbons	ND(37)	ND(46)	ND(36)	ND(40)	ND(40)	ND(38)	ND(38)	ND(42)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(37)	ND(46)	ND(36)	ND(40)	ND(40)	ND(38)	ND(38)	ND(42)	2,500	2,500	2,500	NA
C111-C22 Aromatic Hydrocarbons	ND(37)	ND(46)	ND(36)	ND(40)	ND(40)	ND(38)	ND(38)	ND(42)	200	800	800	NA
PAH by GC/MS-SIM by method 8270												
Naphthalene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	0.005 j	ND(0.013)	ND(0.012)	ND(0.014)	4	100	100	0.160
2-Methylnapthalene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	0.005 j	ND(0.013)	ND(0.012)	ND(0.014)	4	500	500	0.070
Acenaphthylene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	100	100	100	0.044
Acenaphthene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	20	1,000	1,000	0.016
Fluorene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	400	1,000	1,000	0.019
Phenanthrene	ND(0.012)	0.007 j	ND(0.012)	ND(0.013)	0.007 j	ND(0.013)	ND(0.012)	ND(0.014)	700	1,000	100	0.240
Anthracene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	1,000	1,000	1,000	0.085
Fluoranthene	ND(0.012)	0.007 j	ND(0.012)	ND(0.013)	0.008 j	ND(0.013)	ND(0.012)	ND(0.014)	1,000	1,000	1,000	0.600
Pyrene	ND(0.012)	0.011 j	ND(0.012)	ND(0.013)	0.006 j	ND(0.013)	ND(0.012)	ND(0.014)	700	700	700	0.665
Benzo(a)anthracene	ND(0.012)	0.006 j	ND(0.012)	ND(0.013)	0.005 j	ND(0.013)	ND(0.012)	ND(0.014)	0.7	0.7	0.7	0.261
Chrysene	ND(0.012)	0.006 j	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	7	7	7	0.384
Benzo(b)fluoranthene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	7	7	7	0.430
Benzo(a)pyrene	ND(0.012)	0.005 j	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	0.7	0.7	0.7	0.063
Benzo(g,h)perylene	ND(0.012)	ND(0.016)	ND(0.012)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.012)	ND(0.014)	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

### TABLE 5 SUMMARY OF SUBTIDAL SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-03 POPE'S BEACH, FAIRHAVEN Sampling Date: 8/11/04

													NOAA Standards Marine Sediments
Analyte	PB-SS-S01	PB-SS-S02	PB-SS-S03	PB-SS-S04	PB-DS-S01	PB-DS-S02	PB-DS-S03	PB-DS-S04	BSS-S01 (duplicate of PB SS-S02)	S-1 / GW-1	S-1 / GW-2	8-1 / GW-3	ERL
ЕРН													
C9-C18 Aliphatic Hydrocarbons	ND(39)	ND(38)	ND(33)	ND(36)	ND(45)	ND(49)	ND(48)	ND(40)	ND(38)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(39)	ND(38)	ND(33)	ND(36)	47	78	53	ND(40)	ND(38)	2,500	2,500	2,500	NA
C11-C22 Aromatic Hydrocarbons	ND(39)	ND(38)	ND(33)	ND(36)	ND(45)	ND(49)	ND(48)	ND(40)	ND(38)	200	800	800	NA
PAH by GC/MS-SIM by method 8270													
Naphthalene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	ND(0.015)	ND(0.016)	ND(0.016)	ND(0.014)	ND(0.013)	4	100	100	0.160
2-Methylnapthalene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	ND(0.015)	ND(0.016)	ND(0.016)	ND(0.014)	ND(0.013)	4	500	500	0.070
Acenaphthylene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	ND(0.015)	ND(0.016)	ND(0.016)	ND(0.014)	ND(0.013)	100	100	100	0.044
Acenaphthene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	ND(0.015)	ND(0.016)	ND(0.016)	ND(0.014)	ND(0.013)	20	1,000	1,000	0.016
Fluorene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	ND(0.015)	ND(0.016)	ND(0.016)	ND(0.014)	ND(0.013)	400	1,000	1,000	0.019
Phenanthrene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.067	0.035	0.023	0.023	ND(0.013)	700	1,000	100	0.240
Anthracene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.025	ND(0.016)	ND(0.016)	ND(0.014)	ND(0.013)	1,000	1,000	1,000	0.085
Fluoranthene	ND(0.013)	ND(0.013)	0.011	ND(0.012)	0.190	0.077	0.058	0.050	ND(0.013)	1,000	1,000	1,000	0.600
Pyrene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.140	0.064	0.050	0.051	ND(0.013)	700	700	700	0.665
Benzo(a)anthracene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.075	0.033	0.025	0.026	ND(0.013)	0.7	0.7	0.7	0.261
Chrysene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.072	0.030	0.027	0.026	ND(0.013)	7	7	7	0.384
Benzo(b)fluoranthene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.058	0.025	0.021	0.021	ND(0.013)	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.068	0.025	0.020	0.020	ND(0.013)	7	7	7	0.430
Benzo(a)pyrene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.087	0.034	0.028	0.029	ND(0.013)	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.043	0.019	ND(0.016)	0.015	ND(0.013)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	ND(0.015)	ND(0.016)	ND(0.016)	ND(0.014)	ND(0.013)	0.7	0.7	0.7	0.063
Benzo(g,h)perylene	ND(0.013)	ND(0.013)	ND(0.011)	ND(0.012)	0.045	0.020	0.017	0.017	ND(0.013)	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

### TABLE 5 SUMMARY OF SUBTIDAL SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-10 LONG ISLAND AND CAUSEWAY SOUTH, FAIRHAVEN Sampling Date: 8/11/04

								МСЕ	NOAA Standards Marine Sediments		
Analyte	LI-DS-S01	LI-DS-S02	LI-DS-S03	LI-DS-S04	ACD-S01	ACD-S02	ACD-S03	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН											
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(52)	ND(44)	ND(34)	ND(38)	ND(43)	ND(37)	ND(36)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(52)	ND(44)	ND(34)	ND(38)	ND(43)	ND(37)	ND(36)	2,500	2,500	2,500	NA
C111-C22 Aromatic Hydrocarbons	ND(52)	ND(44)	ND(34)	ND(38)	ND(43)	ND(37)	ND(36)	200	800	800	NA
PAH by GC/MS-SIM by method 8270											
Naphthalene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	ND(0.011)	4	100	100	0.160
2-Methylnapthalene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	ND(0.011)	4	500	500	0.070
Acenaphthylene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	ND(0.011)	100	100	100	0.044
Acenaphthene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	ND(0.011)	20	1,000	1,000	0.016
Fluorene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	ND(0.011)	400	1,000	1,000	0.019
Phenanthrene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	0.075	700	1,000	100	0.240
Anthracene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	0.023	1,000	1,000	1,000	0.085
Fluoranthene	0.033	0.018	ND(0.011)	ND(0.012)	0.030	ND(0.012)	0.110	1,000	1,000	1,000	0.600
Pyrene	0.032	0.024	ND(0.011)	ND(0.012)	0.033	ND(0.012)	0.092	700	700	700	0.665
Benzo(a)anthracene	ND(0.018)	0.016	ND(0.011)	ND(0.012)	0.019	ND(0.012)	0.052	0.7	0.7	0.7	0.261
Chrysene	0.019	0.016	ND(0.011)	ND(0.012)	0.022	ND(0.012)	0.047	7	7	7	0.384
Benzo(b)fluoranthene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	0.014	ND(0.012)	0.038	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	0.015	ND(0.012)	0.037	7	7	7	0.430
Benzo(a)pyrene	0.019	0.017	ND(0.011)	ND(0.012)	0.022	ND(0.012)	0.049	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	0.027	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	ND(0.011)	0.7	0.7	0.7	0.063
Benzo(g,h)perylene	ND(0.018)	ND(0.015)	ND(0.011)	ND(0.012)	ND(0.014)	ND(0.012)	0.029	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

