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Sevenson Environmental Services, Inc.

JACOBS

US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
Total Environmental Restoration Contract
USACE Contract Number: DACW33-03-D-0006
Task Order No. 0001

2006 DREDGE SEASON DATA SUBMITTAL
NEW BEDFORD HARBOR
REMEDIAL ACTION

New Bedford Harbor Superfund Site
New Bedford, MA

January 2007

Prepared by
Jacobs Engineering Group
6 Otis Park Drive
Bourne, MA 02532-3870

ACE-J23-35BG0108-M17-0001

SDMS DocID 299736

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TABLE

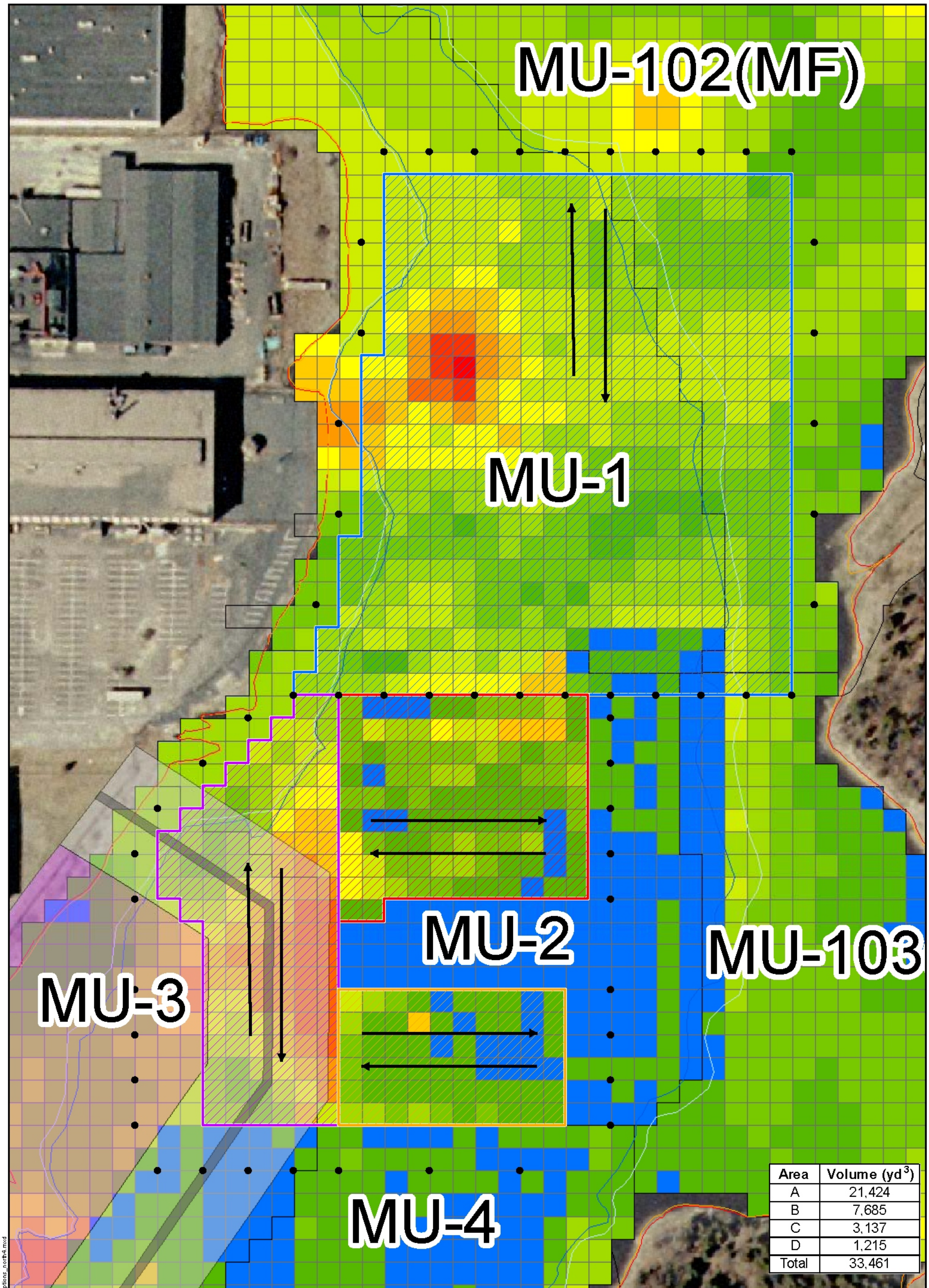
Table 2-1
Wastewater Treatment Plant Discharge Goals
New Bedford Harbor Superfund Site - 2006 Season

Analysis	Surface Water Discharge Treatment Goal (µg/L) [1]
PCB Aroclor [2]	0.065
Metals	
Cd [3]	9.3
Cr [4]	50
Cu [5]	5.6
Pb [6]	8.5

Notes:
1) µg/L = micrograms per liter
2) Per Polychlorinated biphenyl (PCB) Aroclor
3) Cd = Cadmium
4) Cr = Chromium
5) Cu = Copper
6) Pb = Lead

ATTACHMENT A

Dredge Planning and Progress Figures



Area	Volume (yd^3)
A	21,424
B	7,685
C	3,137
D	1,215
Total	33,461

Legend

- Management Units
- Sheet Pile

Z Blocks (ZstarRnd)

- 0
- 0 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0 - 3.5
- 3.5 - 4.0
- 4.0 - 4.5
- 4.0 - 5.0
- 5.0 - 5.5

Aerial Photography MASSGIS 2003

- Area A
- Area B
- Area C
- Area D
- MLLW
- MLW
- MHW
- MHHW
- Proposed Location of footprint of CDF "A". Assumed that no dredging activities will be conducted within this area during remediation activities.
- Proposed Location of CDF "A" Dike. Assumed that dredging activities will be conducted in the footprint of the CDF Dike to "Zstar".
- Proposed road on CDF "A" Dike

Indicates the direction of dredging (NS or EW)

NOTE: There are currently 50 existing sheet piles in NBH from the 2005 dredging season. The 2006 plan calls for 57 sheet piles.

0 50 100 Feet

1:1,200

N

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Draft 2006 Execution Plan

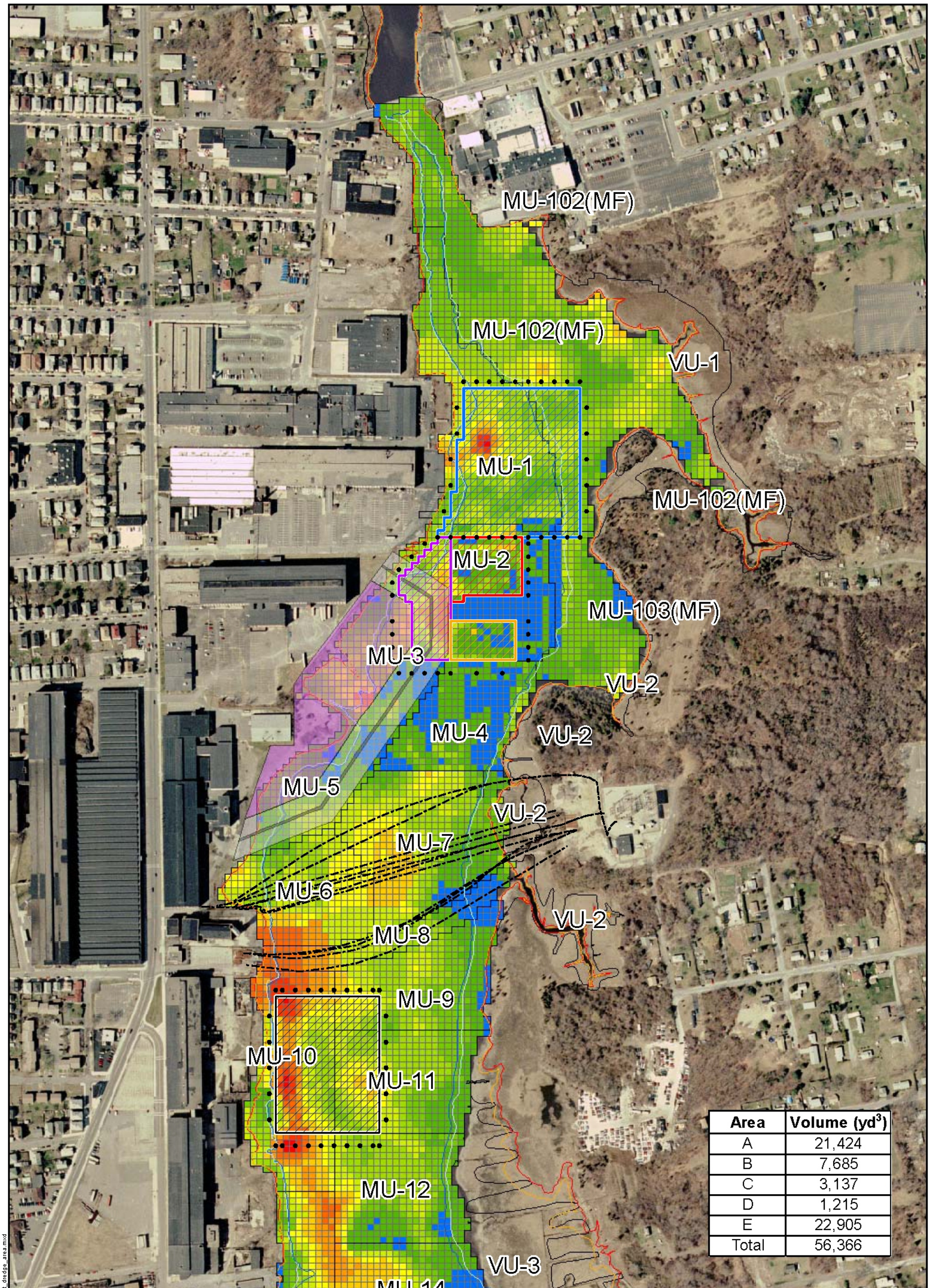
2006 Dredge Option

New Bedford Harbor Superfund Site

NAME: croberts DATE: 4/12/2006

A-1

Y:\NBH\Projects\35BG0101\07\20060412\ArcGIS\2006_dredge_options_north4.mxd



Area	Volume (yd^3)
A	21,424
B	7,685
C	3,137
D	1,215
E	22,905
Total	56,366

Legend

Management Units

Z Blocks (ZstarRnd)

- 0
- 0 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0 - 3.5
- 3.5 - 4.0
- 4.0 - 4.5
- 4.0 - 5.0
- 5.0 - 5.5

Aerial Photography MASSGIS 2003

- MLLW
- MLW
- MHW
- MHHW
- NSTAR Cables
- 2006 Proposed Sheet Piles
- Proposed Location of footprint of CDF "A". Assumed that no dredging activities will be conducted within this area during remediation activities.
- Proposed Location of CDF "A" Dike. Assumed that dredging activities will be conduced in the footprint of the CDF Dike to "Zstar".
- Proposed road on CDF "A" Dike

- Area A
- Area B
- Area C
- Area D
- Area E

0 175 350 Feet

1:4,200

N

JACOBS

Draft 2006 Execution Plan

2006 Dredge Option and Contingent Dredge Area

New Bedford Harbor Superfund Site

NAME: croberts DATE: 4/12/2006

A-2

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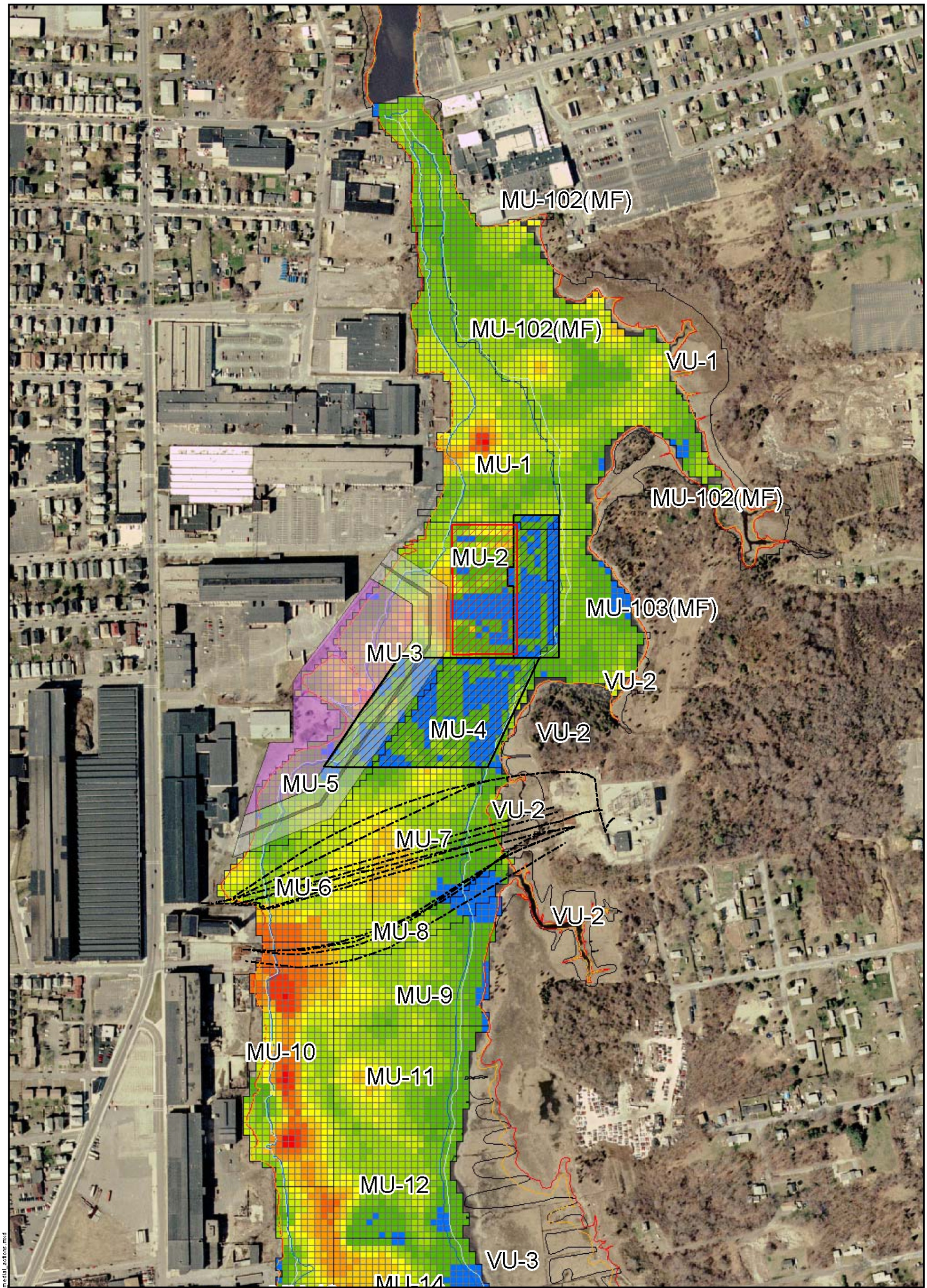


Legend

Management Units

Z Blocks (ZstarRnd)

- 0
- 0 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0 - 3.5
- 3.5 - 4.0
- 4.0 - 4.5
- 4.0 - 5.0
- 5.0 - 5.5

Aerial Photography MASSGIS 2003

- MLLW
- MLW
- MHW
- MHHW
- NSTAR Cables

Proposed Location of footprint of CDF "A". Assumed that no dredging activities will be conducted within this area during remediation activities.

Proposed Location of CDF "A" Dike. Assumed that dredging activities will be conducted in the footprint of the CDF Dike to "Zstar".

Proposed road on CDF "A" Dike

2004 Dredge Area

2005 Dredge Area

0 175 350 Feet 1:4,200

N

JACOBS

Draft 2006 Execution Plan

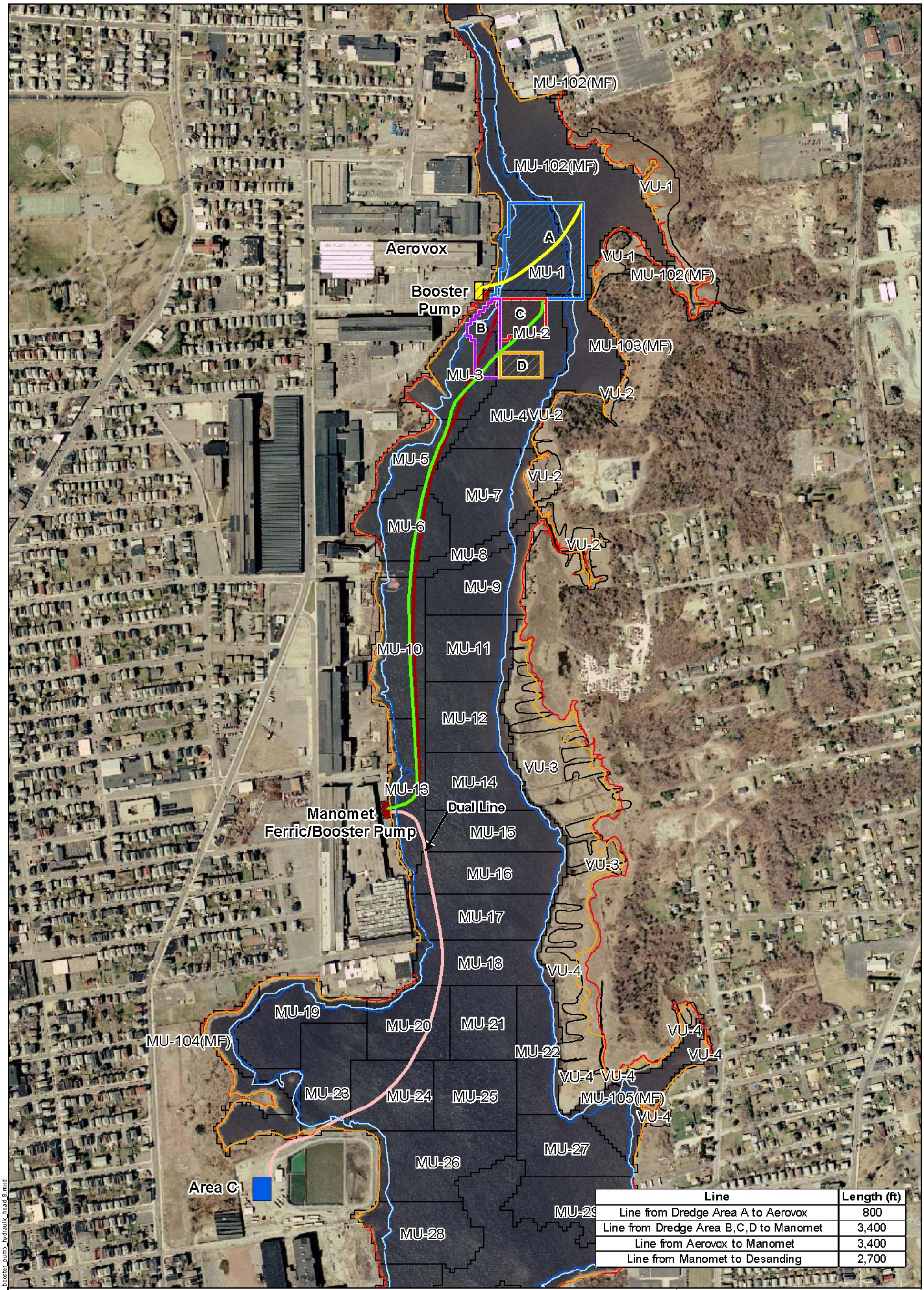
Summary of 2004 and 2005 Remedial Actions

New Bedford Harbor Superfund Site

NAME: croberts DATE: 4/12/2006

A-3

Y:\NBH\Projects\36BG0101\07\20060412\ArcGIS\2004_2005_remedial_actions.mxd



Line	Length (ft)
Line from Dredge Area A to Aerovox	800
Line from Dredge Area B,C,D to Manomet	3,400
Line from Aerovox to Manomet	3,400
Line from Manomet to Desanding	2,700

Legend

- Management Units
- MLLW
- MLW
- MHW
- MHHW
- Manomet Booster Pump and Ferric Sulfate Injection Station
- Aerovox Booster Pump
- Line from Dredge Area A to Aerovox
- Line from Dredge Area B,C,D to Manomet St.
- Line From Aerovox to Manomet St. Ferric Sulfate Injection Station
- Line to Desanding
- 2006 Dredge Area A
- 2006 Dredge Area B
- 2006 Dredge Area C
- 2006 Dredge Area D

Aerial Photography MASSGIS 2003

N

0 275 550 Feet

1:6,600

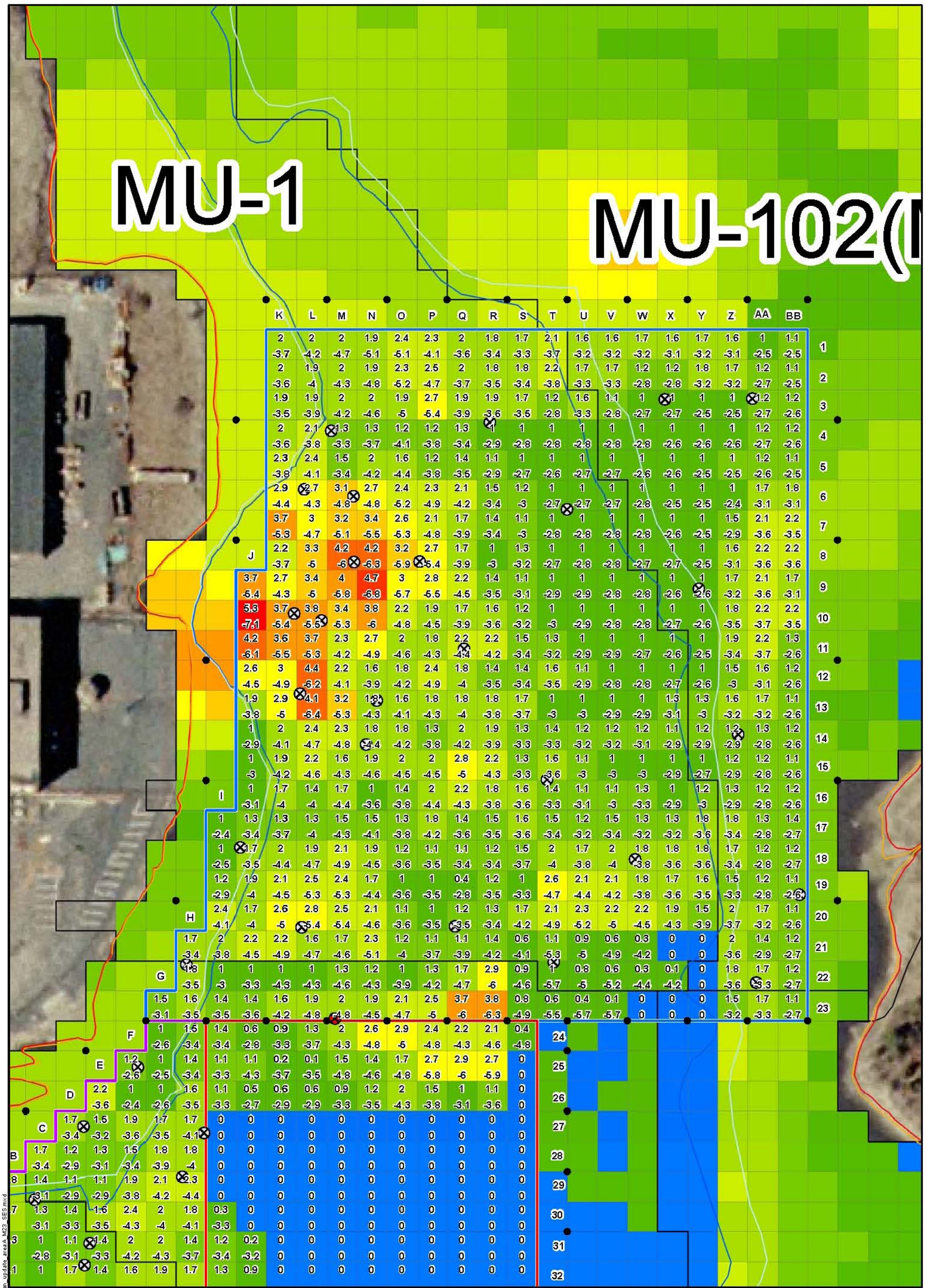
JACOBS

Booster Pump Locations, Ferric Sulfate Injection Location, and Dredge Pipeline Routes

New Bedford Harbor Superfund Site

NAME: croberts DATE: 04/12/2006

A-4



Legend

- Management Units
- Sheet Piles
- Area A
- Area B
- Area C
- Area D

Aerial Photography MASSGIS 2003

2006 Dredge Area A Grid Blocks

2.1 — Feet of sediment to remove and actual z* (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

-3.9 — Target Elevations in feet (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

- Battelle Core
- Modified Battelle Core

NOTE: The pre-dredge core collected at M24 was placed in block M23 in this modified dredge plan and Z-blocks I24-S24 were modified from the software results to provide more consistent and manageable dredge depths in that area.

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

0 37.5 75 Feet

1:900

N

JACOBS

Updated 2006 Targeted Sediment for Removal: Dredge Area A

New Bedford Harbor Superfund Site

NAME: croberts DATE: 8.01.2006

A-5

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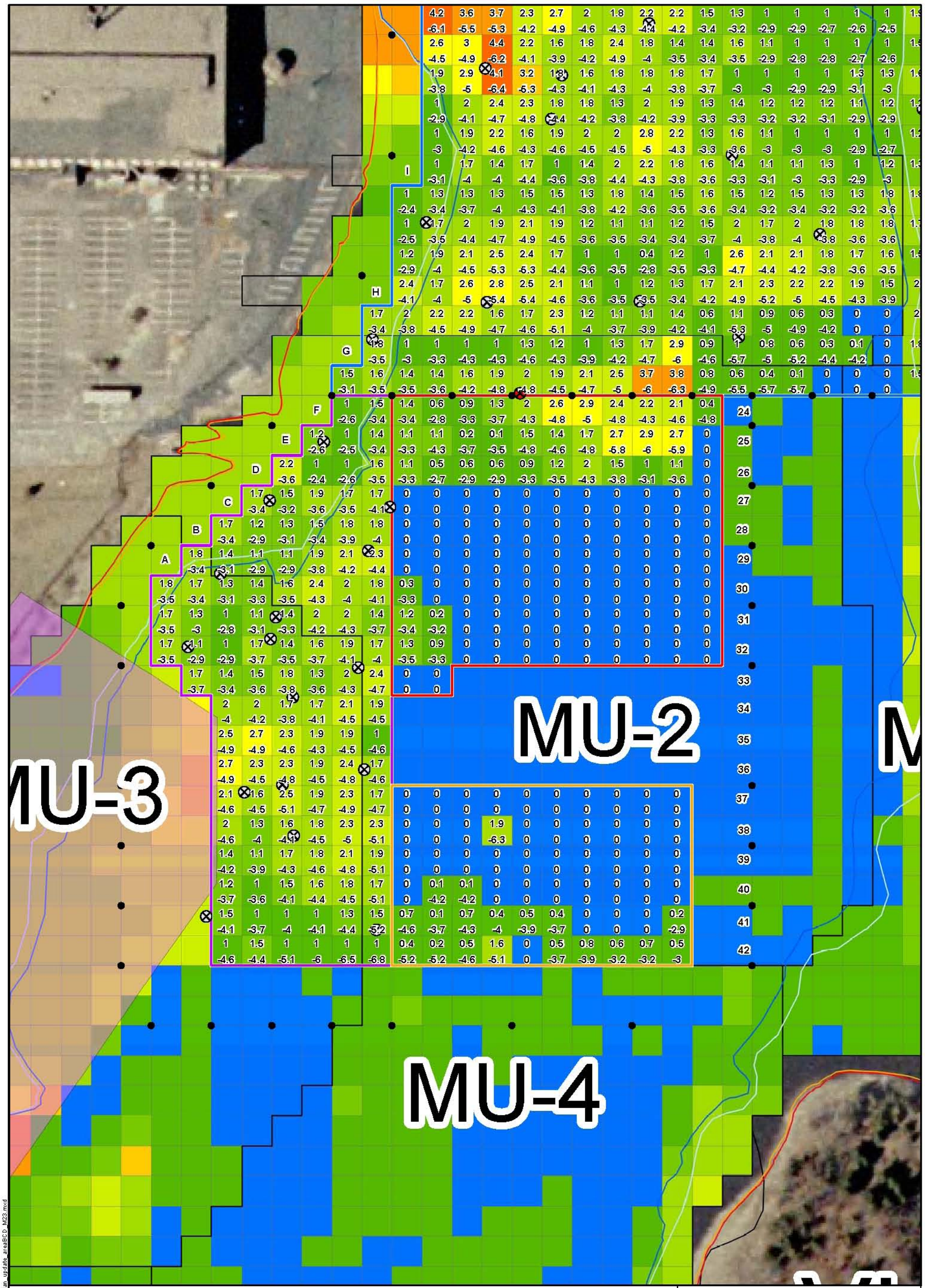


Legend

- Management Units
- Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

Battelle Core

Modified Battelle Core

2006 Dredge Area B,C, and D Grid Blocks

2.1 — Feet of sediment to remove and actual z* (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

-3.9 — Target Elevations in feet (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

NOTE: The pre-dredge core collected at M24 was placed in block M23 in this modified dredge plan and Z-blocks I24-S24 were modified from the software results to provide more consistent and manageable dredge depths in that area.

0 37.5 75 Feet 1:900

N

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35BG0101\08\20060801\ArcGIS\2006dredgeplan_update_areaBCD_M23.mxd

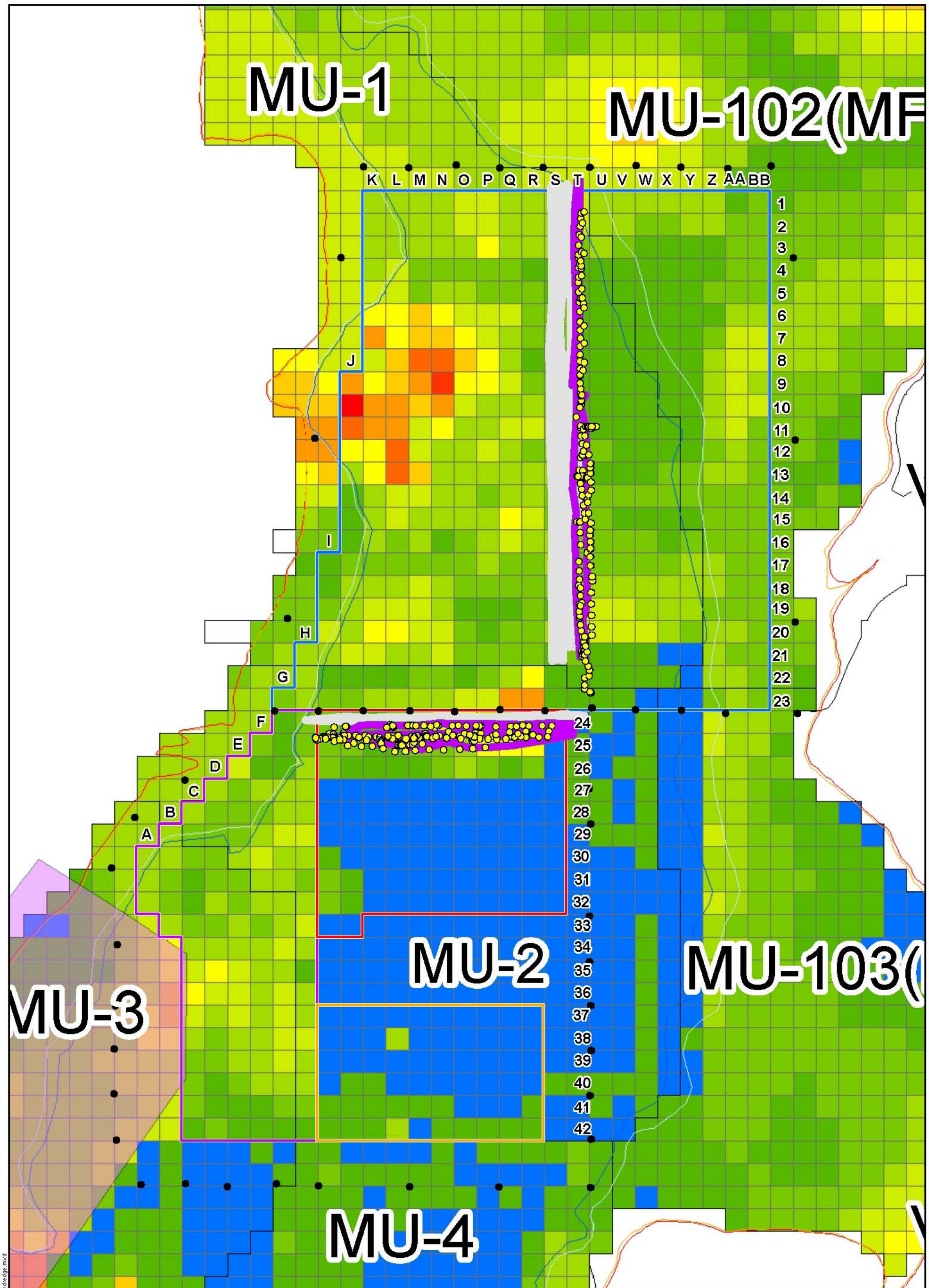
JACOBS

Updated 2006 Targeted Sediment for Removal: Dredge Areas B,C, and D

New Bedford Harbor Superfund Site

NAME: croberts DATE: 8/01/2006

A-6



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 08/18/06
- 8 foot buffer represending area of cut for 08/18/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities

0 50 100 Feet

1:1,200

N

Aerial Photography MASSGIS 2003

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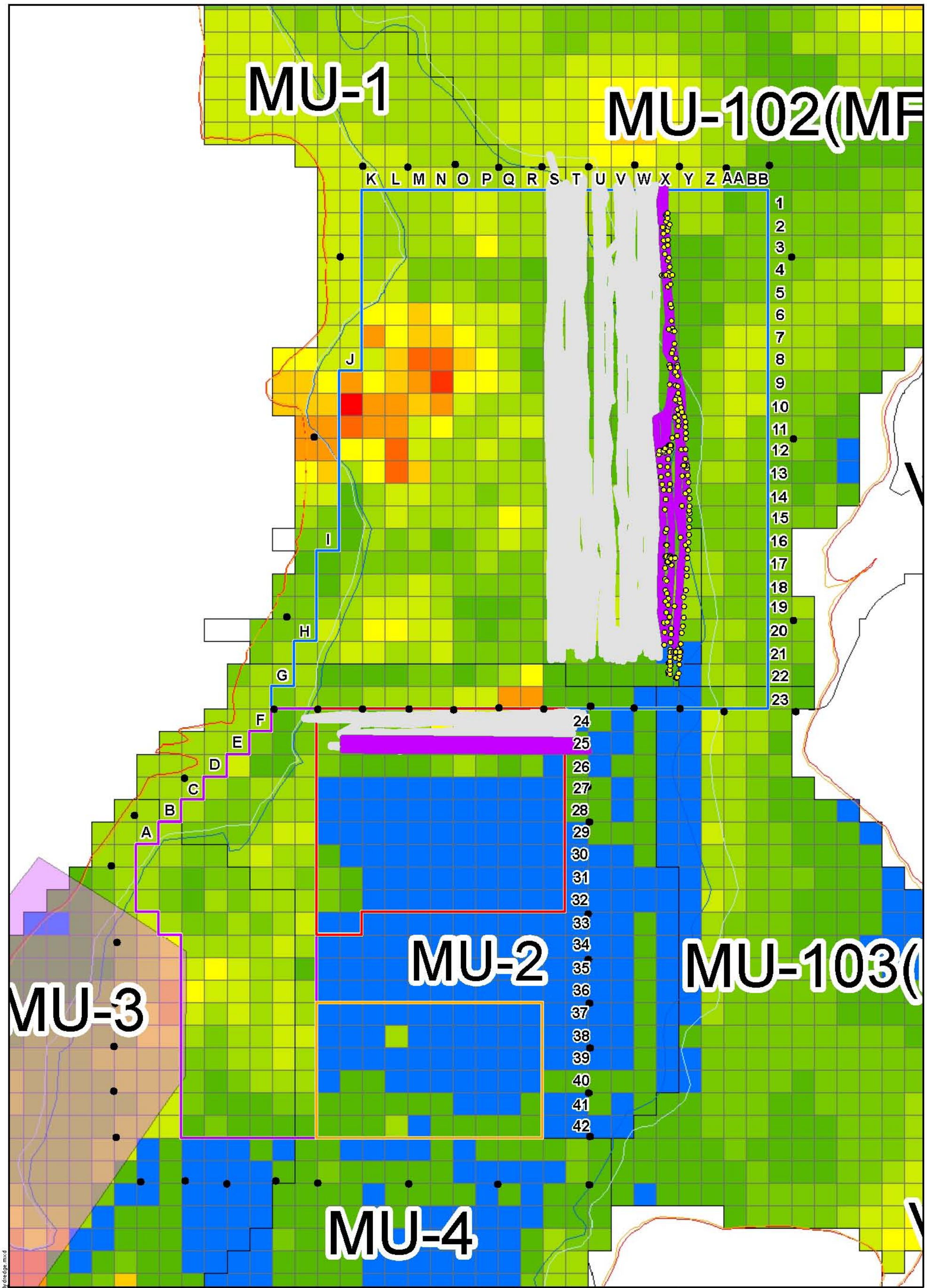
JACOBS

08/18/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 8/18/2006

A-7



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 08/25/06
- 8 foot buffer represending area of cut for 08/25/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities
- MLLW
- MLW
- MHW
- MHHW

0 50 100 Feet 1:1,200

N

Aerial Photography MASSGIS 2003

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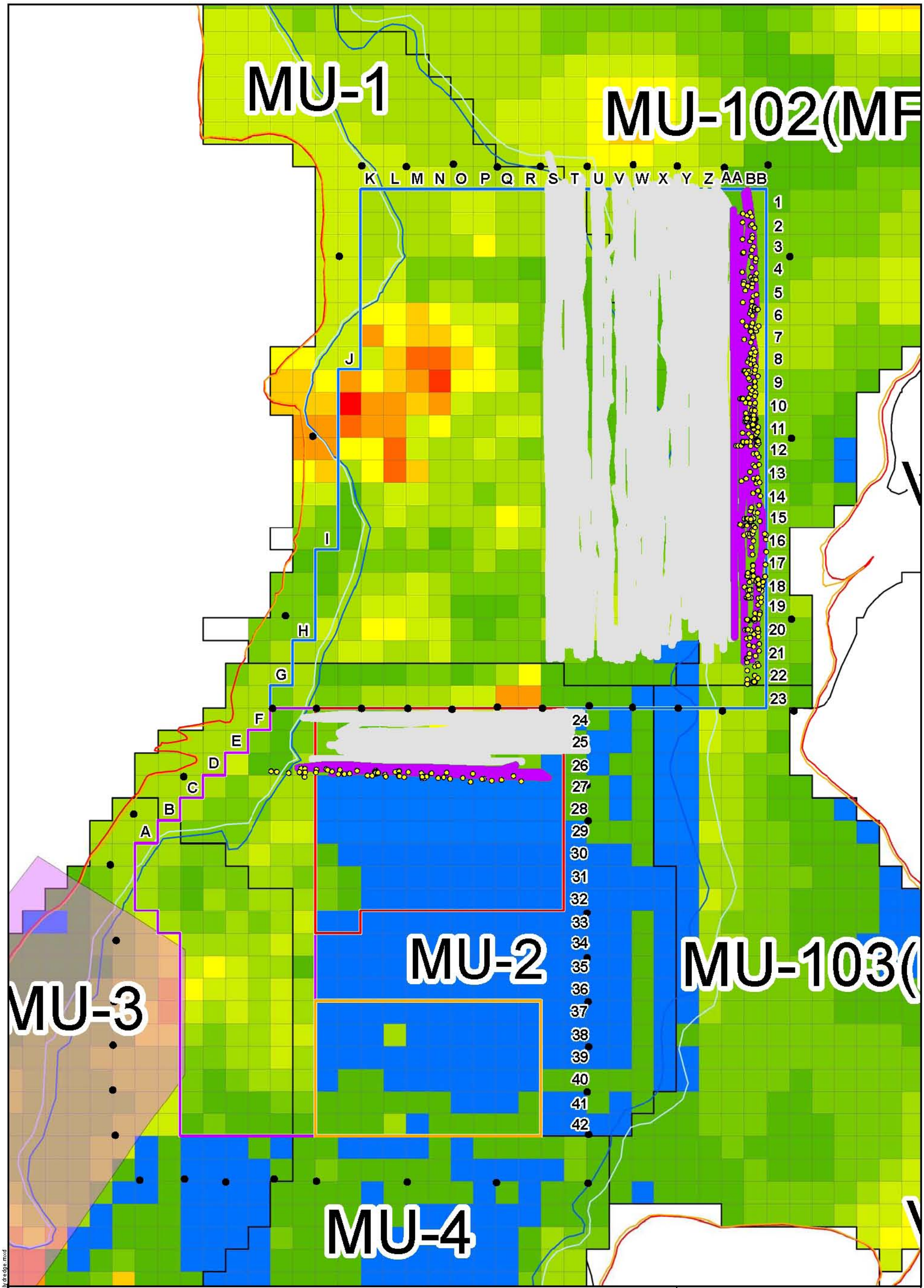
JACOBS

08/25/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 8/25/2006

A-8



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 08/31/06
- 8 foot buffer represending area of cut for 08/31/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities
- MLLW
- MLW
- MHW
- MHHW

0 50 100 Feet 1:1,200

Aerial Photography MASSGIS 2003

JACOBS

08/31/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 8/31/2006

A-9

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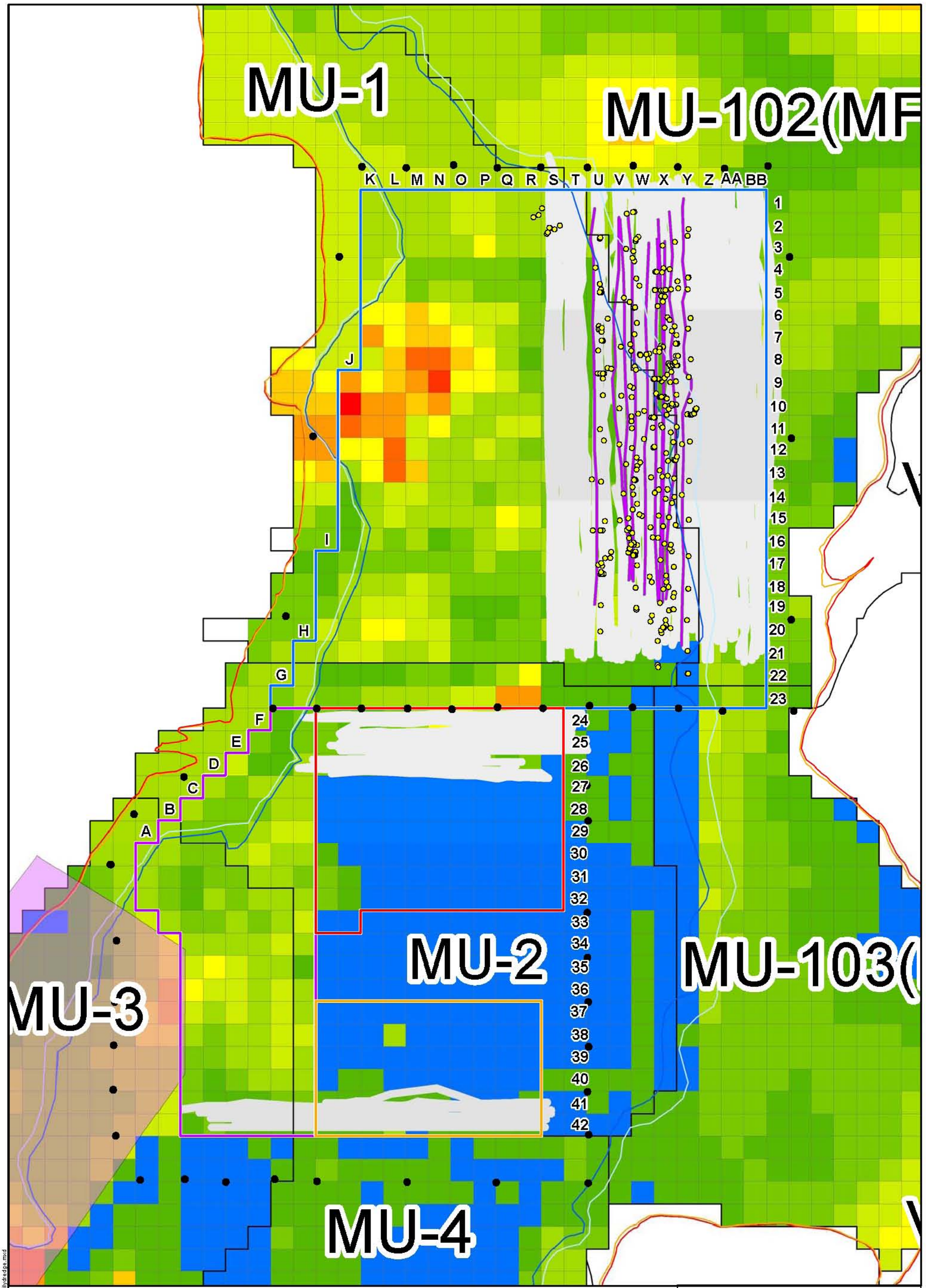


Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 09/8/06
- 8 foot buffer represending area of cut for 09/08/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities
- MLLW
- MLW
- MHW
- MHHW

0 50 100 Feet 1:1,200

N

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35B6010108\20060908\ArcGIS\20060908_dailydredge.mxd

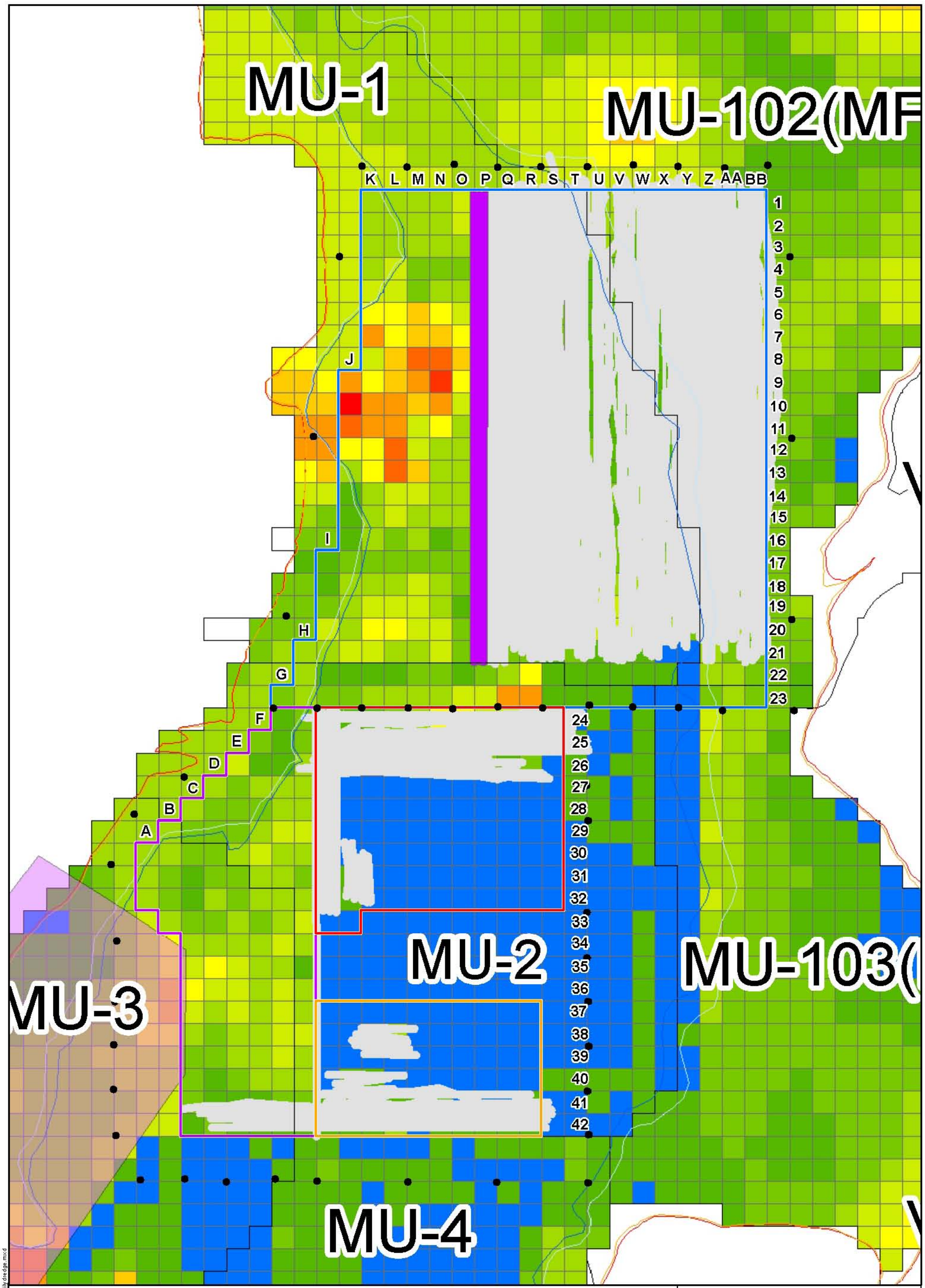
JACOBS

09/08/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 9/7/2006

A-10



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 09/15/06
- 8 foot buffer represending area of cut for 09/15/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities
- MLLW
- MLW
- MHW
- MHHW

0 50 100 Feet 1:1,200

N

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35BG0101\08\20060915\ArcGIS\20060915_dailydredge.mxd

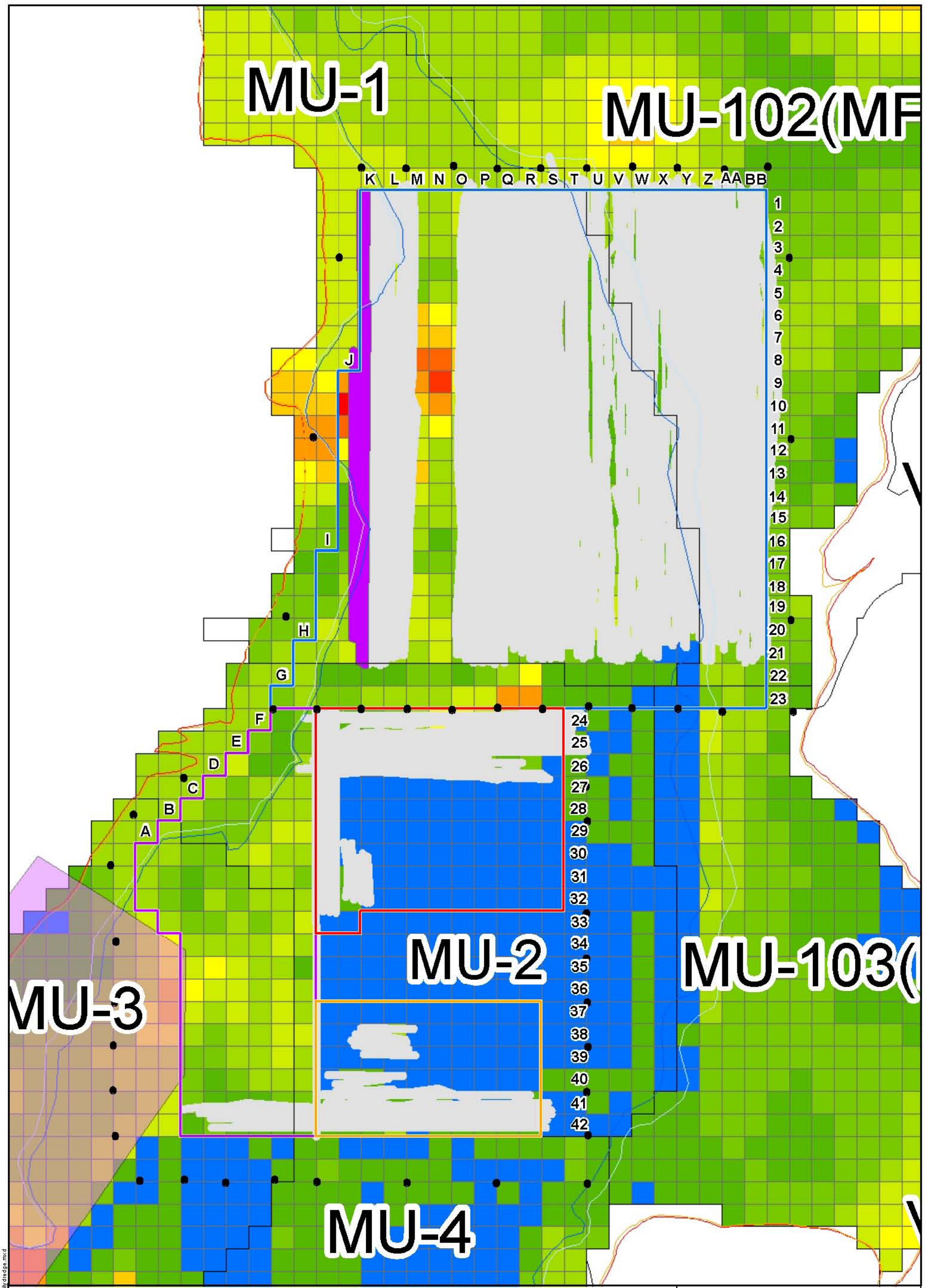
JACOBS

09/15/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 9/15/2006

A-11



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 09/22/06
- 8 foot buffer represending area of cut for 09/22/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities
- MLLW
- MLW
- MHW
- MHHW

0 50 100 Feet 1:1,200

N

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35B6\01010\8\20060922\ArcGIS\20060922_dailydredge.mxd

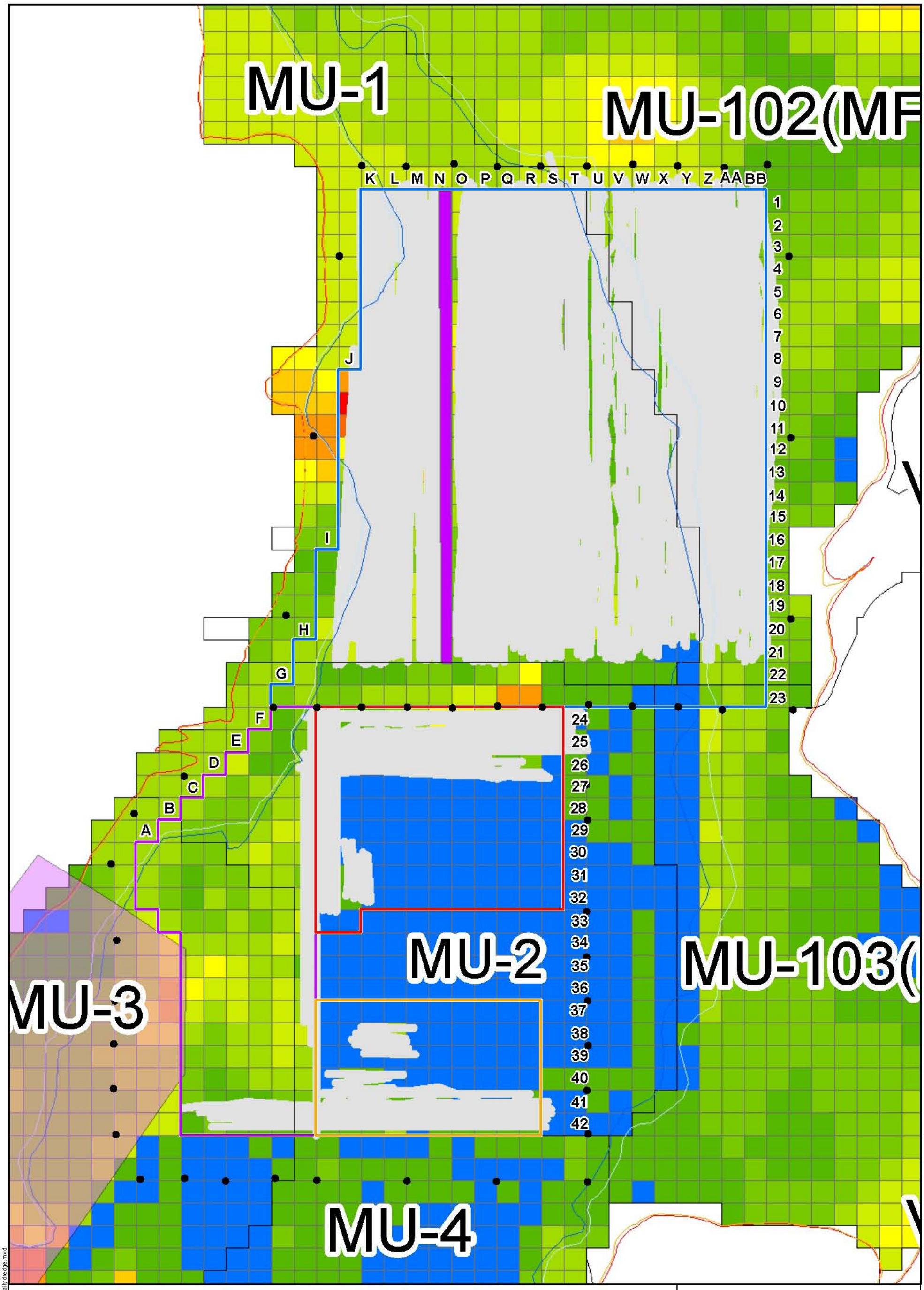
JE JACOBS

09/22/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 9/22/2006

A-12



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 09/29/06
- 8 foot buffer represending area of cut for 09/29/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities
- MLLW
- MLW
- MHW
- MHHW

