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RCRA Facility Investigation
Duwamish Waterway Sediment Investigation
Interim Report
Volume II

RFI
Vol. II

Boeing—Plant 2
Seattle/Tukwila, Washington

Submitted To:
The Boeing Company
Boeing Information Support Services
Safety, Health, and Environmental Affairs

October 1996

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SF DOC ID
6 79834

RCRA FACILITY INVESTIGATION
DUWAMISH WATERWAY SEDIMENT INVESTIGATION INTERIM REPORT
BOEING—PLANT 2

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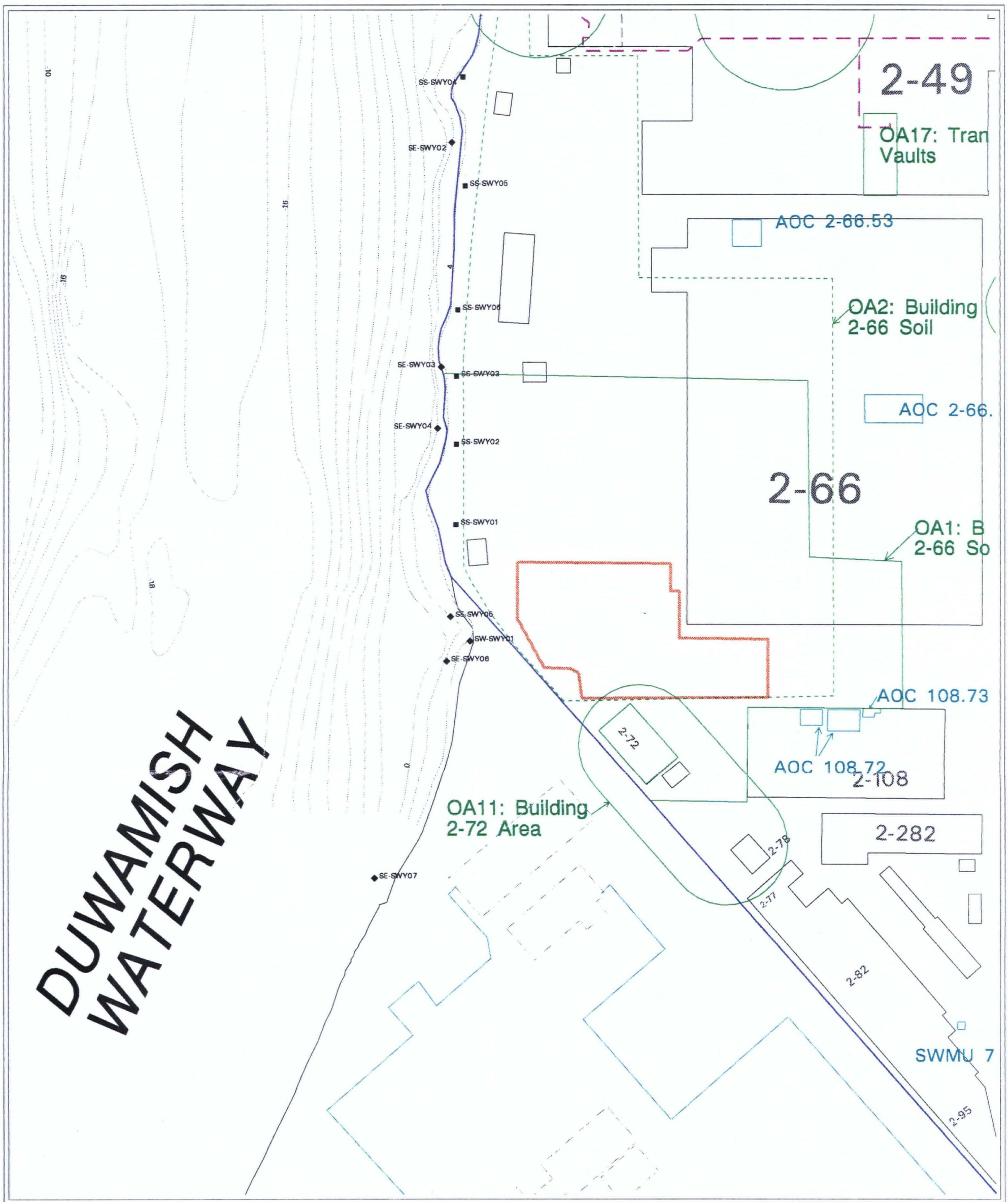
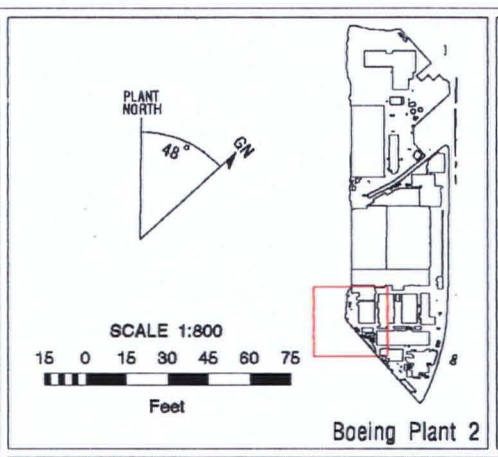


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
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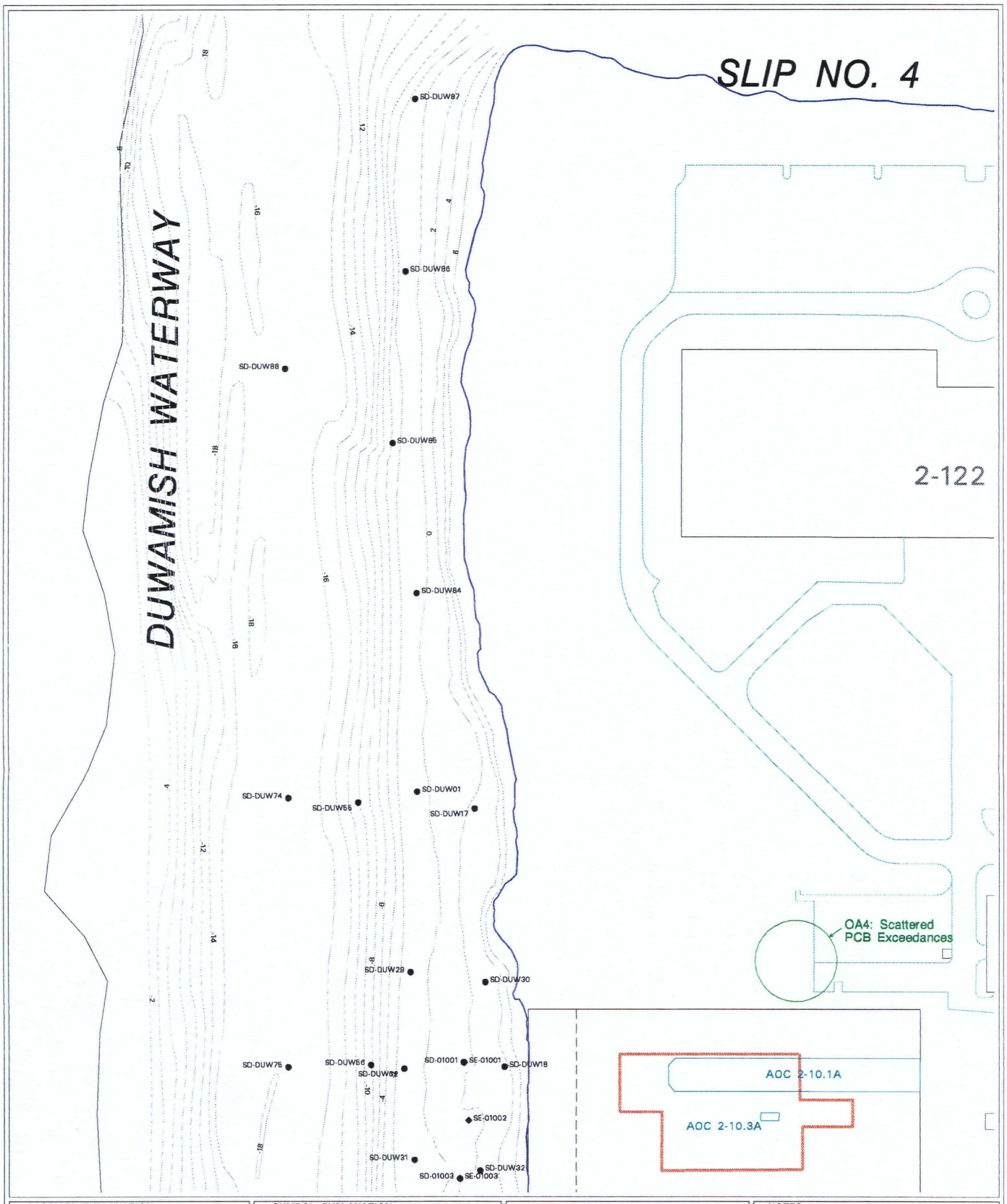
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: _____
APPROVED BY: _____

Boeing Plant 2 Duwamish Investigation Bank Fill Material Sampling Locations

Map 1

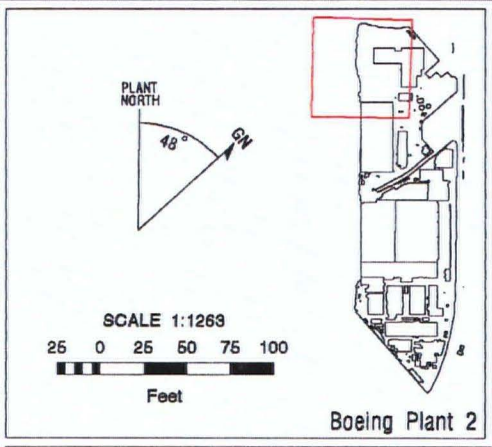


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

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MANAGERS DESIGNERS/CONSULTANTS

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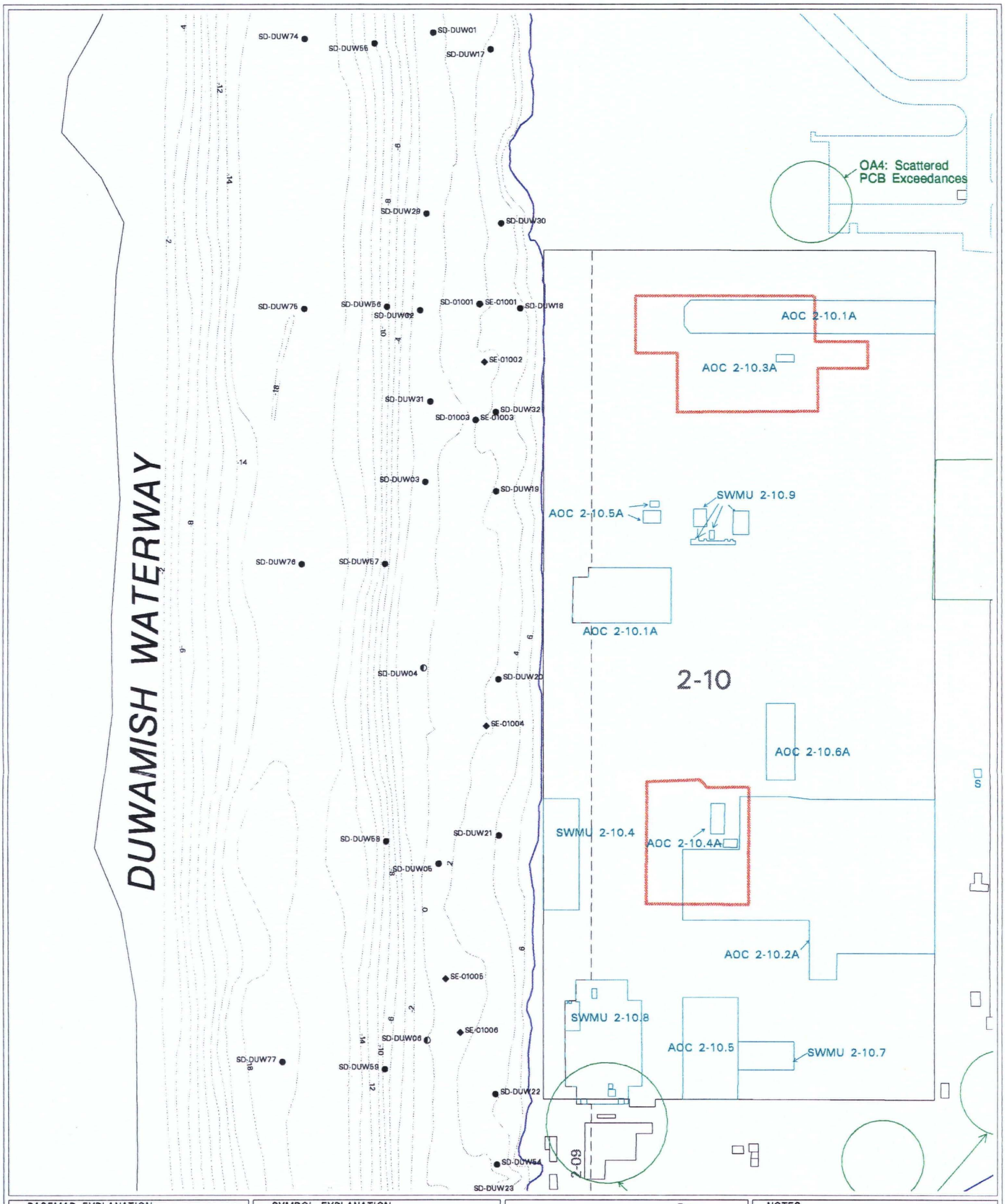
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSJ
APPROVED BY:

Boeing Plant 2 Duwamish Investigation Surface Sediment Sampling Locations

Map 2a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
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DATE: August 07, 1996 11:07 AM
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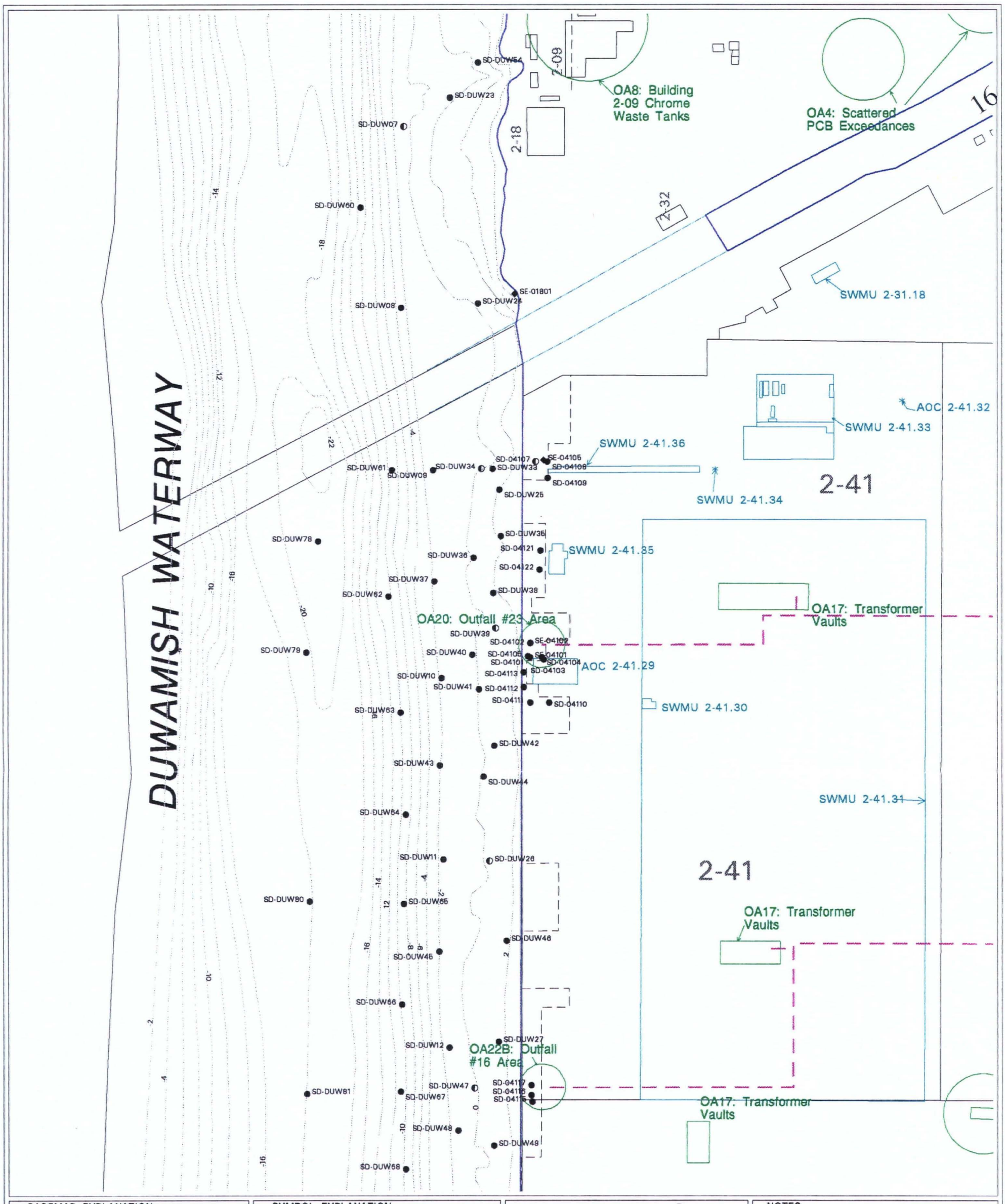
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSJ
APPROVED BY:

Boeing Plant 2 Duwamish Investigation Surface Sediment Sampling Locations

Map 2b

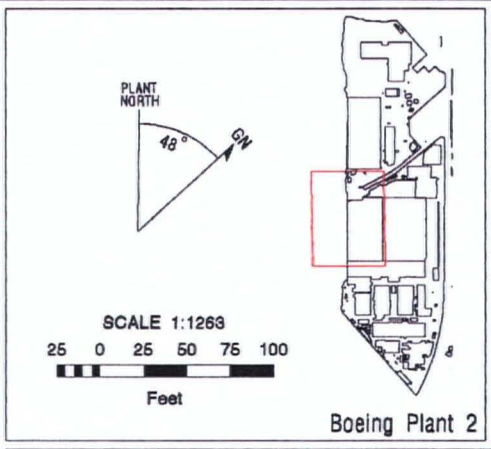


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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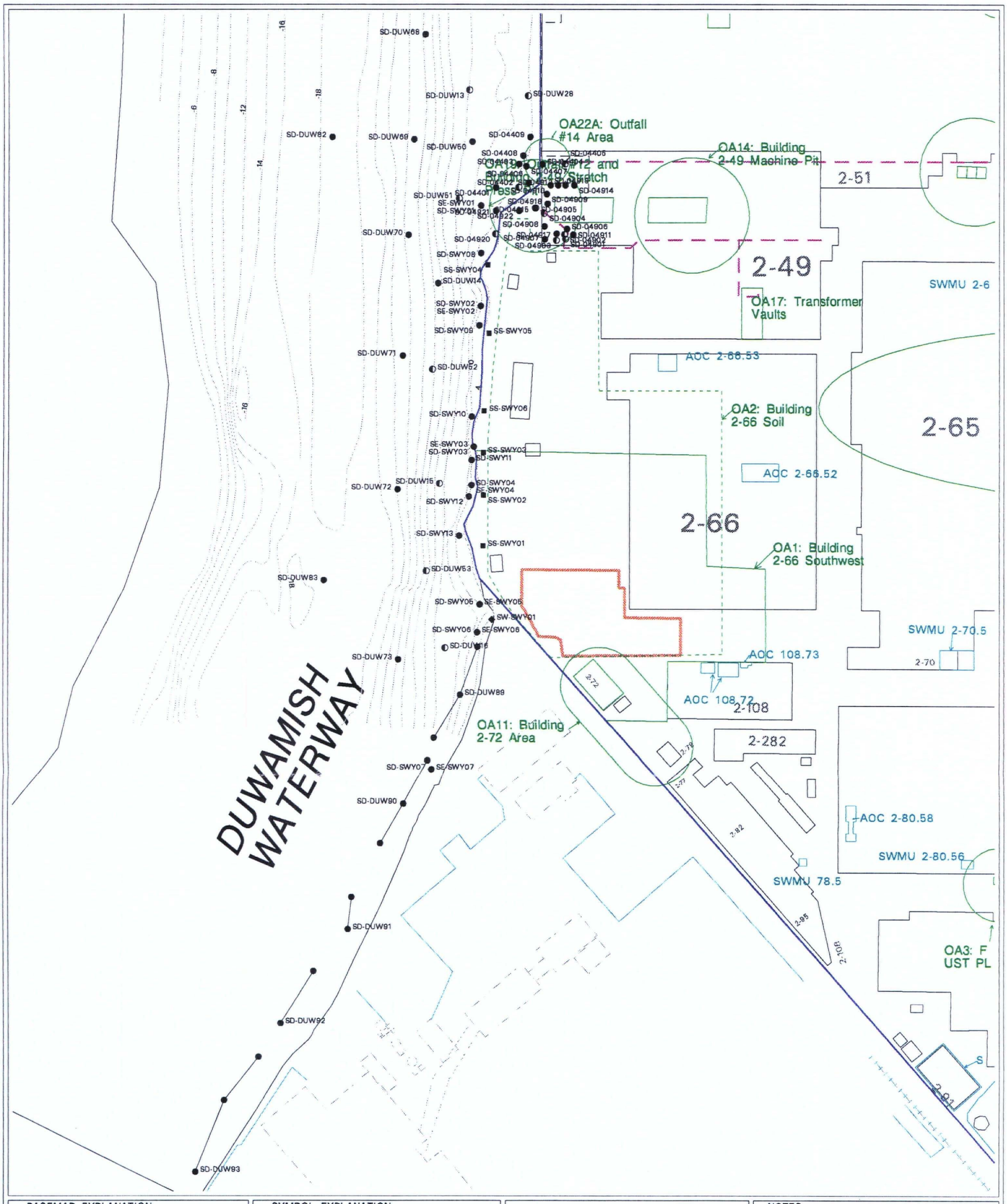
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSJ
APPROVED BY:

Boeing Plant 2 Duwamish Investigation Surface Sediment Sampling Locations

Map 2c

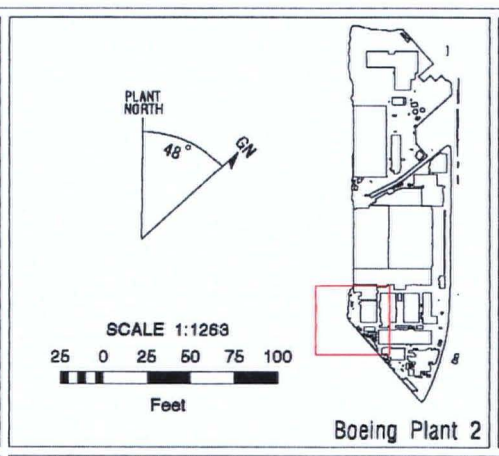


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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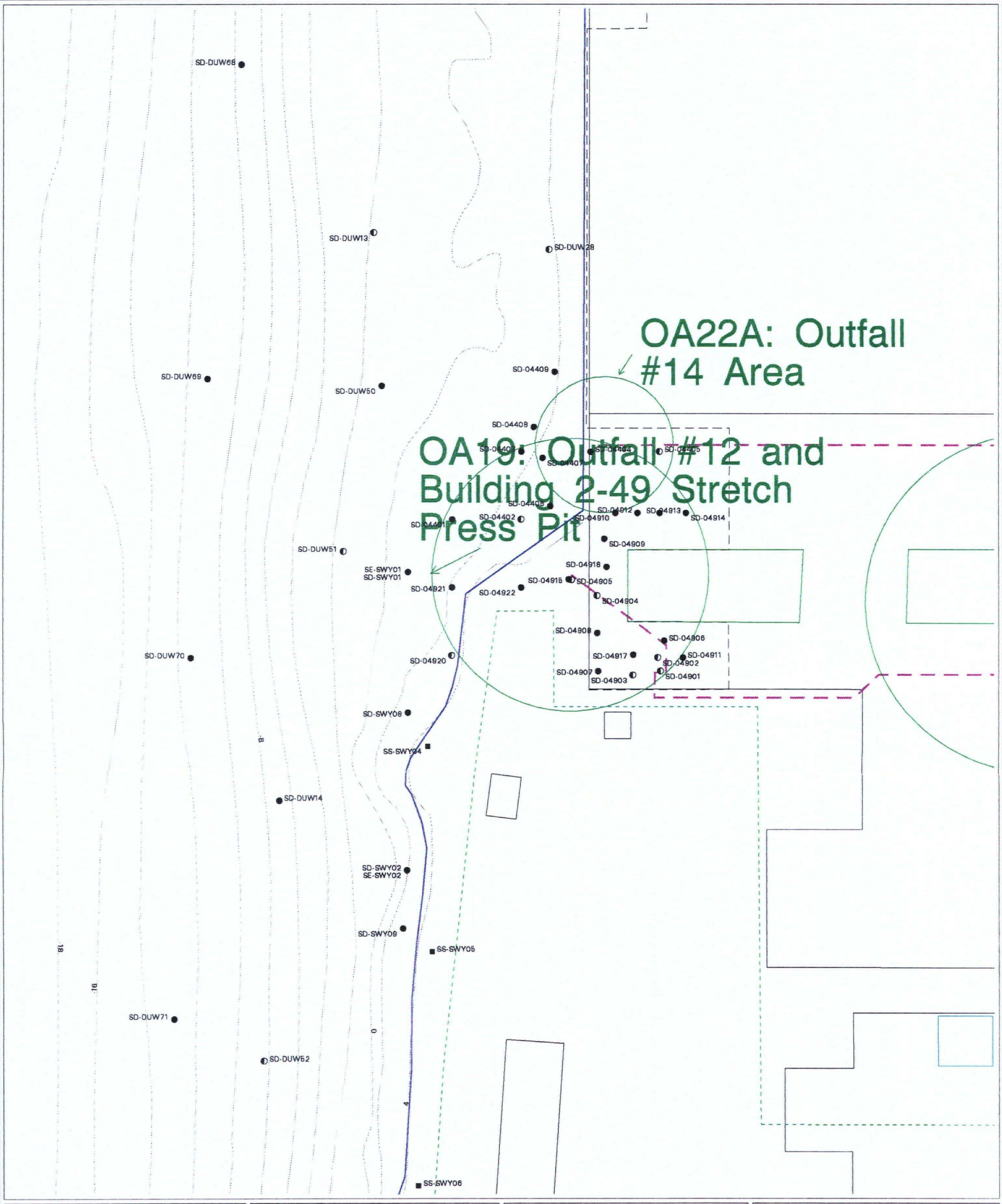
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSS
APPROVED BY:

Boeing Plant 2 Duwamish Investigation Surface Sediment Sampling Locations

Map 2d

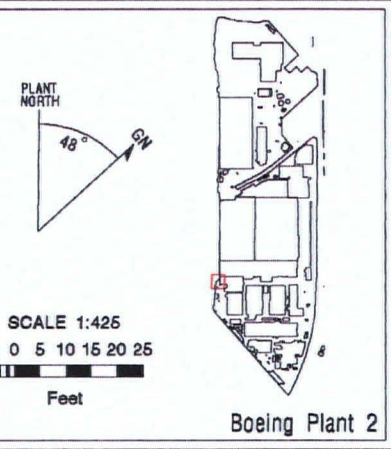


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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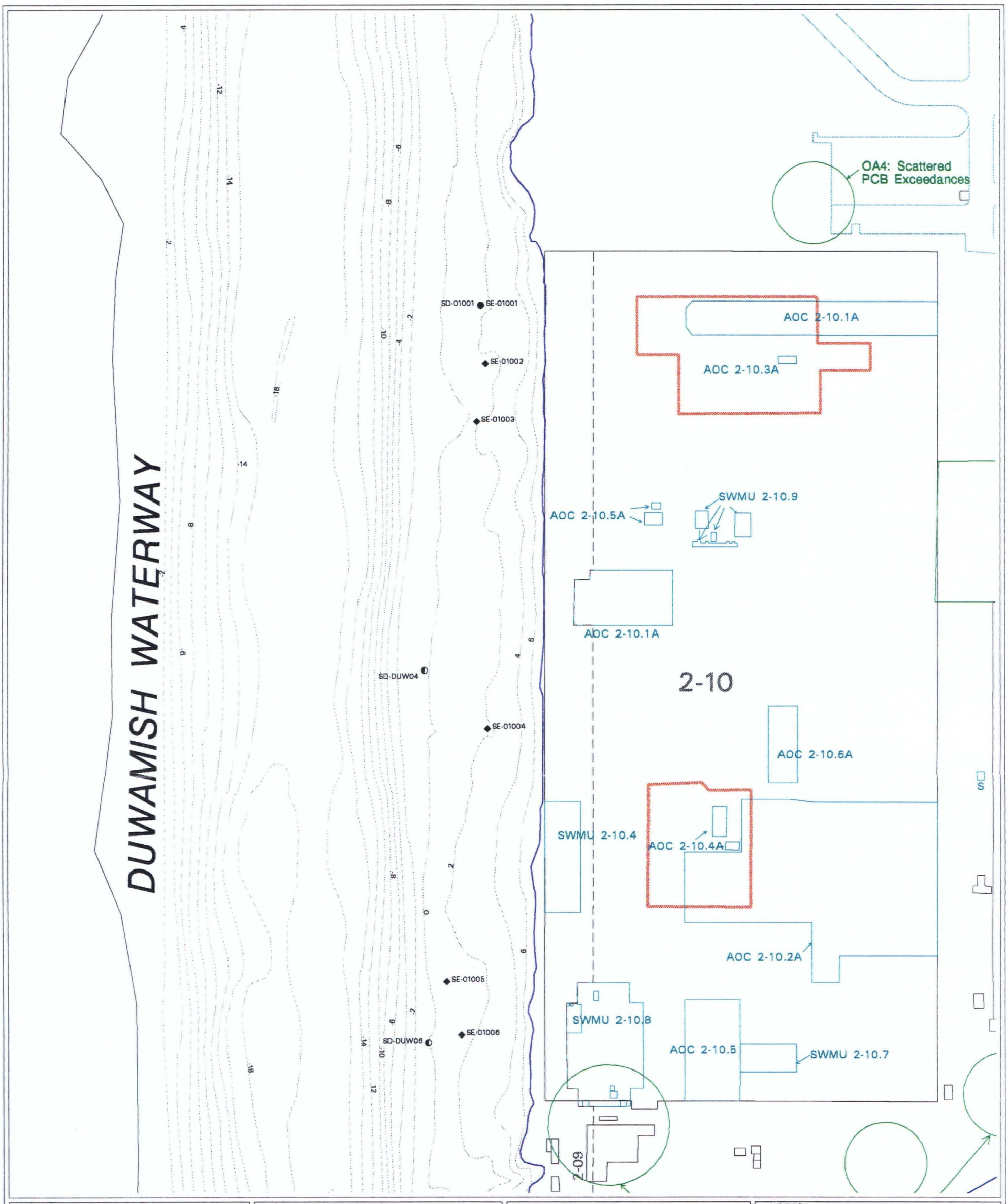
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSS
APPROVED BY:

Boeing Plant 2 Duwamish Investigation Surface Sediment Sampling Locations

Map 2e

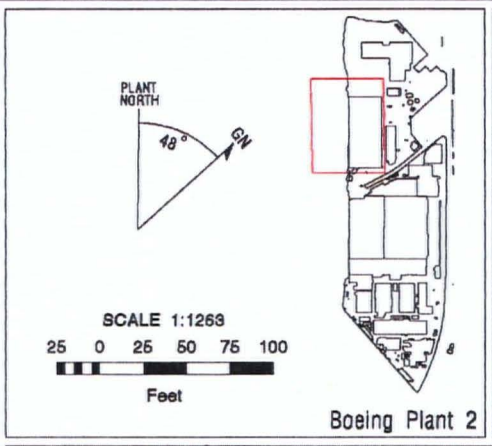


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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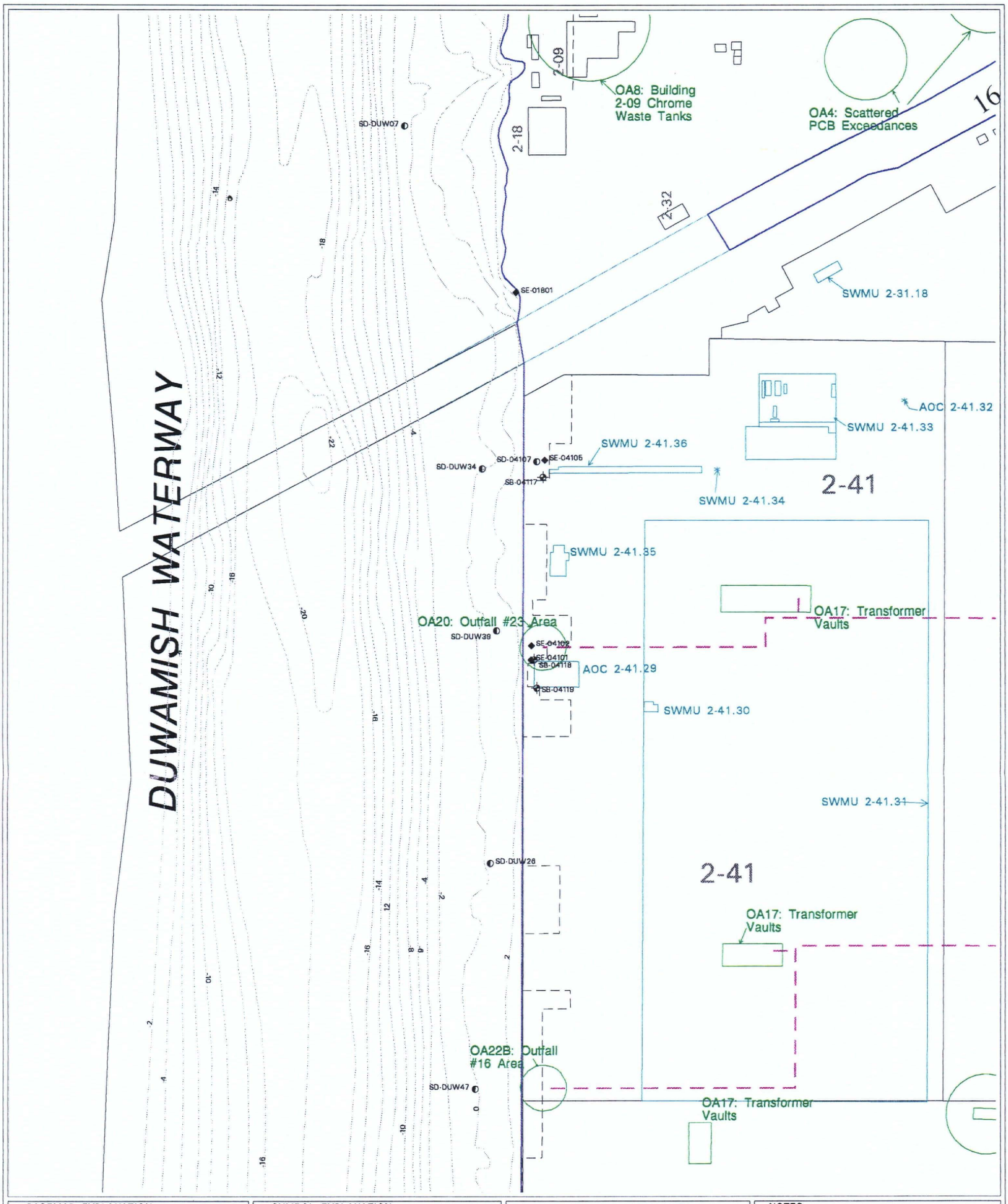
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSS
APPROVED BY:

Boeing Plant 2 Duwamish Investigation Subsurface Sediment Sampling Locations

Map 3a

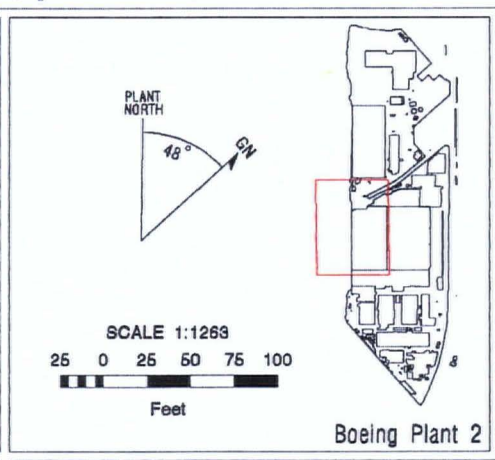


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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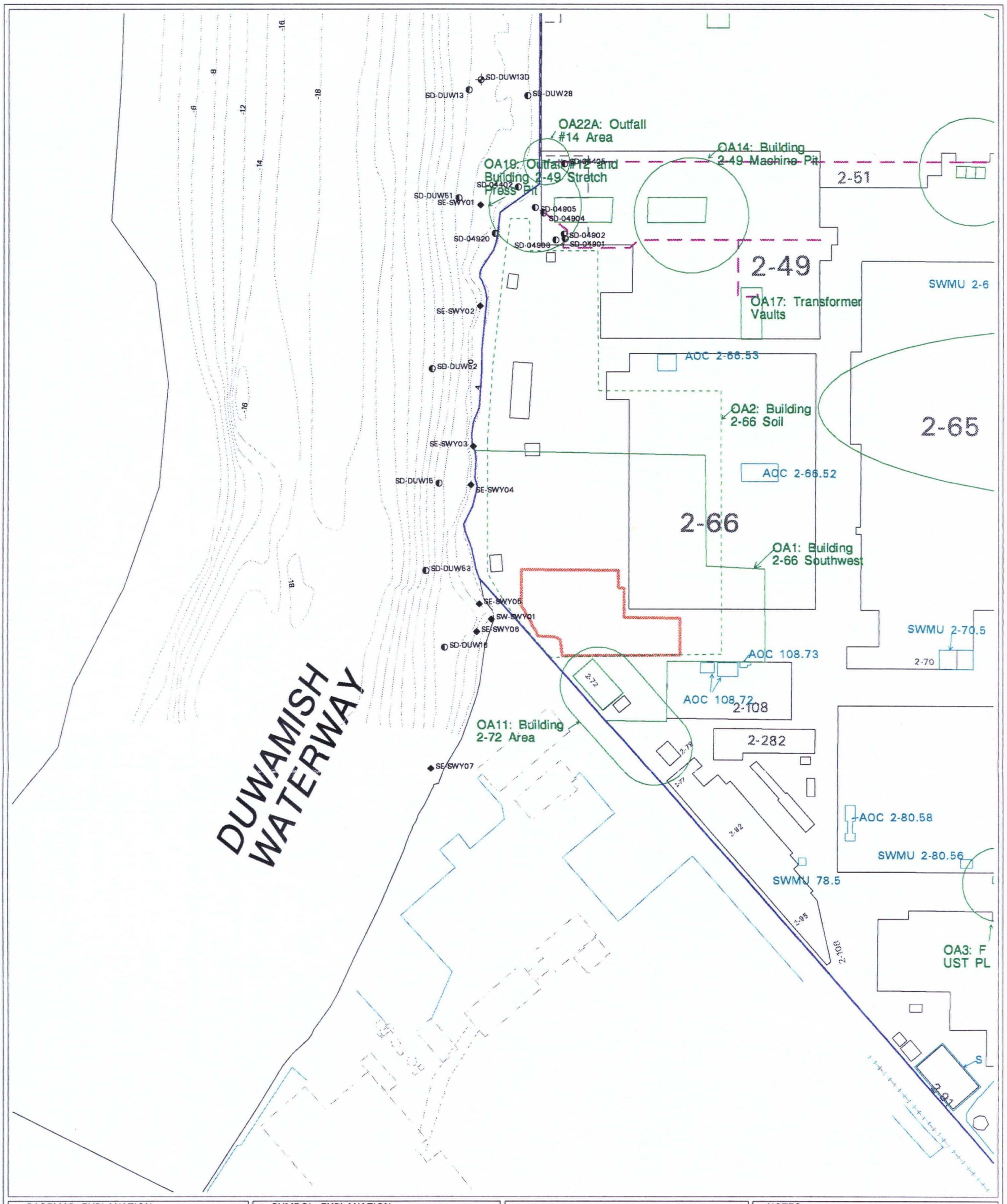
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSS
APPROVED BY:

Boeing Plant 2 Duwamish Investigation Subsurface Sediment Sampling Locations

Map 3b

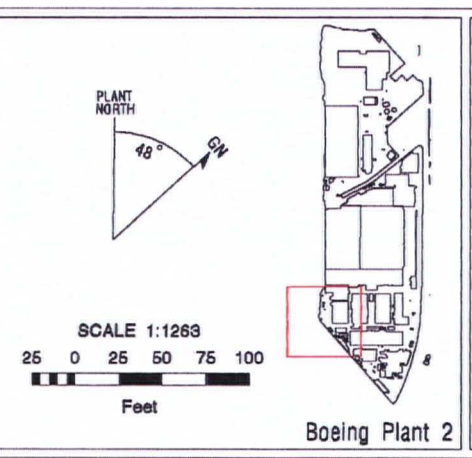


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- Surface/Subsurface sediment sample
- Surface sediment sample
- Subsurface sediment sample
- Bank fill material sample
- Seep sample
- SWMU/AOC
- Other Area



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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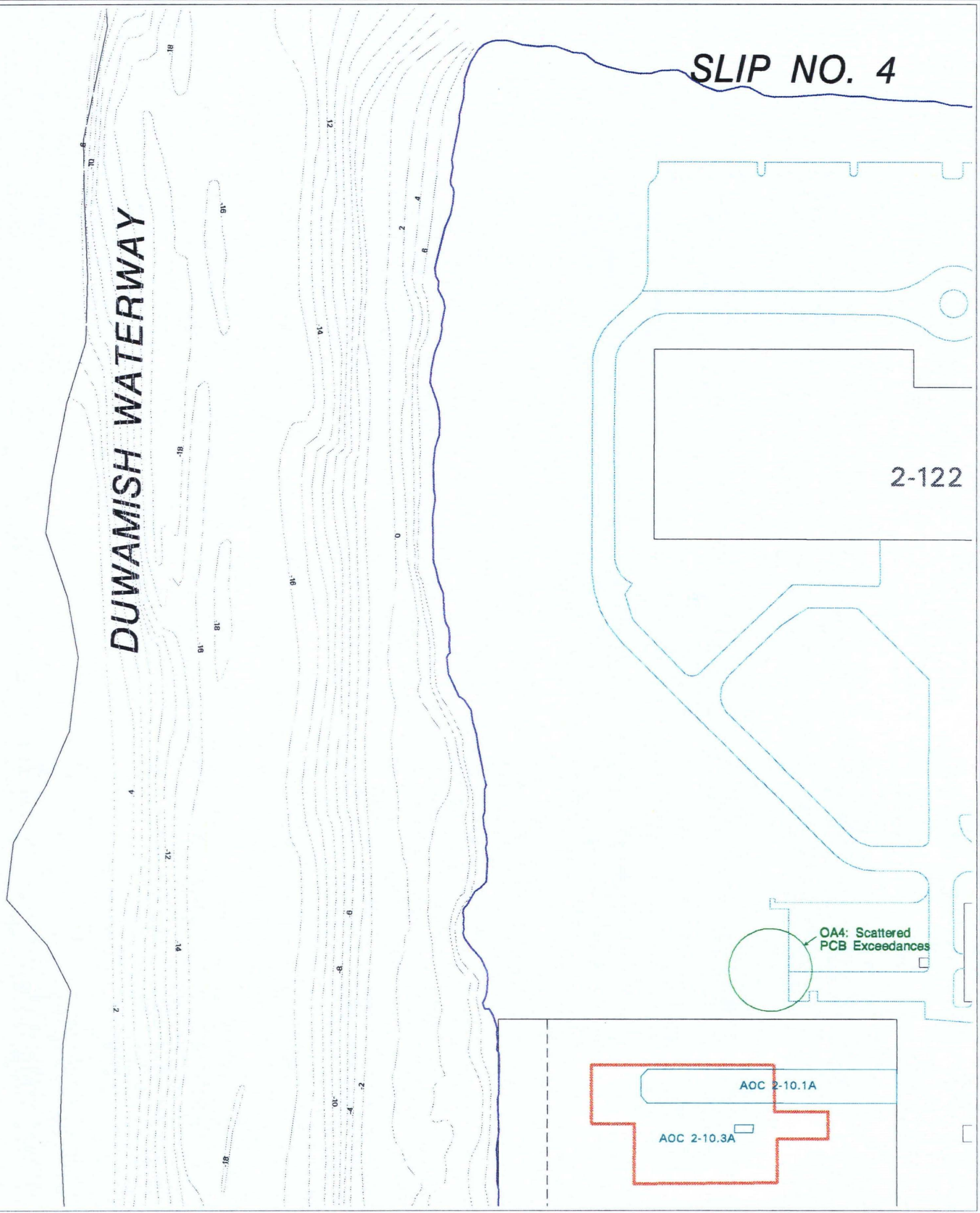
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW
CHECKED BY: MSS
APPROVED BY:

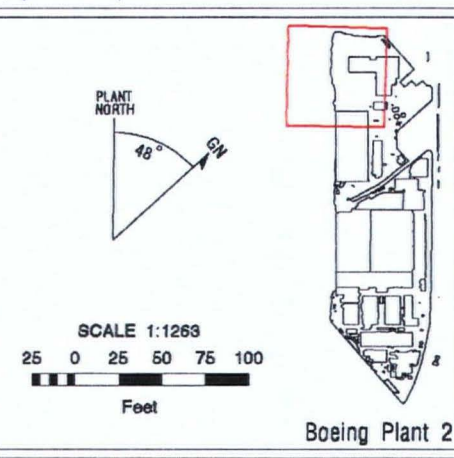
Boeing Plant 2 Duwamish Investigation Subsurface Sediment Sampling Locations

Map 3c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

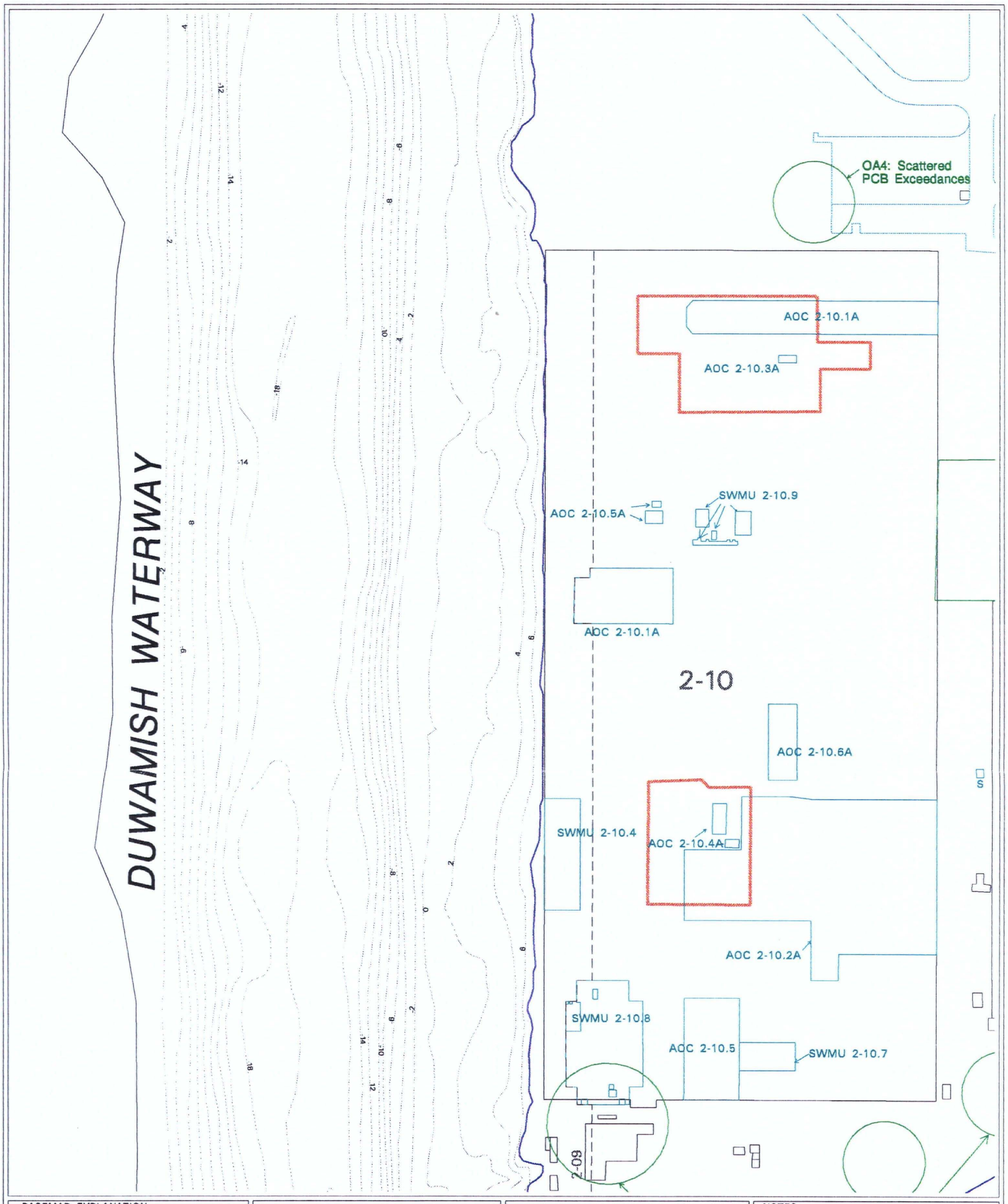
DATE: October 02, 1996 1:58 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW

CHECKED BY: _____

APPROVED BY: _____

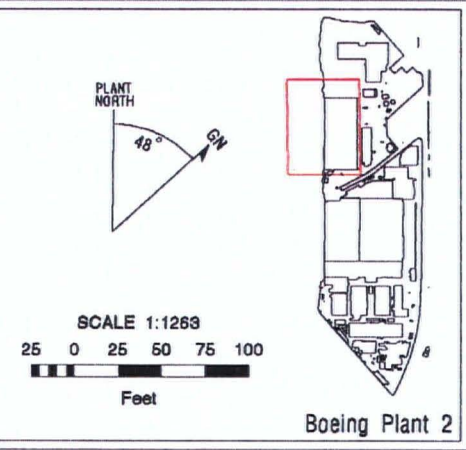
Boeing Plant 2 Duwamish Investigation Bathymetric Contours

Map 4a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

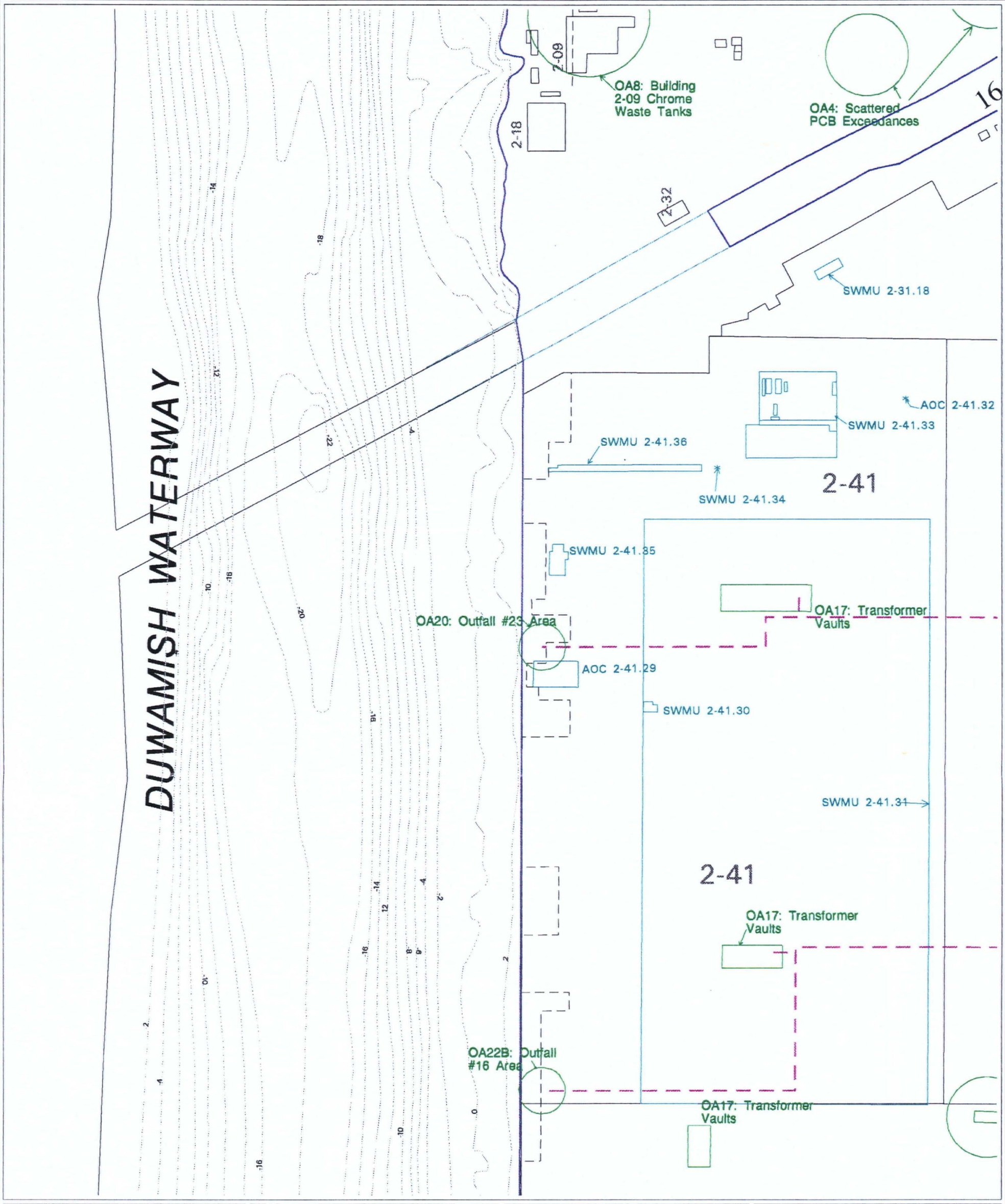
DATE: October 02, 1996 1:59 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW

CHECKED BY: _____

APPROVED BY: _____

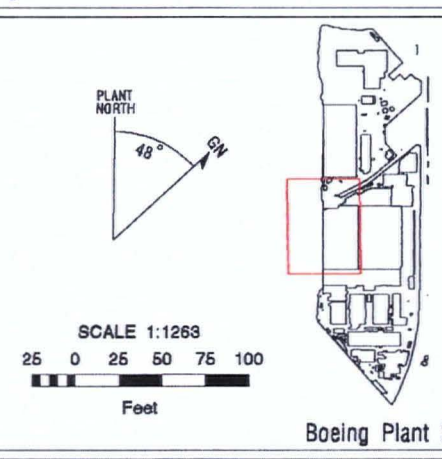
Boeing Plant 2 Duwamish Investigation Bathymetric Contours

Map 4b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour



NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 02, 1996 2:00 PM
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LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW

CHECKED BY: _____

APPROVED BY: _____

Boeing Plant 2 Duwamish Investigation Bathymetric Contours

Map 4C

OA22A: Outfall #14 Area

OA19: Outfall #12 and Building 2-49 Stretch Press Pit

OA14: Building 2-49 Machine Pit

2-51

2-49

SWMU 2-6

OA17: Transformer Vaults

AOC 2-66.53

OA2: Building 2-66 Soil

2-65

AOC 2-66.52

2-66

OA1: Building 2-66 Southwest

SWMU 2-70.5

2-70

AOC 108.73

AOC 108.72

2-108

OA11: Building 2-72 Area

2-282

AOC 2-80.58

SWMU 2-80.56

SWMU 78.5

OA3: F UST PL

DUWAMISH WATERWAY

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

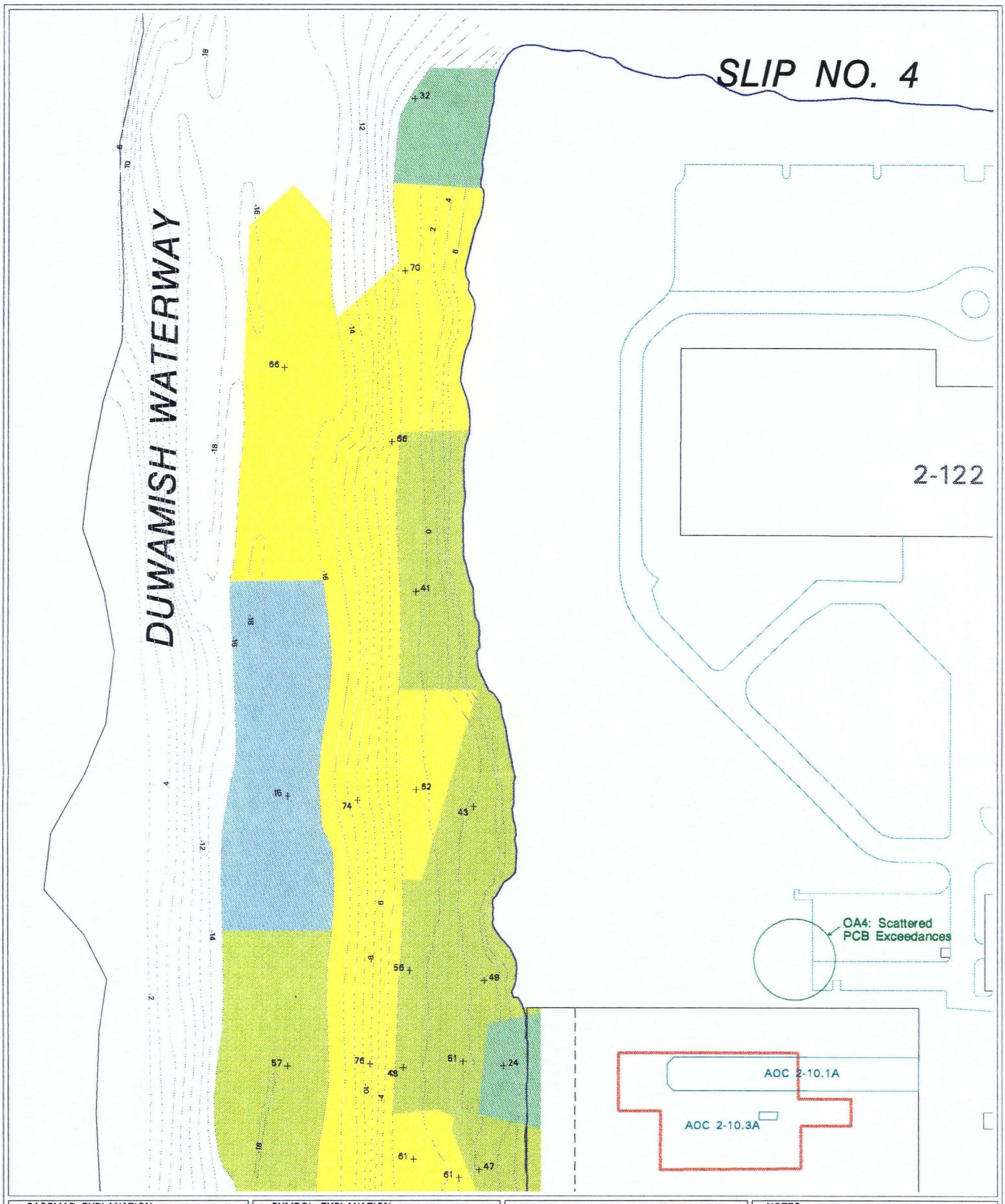
DATE: October 02, 1996 2:01 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: SEDIMENT.VIEW

CHECKED BY: _____

APPROVED BY: _____

Boeing Plant 2 Duwamish Investigation Bathymetric Contours

Map 4d



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is:
Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