### TABLE 6 REPORTS OF OIL JULY 23, 2004-DECEMBER 31, 2004 BARGE B120 SPILL BUZZARDS BAY, MASSACHUSETTS

Inspection Date	Segment Number	Segment Name	Town	Degree of Oiling	Oil Ranking	Objective	Inspection Summary
8/28/2004	W2A-12	Rocky Point to East Cove	Fairhaven	Heavy	1.19	Citizen response inspection (call from 8/27/04)	The citizen described "fist-sized tarballs" on the east side of west island. Oil was not observed, however black algae patches were observed.
8/31/2004	W1D-04	Holly Woods / Peases Point	Mattapoisett	Moderate	1/2/1900	Inspection with MADEP for future delineation and cleanup activities	GeoInsight visited Holly Woods with MADEP to examine the extent of oil originally reported by a citizen on July 17, 2004. Two liquid oil patches (4 and 6inches in diameter) were removed in the upper intertidal zone. Pavement in marsh discussed, as previously evaluated by GeoInsight. DEP shared that there was a non-Bouchard cleanup conducted in the summer of 2003, but the previous cleanup location was not decided.
9/2/2004	W2A-13	East Cove	Fairhaven	Light	1.00	Inspection continued from response to call by a citizen on 8/27/04	Continued inspection in response to a report of oil by a citizen on 8/27/04. The citizen described "fist-sized tarballs" on the east side of West Island. Evidence of oil was not observed.
9/9/2004	NA	NA	Mattapoisett	NA	NA	Evaluating a report of oil by a citizen (call from 9/9/04)	Citizen collected algae from a miscellaneous beach in Mattapoisett and showed it to the inspection team. Evidence of oil not observed.

# TABLE 7INSPECTIONS OF OTHER SEGMENTSJULY 23, 2004-DECEMBER 31, 2004BARGE B120 SPILL

# **BUZZARDS BAY, MASSACHUSETTS**

Inspection Date	Segment Number	Segment Name	Town	Degree of Oiling	Oil Ranking	Objective	Inspection Summary
8/23/2004	W1E-04	Crescent Beach	Mattapoisett	Heavy	3.92	Shoreline inspection	Splatter (<1% surface coverage) up to 12 inches in diameter was observed on cobble splatter was sporadic, concentrated in clusters 2-20 feet apart, and slightly sticky bet single 1-inch diameter flattened tarball was removed from the middle intertidal zone splatter on the cobbles along the west side of the channel on the beach was observed front of a point house at N41°39.132 W70°47.283. Splatter (0.5-6 inches in diameter intertidal zones between N41°39.105 W70°46.895 and N41°39.073 W70°46.553.
8/23/2004	W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28	Shoreline inspection	Trace splatter was observed in the vicinity of the mouth of Pine Island Pond. Splatter inches. A weathered tar patty 8x6 inches and 1.5 inches deep was observed near N4
8/23/2004	W1C-10	Silvershell Beach	Marion	Moderate	<1.00	Shoreline inspection	Inspection started from the end of Jerusalem Road and continued south. Slightly tac middle intertidal zone along a 50' stretch. Trace dried splatter (0.5-2 inches in diame near N41°36.389 W70°51.861. Old pavement (not B120) tar mat observed.
8/23/2004	W1C-12	Converse Point East	Marion	Moderate	2.63	Shoreline inspection	Small tarballs (1-4 inches in diameter) were observed along a 40-foot section on the between N41°41.127 W70°45.079 and N41°41.025 W70°45.110. Additional 2-inch 10-foot area near the south endpoint of the segment, dried splatter (0.25-1 inches in o
8/23/2004	W2A-06	Silver Shell Beach	Fairhaven	Light	2.00	Shoreline inspection	Open private beach area. A trace amount of pieces of asphalt (1-6 inches in diamete not observed.
8/24/2004	W1E-01	Nye Cove / Strawberry Cove	Mattapoisett	Light	1/1/1900	Marsh sampling	One core marsh sample was collected at N41°38.981 W70°45.981. Evidence of oil v
8/24/2004	W2A-10	Long Island and Causeway South	Fairhaven	Heavy	1/3/1900	Marsh sampling	Observed dried splatter scoured to a stain covering 50% of 4-inch diameter cobbles is samples were taken from four locations throughout the marsh in the intertidal zone (at N41°35.957 W70°50.518, N41°35.584 W70°50.540, N41°35.650 W70°50.535, and
8/24/2004	W2A-02	Harbor View	Fairhaven	Heavy	3.00	Shoreline inspection, marsh sampling	Asphalt pieces (road debris) observed at west endpoint of segment at N41°37.651 W were collected in areas of within marsh vegetation at N41°37.706 W70°53.497 and N (W2A02-TP01) was taken from tide pool at N41°37.880 W70°53.350 for laboratory to a laboratory for EPH analysis.
8/24/2004	W2A-03	Pope's Beach	Fairhaven	Moderate	3.00	Shoreline inspection	Pinches of dried oil (2-6 inches in diameter) embedded in peat hummocks were remo through oil patches. Further evidence of oil was not observed.
8/24/2004	W2A-04	Manhattan Ave	Fairhaven	Heavy	3.65	Shoreline inspection	A very trace amount of dime-size dried splatter was observed on jetties within sand a
8/24/2004	W2A-05	Sunset Beach	Fairhaven	Moderate	2.00	Shoreline inspection, marsh sampling	Pieces of asphalt (road debris) up to 6 inches in diameter was observed within cobble dried splatter (0.5-1 inches in diameter) was observed on rocks and boulders in the in (W2A05-MS01 and W2A05-MS02) were collected within the marsh vegetation in as W70°52.146 and near a small tarball at N41°37.036 W70°52.156, respectively. Same
8/24/2004	W1F-03	Brandt Island East	Mattapoisett	Heavy	3.07	Shoreline inspection	Tar-like splatter (4x5 feet) was observed on rock surfaces about 25 feet from the seg centimeter diameter tacky splatter with a sporadic distribution within the intertidal zo observed in the upper intertidal zone near N41°30.998 W70°57.368 and is concentra N41°37.463 W70°49.0445.
8/24/2004	W1F-04	Brandt Island Cove	Mattapoisett	Heavy	2.19	Shoreline inspection	Two dried tarballs (2-3 inches in diameter) were removed from the upper intertidal z was observed in the lower intertidal zone on large boulders. A marsh sediment samp surface water sample (W1F04-W01) was collected near N41°37.895 W70°48.899.