0 50 100 Feet

1:1,200

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35\6\01\01\08\20060929\ArcGIS\20060929_dailydredge.mxd

JACOBS

09/29/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 9/29/2006

A-13

MU-1

MU-102(MF

K L M N O P Q R S T U V W X Y Z AA BB

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42

J I H G F E D C B A

MU-2

MU-103(

MU-3

MU-4

Legend

Management Units

2006 Surveyed Sheet Piles

Area A

Area B

Area C

Area D

Z Blocks

0

0.1 - 1.0

1.1 - 1.5

1.6 - 2.0

2.1 - 2.5

2.6- 3.0

3.1 - 3.5

3.6 - 4.0

4.1- 4.5

4.6- 5.0

5.1 - 5.5

(Projected Depth of Remaining Cut)

Actual GPS points from dredge for 10/06/06

8 foot buffer represending area of cut for 10/06/06

8 foot buffer representing area of cut from previous 2006 dredging activities

MLLW

MLW

MHW

MHHW

N

0 50 100 Feet

1:1,200

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35B6\01010\02\20061006\ArcGIS\20061006_dailydredge.mxd

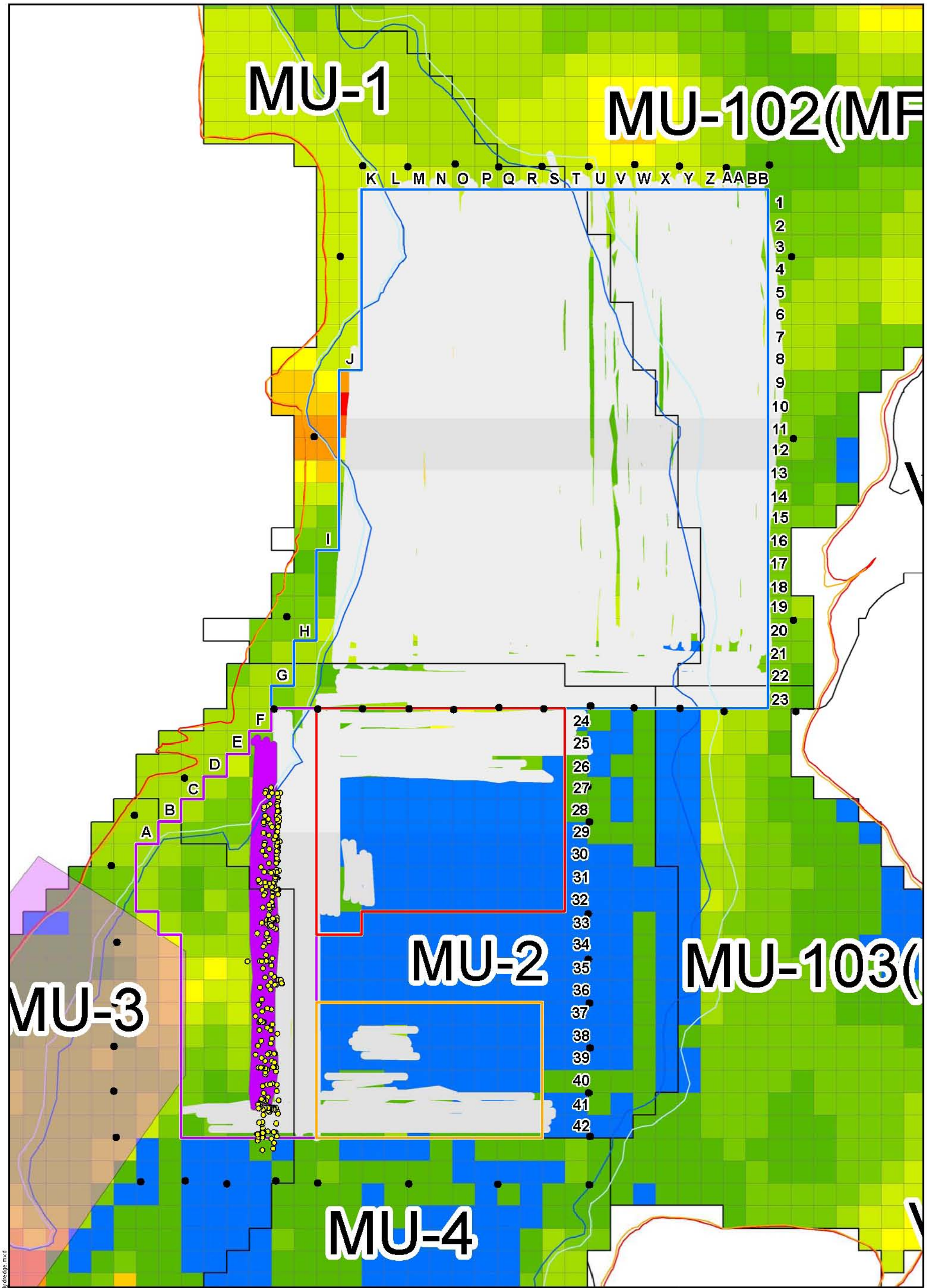
JACOBS

10/06/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/06/2006

A-14



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Z Blocks

- 0
- 0.1 - 1.0
- 1.1 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6- 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1- 4.5
- 4.6- 5.0
- 5.1 - 5.5

(Projected Depth of Remaining Cut)

- Actual GPS points from dredge for 10/16/06
- 8 foot buffer represending area of cut for 10/16/06
- 8 foot buffer representing area of cut from previous 2006 dredging activities
- MLLW
- MLW
- MHW
- MHHW

0 50 100 Feet 1:1,200

N

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35B0\01\08\20061016\ArcGIS\20061016_dailydredge.mxd

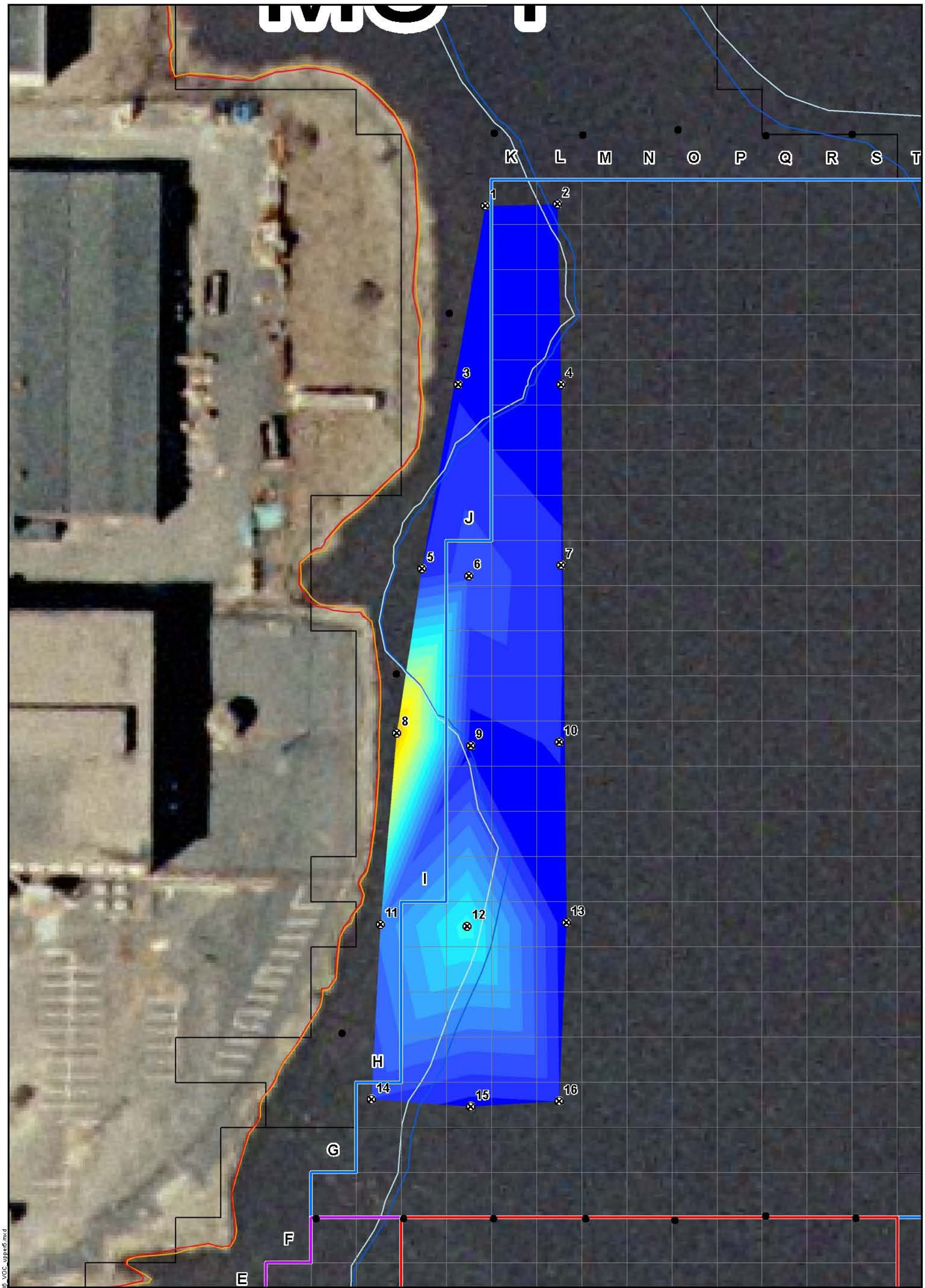
JACOBS

10/16/06 Dredging with GPS Locations (area of dredging was interpreted)

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/16/2006

A-15



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D
- Battelle Sampling Locaiton 10/02/06
- MLLW
- MLW
- MHW
- MHHW

Head Space VOC Above Transition (ppm); 5 Minute Interval Data

- 1700 - 1800
- 1600 - 1700
- 1500 - 1600
- 1400 - 1500
- 1300 - 1400
- 1200 - 1300
- 1100 - 1200
- 1000 - 1100
- 900 - 1000
- 800 - 900
- 700 - 800
- 600 - 700
- 500 - 600
- 400 - 500
- 300 - 400
- 200 - 300
- 100 - 200
- 5.7 - 100

0 25 50 Feet 1:600

N

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35BG0101\08\20061003\ArcGIS\Battelle_100206_VOC_upper5.mxd

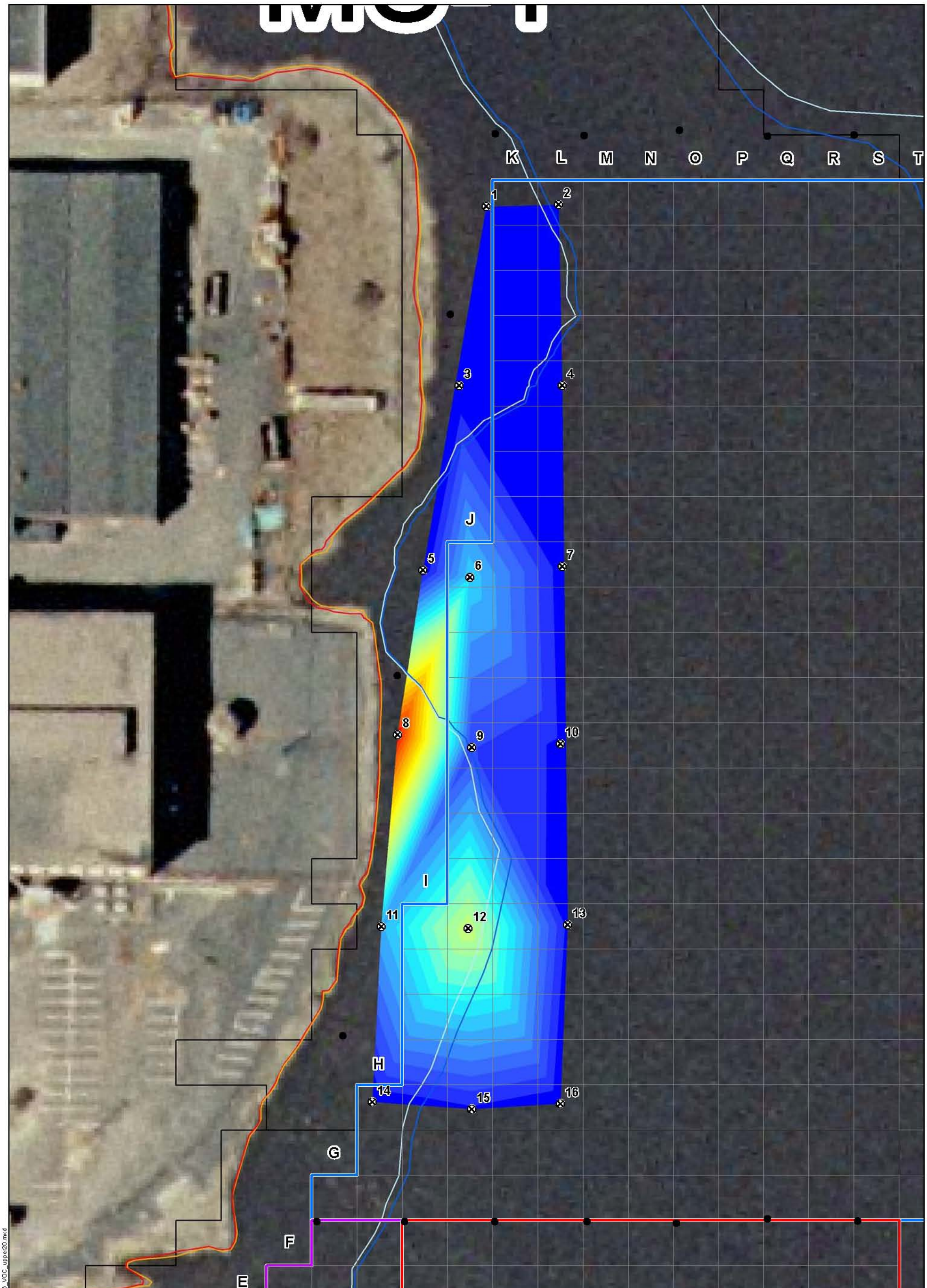
JACOBS

Head Space VOC Data from 10/02/06 Cores; Above Transition - 5 Minute Interval

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/03/2006

A-16



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D
- Battelle Sampling Locaiton 10/02/06
- MLLW
- MLW
- MHW
- MHHW

Aerial Photography MASSGIS 2003

Head Space VOC Data Above Transition (ppm); 20 Minute Interval Data

2300 - 2400
2200 - 2300
2100 - 2200
2000 - 2100
1900 - 2000
1800 - 1900
1700 - 1800
1600 - 1700
1500 - 1600
1400 - 1500
1300 - 1400
1200 - 1300
1100 - 1200
1000 - 1100
900 - 1000
800 - 900
700 - 800
600 - 700
500 - 600
400 - 500
300 - 400
200 - 300
100 - 200
0 - 100

0 25 50 Feet 1:600

N

JACOBS

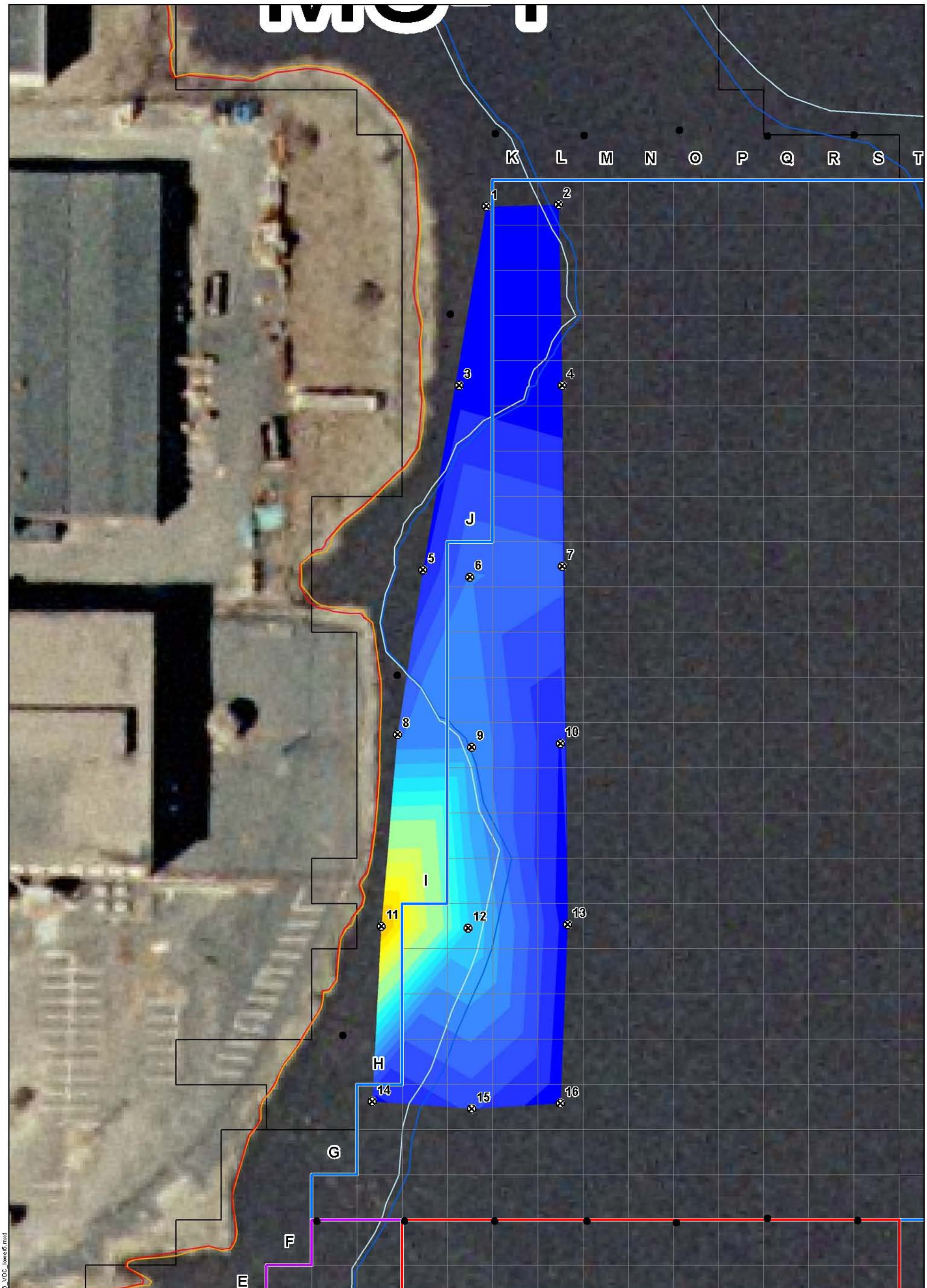
Head Space VOC Data from 10/02/06 Cores; Above Transition - 20 Minute Interval

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/03/2006

A-17

Y:\NBH\Projects\36BG0101\08\20061003\ArcGIS\Battelle_100206_VOC_upper20.mxd



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D
- Battelle Sampling Locaiton 10/02/06
- MLLW
- MLW
- MHW
- MHHW

Head Space VOC Below Transition (ppm); 5 Minute Interval Data

- 1700 - 1800
- 1600 - 1700
- 1500 - 1600
- 1400 - 1500
- 1300 - 1400
- 1200 - 1300
- 1000 - 1200
- 900 - 1000
- 800 - 900
- 700 - 800
- 600 - 700
- 500 - 600
- 400 - 500
- 300 - 400
- 200 - 300
- 100 - 200
- 0 - 100

0 25 50 Feet

1:600

Aerial Photography MASSGIS 2003

JACOBS

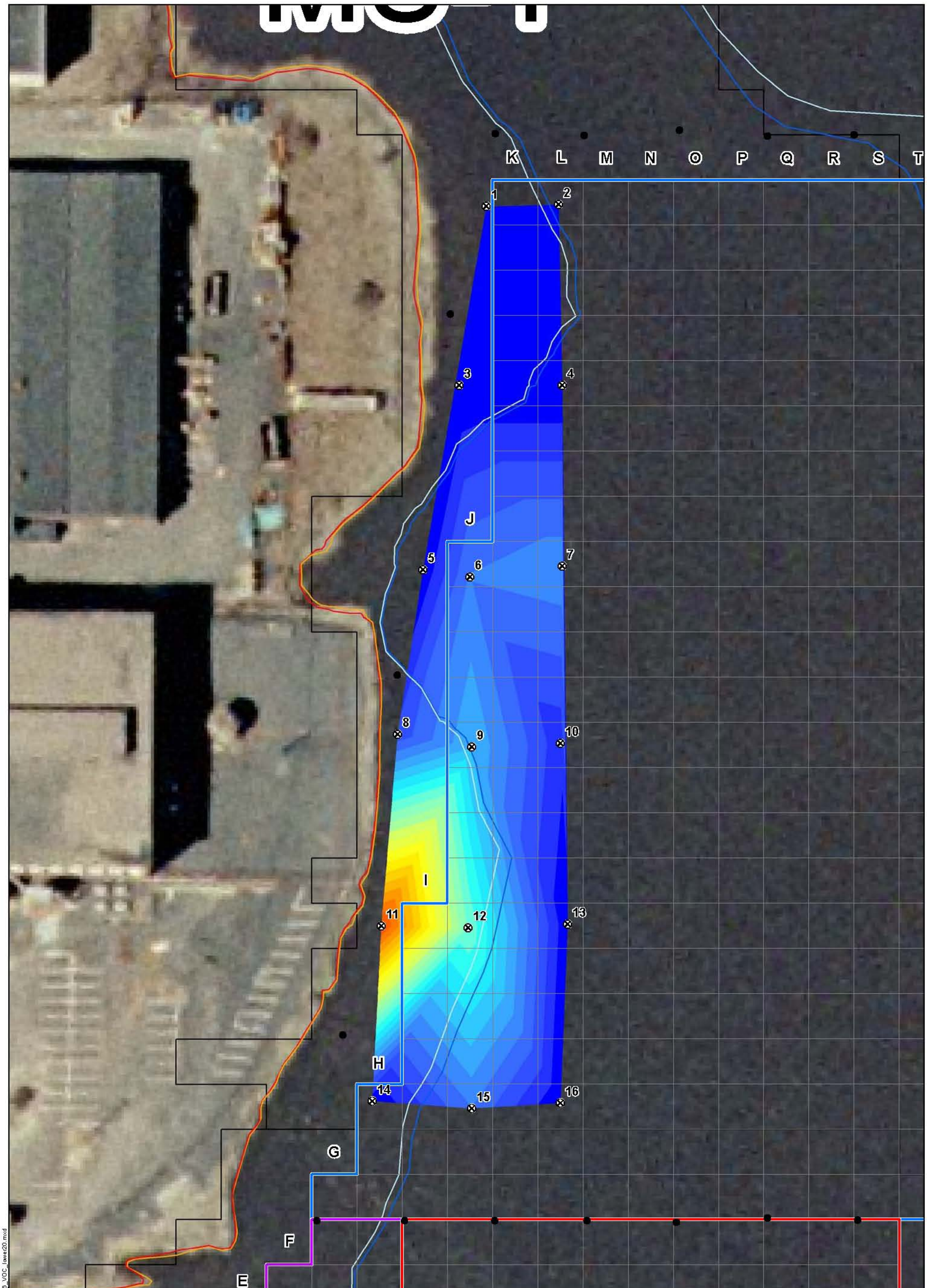
Head Space VOC Data from 10/02/06 Cores; Below Transition - 5 Minute Interval

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/03/2006

A-18

Y:\NBH\Projects\36BG0101\08\20061003\ArcGIS\Battelle_100206_VOC_lower5.mxd



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D
- Battelle Sampling Locaiton 10/02/06
- MLLW
- MLW
- MHW
- MHHW

Head Space VOC Below Transition (ppm); 20 Minute Interval Data

- 2100 - 2200
- 2000 - 2100
- 1900 - 2000
- 1800 - 1900
- 1700 - 1800
- 1600 - 1700
- 1500 - 1600
- 1400 - 1500
- 1300 - 1400
- 1200 - 1300
- 1100 - 1200
- 1000 - 1100
- 900 - 1000
- 800 - 900
- 700 - 800
- 600 - 700
- 500 - 600
- 400 - 500
- 300 - 400
- 200 - 300
- 100 - 200
- 0 - 100

0 25 50 Feet 1:600

N

Aerial Photography MASSGIS 2003

JACOBS

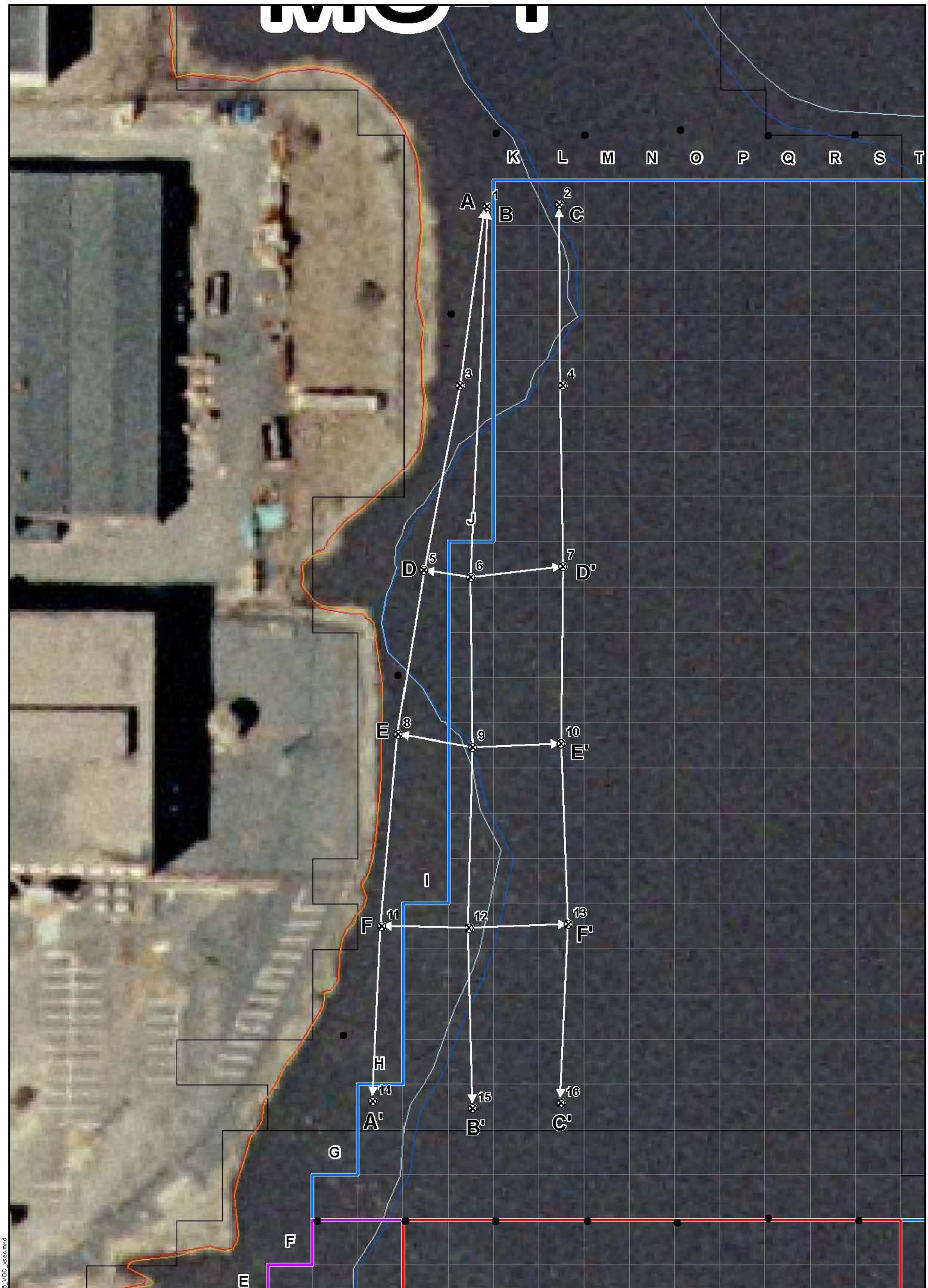
Head Space VOC Data from 10/02/06 Cores; Below Transition - 20 Minute Interval

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/03/2006

A-19

Y:\NBH\Projects\36BG0101\08\20061003\ArcGIS\Battelle_100206_VOC_lower20.mxd



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D
- Battelle Sampling Locaiton 10/02/06
- Cross Section Locations
- MLLW
- MLW
- MHW
- MHHW

Aerial Photography MASSGIS 2003

0 25 50 Feet 1:600

N

JACOBS

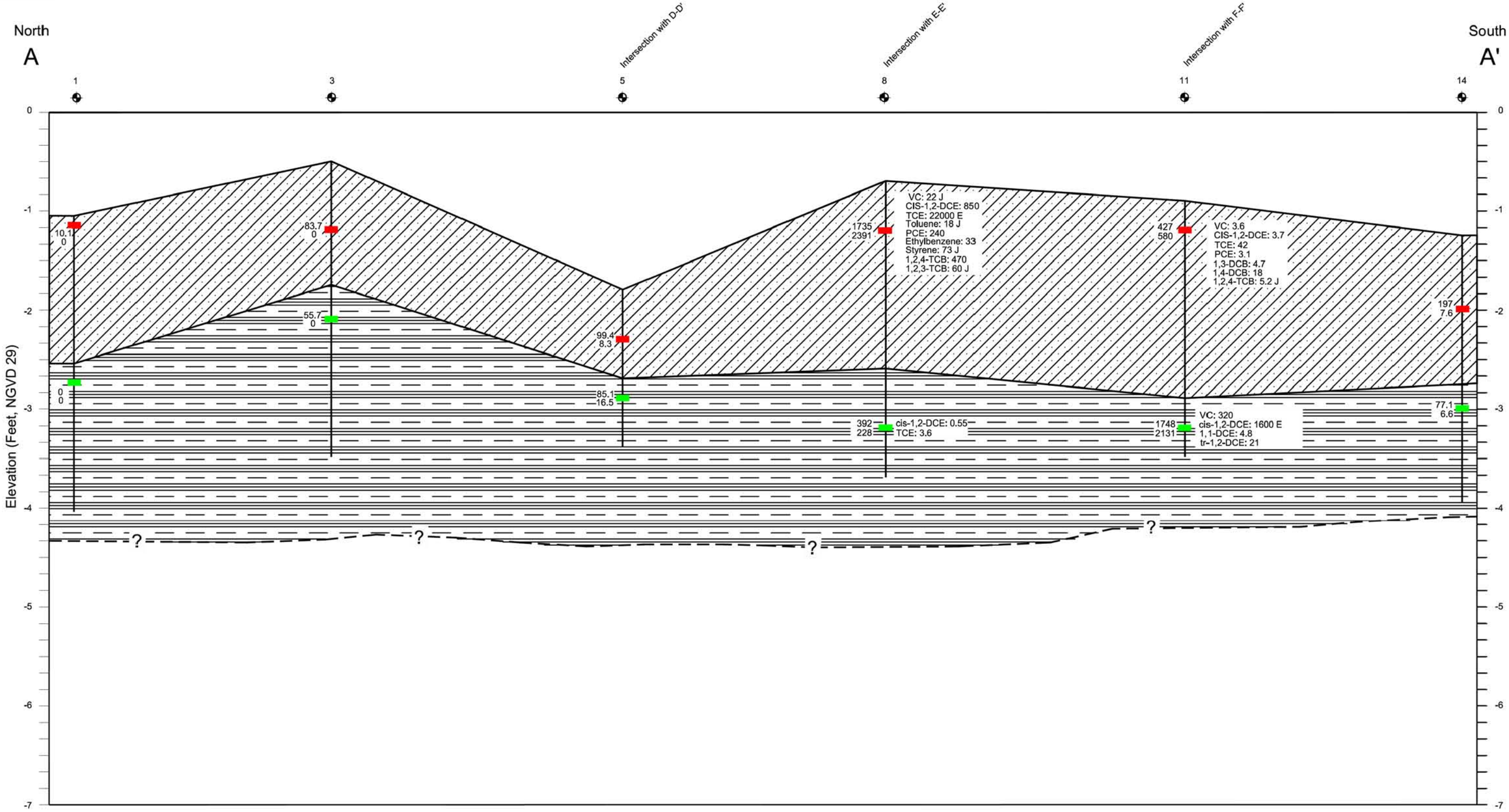
VOC Cores from 10/02/06; Cross Section Locations

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/05/2006

A-20

Y:\NBH\Projects\36BG0101\08\20061005\ArcGIS\Battelle_100206_VOC_xsec.mxd



Legend

- Battelle Core Location
- Upper Sample Location
- Lower Sample Location
- OL Layer
- OH Layer
- Water
- ? — ? — = Geologic Contact Inferred

Headspace Screening
5 min
20 min
PPM in Air

VOC Lab Data
PPM as mg/Kg

J = Estimated Value
E = Exceeds Calibration Limit; Estimated Value

1,1-Dichloroethene = 1,1-DCE
trans-1,2-Dichloroethene = tr-1,2-DCE
cis-1,2-Dichloroethene = cis-1,2-DCE
1,4-Dichlorobenzene = 1,4-DCB
1,3-Dichlorobenzene = 1,3- DCB
1,2-Dichlorobenzene = 1,2- DCB

1,2,4-Trichlorobenzene = 1,2,4-TCB
1,2,3-Trichlorobenzene = 1,2,3-TCB
Trichloroethene = TCE
Tetrachloroethene = PCE
Vinyl chloride = VC

0 V: 1 H: 60
Scale in Feet

Note: Unvalidated data used for cross section.

JACOBS

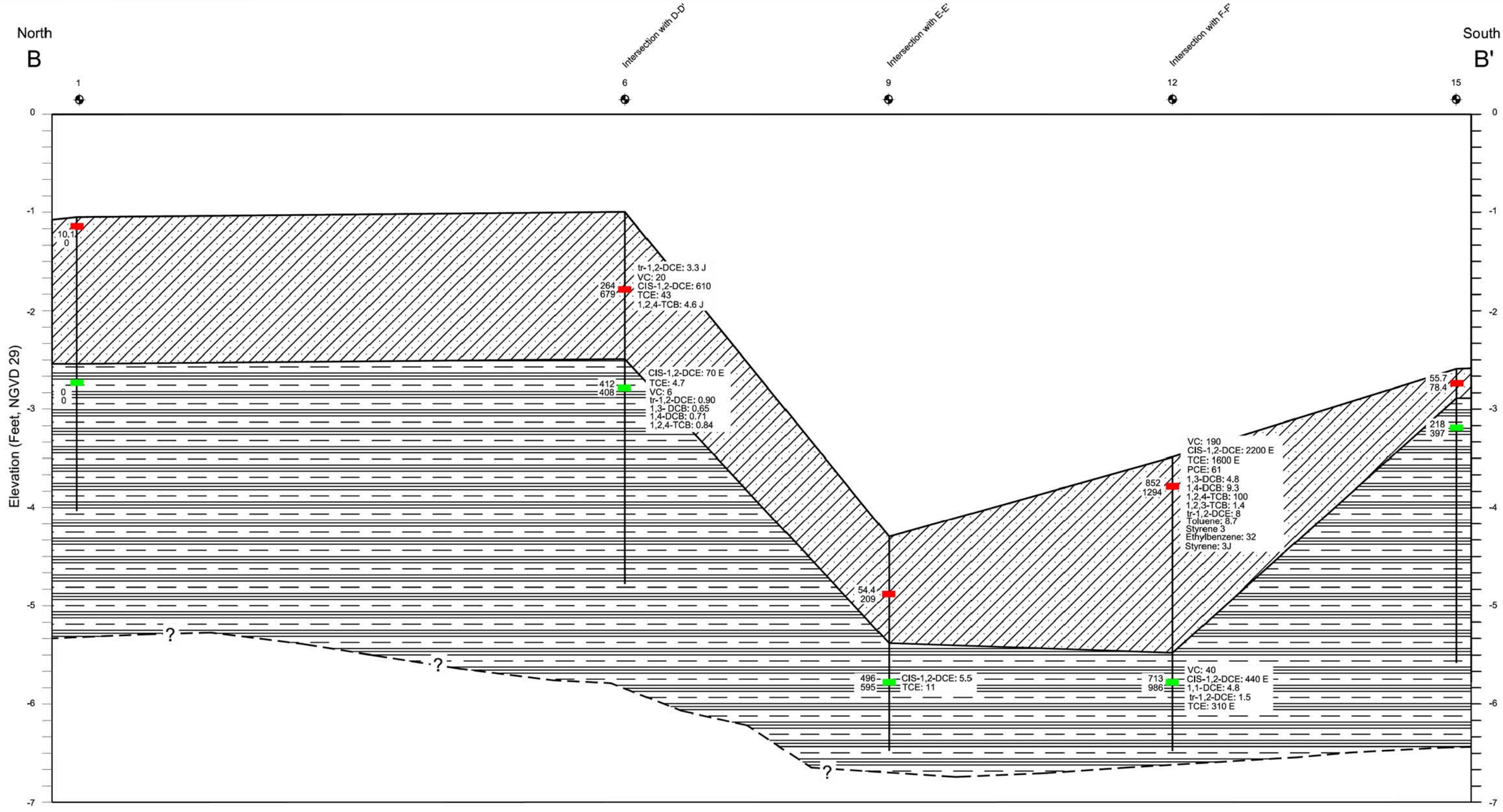
VOC Cross Section A-A' Illustrating OL Thickness and Sample Locations

New Bedford Harbor Superfund Site

01/25/07 CS VOC_xsec_AA.dwg

A-21

last modified: 01/25/07 printed: 01/25/07 by CS C:\Jacobs\20070111\CAD\VOC_xsec_AA.dwg



Legend

- Battelle Core Location
- Upper Sample Location
- Lower Sample Location
- OL Layer
- OH Layer
- Water
- Headspace Screening 5 min 20 min PPM in Air
- VOC Lab Data PPM as mg/Kg
- ? = Geologic Contact Inferred

J = Estimated Value
E = Exceeds Calibration Limit; Estimated Value

1,1-Dichloroethene = 1,1-DCE
trans-1,2-Dichloroethene = tr-1,2-DCE
cis-1,2-Dichloroethene = cis-1,2-DCE
1,4-Dichlorobenzene = 1,4-DCB
1,3-Dichlorobenzene = 1,3- DCB
1,2-Dichlorobenzene = 1,2- DCB

1,2,4-Trichlorobenzene = 1,2,4-TCB
1,2,3-Trichlorobenzene = 1,2,3-TCB
Trichloroethene = TCE
Tetrachloroethene = PCE
Vinyl chloride = VC

0 V: 1 H: 60
Scale in Feet

Note: Unvalidated data used for cross section.

JACOBS

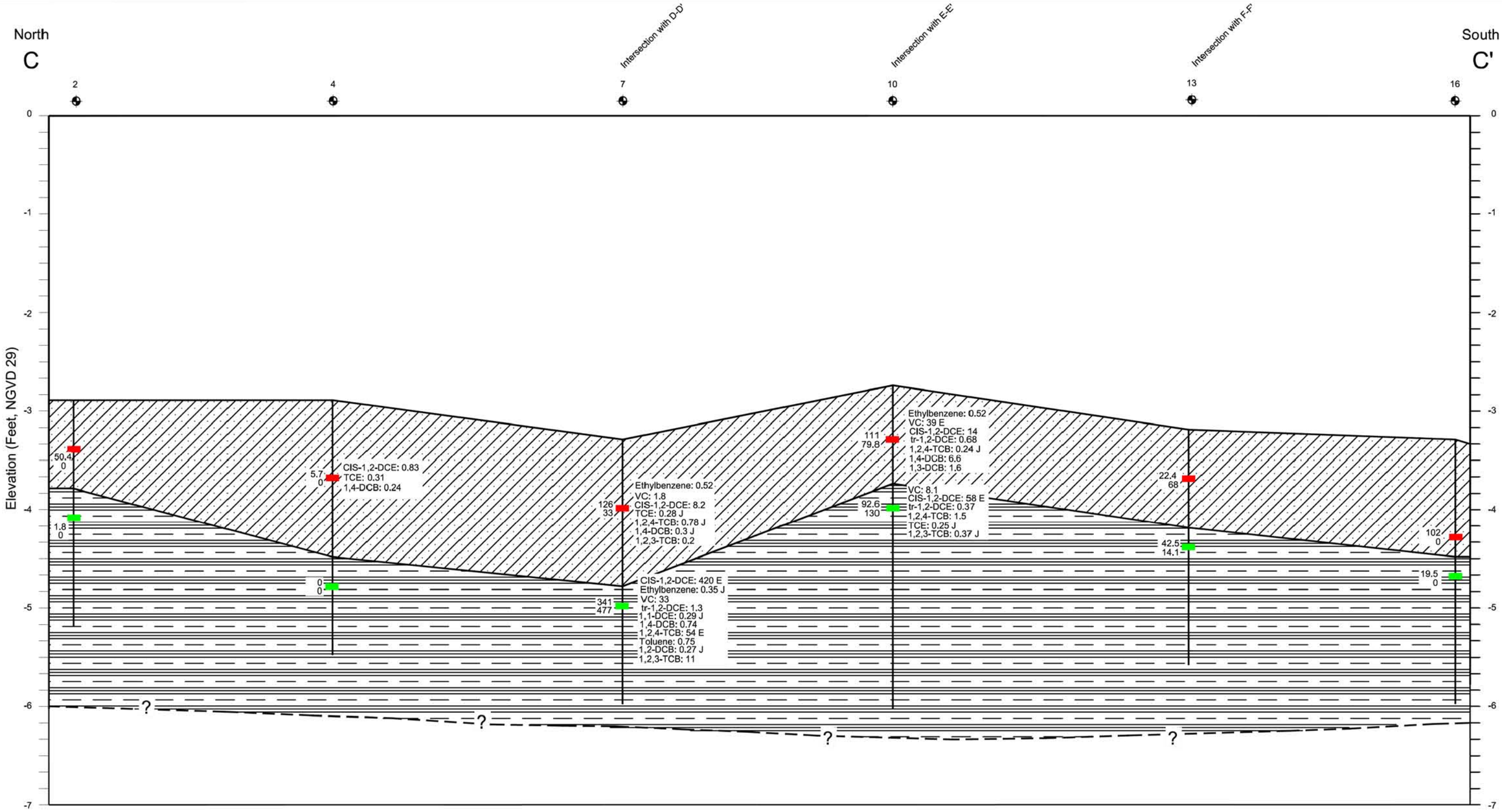
VOC Cross Section B-B' Illustrating OL Thickness and Sample Locations

New Bedford Harbor Superfund Site

01/22/07 CS VOC_xsec_BB.dwg

A-22

last modified: 01/22/07 printed: 01/22/07 by CS C:\Jacobs\20070111\CAD\VOC_xsec_BB.dwg



Legend

- Battelle Core Location
- Upper Sample Location
- Lower Sample Location
- OL Layer
- OH Layer
- Water
- —?— —?— = Geologic Contact Inferred

Headspace Screening
5 min
20 min
PPM in Air

VOC Lab Data
PPM as mg/Kg

J = Estimated Value
E = Exceeds Calibration Limit; Estimated Value

1,1-Dichloroethene = 1,1-DCE
trans-1,2-Dichloroethene = tr-1,2-DCE
cis-1,2-Dichloroethene = cis-1,2-DCE
1,4-Dichlorobenzene = 1,4-DCB
1,3-Dichlorobenzene = 1,3- DCB
1,2-Dichlorobenzene = 1,2- DCB
1,2,4-Trichlorobenzene = 1,2,4-TCB
1,2,3-Trichlorobenzene = 1,2,3-TCB
Trichloroethene = TCE
Tetrachloroethene = PCE
Vinyl chloride = VC

0 V: 1 H: 60
Scale in Feet

Note: Unvalidated data used for cross section.

JACOBS

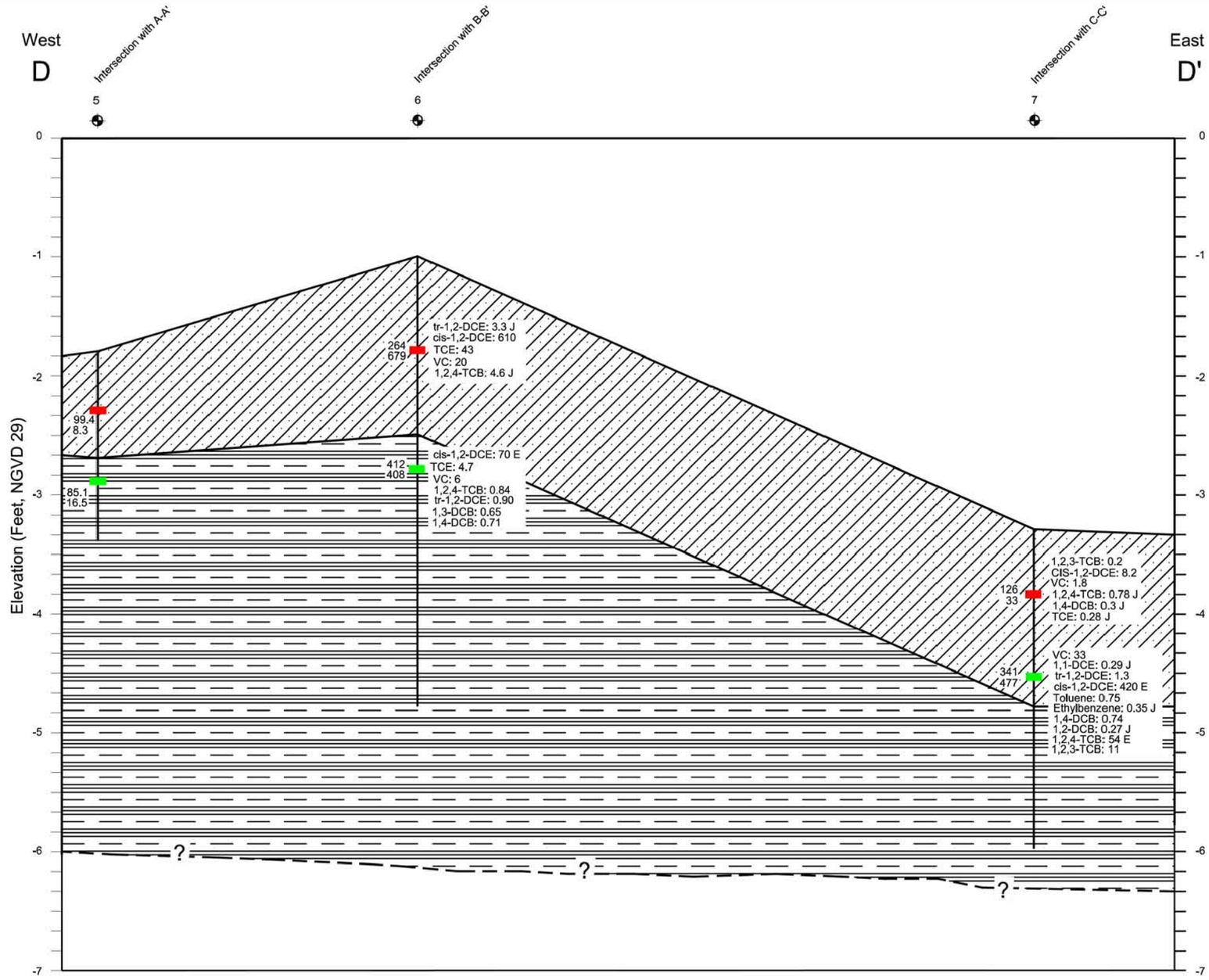
VOC Cross Section C-C' Illustrating OL Thickness and Sample Locations

New Bedford Harbor Superfund Site

01/25/07 CS VOC_xsec_CC.dwg

A-23

last modified: 01/25/07 printed: 01/25/07 by CS C:\jacobs\20070111\CAD\VOC_xsec_CC.dwg



Legend

- Battelle Core Location
- Upper Sample Location
- Lower Sample Location
- OL Layer
- OH Layer
- Water
- Headspace Screening 5 min 20 min PPM in Air
- VOC Lab Data PPM as mg/Kg
- ? ? = Geologic Contact Inferred

J = Estimated Value
E = Exceeds Calibration Limit; Estimated Value

1,1-Dichloroethene = 1,1-DCE
trans-1,2-Dichloroethene = tr-1,2-DCE
cis-1,2-Dichloroethene = cis-1,2-DCE
1,4-Dichlorobenzene = 1,4-DCB
1,3-Dichlorobenzene = 1,3- DCB
1,2-Dichlorobenzene = 1,2- DCB

1,2,4-Trichlorobenzene = 1,2,4-TCB
1,2,3-Trichlorobenzene = 1,2,3-TCB
Trichloroethene = TCE
Tetrachloroethene = PCE
Vinyl chloride = VC

0 V: 1 H: 10
Scale in Feet

Note: Unvalidated data used for cross sections.

JACOBS

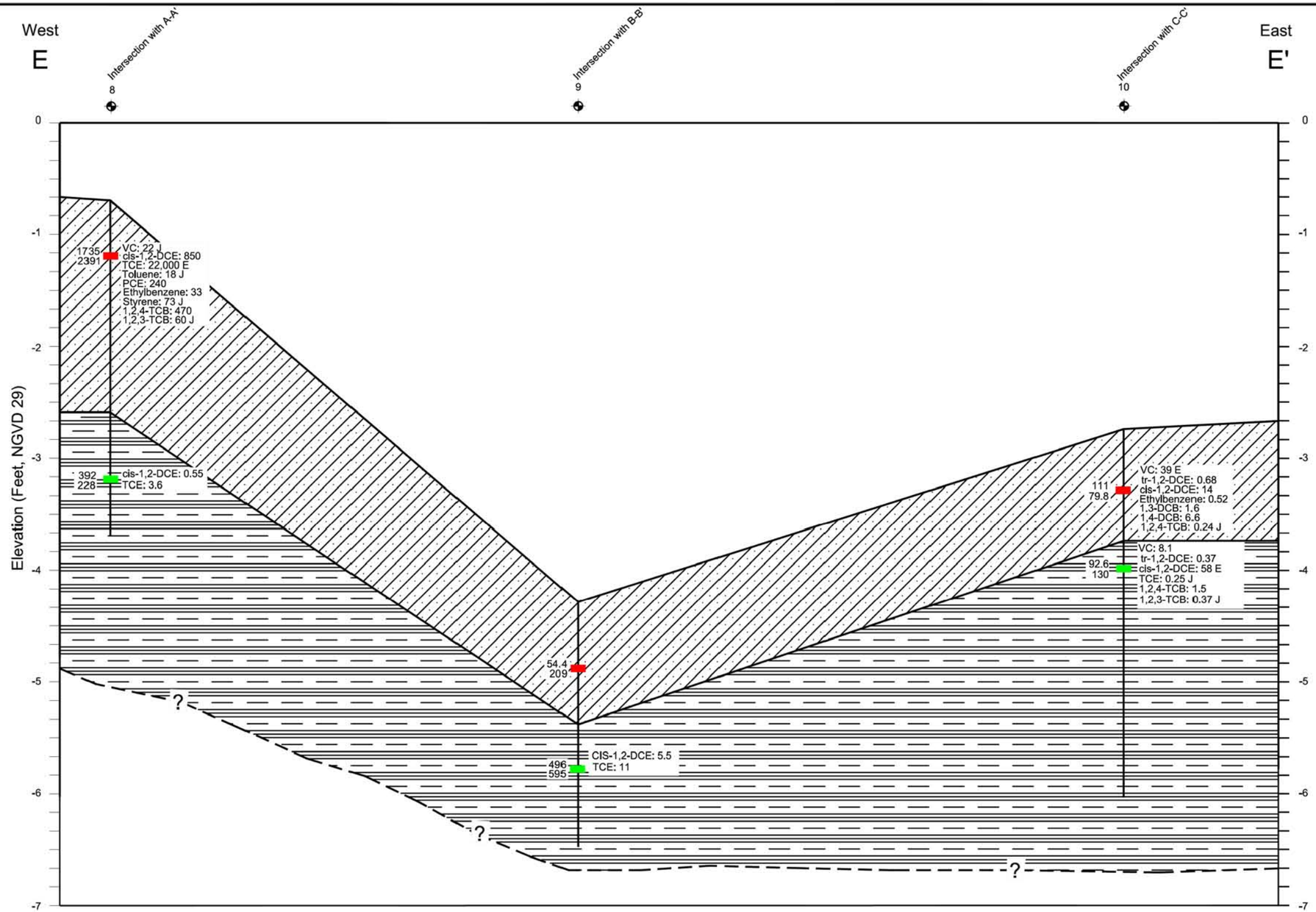
VOC Cross Section D-D' Illustrating OL Thickness and Sample Locations

New Bedford Harbor Superfund Site

01/22/07 CS VOC_xsec_DD.dwg

A-24

last modified: 01/22/07 printed: 01/22/07 by CS C:\Jacobs\20070111\CAD\VOC_xsec_DD.dwg



Legend

- Battelle Core Location
- Upper Sample Location
- Lower Sample Location
- OL Layer
- OH Layer
- Water
- Headspace Screening 5 min 20 min PPM in Air
- VOC Lab Data PPM as mg/Kg
- —?— —?— = Geologic Contact Inferred

J = Estimated Value
E = Exceeds Calibration Limit; Estimated Value

1,1-Dichloroethene = 1,1-DCE
trans-1,2-Dichloroethene = tr-1,2-DCE
cis-1,2-Dichloroethene = cis-1,2-DCE
1,4-Dichlorobenzene = 1,4-DCB
1,3-Dichlorobenzene = 1,3- DCB
1,2-Dichlorobenzene = 1,2- DCB

1,2,4-Trichlorobenzene = 1,2,4-TCB
1,2,3-Trichlorobenzene = 1,2,3-TCB
Trichloroethene = TCE
Tetrachloroethene = PCE
Vinyl chloride = VC

0 V: 1 H: 10
Scale in Feet

Note: Unvalidated data used for cross section.