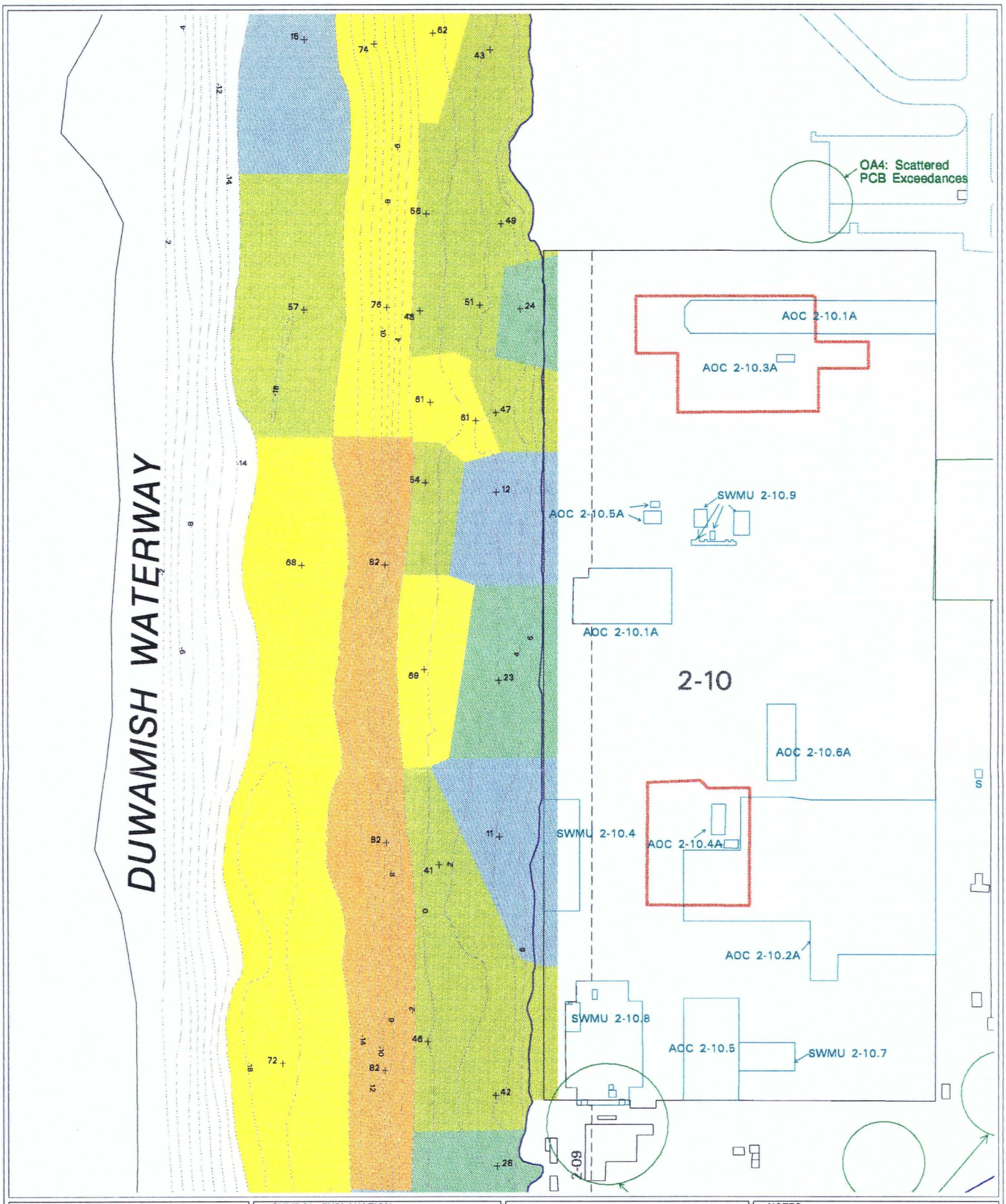
DATE: October 02, 1996 10:18 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Fines in Surface Sediment

Map 5a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

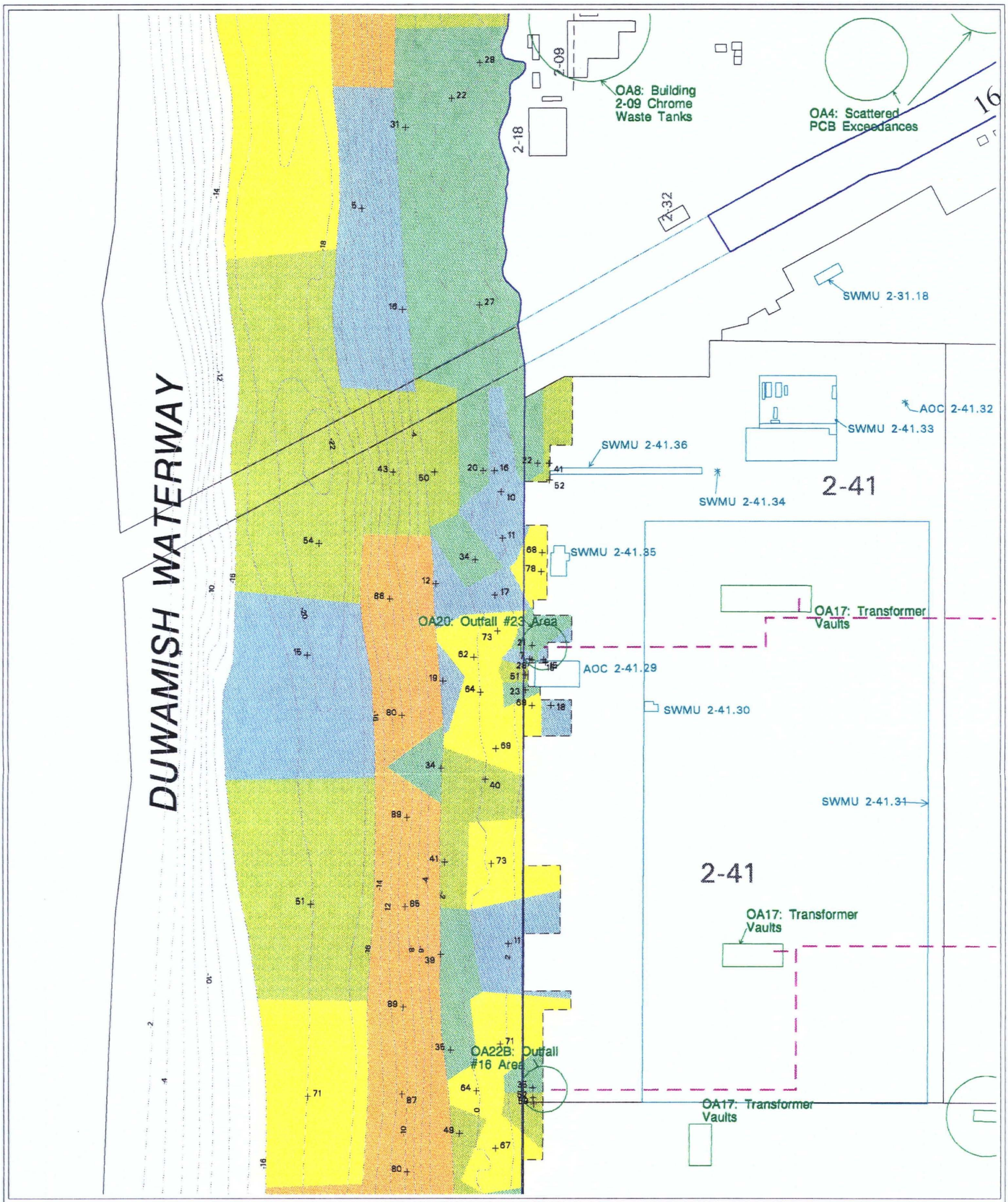
DATE: October 01, 1996 6:37 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Fines in Surface Sediment

Map 5b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

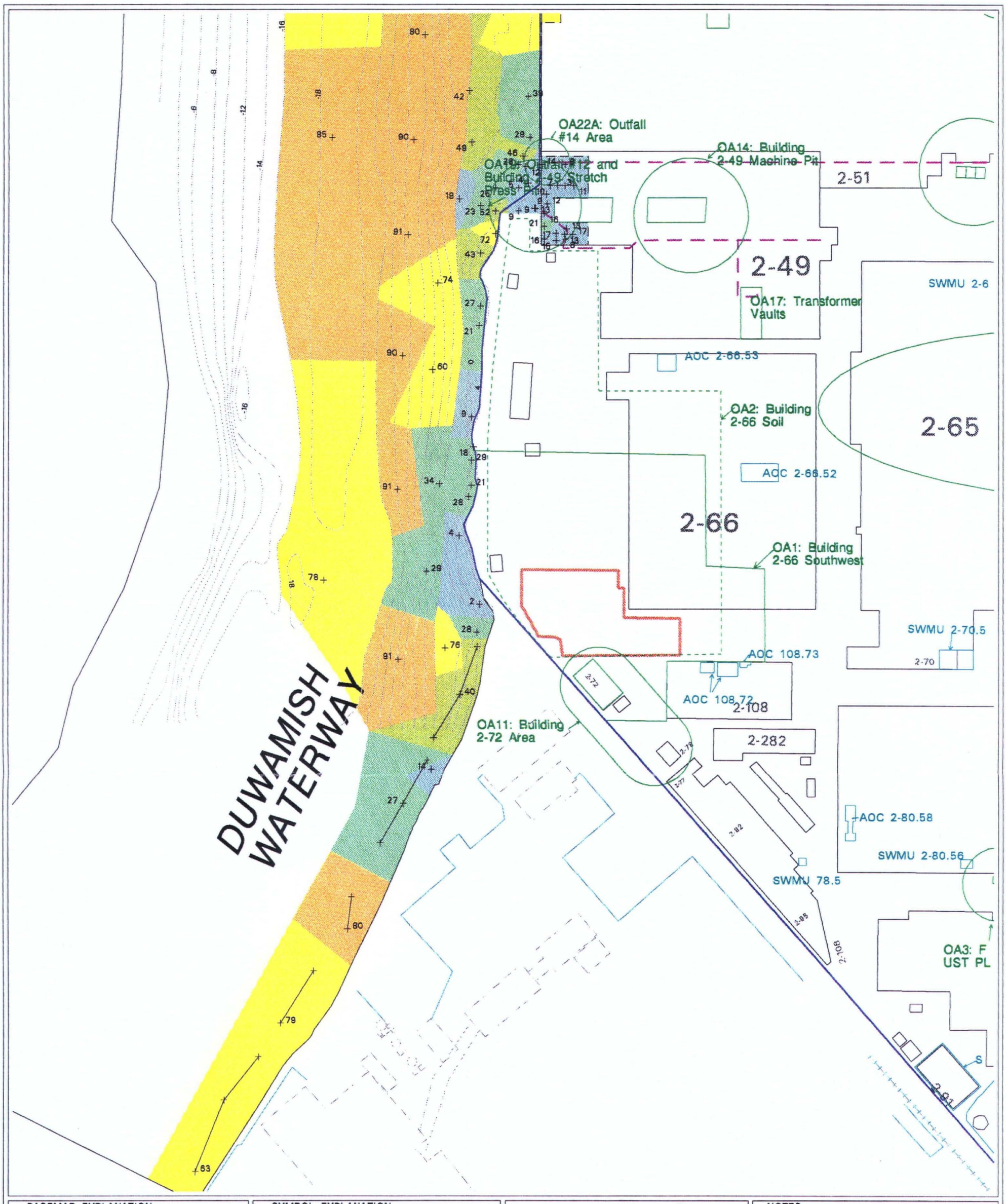
DATE: October 01, 1996 6:33 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Fines in Surface Sediment

Map 5c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 6:28 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

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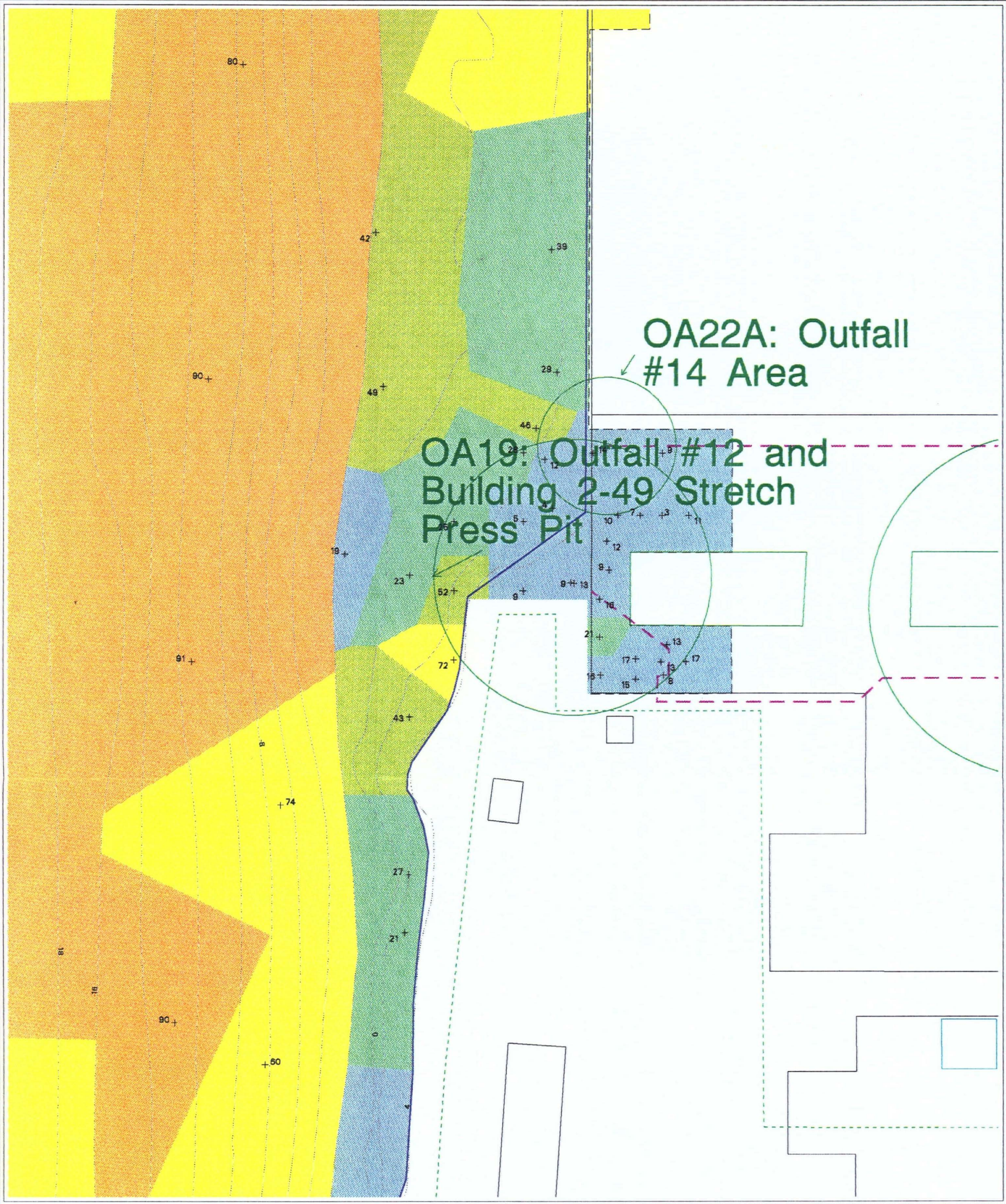
APPROVED BY: _____