es and in few marsh grass areas throughout the intertidal zone. The ween N41°39.064 W70°47.664 and N41°39.122 W70°47.585. A of the sandy beach at N41°39.155 W70°47.325. Trace non-tacky . Very trace splatter was observed in the upper intertidal zone in er) was observed near the east rocky point in the upper and lower

er (<1 inch in diameter) in 5 foot area clusters was observed every 6  $1^{\circ}38.904 \text{ W}70^{\circ}46.447$ , and was tacky when disturbed.

ky dime-sized splatter about every 10-15 feet primarily in the eter) in the middle intertidal zone at N41°36.473 W70°52.049 and

edge of the marsh grass in the lower and middle intertidal zones a diameter dried splatter was observed 30 feet to the south. Within a diameter) was observed on the seawall.

r) observed in the upper and lower intertidal zones. B120 oil was

vas not observed.

in middle intertidal zone near N41°35.785 W70°50.491. Core W2A10-C01, W2A10-C02, W2A10-C03, and W2A10-C04) located nd N41°35.639 W70°50.583, respectively, for laboratory analysis.

70°53.531. 2 soil samples (W2A02-MS01 and W2A02-MS-02) N41°37.939 W70°53.300, respectively. 1 surface water sample r analysis. Evidence of oil was not observed. Samples were submit

oved at N41°37.883 W70°52.999. Vegetation was not growing

and gravel beaches.

e areas near N41°37.229 W70°52.134. A very trace amount of ntertidal zone near N41°37.017 W70°52.168. 2 soil samples n area where the vegetation was stressed at N41°37.411 nples were submited for EPH analysis.

ment endpoint at N41°37.728 W70°49.297. On the island, 1one was observed. A trace amount of tacky dime-size splatter was ited at the point. A 2- inch diameter tar patty was removed at

cone towards the southern portion of the segment. Trace splatter ple (W1F04-S01) was collected near N41°37.639 W70°48.842. A Samples were submit to a laboratory for EPH analysis.

# TABLE 7INSPECTIONS OF OTHER SEGMENTSJULY 23, 2004-DECEMBER 31, 2004BARGE B120 SPILL

Inspection Date	Segment Number	Segment Name	Town	Degree of Oiling	Oil Ranking	Objective	Inspection Summary
8/25/2004	W3B-02	Mishaum Point West	Dartmouth	Heavy	3.65	Shoreline inspection	A trace amount of dime-size splatter was observed in the upper intertidal zone near the observed spordically. A 6x4 inch tar patty was removed in a 5x5 square foot area of droplets.
8/25/2004	W3D-07	Gooseberry Neck West	Westport	Moderate	2.05	Shoreline inspection	Evidence of oil was not observed.
8/25/2004	W1C-02	Planting Island Causeway	Marion	Heavy	3.00	Shoreline inspection	A 110' stretch of weathered splatter (0.5-3 inches in diameter) was observed in the n was 20% tacky splatter in the middle intertidal zone at N41°41.412 W70°43.744. Sp 12x4 inches and 3 inches deep was removed at N41°41.039 W70°43.504 under bould primarily in the middle intertidal zone. Stains observed where cleanup activities were sediment sample (W1C02-MS01) was collected in an area of stressed marsh vegetati (W1C02-TP01 and W1C02-TP02) were collected from tide pools at N41°41.692 W7 were submited for EPH analysis.
8/25/2004	W1C-01	Butler's Point	Marion	Moderate	3.00	Shoreline inspection	Evidence of oil was not observed by inspection team
8/25/2004	E1-13	Nye's Neck	Falmouth	Heavy	2.92	Shoreline inspection	Heavy wrack cover (approximately 70%) limited observation. Stain was observed of diameter) was observed along the rocky shoreline in the middle intertidal zone on the N41°38.444 W70°39.003. Dime-size to 6 inch diameter splatter that was dime-size to 6 the segment in the upper intertidal zone between N41°38.313 W70°39.093 and N4 splatter on a jetty was observed at N41°38.360 W70°39.198 and was surrounded by of N41°38.360 W70°39.198, pavement (8 inches in diameter and 2 inches thick) was thick) was also observed between boulders at N41°38.286 W70°39.172. The pavement
8/26/2004	W1F-06	Mattapoisett Neck South	Mattapoisett	Heavy	2.74	Collect weathered oil sample for NRDA purposes	West portion of segment inspected at point. A 20-foot area along the edge of the pear ans W1F06-W02) of weathered oil, sporadic dime-size to 3-inch diameter clusters of N41° 37.468 W70° 48.597, respectively. Samples were submitted for fingerprint and
8/26/2004	W1F-05	Mattapoisett Neck West	Mattapoisett	Heavy	3.77	Shoreline inspection	A few pinches of dried oil between cobbles and marsh grass in the lower intertidal ze oil was collected at N41°37.37.531 W70°48.712 and 1 tide pool sample (W1F05-TF laboratory for EPH analysis.
8/26/2004	W1F-04	Brandt Island Cove	Mattapoisett	Heavy	2.19	Shoreline inspection continued from 8/24/04	Continued the evaluation of segment, east of channel. Evidence of oil was not obser Surface water in a tide pool was collected within marsh area at 41°37.621 70°48.817 later removed on 10/8/04).
8/26/2004	W2A-14	Pine Creek to North Point	Fairhaven	Moderate	3.00	Shoreline inspection	Sporadic single splatters, ranging about 2 to 200 feet apart were observed along the r The dime-size splatter was primarily dried or stained. One 1-inch diameter wrack pa areas of stressed vegetation where a sediment sample was collected (W2A14-MS01)
9/7/2004	W3B-02	Mishaum Point West	Dartmouth	Heavy	3.65	Shoreline inspection	Evidence of oil was not observed on the south tip of Mishaum Point between N40° 3 band of splatter was observed for about a 500-foot stretch between N41° 30.920 W70 predominantly scoured to stain and along the upper intertidal zone and exists as singlinches in diameter. Within this area, a larger cluster of weathered splatter covering a inch diameter area of hardened splatter and drips were observed in the middle intertion N41° 31.023 W70° 57.370, very trace and weathered dime-size splatter was observed

the pier at N41°51665 W70°95615. Trace dime-size splatter was f a splatter cluster consisting of 1 centimeter to 3 inch diameter

niddle intertidal zone near N41°41.239 W70°43.744. One boulder latter was sporadic and primarily single droplets. Oil pavement ders. From this point south, more splatter scoured to stain observed, e conducted but tacky oil was not observed near 128 Point Road. 1 ion at N41°41.689 W70°44.496, and 2 surface water samples 70°44.489 and N41°41.562 W70°44.428, respectively. Samples

n a boulder at N41°38.756 W70°38.922. Splatter (up to 2 inches in e west side of the segment between N41°38.566 W70°39.012 and to 6inches in diameter was consistently observed on the south side 41°38.372 W70°39.011. A cluster of tacky 12-inch diameter dime and quarter-size splatter droplets. Approximately 2 feet west s observed under cobble. Pavement (2 inches diameter and 4 inches ten has not been removed.

t hummocks had a minute amount of grass. 2 samples (W1F06-W01 f dried splatter, were collected at N41°37.474 W70°48.619 and lysis.

one were removed. 1 marsh sample (W1F05-MS01) of weathered P01) was collected at N41°37.621 W70°48.817 and submit to a

ved during the segment inspection and the marsh appears healthy. . A pile of washed-up snare was noted for future removal (and was

middle intertidal zone on cobbles and exposed peat hummocks. atty was removed. An abundance of black algae was observed in at N41°36.274 W70°49.807 and submited for EPH analysis.