JE JACOBS

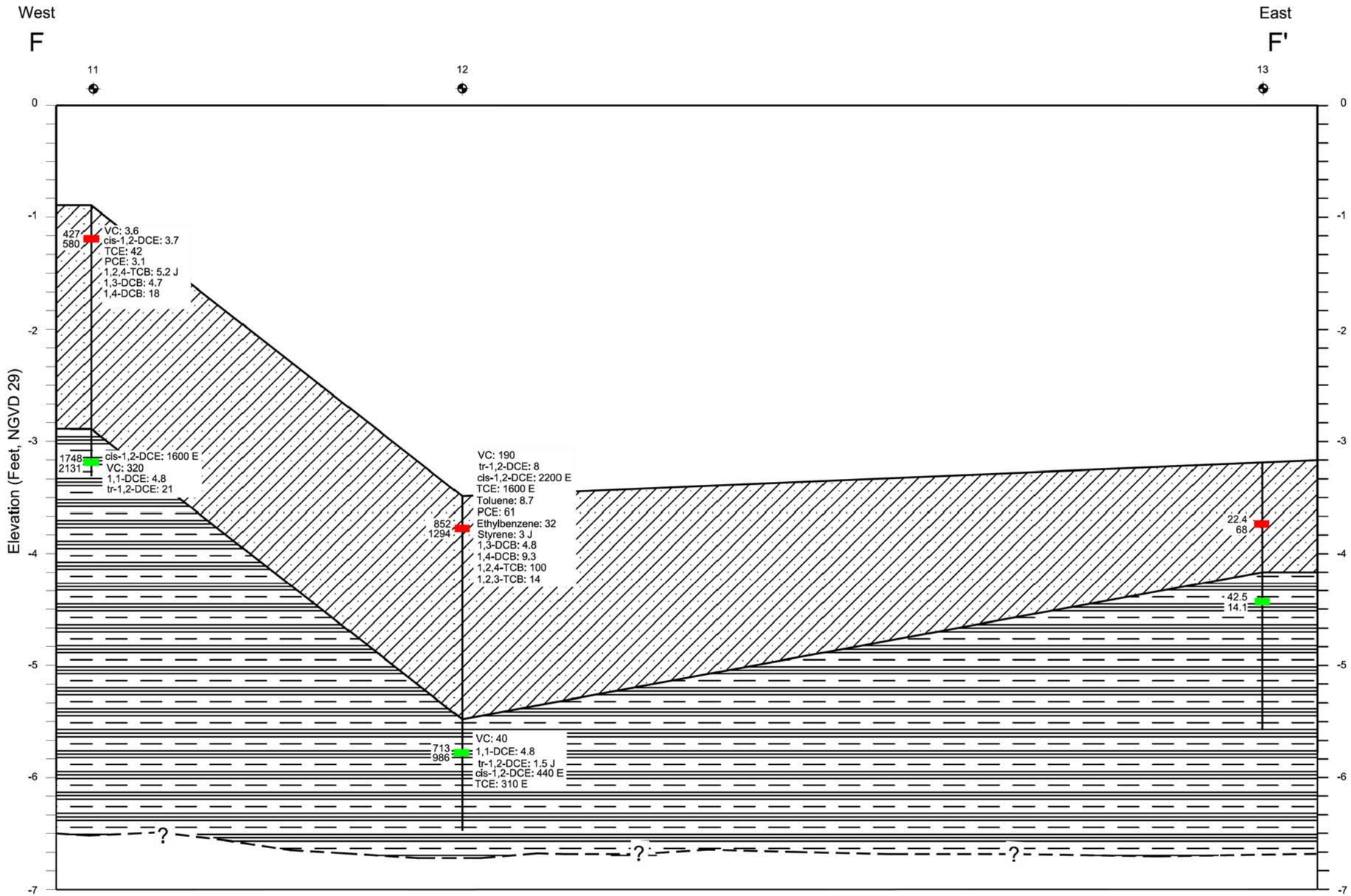
VOC Cross Section E-E' Illustrating OL Thickness and Sample Locations

New Bedford Harbor Superfund Site

01/22/07 CS VOC_xsec_EE.dwg

A-25

last modified: 01/22/07 printed: 01/22/07 by CS C:\Jacobs\20070111\CAD\VOC_xsec_EE.dwg



Legend

- Battelle Core Location
- Upper Sample Location
- Lower Sample Location
- OL Layer
- OH Layer
- Water
- Headspace Screening 5 min 20 min PPM in Air
- VOC Data PPM as mg/Kg
- ? ? = Geologic Contact Inferred

J = Estimated Value
E = Exceeds Calibration Limit; Estimated Value

1,1-Dichloroethene = 1,1-DCE
trans-1,2-Dichloroethene = tr-1,2-DCE
cis-1,2-Dichloroethene = cis-1,2-DCE
1,4-Dichlorobenzene = 1,4-DCB
1,3-Dichlorobenzene = 1,3- DCB
1,2-Dichlorobenzene = 1,2- DCB
1,2,4-Trichlorobenzene = 1,2,4-TCB
1,2,3-Trichlorobenzene = 1,2,3-TCB
Trichloroethene = TCE
Tetrachloroethene = PCE
Vinyl chloride = VC

0 V: 1 H: 10
Scale in Feet

Note: Unvalidated data used for cross section.

JACOBS

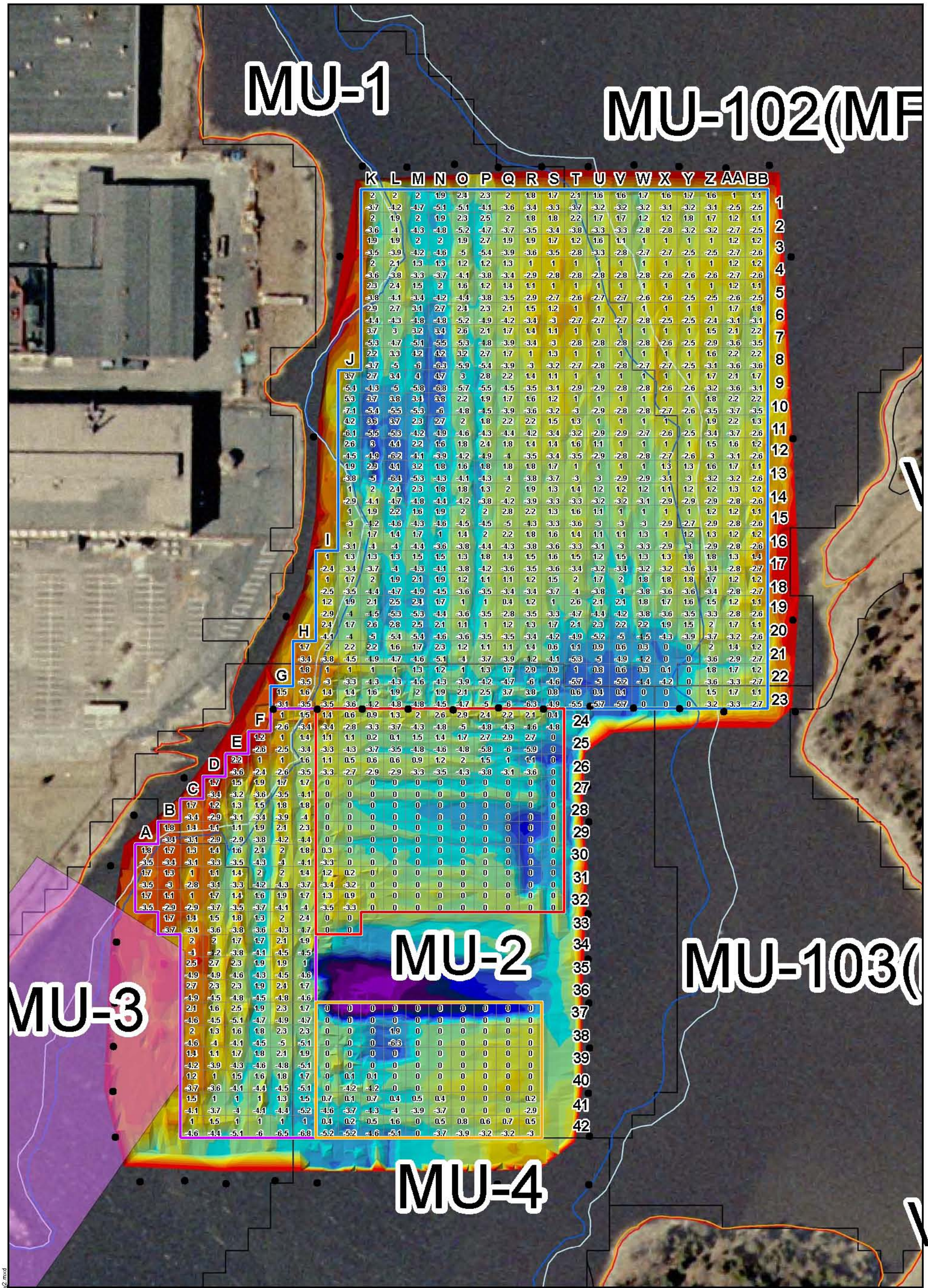
VOC Cross Section F-F' Illustrating OL Thickness and Sample Locations

New Bedford Harbor Superfund Site

01/22/07 CS VOC_xsec_FF.dwg

A-26

last modified: 01/22/07 printed: 01/22/07 by CS C:\Jacobs\20070111\CAD\VOC_xsec_FF.dwg



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Aerial Photography MASSGIS 2003

Bathymetry (10/26/06 Survey)
NGVD 29 - Feet
Elevation (ft)

-1.0 - -0.5
-1.5 - -1
-2.0 - -1.5
-2.5 - -2
-3.0 - -2.5
-3.5 - -3
-4.0- -3.5
-4.5 - -4
-5.0 - -4.5
-5.5 - -5
-6.0 - -5.5
-6.5 - -6
-7.0 - -6.5
-7.5 - -7
-8.0 - -7.5
-8.5 - -8
-9.0 - -8.5
-9.5 - -9

MLLW
MLW
MHW
MHHW

2006 Dredge Grid Blocks

2.1 — Feet of sediment to remove and actual z* (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

-3.9 — Target Elevations in feet (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

N

0 50 100 Feet 1:1,200

JACOBS

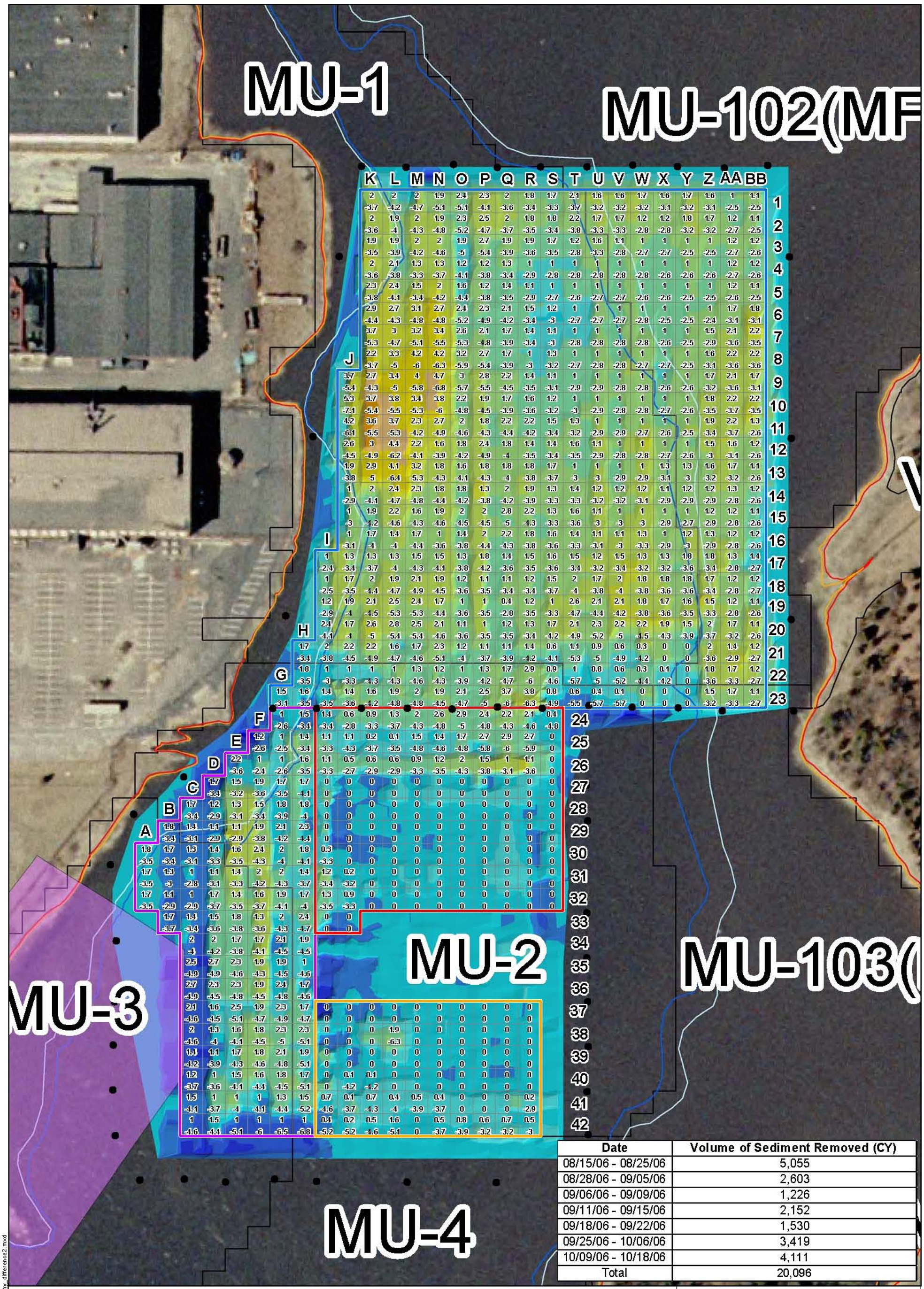
NBH Bathymetry Survey
10/26/06

New Bedford Harbor Superfund Site

NAME: croberts DATE: 10/26/2006

A-27

Y:\NBH\Projects\36B6010108\20061101\ArcGIS\20061026bathy2.mxd



Date	Volume of Sediment Removed (CY)
08/15/06 - 08/25/06	5,055
08/28/06 - 09/05/06	2,603
09/06/06 - 09/09/06	1,226
09/11/06 - 09/15/06	2,152
09/18/06 - 09/22/06	1,530
09/25/06 - 10/06/06	3,419
10/09/06 - 10/18/06	4,111
Total	20,096

Legend

Management Units

2006 Surveyed Sheet Piles

Area A

Area B

Area C

Area D

Aerial Photography MASSGIS 2003

Change in Top of Sediment Elevation (ft)

- >1.5
- 1.0 - 1.5
- 0.5 - 1
- 0 - 0.5
- -0.5 - 0
- -1.0 - -0.5
- -1.5 - -1
- -2.0 - -1.5
- -2.5 - -2
- -3.0 - -2.5
- -3.5 - -3
- -4.0 - -3.5
- -4.5 - -4.0

2006 Dredge Grid Blocks

2.1 — Feet of sediment to remove and actual z* (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

-3.9 — Target Elevations in feet (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

MLLW

MLW

MHW

MHHW

0 50 100 Feet 1:1,200

N

JACOBS

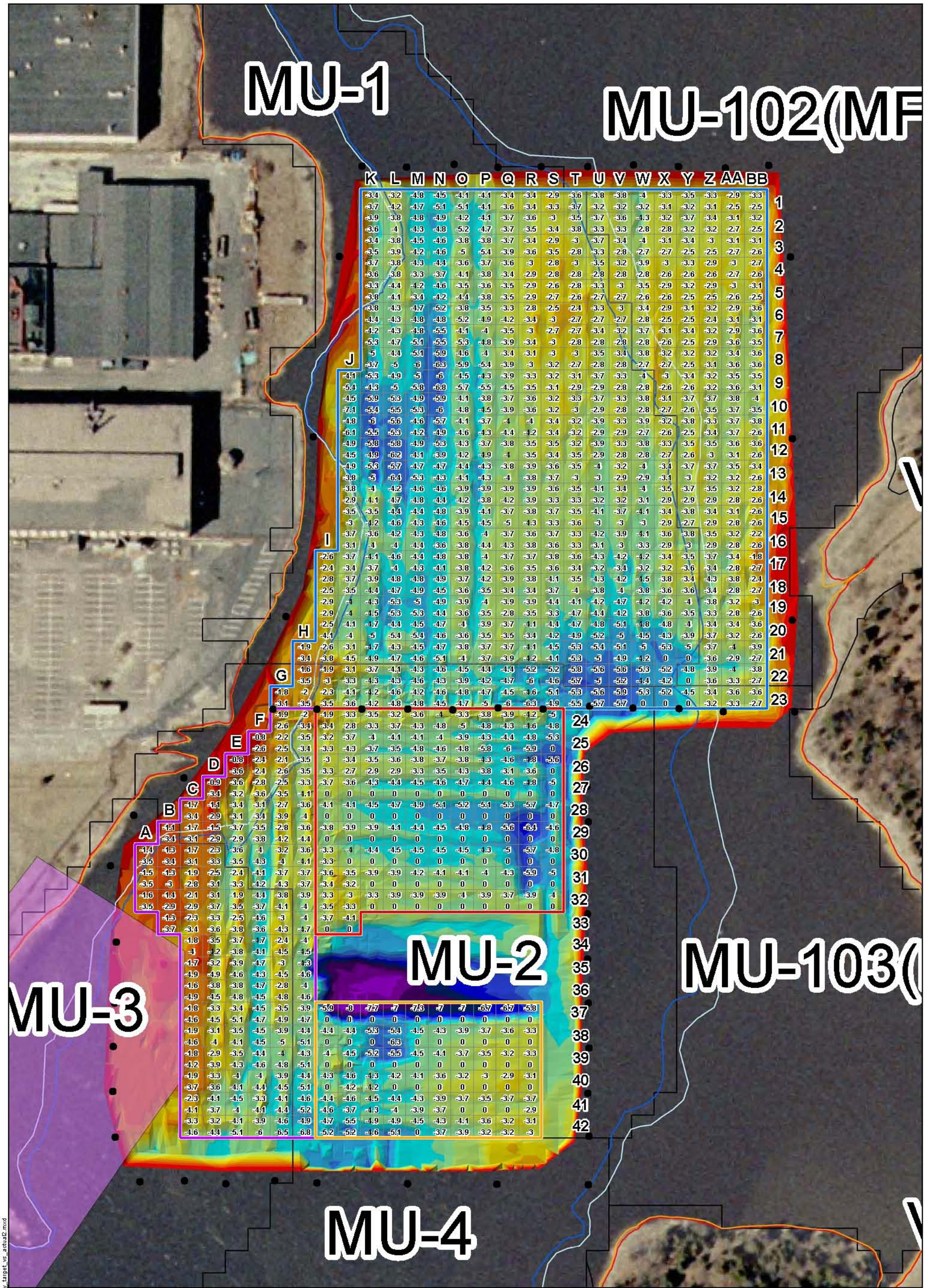
Change in Sediment Thickness From Pre-Dredge Survey to 10/26/06

New Bedford Harbor Superfund Site

NAME: croberts DATE: 11/01/2006

A-28

Y:\NBH\Projects\36B6010108\20061101\ArcGIS\20061026bathy_difference2.mxd



Legend

- Management Units
- 2006 Surveyed Sheet Piles
- Area A
- Area B
- Area C
- Area D

Aerial Photography MASSGIS 2003

Bathymetry (10/26/06 Survey)
NGVD 29 - Feet
Elevation (ft)

-1.0 - -0.5
-1.5 - -1
-2.0 - -1.5
-2.5 - -2
-3.0 - -2.5
-3.5 - -3
-4.0- -3.5
-4.5 - -4
-5.0 - -4.5
-5.5 - -5
-6.0 - -5.5
-6.5 - -6
-7.0 - -6.5
-7.5 - -7
-8.0 - -7.5
-8.5 - -8
-9.0 - -8.5
-9.5 - -9

MLLW
MLW
MHW
MHHW

2006 Dredge Grid Blocks

-3.6 — Actual Elevations in feet (relative to 10/26/06 Bathymetric Survey; NGVD 29 - ft)

-3.9 — Target Elevations in feet (relative to June 2006 Bathymetric Survey; NGVD 29 - ft)

N

0 50 100 Feet 1:1,200

JACOBS

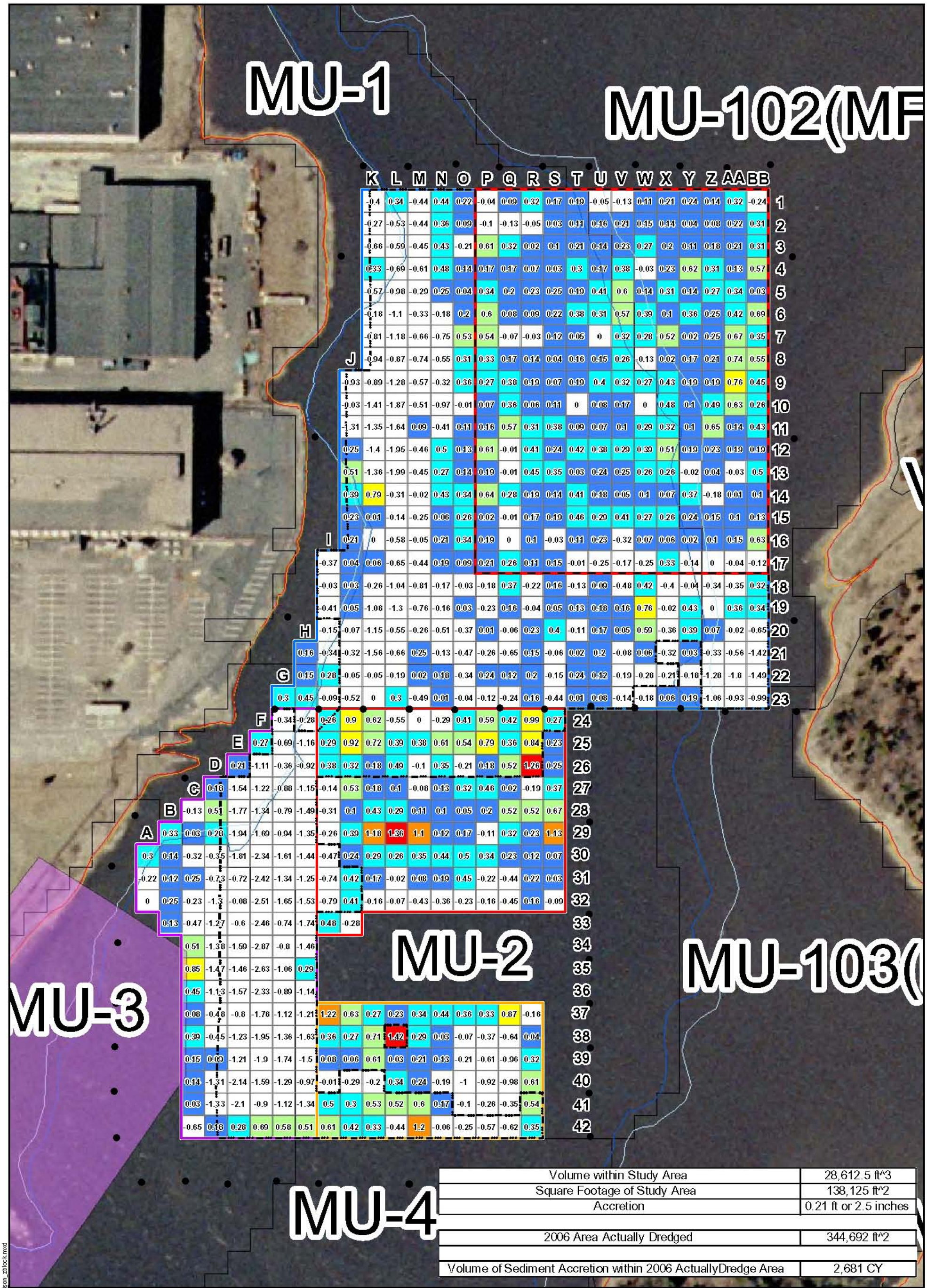
Actual Elevations vs Target Elevations: Based on 10/26/06 Bathymetry Survey

New Bedford Harbor Superfund Site

NAME: croberts DATE: 11/01/2006

A-29

Y:\NBH\Projects\36B60\01\08\20061101\ArcGIS\20061026bathy_target_vs_actual2.mxd



Volume within Study Area	28,612.5 ft^3
Square Footage of Study Area	138,125 ft^2
Accretion	0.21 ft or 2.5 inches
2006 Area Actually Dredged	344,692 ft^2
Volume of Sediment Accretion within 2006 ActuallyDredge Area	2,681 CY

Legend

2006 Surveyed Sheet Piles

Study Area for Accreation: Area = 138,125 ft^2

2006 Area Actually Dredged Area = 344,692 ft^2

Area A

Area B

Area C

Area D

Aerial Photography MASSGIS 2003

Difference between 10/07/06 Bathy and 11/07/06 Bathy (ft)

Erosion

0.00 - 0.25

0.25 - 0.50

0.50 - 0.75

0.75 - 1.00

1.001 - 1.25

1.25 - 1.5

2006 Dredge Grid Blocks

0.21

Change in Sediment Thickness (feet);
Negative number = erosion
Positive number = accretion

MLLW

MLW

MHW

MHHW

0 50 100 Feet

1:1,200

N

JACOBS

Difference Between 10/07/06 Bathy Survey and 11/07/06 Bathy Survey

New Bedford Harbor Superfund Site

NAME: croberts DATE: 11/17/2006

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ATTACHMENT B

Summary of 2006 Activities

Attachment B
Summary of 2006 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Revise/Submit Planning Documents		
Draft April 2004, Final July 2004, Addendum No. 1 May 2005 Addendum No. 2 April 2006	*Execution Plan 2004, 2004 New Bedford Harbor Remedial Action,* New Bedford Harbor Superfund Site, New Bedford, MA. *Draft Addendum No. 1 to Execution Plan 2004, 2005 New Bedford Harbor Remedial Action*. *Draft Addendum No. 2 to Execution Plan 2004, 2005 New Bedford Harbor Remedial Action*	Submittal of *Addendum No. 2 to the Execution Plan* outlining the remediation of the New Bedford Superfund Site to be accomplished for the 2006 field season.
Draft April 2004, Final September 2004	Site Specific Safety & Health Plan	The following documents were not revised in 2006.
Draft May 2004, Final September 2004	Emergency Response Contingency Plan	
Draft May 2004, Final September 2004, Revised September 2005	Construction Quality Control Plan	
Draft May 2004, Final August 2004, Revised August 2005, Revised December 2005	Field Sampling Plan	
Draft June 2004, Final September 2004, Revised May 2005	Quality Assurance Program Plan	
Draft July 2004, Final November 2004, Revised August 2005	Regulatory Compliance Plan	
Draft May 2004, Final September 2004, Revised August 2005	Transportation & Temporary Storage Plan	
Draft May 2004, Final August 2004, Revised August 2005	Environmental Protection Plan	

Attachment B
Summary of 2006 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Submittal of Initial Task Order/Subsequent Modifications		
	Modification 12	**Tasks under Mod. 12 include the following:** *Execution Plan, After Action Report*, Remedy Analysis, Bulkhead Monitoring, Asbestos Survey at Aerovox, and General Site Operations and Maintenance (O&M).
	Modification 13	**Tasks under Mod. 13 were for the following:** All of the activities associated with the 2006 CAD cell investigation including preparation, boring installation, and reporting.
	Modification 14	**Tasks under Mod. 14 were for the following:** The O&M activities for the second half of the 2006 season.
	Modification 15	**Tasks under Mod. 15 were for the following:** The mobilization, demobilization, and transportation and disposal costs associated with the first 20 days of dredging in 2006.
	Modification 16	**Tasks under Mod. 16 were for the following:** This task is associated with the incentive fee for Project 02.
	Modification 17	**Tasks under Mod. 17 were for the following:** The tasks associated with an additional 20 days of processing and the associated transportation and disposal of dredged material.
	Modification 18	**Tasks under Mod. 18 were for the following:** This task is associated with the transportation and disposal of Toxic Substances Control Act (TSCA) material generated during the 2004, 2005, and 2006 dredge seasons. This material was stored at the Area C Debris Disposal Area (DDA).
	Modification 19	**Tasks under Mod. 19 were for the following:** For an additional 5 days of dredging.
	Modification 20	**Tasks under Mod. 20 were for the following:** Reporting of 2006 season, planning, and technical support for 2007 and for the 2007 O&M season.

Attachment B
Summary of 2006 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Mobilization Activities		
July/August 2006	Mobilization of Equipment and Personnel Associated with 2006 Dredging Activities	The 2006 remobilization activites included the installation of sheet piles in Dredge Areas A, B, C, and D, mobilizing the dredges and associated dredge pipelines, staging the combined booster pump/ferric injection system at Manomet Street, and the staging of a second booster pump station at Aerovox. At Area D, the major activities were the rebuilding of the conveyor belts at the filter presses and the replacement of granular activated carbon in four lag vessels. The remainder of the mobilization activities incurred general maintanance and repair activitites necessary to initiate dredging.
August 2006	Booster Pump(s) and Ferric System Setup	Combination of booster pump and ferric sulfate injection system at Manomet Street and the associated booster pump station at Aerovox. Preparatory meeting (7/25/06), Initial Inspection (7/31/06), and Follow-up Inspection & Quality Control Report (QCR #23 - Automated Ferric Injection System).
August 2006	Service Test Pipelines and Preparation Shakedown; Dredge Systems, Area C and D	**Dredge and slurry pipelines**. Preparatory meeting (8/8/06), Initial Inspection (8/15/06) and Follow-up Inspection & Quality Control Reports (QCR #18 - 10-inch Pipe Pressure Test and QCR #19 - Scale Inspections 2006, and QCR #20 - Pipeline Service Test).
August 2006	Transportation & Disposal	Preparatory meeting (8/1/06), Initial Inspection (8/23/06).
Dredging and Associated Activities		
8/16/2006	Initiated dredging activities in Dredge Area A (primarily Dredge Management Unit-1 [DMU-1] and Dredge Area C (primarily DMU-2)	This included the start-up activities for the following support operations: **Sampling** (preparatory meeting [8/11/06] and initial inspection [8/17/06]).
8/16/2006	Initiate loading of Rail Cars with Filter Cake at Area D	The waste management process (including rail) was initiated with the 8/1/06 preparatory meeting and the subsequent 8/23/06 initial inspection. Folllow-up Inspection & Quality Control Report (QCR#22 - Railcar Loading).

Attachment B
Summary of 2006 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Dredging and Associated Activities (continued)		
9/11 through 9/15/06	Trucks were also loaded with Filter Cake at Area D during this period to supplement the rail cars.	Trucks were used in addition to rail cars because of increased filter cake production and slower than anticipated turn around time for the rail cars to return from the disposal facility.
9/21 through 9/26/06	During dredging activities in Dredge Area A (adjacent to the Aerovox shoreline), volatile organic compounds (VOCs) were detected in the breathing zone in the Desanding Plant at Area C. Therefore, operations at Area C desanding plant were conducted in Level B (supplied air).	The workers in the desanding plant were placed on supplied air (Level B) during this period. Based upon the levels of VOCs detected in the desanding plant, the decision was made to discontinue dredging activities in the high VOC area. Following testing of the air within the Desanding Building at Area C, the required personnel protection equipment (PPE) was downgraded from Level B (supplied air) to Level D based upon the levels of VOCs detected in the desanding plant.
9/26/2005	Debris removal activities were completed in the 2006 Dredge Footprint.	On September 26, 2006, debris removal activities in the active dredge areas were completed for the 2006 season. In addition, at the direction of the EPA and NAE, debris removal activities were conducted on the eastern boundary of proposed Confined Disposal Facility (CDF) A, along the eastern boundary of Dredge Area B.
10/11 through 10/13/06	Sand and coarse materials were transported offsite from the Area C DDA stockpiles.	During this period, H & S, the subcontracted transportation and disposal subcontractor, removed approximately 914 tons of sand and coarse material from the existing Area C stockpiles.
10/13/2006	Completed the first 40 days of Dredging	This is for the dredging activitites completed under Mods 15 and 17, which both included 20 days of dredging.
10/18/2006	Completed the 2006 Dredge Season	These final days of dredging were completed under Mod 19.

Attachment B
Summary of 2006 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
10/16 through 10/31	Additional sand and coarse materials were transported offsite from the Area C DDA stockpiles	During this period, H & S removed approximately 2,595 tons of additional sand and coarse material from the existing Area C stockpiles. This activity was conducted under Mod. 19.
Air Monitoring Activities		
Not Conducted in 2006	Pre-Dredge Background Sampling	In 2006, pre-dredge sampling activities were not conducted.
8/30-31/2006	1st Round of Monthly Air Sampling	During this sampling round and the two subsequent 2006 sampling rounds, one (1) duplicate and one (1) field blank were also collected and submitted for analysis. In addition, the samples during each of the three rounds were collected with polyurethane foam (PUF) samples with glass fiber pre-filter using a BGI, PQ-1, Low-Vol sampler. Air samples were collected from six (6) sampling locations. Preparatory Meeting (8/30/06), Initial Inspection 8/30/06, and the follow-up Inspection Quality & Control Report (QCR #26 - Air Sampling Audit).
10/4-5/2006	2nd Round of Monthly Air Sampling	Air samples were collected from six (6) sampling locations.
11/17-18/2006	Post Dredge Round of Air Sampling	Air samples were collected from five (5) sampling locations.

Attachment B
Summary of 2006 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Bathymetric Survey		
6/6 and 6/9/2006	Pre-Dredge Survey in Dredge Areas A, B, C, and D	Survey conducted by Apex. Preparatory Meeting (8/11/06), Initial Inspection (8/26/06). Follow-up Inspection & Quality Control Report (QCR #27 - Final Bathymetric Survey Data).
8/26/2006	Bathymetric Survey in Dredge Areas A, C, and D	Survey conducted by Apex.
9/9/2006	Bathymetric Survey in Dredge Area A	Survey conducted by Apex.
9/16/2006	Bathymetric Survey in Dredge Areas A and C	Survey conducted by Apex.
9/23/2006	Bathymetric Survey in Dredge Areas A and C	Survey conducted by Apex.
10/7/2006	Bathymetric Survey in Dredge Area A and the survey of Dredge Area C was cut short due to tides	Survey conducted by Apex.
10/26/2006	First Final Bathymetric Survey in Complete 2006 Dredge Area	Survey conducted by Apex. The survey data from this survey was not used due to the poor data quality, which was attributed to the high winds that were experienced during this survey.
11/7/2006	Second Final Bathymetric Survey in Complete 2006 Dredge Area	Survey conducted by Apex.
Winterization Activities		
10/19/06 - 11/1/06	Winterization	Winterization activities were completed for the following operations: Dredge Areas A, B, C, and D; combined ferric sulfide treatment system/booster pump station at Manomet Street; pump station at Aerovox, docks at Area C; remove debris scows at Area C; remove dredges at Area D; DDA storage; desanding building (Area C); pipeline from dredge area to Area C: and dewatering plant (Area D). Preparatory Meeting (10/17/06), Initial Inspection (10/27/06), Follow-up Inspection Quality & Contro Report (QCR #25 - 2006 Winterization).

ATTACHMENT C

VOC Related Information

Table C-1
Summa Canister Results for Selected VOCs
New Bedford Harbor Superfund Site - 2006 Season

Location/Sampling Date	VOC Constituent	Concentration (ppbv)	Converted Concentration (ppmv)	8 Hour TLV (ppm)	12 Hour TLV (ppm)	Percent of Individual TLV	Percent of TLV for Sample
Area C Desanding Plant First Sample (9/22/06)	PCE	25	0.025	25	16.67	0.15	
	TCE	1900	1.9	50	33.33	5.7	
	cis 1,2-DCE	660	0.66	200	133.33	0.5	
	Vinyl Chloride	310	0.31	1	0.67	46.5	
							52.85
Area C Desanding Plant Second Sample (9/26/06)	PCE	1.6	0.0016	25	16.67	0.01	
	TCE	35	0.035	50	33.33	0.11	
	cis 1,2-DCE	200	0.2	200	133.33	0.15	
	Vinyl Chloride	69	0.69	1	0.67	10.35	
							10.61
Area D Filter Presses Sample (9/26/06)	PCE	1.2	0.0012	25	16.67	0.01	
	TCE	34	0.034	50	33.33	0.1	
	cis 1,2-DCE	270	0.27	200	133.33	0.2	
	Vinyl Chloride	38	0.038	1	0.67	5.7	
							6.01
Area D WWTP Sample (9/26/06)	PCE	2.2	0.0022	25	16.67	0.01	
	TCE	43	0.043	50	33.33	0.13	
	cis 1,2-DCE	150	0.15	200	133.33	0.11	
	Vinyl Chloride	20	0.02	1	0.67	3	
							3.25

Notes:
The analytical results for the four major VOCs detected are presented in this table. The other VOCs detected are available upon request
cis-1,2-DCE = cis 1,2-dichloroethylene
pbv = parts per billion volume
PCE = Tetrachloroethene
ppm = parts per million
ppmv = parts per million volume
TCE = trichloroethene
TLV = threshold limit value
VOC = volatile organic compounds

Table C-2
VOC and PCB Results for Area C and D GAC Effluent
New Bedford Harbor Superfund Site - 2006 Season

Sampling Date	Sampling Location	Analyte [1]	Concentration (ppmv)
10/18/06	Area C Desanding Plant GAC Filter Effluent	PCE	ND
		TCE	ND
		cis 1,2-DCE	0.46
		Vinyl Chloride	0.016
		PCBs	ND
10/18/06	Area D Mix Tank GAC Filter Effluent	PCE	ND
		TCE	30
		cis 1,2-DCE	33
		Vinyl Chloride	ND

Notes:

1) At Area C, both volatile organic compound (VOCs) and polychlorinated biphenyls (PCBs) were analyzed for. Only VOC samples were collected and submitted for analysis from Area D. The VOCs samples were collected using low flow Summa canisters, which were run for 8 hours and 1/2 hours at Area C and D, respectively. The PCBs were collected using low flow sampling (EPA TO-10A Methodology) over a duration of 2 hours.

cis-1,2-DCE = cis 1,2-dichloroethylene
GAC = granulated activated carbon
ND = Not detected
PCE = Tetrachloroethene
ppmv = parts per million volume
TCE = trichloroethene

ATTACHMENT D

Sample Analytical Summary Tables

Table D-1
Summary of Area C Fine Screenings Analytical Data
New Bedford Harbor Superfund Site - 2006 Season

					Concentration Units mg/kg [1]														
Location ID	**Collection Date**	**Control Number**	**Total Aroclors [2] (mg/kg)**	**Oil and Grease (ppm) [3]**	**Antimony**	**Arsenic**	**Beryllium**	**Cadmium**	**Chromium**	**Copper**	**Lead**	**Mercury**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Zinc**	**Total Cyanide**	**% Solids**
V1-081706	8/17/2006	NB-D000201	142.4	1600	0.80U [4]	1.7	0.52U	1.05U	16	33.4	126	0.207	6.1	1.0U	1.6U	1.6U	275.0	0.50U	81.5
V1-081806	8/18/2006	NB-D000801	113.3	2000	0.29U	1.7	0.13B [5]	0.62B	25.3	44.1	272	0.140	9.2	0.40U	0.44B	0.60U	106.0	0.50U	78.6
V1-082306	8/23/2006	NB-D001201	48.0	1300	0.25U	1.4	0.09U	0.36U	11.1	28.2	57.4	0.140	3.6	0.37U	0.18B	0.55U	83.4	0.50U	81.0
V1-082506	8/25/2006	NB-D001401	48.0	1400	0.29U	1.7	0.19B	0.26U	16.8	39.6	76.9	0.400	6.4	0.39U	0.12U	0.59U	102.0	0.50U	73.6
V1-082906	8/29/2006	NB-D001601	57.0	1900	0.29U	1.8	0.16B	0.55B	23	58.8	101.0	0.150	10.0	0.44U	0.56B	0.66U	271.0	0.50U	74.4
V1-083106	8/31/2006	NB-D002001	93.1	1200	0.29U	1.0	0.13B	0.60U	15.9	33.2	54.6	0.160	6.3	0.51B	1.4B	0.66U	83.0	0.50U	80.6
V1-090806	9/8/2006	NB-D002301	124.5	1600	0.29U	1.2	0.16B	0.38U	18.3	471	122	0.190	6.6	0.43U	0.21U	0.65U	117.0	0.50U	80.0
V1-091206	9/12/2006	NB-D002601	44.1	990	0.30U	1.6	0.16B	0.46B	22.6	33.3	64.6	0.140	5.9	0.45U	0.24B	0.67U	70.9	0.50U	81.5
V1-091406	9/14/2006	NB-D002801	68.0	1100	0.25U	1.4	0.18B	0.43B	22.9	31.0	57.4	0.490	6.9	0.38U	0.45U	0.65U	88.0	0.50U	81.8
V1-091906	9/19/2006	NB-D003201	170.0	1300	0.21U	1.2	0.12B	0.30B	83.1	35.1	61.1	0.110	8.1	0.32U	0.28B	0.47U	65.7	0.60U	82.0
V1-092206	9/22/2006	NB-D003301	180.0	1900	0.30U	1.6	0.16B	0.70B	31.5	76	74.5	0.290	10.7	0.45U	0.27B	0.67U	117	0.50U	81.4
V1-092806	9/28/2006	NB-D003601	419.0	2600	0.28U	1.4	0.16B	0.58B	20.7	69	67.3	0.100	9.4	0.43U	0.29B	0.64U	91.4	0.55U	82.7
V1-100406	10/4/2006	NB-D003901	124.2	1300	0.27U	1.4	0.13B	0.44B	18.1	44.9	61.0	0.270	6.5	0.41U	3.4	0.61U	85.4	0.60U	82.4
V1-100906	10/9/2006	NB-D004201	175.2	1200	0.24U	1.4	0.17B	0.22B	20.9	45.6	37.8	0.090	7.2	0.37U	1.2B	0.55U	60.5	0.60U	83.5
V1-101206	10/12/2006	NB-D004401	554.0	2300	0.27U	1.8	0.22B	0.39B	21.2	51.3	72.1	0.320	10.4	0.40U	0.76B	0.60U	83.1	0.50U	83.0
V1-101606	10/16/2006	NB-D004901	588.0	2200	0.25U	1.4	0.20B	0.72B	20.9	82.1	87.5	0.120	8.5	0.37U	0.45B	0.56U	112	0.50U	85.1
Split Sample Laboratory: STL																			
V1-101206	10/12/2006	NB-D004601	380.0	NA [6]	1.1U	1.7	0.32B	0.39B	18.1	82.6	67.1	0.094	8.7	0.41U	0.23B	0.77U	225	0.57U	82.3

Notes:
1) mg/kg = milligrams per kilogram
2) Aroclors originally reported as individual Aroclors in lab reports, shown here as sum total of Aroclors.
3) Oil and grease originally reported on a percent by weight basis, converted to parts per million (ppm).
4) U qualifier indicates analyte not detected above method detection limit (MDL).
5) B qualifier on metals results indicates an estimated concentration above MDL but below reporting limit.
6) NA = Not analyzed, V1-101206 split sample oil and grease analysis not performed.

The Toxic Substances Control Act (TSCA) threshold concentration for polychlorinated biphenyls (PCBs) is 50 mg/kg.
Composite samples were collected approximately every 100 tons of sand generated.

Table D-2
Area C and D Sieve Samples Geotechnical Summary
New Bedford Harbor Superfund Site - 2006 Season

Area C Sand
Laboratory: Geotesting Express

Location ID	Control Number	% Gravel [2]	% Sand [3]	% Silt & Clay
V1-081806	NB-D000901	0.2	83.3	16.5
V1-083106	NB-D002201	2.3	80.7	17.0
V1-091406 [1]	NB-D003001	1.0	11.6	87.4
V1-092806	NB-D003801	0.2	76.1	23.7
V1-101206	NB-D004801	0.2	74.7	25.1

Area D Filter Cake
Laboratory: Geotesting Express

Location ID	Control Number	% Gravel[4]	% Sand	% Silt & Clay
V2-081806	NB-D000902	8.1	47.7	44.2
V2-083006	NB-D002202	0.1	28.1	71.8
V2-091206 [1]	NB-D003002	0.0	83.7	16.3
V2-092506	NB-D003802	16.5	28.2	55.3
V2-101106	NB-D004802	0.0	3.7	96.3

Area C Sand
Laboratory: JE Onsite Field Sieving

Location ID	Control Number	% Gravel	% Sand	% Silt & Clay
V1-081706	NA	0.2	75.4	24.4
V1-081806	NA	0.0	86.0	14.0
V1-082306	NA	1.0	85.6	13.4
V1-082506	NA	3.0	75.9	21.1
V1-082906	NA	0.0	78.5	21.5
V1-083106	NA	1.1	81.6	17.3
V1-090806	NA	0.6	80.8	18.6
V1-091206	NA	0.6	82.4	17.0
V1-091406	NA	0.3	84.5	15.3
V1-091906	NA	0.4	87.4	12.3
V1-092206	NA	0.1	84.3	15.6
V1-092806	NA	0.5	82.6	16.9
V1-100906	NA	0.4	85.4	14.3
V1-101206	NA	0.0	83.6	16.4
V1-101606	NA	0.7	90.6	8.7
Onsite Average:		**0.6**	**83.0**	**16.5**

Notes:
1) Geotest Samples V2-091206 & V1-091406 appear to have been switched; however, the lab has been unable to confirm.
2) Gravel sieve retains material greater than 1/4 inch.
3) Sand sieve retains material greater than #200 mesh.
4) Gravel content of filter cake likely result of clumped sediment hardened during drying; no gravel observed during sample preparation.

Table D-3
Summary of Analytical Results for Sampling of 2004 and 2005 Coarse Screenings
New Bedford Harbor Superfund Site - 2006 Season

Sample ID	Description	Date Sampled	Sample Type	Total Aroclors [1] (mg/kg)	Percent Solids
V3-05-062106-South	2005 Oversize South Pile	6/21/2006	Composite	1239	63.5
V3-05-062106-North	2005 Oversize North Pile	6/21/2006	Composite	884	86
V3-04-062106	2004 Oversize Pile	6/21/2006	Composite	294	64.8

Notes:
1) Aroclors originally reported in lab reports as individual Aroclors, shown here as sum total of Aroclors.
mg/kg = milligrams per kilogram

Table D-4
Summary of Analytical Data for Area D Filter Cake
New Bedford Harbor Superfund site - 2006 Season

2006 Area D Filter Cake Laboratory : Katahdin Analytical Services							Concentration Units mg/kg [1]														
Location ID	Collection Date	Control Number	Drops		Total Aroclors [2] (mg/kg)	Oil and Grease (ppm) [3]	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	Total Cyanide	% Solids
V2-081806	8/18/2006	NB-D000301	1	65	420.0	7600	0.35U [4]	11.6	0.72	7.9	170	545	400	1.80	36.5	1.7	2.8	0.79U	1530	0.50U	60.0
V2-082206	8/22/2006	NB-D001301	66	141	245.1	5500	0.40U	10.5	0.73	4.5	150	438	328	1.60	29.2	1.1B [5]	1.0B	0.90U	1110	0.50U	61.7
V2-082406	8/24/2006	NB-D001501	142	233	203.6	5400	0.38U	10.7	0.53B	3.9	110	390	285	1.40	24.8	0.84B	0.84B	0.85U	972	0.50U	62.7
V2-082806	8/28/2006	NB-D001701	234	322	346.6	7400	0.42U	11.8	0.76B	5.4	167	518	370	1.60	35.6	2.6	1.3B	0.94U	1460	0.50U	59.1
V2-083006	8/30/2006	NB-D002101	323	415	541.0	11000	0.41U	11.4	0.79	5.5	188	538	367	1.60	38.4	0.90B	1.4B	0.92U	1540	0.50U	58.5
V2-090706	9/7/2006	NB-D002401	416	510	470.7	11000	0.39U	11.3	0.76	5.2	186	529	348	1.20	38.7	1.5	1.3B	0.87U	1320	0.50U	60.4
V2-091206	9/12/2006	NB-D002701	511	591	480.0	12000	0.42U	10.7	0.86	5.7	221	529	354	0.96	38.4	1.8	2.7	0.95U	1230	0.50U	58.9
V2-091506	9/15/2006	NB-D002901	592	672	440.0	4700	0.39U	9.0	0.76	4.4	188	331	246	0.87	34.2	0.87B	1.6B	0.87U	701	0.50U	58.4
V2-092006	9/20/2006	NB-D003401	673	750	970.0	9000	0.42U	9.4	0.78	5.2	201	415	275	0.86	41.0	0.63U	2.0B	0.94U	715	0.85U	56.9
V2-092506	9/25/2006	NB-D003701	751	860	1457.0	12000	0.80U	11.6	0.84	6.7	309	822	490	1.70	50.7	0.98B	3.0	0.90U	1420	0.85U	56.6
V2-100306	10/3/2006	NB-D004001	861	972	2893.0	7700	0.41U	7.7	0.91	3.9	173	341	195	0.68	38.0	0.62U	1.4B	0.92U	540	0.80U	57.5
V2-100606	10/6/2006	NB-D004301	973	1063	1114.0	6300	0.40U	9.5	0.84	5.4	207	538	321	1.00	40.1	1.2B	2.4	0.89U	1210	0.85U	57.9
V2-101106	10/11/2006	NB-B004501	1064	1158	1636.0	5800	0.38U	9.2	0.85	3.8	196	474	261	0.83	38.8	0.57U	1.8B	0.85U	729	0.55U	58.9
V2-101606	10/16/2006	NB-B005001	1159	1282	1743.0	5300	0.41U	8.8	0.95	6.0	173	354	234	0.64	34.8	1.1B	0.92B	0.92U	766	0.60U	60.2
V2-102006	10/20/2006	NB-B005201	1283	1375	2549.0	7800	0.72U	9.2	0.91	6.7	192	427	270	0.82	37.0	1.1B	1.1B	0.81U	923	0.70U	60.4
Split Sample Laboratory: STL																					
V2-101106	10/11/2006	NB-D004701	1064	1158	1450	NA [6]	1.5U	8	0.71	2.7	161	402	229	0.79	29.6	0.93B	1.8	1.1U	836	0.78U	59

Notes:
1) mg/kg = milligrams per kilogram
2) Aroclors originally reported in lab reports as individual Aroclors, shown here as sum total of Aroclors.
3) Oil and grease originally reported in lab reports on a percent by weight basis, converted to parts per million (ppm).
4) U qualifier indicates analyte not detected above method detection limit (MDL).
5) B qualifier on metals results indicates an estimated concentration above MDL but below report limit.
6) V2-101106 split sample oil and grease analysis not performed.

The Toxic Substances Control Act (TSCA) threshold concentration for polychlorinated biphenyls (PCBs) is 50 mg/kg.
Composite samples were collected approximately every 550 tons of filter cake generated.