Concentrations of Total Percent Fines in Surface Sediment

Map 5d



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH
48°
GN

SCALE 1:425
5 0 5 10 15 20 25
Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is:
Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

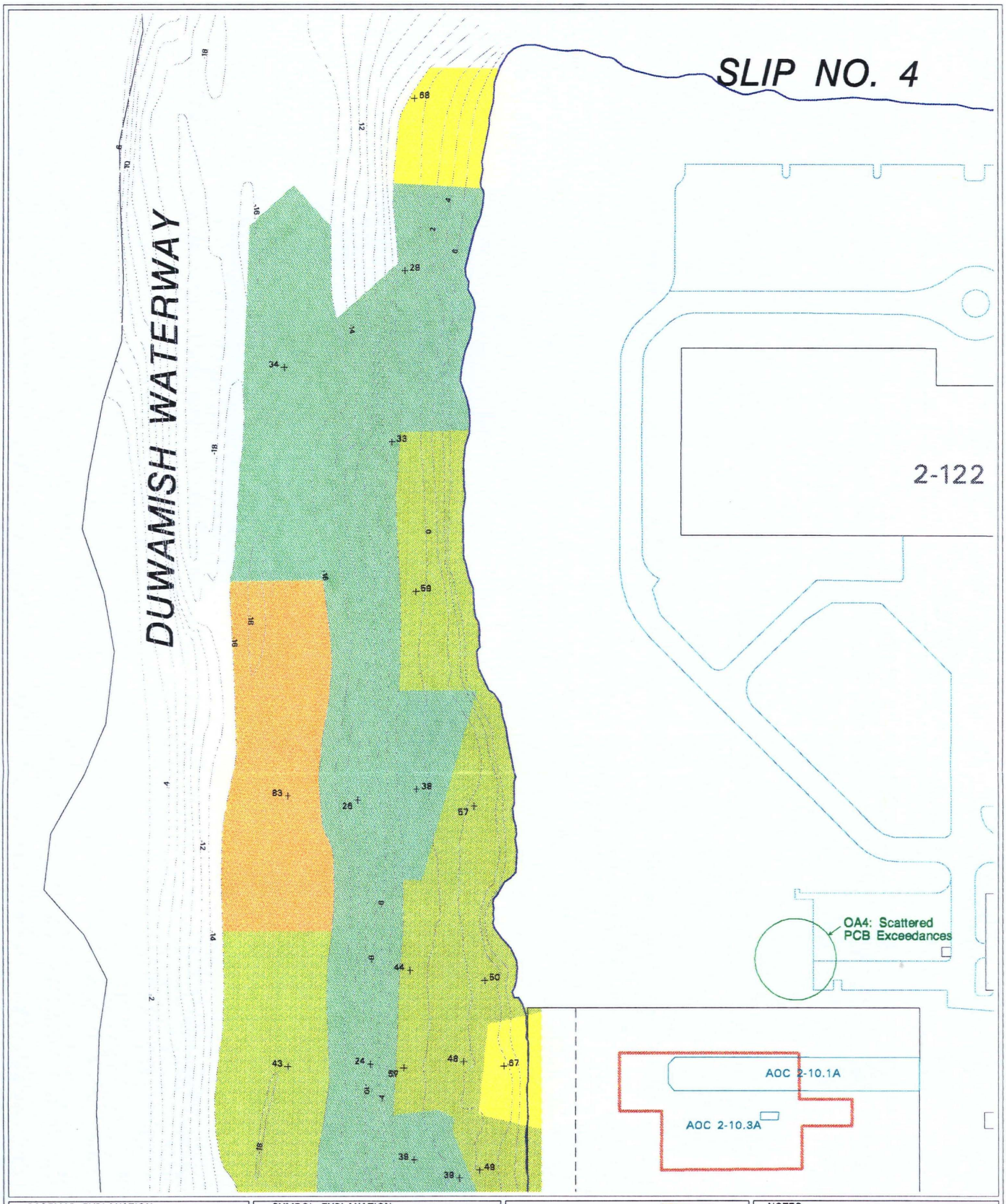
DATE: October 01, 1996 6:25 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Fines in Surface Sediment

Map 5e

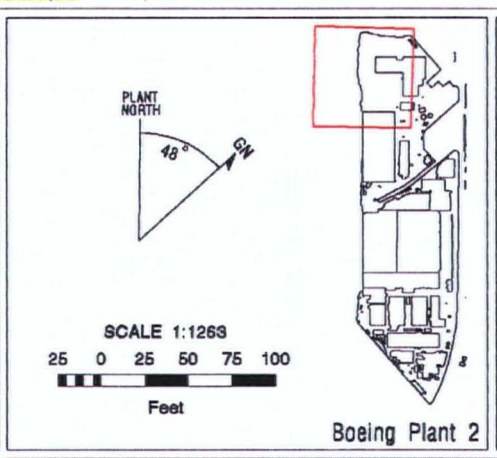


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80



NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

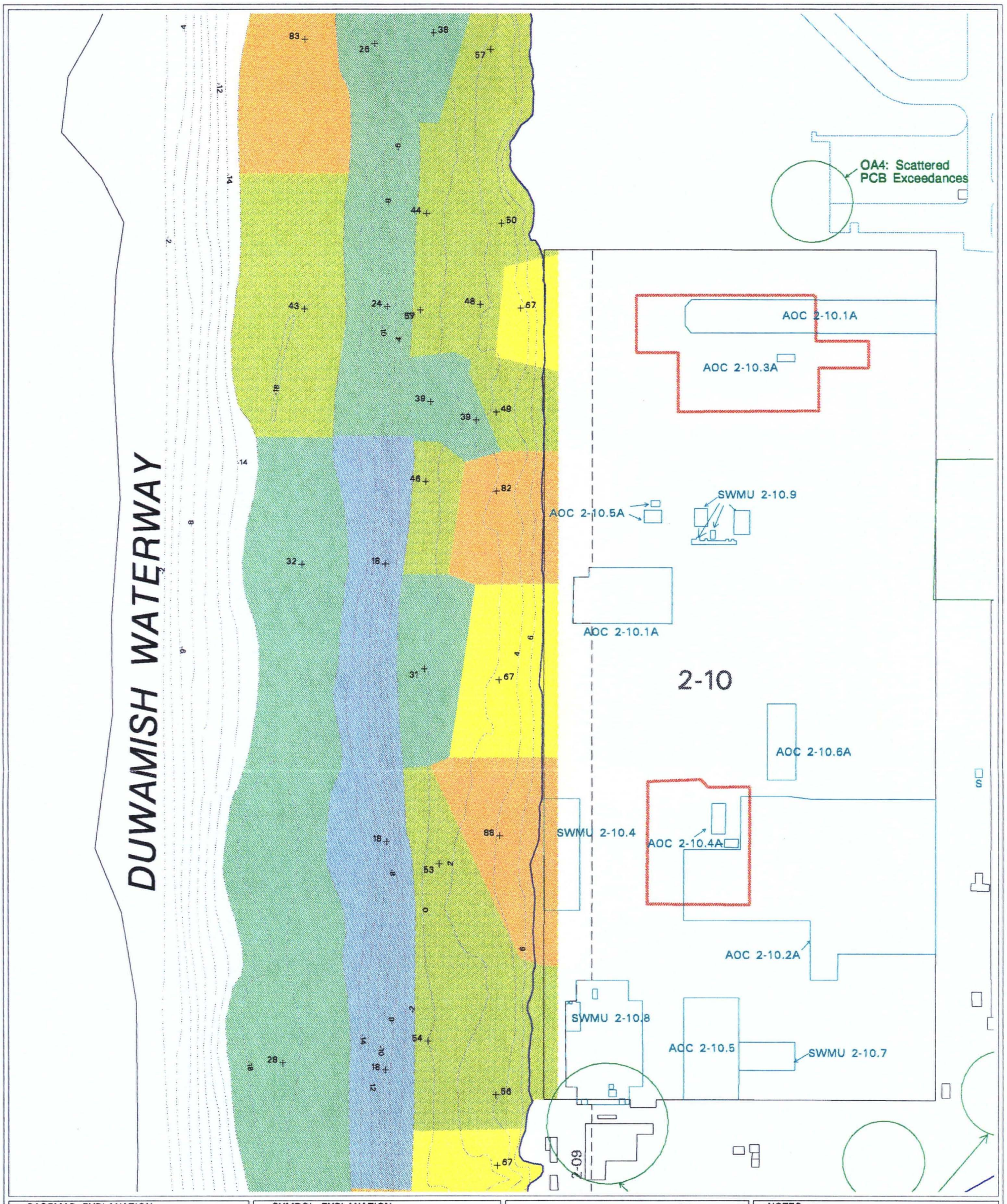
DATE: October 01, 1996 7:04 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Sand in Surface Sediment