30.876 W70° 57.260 and N41° 30.920 W70° 57.311. A consistent 0° 57.311 and N41° 31.023 W70° 57.370. The splatter was de droplets or small clusters 1-50 feet apart, ranging dime-size to 3 a 2x5 foot area was observed at N41° 30.963 W70° 57.532', and a 3-dal zone at N41° 31.068 W70° 57.383. About 200 feet north of d. No further evidence of oil was observed.

# TABLE 7 INSPECTIONS OF OTHER SEGMENTS JULY 23, 2004-DECEMBER 31, 2004 BARGE B120 SPILL

BUZZARDS BAY, MASSACHUSETTS									
Degree of Oiling	Oil Ranking	Objective	Inspection Summary						

Date	Number			Oiling	Ranking		
9/7/2004	W2A-07	Sconticut Neck West	Fairhaven	Heavy	2.17	Shoreline inspection	Toward the south tip, 6 quarter-size stained splatters were observed on cobbles at N4 clusters of splatter about 5-20 feet apart were observed in the middle and upper intert W70° 51.450. Dime-size splatter was observed in the marsh grass in the intertidal zo size splatter (and few up to 6 inches in diameter) were observed in the upper intertid 51.576, in the super intertidal zone within a 5x3-foot area at N41° 35.774 W70° 51.7 W70° 51.392.
9/7/2004	W2B-05	Fort Taber	New Bedford	Moderate	1.44	Shoreline inspection	Along the north side of the south tip groin, only residual stainsnpresent with a few que boulder were scraped and removed, approximately 50 feet north of the groin in the up diameter and 2 inches thick) of hardened pavement mixed with sand was removed u 54.182. A trace amount of single droplets of splatter scoured to stain were observed
9/9/2004	W1B-15	Wareham River East	Wareham	Moderate	1.80	Shoreline inspection	Evidence of oil was not observed.
9/10/2004	W1F-08	Mattapoisett Neck East	Mattapoisett	Heavy	1.08	Shoreline inspection, marsh sampling	Two tacky tar patties (16 and 4 inches in diameter and 1.5 inches thick) were remove private sand and cobble beach.
9/15/2004	W2A-19	Shaw Cove	Fairhaven	Heavy	2.23	Shoreline inspection	Asphalt pieces (road debris) up to 4 inches in diameter were observed in the middle diameter) was removed from boulder and marsh grass area in the upper intertidal zor ranging 1 to 4 inches in diameter in a 12x1-foot area was removed by inspection tear was scraped within a 10x3-foot area in the upper intertidal zone at N41° 37.472 W70° 50° removed from the upper intertidal zone in a 10x10-foot area at N41° 37.472 W70° 50°
9/15/2004	W1E-06	Mattapoisett Town Beach	Mattapoisett	Moderate	3.00	Shoreline inspection	Trace dime-size tacky splatter was observed on top of jetty at N41° 39.449 W70° 48. was removed from cobble area in the upper intertidal zone at N41° 39.271 W70° 49.2 super upper intertidal zone at N41° 39.405 W70° 49.082.
10/8/2004	W1G-00	Ram Island	Mattapoisett	Heavy	4.00	Shoreline inspection	The west tip of the island has dime-quarter size splatter stains in cobble areas in the i from the middle intertidal zone. The south coast has very sporadic and trace dime-si dime to quarter-size splatter was observed in the lower and middle intertidal zones at

Inspection Segment Segment Name

Town

41° 37.179 W70° 51.453. Few dime to quarter-size single and tidal zones between N41° 35.521 W70° 51.591 and N41° 35.227 one at N41° 35.551 W70° 51.578. Several clusters of pea and dimedal zone within a 5x5-square foot area at N41° 35.570 W70° 788, and on cobbles about 5-20 feet apart at N41° 37.974

uarter-size splatters in the groin crevices. 3 tar patties stuck to a upper intertidal zone. Two areas of pavement (8 and 4 inches in under boulders in the upper intertidal zone at N41° 35.345 W70° sporadically throughout the segment.

ed near N41°38.332 W70°48.170 under a boulder along a jetty on a

intertidal zone were observed in this area. A tar patty (1.5 inch ne at N41° 37.489W70° 49.963. Slightly tacky and granular splatter m next N41° 37.489W70° 49.963. Splatter 0.5-6 inches in diameter 0° 50.108. Several 2 to 4 inch diameter tacky tar patties were 0.110.

.386. On west portion of the segment, a 4-inch diameter tar patty 272. One cobble with hardened splatter was removed from the

intertidal zone. Two tarballs (2 inches in diameter) were removed ize stains splatter in the middle intertidal zone. A trace amount of t N  $41^{\circ}$  37.018 W70° 48.206 on the east inlet area of the island.

# TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-02 HARBOR VIEW, FAIRHAVEN Sampling Date: 8/24/04

			ľ	ls	NOAA Standards Marine Sediments	
Analyte	W2A02-MS01	W2A02-MS02	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН						
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(51)	ND(50)	1,000	1,000	1,000	NA
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(51)	64	2,500	1,000	1,000	NA
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	ND(51)	77	200	800	800	NA
PAH by GC/MS-SIM by method 8270						
Naphthalene	ND(17)	0.013	4	100	100	0.160
2-Methylnapthalene	ND(17)	ND(0.017)	4	500	500	0.070
Acenaphthylene	ND(17)	0.021	100	100	100	0.044
Acenaphthene	0.018	0.012	20	1,000	1,000	0.016
Fluorene	0.034	0.023	400	1,000	1,000	0.019
Phenanthrene	0.420	0.320	700	1,000	100	0.240
Anthracene	0.055	0.080	1,000	1,000	1,000	0.085
Fluoranthene	0.460	0.640	1,000	1,000	1,000	0.600
Pyrene	0.460	0.450	700	700	700	0.665
Benzo(a)anthracene	0.230	0.230	0.7	0.7	0.7	0.261
Chrysene	0.250	0.330	7	7	7	0.384
Benzo(b)fluoranthene	0.110	0.230	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	0.110	0.210	7	7	7	NA
Benzo(a)pyrene	0.180	0.340	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	0.064	0.081	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	0.015 j	0.029	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	0.068	0.095	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

8. --- = not analyzed.