Table D-5
Summary of WWTP Analytical Results
New Bedford Harbor Superfund Site - 2006 Season

2006 Area D Waste Water Treatment Plant
Laboratory: STL

Sample Date	COC #	Concentration Units µg/L [2]											
		Effluent					Midpoint		Influent				
		Total Aroclors [1]	Copper	Cadmium	Chromium	Lead	Total Aroclors	Copper	Total Aroclors	Copper	Cadmium	Chromium	Lead
8/16/2006	NB-D0001	0.048U [3]	7.1B [4]	0.40U	1.3U	2.0U	0.050U	11.8B	6.1	12.6B	0.40U	1.4B	5.1B
8/17/2006	NB-D0005	0.048U	11.0B	0.40U	1.3U	2.0U							
8/18/2006	NB-D0006	0.049U	4.1B	0.40U	1.3U	2.0U	0.048U	6.5B	8.6	11.5B	0.40U	1.3U	2.0U
8/21/2006	NB-D0010	0.048U	5.1B	0.41B	1.0U	2.7U							
8/22/2006	NB-D0011	0.048U	3.0B	0.40U	1.0U	2.7U	0.049U	5.8B	19	14.8B	0.40U	2.5B	2.7U
8/30/2006	NB-D0018	0.047U	2.2U	0.40U	1.3U	2.0U	0.047U	4.1B					
9/8/2006	NB-D0025	0.047U	3.0B	1.0B	1.0U	2.7U	0.048U	2.5B					
9/15/2006	NB-D0031	0.047U	2.2U	0.67B	1.3U	2.0U	0.048U	3.1B					
9/15/2006	Field Dup	0.047U	2.7B	0.42B	1.3U	2.0U	0.048U	4.3B					
10/6/2006	NB-D0041	0.047U	2.2B	0.50U	0.70U	2.8U	0.048U	3.4B	80	14.7B	0.50U	4.4B	2.8U

Split Sample Laboratory :
Katahdin Analytical Services

8/18/2006	NB-D0007	0.050U	1.1U	0.50U	0.69U	1.80U	0.050U	1.1U	6.1	8.0B	0.50U	1.1B	3.1B
ROD discharge limits for Effluent [5]:		0.065 µg/L per Aroclor	5.6 µg/L	9.3 µg/L	50 µg/L	8.5 µg/L							

Notes:
1) Aroclors originally reported as individual Aroclors, shown here as sum total of Aroclors.
2) µg/L = micrograms per liter
3) U qualifier indicates analyte not detected above method detection limit (MDL).
4) B qualifier on metals results indicates an estimated concentration above MDL but below report limit.
5) Discharge limits based on monthly average.
COC # = chain of custody number
WWTP = Waste Water Treatment Plant

Table D-6
Summary of WWTP Effluent Water Quality Data
New Bedford Harbor Superfund SIte - 2006 Season

Date [1,2]	Time	Temperature (°C)	Specific Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mV)	Turbidity (ntu)[3]	Effluent flow at time of reading (gpm)
8/16/2006	9:00	24.79	38335	6.48	7.23	125.8	-6.9	597
8/16/2006	9:30	25.10	38307	6.56	7.50	50.2	-8.3	169
8/16/2006	10:00	25.25	37151	6.20	7.48	41.8	-7.2	347
8/16/2006	10:30	25.42	36077	5.72	7.47	54.9	-4.1	1860
8/16/2006	11:30	25.68	35109	5.08	7.42	66.4	-4.7	1722
8/16/2006	12:00	25.63	35383	5.80	7.40	16.8	-8.6	294
8/16/2006	12:30	25.82	34993	4.87	7.33	24.9	-7.6	1863
8/16/2006	13:00	25.78	35126	5.79	7.28	15.8	-7.8	670
8/16/2006	14:30	26.10	35857	5.56	7.20	49.8	-5.8	198
8/16/2006	15:45	26.25	35963	5.93	7.17	74.3	-8.4	1854
8/16/2006	16:15	26.33	36111	5.30	7.23	19.1	-8.6	1864
8/16/2006	17:15	26.50	35474	4.28	7.23	34.4	-4.9	689
8/16/2006	17:45	26.62	25676	5.44	7.33	50.9	-7.4	689
8/16/2006	18:15	26.66	35849	5.15	7.25	24.2	-7.1	1174
8/17/2006	9:00	26.50	40533	5.43	7.12	162.3	-6.7	324
8/17/2006	9:30	26.55	40695	5.58	7.23	31.9	-7.8	345
8/17/2006	10:00	26.66	40799	5.21	7.19	16.5	-6.3	580
8/17/2006	10:30	26.71	41449	5.30	7.17	18.3	-6.7	675
8/17/2006	11:15	26.75	41166	5.40	7.10	29.7	-6.5	636
8/17/2006	11:30	26.74	41203	5.57	7.09	27.2	-7.8	182
8/17/2006	13:30	26.64	41034	5.69	7.01	49.7	-8.3	664
8/17/2006	14:00	26.72	41031	5.40	6.96	39.5	-8.2	1856
8/17/2006	14:30	26.60	40054	6.12	6.96	44.3	-7.2	615
8/17/2006	15:30	26.82	40691	6.01	6.96	60.3	-8.9	1830
8/17/2006	16:00	26.79	40057	6.63	6.96	50.5	-8.3	655
8/17/2006	16:30	26.88	41635	6.01	6.97	52.7	-9.1	1842
8/17/2006	17:00	26.99	41700	5.80	6.98	61.0	-7.5	645
8/17/2006	17:45	26.99	42078	5.41	7.02	66.3	-8.6	661
8/17/2006	18:20	27.30	41881	4.51	7.02	88.4	-8.9	1860
8/18/2006	9:30	26.86	40197	4.85	7.20	186.0	-5.8	1853
8/18/2006	10:00	26.93	40437	5.33	7.27	138.4	-5.1	309
8/18/2006	11:00	26.82	39893	5.36	7.22	103.7	-6.9	275
8/18/2006	11:30	26.66	39714	6.12	7.22	62.0	-3.3	1858
8/18/2006	12:00	26.67	39777	5.56	7.18	74.5	-5.5	614
8/18/2006	12:30	26.70	39249	4.87	7.16	52.5	-6.2	1829
8/18/2006	13:00	26.66	39236	5.30	7.15	49.1	-7.0	262
8/18/2006	14:40	26.50	38654	5.82	7.15	68.8	-7.1	638
8/18/2006	15:00	26.60	38508	5.66	7.15	58.2	-6.3	1815
8/18/2006	16:30	26.81	39568	5.44	7.09	209.7	-7.4	621
8/18/2006	17:00	26.94	39452	5.52	7.10	201.5	-6.8	635
8/18/2006	17:20	27.05	39761	4.99	7.12	96.9	-6.7	1805
8/18/2006	18:00	27.02	39719	4.88	7.14	58.7	-7.2	1803
8/21/2006	9:00	26.39	37627	5.85	7.19	63.2	-3.5	639
8/21/2006	9:30	26.46	37372	5.80	7.28	3.7	-4.7	1880
8/21/2006	10:00	26.46	34870	5.76	7.13	18.8	-2.8	705
8/21/2006	10:30	26.42	34478	5.05	7.05	30.8	-5.0	1883
8/21/2006	11:00	26.45	34458	5.46	6.92	44.0	-5.4	711
8/21/2006	11:30	26.29	34570	5.64	6.87	51.9	-4.2	733
8/21/2006	13:00	26.35	35587	5.73	6.86	67.7	-6.1	700
8/21/2006	13:30	26.49	35911	6.03	6.88	65.9	-5.6	350

Table D-6
Summary of WWTP Effluent Water Quality Data
New Bedford Harbor Superfund SIte - 2006 Season

Date [1,2]	Time	Temperature (°C)	Specific Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mV)	Turbidity (ntu)[3]	Effluent flow at time of reading (gpm)
8/21/2006	14:30	26.61	35953	5.56	6.93	70.4	-6.2	702
8/21/2006	15:00	26.80	35802	5.10	6.95	90.1	-6.1	693
8/21/2006	16:30	26.89	35027	5.30	6.99	65.9	-6.2	685
8/21/2006	17:00	27.09	35047	5.19	7.03	62.2	-6.0	376
8/21/2006	17:30	26.91	34935	5.74	7.04	68.4	-0.8	1861
8/21/2006	18:00	27.20	35233	4.43	7.01	74.3	-6.1	680
8/21/2006	18:30	26.94	35284	5.50	7.03	60.9	0.4	650
8/22/2006	9:00	26.43	39764	5.00	6.90	242.6	-8.8	680
8/22/2006	9:30	26.52	39988	4.94	6.95	223.3	-8.2	312
8/22/2006	10:00	25.83	39676	5.81	7.07	142.5	-8.7	1830
8/22/2006	11:00	26.54	39315	5.64	7.08	25.7	-9.0	1831
8/22/2006	11:30	26.61	40362	5.38	7.07	23.8	-9.1	1820
8/22/2006	12:00	26.53	40347	4.89	7.06	10.2	-7.9	1839
8/22/2006	12:30	26.28	40012	5.32	7.05	24.2	-8.5	650
8/22/2006	13:00	26.28	40129	5.20	7.03	29.9	-8.8	345
8/22/2006	13:30	26.28	40251	5.08	7.03	21.6	-9.1	1817
8/22/2006	14:30	27.13	40214	5.10	7.06	60.4	-4.9	1806
8/22/2006	15:30	27.19	40209	4.62	7.05	63.9	-5.1	632
8/22/2006	16:30	27.21	40319	4.50	7.05	66.7	-9.0	332
8/22/2006	17:00	27.30	40355	4.42	7.05	69.1	-7.5	1803
8/22/2006	17:30	27.24	39864	5.45	7.08	22.6	-9.0	602
8/22/2006	18:00	27.41	39299	4.99	7.29	19.8	-9.1	1787
8/22/2006	18:30	27.06	39042	4.98	7.09	21.4	-8.7	587
8/30/2006	9:30	23.28	37641	6.01	7.11	85.6	-9.3	264
8/30/2006	10:00	23.32	37704	6.14	7.38	48.0	-11.5	245
8/30/2006	10:30	23.45	37687	6.35	7.41	41.9	-11.6	266
8/30/2006	11:00	23.37	37225	7.11	7.42	18.3	-11.6	256
8/30/2006	11:30	23.28	36981	6.04	7.39	14.9	-10.4	684
8/30/2006	12:00	23.40	36942	6.48	7.35	17.9	-11.2	656
8/30/2006	12:30	23.48	37060	6.27	7.32	15.5	-11.0	1857
8/30/2006	14:00	23.67	37942	5.73	7.25	39.9	-9.7	1852
8/30/2006	14:30	23.61	37892	6.10	7.24	22.7	-11.3	657
8/30/2006	15:00	23.70	37840	6.20	7.24	22.5	-11.5	387
8/30/2006	15:30	23.78	37776	6.16	7.22	36.0	-9.4	671
8/30/2006	16:30	24.00	37559	5.75	7.22	47.4	-9.9	1865
8/30/2006	17:00	24.00	37736	6.30	7.23	24.5	-11.5	644
8/30/2006	17:30	23.77	37709	6.53	7.22	35.9	-7.9	647
8/30/2006	18:00	24.05	37933	6.07	7.24	NM	-11.7	690
8/30/2006	18:30	24.18	38007	5.88	7.21	NM	-11.6	1861
9/8/2006	9:30	24.53	35889	6.93	6.87	172.7	-8.1	163
9/8/2006	10:00	24.45	36040	7.27	7.10	159.1	-8.3	184
9/8/2006	10:30	24.68	36228	7.84	7.15	66.9	-8.2	308
9/8/2006	11:00	24.78	36430	7.60	7.15	57.5	-7.5	569
9/8/2006	11:30	24.93	36555	7.29	7.15	69.6	-8.3	567
9/8/2006	13:00	25.06	36730	7.67	7.13	73.9	-7.9	655
9/8/2006	13:30	24.95	36486	7.15	7.11	78.4	-7.5	665
9/8/2006	14:00	24.85	36692	6.99	7.08	77.2	-6.5	668
9/8/2006	15:00	24.73	37080	6.63	7.08	89.5	-8.3	385
9/8/2006	15:30	24.68	37344	7.31	7.10	75.9	-7.7	10
9/8/2006	16:00	24.71	37384	7.01	7.11	69.9	-8.2	2

Table D-6
Summary of WWTP Effluent Water Quality Data
New Bedford Harbor Superfund SIte - 2006 Season

Date [1,2]	Time	Temperature (°C)	Specific Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mV)	Turbidity (ntu)[3]	Effluent flow at time of reading (gpm)
9/8/2006	16:45	24.71	37359	7.13	7.08	72.5	-8.2	2
9/8/2006	17:15	24.72	37318	7.40	7.06	74.8	-8.0	2
9/8/2006	17:40	24.73	37998	7.48	7.05	NM	-8.1	549
9/15/2006	9:00	22.02	37441	6.39	6.90	NM	-7.0	260
9/15/2006	9:30	22.08	37440	6.16	7.00	337.0	-2.5	1807
9/15/2006	10:00	22.01	37373	5.66	7.07	219.7	-6.4	590
9/15/2006	10:30	22.06	37297	7.53	7.06	150.3	-5.5	576
9/15/2006	11:30	21.98	37095	6.39	7.03	120.5	-6.7	608
9/15/2006	12:00	22.15	36954	5.93	7.04	117.8	-5.8	598
9/15/2006	12:30	22.19	36905	6.23	7.05	116.9	-5.8	562
9/15/2006	13:30	22.10	36965	7.39	7.06	121.3	-6.6	202
9/15/2006	14:00	22.04	36912	8.23	7.06	113.9	-7.0	166
9/15/2006	14:30	22.12	36872	8.14	7.09	113.5	-6.9	201
9/15/2006	15:00	22.07	36855	7.21	7.11	89.7	-7.0	313
9/15/2006	15:30	22.21	36960	8.42	7.05	152.9	-2.6	1761
9/15/2006	16:30	22.26	36419	7.60	7.04	98.6	-7.1	1772
9/15/2006	17:00	21.95	36289	7.81	7.02	100.8	-7.1	252
9/15/2006	17:30	22.09	36358	7.96	7.03	100.2	-6.8	592
10/6/2006	9:30	21.56	37948	8.31	7.27	218.2	-7.8	1853
10/6/2006	10:30	20.65	38189	9.51	7.29	144.4	-7.6	632
10/6/2006	11:00	20.66	38250	8.18	7.27	131.4	-8.4	302
10/6/2006	11:30	21.28	38439	9.10	7.29	115.9	-8.4	274
10/6/2006	12:00	21.30	38685	9.48	7.31	101.3	-8.9	281
10/6/2006	12:45	21.13	38615	9.43	7.32	84.7	-8.4	322
10/6/2006	13:15	21.09	38796	9.53	7.30	79.8	-7.8	310
10/6/2006	13:45	20.85	38987	9.83	7.29	76.9	-9.0	403
10/6/2006	14:15	20.82	38766	9.52	7.23	82.5	-8.5	453
10/6/2006	14:45	20.83	38867	9.82	7.30	86.5	-9.1	732
10/6/2006	15:15	20.74	38803	9.56	7.16	87.9	-9.1	1880
10/6/2006	16:15	20.36	39155	9.96	7.10	91.5	-8.9	720
10/6/2006	16:45	20.13	39291	10.26	7.07	100.7	-8.3	715
10/6/2006	17:25	20.37	39366	10.79	7.20	NM	-9.1	701
10/6/2006	17:45	20.26	39302	10.77	7.12	64.9	-8.6	705
10/6/2006	18:00	20.28	39204	10.33	7.13	77.7	-7.0	682

Notes:
1) All measurements were taken on a YSI 650/6920, s/n 01L0707AF.
2) A flow through cell connected to effluent autosampler is used to collect sample for readings.
3) A negative turbidity reading indicates measured sample exhibits less turbidity than 0 ntu calibration standard.
0 ntu turbidity standard used is deionized Poland Springs bottled water.
°C = Degrees Celsius
gpm = gallons of water discharged per minute
mg/L= milligrams/Liter
mV = millivolts
NM = measurement not collected due to lack of stability (ORP only other parameters stabilized)
ntu= nephelometric turbidity units
ORP = Oxidation Reduction Potential
WWTP = Waste Water Treatment Plan
µs/cm =microsiemens per centimeter

Table D-7
Summary of WWTP Midpoint and Influent Water Quality Data
New Bedford Harbor Superfund Site - 2006 Season

Waste Water Treatment Plant Midpoint Water Quality Monitoring							
Date [1,2]	Time	Temperature (°C)	Specific Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mV)	Turbidity (ntu)[3]
8/16/2006	17:30	26.88	36108	5.13	6.87	127.9	-8.3
8/18/2006	17:30	27.63	39979	4.43	6.93	144.0	-7.0
8/22/2006	17:35	27.75	38150	3.94	7.18	46.5	-9.2
8/30/2007	17:45	24.22	36594	6.18	7.07	83.6	NM
8/30/2007	17:50	24.26	38145	0.71	7.01	113.7	-11.8
8/30/2007	17:53	24.27	38141	1.20	7.00	126.1	-11.8
8/30/2007	17:55	24.27	38135	1.26	7.00	132.8	-11.8
8/30/2007	17:56	24.27	38123	1.27	7.00	135.2	-11.8
9/8/2006	17:25	24.49	39390	4.35	6.88	159.7	-8.2
9/15/2006	17:45	22.32	38805	4.74	6.88	135.8	-7.4
10/6/2006	17:00	20.35	39052	6.28	7.04	107.5	-9.1

Waste Water Treatment Plant Influent Water Quality Monitoring							
Date	Time	Temperature (°C)	Specific Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mV)	Turbidity (ntu)[3]
8/16/2006	17:40	26.87	37391	6.30	7.19	39.4	-7.3
8/18/2006	17:40	27.52	40202	5.37	6.75	31.6	-4.0
8/22/2006	17:45	27.61	39735	5.65	7.27	-37.3	0.6
8/28/2006	15:20	24.05	37480	6.33	7.26	-96.4	NM
8/28/2006	15:30	24.05	37371	6.31	7.26	-99.4	NM
8/28/2006	15:33	24.02	37523	6.43	7.24	-105.2	NM
8/28/2006	15:35	24.01	37617	6.38	7.22	-107.7	NM
8/28/2006	15:37	24.00	37692	6.35	7.21	-108.7	NM
8/28/2006	15:39	24.00	37759	6.34	7.20	-111.1	NM
8/28/2006	15:41	24.00	37797	6.32	7.19	-112.2	NM
8/28/2006	15:43	24.01	37946	6.52	7.19	-111.0	NM
10/6/2006	17:13	20.53	38737	10.64	7.03	3.8	4.5

Notes:
1) All measurements were taken on a YSI 650/6920, s/n 01L0707AF.
2) A flow through cell connected to an inline sampling port is used to collect sample for readings.
3) A negative turbidity reading indicates measured sample exhibits less turbidity than 0 ntu calibration standard.
0 ntu turbidity standard used is deionized Poland Springs bottled water.
°C = Degrees Celsius
mg/L= milligrams/Liter
mV = millivolts
NM = measurement not collected due to lack of stability (ORP only other parameters stabilized)
ntu= nephelometric turbidity units
ORP = Oxidation Reduction Potential
WWTP = Waste Water Treatment Plant
µs/cm =microsiemens per centimeter

ATTACHMENT E

Transportation and Disposal Reports

Table E-1
Sand and Oversize Screenings Transport Log - Area C
New Bedford Harbor Superfund Site - 2006

	Sand			Oversize			Totals	
Date	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Daily S&O (tons)	Running Total (tons)
8/21/2006				21420	10.71			
				21460	10.73			
				23880	11.94			
				25340	12.67			
				19840	9.92			
				19880	9.94	65.91	65.91	65.91
8/22/2006	38940	19.47		23220	11.61			
	39020	19.51		23240	11.62			
	13280	6.64		23140	11.57			
	38140	19.07		23200	11.6			
	42720	21.36						
	39060	19.53	105.58			46.4	151.98	217.89
8/23/2006	39960	19.98		19160	9.58			
	40140	20.07		23540	11.77			
	43160	21.58		21240	10.62			
	38800	19.4						
	41980	20.99	102.02			31.97	133.99	351.88
8/25/2006				14020	7.01			
				21540	10.77			
				22580	11.29			
				21160	10.58			
				22060	11.03			
				20820	10.41			
				23940	11.97			
				20280	10.14	83.2	83.2	435.08
8/28/2006	39540	19.77						
	36800	18.4						
	30780	15.39						
	35100	17.55						
	34640	17.32						
	35620	17.81	106.24				106.24	541.32

Table E-1
Sand and Oversize Screenings Transport Log - Area C
New Bedford Harbor Superfund Site - 2006

	Sand			Oversize			Totals	
Date	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Daily S&O (tons)	Running Total (tons)
8/29/2006				28420	14.21			
				23880	11.94			
				22060	11.03			
8/29/2006				26720	13.36	50.54	50.54	591.86
8/30/2006	29660	14.83		22000	11			
	41960	20.98		23760	11.88			
	47160	23.58						
	41860	20.93						
	43120	21.56	101.88			22.88	124.76	716.62
8/31/2006				24400	12.2			
				21740	10.87			
				25620	12.81			
				26200	13.1			
				29700	14.85	63.83	63.83	780.45
9/5/2006	48020	24.01						
	46200	23.1						
	42020	21.01						
	42780	21.39						
	44740	22.37						
	37800	18.9						
	43720	21.86						
	53940	26.97	179.61				179.61	960.06
9/6/2006	45000	22.5						
	47820	23.91						
	47200	23.6						
	54080	27.04						
	40780	20.39						
	47220	23.61						
	45620	22.81						
	41560	20.78						
	42140	21.07	205.71				205.71	1165.77

Table E-1
Sand and Oversize Screenings Transport Log - Area C
New Bedford Harbor Superfund Site - 2006

	Sand			Oversize			Totals	
Date	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Daily S&O (tons)	Running Total (tons)
9/7/2006				32100	16.05			
				27120	13.56			
				13820	6.91	36.52	36.52	1202.29
9/12/2006	49260	24.63		24680	12.34			
	49700	24.85		27960	13.98			
	46240	23.12		27500	13.75			
	41200	20.6		17960	8.98			
	42840	21.42		16400	8.2			
	45960	22.98	137.6			57.25	194.85	1397.14
9/13/2006				22020	11.01		0	
				17640	8.82		0	
				23300	11.65	31.48	31.48	1428.62
9/14/2006		147	147	51560	25.78	25.78	172.78	1601.4
9/15/2006				51560	25.78	25.78	25.78	1627.18
9/18/2006		198	198	22000	11	11	209	1836.18
9/19/2006				44000	22	22	22	1858.18
9/21/2006				21540	10.77			
				24360	12.18			
				24820	12.41			
				14520	7.26	42.62	42.62	1900.8
9/23/2006	28540	14.27		31480	15.74			
	42600	21.3						
	48840	24.42						
	43880	21.94						
	48600	24.3						
	48260	24.13						
	48800	24.4						
	48820	24.41						
	53860	26.93	206.1			15.74	221.84	2122.64
9/26/2006	44560	22.28		20980	10.49			
	36620	18.31		24360	12.18			
	42620	21.31						

Table E-1
Sand and Oversize Screenings Transport Log - Area C
New Bedford Harbor Superfund Site - 2006

	Sand			Oversize			Totals	
Date	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Daily S&O (tons)	Running Total (tons)
9/26/2006	36560	18.28						
	40900	20.45						
	41380	20.69						
	42140	21.07						
	37820	18.91						
	37200	18.6						
	39180	19.59	199.49			22.67	222.16	2344.8
9/28/2006				22060	11.03			
				15500	7.75	18.78	18.78	2363.58
9/29/2006	37200	18.6	18.6				18.6	2382.18
10/3/2006	31620	15.81						
	39380	19.69						
	42100	21.05		22080	11.04			
	49360	24.68		20920	10.46			
	52100	26.05	107.28	9680	4.84	26.34	133.62	2515.8
10/4/2006				21280	10.64			
				25180	12.59	23.23	23.23	2539.03
10/5/2006				25500	12.75	12.75	12.75	2551.78
10/6/2006				15940	7.97	7.97	7.97	2559.75
10/9/2006	16540	8.27		20640	10.32			
	39440	19.72						
	45900	22.95						
	42820	21.41						
	45900	22.95						
	48400	24.2						
	44520	22.26						
	44780	22.39	164.15			10.32	174.47	2734.22

Table E-1
Sand and Oversize Screenings Transport Log - Area C
New Bedford Harbor Superfund Site - 2006

	Sand			Oversize			Totals	
Date	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Daily S&O (tons)	Running Total (tons)
10/10/2006				21400	10.7			
				13180	6.59	17.29	17.29	2751.51
10/11/2006	52260	26.13	26.13	22000	11	11	37.13	2788.64
10/12/2006	43300	21.65						
	46920	23.46						
	46200	23.1						
	13840	6.92	75.13	17840	8.92	8.92	84.05	2872.69
10/13/2006				29760	14.88			
				29680	14.84	29.72	29.72	2902.41
10/16/2006	47940	23.97		18240	9.12			
	46880	23.44		19280	9.64			
	51140	25.57						
10/16/2006	44760	22.38						
	46640	23.32	118.68			18.76	137.44	3039.85
10/17/2006	28740	14.37		12900	6.45			
	41900	20.95	35.32	14520	7.26	13.71	49.03	3088.88
10/18/2006	53520	26.76	26.76	30520	15.26	15.26	42.02	3130.9
10/19/2006	53220	26.61						
	44960	22.48						
	51520	25.76						
	41680	20.84	95.69				95.69	3226.59
10/21/2006	36040	18.02						
	34600	17.3						
	32260	16.13						
	34840	17.42						
	34020	17.01	85.88				85.88	3312.47
Totals		2442.85	2442.85		869.62	869.62	3312.47	

Note:
lb. = pounds
S&O = sand and oversize
Wt. = weight

Table E-2
TSCA Waste Transport Log - Area C
New Bedford Harbor Superfund Site - 2006 Season

Date Shipped	Truck Number	Manifest Number	Manifest Doc Number	Tare Wt.	Area C Net Tons	Area C Net lb.	MHF Net lb.	MHF Net Tons	Area C Gross Wt. lb.	Date Loaded
10/16/2006	86160	000234325JJK	6C001	36,100	33.56	67,120	67,120	33.56	103,220	10/16/2006
10/16/2006	69891	000234326JJK	6C002	34,920	33.14	66,280	66,280	33.14	101,200	10/16/2006
10/16/2006	76100	000234327JJK	6C003	32,180	37.02	74,040	74,040	37.02	106,220	10/16/2006
10/16/2006	86160	000234328JJK	6C004	36,100	34.22	68,440	68,440	34.22	104,540	10/16/2006
10/16/2006	76100	000234329JJK	6C005	32,180	35.90	71,800	71800	35.90	103,980	10/16/2006
10/16/2006	69891	000234330JJK	6C006	34,920	37.30	74,600	74600	37.30	109,520	10/16/2006
10/17/2006	86160	000234331JJK	6C007	36,100	34.37	68,740	68740	34.37	104,840	10/17/2006
10/17/2006	76100	000234332JJK	6C008	32,180	33.83	67,660	67660	33.83	99,840	10/17/2006
10/17/2006	69891	000234333JJK	6C009	34,920	31.79	63,580	63580	31.79	98,500	10/17/2006
10/17/2006	86160	000234334JJK	6C010	36,100	34.62	69,240	69249	34.62	105,340	10/17/2006
10/17/2006	76100	000234335JJK	6C011	32,180	34.69	69,380	69380	34.69	101,560	10/17/2006
10/17/2006	69891	000234336JJK	6C012	34,920	34.38	68,760	68760	34.38	103,680	10/17/2006
10/18/2006	69891	000234337JJK	6C013	34,920	35.37	70,740	70740	35.37	105,660	10/18/2006
10/18/2006	76100	000234338JJK	6C014	32,180	36.49	72,980	72980	36.49	105,160	10/18/2006
10/18/2006	86160	000234339JJK	6C015	36,100	31.22	62,440	62440	31.22	98,540	10/18/2006
10/18/2006	76100	000234340JJK	6C016	32,180	34.72	69,440	69440	34.72	101,620	10/18/2006
10/18/2006	69891	000234341JJK	6C017	34,920	34.93	69,860	69860	34.93	104,780	10/18/2006
10/18/2006	86160	000234342JJK	6C018	36,100	34.53	69,060	69060	34.53	105,160	10/18/2006
10/19/2006	76100	000234343JJK	6C019	32,180	37.17	74,340	74340	37.17	106,520	10/19/2006
10/19/2006	69891	000234344JJK	6C020	34,920	34.38	68,760	68760	34.38	103,680	10/19/2006
10/19/2006	86160	000234345JJK	6C021	36,100	31.93	63,860	63860	31.93	99,960	10/19/2006
10/19/2006	76100	000234346JJK	6C022	32,180	34.51	69,020	69020	34.51	101,200	10/19/2006
10/19/2006	69891	000234347JJK	6C023	34,920	35.36	70,720	70720	35.36	105,640	10/19/2006
10/19/2006	86160	000234348JJK	6C024	36,100	32.32	64,640	64640	32.32	100,740	10/19/2006
10/19/2006	76100	000234349JJK	6C025	32,180	35.09	70,180	70180	35.09	102,360	10/19/2006
10/19/2006	69891	000234350JJK	6C026	34,920	35.16	70,320	70320	35.16	105,240	10/19/2006
10/19/2006	86160	000234351JJK	6C027	36,100	35.45	70,900	70900	35.45	107,000	10/19/2006
10/20/2006	76100	000234352JJK	6C028	32,180	33.82	67,640	67640	33.82	99,820	10/20/2006
10/20/2006	69891	000234353JJK	6C029	34,920	36.71	73,420	73420	36.71	108,340	10/20/2006
10/20/2006	86160	000234354JJK	6C030	36,100	37.38	74,760	74760	37.38	110,860	10/20/2006
10/23/2006	76100	000234355JJK	6C031	32,180	34.90	69,800	69800	34.90	101,980	10/23/2006
10/23/2006	44273	000234432JJK	6C032	35,060	34.11	68,220	68220	34.11	103,280	10/23/2006
10/23/2006	69891	000234433JJK	6C033	34,920	34.02	68,040	68040	34.02	102,960	10/23/2006
10/23/2006	76100	000234447JJK	6C034	32,180	34.82	69,640	69640	34.82	101,820	10/23/2006
10/23/2006	44273	000234461JJK	6C035	35,060	33.98	67,960	67960	33.98	103,020	10/23/2006

Table E-2
TSCA Waste Transport Log - Area C
New Bedford Harbor Superfund Site - 2006 Season

Date Shipped	Truck Number	Manifest Number	Manifest Doc Number	Tare Wt.	Area C Net Tons	Area C Net lb.	MHF Net lb.	MHF Net Tons	Area C Gross Wt. lb.	Date Loaded
10/23/2006	69891	000234462JJK	6C036	34,920	34.44	68,880	68880	34.44	103,800	10/23/2006
10/24/2006	76100	000234434JJK	6C037	32,180	35.72	71,440	71440	35.72	103,620	10/24/2006
10/24/2006	69891	000234435JJK	6C038	35,060	32.12	64,240	64240	32.12	99,300	10/24/2006
10/24/2006	44273	000234436JJK	6C039	35,060	34.80	69,600	69600	34.80	104,660	10/24/2006
10/24/2006	44273	000234437JJK	6C040	35,060	33.64	67,280	67280	33.64	102,340	10/24/2006
10/24/2006	76100	000234438JJK	6C041	32,180	35.49	70,980	70980	35.49	103,160	10/24/2006
10/24/2006	69891	000234439JJK	6C042	34,920	33.98	67,960	67960	33.98	102,880	10/24/2006
10/25/2006	76100	000234440JJK	6C043	32,180	35.70	71,400	71400	35.70	103,580	10/25/2006
10/25/2006	44273	000234441JJK	6C044	35,060	36.20	72,400	72400	36.20	107,460	10/25/2006
10/25/2006	69891	000234442JJK	6C045	34,920	32.21	64,420	64420	32.21	99,340	10/25/2006
10/25/2006	76100	000234443JJK	6C046	32,180	35.33	70,660	70660	35.33	102,840	10/25/2006
10/25/2006	44273	000234444JJK	6C047	35,060	34.26	68,520	68520	34.26	103,580	10/25/2006
10/25/2006	69891	000234445JJK	6C048	34,920	34.45	68,900	68900	34.45	103,820	10/25/2006
10/26/2006	76100	000234446JJK	6C049	32,180	35.99	71,980	71980	35.99	104,160	10/26/2006
10/26/2006	44273	000234448JJK	6C050	35,060	34.55	69,100	69100	34.55	104,160	10/26/2006
10/26/2006	69891	000234449JJK	6C051	34,920	34.01	68,020	68020	34.01	102,940	10/26/2006
10/26/2006	76100	000234450JJK	6C052	32,180	34.21	68,420	68420	34.21	100,600	10/26/2006
10/26/2006	44273	000234451JJK	6C053	35,060	34.61	69,220	69220	34.61	104,280	10/26/2006
10/26/2006	69891	000234452JJK	6C054	34,920	34.94	69,880	69880	34.94	104,800	10/26/2006
10/26/2006	76100	000234453JJK	6C055	32,180	34.49	68,980	68980	34.49	101,160	10/26/2006
10/26/2006	69891	000234454JJK	6C056	34,960	34.68	69,360	69360	34.68	104,280	10/26/2006
10/26/2006	44273	000234455JJKK	6C057	35,060	33.53	67,060	67060	33.53	102,120	10/26/2006
10/27/2006	69891	000234456JJK	6C058	34,960	34.34	68,680	68680	34.34	103,600	10/27/2006
10/27/2006	44273	000234457JJK	6C059	35,060	34.33	68,660	68660	34.33	103,720	10/27/2006
10/27/2006	76100	000234458JJK	6C060	32,180	33.58	67,160	67160	33.58	99,340	10/27/2006
10/30/2006	44273	000240287JJK	6C061	35,060	35.58	71,160	71160	35.58	106,220	10/30/2006
10/30/2006	76100	000240288JJK	6C062	32,180	34.40	68,800	68800	34.40	100,980	10/30/2006
10/30/2006	69891	000240289JJK	6C063	34,960	35.34	70,680	70680	35.34	105,600	10/30/2006
10/30/2006	44273	000240290JJK	6C064	35,060	33.44	66,880	66880	33.44	101,940	10/30/2006
10/30/2006	76100	000240291JJK	6C065	32,180	34.46	68,920	68920	34.46	101,100	10/30/2006
10/30/2006	69891	000240292JJK	6C066	34,960	34.87	69,740	69740	34.87	104,660	10/30/2006
10/31/2006	76100	000240293JJK	6C067	32,180	34.11	68,220	68220	34.11	100,400	10/31/2006
10/31/2006	44273	000240294JJK	6C068	35,060	34.02	68,040	68040	34.02	103,100	10/31/2006
10/31/2006	69891	000240295JJK	6C069	34,960	34.86	69,720	69720	34.86	104,640	10/31/2006
10/31/2006	76100	000240296JJK	6C070	32,180	35.73	71,460	71460	35.73	103,640	10/31/2006

Table E-2
TSCA Waste Transport Log - Area C
New Bedford Harbor Superfund Site - 2006 Season

Date Shipped	Truck Number	Manifest Number	Manifest Doc Number	Tare Wt.	Area C Net Tons	Area C Net lb.	MHF Net lb.	MHF Net Tons	Area C Gross Wt. lb.	Date Loaded
10/31/2006	44273	000240297JJK	6C071	35,060	35.03	70,060	70060	35.03	105,120	10/31/2006
10/31/2006	69891	000240298JJK	6C072	34,960	34.60	69,200	69200	34.60	104,120	10/31/2006
10/31/2006	76100	000240299JJK	6C073	32,180	34.64	69,280	69280	34.64	101,460	10/31/2006
10/31/2006	44273	000240300JJK	6C074	35,060	34.33	68,660	68660	34.33	103,720	10/31/2006
10/31/2006	69891	000240301JJK	6C075	34,920	35.00	70,000	70000	35.00	104,920	10/31/2006

Notes:

This material was removed from the Site and disposed of by H & S, under direct contract to Jacobs.

Total Area C tons = 2,595.2

Total MHF tons = 2,595.2

Doc = document

lb. = pounds

MHF = Material Handling Facility, Worcester, MA

TSCA = Toxic Substances Control Act

Wt. = weight

Table E-3
Sand and Oversize Screenings
Transport Log for Material Shipped from Area C to Area D for Rail Shipment (10/11-13/06)

	Sand			Oversize			Totals	
Date	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Net Wt. (lb.)	Net Wt. (tons)	Daily Total (tons)	Daily S&O (tons)	Running Total (tons)
10/11/2006	66280	33.14						
	61540	30.77						
	60140	30.07						
	59800	29.9						
	60980	30.49						
	62380	31.19						
	61400	30.7						
	66920	33.46						
	62240	31.12	280.84				280.84	280.84
10/12/2006	60780	30.39						
	64140	32.07						
	56140	28.07						
	59260	29.63						
	56400	28.2						
	58720	29.36						
	56980	28.49						
	58700	29.35						
	67260	33.63						
	62220	31.11	300.3				300.3	581.14
10/13/2006	57300	28.65						
	58440	29.22						
	58080	29.04						
	60160	30.08						
	61440	30.72						
	60380	30.19						
	61900	30.95						
	61660	30.83						
	61200	30.6						
	61960	30.98						
	63360	31.68	332.94				332.94	914.08
Totals		914.08	914.08				914.08	

Note:
lb. = pounds
S&O = sand and oversize

Table E-4
TSCA Filter Cake and Fine and Coarse Screenings Waste Transport Log - Area D (Rail)
New Bedford Harbor Superfund Site - 2006 Season

Date Loaded	Date Shipped	Railcar Number	Manifest Number	Tare (lb.)	Net Tonnage	Net Pounds	Gross Weight (lb.)
08/16/06	08/18/06	CEFX 555334	MI10325963	66,600	96.58	193,150	259,750
08/16/06	08/18/06	CEFX555342	MI10325964	66,900	97.83	195,650	262,550
08/17/06	08/18/06	CEFX555344	MI10325965	66,350	98.30	196,600	262,950
08/17/06	08/18/06	CEFX555343	MI10325966	66,100	98.38	196,750	262,850
08/17/06	08/18/06	CEFX555346	MI10325967	66,750	97.93	195,850	262,600
08/18/06	08/18/06	CEFX555337	MI10325968	67,300	97.80	195,600	262,900
08/18/06	08/23/06	CEFX555329	MI10325969	66,300	98.03	196,050	262,400
08/21/06	08/23/06	CEFX555333	MI10325970	66,350	98.25	196,500	262,850
08/21/06	08/23/06	CEFX30291	MI10325971	68,950	96.73	193,450	262,400
08/21/06	08/23/06	CEFX555330	MI10325972	66,100	98.45	196,900	263,000
08/22/06	08/23/06	CEFX555348	MI10325973	65,950	98.53	197,050	263,000
08/22/06	08/23/06	CEFX555335	MI10325974	66,550	97.93	195,850	262,400
08/22/06	08/23/06	CEFX555339	MI10325975	67,750	97.63	195,250	263,000
08/23/06	08/23/06	CEFX555332	MI10325976	66,350	98.20	196,400	262,750
08/23/06	08/25/06	CEFX32754	MI10325977	64,800	98.93	197,850	262,650
08/23/06	08/25/06	CEFX32721	MI10325978	65,150	98.80	197,600	262,750
08/23/06	08/25/06	CEFX32732	MI10325979	65,400	98.60	197,200	262,600
08/23/06	08/25/06	CEFX32751	MI10325982	66,150	98.28	196,550	262,700
08/23/06	08/25/06	CEFX555340	MI10325983	66,300	98.20	196,400	262,700
08/24/06	08/25/06	CEFX555345	MI10325984	66,500	98.13	196,250	262,750
08/24/06	08/25/06	CEFX555336	MI10325985	66,300	98.28	196,550	262,850
08/24/06	08/25/06	CEFX555328	MI10325986	66,650	98.13	196,250	262,900
08/25/06	08/30/06	CEFX32749	MI10325987	65,150	98.83	197,650	262,800
08/25/06	08/30/06	CEFX32766	MI10325988	65,250	98.73	197,450	262,700
08/25/06	08/30/06	CEFX32734	MI10325989	66,050	98.48	196,950	263,000
08/25/06	08/30/06	CEFX32719	MI10325990	65,750	98.55	197,100	262,850
08/28/06	08/30/06	CEFX32723	MI10325991	65,350	98.65	197,300	262,650
08/28/06	08/30/06	CEFX32736	MI10325992	65,950	98.43	197,850	262,800
08/28/06	08/30/06	CEFX32755	MI10325993	65,150	98.85	197,700	262,850
08/28/06	08/30/06	CEFX32750	MI10325994	65,500	98.53	197,050	262,550
08/29/06	08/30/06	CEFX30302	MI10325741	65,800	98.43	196,850	262,650
08/30/06	08/30/06	CEFX30281	MI10325742	65,600	98.60	197,200	262,800
08/30/06	09/01/06	JTLX4062	MI10325743	66,300	98.15	196,300	262,600

Table E-4
TSCA Filter Cake and Fine and Coarse Screenings Waste Transport Log - Area D (Rail)
New Bedford Harbor Superfund Site - 2006 Season

Date Loaded	Date Shipped	Railcar Number	Manifest Number	Tare (lb.)	Net Tonnage	Net Pounds	Gross Weight (lb.)
08/30/06	09/01/06	CEFX30300	MI10325744	66,250	98.20	196,400	262,650
08/30/06	09/01/06	CEFX555327	MI10325745	65,700	98.63	197,250	262,950
08/31/06	09/01/06	CEFX555349	MI10325746	66,000	98.38	196,750	262,750
08/31/06	09/01/06	JTLX4063	MI10325747	65,850	98.58	197,150	263,000
08/31/06	09/01/06	CEFX33461	MI10325748	66,850	97.90	195,800	262,650
08/31/06	09/01/06	CEFX31932	MI10325749	66,550	98.03	196,050	262,600
08/31/06	09/01/06	CEFX30311	MI10325750	65,700	98.40	196,800	262,500
09/01/06	09/06/06	CEFX30279	001913608JJK	65,950	98.50	197,000	262,950
09/05/06	09/06/06	CEFX31071	001913609JJK	64,300	99.20	198,400	262,700
09/05/06	09/06/06	CEFX33357	001913610JJK	66,900	97.95	195,900	262,800
09/05/06	09/06/06	CEFX31052	001913612JJK	64,500	99.25	198,500	263,000
09/06/06	09/06/06	CEFX32090	001913613JJK	67,000	97.80	195,600	262,600
09/06/06	09/06/06	CEFX31900	001913614JJK	66,400	98.28	196,550	262,950
09/12/06	09/14/06	CEFX555346	001913615JJK	66,750	97.90	195,800	262,550
09/12/06	09/14/06	CEFX555337	001913616JJK	67,300	97.80	195,600	262,900
09/13/06	09/14/06	CEFX555344	001913617JJK	66,350	98.13	196,250	262,600
09/13/06	09/14/06	CEFX555343	001913618JJK	66,100	98.20	196,400	262,500
09/14/06	09/19/06	CEFX32754	001913619JJK	64,800	99.05	198,100	262,900
09/15/06	09/19/06	CEFX32721	001913620JJK	65,150	98.83	197,650	262,800
09/15/06	09/19/06	CEFX555332	001913621JJK	66,350	98.23	196,450	262,800
09/18/06	09/19/06	CEFX555334	001913622JJK	66,600	98.08	196,150	262,750
09/18/06	09/19/06	CEFX555342	001913623JJK	66,900	98.00	196,000	262,900
09/18/06	09/19/06	CEFX555328	001913624JJK	66,650	98.10	196,200	262,850
09/18/06	09/19/06	CEFX555345	001213625JJK	66,500	98.25	196,500	263,000
09/19/06	09/21/06	CEFX555336	001913626JJK	66,300	98.35	196,700	263,000
09/19/06	09/21/06	CEFX555330	001913627JJK	66,100	98.23	196,450	262,550
09/19/06	09/21/06	CEFX555348	001913628JJK	66,300	98.45	196,900	262,850
09/19/06	09/21/06	CEFX555333	001913629JJK	66,350	98.20	196,400	262,750
09/20/06	09/21/06	CEFX555340	001913630JJK	66,300	98.25	196,500	262,800
09/20/06	09/21/06	CEFX555329	001913631JJK	66,350	98.33	196,650	263,000
09/20/06	09/21/06	CEFX555335	001913632JJK	66,550	98.18	196,350	262,900
09/21/06	09/21/06	CEFX555339	001913633JJK	67,750	97.38	194,750	262,500
09/21/06	09/25/06	CEFX32723	001913634JJK	65,350	98.60	197,200	262,550

Table E-4
TSCA Filter Cake and Fine and Coarse Screenings Waste Transport Log - Area D (Rail)
New Bedford Harbor Superfund Site - 2006 Season

Date Loaded	Date Shipped	Railcar Number	Manifest Number	Tare (lb.)	Net Tonnage	Net Pounds	Gross Weight (lb.)
09/21/06	09/25/06	CEFX32766	001913635JJK	65,250	98.68	197,350	262,600
09/22/06	09/25/06	CEFX31932	001913636JJK	66,550	98.05	196,100	262,650
09/22/06	09/25/06	CEFX30311	001913637JJK	65,700	98.40	196,800	262,500
09/22/06	09/25/06	CEFX32751	001913829JJK	66,150	98.25	196,500	262,650
09/25/06	09/25/06	CEFX30281	001913830JJK	65,600	98.58	197,150	262,750
09/25/06	09/25/06	CEFX32749	001913831JJK	65,150	98.80	197,600	262,750
09/25/06	09/25/06	CEFX32719	001913832JJK	65,750	98.58	197,150	262,900
09/26/06	09/28/06	CEFX30302	001913833JJK	65,800	98.48	196,950	262,750
09/26/06	09/28/06	CEFX32750	001913834JJK	65,500	98.63	197,250	262,750
09/26/06	09/28/06	CEFX30291	001913835JJK	68,950	96.90	193,800	262,750
09/27/06	09/28/06	JTLX4063	001913836JJK	65,850	98.55	197,100	262,950
09/27/06	09/28/06	CEFX33461	001913837JJK	66,850	98.05	196,100	262,950
09/27/06	09/28/06	CEFX555327	001913838JJK	65,700	98.40	196,800	262,500
09/28/06	09/28/06	CEFX555349	001913839JJK	66,000	98.43	196,850	262,850
09/28/06	09/28/06	CEFX30300	001913840JJK	66,250	98.13	196,250	262,500
10/02/06	10/03/06	CEFX32732	001913841JJK	65,400	98.70	197,400	262,800
10/02/06	10/03/06	CEFX32736	001913842JJK	65,950	98.48	196,950	262,900
10/02/06	10/03/06	CEFX32755	001913843JJK	65,150	98.83	197,650	262,800
10/03/06	10/03/06	CEFX32734	001913844JJK	66,050	98.43	196,850	262,900
10/03/06	10/05/06	JTLX4062	001913845JJK	66,300	98.20	196,400	262,700
10/04/06	10/05/06	CEFX31071	001913846JJK	64,300	99.33	198,650	262,950
10/04/06	10/05/06	CEFX31900	001913847JJK	66,400	98.20	196,400	262,800
10/04/06	10/05/06	CEFX30279	001913848JJK	65,950	98.53	197,050	263,000
10/05/06	10/05/06	CEFX33357	001913849JJK	66,900	98.05	196,100	263,000
10/05/06	10/05/06	CEFX31052	001913850JJK	64,500	99.05	198,100	262,600
10/05/06	10/09/06	CEFX32090	001913851JJK	67,000	97.85	195,700	262,700
10/06/06	10/09/06	CEFX555346	001913852JJK	66,750	98.08	196,150	262,900
10/06/06	10/09/06	CEFX555337	001913853JJK	67,300	97.80	195,600	262,900
10/09/06	10/09/06	CEFX555344	001913854JJK	66,350	98.23	196,450	262,800
10/09/06	10/12/06	CEFX555343	001913855JJK	66,100	98.43	196,850	262,950
10/10/06	10/12/06	CEFX555332	001913856JJK	66,350	98.15	196,300	262,650
10/10/06	10/12/06	CEFX32754	001913857JJK	64,800	99.10	198,200	263,000
10/10/06	10/12/06	CEFX555328	001913858JJK	66,650	98.18	196,350	263,000

Table E-4
TSCA Filter Cake and Fine and Coarse Screenings Waste Transport Log - Area D (Rail)
New Bedford Harbor Superfund Site - 2006 Season

Date Loaded	Date Shipped	Railcar Number	Manifest Number	Tare (lb.)	Net Tonnage	Net Pounds	Gross Weight (lb.)
10/11/06	10/12/06	CEFX555345	001913859JJK	66,500	98.25	196,500	263,000
10/11/06	10/12/06	CEFX555334	001913860JJK	66,600	98.18	196,350	262,950
10/11/06	10/12/06	CEFX555342	001913861JJK	66,900	98.03	196,050	262,950
10/12/06	10/12/06	CEFX32721	001913862JJK	65,150	98.75	197,500	262,650
10/12/06	10/16/06	CEFX555333	001913863JJK	66,350	98.25	196,500	262,850
10/12/06	10/16/06	CEFX555335	001913864JJK	66,550	98.20	196,400	262,950
10/12/06	10/16/06	CEFX555340	001913865JJK	66,300	98.23	196,450	262,750
10/12/06	10/16/06	CEFX555336	001913866JJK	66,300	98.25	196,500	262,800
10/13/06	10/16/06	CEFX555330	001913867JJK	66,100	98.28	196,550	262,650
10/13/06	10/16/06	CEFX555329	001913868JJK	66,350	98.28	196,550	262,900
10/13/06	10/16/06	CEFX555339	001913869JJK	67,750	97.45	194,900	262,650
10/13/06	10/16/06	CEFX555348	001913870JJK	65,950	98.48	196,950	262,900
10/18/06	10/19/06	CEFX31932	001913871JJK	66,550	97.90	195,800	262,350
10/18/06	10/19/06	CEFX30311	001913872JJK	65,700	98.60	197,200	262,900
10/18/06	10/19/06	CEFX32723	001913873JJK	65,350	98.60	197,200	262,550
10/18/06	10/19/06	CEFX32766	000234245JJK	65,250	98.88	197,750	263,000
10/19/06	10/19/06	CEFX30281	000234246JJK	65,600	98.60	197,200	262,800
10/19/06	10/19/06	CEFX32749	000234247JJK	65,150	98.80	197,600	262,750
10/19/06	10/19/06	CEFX32751	000234248JJK	66,150	98.38	196,750	262,900
10/19/06	10/19/06	CEFX32755	000234249JJK	65,150	98.85	197,700	262,850
10/19/06	10/24/06	CEFX32719	000234250JJK	65,750	98.53	197,050	262,800
10/21/06	10/24/06	CEFX32734	000234251JJK	66,050	98.43	196,850	262,900
10/23/06	10/24/06	CEFX32732	000234252JJK	65,400	98.65	197,300	262,700
10/23/06	10/24/06	CEFX32736	000234253JJK	65,950	98.38	196,750	262,700
10/23/06	10/24/06	CEFX30291	000234254JJK	68,950	96.93	193,850	262,800
10/23/06	10/24/06	CEFX30302	000234255JJK	65,800	98.60	197,200	263,000
10/23/06	10/24/06	CEFX30300	000234256JJK	66,250	98.30	196,600	262,850
10/24/06	10/24/06	CEFX32750	00023457JJK	65,500	98.70	197,400	262,900
10/24/06	10/25/06	CEFX555349	000234258JJK	66,000	98.48	196,950	262,950
10/24/06	10/25/06	JTLX4063	000234259JJK	65,850	98.50	197,000	262,850
10/24/06	10/25/06	CEFX33461	000234260JJK	66,850	98.03	196,050	262,900
10/25/06	10/25/06	CEFX555327	000234261JJK	65,700	98.65	197,300	263,000
10/25/06	10/27/06	CEFX33357	000234262JJK	66,900	97.85	195,700	262,600

Table E-4
TSCA Filter Cake and Fine and Coarse Screenings Waste Transport Log - Area D (Rail)
New Bedford Harbor Superfund Site - 2006 Season

Date Loaded	Date Shipped	Railcar Number	Manifest Number	Tare (lb.)	Net Tonnage	Net Pounds	Gross Weight (lb.)
10/25/06	10/27/06	CEFX31052	000234263JJK	64,500	99.20	198,400	262,900
10/26/06	10/27/06	CEFX31900	000234264JJK	66,400	98.30	196,600	263,000
10/26/06	10/27/06	CEFX30279	000234269JJK	65,950	98.48	196,950	262,900
10/31/06	10/31/06	JTLX4062	000234270JJK	66,300	60.20	120,400	186,700
			TOTALS		13,333.45	26,667,900	

Notes:
arr. = arrived
lb. = pounds
TSCA = Toxic Substances Control Act

Table E-5
TSCA Filter Cake Waste Transport Log - Area D (Trucks)
New Bedford Harbor Superfund Site - 2006 Season

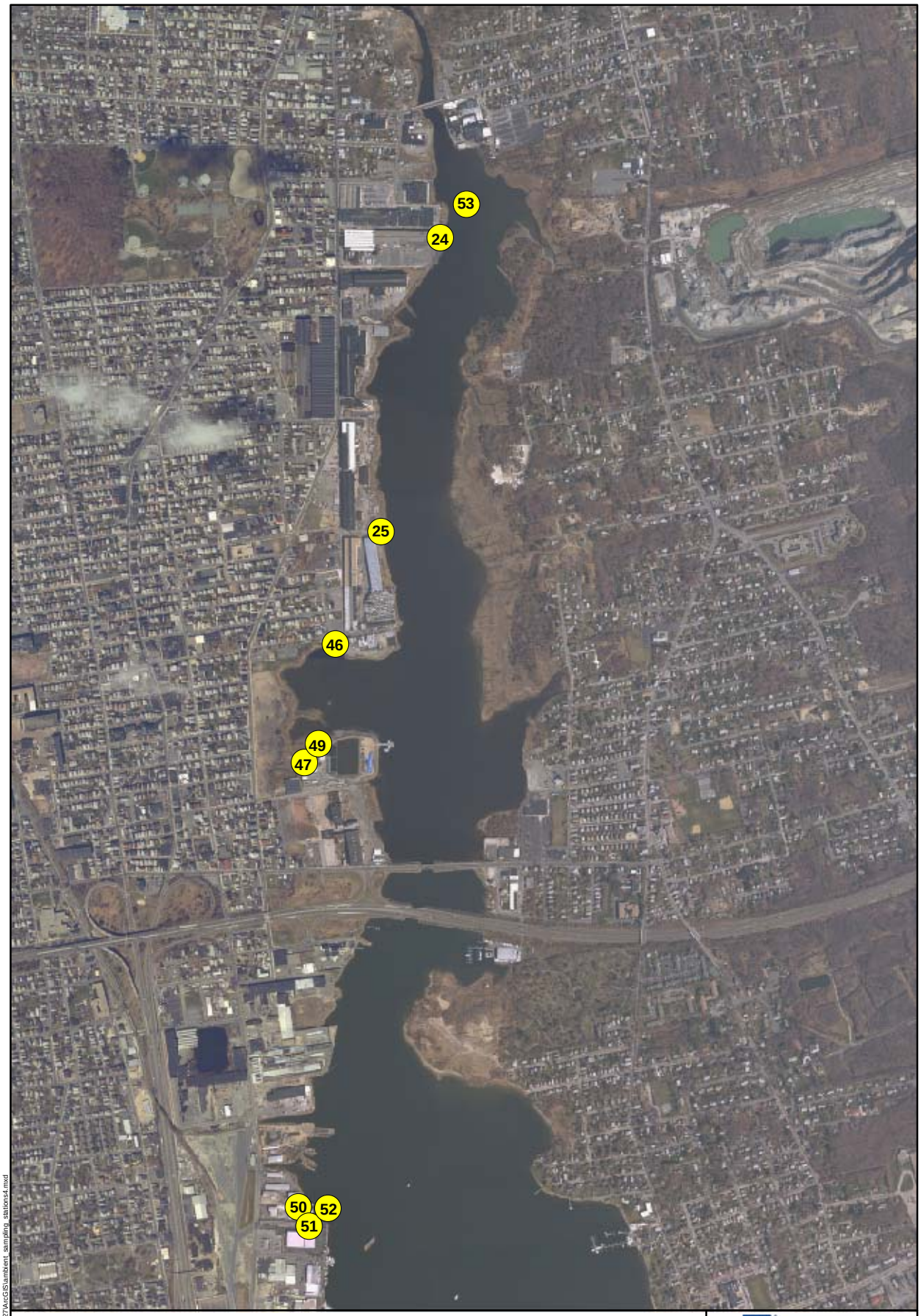
Date Shipped	Truck Number	Manifest Number	Manifest Doc Number	Tare Weight	Area D Net Tons	Area D Net lb.	MHF Net lb.	MHF Net Tons	Area D Gross Wt. lb.
09/11/06	MA44273	001913681JJK	6D001	35,240	34.88	69,760	69,760	34.88	105,000
09/11/06	MA69891	001913682JJK	6D002	34,860	34.63	69,260	69,260	34.63	104,120
09/11/06	ME86160	001913683JJK	6D003	36,340	34.61	69,220	69,220	34.61	105,560
09/11/06	ME86160	001913684JJK	6D004	36,340	34.10	68,200	68,200	34.10	104,540
09/11/06	MA44273	001913685JJK	6D005	35,240	34.32	68,640	68,640	34.32	103,880
09/11/06	MA69891	001913686JJK	6D006	34,860	33.84	67,680	67,680	33.84	102,540
09/12/06	ME86160	001913687JJK	6D007	36,100	35.86	71,720	71,720	35.86	107,820
09/12/06	MA69891	001913688JJK	6D008	34,920	34.25	68,500	68,500	34.25	103,420
09/12/06	MA44273	001913689JJK	6D009	35,060	33.27	66,540	66,540	33.27	101,600
09/12/06	ME86160	001913690JJK	6D010	36,100	33.85	67,700	67,700	33.85	103,800
09/12/06	MA69891	001913691JJK	6D011	34,920	36.81	73,620	73,620	36.81	108,540
09/12/06	MA44273	001913692JJK	6D012	35,060	33.44	66,880	66,880	33.44	101,940
09/13/06	ME86160	001913697JJK	6D013	36,100	34.24	68,480	68,480	34.24	104,580
09/13/06	MA69891	001913698JJK	6D014	34,920	34.36	68,720	68,720	34.36	103,640
09/13/06	MA44273	001913695JJK	6D015	35,060	34.94	69,880	69,880	34.94	104,800
09/13/06	ME86160	001913696JJK	6D016	36,100	34.44	68,880	68,880	34.44	104,980
09/13/06	MA69891	001913699JJK	6D017	34,960	34.54	69,080	69,080	34.54	104,000
09/13/06	MA44273	001913700JJK	6D018	35,060	33.53	67,060	67,060	33.53	102,120
09/14/06	MA69891	001913701JJK	6D019	34,920	34.56	69,120	69,120	34.56	104,040
09/14/06	MA44273	001913702JJK	6D020	35,060	33.99	67,980	67,980	33.99	103,040
09/14/06	ME86160	001913703JJK	6D021	36,100	34.89	69,780	69,780	34.89	105,880
09/14/06	MA69891	001913704JJK	6D022	34,920	34.69	69,380	69,380	34.69	104,300
09/14/06	MA44273	001913705JJK	6D023	35,060	34.39	68,780	68,780	34.39	103,840
09/14/06	ME86160	001913706JJK	6D024	36,100	34.93	69,860	69,860	34.93	105,960
09/15/06	MA69891	001913707JJK	6D025	34,920	34.14	68,280	68,280	34.14	103,200
09/15/06	ME86160	001913708JJK	6D026	36,100	34.64	69,280	69,280	34.64	105,380
09/15/06	MA44273	001913709JJK	6D027	35,060	34.41	68,820	68,820	34.41	103,880
09/15/06	ME86160	001913710JJK	6D028	36,100	34.71	69,420	69,420	34.71	105,520
09/15/06	MA69891	001913711JJK	6D029	34,920	34.93	69,860	69,860	34.93	104,780
09/15/06	MA44273	001913712JJK	6D030	35,060	34.05	68,100	68,100	34.05	103,160

Notes:
Doc = Document
lb. = pounds
MHF = Material Handling Facility, Worester, MA
Wt. = weight

1,034.24	1,034.24
Area D Total Net Tons	MHF Total Net Tons

ATTACHMENT F

Ambient Air Monitoring Information



Legend

Aerial Photography MASSGIS 2005

Ambient Air Sampling Locations

Sample Station

0 750 1,500 Feet

1:18,000

JACOBS

2006 Ambient Air Sampling Station Locations

New Bedford Harbor Superfund Site

NAME: crobers DATE: 1/27/2007

Figure F-1

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Table F-1
Ambient Monitoring
Program - Total Detectable PCBs (Homologues) in Air
New Bedford Harbor Superfund Site - 2005 and 2006 Season

Sampling [1] Period	Aerovox [2] (Station 24)	Aerovox west upwind (Station 55)	Cliftex (Station 25)	Nstar (Station 42)	Coffin Ave (Station 46)	Area C downwind (Station 47)	Area C [3] crosswind (Station 48)	Area C downwind (Station 49)	Area D downwind (Station 50)	Area D downwind (Station 51)	Area D downwind (Station 52)	Dredge (Station 53)	Achusnet Park (Station 56)	Duplicate (Blank)	ng/M^3 sample	Comments
2005 Events																
8.10 to 8.11 Round 1	216	42.1	103	25.9	37.2	NS [4]	NS	29.3	NS	NS	21.3	NS	49.9	44.1	0.32	Duplicate sample Aerovox West
9.14 to 9.15 Round 2	1,490	37.6	58.2	22.5	99.8	NS	14.9	83.6	0.52	NS	NS	1,280	102	NS	0.26	No Duplicate Sample
9.22 to 9.23 Round 3	178	2.64	35.2	83.3	115	NS	19.1	97	0.26	NS	NS	780	23.9	18.8	0.54	Duplicate sample Station 48, Area C
9.28 to 9.29 Round 4	383	87	104	5.28	124	NS	17.3	44.2	24.2	NS	NS	391	77.9	QA[7]	1.16	Duplicate sample to Corps Lab
10.5 to 10.6 Round 5	1,822	222	251	119	130	NS	60.1	114	81.7	NS	NS	6,315	180	1,708	0.96	Duplicate sample Aerovox Station 24
10.27 to 10.28 Round 6	15.4	3.97	NS [5]	32.3	2.06	NS	4.61	12.3	0.01	NS	NS	505	2.73	QA[7]	0.42	Duplicate sample sent to Corps lab
11.17 to 11.18 Round 7	15.9	0.12	0.12	63.6	0.14	NS	0.139	3.71	NS[6]	NS	NS	913	3.76	14.9	1.73	Duplicate sample Aerovox Station 24
12.28 to 12.29 Round 8	83.2	10.8	10.9	21.4	65.1	7.42	NS	NS	NS	2.18	NS	NS	13.5	QA[7]	0.33	Duplicate sample sent to Corps lab
2006 Events																
8.30 to 8.31 Round 1 2006	1,629	NS	176	NS	70.4	39.2	NS	NS	NS	67.3	NS	2,336	NS	1,387	1.57	Duplicate sample Aerovox Station 24
10.4 to 10.6 Round 2 2006	2,357	NS	451 [8]	NS	108	NS	NS	157	NS	NS	197	13,430	NS	QA[7]	6.65	Duplicate sample sent to Corps lab
11.18 to 11.19 Round 3 2006	41.1	NS	0.14	NS	4.05	NS	NS	81.4	2.6	NS	NS	NS	NS	0.25	0.74	Duplicate sample Aerovox Station 24

Notes:
(1) Sampled and analyzed using EPA TO-10A Methodology.
(2) All results reported for 24 hour time-weighted average in nanograms per cubic meter of air (ng/m^3).
(3) Station 48 was a cross wind location for the 2004 and 2005 season and is no longer sampled.
(4) NS = Not Sampled.
(5) Sample tube for 25 Cliftex was broken during transport.
(6) Sample tube for 50 Area D was broken during analysis preparation.
(7) Duplicate sent to USACE laboratory.
(8) During the first day of sampling, the duplicate sample was to be collected at Station 25. However, one of the two sampling pumps failed at Station 25, and these samples were not submitted for analysis. Therefore, the sample and associated duplicate sample were collected on the following day from Station 25 and submitted for analysis.

Table F-2
Ambient PCB Sample Station Locations
New Bedford Harbor Superfund Site - 2006 Season

Station Number	Location	City/Town	Northing	Easting
21	New Bedford Welding	New Bedford	2696913.00000	814013.00000
24 (1)	Aerovox NE corner	New Bedford	2706941.00000	815574.00000
24D (1)	Aerovox duplicate	New Bedford	2706932.00000	815574.00000
25 (1)	Cliftex, Manomet Street	New Bedford	2703854.00000	814907.00000
27	Francis St (Porter)	Fairhaven	2703925.00000	816405.00000
30	Fiber Leather	New Bedford	2705861.00000	815029.00000
30D	Fiber Leather duplicate	New Bedford	2705864.00000	815034.00000
40	Wood St (Titleist)	Acushnet	2705820.00000	814933.00000
41	NSTAR substation	Acushnet	2705524.00000	816074.00000
42	NSTAR North	Fairhaven	2706236.00000	816524.00000
43	Bus Terminal Lot	Fairhaven	2701377.00000	816482.00000
44	Taber St (Pumping Station)	Fairhaven	2698035.00000	816277.00000
45	Cozy Cove Marina	Fairhaven	2684279.00000	817739.00000
46 (1)	Coffin Ave	New Bedford	2703796.00000	814947.00000
47 (1)	Area C Downwind	New Bedford	2701361.00000	814129.00000
48 (1)	Area C Crosswind	New Bedford	2701462.00000	814128.00000
49 (1)	Area C Upwind	New Bedford	2701564.00000	814279.00000
50 (1)	Area D Downwind	New Bedford	2696198.00000	814012.00000
51 (1)	Area D Crosswind	New Bedford	2696500.00000	812858.00000
52 (1)	Area D Upwind	New Bedford	2695390.00000	814397.00000
53 (1)	DMU2 Dredge	Varies	2706636.00000	815839.00000
54	DMU2 DW on barge	Varies	2706333.00000	815917.00000
55	Aerovox West (R7 receptor)	New Bedford	2706728.00000	814540.00000
56	Acushnet Park	New Bedford	2708962.00000	815519.00000

Note:
1) Location sampled in 2006. The remainder of the locations were either sampled since remediation was initiated in 2004 or during previous air sampling activities.

Table F-3
Meteorological Data/Tide Data Summary
New Bedford Harbor Superfund Site - 2006 Season

Date	Avg. Wind (mph)	Direction	Min Temp (^oF)	Max Temp (^oF)	Min Humidity %	Max Humidity %	Barometer (inch)	Avg. Radiation (watts /m^3)	Max Radiation (watts /m^3)	Tide Min (ft msl)	Tide Max (ft msl)
Aug 30, 31	7.38	NNE	57.8	72.5	45.9	96.5	30	278	813	0.60	3.70
Oct 4, 5, 6	10.64	NNE and SSW	46.4	72.4	57	99.7	30.1	183	756	-0.70	5.20
Nov 18, 19	6.78	N	42	52.5	51.2	93	29.86	124	487	0.10	4.30

Notes:
avg. = average
^oF = Fahrenheit
ft msl = feet mean sea level
max = maximum
min = minimum
mph = miles per hour
watts/m^3 = watts per meter cubed

ATTACHMENT F

Air Sampling Status Reports (PETS Curves)

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 24 Aerovox
Exposure Budget Slope (EBS) = 344 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2006

Construction Activity: The 2006 dredging activities were initiated on August 16, 2006 and demobilization activities were completed on November 1, 2006.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 24 Aerovox, the quarterly average ambient air PCB concentrations for the June 1999 through May 2000 baseline sampling were used as background concentrations. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, and from 12/28/05 through 8/15/06 to close the recent inactive field season. In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used to project concentrations detected at Station 24 Aerovox on August 16, 2006 (the start of dredging activities). This better simulates the ambient air PCB concentrations present at Station 24 Aerovox during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis.

However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the background concentrations were projected to be at background levels at Station 24 Aerovox on October 19, 2006, which is the day after the 2006 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 dredging activities. Low triggers were identified, which will be evaluated for potential necessary response.

Monitoring Station		24 Aerovox
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	75
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limits		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
24 Aerovox Location

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	67	67.00	67.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	67	67.00	67.00	6192	6192	1206.0	1,206.0	19.5%	19.5%
3	12/1/2002	1	19	9476	32	49.50	66.08	344	6536	49.5	1,255.5	14.4%	19.2%
4	2/28/2003	89	108	9387	32	32.00	38.00	30616	37152	2848.0	4,103.5	9.3%	11.0%
5	5/31/2003	92	200	9295	76	54.00	45.36	31648	68800	4968.0	9,071.5	15.7%	13.2%
6	8/31/2003	92	292	9203	130	103.00	63.52	31648	100448	9476.0	18,547.5	29.9%	18.5%
7	11/30/2003	91	383	9112	67	98.50	71.83	31304	131752	8963.5	27,511.0	28.6%	20.9%
8	2/28/2004	90	473	9022	32	49.50	67.58	30960	162712	4455.0	31,966.0	14.4%	19.6%
9	5/31/2004	93	566	8929	76	54.00	65.35	31992	194704	5022.0	36,988.0	15.7%	19.0%
10	8/31/2004	92	658	8837	130	103.00	70.61	31648	226352	9476.0	46,464.0	29.9%	20.5%
11	9/8/2004	8	666	8829	67	98.50	70.95	2752	229104	788.0	47,252.0	28.6%	20.6%
12	9/9/2004	1	667	8828	1024	545.50	71.66	344	229448	545.5	47,797.5	158.6%	20.8%
13	9/14/2004	5	672	8823	1449	1236.50	80.33	1720	231168	6182.5	53,980.0	359.4%	23.4%
14	9/23/2004	9	681	8814	588	1018.50	92.73	3096	234264	9166.5	63,146.5	296.1%	27.0%
15	9/27/2004	4	685	8810	9557	5072.50	121.81	1376	235640	20290.0	83,436.5	1474.6%	35.4%
16	10/19/2004	22	707	8788	559	5058.00	275.41	7568	243208	111276.0	194,712.5	1470.3%	80.1%
17	11/5/2004	17	724	8771	578	568.50	282.29	5848	249056	9664.5	204,377.0	165.3%	82.1%
18	12/3/2004	28	752	8743	30	304.00	283.10	9632	258688	8512.0	212,889.0	88.4%	82.3%
19	2/28/2005	87	839	8656	32	31.00	256.96	29928	288616	2697.0	215,586.0	9.0%	74.7%
20	5/31/2005	92	931	8564	76	54.00	236.90	31648	320264	4968.0	220,554.0	15.7%	68.9%
21	8/10/2005	71	1002	8493	130	103.00	227.41	24424	344688	7313.0	227,867.0	29.9%	66.1%
22	8/11/2005	1	1003	8492	216	173.00	227.36	344	345032	173.0	228,040.0	50.3%	66.1%
23	9/15/2005	35	1038	8457	1490	853.00	248.45	12040	357072	29855.0	257,895.0	248.0%	72.2%
24	9/23/2005	8	1046	8449	178	834.00	252.93	2752	359824	6672.0	264,567.0	242.4%	73.5%
25	9/29/2005	6	1052	8443	383	280.50	253.09	2064	361888	1683.0	266,250.0	81.5%	73.6%
26	10/6/2005	7	1059	8436	1822	1102.50	258.70	2408	364296	7717.5	273,967.5	320.5%	75.2%
27	10/28/2005	22	1081	8414	15.4	918.70	272.14	7568	371864	20211.4	294,178.9	267.1%	79.1%
28	11/18/2005	21	1102	8393	15.9	15.65	267.25	7224	379088	328.7	294,507.6	4.5%	77.7%
29	12/29/2005	41	1143	8352	83.2	49.55	259.44	14104	393192	2031.6	296,539.1	14.4%	75.4%
30	2/28/2006	61	1204	8291	32	57.60	249.21	20984	414176	3513.6	300,052.7	16.7%	72.4%
31	5/31/2006	92	1296	8199	76	54.00	235.36	31648	445824	4968.0	305,020.7	15.7%	68.4%
32	8/16/2006	77	1373	8122	1629	852.50	269.97	26488	472312	65642.5	370,663.2	247.8%	78.5%
33	8/31/2006	15	1388	8107	1629	1629.00	284.65	5160	477472	24435.0	395,098.2	473.5%	82.7%
34	10/5/2006	35	1423	8072	2357	1993.00	326.67	12040	489512	69755.0	464,853.2	579.4%	95.0%
35	10/19/2006	14	1437	8058	41.1	1199.05	335.17	4816	494328	16786.7	481,639.9	348.6%	97.4%
36	11/19/2006	31	1468	8027	41.1	41.10	328.96	10664	504992	1274.1	482,914.0	11.9%	95.6%
37	11/30/2006	11	1479	8016	67	54.05	326.92	3784	508776	594.6	483,508.6	15.7%	95.0%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day (nanograms per cubic meter per day)

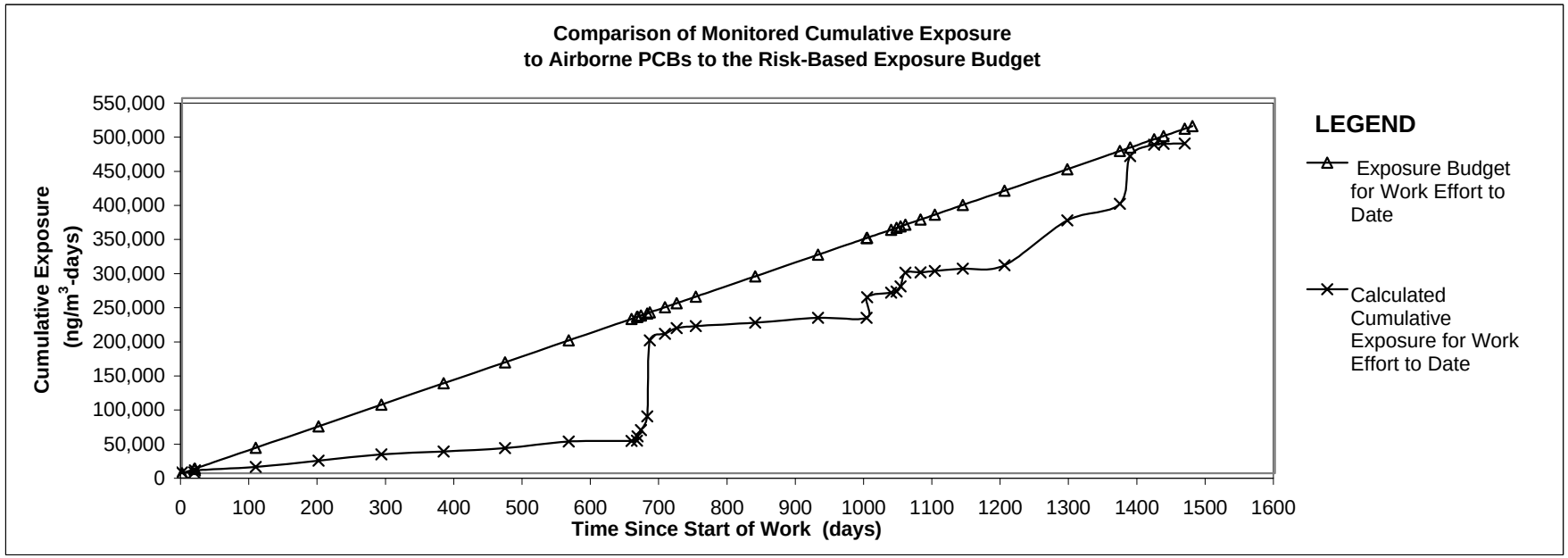
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	24 Aerovox
Collection Date:	11/30/2006
Measured PCB Concentration (ng/m^3):	67
Exposure Budget Expended During This Period:	15.7%
Cumulative Exposure Budget Expended to Date:	95.0%
Response Level:	LOW
Response:	Evaluate the Cause and Significance of the Triggering Conditions

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre-and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 25 Cliftex
Exposure Budget Slope (EBS) = 202 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2006

Construction Activity: The 2006 dredging activities were initiated on August 16, 2006 and demobilization activities were completed on November 1, 2006.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 25 Cliftex, the quarterly average ambient air PCB concentrations were used as a background concentration, which represent the quarterly baseline averages for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, and from 12/28/05 through 8/15/06 to close the recent inactive field season. In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used to project concentrations detected at Station 25 Cliftex on August 16, 2006 (the start of dredging activities). This better simulates the ambient air PCB concentrations at Station 25 Cliftex during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis.

However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the background concentrations were projected to be at background levels at Station 25 Cliftex on October 19, 2006, which is the day after the 2006 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 dredging activities. No triggers were identifed, therefore, no action is required.

Monitoring Station		25 Cliftex
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	23
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
25 Cliftex Location

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	22	22.00	22.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	22	22.00	22.00	3636	3636	396.0	396.0	10.9%	10.9%
3	12/1/2002	1	19	9476	3.2	12.60	21.51	202	3838	12.6	408.6	6.2%	10.6%
4	2/28/2003	89	108	9387	3.2	3.20	6.42	17978	21816	284.8	693.4	1.6%	3.2%
5	5/31/2003	92	200	9295	35	19.10	12.25	18584	40400	1757.2	2,450.6	9.5%	6.1%
6	8/31/2003	92	292	9203	46	40.50	21.15	18584	58984	3726.0	6,176.6	20.0%	10.5%
7	11/30/2003	91	383	9112	22	34.00	24.21	18382	77366	3094.0	9,270.6	16.8%	12.0%
8	2/28/2004	90	473	9022	3.2	12.60	22.00	18180	95546	1134.0	10,404.6	6.2%	10.9%
9	5/31/2004	93	566	8929	35	19.10	21.52	18786	114332	1776.3	12,180.9	9.5%	10.7%
10	8/31/2004	92	658	8837	46	40.50	24.17	18584	132916	3726.0	15,906.9	20.0%	12.0%
11	9/8/2004	8	666	8829	22	34.00	24.29	1616	134532	272.0	16,178.9	16.8%	12.0%
12	9/9/2004	1	667	8828	167	94.50	24.40	202	134734	94.5	16,273.4	46.8%	12.1%
13	9/14/2004	5	672	8823	229	198.00	25.69	1010	135744	990.0	17,263.4	98.0%	12.7%
14	9/23/2004	9	681	8814	97	163.00	27.50	1818	137562	1467.0	18,730.4	80.7%	13.6%
15	9/28/2004	5	686	8809	423	260.00	29.20	1010	138572	1300.0	20,030.4	128.7%	14.5%
16	10/19/2004	21	707	8788	259	341.00	38.46	4242	142814	7161.0	27,191.4	168.8%	19.0%
17	11/15/2004	27	734	8761	61	160.00	42.93	5454	148268	4320.0	31,511.4	79.2%	21.3%
18	12/3/2004	18	752	8743	27	44.00	42.96	3636	151904	792.0	32,303.4	21.8%	21.3%
19	2/28/2005	87	839	8656	3.2	15.10	40.07	17574	169478	1313.7	33,617.1	7.5%	19.8%
20	5/31/2005	92	931	8564	35	19.10	38.00	18584	188062	1757.2	35,374.3	9.5%	18.8%
21	8/10/2005	71	1002	8493	46	40.50	38.17	14342	202404	2875.5	38,249.8	20.0%	18.9%
22	8/11/2005	1	1003	8492	103	74.50	38.21	202	202606	74.5	38,324.3	36.9%	18.9%
23	9/15/2005	35	1038	8457	58.2	80.60	39.64	7070	209676	2821.0	41,145.3	39.9%	19.6%
24	9/23/2005	8	1046	8449	35.2	46.70	39.69	1616	211292	373.6	41,518.9	23.1%	19.7%
25	9/29/2005	6	1052	8443	104	69.60	39.86	1212	212504	417.6	41,936.5	34.5%	19.7%
26	10/6/2005	7	1059	8436	251	177.50	40.77	1414	213918	1242.5	43,179.0	87.9%	20.2%
27	11/18/2005	43	1102	8393	0.12	125.56	44.08	8686	222604	5399.1	48,578.1	62.2%	21.8%
28	12/29/2005	41	1143	8352	10.9	5.51	42.70	8282	230886	225.9	48,804.0	2.7%	21.1%
29	2/28/2006	61	1204	8291	3.2	7.05	40.89	12322	243208	430.1	49,234.0	3.5%	20.2%
30	5/31/2006	92	1296	8199	35	19.10	39.35	18584	261792	1757.2	50,991.2	9.5%	19.5%
31	8/16/2006	77	1373	8122	176	105.50	43.06	15554	277346	8123.5	59,114.7	52.2%	21.3%
32	8/31/2006	15	1388	8107	176	176.00	44.49	3030	280376	2640.0	61,754.7	87.1%	22.0%
33	10/5/2006	35	1423	8072	451	313.50	51.11	7070	287446	10972.5	72,727.2	155.2%	25.3%
34	10/19/2006	14	1437	8058	0.14	225.57	52.81	2828	290274	3158.0	75,885.2	111.7%	26.1%
35	11/19/2006	31	1468	8027	0.14	0.14	51.70	6262	296536	4.3	75,889.6	0.1%	25.6%
36	11/30/2006	11	1479	8016	22	11.07	51.39	2222	298758	121.8	76,011.3	5.5%	25.4%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day (nanograms per cubic meter per day)

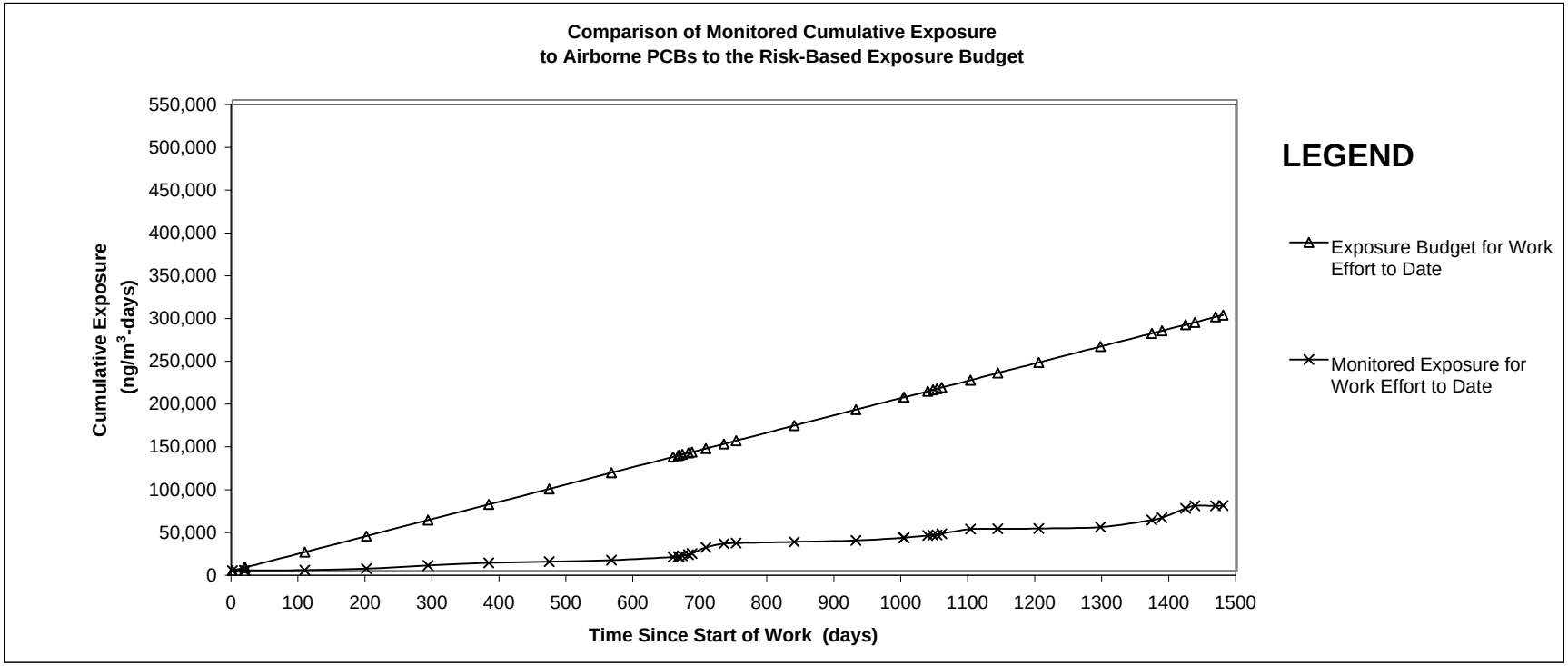
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	25 Cliftex
Collection Date:	11/30/2006
Measured PCB Concentration (ng/m^3):	22
Exposure Budget Expended During This Period:	5.5%
Cumulative Exposure Budget Expended to Date:	25.4%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:
a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 46 Coffin Ave

Exposure Budget Slope (EBS) = 202 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2006

Construction Activity: The 2006 dredging activities were initiated on August 16, 2005 and demobilization activities were completed on November 1, 2006.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 46 Coffin Ave., the quarterly ambient air PCB concentrations were used for background concentrations. These values represent the quarterly baseline averages from Stations 21 and 25 - Cliftex, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, and from 12/28/05 through 8/15/06 to close the inactive field season. In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used to project concentrations detected at Station 46 Coffin Ave on August 16, 2006 (the start of dredging activities). This better simulates the ambient air PCB concentrations at Station 46 Coffin Ave during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis.

However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the background concentrations were projected to be at background levels at Station 46 Coffin Ave on October 19, 2006, which is the day after the 2006 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 dredging activities. No triggers were identified, therefore, no action is required.

Monitoring Station		46 Coffin Ave
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	26.1
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
46 Coffin Avenue

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	22	22.00	22.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	22	22.00	22.00	3636	3636	396.0	396.0	10.9%	10.9%
3	12/1/2002	1	19	9476	3.2	12.60	21.51	202	3838	12.6	408.6	6.2%	10.6%
4	2/28/2003	89	108	9387	3.2	3.20	6.42	17978	21816	284.8	693.4	1.6%	3.2%
5	5/31/2003	92	200	9295	35	19.10	12.25	18584	40400	1757.2	2,450.6	9.5%	6.1%
6	8/31/2003	92	292	9203	46	40.50	21.15	18584	58984	3726.0	6,176.6	20.0%	10.5%
7	11/30/2003	91	383	9112	22	34.00	24.21	18382	77366	3094.0	9,270.6	16.8%	12.0%
8	2/28/2004	90	473	9022	3.2	12.60	22.00	18180	95546	1134.0	10,404.6	6.2%	10.9%
9	5/31/2004	93	566	8929	35	19.10	21.52	18786	114332	1776.3	12,180.9	9.5%	10.7%
10	8/31/2004	92	658	8837	46	40.50	24.17	18584	132916	3726.0	15,906.9	20.0%	12.0%
11	9/8/2004	8	666	8829	22	34.00	24.29	1616	134532	272.0	16,178.9	16.8%	12.0%
12	9/9/2004	1	667	8828	145	83.50	24.38	202	134734	83.5	16,262.4	41.3%	12.1%
13	9/14/2004	5	672	8823	48	96.50	24.92	1010	135744	482.5	16,744.9	47.8%	12.3%
14	9/23/2004	9	681	8814	5	26.50	24.94	1818	137562	238.5	16,983.4	13.1%	12.3%
15	9/28/2004	5	686	8809	342	173.50	26.02	1010	138572	867.5	17,850.9	85.9%	12.9%
16	10/19/2004	21	707	8788	36	189.00	30.86	4242	142814	3969.0	21,819.9	93.6%	15.3%
17	11/5/2004	17	724	8771	80	58.00	31.50	3434	146248	986.0	22,805.9	28.7%	15.6%
18	12/3/2004	28	752	8743	15	47.50	32.10	5656	151904	1330.0	24,135.9	23.5%	15.9%
19	2/28/2005	87	839	8656	3.2	9.10	29.71	17574	169478	791.7	24,927.6	4.5%	14.7%
20	5/31/2005	92	931	8564	35	19.10	28.66	18584	188062	1757.2	26,684.8	9.5%	14.2%
21	8/10/2005	71	1002	8493	46	40.50	29.50	14342	202404	2875.5	29,560.3	20.0%	14.6%
22	8/11/2005	1	1003	8492	37.2	41.60	29.51	202	202606	41.6	29,601.9	20.6%	14.6%
23	9/15/2005	35	1038	8457	99.8	68.50	30.83	7070	209676	2397.5	31,999.4	33.9%	15.3%
24	9/23/2005	8	1046	8449	115	107.40	31.41	1616	211292	859.2	32,858.6	53.2%	15.6%
25	9/29/2005	6	1052	8443	124	119.50	31.92	1212	212504	717.0	33,575.6	59.2%	15.8%
26	10/6/2005	7	1059	8436	130	127.00	32.54	1414	213918	889.0	34,464.6	62.9%	16.1%
27	10/28/2005	22	1081	8414	2.06	66.03	33.23	4444	218362	1452.7	35,917.3	32.7%	16.4%
28	11/18/2005	21	1102	8393	0.14	1.10	32.61	4242	222604	23.1	35,940.4	0.5%	16.1%
29	12/29/2005	41	1143	8352	65.1	32.62	32.61	8282	230886	1337.4	37,277.8	16.1%	16.1%
30	2/28/2006	61	1204	8291	3.2	34.15	32.69	12322	243208	2083.2	39,360.9	16.9%	16.2%
31	5/31/2006	92	1296	8199	35	19.10	31.73	18584	261792	1757.2	41,118.1	9.5%	15.7%
32	8/16/2006	77	1373	8122	70.4	52.70	32.90	15554	277346	4057.9	45,176.0	26.1%	16.3%
33	8/31/2006	15	1388	8107	70.4	70.40	33.31	3030	280376	1056.0	46,232.0	34.9%	16.5%
34	10/5/2006	35	1423	8072	106	88.20	34.66	7070	287446	3087.0	49,319.0	43.7%	17.2%
35	10/19/2006	14	1437	8058	4.05	55.03	34.86	2828	290274	770.4	50,089.4	27.2%	17.3%
36	11/19/2006	31	1468	8027	4.05	4.05	34.21	6262	296536	125.6	50,214.9	2.0%	16.9%
37	11/30/2006	11	1479	8016	22	13.03	34.05	2222	298758	143.3	50,358.2	6.4%	16.9%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day (nanograms per cubic meter per day)

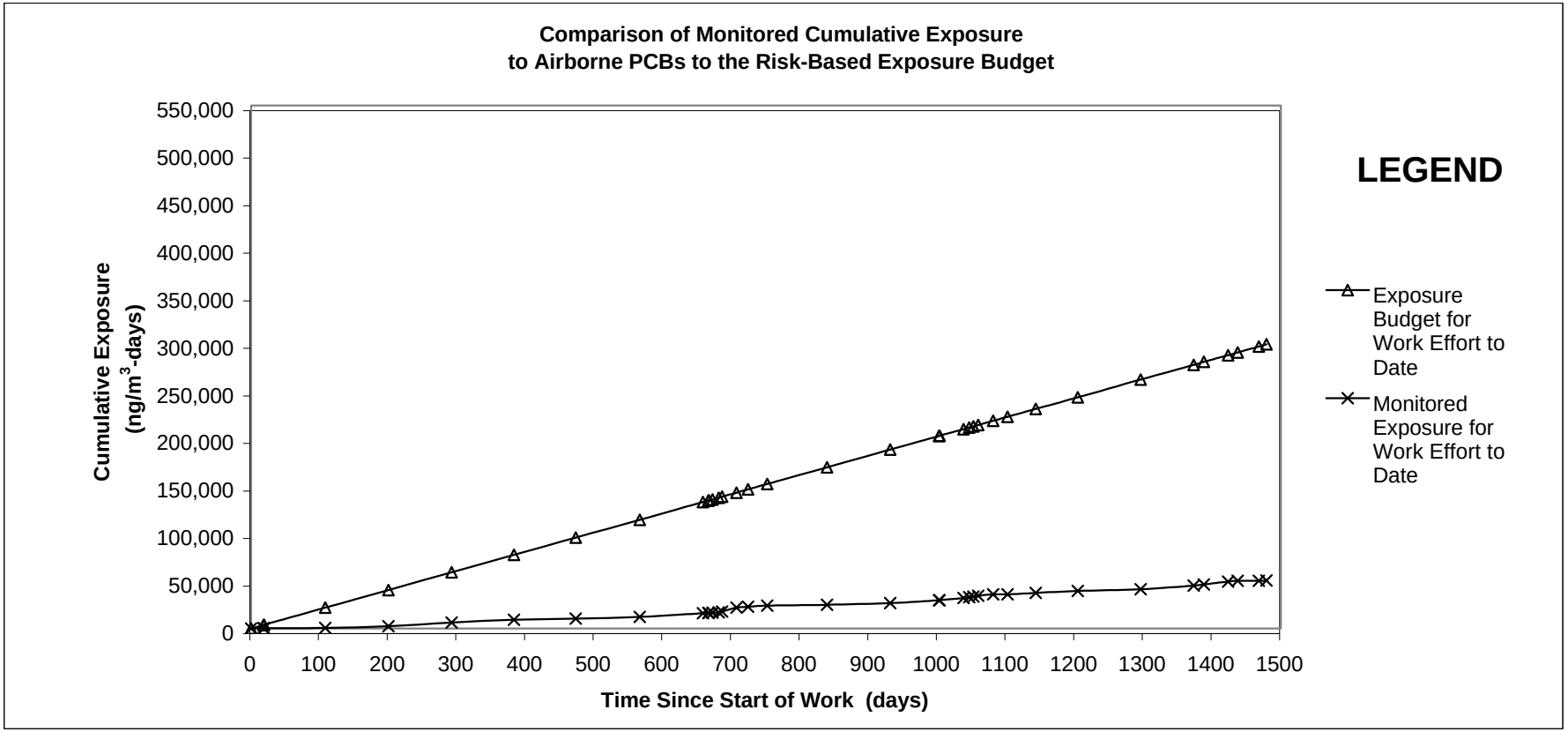
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	46 Coffin Ave
Collection Date:	11/30/2006
Measured PCB Concentration (ng/m^3):	22
Exposure Budget Expended During This Period:	6.4%
Cumulative Exposure Budget Expended to Date:	16.9%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005.
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 49 Area C Downwind
Exposure Budget Slope (EBS) = 202 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2006

Construction Activity: The 2006 dredging activities were initiated on August 16, 2006 and demobilization activities were completed on November 1, 2006.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 49 Area C Downwind, the quarterly average ambient air PCB concentrations were used for background. These represent the average quarterly baseline averages from Station 26 - Sawyer Street, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, and from 12/28/05 through 8/15/06 to close the recent inactive field season. For the December 2005 sampling event, based on wind direction for that day, the results from Station 47 were used to represent Area C downgradient air PCB concentrations. For the August 2006 sampling event, based on wind direction for that day, Station 47 sampling results were used to represent Area C downgradient PCB concentrations. In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used to project concentrations detected at Station 49 on August 16, 2006 (the start of dredging activities).

For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. This better simulates the ambient air PCB concentrations at Station 49 during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the background concentrations were projected to be at background levels at Station 49 Area C on October 19, 2006, which is the day after the 2006 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 dredging activities. No triggers were identified, therefore, no action is required.

Monitoring Station		49 Area C Downwind
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	56
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
49 Area C Downwind

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	43	43.00	43.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	43	43.00	43.00	3636	3636	774.0	774.0	21.3%	21.3%
3	12/1/2002	1	19	9476	89	66.00	44.21	202	3838	66.0	840.0	32.7%	21.9%
4	2/28/2003	89	108	9387	89	89.00	81.12	17978	21816	7921.0	8,761.0	44.1%	40.2%
5	5/31/2003	92	200	9295	61	75.00	78.31	18584	40400	6900.0	15,661.0	37.1%	38.8%
6	8/31/2003	92	292	9203	33	47.00	68.44	18584	58984	4324.0	19,985.0	23.3%	33.9%
7	11/30/2003	91	383	9112	43	38.00	61.21	18382	77366	3458.0	23,443.0	18.8%	30.3%
8	2/28/2004	90	473	9022	89	66.00	62.12	18180	95546	5940.0	29,383.0	32.7%	30.8%
9	5/31/2004	93	566	8929	61	75.00	64.24	18786	114332	6975.0	36,358.0	37.1%	31.8%
10	8/31/2004	92	658	8837	33	47.00	61.83	18584	132916	4324.0	40,682.0	23.3%	30.6%
11	9/8/2004	8	666	8829	43	38.00	61.54	1616	134532	304.0	40,986.0	18.8%	30.5%
12	9/9/2004	1	667	8828	56	49.50	61.52	202	134734	49.5	41,035.5	24.5%	30.5%
13	9/14/2004	5	672	8823	86	71.00	61.59	1010	135744	355.0	41,390.5	35.1%	30.5%
14	9/23/2004	9	681	8814	17	51.50	61.46	1818	137562	463.5	41,854.0	25.5%	30.4%
15	9/28/2004	5	686	8809	207	112.00	61.83	1010	138572	560.0	42,414.0	55.4%	30.6%
16	10/19/2004	21	707	8788	66	136.50	64.05	4242	142814	2866.5	45,280.5	67.6%	31.7%
17	11/5/2004	17	724	8771	28	47.00	63.65	3434	146248	799.0	46,079.5	23.3%	31.5%
18	12/3/2004	28	752	8743	26	27.00	62.28	5656	151904	756.0	46,835.5	13.4%	30.8%
19	2/28/2005	87	839	8656	89	57.50	61.79	17574	169478	5002.5	51,838.0	28.5%	30.6%
20	5/31/2005	92	931	8564	61	75.00	63.09	18584	188062	6900.0	58,738.0	37.1%	31.2%
21	8/10/2005	71	1002	8493	33	47.00	61.95	14342	202404	3337.0	62,075.0	23.3%	30.7%
22	8/11/2005	1	1003	8492	29.3	31.15	61.92	202	202606	31.2	62,106.2	15.4%	30.7%
23	9/15/2005	35	1038	8457	83.6	56.45	61.74	7070	209676	1975.8	64,081.9	27.9%	30.6%
24	9/23/2005	8	1046	8449	97	90.30	61.95	1616	211292	722.4	64,804.3	44.7%	30.7%
25	9/29/2005	6	1052	8443	44.2	70.60	62.00	1212	212504	423.6	65,227.9	35.0%	30.7%
26	10/6/2005	7	1059	8436	114	79.10	62.12	1414	213918	553.7	65,781.6	39.2%	30.8%
27	10/28/2005	22	1081	8414	12.3	63.15	62.14	4444	218362	1389.3	67,170.9	31.3%	30.8%
28	11/18/2005	21	1102	8393	3.71	8.01	61.11	4242	222604	168.1	67,339.0	4.0%	30.3%
29	12/29/2005	41	1143	8352	7.42	5.57	59.11	8282	230886	228.2	67,567.2	2.8%	29.3%
30	2/28/2006	61	1204	8291	89	48.21	58.56	12322	243208	2940.8	70,508.0	23.9%	29.0%
31	5/31/2006	92	1296	8199	61	75.00	59.73	18584	261792	6900.0	77,408.0	37.1%	29.6%
32	8/16/2006	77	1373	8122	39.2	50.10	59.19	15554	277346	3857.7	81,265.7	24.8%	29.3%
33	8/31/2006	15	1388	8107	39.2	39.20	58.97	3030	280376	588.0	81,853.7	19.4%	29.2%
34	10/5/2006	35	1423	8072	157	98.10	59.93	7070	287446	3433.5	85,287.2	48.6%	29.7%
35	10/19/2006	14	1437	8058	81.4	119.20	60.51	2828	290274	1668.8	86,956.0	59.0%	30.0%
36	11/19/2006	31	1468	8027	81.4	81.40	60.95	6262	296536	2523.4	89,479.4	40.3%	30.2%
37	11/30/2006	11	1479	8016	43	62.20	60.96	2222	298758	684.2	90,163.6	30.8%	30.2%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day (nanograms per cubic meter per day)

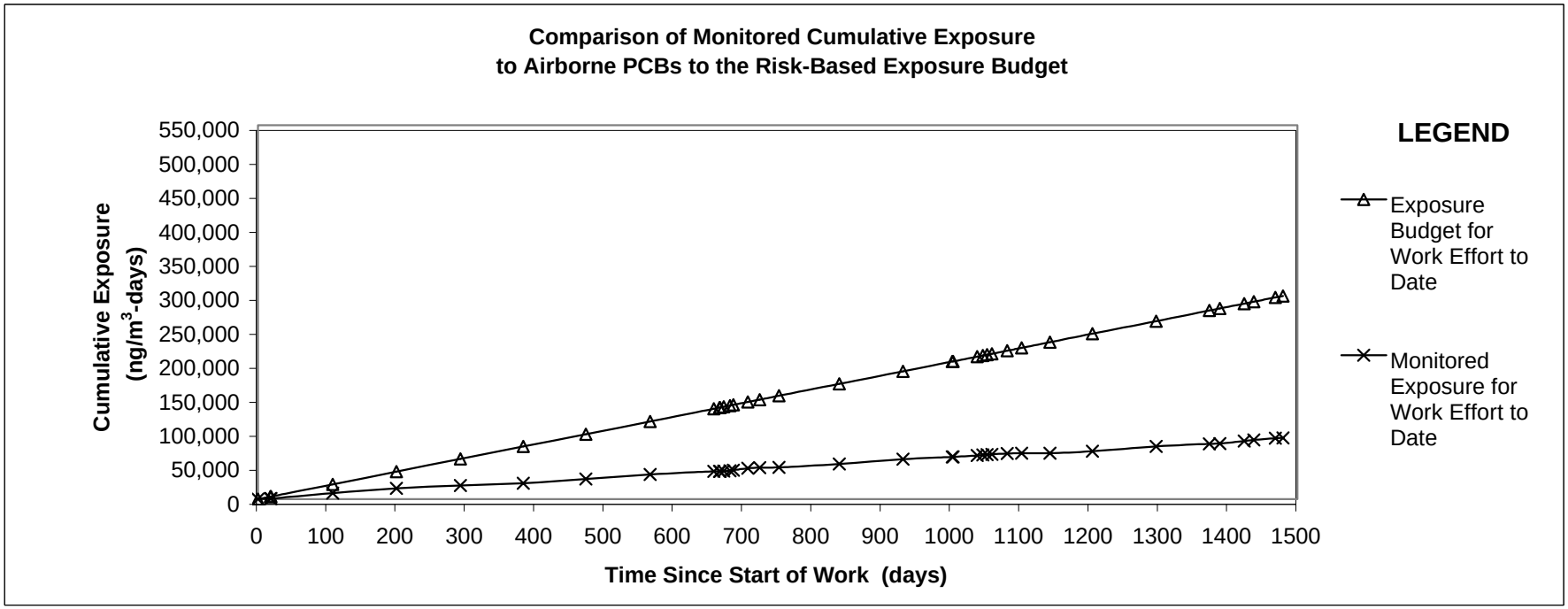
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	49 Area C Downwind
Collection Date:	11/30/2006
Measured PCB Concentration (ng/m^3):	43
Exposure Budget Expended During This Period:	30.8%
Cumulative Exposure Budget Expended to Date:	30.2%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 50 Area D Downwind
Exposure Budget Slope (EBS) = 344 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2006

Construction Activity: The October 28, 2005 sample was broken during analysis. The 2006 dredging activities were initiated on August 16, 2006 and the demobilization activities were completed on November 1, 2006.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. However, for the August 2005 background sampling event, based on wind direction for that day, the results from Station 52 were used to represent Area D downgradient air PCB concentrations. For Station 50 Area D, the average quarterly air PCB concentrations were used as background concentrations, which represent the average quarterly from Station 21 - New Bedford Welding, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, and from 12/28/05 through 8/15/06 to close the recent inactive field season. For the December 2005 post-dredging sampling event, based on wind direction for the day, the results from Station 51 were used to represent Area D downgradient air PCB concentrations. For the August 2006, and October 2006 sampling events, based on the wind direction for those days, Station 51 and Station 52 sampling events were used to represent Area D downgradient air PCB concentrations, respectively for those days.

In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used to project concentrations detected at Station 50 on August 16, 2006 (the start of dredging activities). For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. This better simulates the ambient air PCB concentrations at Station 50 during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the background concentrations were projected to be at background levels at Station 50 Area D on October 19, 2006, which is the day after the 2006 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 dredging activities. No triggers were identified, therefore, no action is necessary.

Monitoring Station		50 Area D Downwind
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	16.7
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
50 Area D Downwind

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	5.9	5.90	5.90	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	5.9	5.90	5.90	6192	6192	106.2	106.2	1.7%	1.7%
3	12/1/2002	1	19	9476	3.4	4.65	5.83	344	6536	4.7	110.9	1.4%	1.7%
4	2/28/2003	89	108	9387	3.4	3.40	3.83	30616	37152	302.6	413.5	1.0%	1.1%
5	5/31/2003	92	200	9295	6.8	5.10	4.41	31648	68800	469.2	882.7	1.5%	1.3%
6	8/31/2003	92	292	9203	12	9.40	5.98	31648	100448	864.8	1,747.5	2.7%	1.7%
7	11/30/2003	91	383	9112	5.9	8.95	6.69	31304	131752	814.5	2,561.9	2.6%	1.9%
8	2/28/2004	90	473	9022	3.4	4.65	6.30	30960	162712	418.5	2,980.4	1.4%	1.8%
9	5/31/2004	93	566	8929	6.8	5.10	6.10	31992	194704	474.3	3,454.7	1.5%	1.8%
10	8/31/2004	92	658	8837	12	9.40	6.56	31648	226352	864.8	4,319.5	2.7%	1.9%
11	9/8/2004	8	666	8829	5.9	8.95	6.59	2752	229104	71.6	4,391.1	2.6%	1.9%
12	9/9/2004	1	667	8828	20	12.95	6.60	344	229448	13.0	4,404.1	3.8%	1.9%
13	9/14/2004	5	672	8823	38	29.00	6.77	1720	231168	145.0	4,549.1	8.4%	2.0%
14	9/23/2004	9	681	8814	6	22.00	6.97	3096	234264	198.0	4,747.1	6.4%	2.0%
15	9/28/2004	5	686	8809	80	43.00	7.23	1720	235984	215.0	4,962.1	12.5%	2.1%
16	10/19/2004	21	707	8788	17	48.50	8.46	7224	243208	1018.5	5,980.6	14.1%	2.5%
17	12/3/2004	45	752	8743	22	19.50	9.12	15480	258688	877.5	6,858.1	5.7%	2.7%
18	2/28/2005	87	839	8656	3.4	12.70	9.49	29928	288616	1104.9	7,963.0	3.7%	2.8%
19	5/31/2005	92	931	8564	6.8	5.10	9.06	31648	320264	469.2	8,432.2	1.5%	2.6%
20	8/10/2005	71	1002	8493	12	9.40	9.08	24424	344688	667.4	9,099.6	2.7%	2.6%
21	8/11/2005	1	1003	8492	21.3	16.65	9.09	344	345032	16.7	9,116.2	4.8%	2.6%
22	9/15/2005	35	1038	8457	0.52	10.91	9.15	12040	357072	381.9	9,498.1	3.2%	2.7%
23	9/23/2005	8	1046	8449	0.26	0.39	9.08	2752	359824	3.1	9,501.2	0.1%	2.6%
24	9/29/2005	6	1052	8443	24.2	12.23	9.10	2064	361888	73.4	9,574.6	3.6%	2.6%
25	10/6/2005	7	1059	8436	81.7	52.95	9.39	2408	364296	370.7	9,945.2	15.4%	2.7%
26	10/28/2005	22	1081	8414	0.01	40.86	10.03	7568	371864	898.8	10,844.0	11.9%	2.9%
27	12/29/2005	62	1143	8352	2.18	1.10	9.55	21328	393192	67.9	10,911.9	0.3%	2.8%
28	2/28/2006	61	1204	8291	3.4	2.79	9.20	20984	414176	170.2	11,082.1	0.8%	2.7%
29	5/31/2006	92	1296	8199	6.8	5.10	8.91	31648	445824	469.2	11,551.3	1.5%	2.6%
30	8/16/2006	77	1373	8122	12	9.40	8.94	26488	472312	723.8	12,275.1	2.7%	2.6%
31	8/31/2006	15	1388	8107	67.3	39.65	9.27	5160	477472	594.8	12,869.8	11.5%	2.7%
32	10/5/2006	35	1423	8072	197	132.15	12.29	12040	489512	4625.3	17,495.1	38.4%	3.6%
33	10/19/2006	14	1437	8058	2.6	99.80	13.15	4816	494328	1397.2	18,892.3	29.0%	3.8%
34	11/19/2006	31	1468	8027	2.6	2.60	12.92	10664	504992	80.6	18,972.9	0.8%	3.8%
35	11/30/2006	11	1479	8016	5.9	4.25	12.86	3784	508776	46.8	19,019.6	1.2%	3.7%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day (nanograms per cubic meter per day)

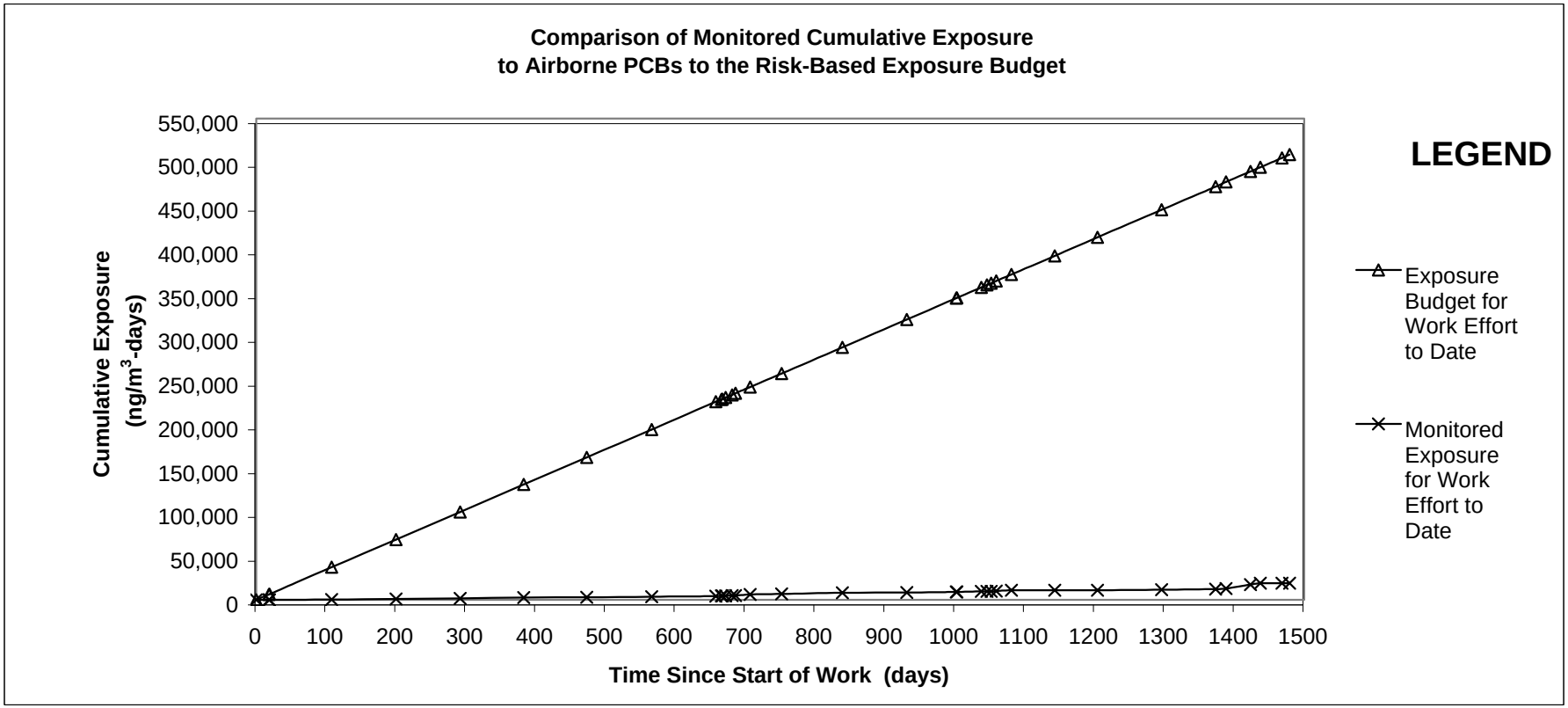
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	50 Area D Downwind
Collection Date:	11/30/2006
Measured PCB Concentration (ng/m^3):	5.9
Exposure Budget Expended During This Period:	1.2%
Cumulative Exposure Budget Expended to Date:	3.7%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

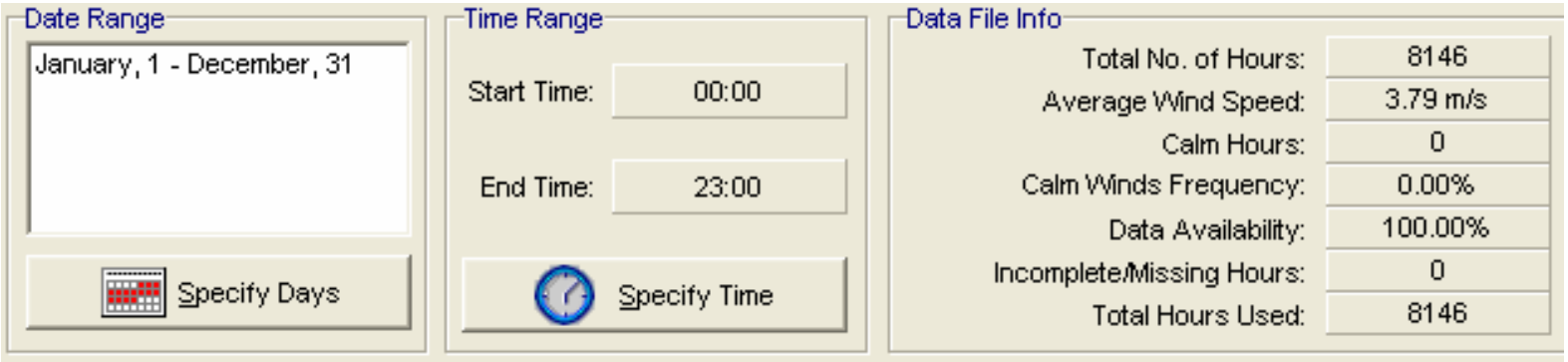
a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).