9. Shaded values exceed applicable NOAA ERL's

# TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W1E-01 NYE COVE/ STRAWBERRY COVE, MATTAPOISETT Sampling Date: 8/24/04

		I	ls	NOAA Standards Marine Sediments	
Analyte	W1E-01-C05	S-1 / GW-1	S-1 / GW-2	8-1 / GW-3	ERL
EPH by GC/FID (mg/kg)	GWA				
C9-C18 Aliphatic Hydrocarbons	ND(73)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(73)	2,500	1,000	1,000	NA
C11-C22 Aromatic Hydrocarbons	ND(73)	200	800	800	NA
PAH by GC/MS-SIM by method 8270 (mg/kg)					
Naphthalene	ND(0.025)	4	100	100	0.160
2-Methylnapthalene	0.008 j	4	500	500	0.070
Acenaphthylene	ND(0.025)	100	100	100	0.044
Acenaphthene	ND(0.025)	20	1,000	1,000	0.016
Fluorene	ND(0.025)	400	1,000	1,000	0.019
Phenanthrene	0.0012 j	700	1,000	100	0.240
Anthracene	ND(0.025)	1,000	1,000	1,000	0.085
Fluoranthene	0.017 j	1,000	1,000	1,000	0.600
Pyrene	0.017 j	700	700	700	0.665
Benzo(a)anthracene	0.006 j	0.7	0.7	0.7	0.261
Chrysene	0.006 j	7	7	7	0.384
Benzo(b)fluoranthene	0.012 j	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.025)	7	7	7	NA
Benzo(a)pyrene	0.008 j	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	0.008 j	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.025)	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	0.006 j	1,000	1,000	1,000	NA
Total PAH	0.0892	NA	NA	NA	4

NOTES:

1. Results in milligrams per kilogram (mg/kg) and micrograms per kilogram (ug/kg).

2. GWA = Analysis conducted by Groundwater Analytical, Inc.

3. EPH: Extractable Petroleum Hydrocarbons.

4. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

5. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

6. j: estimated concentration/ detected below standard laboratory reporting limits.

7. NA: Not Analyzed or Not Available.

8. Shaded cells exceed applicable standards.

m: Surrogate recovery outside recommeded limits due to sample matrix interference.
\*: Sample was analyzed twice. During the second run, concentration was reported at 0.009 j

### TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-10 LONG ISLAND AND CAUSEWAY SOUTH, FAIRHAVEN Sampling Date: 8/24/04

					1	ls	NOAA Standards Marine Sediments	
Analyte	W2A10-C01	W2A10-C02	W2A10-C03	W2A10-C04	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
EPH by GC/FID (mg/kg)	GWA	GWA	GWA	GWA				
C9-C18 Aliphatic Hydrocarbons	ND(43)	ND(140)	ND(45)	ND(39)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	110	ND(140)	ND(45)	ND(39)	2,500	1,000	1,000	NA
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	180	ND(140)	ND(45)	ND(39)	200	800	800	NA
PAH by GC/MS-SIM by method 8270 (mg/kg)								
Naphthalene	ND(0.014)	ND(0.046) m*	ND(0.015)	ND(0.013)	4	100	100	0.160
2-Methylnapthalene	0.037	0.022 j	ND(0.015)	0.008 j	4	500	500	0.070
Acenaphthylene	ND(0.014)	ND(0.046)	ND(0.015)	ND(0.013)	100	100	100	0.044
Acenaphthene	0.014	ND(0.046)	ND(0.015)	ND(0.013)	20	1,000	1,000	0.016
Fluorene	0.026	ND(0.046)	ND(0.015)	ND(0.013)	400	1,000	1,000	0.019
Phenanthrene	0.120	ND(0.046)	ND(0.015)	0.005 j	700	1,000	100	0.240
Anthracene	0.021	ND(0.046)	ND(0.015)	ND(0.013)	1,000	1,000	1,000	0.085
Fluoranthene	0.043	ND(0.046)	ND(0.015)	ND(0.013)	1,000	1,000	1,000	0.600
Pyrene	0.170	ND(0.046)	ND(0.015)	ND(0.013)	700	700	700	0.665
Benzo(a)anthracene	0.098	ND(0.046)	ND(0.015)	ND(0.013)	0.7	0.7	0.7	0.261
Chrysene	0.130	ND(0.046)	ND(0.015)	ND(0.013)	7	7	7	0.384
Benzo(b)fluoranthene	0.070	ND(0.046)	ND(0.015)	ND(0.013)	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	0.014	ND(0.046)	ND(0.015)	ND(0.013)	7	7	7	NA
Benzo(a)pyrene	0.093	ND(0.046)	ND(0.015)	ND(0.013)	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	0.012 j	ND(0.046)	ND(0.015)	ND(0.013)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	0.012 j	ND(0.046)	ND(0.015)	ND(0.013)	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	0.015	ND(0.046)	ND(0.015)	ND(0.013)	1,000	1,000	1,000	NA
Total PAH	0.875	0.022	NA	0.013	NA	NA	NA	4

NOTES:

1. Results in milligrams per kilogram (mg/kg) and micrograms per kilogram (ug/kg).

2. GWA = Analysis conducted by Groundwater Analytical, Inc.

3. EPH: Extractable Petroleum Hydrocarbons.

4. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

5. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

6. j: estimated concentration/ detected below standard laboratory reporting limits.

7. NA: Not Analyzed or Not Available.

8. Shaded cells exceed applicable standards.

9. m: Surrogate recovery outside recommeded limits due to sample matrix interference.

10. \*: Sample was analyzed twice. During the second run, concentration was reported at 0.009 j

# TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W1F-04 BRANDT ISLAND COVE, MATTAPOISETT Sampling Date: 8/24/04

		1	NOAA Standards Marine Sediments		
Analyte	W1F04-S01	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН					
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(45)	1,000	1,000	1,000	NA
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(45)	2,500	1,000	1,000	NA
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	ND(45)	200	800	800	NA
PAH by GC/MS-SIM by method 8270					
Naphthalene	ND(0.015)	4	100	100	0.160
2-Methylnapthalene	ND(0.015)	4	500	500	0.070
Acenaphthylene	ND(0.015)	100	100	100	0.044
Acenaphthene	ND(0.015)	20	1,000	1,000	0.016
Fluorene	ND(0.015)	400	1,000	1,000	0.019
Phenanthrene	ND(0.015)	700	1,000	100	0.240
Anthracene	ND(0.015)	1,000	1,000	1,000	0.085
Fluoranthene	ND(0.015)	1,000	1,000	1,000	0.600
Pyrene	ND(0.015)	700	700	700	0.665
Benzo(a)anthracene	ND(0.015)	0.7	0.7	0.7	0.261
Chrysene	ND(0.015)	7	7	7	0.384
Benzo(b)fluoranthene	ND(0.015)	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.015)	7	7	7	NA
Benzo(a)pyrene	ND(0.015)	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.015)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.015)	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	ND(0.015)	1,000	1,000	1,000	NA

# NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

### TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-05 SUNSET BEACH, FAIRHAVEN Sampling Date: 8/24/04

			r	MCP Method 1 Standard	ls	NOAA Standards Marine Sediments
Analyte	W2A05-MS01	W2A05-MS02	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН						
C9-C18 Aliphatic Hydrocarbons	ND(38)	ND(43)	1,000	1,000	1,000	NA
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(38)	ND(43)	2,500	1,000	1,000	NA
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	ND(38)	ND(43)	200	800	800	NA
PAH by GC/MS-SIM by method 8270						
Naphthalene	ND(0.013)	ND(0.014)	4	100	100	0.160
2-Methylnapthalene	ND(0.013)	ND(0.014)	4	500	500	0.070
Acenaphthylene	ND(0.013)	ND(0.014)	100	100	100	0.044
Acenaphthene	ND(0.013)	ND(0.014)	20	1,000	1,000	0.016
Fluorene	ND(0.013)	ND(0.014)	400	1,000	1,000	0.019
Phenanthrene	0.021	0.007 j	700	1,000	100	0.240
Anthracene	0.007 j	ND(0.014)	1,000	1,000	1,000	0.085
Fluoranthene	0.052	0.021	1,000	1,000	1,000	0.600
Pyrene	0.042	0.021	700	700	700	0.665
Benzo(a)anthracene	0.021	0.016	0.7	0.7	0.7	0.261
Chrysene	0.021	0.018	7	7	7	0.384
Benzo(b)fluoranthene	0.015	0.012 j	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	0.017	0.016	7	7	7	NA
Benzo(a)pyrene	0.021	0.022	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	0.007 j	0.007 j	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.013)	ND(0.014)	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	0.007 j	0.007 j	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

## TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W1C-02 PLANTING ISLAND CAUSEWAY, MARION Sampling Date: 8/25/04

		r	NOAA Standards Marine Sediments		
Analyte	W1C02-MS01	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН					
C9-C18 Aliphatic Hydrocarbons	ND(47)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(47)	2,500	1,000	1,000	NA
C11-C22 Aromatic Hydrocarbons	ND(47)	200	800	800	NA
PAH by GC/MS-SIM by method 8270					
Naphthalene	0.006 j	4	100	100	0.160
2-Methylnapthalene	0.006 j	4	500	500	0.070
Acenaphthylene	ND(0.016)	100	100	100	0.044
Acenaphthene	ND(0.016)	20	1,000	1,000	0.016
Fluorene	ND(0.016)	400	1,000	1,000	0.019
Phenanthrene	0.006 j	700	1,000	100	0.240
Anthracene	ND(0.016)	1,000	1,000	1,000	0.085
Fluoranthene	0.014 j	1,000	1,000	1,000	0.600
Pyrene	0.008 j	700	700	700	0.665
Benzo(a)anthracene	ND(0.016)	0.7	0.7	0.7	0.261
Chrysene	0.006 j	7	7	7	0.384
Benzo(b)fluoranthene	0.006 j	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	0.005 j	7	7	7	NA
Benzo(a)pyrene	0.005 j	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.016)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.016)	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	ND(0.016)	1,000	1,000	1,000	NA

### NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

## TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-14 PINE CREEK TO NORTH POINT, FAIRHAVEN Sampling Date: 8/26/04

		r	NOAA Standards Marine Sediments		
Analyte	W2A14-MS01	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН					
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(41)	1,000	1,000	1,000	NA
C19-C36 Aliphatic Hydrocarbons	ND(41)	2,500	1,000	1,000	NA
C11-C22 Aromatic Hydrocarbons	ND(41)	200	800	800	NA
PAH by GC/MS-SIM by method 8270					
Naphthalene	ND(0.013)	4	100	100	0.160
2-Methylnapthalene	ND(0.013)	4	500	500	0.070
Acenaphthylene	ND(0.013)	100	100	100	0.044
Acenaphthene	ND(0.013)	20	1,000	1,000	0.016
Fluorene	ND(0.013)	400	1,000	1,000	0.019
Phenanthrene	ND(0.013)	700	1,000	100	0.240
Anthracene	ND(0.013)	1,000	1,000	1,000	0.085
Fluoranthene	0.014	1,000	1,000	1,000	0.600
Pyrene	0.014	700	700	700	0.665
Benzo(a)anthracene	0.006 j	0.7	0.7	0.7	0.261
Chrysene	0.006 j	7	7	7	0.384
Benzo(b)fluoranthene	0.005 j	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	0.005 j	7	7	7	NA
Benzo(a)pyrene	0.006 j	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.013)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.013)	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	ND(0.013)	1,000	1,000	1,000	NA

### NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

## TABLE 8 SUMMARY OF MARSH SEDIMENT ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W1F-05 MATTAPOISETT NECK WEST, MATTAPOISETT Sampling Date: 8/26/04

		1	NOAA Standards Marine Sediments		
Analyte	W1F05-MS01	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ERL
ЕРН					
C9-C18 Aliphatic Hydrocarbons	ND(59)	1,000	1,000	1,000	NA
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(59)	2,500	1,000	1,000	NA
C11-C22 Aromatic Hydrocarbons	ND(59)	200	800	800	NA
PAH by GC/MS-SIM by method 8270					
Naphthalene	ND(0.020)	4	100	100	0.160
2-Methylnapthalene	ND(0.020)	4	500	500	0.070
Acenaphthylene	ND(0.020)	100	100	100	0.044
Acenaphthene	ND(0.020)	20	1,000	1,000	0.016
Fluorene	ND(0.020)	400	1,000	1,000	0.019
Phenanthrene	0.009 J	700	1,000	100	0.240
Anthracene	ND(0.020)	1,000	1,000	1,000	0.085
Fluoranthene	0.020	1,000	1,000	1,000	0.600
Pyrene	0.01 J	700	700	700	0.665
Benzo(a)anthracene	0.009 J	0.7	0.7	0.7	0.261
Chrysene	0.011 J	7	7	7	0.384
Benzo(b)fluoranthene	0.011 J	0.7	0.7	0.7	NA
Benzo(k)fluoranthene	ND(0.020)	7	7	7	NA
Benzo(a)pyrene	ND(0.020)	0.7	0.7	0.7	0.430
Indeno(1,2,3-cd)pyrene	ND(0.020)	0.7	0.7	0.7	NA
Dibenzo(a,h)anthracene	ND(0.020)	0.7	0.7	0.7	0.063
Benzo(g,h,I)perylene	ND(0.020)	1,000	1,000	1,000	NA

# NOTES:

1. Results in mg/Kg (milligrams per kilogram).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. MCP: Massachusetts Contingency Plan.