ATTACHMENT F

2006 New Bedford Harbor On-Site Climatic Data Survey

(January 1 – December 31, 2006, Hourly Data)

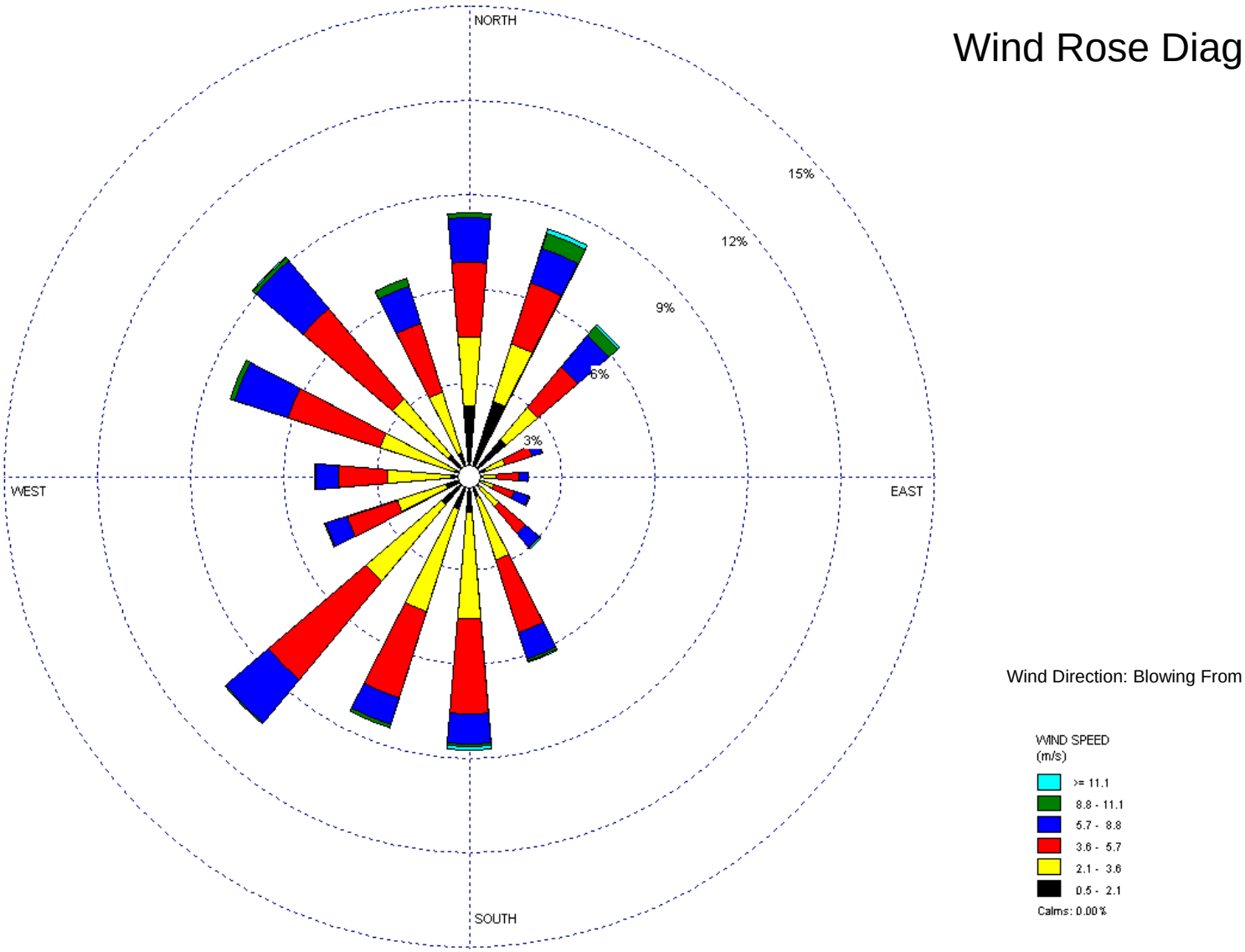
2006 New Bedford Harbor On-Site Climatic Data Summary
(January 1 – December 31, 2006 Hourly Data)



1 m/s (meter per second) = 2.237 mile per hour

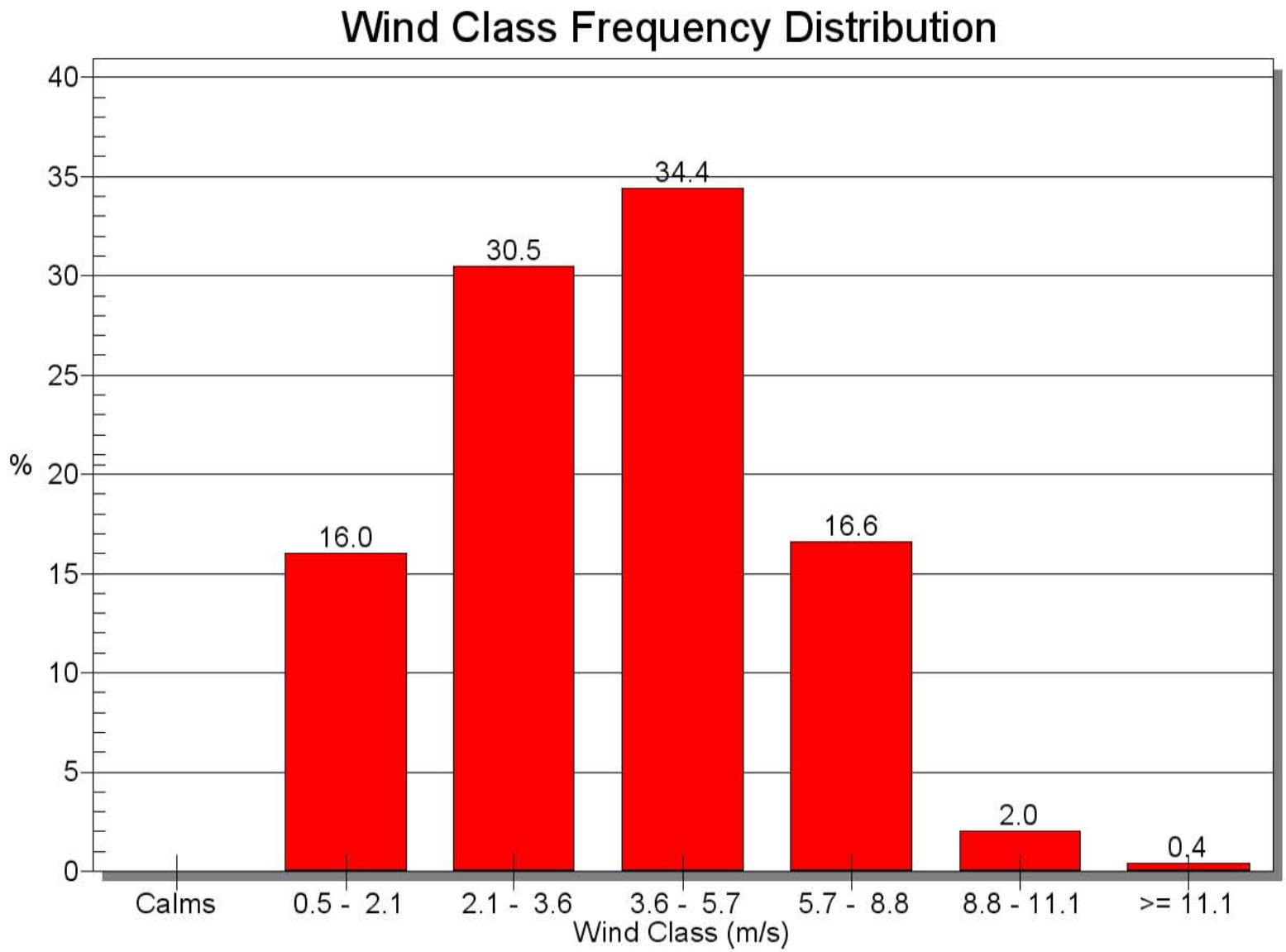
(January 1 – December 31, 2006 Hourly Data)

Wind Rose Diagram



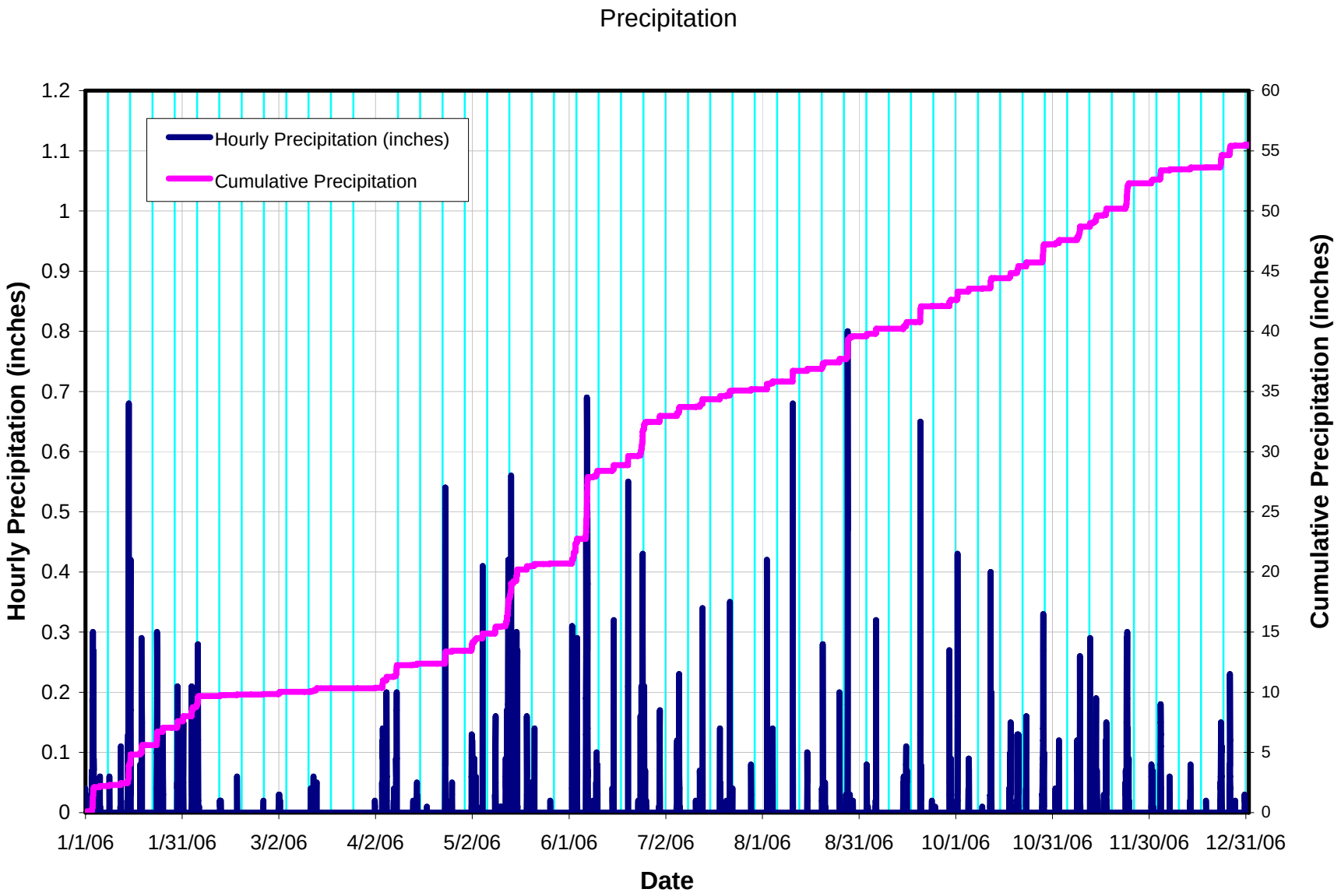
1 m/s (meter per second) = 2.237 miles per hour

(January 1 – December 31, 2006 Hourly Data)



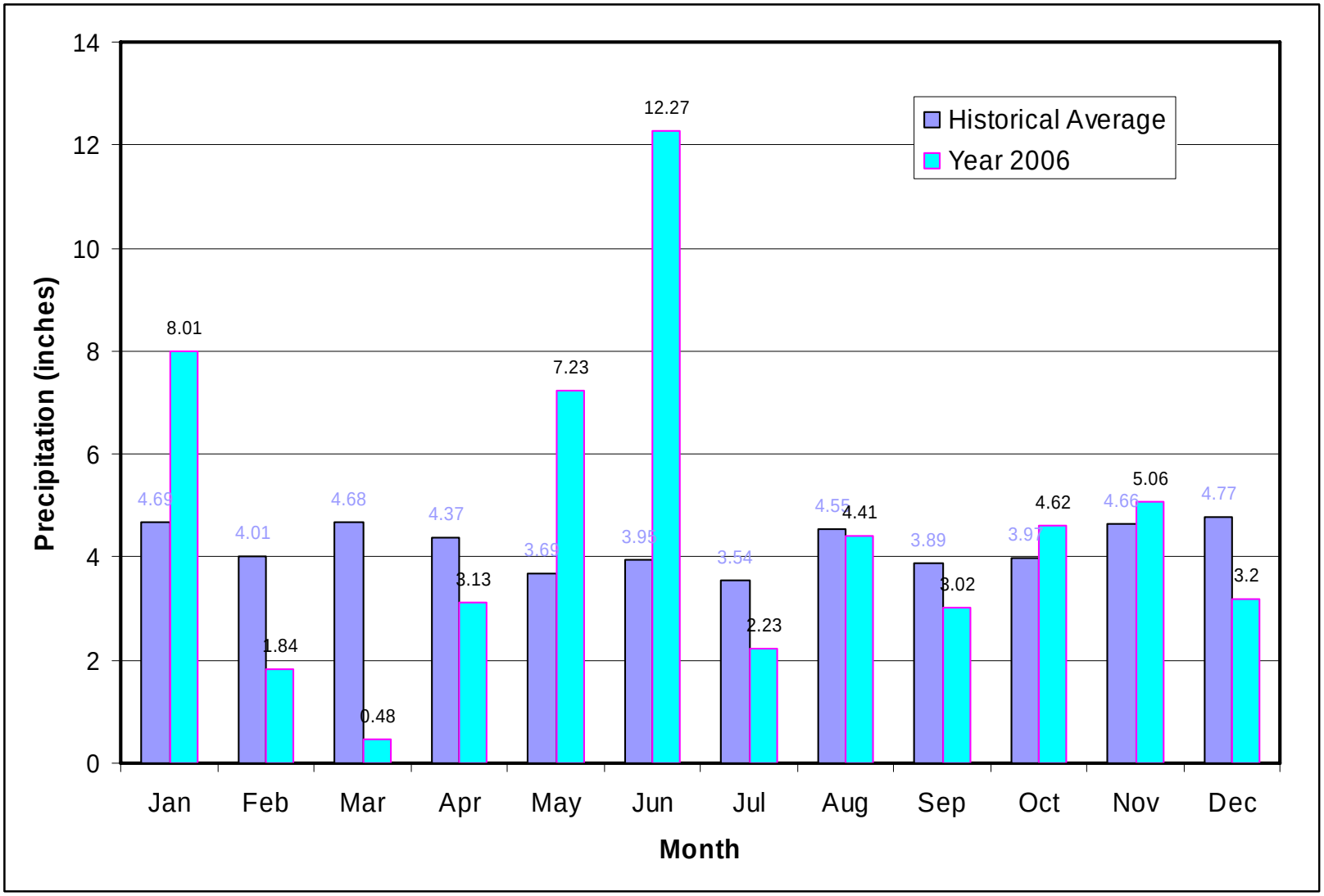
1 m/s (meter per second) = 2.237 miles per hour

(January 1 – December 31, 2006 Hourly Data)



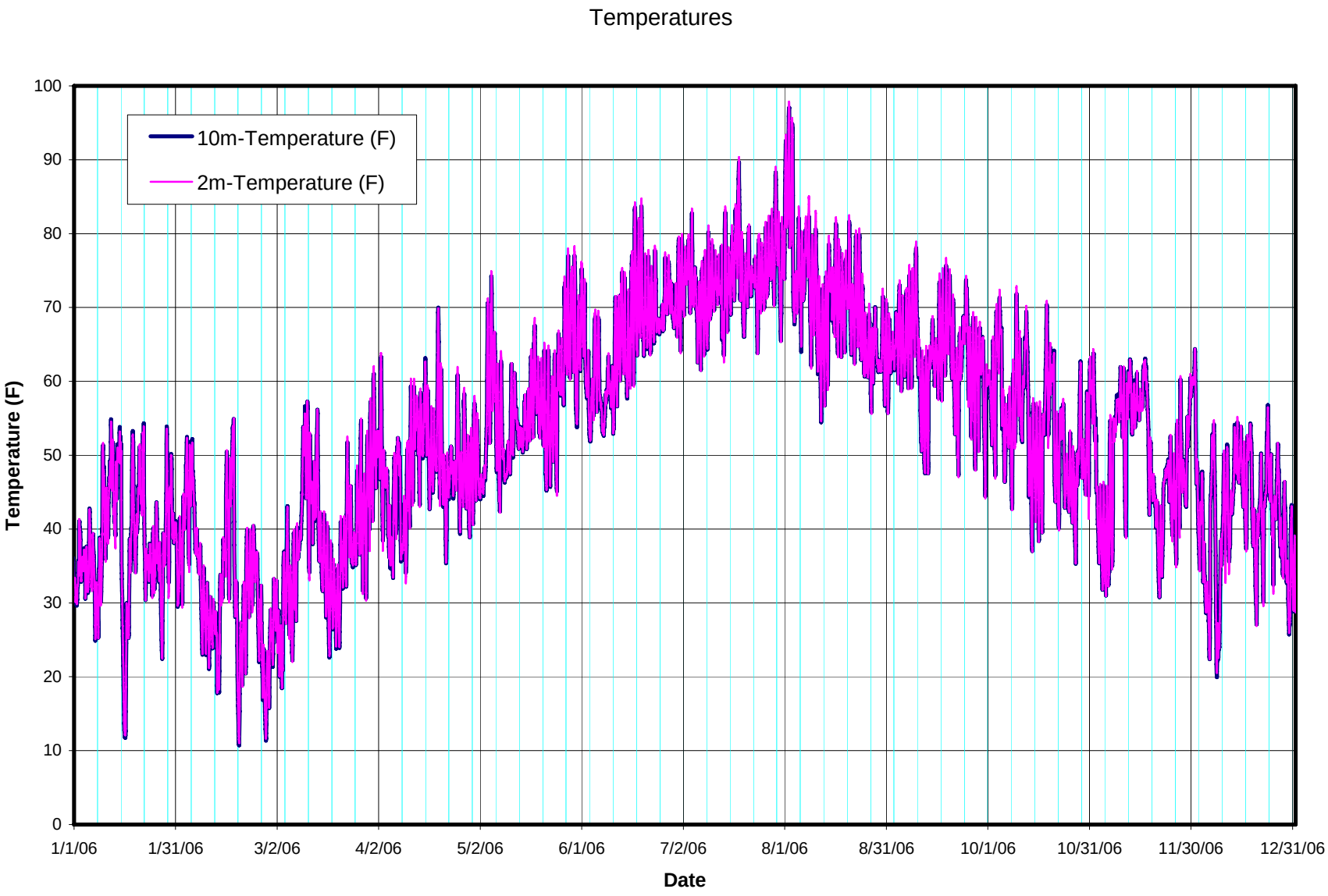
2006 was a slightly wetter year at NBH. The yearly precipitation (55.50 inches) is higher than the historical average (50.77 inches).

(January 1 – December 31, 2006 Hourly Data)



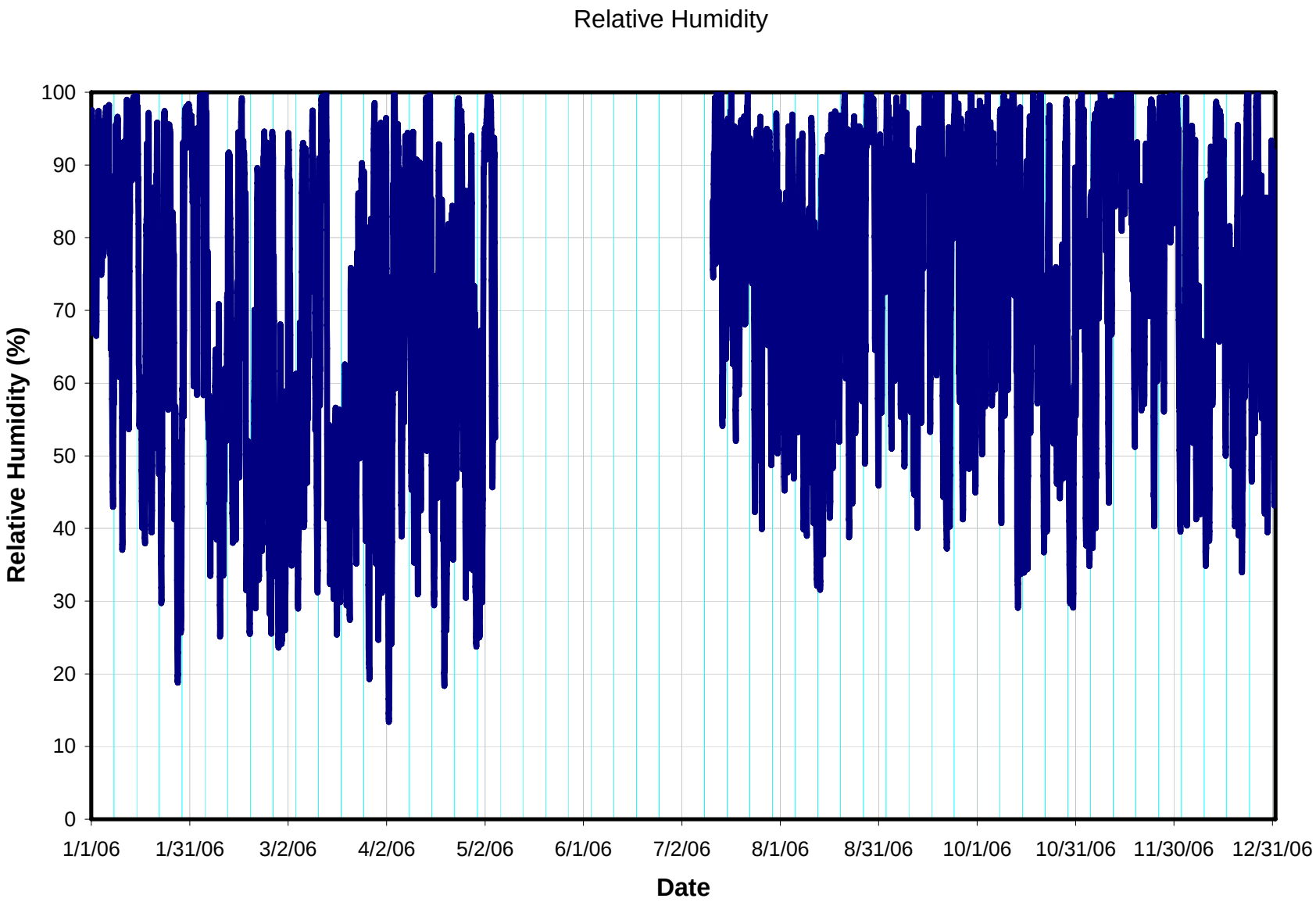
2006 was dryer in Feb-April and wetter in May-June. Precipitation was about normal for the dredging season (Aug-Nov).

(January 1 – December 31, 2006 Hourly Data)



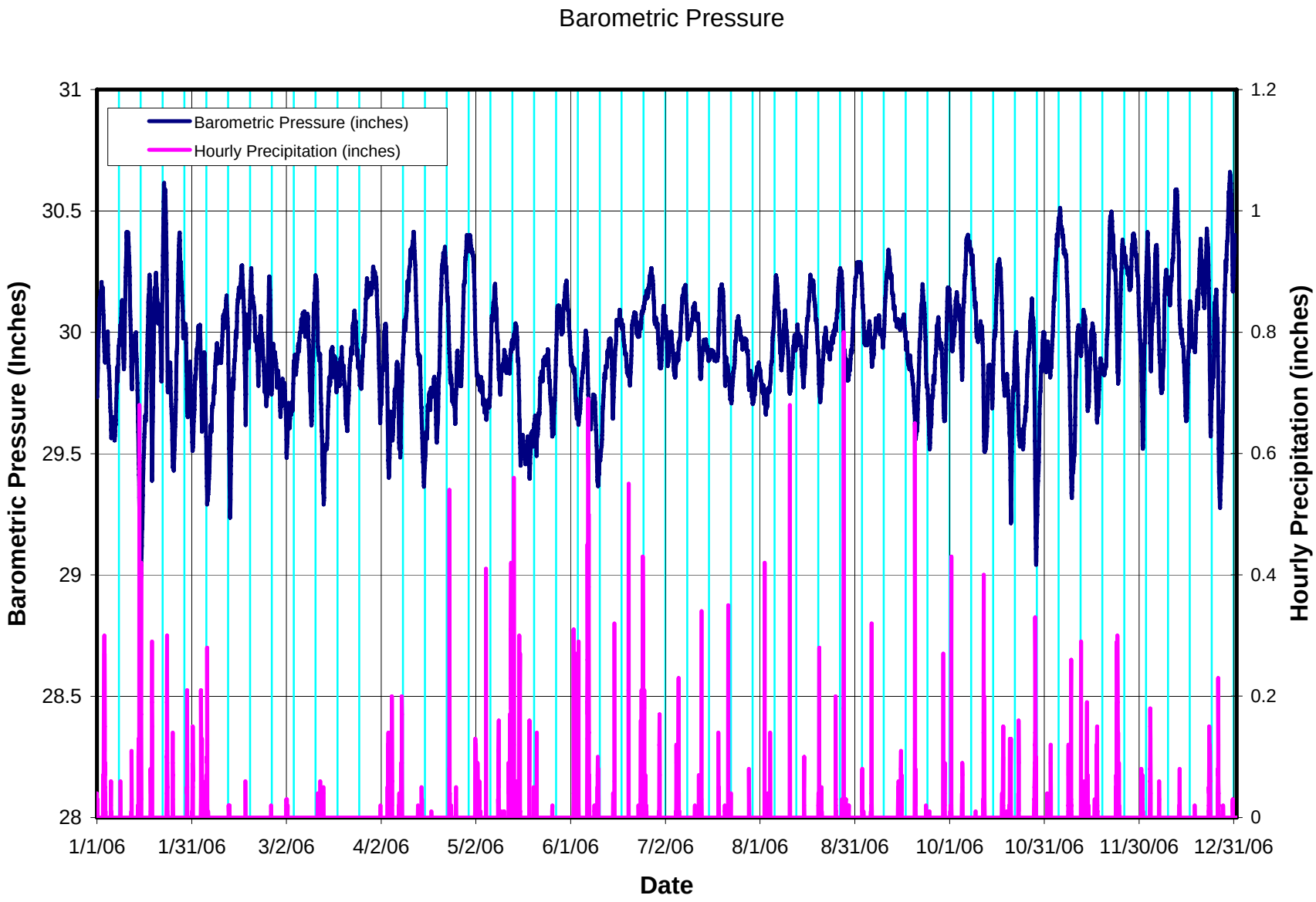
Temperatures recorded at 10m and 2m had a mean difference of 0.097 ^{o}F ($T\text{-}_{2m} – T\text{-}_{10m}$). The largest difference is 5.6 ^{o}F.

(January 1 – December 31, 2006 Hourly Data)



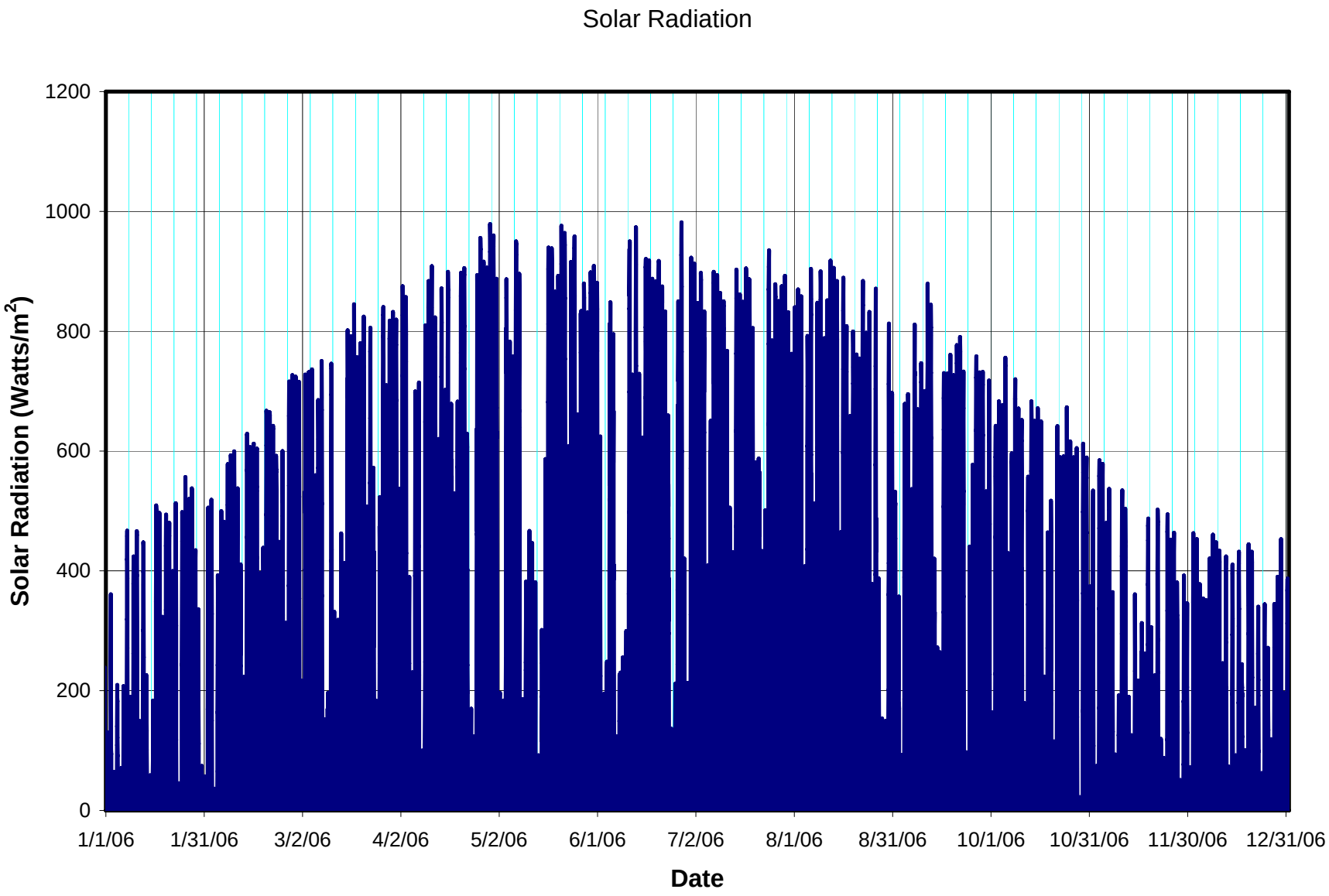
Relative humidity data was not recorded between 5/5 to 7/11/2006 when the recording instrument was repaired offsite.

(January 1 – December 31, 2006 Hourly Data)



Each precipitation event resulted in a lower barometric pressure reading.

(January 1 – December 31, 2006 Hourly Data)



2006 New Bedford Harbor On-Site Climatic Data Summary
For the Sampling Periods

First Monthly Sampling Round -
(7am August 30 – 4pm August 31, 2006)

Second Monthly Sampling Round -
(7am October 4 – 5pm October 6, 2006)

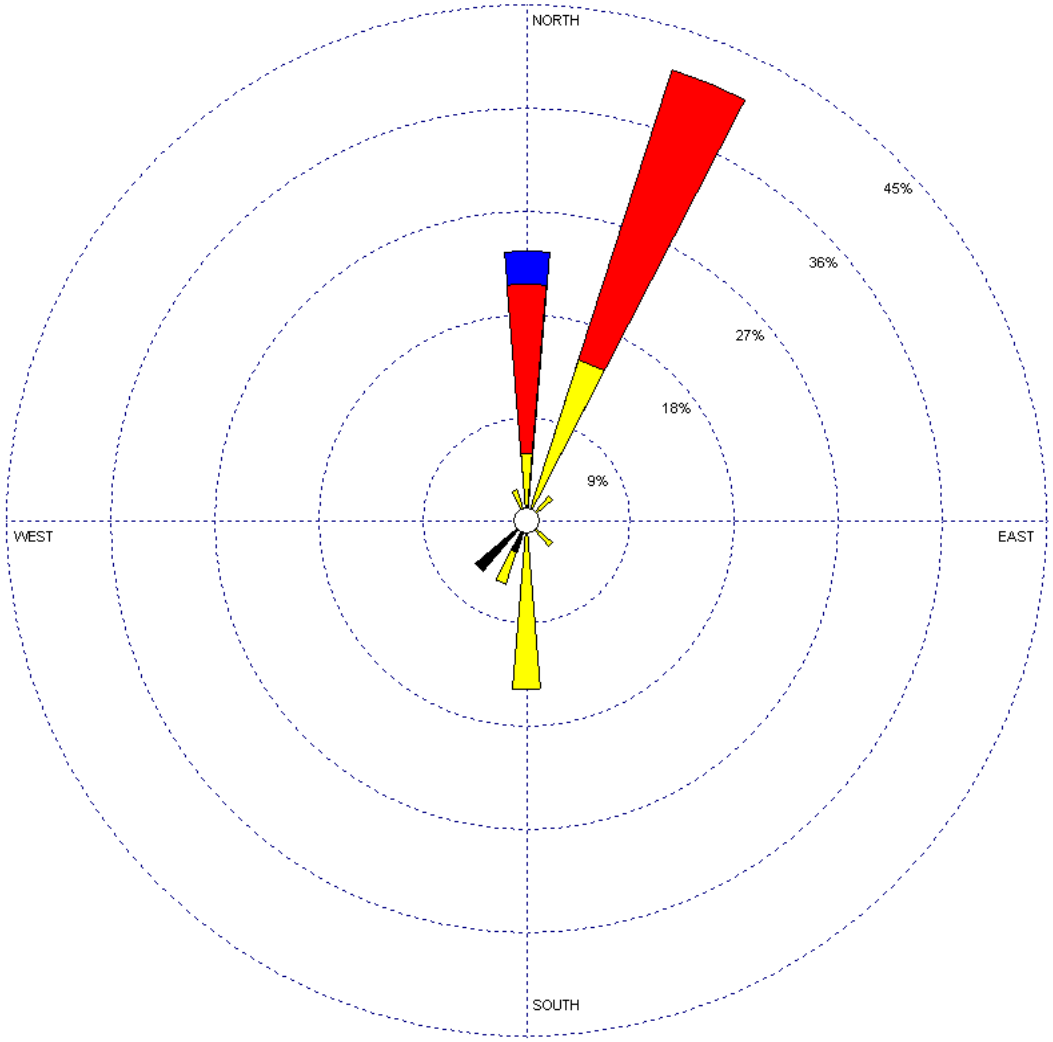
Post Dredging/Demobilization Sampling Round -
(7am November 18 – 1pm November 19, 2006)

First Monthly Sampling Round
(7am August 30 – 4pm August 31, 2006 Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inches)	Solar Radiation (Watts/m2)	Hourly Precipitation (inches)	Tidal Elevation (ft)
8/30/06 7:00 AM	6.73	14.63	61.48	61.43	0.05	96.50	29.87	12.08	0	
8/30/06 8:00 AM	6.98	6.58	62.05	62.14	-0.10	93.66	29.88	78.05	0	
8/30/06 9:00 AM	8.26	16.68	62.91	63.21	-0.30	90.12	29.89	142.59	0	
8/30/06 10:00 AM	8.58	13.47	63.71	64.14	-0.43	86.75	29.90	201.43	0	
8/30/06 11:00 AM	8.71	30.92	64.94	65.66	-0.72	80.19	29.92	360.50	0	
8/30/06 12:00 PM	6.23	25.13	66.25	67.13	-0.89	75.46	29.93	412.92	0	
8/30/06 1:00 PM	4.82	53.00	68.48	69.85	-1.37	66.26	29.93	712.18	0	3.7
8/30/06 2:00 PM	5.42	123.90	70.29	71.77	-1.48	64.54	29.93	812.91	0	
8/30/06 3:00 PM	6.53	177.10	70.96	72.51	-1.55	67.56	29.92	700.88	0	
8/30/06 4:00 PM	6.82	182.40	71.47	72.53	-1.07	65.79	29.92	552.82	0	
8/30/06 5:00 PM	6.65	178.30	71.16	71.96	-0.81	67.35	29.92	418.23	0	
8/30/06 6:00 PM	6.90	177.30	70.57	71.04	-0.47	68.85	29.92	240.39	0	
8/30/06 7:00 PM	5.23	173.40	69.85	69.85	-0.01	70.86	29.92	89.60	0	0.9
8/30/06 8:00 PM	4.26	193.90	68.43	68.01	0.41	79.49	29.93	-0.63	0	
8/30/06 9:00 PM	2.80	202.80	66.19	65.91	0.28	87.76	29.95	-2.91	0	
8/30/06 10:00 PM	2.65	243.80	65.12	64.85	0.27	91.04	29.96	-2.80	0	
8/30/06 11:00 PM	1.98	230.30	64.76	64.39	0.37	91.12	29.97	-1.83	0	
8/31/06 12:00 AM	4.59	330.40	63.81	63.72	0.09	93.12	29.99	-1.64	0	
8/31/06 1:00 AM	9.61	0.31	64.49	64.35	0.14	79.56	30.00	-2.66	0	
8/31/06 2:00 AM	13.31	5.17	63.28	63.20	0.07	71.41	30.00	-2.80	0	3
8/31/06 3:00 AM	10.87	4.64	61.46	61.40	0.06	74.46	30.02	-2.80	0	
8/31/06 4:00 AM	10.37	4.00	60.07	60.03	0.05	76.63	30.04	-2.80	0	
8/31/06 5:00 AM	7.96	359.30	58.86	58.80	0.06	78.42	30.05	-2.81	0	
8/31/06 6:00 AM	6.69	354.60	57.47	57.40	0.07	82.24	30.07	-2.30	0	
8/31/06 7:00 AM	6.25	358.40	56.70	56.75	-0.05	80.13	30.09	49.90	0	0.6
8/31/06 8:00 AM	8.84	5.27	57.53	57.89	-0.36	75.54	30.10	172.76	0	
8/31/06 9:00 AM	9.11	6.85	59.20	59.83	-0.63	71.98	30.11	303.49	0	
8/31/06 10:00 AM	10.66	20.49	61.83	62.80	-0.97	66.03	30.12	525.79	0	
8/31/06 11:00 AM	10.52	24.08	64.13	65.17	-1.03	57.88	30.13	573.88	0	
8/31/06 12:00 PM	11.47	27.48	65.63	66.74	-1.11	51.12	30.14	650.57	0	
8/31/06 1:00 PM	10.03	22.63	66.84	68.09	-1.25	49.32	30.14	697.12	0	
8/31/06 2:00 PM	8.25	19.30	67.22	68.51	-1.29	47.43	30.15	695.12	0	3.7
8/31/06 3:00 PM	6.78	28.51	68.34	69.56	-1.22	46.13	30.15	631.11	0	
8/31/06 4:00 PM	5.90	31.10	69.93	70.79	-0.86	45.88	30.15	456.31	0	
Maximum	**13.31**		**71.47**	**72.53**	**0.41**	**96.50**	**30.15**	**812.91**	**0.00**	**3.70**
Minimum	**1.98**		**56.70**	**56.75**	**-1.55**	**45.88**	**29.87**	**-2.91**	**0.00**	**0.60**
Average	**7.38**		**64.86**	**65.34**	**-0.47**	**73.25**	**30.00**	**278.37**	**0.00**	**2.38**

First Monthly Sampling Round
(7am August 30 – 4pm August 31, 2006 Hourly Data)

Wind Rose Diagram



Wind Direction: Blowing From

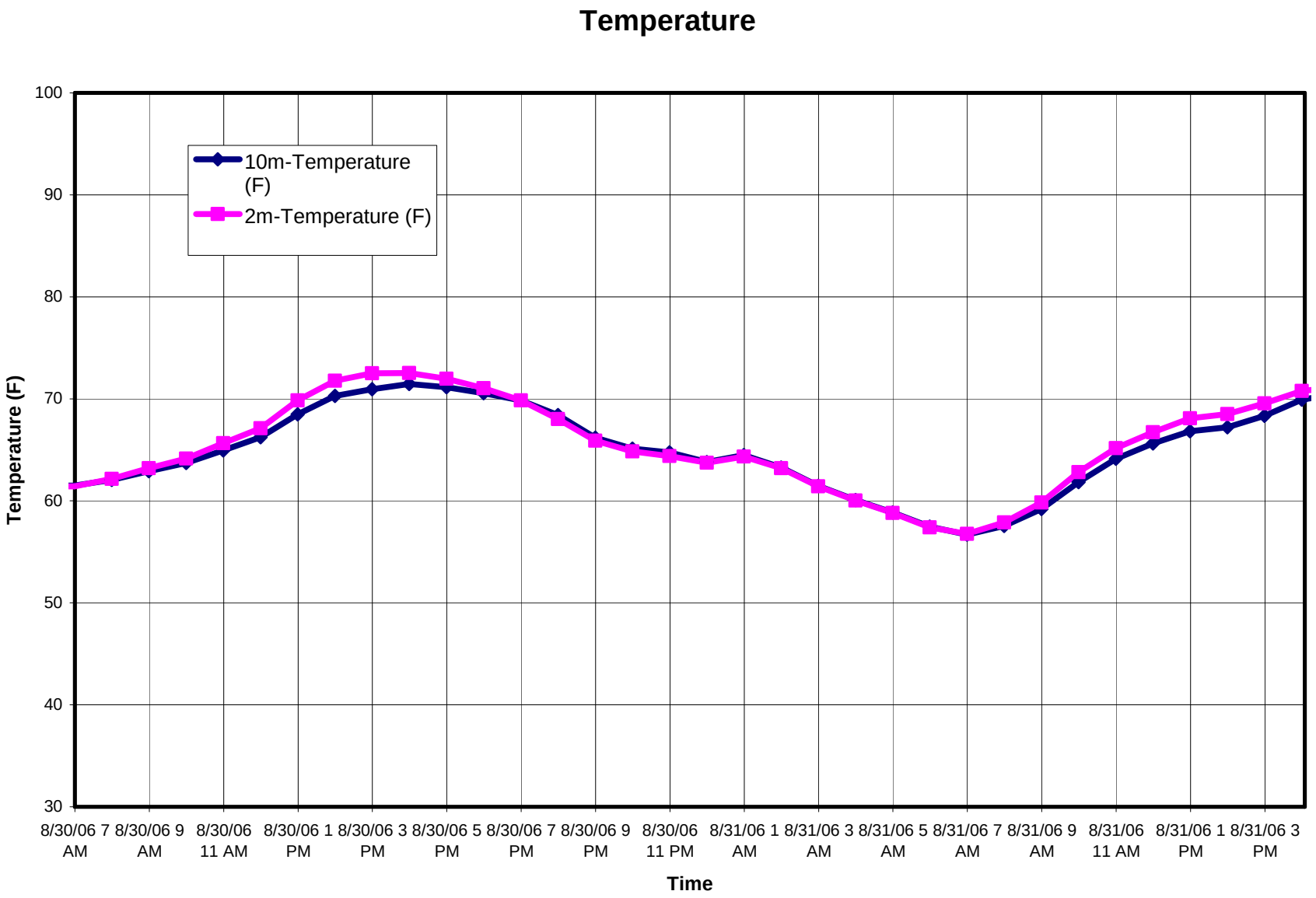
WIND SPEED
(m/s)

- >= 11.1
- 8.8 - 11.1
- 5.7 - 8.8
- 3.6 - 5.7
- 2.1 - 3.6
- 0.5 - 2.1

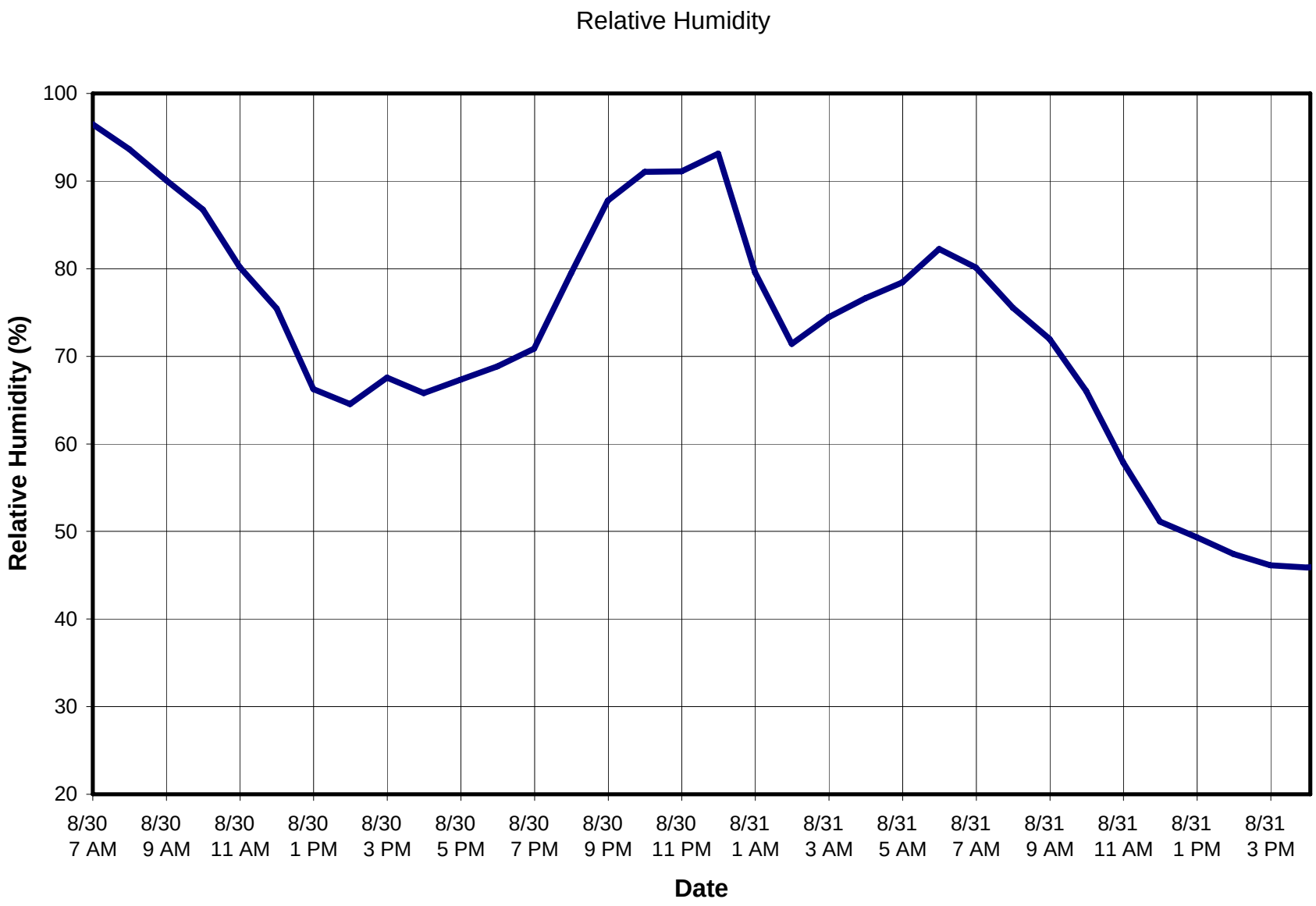
Calms: 0.00%

1 m/s (meter per second) = 2.237 miles per hour

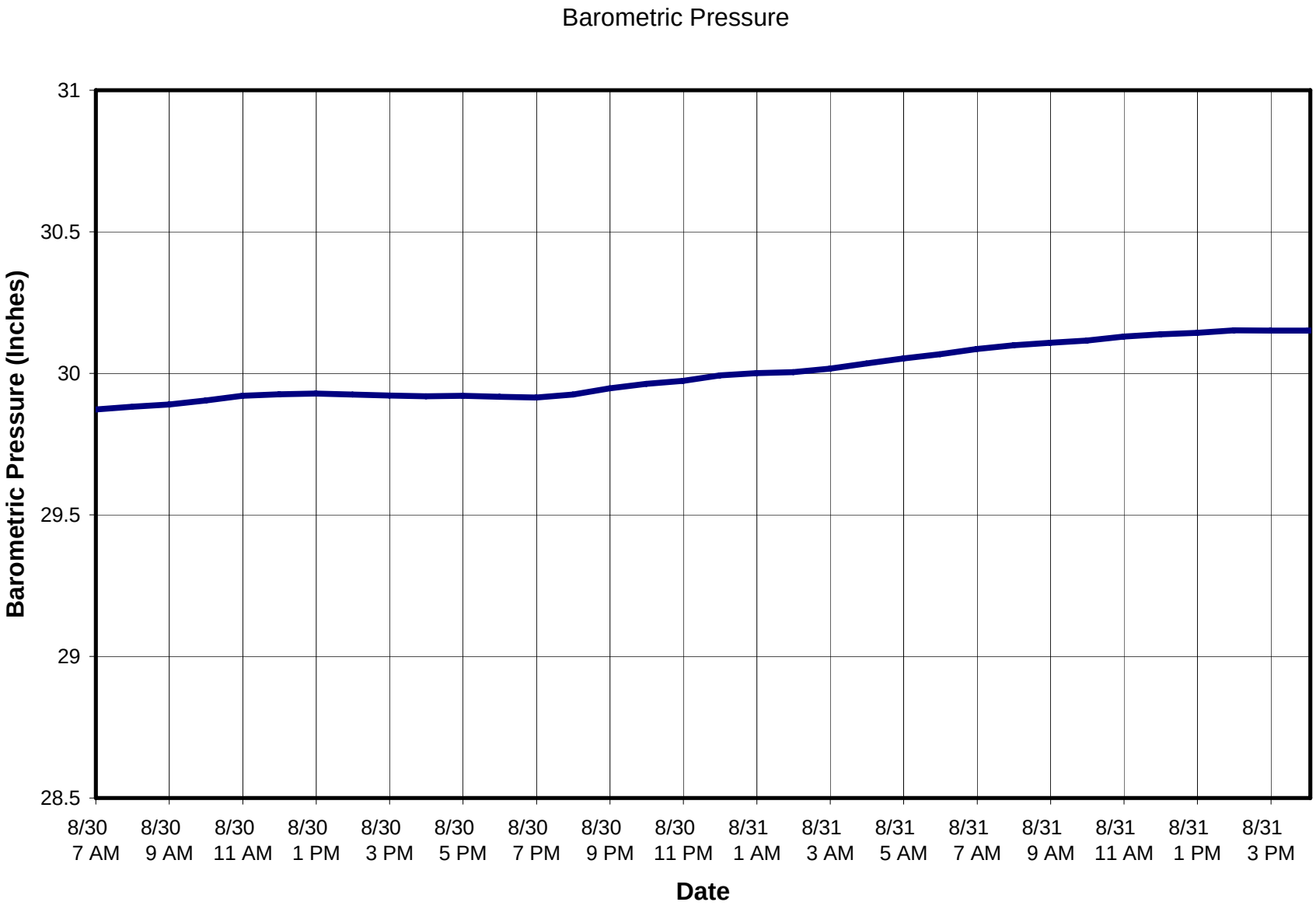
First Monthly Sampling Round
(7am August 30 – 4pm August 31, 2006 Hourly Data)



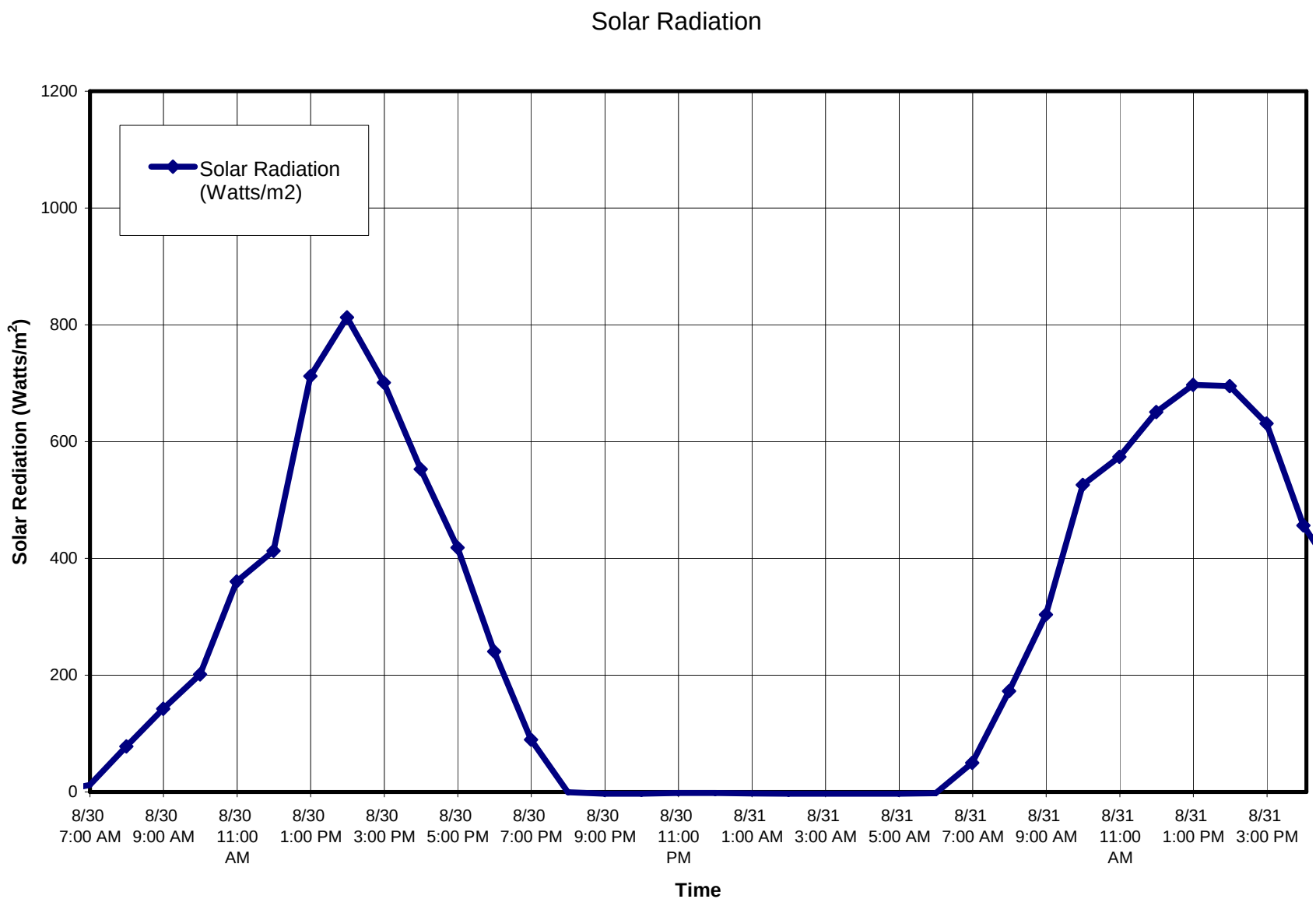
First Monthly Sampling Round
(7am August 30 – 4pm August 31, 2006 Hourly Data)



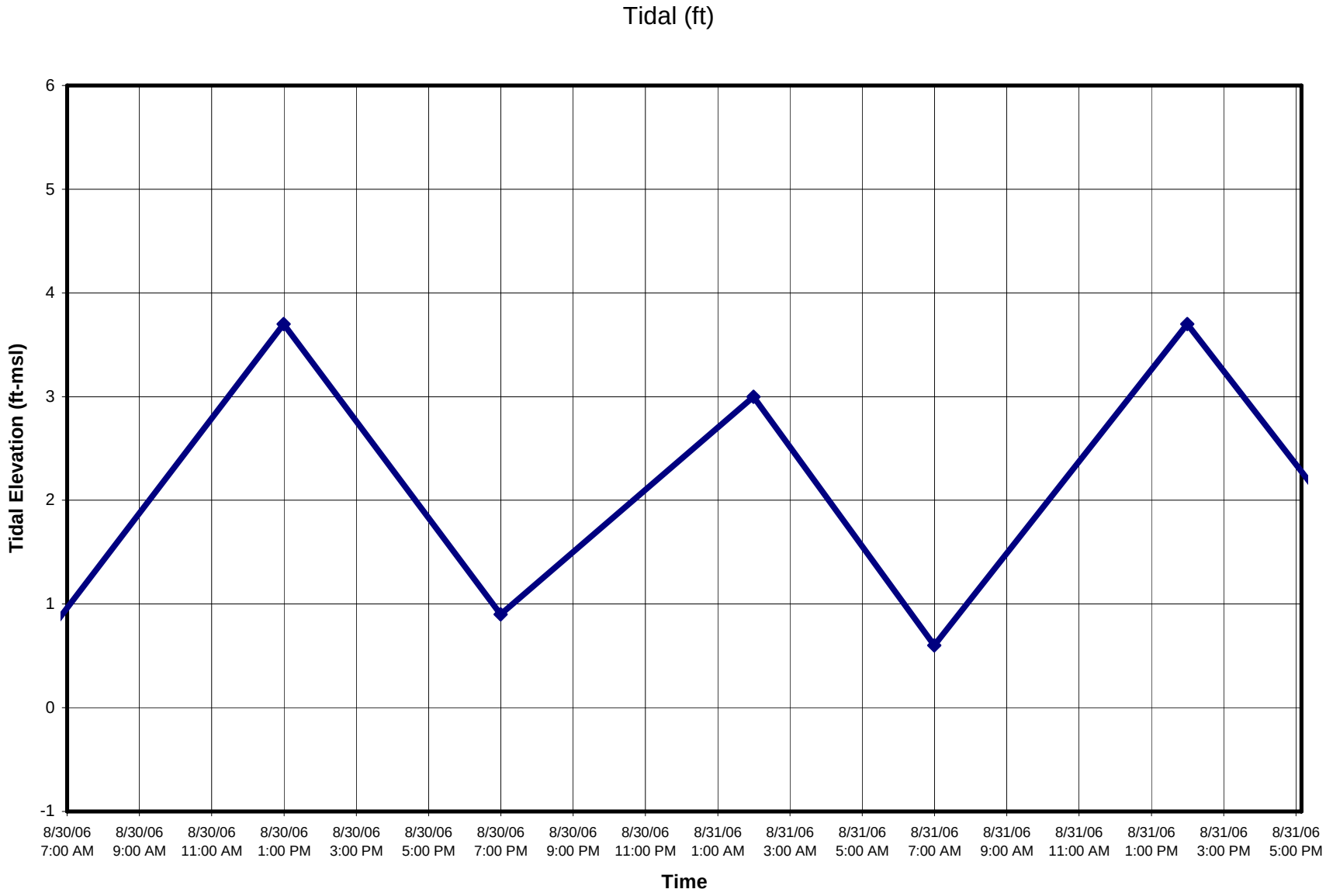
First Monthly Sampling Round
(7am August 30 – 4pm August 31, 2006 Hourly Data)



First Monthly Sampling Round
(7am August 30 – 4pm August 31, 2006 Hourly Data)



First Monthly Sampling Round
(7am August 30 – 4pm August 31, 2006 Hourly Data)



Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inches)	Solar Radiation (Watts/m2)	Hourly Precipitation (inches)	Tidal Elevation (ft)
10/4/06 7:00 AM	2.43	247.00	61.49	61.09	0.39	99.75	30.08	3.07	0	
10/4/06 8:00 AM	3.02	186.10	61.99	61.61	0.38	99.66	30.09	86.92	0	
10/4/06 9:00 AM	4.43	198.60	62.80	62.70	0.10	97.59	30.09	111.80	0	
10/4/06 10:00 AM	5.28	203.40	64.68	64.80	-0.12	93.14	30.09	140.64	0	
10/4/06 11:00 AM	6.32	226.90	67.21	67.74	-0.53	83.87	30.07	315.29	0	
10/4/06 12:00 PM	8.66	215.20	69.69	70.63	-0.95	73.45	30.05	623.71	0	-0.1
10/4/06 1:00 PM	9.50	205.00	71.33	72.40	-1.07	69.25	30.03	676.35	0	
10/4/06 2:00 PM	10.74	210.40	70.34	71.18	-0.84	72.12	30.01	522.63	0	
10/4/06 3:00 PM	12.05	207.10	69.64	70.41	-0.77	75.67	29.98	461.53	0	
10/4/06 4:00 PM	11.90	220.50	69.51	70.12	-0.61	77.68	29.97	395.23	0	
10/4/06 5:00 PM	10.55	213.60	68.98	69.40	-0.42	79.54	29.95	231.47	0	
10/4/06 6:00 PM	11.46	215.30	67.47	67.64	-0.17	85.42	29.94	81.19	0	
10/4/06 7:00 PM	13.89	219.90	66.72	66.75	-0.03	89.41	29.92	1.23	0	4.6
10/4/06 8:00 PM	13.08	230.00	66.94	66.98	-0.04	88.42	29.91	-0.01	0	
10/4/06 9:00 PM	11.50	227.50	66.61	66.56	0.04	90.17	29.90	-1.54	0	
10/4/06 10:00 PM	9.91	225.40	66.50	66.45	0.05	91.66	29.88	-0.55	0	
10/4/06 11:00 PM	9.98	224.70	66.93	66.85	0.08	90.58	29.86	-2.15	0	
10/5/06 12:00 AM	10.22	220.40	66.81	66.75	0.07	90.46	29.84	-0.65	0	
10/5/06 1:00 AM	10.79	223.40	67.10	66.99	0.11	91.16	29.82	-0.53	0.04	-0.3
10/5/06 2:00 AM	10.87	232.50	67.13	66.88	0.25	93.43	29.80	0.60	0	
10/5/06 3:00 AM	9.68	254.00	67.23	66.98	0.25	94.46	29.81	0.00	0.05	
10/5/06 4:00 AM	7.34	268.10	66.71	66.43	0.28	95.88	29.82	0.00	0.09	
10/5/06 5:00 AM	12.38	351.60	61.64	61.58	0.06	93.36	29.85	0.32	0.07	
10/5/06 6:00 AM	14.33	353.40	58.05	58.11	-0.06	88.09	29.90	2.26	0	
10/5/06 7:00 AM	14.43	350.90	55.37	55.52	-0.15	84.28	29.96	2.39	0	4.8
10/5/06 8:00 AM	14.73	358.30	53.75	53.95	-0.21	81.74	30.01	17.45	0	
10/5/06 9:00 AM	13.91	1.91	53.53	53.98	-0.44	75.64	30.05	195.18	0	
10/5/06 10:00 AM	18.25	17.36	54.96	55.72	-0.76	65.42	30.08	440.62	0	
10/5/06 11:00 AM	18.49	22.48	55.30	55.98	-0.68	64.45	30.10	358.30	0	
10/5/06 12:00 PM	16.65	26.06	56.48	57.61	-1.12	60.35	30.11	755.73	0	
10/5/06 1:00 PM	16.51	32.57	56.75	57.97	-1.22	59.27	30.12	742.59	0	-0.5
10/5/06 2:00 PM	14.53	33.00	57.27	58.38	-1.12	58.31	30.13	587.77	0	
10/5/06 3:00 PM	14.47	45.78	57.79	58.94	-1.14	56.92	30.12	580.97	0	
10/5/06 4:00 PM	13.53	49.80	57.85	58.79	-0.95	58.40	30.12	463.23	0	

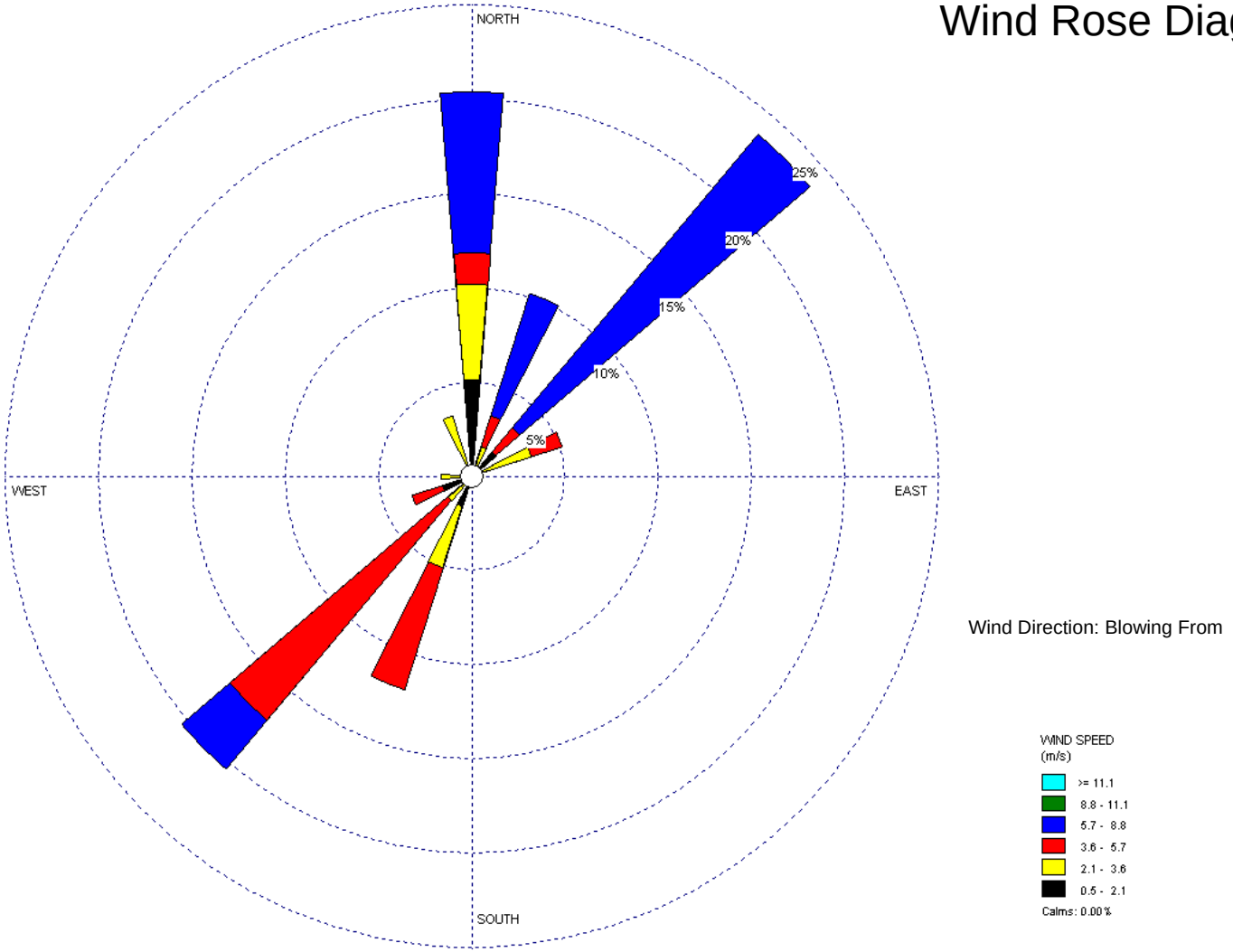
Continued on Next Page

Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inches)	Solar Radiation (Watts/m2)	Hourly Precipitation (inches)	Tidal Elevation (ft)
10/5/06 5:00 PM	12.63	48.24	57.44	58.13	-0.69	61.29	30.14	293.61	0	
10/5/06 6:00 PM	11.15	55.94	56.04	56.45	-0.41	63.49	30.15	99.56	0	
10/5/06 7:00 PM	5.56	60.92	54.00	54.08	-0.07	73.89	30.18	-0.48	0	
10/5/06 8:00 PM	4.28	55.98	52.66	52.65	0.01	78.03	30.20	-3.00	0	4.8
10/5/06 9:00 PM	2.95	41.13	51.49	51.36	0.13	81.60	30.20	-2.95	0	
10/5/06 10:00 PM	3.50	5.44	50.58	50.32	0.26	86.82	30.22	-2.98	0	
10/5/06 11:00 PM	2.47	350.90	49.19	48.90	0.29	89.97	30.23	-3.05	0	
10/6/06 12:00 AM	3.35	357.20	48.05	47.85	0.20	89.98	30.24	-2.85	0	
10/6/06 1:00 AM	4.45	9.55	46.47	46.36	0.12	94.37	30.24	-3.02	0	
10/6/06 2:00 AM	5.96	3.49	46.37	46.37	0.00	89.62	30.24	-3.26	0	-0.6
10/6/06 3:00 AM	5.91	3.61	46.62	46.60	0.02	86.69	30.24	-2.67	0	
10/6/06 4:00 AM	4.69	338.70	47.49	47.55	-0.06	83.04	30.25	-0.90	0	
10/6/06 5:00 AM	6.60	357.00	47.33	47.43	-0.10	86.39	30.28	-1.24	0	
10/6/06 6:00 AM	6.37	342.90	47.26	47.35	-0.09	89.71	30.30	-1.10	0	
10/6/06 7:00 AM	7.60	8.11	48.40	48.53	-0.14	88.96	30.31	1.23	0	
10/6/06 8:00 AM	7.81	25.50	50.57	50.83	-0.26	80.72	30.33	90.65	0	5.2
10/6/06 9:00 AM	11.06	38.24	53.16	53.69	-0.53	68.25	30.35	225.06	0	
10/6/06 10:00 AM	15.35	44.82	55.14	55.95	-0.81	59.76	30.37	429.40	0	
10/6/06 11:00 AM	17.95	45.42	56.00	56.72	-0.72	60.00	30.38	399.59	0	
10/6/06 12:00 PM	18.85	50.38	56.18	56.95	-0.77	59.11	30.39	389.80	0	
10/6/06 1:00 PM	17.52	47.68	56.21	56.97	-0.76	59.91	30.39	399.05	0	
10/6/06 2:00 PM	18.13	44.08	55.94	56.63	-0.69	61.82	30.38	293.09	0	-0.7
10/6/06 3:00 PM	17.45	47.40	55.30	55.84	-0.54	64.88	30.36	160.22	0	
10/6/06 4:00 PM	15.84	44.16	54.83	55.34	-0.51	68.32	30.37	160.20	0	
10/6/06 5:00 PM	14.61	42.63	54.44	54.86	-0.42	69.95	30.39	92.79	0	
Maximum	**18.85**		**71.33**	**72.40**	**0.39**	**99.75**	**30.39**	**755.73**	**0.09**	**5.20**
Minimum	**2.43**		**46.37**	**46.36**	**-1.22**	**56.92**	**29.80**	**-3.26**	**0.00**	**-0.70**
Average	**10.64**		**58.47**	**58.77**	**-0.30**	**79.08**	**30.11**	**183.05**	**0.00**	**1.91**

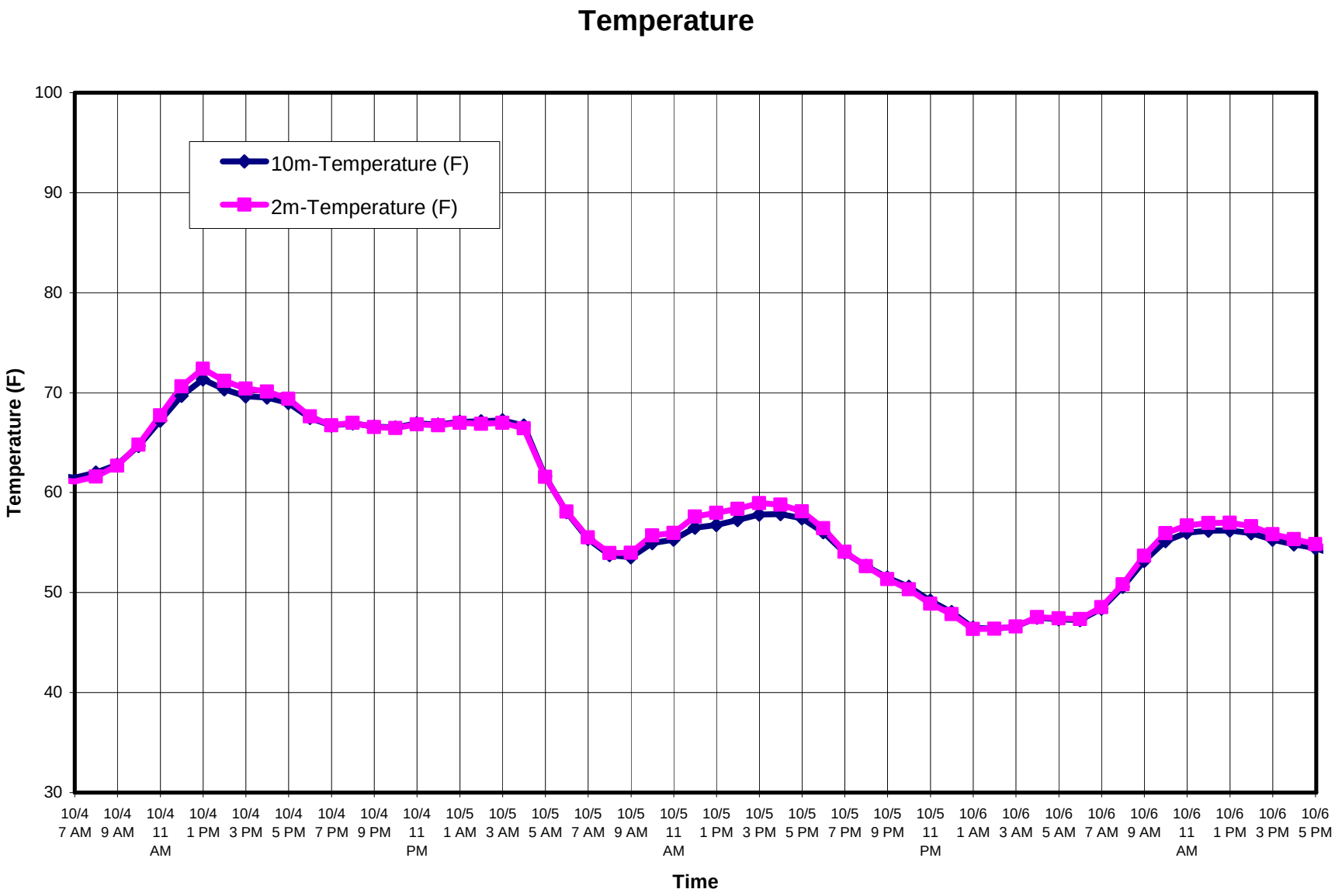
Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)

Wind Rose Diagram

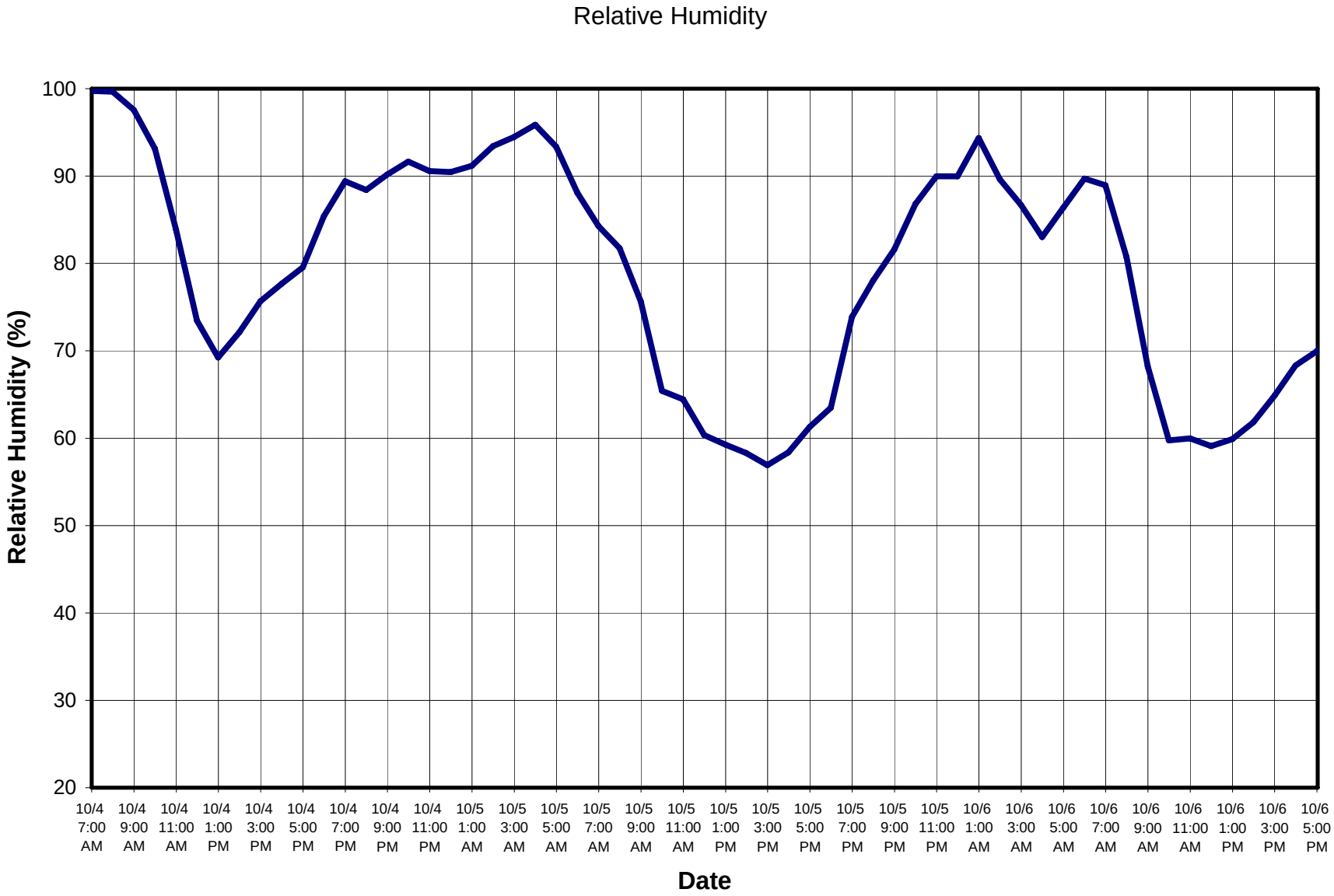


1 m/s (meter per second) = 2.237 miles per hour

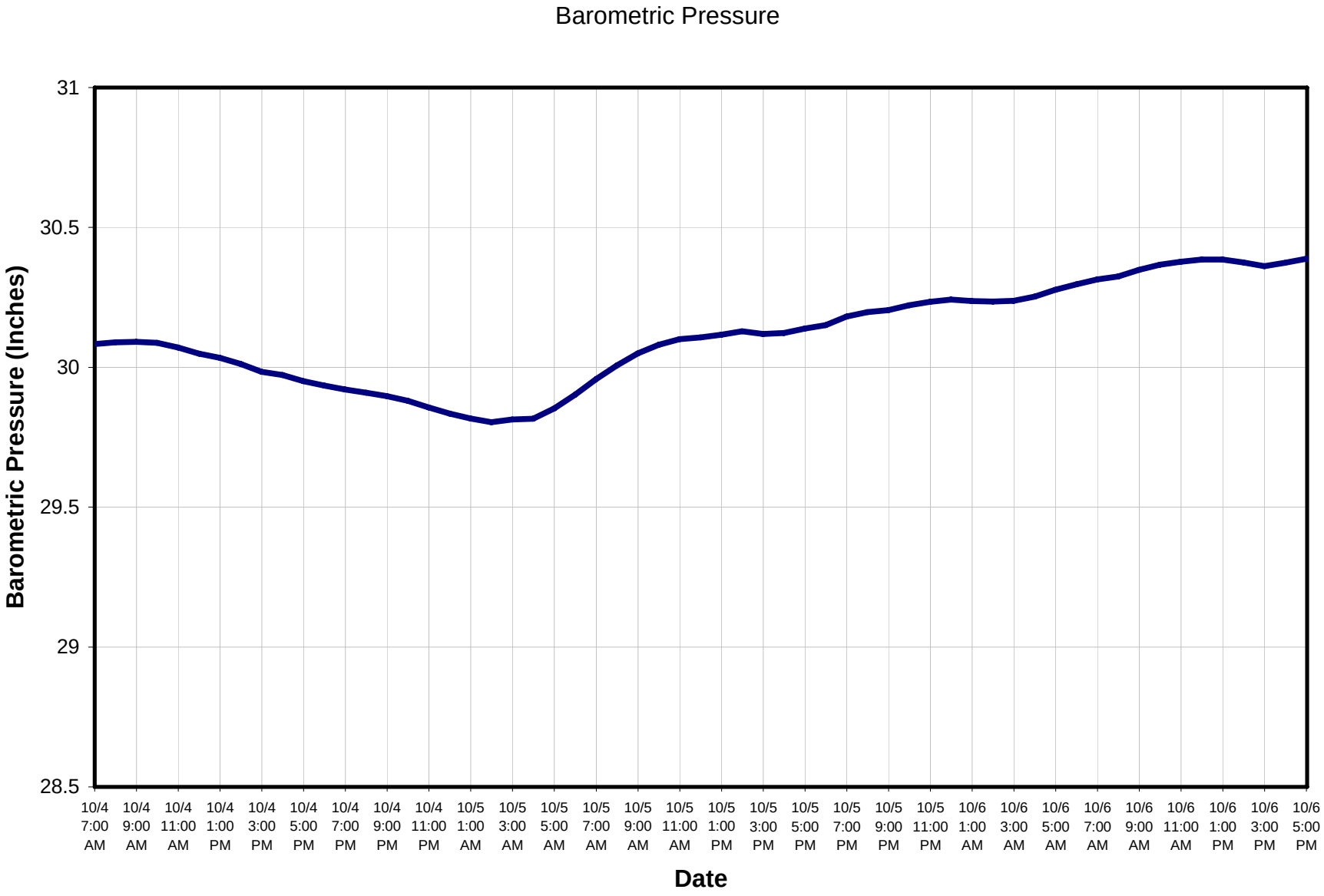
Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)



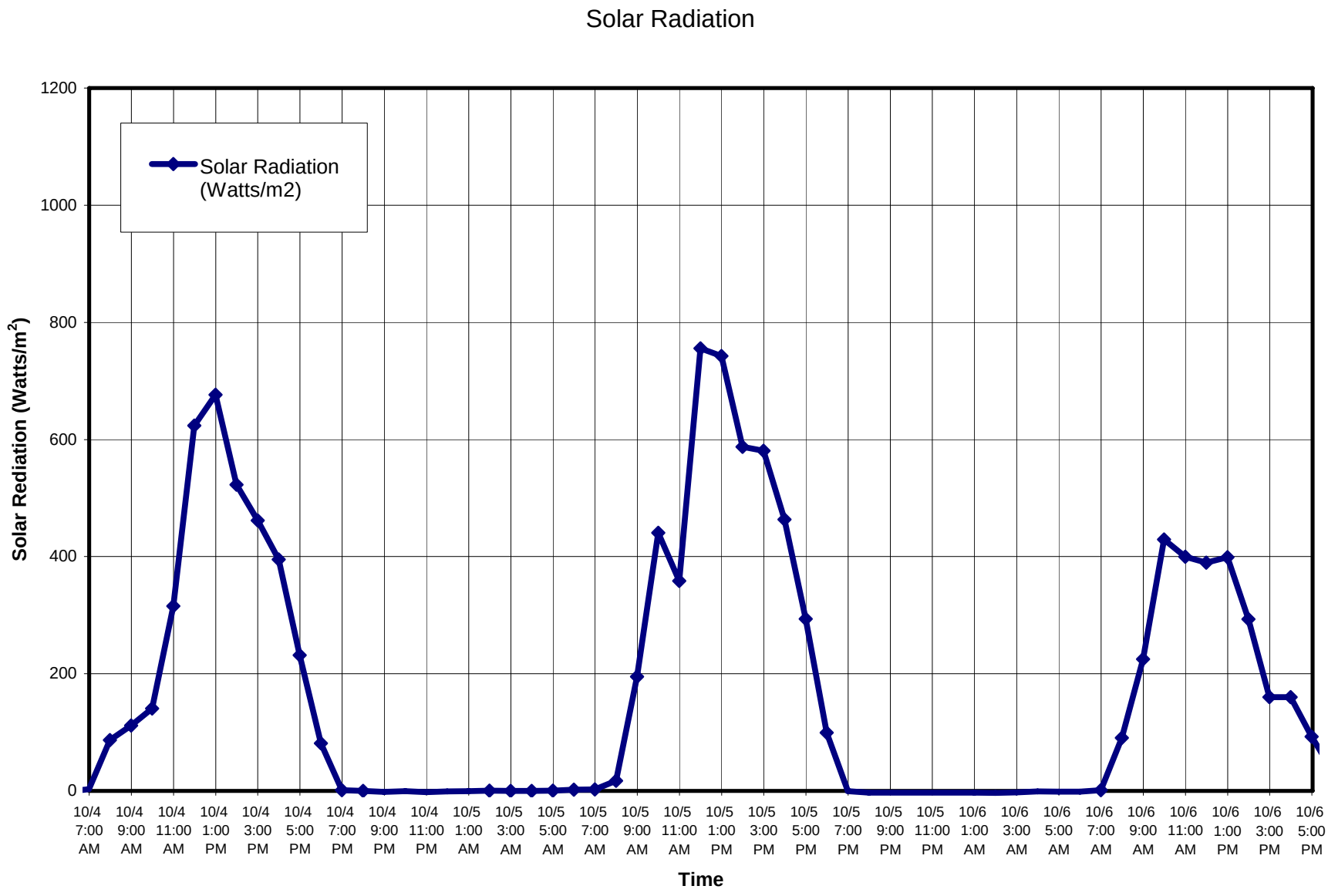
Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)



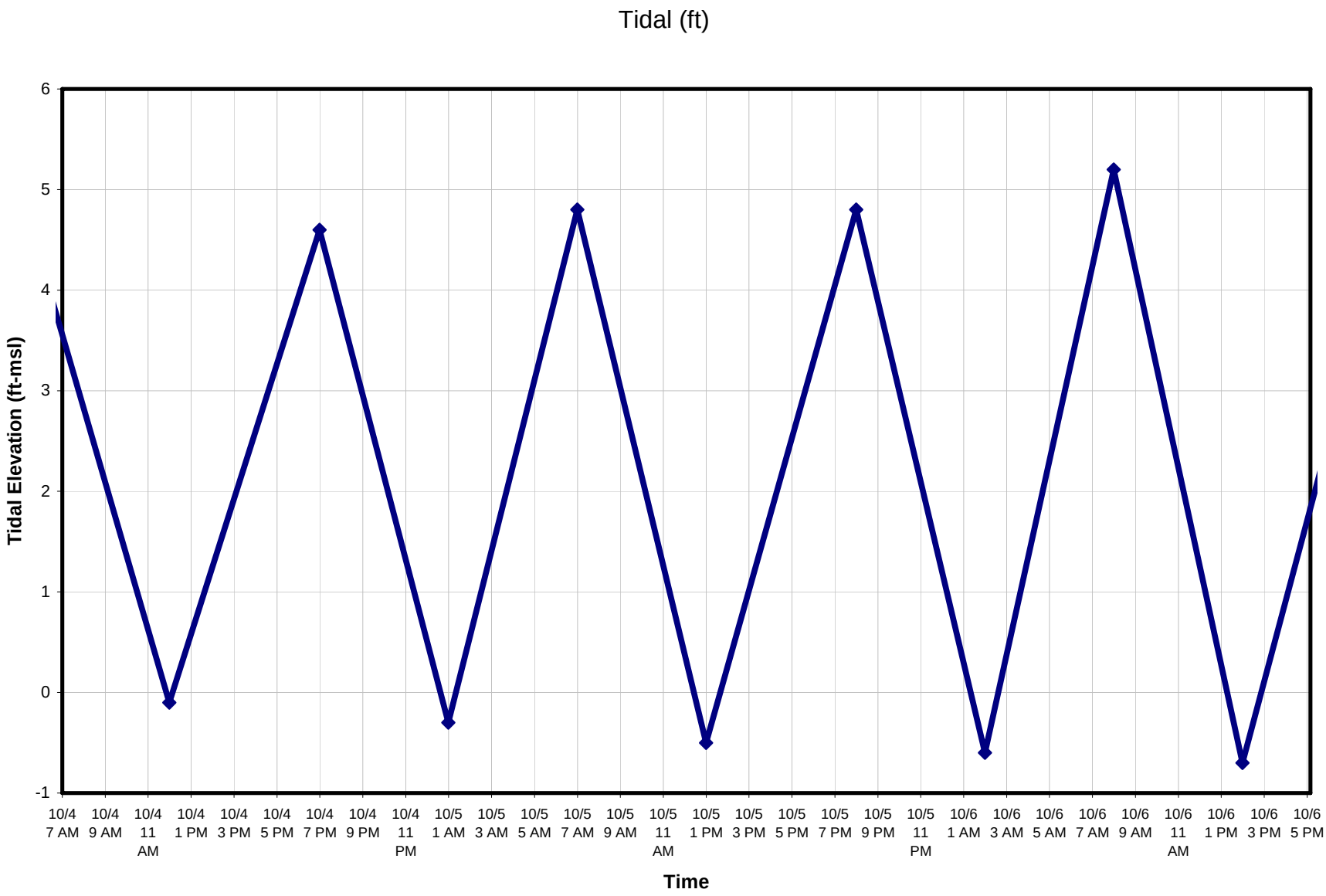
Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)



Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)



Second Monthly Sampling Round
(7am October 4 – 5pm October 6, 2006 Hourly Data)

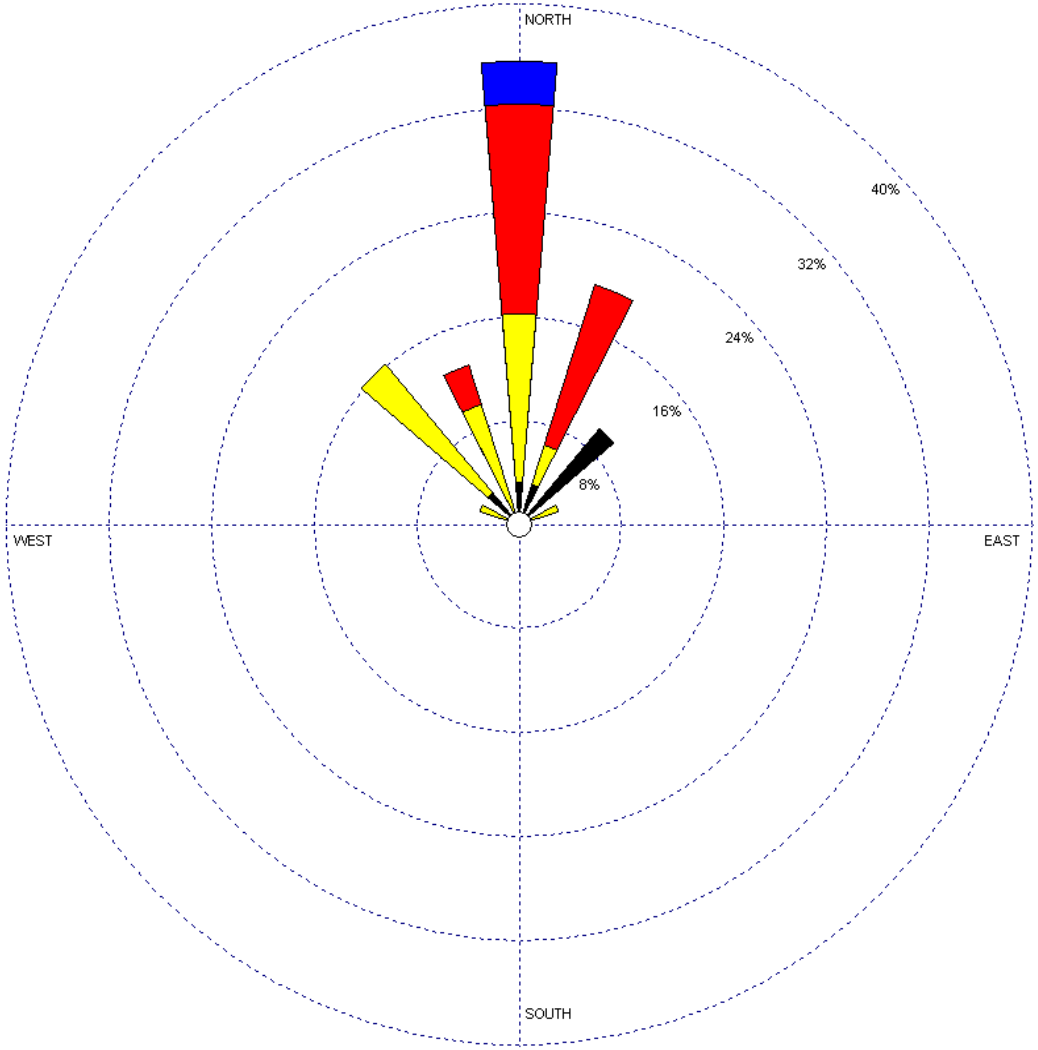


Post Dredging/Demobilization Sampling Round
(7am November 18 – 1pm November 19, 2006 Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inches)	Solar Radiation (Watts/m2)	Hourly Precipitation (inches)	Tidal Elevation (ft)
11/18/06 7:00 AM	4.17	315.30	42.89	42.92	-0.03	81.23	29.86	-2.98	0	
11/18/06 8:00 AM	3.77	314.50	41.91	41.96	-0.06	83.46	29.87	6.30	0	
11/18/06 9:00 AM	6.22	307.30	42.68	43.01	-0.33	74.81	29.89	114.35	0	
11/18/06 10:00 AM	7.75	329.30	45.54	45.98	-0.44	64.55	29.89	276.98	0	
11/18/06 11:00 AM	8.92	348.00	47.65	48.12	-0.47	59.25	29.89	377.16	0	
11/18/06 12:00 PM	6.26	1.51	48.55	49.13	-0.58	57.69	29.89	450.85	0	0.3
11/18/06 1:00 PM	4.05	349.40	49.74	50.42	-0.68	54.35	29.87	475.01	0	
11/18/06 2:00 PM	4.36	295.60	51.03	51.79	-0.76	51.45	29.85	487.39	0	
11/18/06 3:00 PM	5.83	320.80	51.64	52.25	-0.61	51.84	29.84	386.32	0	
11/18/06 4:00 PM	5.59	304.80	51.85	52.40	-0.55	51.22	29.83	267.80	0	
11/18/06 5:00 PM	6.38	351.40	51.65	51.92	-0.28	54.89	29.84	75.89	0	
11/18/06 6:00 PM	5.43	18.25	50.71	50.92	-0.21	60.72	29.85	1.44	0	
11/18/06 7:00 PM	5.95	56.49	48.02	48.33	-0.30	72.96	29.86	-0.96	0	3.6
11/18/06 8:00 PM	2.55	63.94	47.50	47.66	-0.16	73.85	29.86	-0.72	0	
11/18/06 9:00 PM	3.23	33.11	47.35	47.49	-0.15	75.57	29.87	-0.24	0	
11/18/06 10:00 PM	2.07	32.99	47.10	47.22	-0.12	77.97	29.87	-0.52	0	
11/18/06 11:00 PM	1.26	50.59	47.07	47.12	-0.05	79.57	29.87	-0.48	0	
11/19/06 12:00 AM	4.57	351.20	46.56	46.71	-0.15	80.89	29.86	-0.43	0	0.1
11/19/06 1:00 AM	3.63	347.00	45.94	46.11	-0.17	82.15	29.86	-0.75	0	
11/19/06 2:00 AM	5.51	341.00	45.37	45.55	-0.18	83.97	29.85	-0.30	0	
11/19/06 3:00 AM	7.20	351.40	44.87	45.06	-0.19	81.39	29.84	-0.34	0	
11/19/06 4:00 AM	6.86	2.83	44.56	44.74	-0.18	80.00	29.84	-0.42	0	
11/19/06 5:00 AM	10.71	11.39	43.98	44.16	-0.18	88.04	29.83	-1.17	0	
11/19/06 6:00 AM	9.02	355.40	43.68	43.83	-0.15	87.98	29.83	-0.57	0	
11/19/06 7:00 AM	10.50	3.48	43.66	43.81	-0.15	90.26	29.83	-0.22	0	4.3
11/19/06 8:00 AM	14.09	13.10	44.23	44.39	-0.16	93.03	29.84	1.70	0	
11/19/06 9:00 AM	11.46	13.51	44.02	44.22	-0.20	93.12	29.85	36.87	0	
11/19/06 10:00 AM	9.99	6.77	43.76	44.04	-0.28	89.13	29.86	107.85	0	
11/19/06 11:00 AM	11.81	10.20	44.39	44.94	-0.55	83.53	29.86	298.94	0	
11/19/06 12:00 PM	11.06	13.89	46.12	46.80	-0.68	76.39	29.86	305.76	0	
11/19/06 1:00 PM	9.87	9.64	46.75	47.26	-0.51	73.87	29.85	161.41	0	0.2
Maximum	**14.09**		**51.85**	**52.40**	**-0.03**	**93.12**	**29.89**	**487.39**	**0.00**	**4.30**
Minimum	**1.26**		**41.91**	**41.96**	**-0.76**	**51.22**	**29.83**	**-2.98**	**0.00**	**0.10**
Average	**6.78**		**46.48**	**46.78**	**-0.31**	**74.49**	**29.86**	**123.29**	**0.00**	**1.70**

Post Dredging/Demobilization Sampling Round
(7am November 18 – 1pm November 19, 2006 Hourly Data)

Wind Rose Diagram



Wind Direction: Blowing From

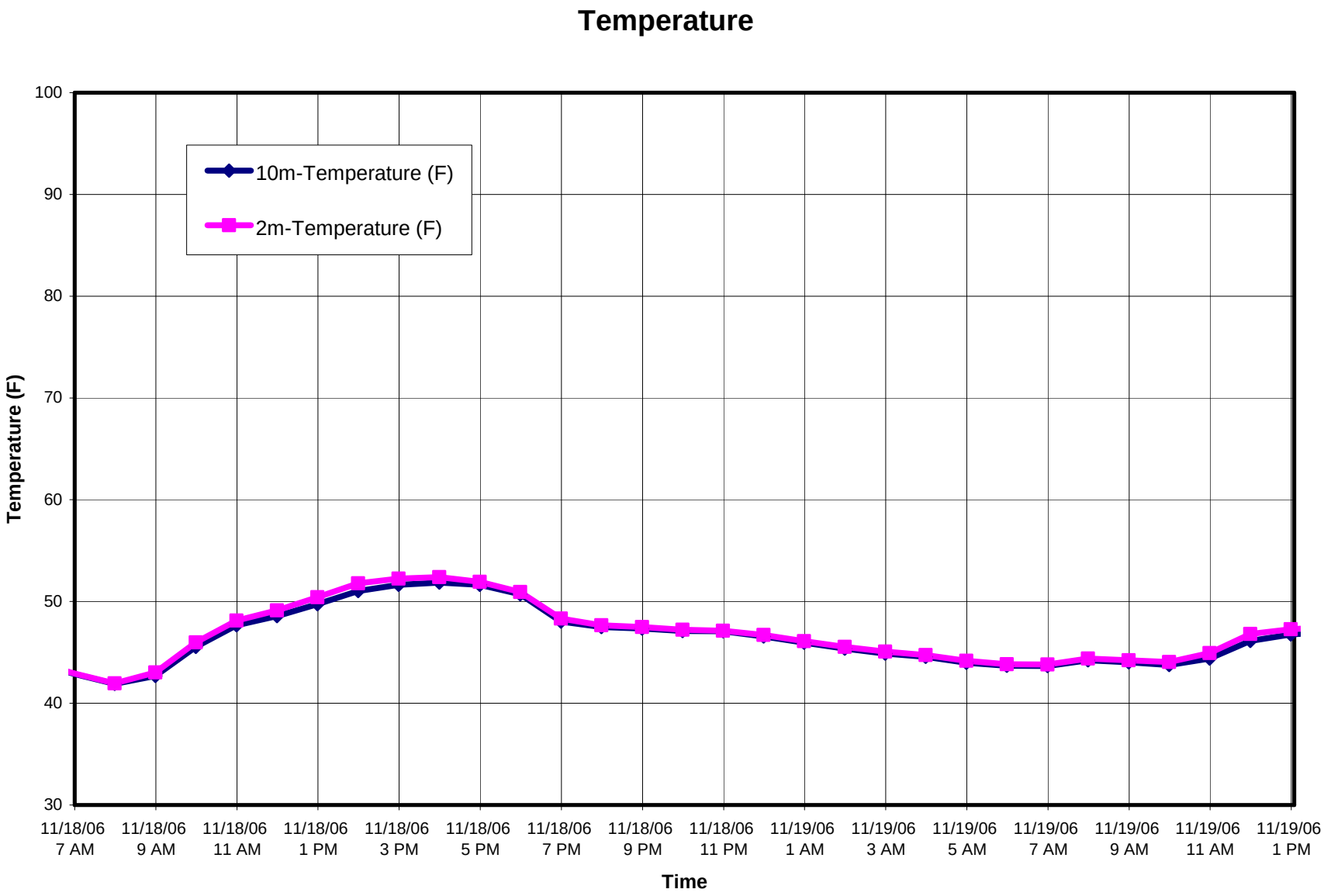
WIND SPEED
(m/s)

- >= 11.1
- 8.8 - 11.1
- 5.7 - 8.8
- 3.6 - 5.7
- 2.1 - 3.6
- 0.5 - 2.1

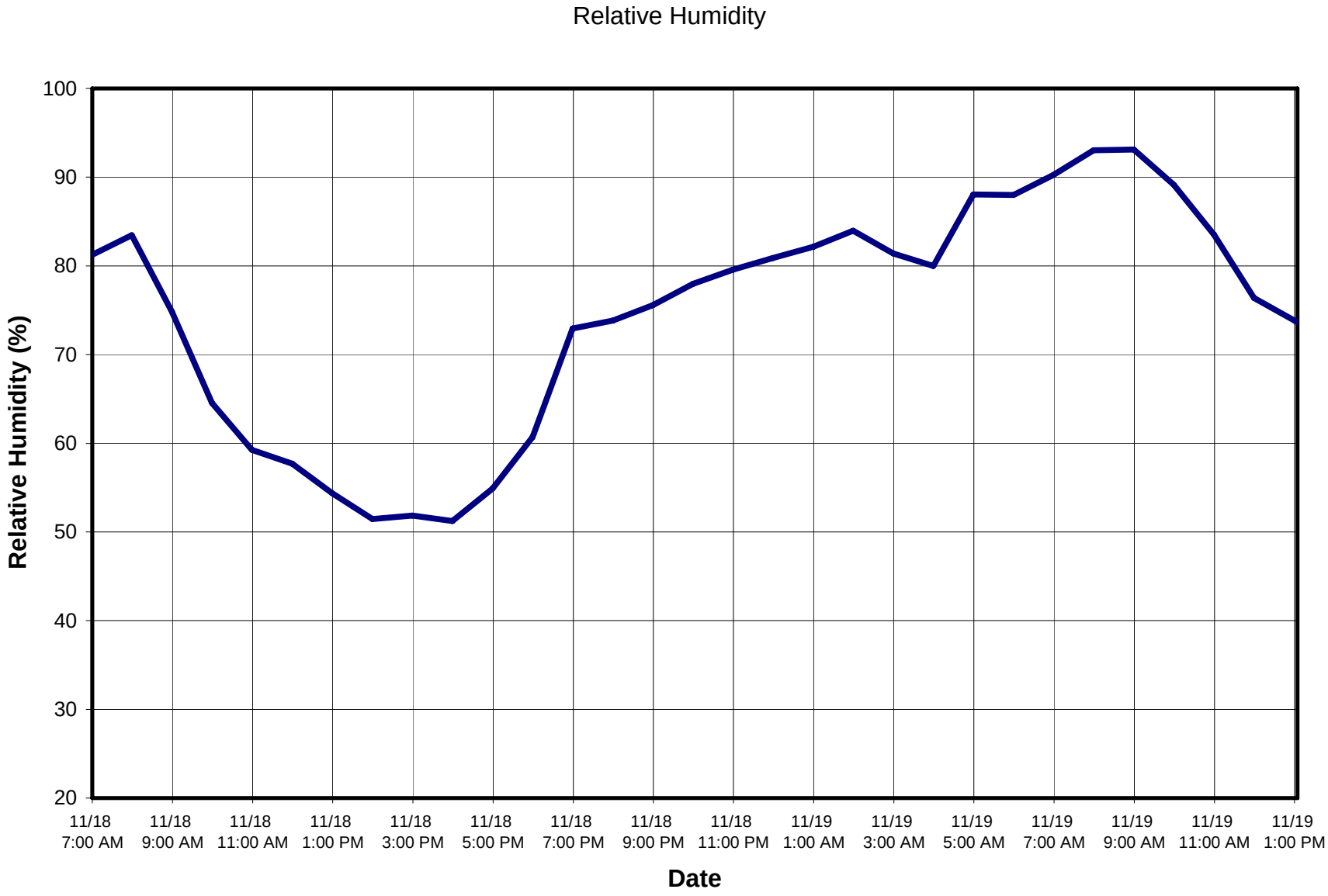
Calms: 0.00 %

1 m/s (meter per second) = 2.237 miles per hour

Post Dredging/Demobilization Sampling Round
(7am November 18 – 1pm November 19, 2006 Hourly Data)

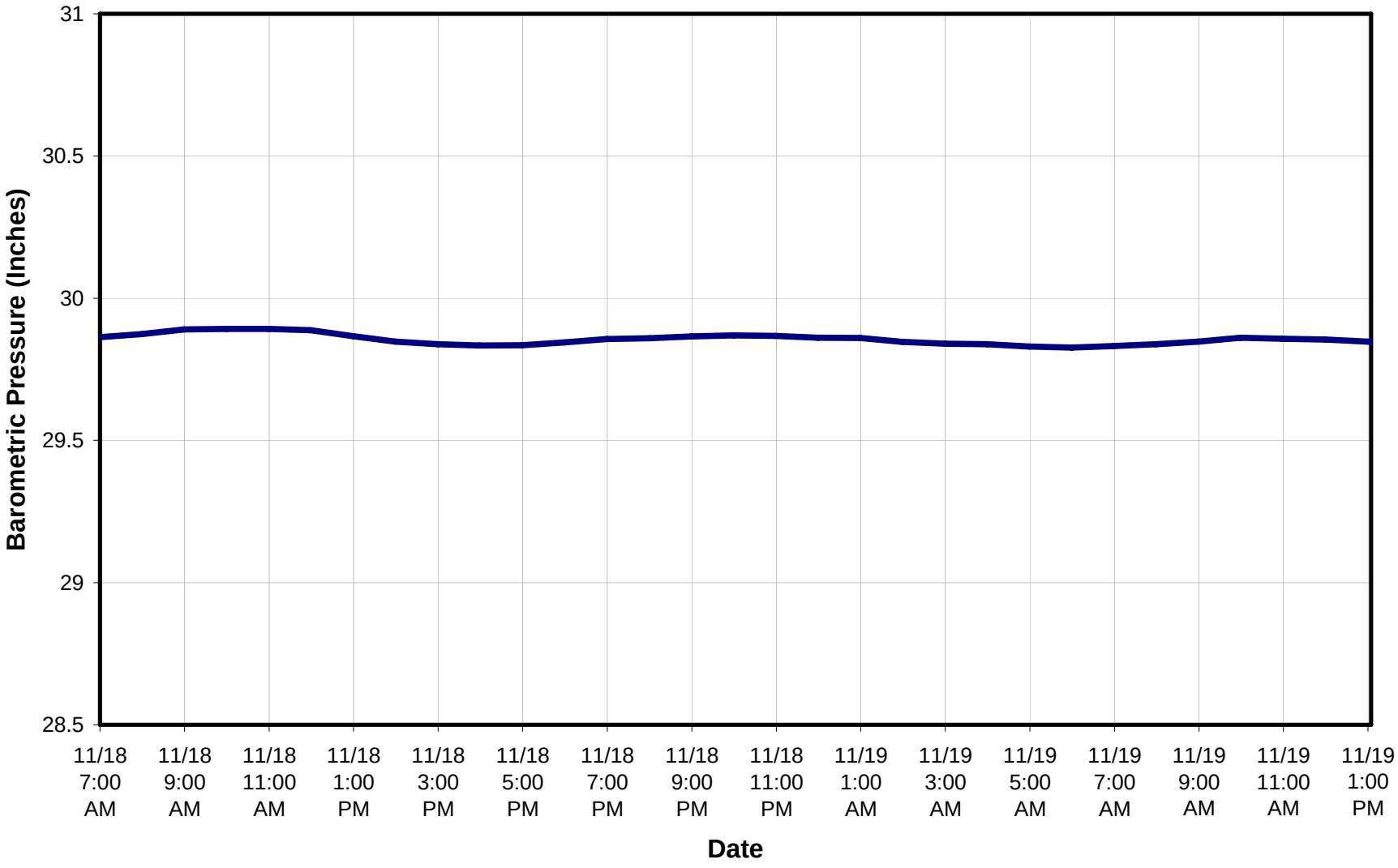


Post Dredging/Demobilization Sampling Round
(7am November 18 – 1pm November 19, 2006 Hourly Data)

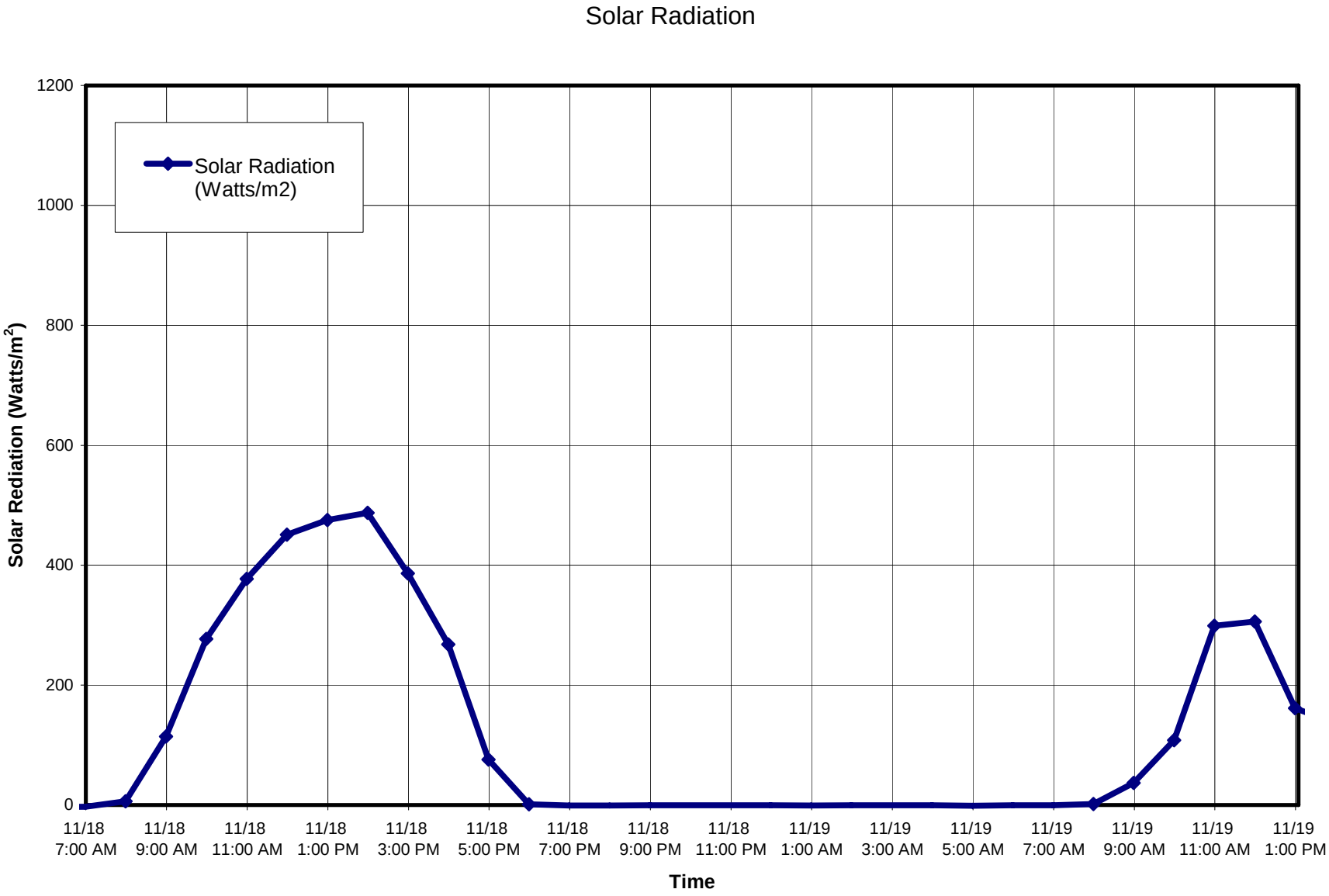


Post Dredging/Demobilization Sampling Round
(7am November 18 – 1pm November 19, 2006 Hourly Data)