6. NOAA ERL: National Oceanic and Atmospheric Adminstration Effects Range Low.

7. NA: Not Available.

# TABLE 9 SUMMARY OF SURFACE WATER ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W2A-02 HARBOR VIEW, FAIRHAVEN Sampling Date: 8/24/04

Analyte	W2A02-TP01	Surface Water Q	uality Standards
ЕРН		MADEP VPH/EPH Surface Water Guideline	NOAA SQuiRT Marine Surface Water Quality Criteria Maximum Concentration
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(500)	1,800	N/A
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(500)	2,100	N/A
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	ND(150)	See Note Below	N/A
PAH by GC/MS-SIM by method 8270			
Naphthalene	ND(0.5)	NA	2,350
2-Methylnapthalene	ND(0.5)	NA	300
Acenaphthylene	ND(0.5)	NA	300
Acenaphthene	ND(0.5)	NA	970
Fluorene	ND(0.5)	NA	300
Phenanthrene	ND(0.5)	NA	7.7
Anthracene	ND(0.5)	NA	300
Fluoranthene	ND(0.5)	NA	40
Pyrene	ND(0.5)	NA	300
Benzo(a)anthracene	ND(0.1)	NA	300
Chrysene	ND(0.1)	NA	300
Benzo(b)fluoranthene	ND(0.1)	NA	300
Benzo(k)fluoranthene	ND(0.1)	NA	300
Benzo(a)pyrene	ND(0.1)	NA	300
Indeno(1,2,3-cd)pyrene	ND(0.1)	NA	300
Dibenzo(a,h)anthracene	ND(0.1)	NA	300
Benzo(g,h,I)perylene	ND(0.1)	NA	300

NOTES:

1. Results in ug/L (micrograms per liter).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. NA: Not Available.

6. Effects for C11-C22 Aromatic Hydrocarbons may be seen at less than the EPH reporting limit.

# TABLE 9 SUMMARY OF SURFACE WATER ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W1F-04 BRANDT ISLAND COVE, MATTAPOISETT Sampling Date: 8/24/04

Analyte	W1F04-W01	Surface Water Quality Standards		
ЕРН		MADEP VPH/EPH Surface Water Guideline	NOAA SQuiRT Marine Surface Water Quality Criteria Maximum Concentration	
$C_9$ - $C_{18}$ Aliphatic Hydrocarbor	s ND(590)	1,800	N/A	
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbor	ns ND(590)	2,100	N/A	
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbor	ns ND(180)	See Note Below	N/A	
PAH by GC/MS-SIM by method 8270				
Naphthalen	e ND(0.6)	NA	2,350	
2-Methylnapthalen	e ND(0.6)	NA	300	
Acenaphthylen	e ND(0.6)	NA	300	
Acenaphthen	e ND(0.6)	NA	970	
Fluoren	e ND(0.6)	NA	300	
Phenanthren	e ND(0.6)	NA	7.7	
Anthracen	e ND(0.6)	NA	300	
Fluoranthen	e ND(0.6)	NA	40	
Pyren	e ND(0.6)	NA	300	
Benzo(a)anthracen	e ND(0.1)	NA	300	
Chrysen	e ND(0.1)	NA	300	
Benzo(b)fluoranthem	e ND(0.1)	NA	300	
Benzo(k)fluoranthem	e ND(0.1)	NA	300	
Benzo(a)pyren	e ND(0.1)	NA	300	
Indeno(1,2,3-cd)pyren	e ND(0.1)	NA	300	
Dibenzo(a,h)anthracen	e ND(0.1)	NA	300	
Benzo(g,h,I)peryler	e ND(0.1)	NA	300	

# NOTES:

1. Results in ug/L (micrograms per liter).

2. EPH: Extractable Petroleum Hydrocarbons.

- 2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.
- 3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.
- 4. j: estimated concentration/ detected below standard laboratory reporting limits.
- 5. NA: Not Available.
- 6. Effects for C11-C22 Aromatic Hydrocarbons may be seen at less than the EPH reporting limit.

# TABLE 9 SUMMARY OF SURFACE WATER ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT: W1C-02 MATTAPOISETT NECK WEST, MATTAPOISETT Sampling Date: 8/25/04

Analyte	W1C02-TP01	W1C02-TP02	Surface Water Quality Standards	
ЕРН			MADEP VPH/EPH Surface Water Guideline	NOAA SQuiRT Marine Surface Water Quality Criteria Maximum Concentration
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(500)	ND(500)	1,800	N/A
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(500)	ND(500)	2,100	N/A
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	ND(150)	ND(150)	See Note Below	N/A
PAH by GC/MS-SIM by method 8270				
Naphthalene	ND(0.5)	ND(0.5)	NA	2,350
2-Methylnapthalene	ND(0.5)	ND(0.5)	NA	300
Acenaphthylene	ND(0.5)	ND(0.5)	NA	300
Acenaphthene	ND(0.5)	ND(0.5)	NA	970
Fluorene	ND(0.5)	ND(0.5)	NA	300
Phenanthrene	ND(0.5)	ND(0.5)	NA	7.7
Anthracene	ND(0.5)	ND(0.5)	NA	300
Fluoranthene	ND(0.5)	ND(0.5)	NA	40
Pyrene	ND(0.5)	ND(0.5)	NA	300
Benzo(a)anthracene	ND(0.1)	ND(0.1)	NA	300
Chrysene	ND(0.1)	ND(0.1)	NA	300
Benzo(b)fluoranthene	ND(0.1)	ND(0.1)	NA	300
Benzo(k)fluoranthene	ND(0.1)	ND(0.1)	NA	300
Benzo(a)pyrene	ND(0.1)	ND(0.1)	NA	300
Indeno(1,2,3-cd)pyrene	ND(0.1)	ND(0.1)	NA	300
Dibenzo(a,h)anthracene	ND(0.1)	ND(0.1)	NA	300
Benzo(g,h,I)perylene	ND(0.1)	ND(0.1)	NA	300

### NOTES:

1. Results in ug/L (micrograms per liter).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. NA: Not Available.

6. Effects for C11-C22 Aromatic Hydrocarbons may be seen at less than the EPH reporting limit.

# TABLE 9 SUMMARY OF SURFACE WATER ANALYTICAL RESULTS BUZZARDS BAY, MASSACHUSETTS SEGMENT W1F-05 MATTAPOISETT HARBOR EAST, MATTAPOISETT Sampling Date: 8/26/04

Analyte	W1F05-TP01	Surface Water Quality Standards		
ЕРН		MADEP VPH/EPH Surface Water Guideline	NOAA SQuiRT Marine Surface Water Quality Criteria Maximum Concentration	
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(500)	1,800	N/A	
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(500)	2,100	N/A	
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	ND(150)	See Note Below	N/A	
PAH by GC/MS-SIM by method 8270				
Naphthalene	ND(0.5)	NA	2,350	
2-Methylnapthalene	ND(0.5)	NA	300	
Acenaphthylene	ND(0.5)	NA	300	
Acenaphthene	ND(0.5)	NA	970	
Fluorene	ND(0.5)	NA	300	
Phenanthrene	ND(0.5)	NA	7.7	
Anthracene	ND(0.5)	NA	300	
Fluoranthene	ND(0.5)	NA	40	
Pyrene	ND(0.5)	NA	300	
Benzo(a)anthracene	ND(0.1)	NA	300	
Chrysene	ND(0.1)	NA	300	
Benzo(b)fluoranthene	ND(0.1)	NA	300	
Benzo(k)fluoranthene	ND(0.1)	NA	300	
Benzo(a)pyrene	ND(0.1)	NA	300	
Indeno(1,2,3-cd)pyrene	ND(0.1)	NA	300	
Dibenzo(a,h)anthracene	ND(0.1)	NA	300	
Benzo(g,h,I)perylene	ND(0.1)	NA	300	

### NOTES:

1. Results in ug/L (micrograms per liter).

2. EPH: Extractable Petroleum Hydrocarbons.

2. ND(x) = constituent not detected at practical quantitation limits noted in parentheses.

3. PAH by GC/MS-SIM: Polyaromatic Hydrocarbons with Selected Ion Monitoring.

4. j: estimated concentration/ detected below standard laboratory reporting limits.