Barometric Pressure

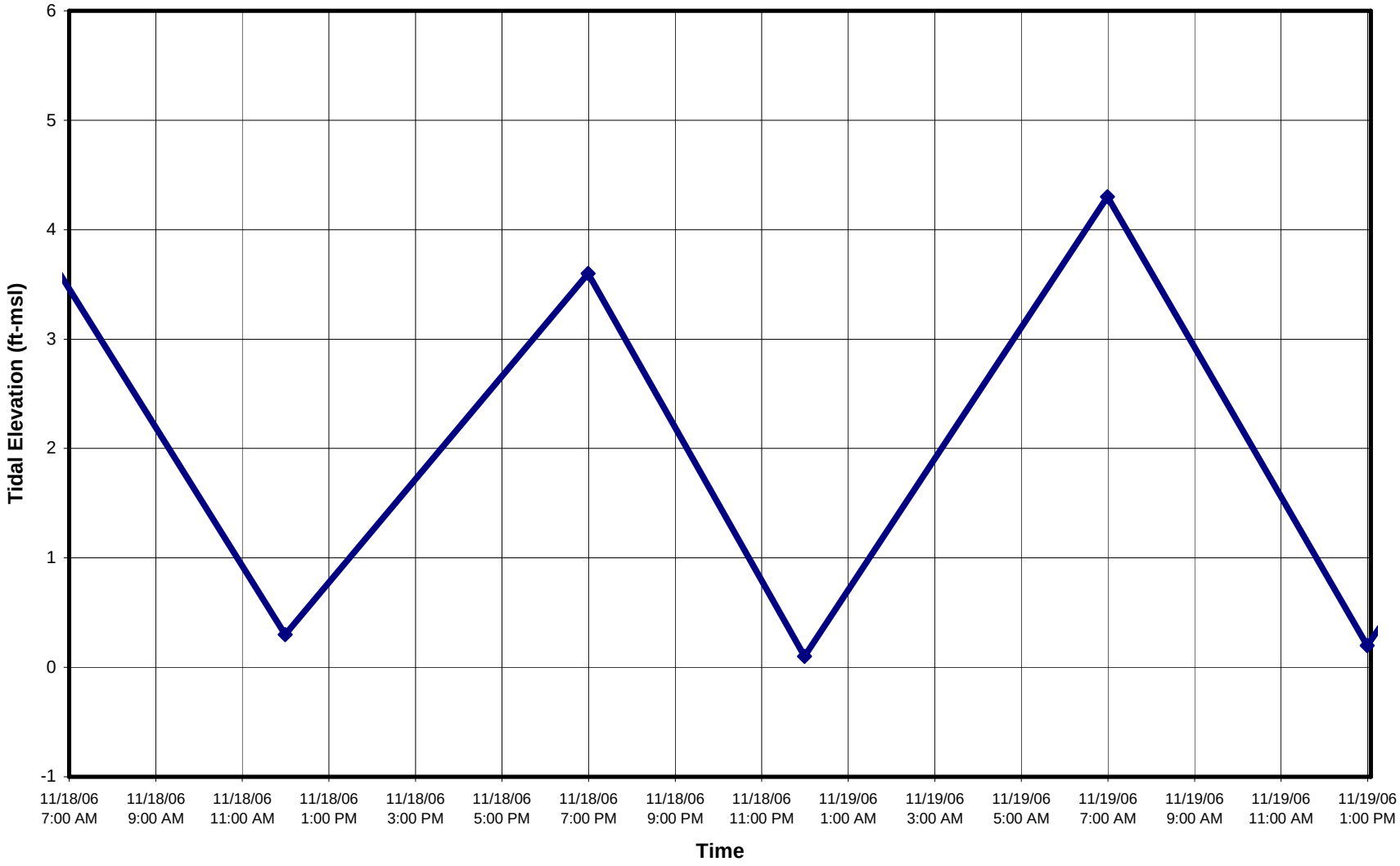


Post Dredging/Demobilization Sampling Round
(7am November 18 – 1pm November 19, 2006 Hourly Data)



Post Dredging/Demobilization Sampling Round
(7am November 18 – 1pm November 19, 2006 Hourly Data)

Tidal (ft)



ATTACHMENT G

Jacobs Solid and Water Balance and PCB Mass Removal Calculations

Table G-1
Jacobs Solids and Water Balance
New Bedford Harbor Superfund Site - 2006 Season

	Area C										Area D															
	Slurry In		Debris Out				Sand Out				Feed In		Filter Cake Out													
	Area C Totalized Slurry Flow		Debris Transferred from Building C to DDA Storage				Sand Transferred from Building C to DDA Storage				Totalized Wastewater Treatment Plant Influent		Filter Cake Production								Miscellaneous Calculations					
Date	YTD Totalized Slurry Flow [gal]	YTD Totalized Slurry Flow [tons]	Scale Weighed YTD Wet Solids [tons]	Estimated Average % Dry Solids	Calculated YTD Dry Solids [tons]	Calculated YTD Water [tons]	Scale Weighed YTD Wet Solids [tons]	EstimatedAverage % Dry Solids	Calculated YTD Dry Solids [tons]	Calculated YTD Water [tons]	Totalized Plant Influent [gal]	Totalized Plant Influent [tons]	YTD Number of Press Drops	Daily Press Drops	Calculated YTD Cake Volume [cy]	Calculated Daily Wet Solids [tons]	Calculated YTD Wet Solids [tons]	Observed Daily Average % Dry Solids	Calculated YTD Dry Solids [tons]	Calculated YTD Water [tons]	Area C Influent Calculated Average % Dry Solids	Press Influent Calculated Average % Dry Solids	Press Influent Diluted Average % Dry Solids	Debris as % of All Dry Solids YTD	Sand as % of All Dry Solids YTD	Cake as % of All Dry Solids YTD
8/16/2006	690,116	3,257	0	50	0	0	0	80	0	0	652,600	2,800	30	30	243	325.62	326	62.27%	203	123	6.2	6.2	5.6	0	0	100
8/17/2006	1,407,787	6,643	0	50	0	0	0	80	0	0	1,333,600	5,721	54	24	437	235.22	561	63.04%	351	210	5.3	5.3	4.7	0	0	100
8/18/2006	2,096,338	9,893	0	50	0	0	0	80	0	0	2,239,900	9,609	72	18	583	174.96	736	61.5%	459	277	4.6	4.6	4.1	0	0	100
8/21/2006	2,890,297	13,639	66	50	33	33	0	80	0	0	3,097,500	13,288	115	43	932	414.48	1150	62.75%	719	432	5.5	5.3	4.7	4	0	96
8/22/2006	3,656,630	17,256	112	50	56	56	106	80	84	21	3,808,300	16,338	153	38	1,239	366.28	1517	63.98%	953	564	6.3	5.6	5.0	5	8	87
8/23/2006	4,342,255	20,491	144	50	72	72	208	80	166	42	4,539,200	19,473	202	49	1,636	464.37	1981	64.53%	1,253	728	7.3	6.2	5.5	5	11	84
8/24/2006	5,195,854	24,519	144	50	72	72	208	80	166	42	5,288,100	22,686	249	47	2,017	434.00	2415	64.36%	1,532	883	7.2	6.3	5.7	4	9	87
8/25/2006	5,843,475	27,575	227	50	114	114	208	80	166	42	5,912,600	25,365	296	47	2,398	453.03	2868	63.23%	1,818	1,049	7.6	6.7	6.0	5	8	87
8/28/2006	6,605,276	31,170	227	50	114	114	314	80	251	63	6,792,500	29,140	339	43	2,746	414.48	3282	61.78%	2,075	1,208	7.8	6.8	6.0	5	10	85
8/29/2006	7,226,524	34,102	278	50	139	139	314	80	251	63	7,424,900	31,853	381	42	3,086	404.84	3687	62.84%	2,329	1,358	8.0	6.9	6.2	5	9	86
8/30/2006	7,990,214	37,706	301	50	150	150	416	80	333	83	8,052,000	34,543	428	47	3,467	460.65	4148	62.47%	2,617	1,531	8.2	7.1	6.3	5	11	84
8/31/2006	8,670,724	40,917	368	50	184	184	416	80	333	83	8,730,500	37,454	474	46	3,839	458.30	4606	62.43%	2,903	1,703	8.4	7.2	6.4	5	10	85
9/1/2006	8,670,724	40,917	368	50	184	184	416	80	333	83	8,780,600	37,669	477	3	3,864	32.56	4639	62.43%	2,923	1,716	8.4	7.3	6.5	5	10	85
9/6/2006	9,383,805	44,282	368	50	184	184	801	80	641	160	9,574,000	41,072	516	39	4,180	356.97	4996	61.18%	3,142	1,854	9.0	7.3	6.5	5	16	79
9/7/2006	9,832,433	46,399	401	50	201	201	801	80	641	160	10,033,500	43,044	536	20	4,342	192.78	5189	63.30%	3,264	1,925	8.8	7.2	6.4	5	16	80
9/8/2006	10,116,360	47,739	401	50	201	201	801	80	641	160	10,408,900	44,654	550	14	4,455	133.81	5322	62.62%	3,347	1,975	8.8	7.2	6.4	5	15	80
9/11/2006	10,772,547	50,836	401	50	201	201	801	80	641	160	11,106,500	47,647	575	25	4,658	238.95	5561	62.16%	3,496	2,065	8.5	7.0	6.3	5	15	81
9/12/2006	11,244,108	53,061	459	50	229	229	939	80	751	188	11,569,700	49,634	598	23	4,844	221.70	5783	62.81%	3,635	2,148	8.7	7.0	6.3	5	16	79
9/13/2006	11,957,690	56,428	490	50	245	245	939	80	751	188	12,254,800	52,573	624	26	5,054	248.51	6032	61.26%	3,787	2,244	8.5	6.9	6.1	5	16	79
9/14/2006	12,615,298	59,532	516	50	258	258	1,086	80	869	217	12,845,700	55,108	650	26	5,265	248.51	6280	62.19%	3,942	2,338	8.5	6.8	6.1	5	17	78
9/15/2006	13,163,097	62,117	542	50	271	271	1,086	80	869	217	13,331,300	57,191	675	25	5,468	238.95	6519	62.14%	4,090	2,429	8.4	6.8	6.0	5	17	78
9/18/2006	13,798,957	65,117	553	50	276	276	1,284	80	1,027	257	14,069,600	60,359	703	28	5,694	267.62	6787	62.69%	4,258	2,528	8.5	6.7	6.0	5	18	77
9/19/2006	14,366,540	67,796	575	50	287	287	1,284	80	1,027	257	14,567,400	62,494	721	18	5,840	174.96	6962	62.16%	4,367	2,595	8.4	6.6	5.9	5	18	77
9/20/2006	15,061,564	71,076	575	50	287	287	1,284	80	1,027	257	15,251,500	65,429	758	37	6,140	359.64	7321	61.43%	4,588	2,733	8.3	6.6	5.9	5	17	78
9/21/2006	15,748,455	74,317	617	50	309	309	1,284	80	1,027	257	15,889,100	68,164	795	37	6,440	359.64	7681	61.26%	4,808	2,873	8.3	6.6	5.9	5	17	78
9/22/2006	16,399,982	77,392	617	50	309	309	1,284	80	1,027	257	16,535,900	70,939	832	37	6,739	359.64	8040	59.98%	5,024	3,017	8.2	6.7	5.9	5	16	79
9/25/2006	17,020,373	80,319	633	50	316	316	1,490	80	1,192	298	17,311,000	74,264	860	28	6,966	272.16	8313	59.11%	5,185	3,128	8.3	6.6	5.9	5	18	77
9/26/2006	17,608,791	83,096	656	50	328	328	1,689	80	1,351	338	17,908,200	76,826	893	33	7,233	320.76	8633	59.29%	5,375	3,258	8.5	6.7	5.9	5	19	76
9/27/2006	18,162,976	85,711	656	50	328	328	1,689	80	1,351	338	18,482,900	79,292	917	24	7,428	233.28	8867	59.86%	5,515	3,352	8.4	6.6	5.9	5	19	77
9/28/2006	18,267,192	86,203	674	50	337	337	1,689	80	1,351	338	18,654,500	80,028	923	6	7,476	58.32	8925	59.89%	5,550	3,375	8.4	6.6	5.9	5	19	77
9/29/2006	18,518,661	87,390	674	50	337	337	1,708	80	1,366	342	19,097,300	81,927	925	2	7,493	19.44	8944	63.33%	5,562	3,383	8.3	6.5	5.8	5	19	77
10/2/2006	19,112,182	90,190	674	50	337	337	1,708	80	1,366	342	19,680,100	84,428	955	30	7,736	291.60	9236	60.05%	5,737	3,499	8.2	6.5	5.8	5	18	77
10/3/2006	19,489,622	91,972	701	50	350	350	1,815	80	1,452	363	20,155,100	86,465	980	25	7,938	243.00	9479	61.04%	5,885	3,594	8.4	6.6	5.9	5	19	77
10/4/2006	20,201,241	95,330	724	50	362	362	1,815	80	1,452	363	20,768,500	89,097	1014	34	8,213	330.48	9810	59.76%	6,083	3,727	8.3	6.6	5.8	5	18	77
10/5/2006	20,788,987	98,103	737	50	368	368	1,815	80	1,452	363	21,380,400	91,722	1048	34	8,489	330.48	10140	62.79%	6,290	3,850	8.3	6.6	5.9	5	18	78
10/6/2006	21,301,457	100,522	745	50	372	372	1,815	80	1,452	363	21,896,200	93,935	1066	18	8,635	174.96	10315	64.40%	6,403	3,912	8.2	6.5	5.8	5	18	78
10/9/2006	21,607,511	101,966	755	50	377	377	1,979	80	1,583	396	22,484,100	96,457	1082	16	8,764	155.52	10470	63.54%	6,502	3,969	8.3	6.6	5.8	4	19	77
10/10/2006	22,331,034	105,380	772	50	386	386	1,979	80	1,583	396	23,141,200	99,276	1119	37	9,064	359.64	10830	62.43%	6,726	4,104	8.3	6.6	5.8	4	18	77
10/11/2006	23,047,053	108,759	783	50	392	392	2,005	80	1,604	401	23,795,300	102,082	1161	42	9,404	408.24	11238	62.30%	6,981	4,258	8.3	6.6	5.9	4	18	78
10/12/2006	23,616,312	111,445	792	50	396	396	2,081	80	1,664	416	24,372,800	104,559	1197	36	9,696	349.92	11588	61.55%	7,196	4,392	8.3	6.6	5.9	4	18	78
10/13/2006	24,062,258	113,550	822	50	411	411	2,081	80	1,664	416	24,925,400	106,930	1238	41	10,028	398.52	11987	60.98%	7,439	4,548	8.4	6.7	6.0	4	17	78
10/16/2006	24,667,072	116,404	841	50	420	420	2,199	80	1,759	440	25,682,200	110,177	1284	46	10,400	447.12	12434	63.86%	7,725	4,709	8.5	6.8	6.1	4	18	78
10/17/2006	25,173,711	118,795	854	50	427	427	2,235	80	1,788	447	26,166,500	112,254	1324	40	10,724	388.80	12823	62.18%	7,966	4,856	8.6	6.9	6.1	4	18	78
10/18/2006	25,478,338	120,232	870	50	435	435	2,261	80	1,809	452	26,529,800	113,813	1366	42	11,065	408.24	13231	61.86%	8,219	5,012	8.7	7.0	6.3	4	17	79

Table G-1
Jacobs Solids and Water Balance
New Bedford Harbor Superfund Site - 2006 Season

	Area C										Area D															
	Slurry In		Debris Out				Sand Out				Feed In		Filter Cake Out													
	Area C Totalized Slurry Flow		Debris Transferred from Building C to DDA Storage				Sand Transferred from Building C to DDA Storage				Totalized Wastewater Treatment Plant Influent		Filter Cake Production								Miscellaneous Calculations					
Date	**YTD Totalized Slurry Flow [gal]**	**YTD Totalized Slurry Flow [tons]**	**Scale Weighed YTD Wet Solids [tons]**	**Estimated Average % Dry Solids**	**Calculated YTD Dry Solids [tons]**	**Calculated YTD Water [tons]**	**Scale Weighed YTD Wet Solids [tons]**	**EstimatedAverage % Dry Solids**	**Calculated YTD Dry Solids [tons]**	**Calculated YTD Water [tons]**	**Totalized Plant Influent [gal]**	**Totalized Plant Influent [tons]**	**YTD Number of Press Drops**	**Daily Press Drops**	**Calculated YTD Cake Volume [cy]**	**Calculated Daily Wet Solids [tons]**	**Calculated YTD Wet Solids [tons]**	**Observed Daily Average % Dry Solids**	**Calculated YTD Dry Solids [tons]**	**Calculated YTD Water [tons]**	**Area C Influent Calculated Average % Dry Solids**	**Press Influent Calculated Average % Dry Solids**	**Press Influent Diluted Average % Dry Solids**	**Debris as % of All Dry Solids YTD**	**Sand as % of All Dry Solids YTD**	**Cake as % of All Dry Solids YTD**
10/19/2006	25,613,088	120,868	870	50	435	435	2,357	80	1,886	471	26,813,465	115,030	1375	9	11,138	87.48	13318	67.45%	8,278	5,041	N/A	7.0	6.3	4	18	78
10/20/2006	25,613,088	120,868	870	50	435	435	2,357	80	1,886	471	27,071,265	116,136	1376	1	11,146	9.72	13328	60.80%	8,284	5,044	N/A	7.0	6.3	4	18	78
10/21/2006	25,613,088	120,868	870	50	435	435	2,443	80	1,954	489	27,071,265	116,136	1376		11,146	0.00	13328		8,284	5,044	N/A	7.0	6.3	4	18	78
10/23/2006	25,613,088	120,868	870	50	435	435	2,443	80	1,954	489	27,119,165	116,341	1377	1	11,154	9.72	13338	64.45%	8,290	5,048	N/A	7.1	6.3	4	18	78
Daily Average																		62.21%			*8.0*	*6.6*	*5.9*	*4.4*	*14.6*	*81.0*
																						Seasonal Percentage		*4%*	*18%*	*78%*

Notes

Notes [a] through [f] estimate the overall reduction in dry solids between the Area C influent and the Area D press feed tanks.

a. Average slurry flow = 606,627 gal/day = 3,033,135 gal/wk

b. Area C Dilution Water Flows [floor wash water]

Water meter [hi & lo flows] was 308,676 gal from 8-14-06 to 11-1-06 = 36,747 gal/wk, less 2,200 gal/wk sanitary use = 290,196 total = 34,547 gal/wk

c. Area D Dilution Water Flows

1. Process water meter [hi and lo flows] was 2,803,366 gal from 8-14-06 to 11-01-06, =2,803,366 333,734 gal/wk
2. Polymer make-up water rate is 1.5 gpm/feed pump, six pumps, = 9 gpm, 12 hrs/day, 5 days/wk = 32,400 gal/wk
3. Sand filter backwash water use is 30,000 gal/vessel/wk, for four vessels = 120,000 gal/wk
4. Pipeline flush water included in Area C slurry inflow = 0 gal/wk
5. Estimated filtrate monitoring water is 5 gpm/press, six presses, 12 hrs/day, five days/wk = 108,000 gal/wk
6. Wash water is the difference between process meter flow minus the polymer make-up water, backwash water and filtrate monitoring water. = 73,334 gal/wk

Total polymer, wash, backwash, flush water, filtrate monitoring water = = **368,281** **gal/wk**

d. Solids Dilution due to process water

1. The solids dilution ratio from Area C influent to Area D influent is (avg weekly slurry flow) / (avg weekly slurry flow+ avg weeklyArea C wash water) = 0.99 1 % reduction of solids concentration from Area C influent to Area D influent
2. The solids dilution ratio from Area D influent to Area D effluent is (avg weekly slurry flow + Area C wash water) / (avg weekly slurry + Area C wash water + avg weekly Area D process water usage) = 0.90 10 % reduction of solids concentration due to Area D dilution (all sources listed)
3. The total solids dilution ratio is (avg weekly slurry flow) / (average weekly slurry flow + avg weekly Area C wash water + avg weekly Area D process water) = 0.89 11 % reduction of solids concentration from dredge influent to Area D effluent.

e. Press Influent Calculated, Average % Dry Solids column - These percentages are derived from mass balance calculations by Jacobs. These calculations used tonnages of screened material, filter cake, and dredge slurry as measured and estimated throughout the year.

f. Press Influent Diluted, Average % Dry Solid column - These percentages are derived from % solids calculated in the previous column with a dilution factor applied as presented in the calculations below the main body of the table.

g. Area C sand and debris weights obtained from weigh tickets; Area D filter cake weights calculated.

h. Filter cake % solids and density values provided by SES as measured during production.

h. Gallons per week calculations assume a 5 day work week, 42 working dredge days. 42 days accounts for down time, holidays and other process delays.

cy = cubic yards
DDA = Debris Disposal Area
gal = gallon
gpm = gallons per minute
hrs = hours
wk = week
YTD = year to date
avg = average

Table G-2
Pre-Season and Post-Season Production Quantities
New Bedford Harbor Superfund Site - 2006 Season

Pre-Season Production Quantities (Theoretical) [1]							
Amount Insitu Material Dredged	20,000	cy	207,900	wet tons	9,979	dry tons	4.8% solids
Sand and Oversize Removed at Area C			2,994	wet tons	2,395	dry tons	24% of total solids
Feed % Solids	4.80	%					599 tons of water in sand & debris
Filter Cake Produced			12,640	wet tons	7,584	dry tons	76% of total solids
Filter Cake % Solids	60.00	%					5,056 tons of water in filter cake
Filtrate Effluent	46,106,935	gal					

Post-Season Production Quantities (Actual)							
Amount Insitu Material Dredged	20,096	cy	119,168	wet tons[2]	10,759	dry tons	9.0% solids (as dredged)
Sand and Oversize Removed at Area C			3,313	wet tons[3]	2,389	dry tons[4]	22% of total solids
Feed % Solids	6.85	%					924 tons of water in sand & debris
Filter Cake Produced			13,454	wet tons[3]	8,370	dry tons[4]	78% of total solids
Filter Cake % Solids [5]	62.21	%					5,084 tons of water in filter cake
Filtrate Effluent	25,343,500	gal					

Notes:
1) Theoretical Quantities taken from 2006 execution plan, SES calculations.
2) Tons of insitu material dredged has 1,700 tons of water booster pump contribution removed. (Table G-3)
3) Wet tonnage of sand, filter cake and oversize based on actual weigh tickets.
4) Dry tonnage of sand and oversize calculated with actual weigh tickets and estimated percent solids.
5) Average filter cake % solids value from JE Solids and Water Balance Table
cy = cubic yards
gal = gallons

Table G-3
New Bedford Harbor Dredge Season Water Usage
New Bedford Harbor Superfund Site - 2006 Season

2006 Water Usage						
Location	**Pre season meter reading (cf) (1)**	**Post Season meter reading (cf)**	**Total Usage (cf)**	**Gallons**	**Tons**	**Area Total (Tons)**
Area C 1						
Area C2						
Manomet St	21,650	23,720	2,070	15,482		
Aerovox (2)	207,800	247,000	39,200	293,194	642.0	
Area D process	17,168	44,412	27,243	203,765	850.0	1,287.6
	17,168	44,412	27,243	203,765	850.0	
Total Water Added	445,650	820,460	374,810	2,803,366	11,694.1	
			470,567	3,519,572		850.0 14,681.7
					850.0 11,694.1	

Notes:

1) cf = cubic feet and 1.0 cf = 0.1337 gal

cf freshwater = 62.40 pounds at 50*F source United States Coast Guard Chemical Hazardous Information System (CHRIS)

1.0

2) The Aerovox water meter was broken; therefore, the water volume was estimated to be the same as Manomet Street.

Table G-4
PCB Mass Removed for 2004 Season
New Bedford Harbor Superfund Site

2004 Filter Cake			
Sample ID	**Date**	**Total Aroclors (mg/kg)**	
V2-091604	9/16/2004	133	
V2-100104	10/1/2004	1070	
V2-100504	10/5/2004	790	
V2-100704	10/7/2004	450	
V2-101204	10/12/2004	248	
V2-101904	10/19/2004	1650	
V2-102204	10/22/2004	1270	
V2-102704	10/27/2004	1180	
V2-110204	11/2/2004	550	
V2-110804	11/8/2004	171	
	Average Aroclors	751.2	
	Average % solids	62%	
	Total cake	7067	wet tons
	Total cake	4382	dry tons
	Total cake	3974933.09	dry kg
	Calculated Aroclor Mass	3000	kg

2004 Oversize			
Sample ID	**Date**	**Total Aroclors (mg/kg)**	
V3-04-062106	6/21/2006	294	
	Average Aroclors	294	
	Average % solids	64.8	
	Total Oversize	326	wet tons
	Total Oversize	211.248	dry tons
	Total Oversize	191641	dry kg (1)
	Calculated Aroclor Mass	56	kg

2004 Sand			
Sample ID	**Date**	**Total Aroclors (mg/kg)**	
V1-091004	9/10/2004	18.3	
V1-092204	9/22/2004	9	
V1-092704	9/27/2004	108	
V1-100404	10/4/2004	142	
V1-100604	10/6/2004	168	
V1-101104	10/11/2004	125	
V1-101304	10/13/2004	109	
V1-102004	10/20/2004	235	
V1-102704	10/27/2004	132	
V1-110304	11/3/2004	142	
V1-111004	11/10/2004	36.2	
	Average Aroclors	111	
	Average % solids	84%	
	Total Sand	1346	wet tons
	Total Sand	1130.64	dry tons
	Total Sand	1025716.61	dry kg
	Calculated Aroclor Mass	110	kg

Total Aroclor Mass Removed In Solid Materials			
Filter Cake	3000kg		
Sand	110kg		
Oversize	56kg		
Total	3200kg	3.5	tons

Notes:
1) Solid materials characteristics as reported in 2004 After Action Report except for 2004 oversize analytical. 2004 Oversize sampled and analyzed 6/21/06.
kg = kilograms
mg/kg = miligrams per kilogram

Table G-5
PCB Mass Removal for 2005 Season
New Bedford Harbor Superfund Site

2005 Filter Cake			
Sample ID	**Date**	**Total Aroclors (mg/kg)**	**% Solids**
V2-091405	09/14/05	355.6	57.8
V2-092005	09/20/05	239.6	61.3
V2-092205	09/22/05	316.1	60.1
V2-092705	09/27/05	207.4	61.5
V2-093005	09/30/05	310.6	61.1
V2-100405	10/04/05	157.8	62.6
V2-100704	10/07/05	1002	58.1
V2-101105	10/11/05	727.9	59.8
V2-101305	10/13/05	1961	57.9
V2-101805	10/18/05	1240	57.8
V2-102105	10/21/05	520	62.4
V2-102805	10/28/05	669.5	59.8
V2-110105	11/01/05	1088.6	55.2
V2-110305	11/03/05	1763	58.2
V2-110805	11/08/05	1975	59.4
V2-110905	11/09/05	1571.3	59.2
V2-111105	11/11/05	750	59.0
V2-111605	11/16/05	1130	57.4
V2-111705	11/17/05	1498	59.0
V2-111805	11/18/05	1334	56.8
	Weighted Average	901.6	59.6
	Total Cake	16070	Wet Tons
	Total Cake	9578	Dry Tons
	Total Cake	8688761	Dry kg
	Calculated Aroclor Mass	7830	kg

2005 Sand			
Sample ID	**Date**	**Total Aroclors (mg/kg)**	**% Solids**
V1-091505	09/15/05	51.8	80.6
V1-092105	09/21/05	12.0	76.4
V1-092605	09/26/05	66.5	77.4
V1-092805	09/28/05	46.0	78.1
V1-100505	10/05/05	179.7	62.9
V1-101105	10/11/05	208.7	81.9
V1-101305	10/13/05	439.1	85.0
V1-101405	10/14/05	122.3	85.5
V1-101805	10/18/05	232.3	88.4
V1-101905	10/19/05	46.9	83.8
V1-102105	10/21/05	117.8	87.7
V1-102605	10/26/05	94.0	81.3
V1-110205	11/02/05	371.7	82.6
V1-110805	11/08/05	485.4	83.0
V1-111405	11/14/05	173.0	81.3
V1-111605	11/16/05	465.6	76.5
V1-111805	11/18/05	172.7	82.4
Straight Average (mg/kg)		193	80.9
Weight of Wet Sand (tons)		2508	Wet Tons
Weight of Dry Sand (tons)		2029	Dry Tons
Weight of Dry Sand (kg)		1840652	Dry kg
Calculated Aroclor Mass		356	kg

2005 Oversize			
Sample ID	**Date**	**Total Aroclors (mg/Kg)**	**% Solids**
V3-05-062106-S	6/21/2006	1239	63.5
V3-05-062106-N	6/21/2006	884	86
Straight Average (mg/kg)		1062	75
Weight of Wet Oversize (tons)		488	Wet Tons
Weight of Dry oversize (tons)		366	Dry Tons
Weight of Dry oversize (kg)		332029	Dry kg
Calculated Aroclor Mass		350	kg

Total Aroclor Mass Removed In Solid Materials			
Filter Cake	7830		
Sand	356		
Oversize	350		
Total	8536	9.4	tons

Notes:
kg = kilograms
mg/kg = miligrams per kilogram

Table G-6
PCB Mass Removal for 2006 Season
New Bedford Harbor Superfund Site

2006 Filter Cake			
Sample ID	**Date**	**Total Aroclors (mg/kg)**	**% Solids**
V2-081806	8/18/2006	420.0	60.0
V2-082206	8/22/2006	245.1	61.7
V2-082406	8/24/2006	203.6	62.7
V2-082806	8/28/2006	346.6	59.1
V2-083006	8/30/2006	541.0	58.5
V2-090706	9/7/2006	470.7	60.4
V2-091206	9/12/2006	480.0	58.9
V2-091506	9/15/2006	440.0	58.4
V2-092006	9/20/2006	970.0	56.9
V2-092506	9/25/2006	1457.0	56.6
V2-100306	10/3/2006	2893.0	57.5
V2-100606	10/6/2006	1114.0	57.9
V2-101106	10/11/2006	1636.0	58.9
V2-101606	10/16/2006	1743.0	60.2
V2-102006	10/20/2006	2549.0	60.4
	Weighted Average	1118.4	59.2
	Total Cake	13454	Wet Tons
	Total Cake	7960	Dry Tons
	Total Cake	7220977	Dry kg
	Calculated Aroclor Mass	8076	kg

2006 Sand			
Sample ID	**Date**	**Total Aroclors (mg/kg)**	**% Solids**
V1-081706	8/17/2006	142.4	81.5
V1-081806	8/18/2006	113.3	78.6
V1-082306	8/23/2006	48.0	81.0
V1-082506	8/25/2006	48.0	73.6
V1-082906	8/29/2006	57.0	74.4
V1-083106	8/31/2006	93.1	80.6
V1-090806	9/8/2006	124.5	80.0
V1-091206	9/12/2006	44.1	81.5
V1-091406	9/14/2006	68.0	81.8
V1-091906	9/19/2006	170.0	82.0
V1-092206	9/22/2006	180.0	81.4
V1-092806	9/28/2006	419.0	82.7
V1-100406	10/4/2006	124.2	82.4
V1-100906	10/9/2006	175.2	83.5
V1-101206	10/12/2006	554.0	83.0
V1-101606	10/16/2006	588.0	85.1
	Straight Average (mg/kg)	184.3	80.8
	Weight of Wet Sand (tons)	2443	Wet Tons
	Weight of Dry Sand (tons)	1974	Dry Tons
	Weight of Dry Sand (kg)	1791147	Dry kg
	Calculated Aroclor Mass	330	kg

2006 Oversize[1]		
No analytical available		
Weight of Wet Oversize (tons)	870	Wet Tons
Weight of Dry oversize (tons)	653	Dry Tons
Weight of Dry oversize (tons)	591938	Dry kg
Estimated Aroclor Mass	629	kg

Total Aroclor Mass Removed In Solid Materials			
Filter Cake	8076	kg	
Sand	330	kg	
Oversize	629	kg	
Total	9035 kg	10.0	tons

Notes:
1) Oversize material had no analytical, 2005 season average concentration and percent solids used to estimate PCB mass.
kg = kilograms
mg/kg = miligrams per kilogram

ATTACHMENT H

Sevenson Operational Monitoring Data

Attachment H
Sevenson Operational Monitoring Data
New Bedford Harbor Superfund Site - 2006 Season

Sevenson Operational Monitoring 2006
New Bedford Harbor Superfund Site OU-1

DMU Area	Day No. Prod.	Date	Daily Dredged Gallons	Dredged Gallons to Date	DMU Estimated In-Situ cy Dredged	DMU In-Situ cy to Date	Average % Solids Dredged DMU	Average % Solids Press Feed	Average % Solids Filter Cake	No. Press On Line	Hours of Oper.	No. Press Drops	Total Drops to Date	Avg. Cycle Time (min)	Calculated Daily cy Filter Cake	Calculated cy Filter Cake to Date	Tons/cy of Filter Cake	Calculated Daily Tons of Filter Cake	Calculated Tons of Filter Cake to Date	Sludge Gal/Day	Total Sludge Gal to Date
1	1	16-Aug	690,116	690,116	466	466	0.00%	6.2%	62.27%	6	12.0	30	30	144	243.00	243.00	1.34	325.62	325.62	738,083	738,083
1	2	17-Aug	717,671	1,407,787	361	827	10.4%	10.0%	63.04%	6	12.0	24	54	180	194.40	437.40	1.21	235.22	560.84	713,964	1,452,047
1	3	18-Aug	688,551	2,096,338	298	1,125	7.4%	6.1%	61.5%	6	12.0	18	72	240	145.80	583.20	1.20	174.96	735.80	798,424	2,250,471
1	4	21-Aug	793,959	2,890,297	686	1,811	11.50%	8.80%	62.75%	6	12.0	43	115	100	348.30	931.50	1.19	414.48	1,150.28	858,041	3,108,512
1	5	22-Aug	766,333	3,656,630	629	2,440	14.75%	7.89%	63.98%	6	12.0	38	153	114	307.80	1,239.30	1.19	366.28	1,516.56	806,300	3,914,812
1	6	23-Aug	685,625	4,342,255	794	3,234	15.43%	10.95%	64.53%	6	12.0	49	202	88	396.90	1,636.20	1.17	464.37	1,980.94	813,287	4,728,099
1	7	24-Aug	853,599	5,195,854	732	3,966	21.45%	8.75%	64.36%	6	12.0	47	249	92	380.70	2,016.90	1.14	434.00	2,414.93	860,244	5,588,343
1	8	25-Aug	647,621	5,843,475	764	4,730	11.93%	10.31%	63.23%	6	12.0	47	296	92	380.70	2,397.60	1.19	453.03	2,867.97	738,778	6,327,121
1	9	28-Aug	761,801	6,605,276	681	5,411	18.26%	12.66%	61.78%	6	12.0	43	339	100	348.30	2,745.90	1.19	414.48	3,282.44	738,778	7,065,899
1	10	29-Aug	621,248	7,226,524	663	6,074	13.73%	9.35%	62.84%	6	12.0	42	381	103	340.20	3,086.10	1.19	404.84	3,687.28	684,529	7,750,428
1	11	30-Aug	763,690	7,990,214	738	6,812	15.78%	10.76%	62.47%	6	12.0	47	428	92	380.70	3,466.80	1.21	460.65	4,147.93	731,696	8,482,124
1	12	31-Aug	680,510	8,670,724	647	7,459	15.15%	10.29%	62.43%	6	12.0	46	474	94	372.60	3,839.40	1.23	458.30	4,606.23	753,286	9,235,410
1	12.5	1-Sep	0	8,670,724	0	7,459	N/A	N/A	62.43%	4	5.0	3	477	960	24.30	3,863.70	1.34	32.56	4,638.79	42,092	9,277,502
1	13.5	6-Sep	713,081	9,383,805	594	8,053	11.44%	9.58%	61.18%	6	12.0	39	516	111	315.90	4,179.60	1.13	356.97	4,995.76	741,950	10,019,452
1	14.5	7-Sep	448,628	9,832,433	318	8,371	14.60%	7.66%	63.30%	6	12.0	20	536	216	162.00	4,341.60	1.19	192.78	5,188.54	615,161	10,634,613
1	15.5	8-Sep	283,927	10,116,360	221	8,592	8.83%	6.24%	62.62%	6	12.0	14	550	309	113.40	4,455.00	1.18	133.81	5,322.35	337,020	10,971,633
1	16.5	11-Sep	656,187	10,772,547	405	8,997	11.94%	9.40%	62.16%	6	12.0	25	575	173	202.50	4,657.50	1.18	238.95	5,561.30	668,212	11,639,845
1	17.5	12-Sep	471,561	11,244,108	375	9,372	13.95%	7.46%	62.81%	4	7.5	23	598	125	186.30	4,843.80	1.19	221.70	5,783.00	500,081	12,139,926
1	18.5	13-Sep	713,582	11,957,690	400	9,772	12.18%	7.08%	61.26%	6	12.0	26	624	166	210.60	5,054.40	1.18	248.51	6,031.50	751,657	12,891,583
1	19.5	14-Sep	657,608	12,615,298	407	10,179	10.33%	7.29%	62.19%	6	12.0	26	650	166	210.60	5,265.00	1.18	248.51	6,280.01	657,020	13,548,603
1	20.5	15-Sep	547,799	13,163,097	381	10,560	14.50%	10.06%	62.14%	5	12.0	25	675	144	202.50	5,467.50	1.18	238.95	6,518.96	420,453	13,969,056
1	21.5	18-Sep	635,860	13,798,957	420	10,980	12.21%	7.57%	62.69%	6	12.0	28	703	154	226.80	5,694.30	1.18	267.62	6,786.59	714,204	14,683,260
1	22.5	19-Sep	567,583	14,366,540	279	11,259	11.05%	5.49%	62.16%	4	12.0	18	721	160	145.80	5,840.10	1.20	174.96	6,961.55	553,617	15,236,877
1	23.5	20-Sep	695,024	15,061,564	575	11,834	9.80%	8.31%	61.43%	6	12.0	37	758	117	299.70	6,139.80	1.20	359.64	7,321.19	755,071	15,991,948
1	24.5	21-Sep	686,891	15,748,455	569	12,403	9.71%	7.74%	61.26%	6	12.0	37	795	117	299.70	6,439.50	1.20	359.64	7,680.83	711,795	16,703,743
1	25.5	22-Sep	651,527	16,399,982	583	12,986	13.58%	7.83%	59.98%	6	12.0	37	832	117	299.70	6,739.20	1.20	359.64	8,040.47	882,234	17,585,977
1	26.5	25-Sep	620,391	17,020,373	431	13,417	13.02%	7.06%	59.11%	6	12.0	28	860	154	226.80	6,966.00	1.20	272.16	8,312.63	819,518	18,405,495
1	27.5	26-Sep	588,418	17,608,791	507	13,924	13.45%	7.89%	59.29%	6	12.0	33	893	131	267.30	7,233.30	1.20	320.76	8,633.39	652,734	19,058,229
1	28.5	27-Sep	554,185	18,162,976	358	14,282	8.96%	7.45%	59.86%	6	12.0	24	917	180	194.40	7,427.70	1.20	233.28	8,866.67	636,042	19,694,271
1	29.5	28-Sep	104,216	18,267,192	89	14,371	5.33%	3.64%	59.89%	6	10.0	6	923	720	48.60	7,476.30	1.20	58.32	8,924.99	195,612	19,889,883
1	30.5	29-Sep	251,469	18,518,661	11	14,382	0.00%	0.00%	63.33%	6	12.0	2	925	2160	16.20	7,492.50	1.20	19.44	8,944.43	535,884	20,425,767
1	31.5	2-Oct	593,521	19,112,182	463	14,845	14.22%	7.57%	60.05%	6	12.0	30	955	144	243.00	7,735.50	1.20	291.60	9,236.03	637,874	21,063,641
1	32.5	3-Oct	377,440	19,489,622	386	15,231	5.84%	4.30%	61.04%	6	12.0	25	980	173	202.50	7,938.00	1.20	243.00	9,479.03	521,736	21,585,377
1	33.5	4-Oct	711,619	20,201,241	524	15,755	18.00%	7.11%	59.76%	6	12.0	34	1014	127	275.40	8,213.40	1.20	330.48	9,809.51	704,338	22,289,715
1	34.5	5-Oct	587,746	20,788,987	511	16,266	15.37%	7.79%	62.79%	6	12.0	34	1048	127	275.40	8,488.80	1.20	330.48	10,139.99	666,015	22,955,730
1	35.5	6-Oct	512,470	21,301,457	293	16,559	20.32%	6.74%	64.40%	6	12.0	18	1066	240	145.80	8,634.60	1.20	174.96	10,314.95	596,555	23,552,285
1	36.5	9-Oct	306,054	21,607,511	244	16,803	10.28%	5.54%	63.54%	6	12.0	16	1082	270	129.60	8,764.20	1.20	155.52	10,470.47	741,340	24,293,625
1	37.5	10-Oct	723,523	22,331,034	584	17,387	13.17%	9.66%	62.43%	6	12.0	37	1119	117	299.70	9,063.90	1.20	359.64	10,830.11	855,254	25,148,879
1	38.5	11-Oct	716,019	23,047,053	673	18,060	12.86%	9.51%	62.30%	6	12.0	42	1161	103	340.20	9,404.10	1.20	408.24	11,519.19	750,244	25,899,123
1	39.5	12-Oct	569,259	23,616,312	557	18,617	13.58%	8.99%	61.55%	6	12.0	36	1197	120	291.60	9,695.70	1.20	349.92	12,169.27	629,388	26,528,511
1	40.5	13-Oct	445,946	24,062,258	640	19,257	17.90%	9.90%	60.98%	6	12.0	41	1238	105	332.10	10,027.80	1.20	398.52	12,900.73	575,528	27,104,039
1	41.5	16-Oct	604,814	24,667,072	732	19,989	15.01%	11.97%	63.86%	6	12.0	46	1284	94	372.60	10,400.40	1.20	447.12	13,347.85	664,591	27,768,630
1	42.5	17-Oct	506,639	25,173,711	615	20,604	24.60%	13.01%	62.18%	6	12.0	40	1324	108	324.00	10,724.40	1.20	388.80	13,736.65	664,591	28,433,221
1	43	18-Oct	304,627	25,478,338	657	21,261	22.83%	15.02%	61.86%	6	12.0	42	1366	103	340.20	11,064.60	1.20	408.24	14,144.89	431,078	28,864,299
Backwash		19-Oct	134,750	25,613,088			0.00%	9.14%	67.45%	4	12.0	9	1375	320	72.90	11,137.50	1.20	87.48	14,232.37	431,078	29,295,377
Backwash		20-Oct							60.80%	1		1	1376	720	8.10	11,145.60	1.20	9.72	14,242.09	123,768	29,419,145
		21-Oct																			
Backwash		23-Oct							64.45%	1		1	1377		8.10	11,153.70	1.20	9.72	14,251.81		
Average					494		12.90%	8.30%	62.21%			32[a]					1.20			656,006.80	
Totals	43			25,613,088		21,261							1377			11154[b]			14252[c]		29,419,145

Notes:
a. Average drops per day only includes drops during actual dredging season
b. Cubic yardage calculated at 8.1 CY / drop
c. Tons of filter cake calculated using calculated CY and measured average density
d. Total railcars from area D includes shipments after 10/23/06, table E-4 shows all railcar shipments
e. Total tonnage of railcar shipments includes shipments after 10/23/06, table E-4 shows all rail car shipments
f. Total tonnage of railcar shipments includes shipments after 10/23/06, table E-4 shows all rail car shipments
Unless otherwise noted averages only include activities during processing season

avg. = average
Cum. = cumulative
cy = cubic yards
DMU = dredge management unit
gal = gallons
GPM = gallons per minute
min = minutes
no. = number
oper. = operation
Prod. = production
TSCA = Toxic Substances Control Act
WWT = wastewater treatment

Attachment H
Sevenson Operational Monitoring Data
New Bedford Harbor Superfund Site - 2006 Season

Sevenson Operational Monitoring 2006
New Bedford Harbor Superfund Site OU-1

	Influent		Effluent			Build C	Build C	CY x 1.9	Cum.	Build C Tons	Build C	Build C	Build C	Build C	Build C	Cum.	Area D	Area D	Area D	Area D	Area D	Area D		Area D	Area D	Pumps	Area D
Date	Total Gal Water/ Day	Total Gal Water to Date	Gallons of Water Discharged	Total Gallons of Water Discharged	Average WWT GPM/Day	Estimated Daily Sand CY	Estimated Sand to Date CY	Calculated Tons Per Day of Sand	Total Calculated Tons of Sand	Total Tons of Sand Removed	Daily Truckloads of Sand Removed	Estimated Daily CY of Oversize	Estimated CY of Oversize	Total Tons of Oversize Removal	Daily Truckloads of Oversize Removal	Total Truckloads of Oversize Removed	No. of Rail Cars	Daily Tonnage of Rail Cars	Total Tonnage of Rail Cars	No. of Trucks of Filter Cake	Railcar Average Tons/Load of Filter Cake	Truck Tonnage of Filter Cake	TSCA Sand Trucked to Area D	Total Tons of Filter Cake to Date	Remaining Tons of Filter Cake to Date	Ferric Sulfate in Gallons	Polymer Useage in Gallons
16-Aug	652,600	652,600	626,000	626,000	906	55.8	55.8	106.0	106.0	0.0	0	28.00	28.00	0.00	0	0	2	194.4	194	0	97.2	0	0	194.40	131.2	245.00	891
17-Aug	681,000	1,333,600	655,000	1,281,000	946	25.1	80.9	47.7	153.7	0.0	0	19.6	47.60	0.00	0	0	3	294.6	489	0	98.2	0	0	489.01	71.8	343.00	770
18-Aug	906,300	2,239,900	761,000	2,042,000	1,259	15.3	96.2	29.0	182.7	0.0	0	25.1	72.70	0.00	0	0	2	195.8	684.8	0	97.9	0	0	684.84	51.0	392.00	1,128
21-Aug	857,600	3,097,500	744,000	2,786,000	1,191	12.6	108.8	23.9	206.7	0.0	0	34.9	107.60	65.88	6	6	3	293.4	978.2	0	97.8	0	0	978.24	172.0	441.00	990
22-Aug	710,800	3,808,300	691,000	3,477,000	987	25.1	133.9	47.7	254.4	105.6	6	15.3	122.87	46.40	4	10	3	294.0	1272.2	0	98.0	0	0	1,272.24	244.3	392.00	962.00
23-Aug	730,900	4,539,200	709,000	4,186,000	1,015	10.5	144.4	20.0	274.3	102.0	5	9.7	132.57	31.97	3	13	6	591.0	1863.2	0	98.5	0	0	1,863.24	117.7	245.00	973.00
24-Aug	748,900	5,288,100	724,000	4,910,000	1,040	17.5	161.8	33.2	307.5	0.0	0	11.6	144.20	0.00	0	13	3	294.0	2157.2	0	98.0	0	0	2,157.24	257.7	392.00	1,011.00
25-Aug	624,500	5,912,600	598,000	5,508,000	867	24.5	186.3	46.6	354.0	0.0	0	9.8	154.03	83.20	8	21	4	394.0	2551.2	0	98.5	0	0	2,551.24	316.7	343.00	833.00
28-Aug	879,900	6,792,500	731,000	6,239,000	1,222	31.5	217.8	59.9	413.9	106.2	6	38.7	192.73	0.00	0	21	4	394.0	2945.2	0	98.5	0	0	2,945.24	337.2	392.00	827.00
29-Aug	632,400	7,424,900	626,000	6,865,000	878	31.5	249.3	59.9	473.7	0.0	0	18.2	210.93	50.54	4	25	1	98.0	3043.2	0	98.0	0	0	3,043.24	644.0	343.00	792.00
30-Aug	627,100	8,052,000	605,000	7,470,000	871	54.5	303.8	103.6	577.3	101.9	5	42.2	253.13	22.88	2	27	4	393.0	3436.2	0	98.3	0	0	3,436.24	711.7	392.00	819.00
31-Aug	678,500	8,730,500	651,000	8,121,000	942	55.8	359.6	106.0	683.3	0.0	0	24.8	277.93	63.83	5	32	5	491.0	3927.2	0	98.2	0	0	3,927.24	679.0	392.00	826.00
1-Sep	50,100	8,780,600	40,500	8,161,500	70	0.0	359.6	0.0	979.0	0.0	0	0.0	277.93	0.00	0	32	1	98.0	4025.2	0	98.0	0	0	4,025.24	613.5	0.00	62.00
6-Sep	793,400	9,574,000	1,256,000	9,417,500	1,102	32.8	392.4	62.3	1041.3	385.3	17	29.7	307.63	0.00	0	32	5	492.0	4517.2	0	98.4	0	0	4,517.24	478.5	490.00	955.00
7-Sep	459,500	10,033,500	443,000	9,860,500	638	11.4	403.8	21.7	1063.0	0.0	0	7.7	315.30	36.52	3	35	0	0.0	4517.2	0	0.0	0	0	4,517.24	671.3	294.00	586.82
8-Sep	375,400	10,408,900	351,000	10,211,500	521	8.2	412.0	15.6	1078.6	0.0	0	1.9	317.16	0.00	0	35	0	0.0	4517.2	0	0.0	0	0	4,517.24	805.1	147.00	469.13
11-Sep	697,600	11,106,500	598,000	10,809,500	969	47.6	459.6	90.4	1169.0	0.0	0	37.6	354.78	0.00	0	35	0	0.0	4517.2	6	0.0	206	0	4,723.24	838.1	493.00	698.40
12-Sep	463,200	11,569,700	471,000	11,280,500	643	21.9	481.5	41.6	1210.6	137.6	6	17.5	372.28	57.25	5	40	2	195.0	4712.2	6	97.5	207	0	5,125.24	657.8	539.00	611.60
13-Sep	685,100	12,254,800	664,000	11,944,500	952	67.8	549.3	128.7	1339.4	0.0	0	11.4	383.72	31.48	3	43	2	196.0	4908.2	6	98.0	206	0	5,527.24	504.3	490.00	844.25
14-Sep	590,900	12,845,700	569,000	12,513,500	821	33.9	583.2	64.4	1403.7	147.0	7	8.0	391.72	25.78	2	45	1	99.0	5007.2	6	99.0	207	0	5,833.24	446.8	441.00	913.00
15-Sep	485,600	13,331,300	463,000	12,976,500	674	38.0	621.2	72.2	1475.9	0.0	0	20.0	411.72	25.78	2	47	2	197.0	5204.2	6	98.5	206	0	6,236.24	282.7	279.30	834.00
18-Sep	738,300	14,069,600	647,000	13,623,500	1,025	36.0	657.2	68.4	1544.3	198.0	9	14.4	426.07	11.00	1	48	4	392.0	5596.2	0	98.0	0	0	6,628.24	158.3	245.00	816.62
19-Sep	497,800	14,567,400	470,000	14,093,500	691	21.8	679.0	41.4	1585.8	0.0	0	6.8	432.87	22.00	2	50	4	393.0	5989.2	0	98.3	0	0	7,021.24	100.0	294.00	820.00
20-Sep	684,100	15,251,500	657,000	14,750,500	950	27.1	706.1	51.5	1637.3	0.0	0	23.0	455.87	0.00	0	50	3	294.0	6283.2	0	98.0	0	0	7,315.24	5.9	294.00	990.00
21-Sep	637,600	15,889,100	620,000	15,370,500	886	10.3	716.4	19.6	1656.8	0.0	0	0.0	455.87	42.62	4	54	3	294.0	6577.2	0	98.0	0	0	7,609.24	71.6	245.00	1,053.00
22-Sep	646,800	16,535,900	639,000	16,009,500	898	19.9	736.3	37.9	1694.7	0.0	0	7.3	463.13	0.00	0	54	3	294.0	6871.2	0	98.0	0	0	7,903.24	137.2	343.00	754.00
25-Sep	775,100	17,311,000	630,000	16,639,500	1,077	19.4	755.7	36.8	1731.5	206.1	9	7.9	470.99	15.92	1	55	3	296.0	7167.2	0	98.7	0	0	8,199.24	113.4	245.00	844.00
26-Sep	597,200	17,908,200	555,000	17,194,500	829	13.4	769.1	25.5	1757.0	218.1	11	8.9	479.89	22.67	2	57	3	294.0	7461.2	0	98.0	0	0	8,493.24	140.1	49.00	767.97
27-Sep	574,700	18,482,900	541,000	17,735,500	798	15.3	784.4	29.1	1786.1	0.0	0	14.4	494.24	0.00	0	57	3	295.0	7756.2	0	98.3	0	0	8,788.24	78.4	245.00	767.97
28-Sep	171,600	18,654,500	168,000	17,903,500	238	10.9	795.3	20.7	1806.8	0.0	0	6.2	500.42	18.78	2	59	2	196.0	7952.2	0	98.0	0	0	8,984.24	0.0	49.00	309.27
29-Sep	442,800	19,097,300	159,000	18,062,500	615	0.0	795.3	0.0	1806.8	0.0	0	0.0	500.42	0.00	0	59	0	0.0	7952.2	0	0.0	0	0	8,984.24	0.0	49.00	364.00
2-Oct	582,800	19,680,100	530,000	18,592,500	809	26.5	821.8	50.4	1857.1	0.0	0	16.1	516.52	0.00	0	59	3	296.0	8248.2	0	98.7	0	0	9,280.24	0.0	490.00	827.05
3-Oct	475,000	20,155,100	461,000	19,053,500	660	19.3	841.1	36.7	1893.8	107.3	5	7.8	524.32	26.34	3	62	2	196.0	8444.2	0	98.0	0	0	9,476.24	2.8	196.00	663.72
4-Oct	613,400	20,768,500	581,000	19,634,500	852	26.5	867.6	50.4	1944.1	0.0	0	5.9	530.19	23.23	2	64	3	296.0	8740.2	0	98.7	0	0	9,772.24	37.3	441.00	948.67
5-Oct	611,900	21,380,400	588,000	20,222,500	850	23.9	891.5	45.4	1989.6	0.0	0	6.8	536.99	12.75	1	65	3	295.0	9035.2	0	98.3	0	0	10,067.24	72.7	343.00	827.00
6-Oct	515,800	21,896,200	481,000	20,703,500	716	10.1	901.6	19.2	2008.7	24.2	1	25.5	562.49	7.97	1	66	2	195.0	9230.2	0	97.5	0	0	10,262.24	52.7	196.00	108.50
9-Oct	587,900	22,484,100	408,000	21,111,500	817	7.9	909.5	14.9	2023.7	164.2	8	5.5	567.99	10.32	1	67	2	196.0	9426.2	0	98.0	0	0	10,458.24	12.2	98.00	646.35
10-Oct	657,100	23,141,200	627,000	21,738,500	913	21.6	931.1	41.0	2064.7	0.0	0	5.8	573.79	17.27	2	69	3	295.0	9721.2	0	98.3	0	0	10,753.24	76.9	343.00	834.00
11-Oct	654,100	23,795,300	635,000	22,373,500	908	18.8	949.9	35.7	2100.4	26.1	1	9.8	583.54	11.00	1	70	3	294.0	10015.2	0	98.0	0	281	11,047.24	471.9	392.00	840.95
12-Oct	577,500	24,372,800	555,000	22,928,500	802	14.3	964.2	27.2	2127.6	75.1	4	8.8	592.32	8.92	1	71	5	491.0	10506.2	0	98.2	0	300	11,538.24	631.0	343.00	712.37
13-Oct	552,600	24,925,400	517,000	23,445,500	768	19.0	983.2	36.1	2163.7	0.0	0	0.0	592.32	29.72	2	73	4	392.0	10898.2	0	98.0	0	333	11,930.24	970.5	294.00	764.50
16-Oct	756,800	25,682,200	617,000	24,062,500	1,051	25.2	1008.4	47.9	2211.6	118.7	5	5.7	598.02	18.76	2	75	0	0.0	10898.2	0	0.0	0	0	11,930.24	1,417.6	343.00	740.17
17-Oct	484,300	26,166,500	457,000	24,519,500	673	16.1	1024.5	30.6	2242.2	35.3	2	6.8	604.86	13.70	2	77	0	0.0	10898.2	0	0.0	0	0	11,930.24	1,806.4	343.00	646.35
18-Oct	363,300	26,529,800	348,000	24,867,500	505	10.3	1034.8	19.6	2261.7	0.0	0	5.0	609.86	15.26	1	78	4	394.0	11292.2	0	98.5	0	0	12,324.24	1,820.6	343.00	521.25
19-Oct	283,665	26,813,465	348,000	25,215,500	394	0.0	0.0	0.0	0.0	122.5	5	0.0	0.00	0.00	0	78	5	493.0	11785.2	0	98.6	0	0	12,817.24	1,415.1	0.00	166.80
20-Oct	257,800	27,071,265	47,000	25,262,500	358																						
21-Oct		27,071,265		25,262,500						85.9	5																
23-Oct	47,900	27,119,165	81,000	25,343,500																							
Average	600,470		560,489		817																98.2						
Total		27,119,165		25,343,500						2467	117		870		78	136[d]		13333[e]	30		1,034	914	13454[f]	0	13,708	33,531

13,453.45