5. NA: Not Available.

6. Effects for C11-C22 Aromatic Hydrocarbons may be seen at less than the EPH reporting limit.

# TABLE 10CLEANUP ACTIVITIESJULY 23, 2004-DECEMBER 31, 2004BARGE B120BUZZARDS BAY, MASSACHUSETTS

Inspection Date	e Segment Number	Segment Name	Town	Degree of Oiling	Oil Ranking	Objective	Inspection Summary
9/23/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	1/3/1900	Cleanup activities at sandy beach (Leisure Shores)	Continued cleanup activities of particulate oil in the intertidal area of Leist coverage of oil throughout the beach area, the full intertidal beach area (80 Several spot checks and trenches were also advanced. Absorbent material in diameter) and sheening that infiltrated into trenches and raked areas. O concentration was found to be primarily on the east middle to lower interti- inches deep.
9/27/2004	W1F-01	Brandt Beach	Mattapoisett	Heavy	1/2/1900	Segment inspection, buried oil inspection	A total of 4 trenches were advanced throughout intertidal zones and along inches in diameter) embedded in the marsh were removed in the lower int up to 1 inch in diameter were removed sporadically on shells and rocks in 49.540.
9/27/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	1/3/1900	Post cleanup inspection	A total of 43 test pits were excavated in the intertidal zone of Leisure Shor size) of oil mixed with sediment were found in this area 2-4 inches below assessed). Two samples were collected for observation. A large test pit 10 was dug encircling this impacted area to define the extent of the oil-impact pits (5 feet away) had oil floating on infiltrating water. 9 out of the 10 test pits throughout the segment showed sporadic distribution of oil throughout
10/27/2004	W1F-02	Brandt Island West	Mattapoisett	Heavy	1/3/1900	Post cleanup inspection	A 30x20-foot area of test pits were excavated at N41° 37.712 W70° 49.432
10/27/2004	W1F-01	Brand Island	Mattapoisett	Heavy	1/2/1900	Shoreline Inspection	Few tacky tarballs removed from channel banks on Howard Beach.
10/27/2004	W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28	Pre-cleanup evaluation of segment with DEP	Observed patches of pavement starting at N41° 38.493 W70° 46.143 and w marsh grass along a fairly consistent band in the middle intertidal zone. La activities.
10/27/2004	W1E-02	Strawberry Cove	Mattapoisett	Light	1.46	Part of Strawberry Point pre-cleanup evaluation of Strawberry Point with DEP	Evaluated areas previously GPS-marked to be cleaned by inspection team. embedded in sand and peat were removed in the marsh grass in the middle splatter (dime-size to 3 inches in diameter) was scraped in marsh grass and at N 41° 38.503 W70° 45.930, N41° 38.510 W70° 45.953, and N41° 38.54 also removed from N41° 38.544 W70° 45.969.
11/23/2004	W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28	Cleanup activities	Areas of concern flagged for upcoming cleanup activities.
12/6/2004	W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28	Clean-up activities	Clean-up activities started near N41°38.486 W70°46.138. Four areas were W70°46.137, N41°38.466 W70°46.133, and N41°38.463 W70°46.139. Cl remove oil. Snare lines were deployed near N41°38.486 W70°46.138 and W70°46.138. A total of 43 bags, weighing approximately 20lbs each, were grassline in the upper intertidal zone to be disposed at the end of clean-up of the started star
12/7/2004	W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28	Clean-up activities	Cleanup activities started near N41° 38.463 W70° 46.139. Six additional a N41° 38.641 W70° 46.349. The cleanup crew worked northward on the w W70° 46.349. A total of 52 bags, weighing approximately 20 pounds each near the grassline in the supraintertidal zone to be disposed at the finish of
12/8/2004	W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28	Clean-up activities	The previously designated areas were inspected and trace oil was removed approximately 100 bags of oil mixed with sediment and cobbles were trans
12/29/2004	W1E-03	Strawberry Point West	Mattapoisett	Moderate	2.28	Post cleanup inspection	Areas of cleanup between 12/6 to 12/8/2004 were inspected. Evidence of r located in the upper intertidal zone near N41°38.460 W70°46.209 was rem removed between N41°38.523 W70°46.228 and N41°38.641 W70°46.349

3/23/2005

sure Shores beach. Because the delineation on 9/8/04 indicated sporadic 0x180 feet and 2-3 inches deep) was raked and sporadically trenched. I was used to remove floating globules (ranging from pinhead- 7 millimeters bil was observed sporadically in the intertidal zone, however, the highest oil idal area surrounding N41° 37.714 W70° 49.432 in a 20x20 foot area and 4-6

channel banks. Buried oil was not observed. Few pinches of oil (dime to 6 tertidal zone. A trace amount of granular splatter and slightly tacky tarballs the upper intertidal zone west of the channel around N41° 37.655 W70°

res, primarily surrounding N41° 37.712 W70° 49.433. Loose tarballs (eggthe surface in a 1.5x2-foot area ( which was deeper than previously 0x3 feet and 6 inches deep, and a long trench perpendicular to the shoreline, eted area at this depth, by digging trenches encircling this area. 4 out of 6 test t pits (10 feet away) had oil floating on infiltrating water. The remaining test at the intertidal zone, with a concentration on the east side of the beach.

3. Evidence of particulate oil was observed.

vestward. The pavement is mixed with sand between cobbles and within imited disturbance to the marsh grass areas was warranted for cleanup

On the east side of Angelica Point, tar patties 2-3 inches in diameter intertidal zone at N 41° 38.533 W70° 45.892. Elevated and granular l in cobbles in the middle intertidal zone on the west side of Angelica Point 14 W70° 45.969. Small patches of pavement (1-3 inches in diameter) were

e designated to be cleaned at N41°38.486 W70°46.138, N41°38.476 lean-up consisted of wirebrushing rocks and using spades and shovels to N41°38.476 W70°46.137 and boom was deployed near N41°38.486 e filled with oil-impacted sand and cobbles. The bags were piled near the activities.

areas were designated to be cleaned between N41° 38.909 W70° 46.473 and vestern side of Strawberry Point. Snare was deployed near N41° 38.641 n, were filled with oil-impacted sediment and cobbles. The bags were piled 'the cleanup activities.

. Snare was removed from N41'38.641 W70'46.349. 52. A total of sported to a roll-off at Mattapoisett Town Beach for proper disposal.

remaining oil was not observed. A tarball (8" long x 3"wide x 2" thick) noved. Five tar patties (ranging from 2x1-inch to 4x2-inch areas were . The snare and boom did not need to be replaced, and was removed.

# TABLE 11 WASTE DISPOSAL INFORMATION JULY 23, 2004 - DECEMBER 31, 2004 BARGE B120 SPILL BUZZARDS BAY, MASSACHUSETTS

Date of Disposal	Weight of Material			
	Pounds	Tons		
10/6/2004	260	0.13		
12/14/2004	2,920	1.46		
12/23/2004	1,940	0.97		
TOTAL:	5,120	2.56		

NOTES:

Disposal Facility: American Ref-Fuel Co. of SEMASS Carrier: Fleet Environmental