Map 6a

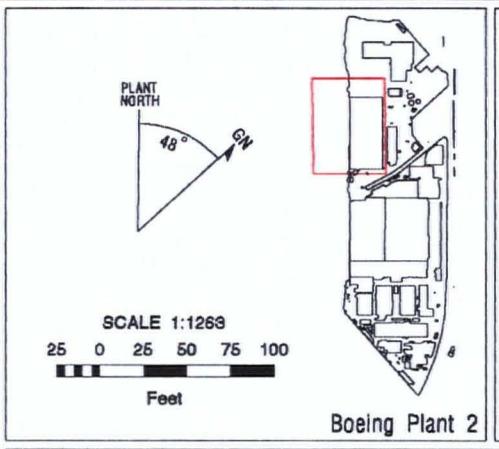


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80



NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

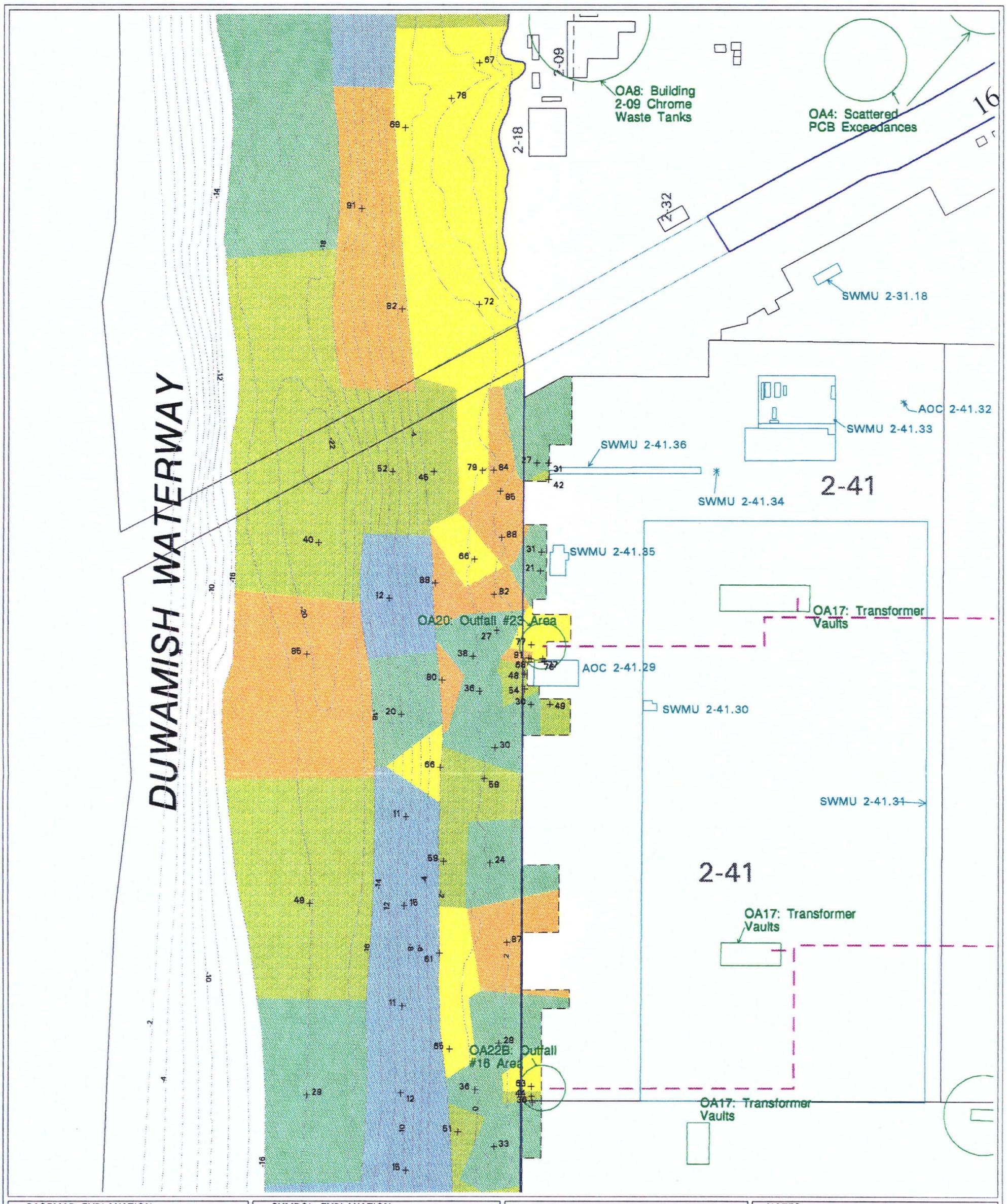
DATE: October 01, 1996 7:00 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Sand in Surface Sediment

Map 6b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 6:56 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Sand in Surface Sediment

Map 6c

OA22A: Outfall #14 Area

OA14: Building 2-49 Machine Pit

OA10: Outfall #12 and Building 2-49 Stretch Press Pit

2-51

2-49

OA17: Transformer Vaults

SWMU 2-6

AOC 2-66.53

OA2: Building 2-66 Soil

2-65

AOC 2-66.52

2-66

OA1: Building 2-66 Southwest

SWMU 2-70.5

2-70

AOC 108.73

AOC 108.72

2-108

OA11: Building 2-72 Area

2-282

AOC 2-80.58

SWMU 2-80.56

SWMU 78.5

OA3: F UST PL

DUWAMISH WATERWAY

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 6:52 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

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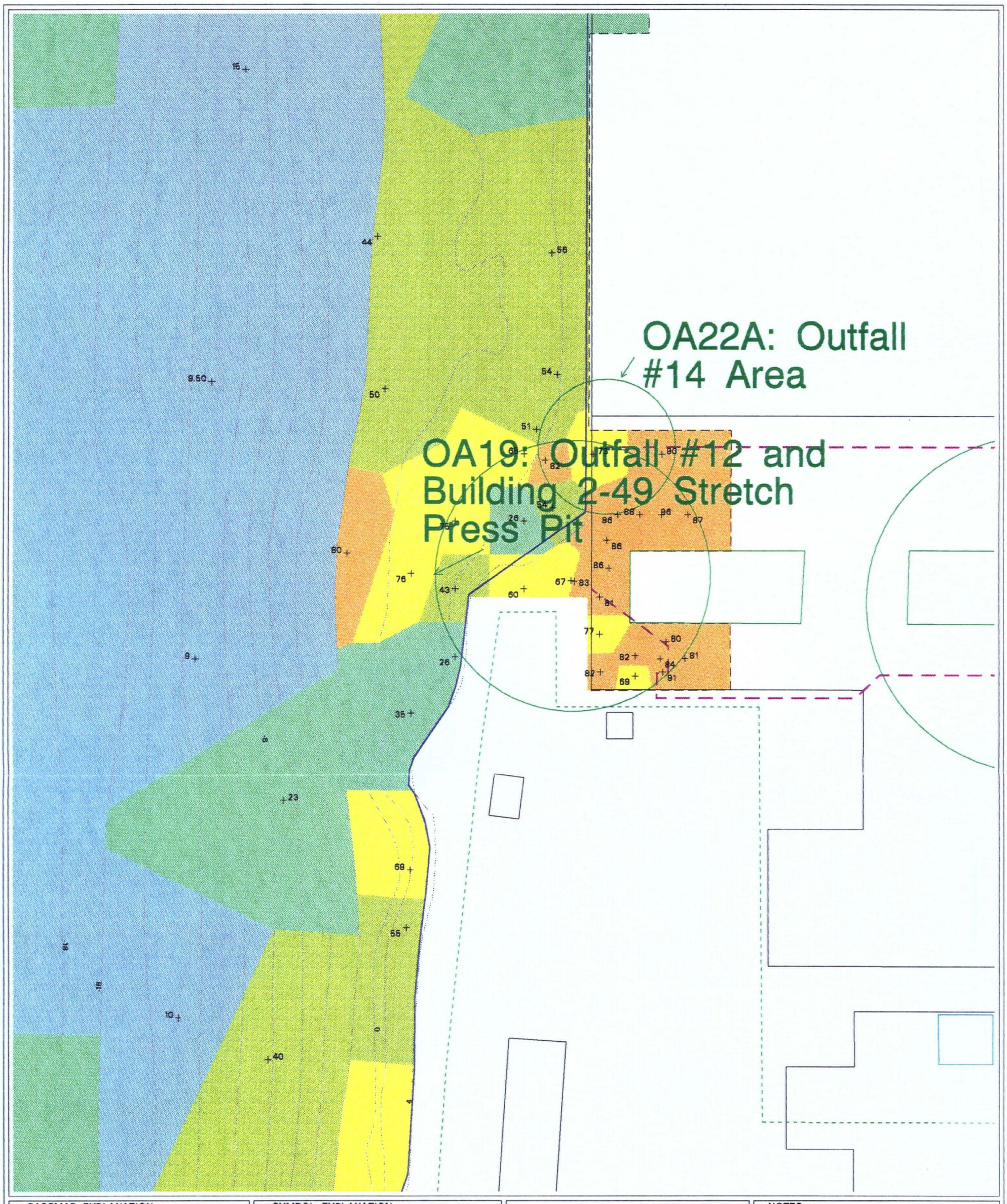
APPROVED BY: _____

Concentrations of Total Percent Sand in Surface Sediment

Map 6d



BASEMAP EXPLANATION

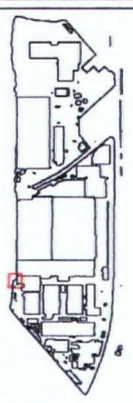
- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 20
- 20 - 39.99
- 40 - 59.99
- 60 - 79.99
- >= 80

PLANT NORTH
48°
GN

SCALE 1:425
5 0 5 10 15 20 25
Feet



Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is:
Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

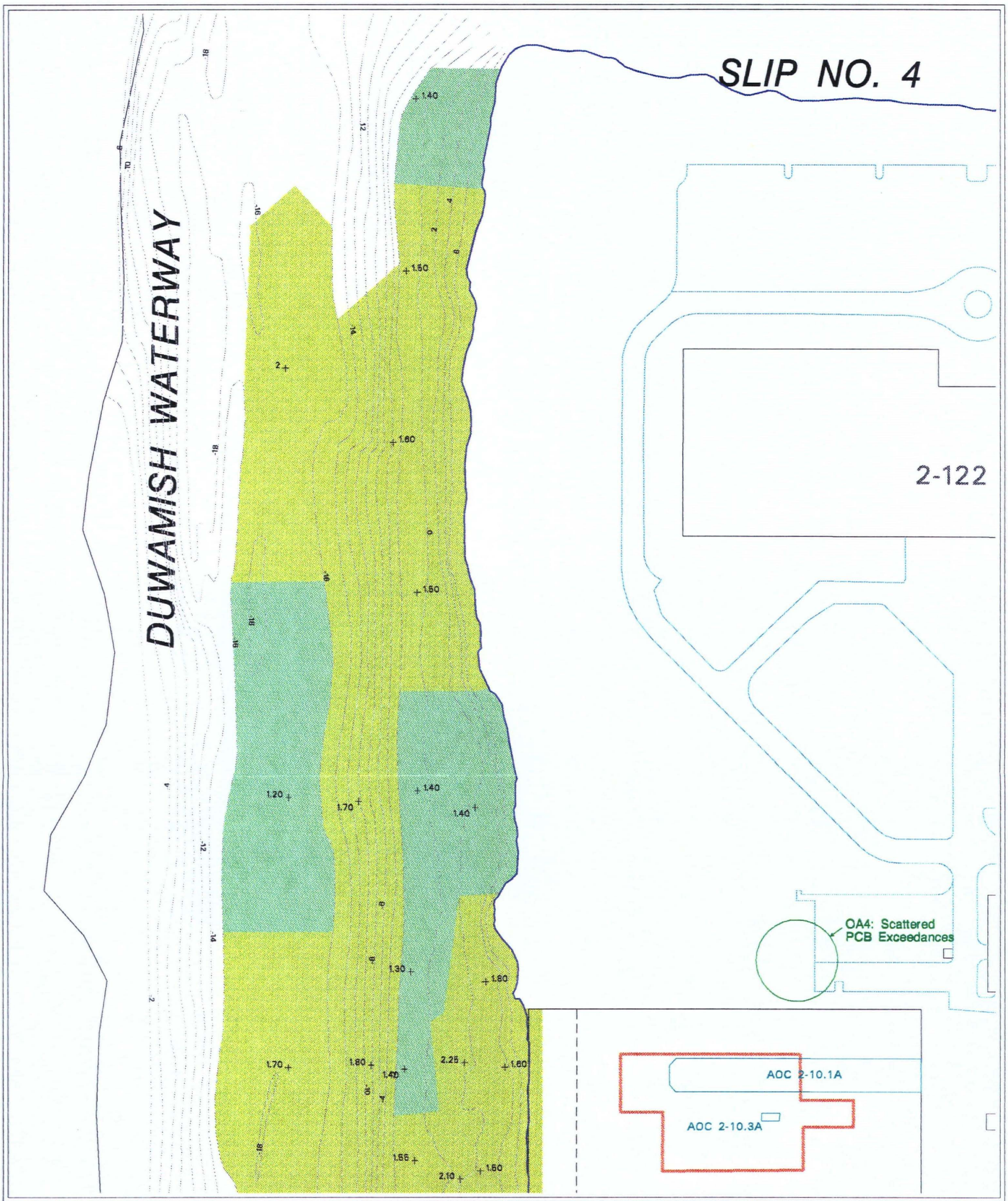
DATE: October 01, 1996 6:48 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Percent Sand in Surface Sediment

Map
6e

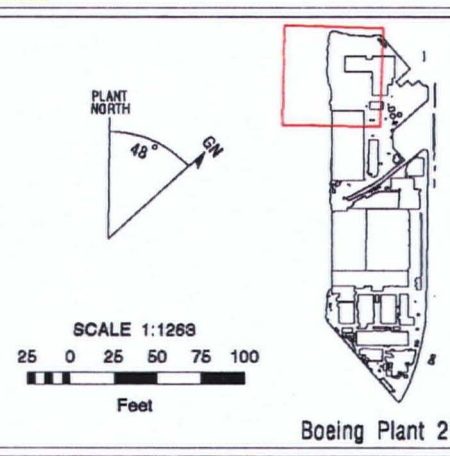


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 0.5
- 0.5 - 1.49
- 1.5 - 2.49
- 2.5 - 3.49
- >= 3.5



NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

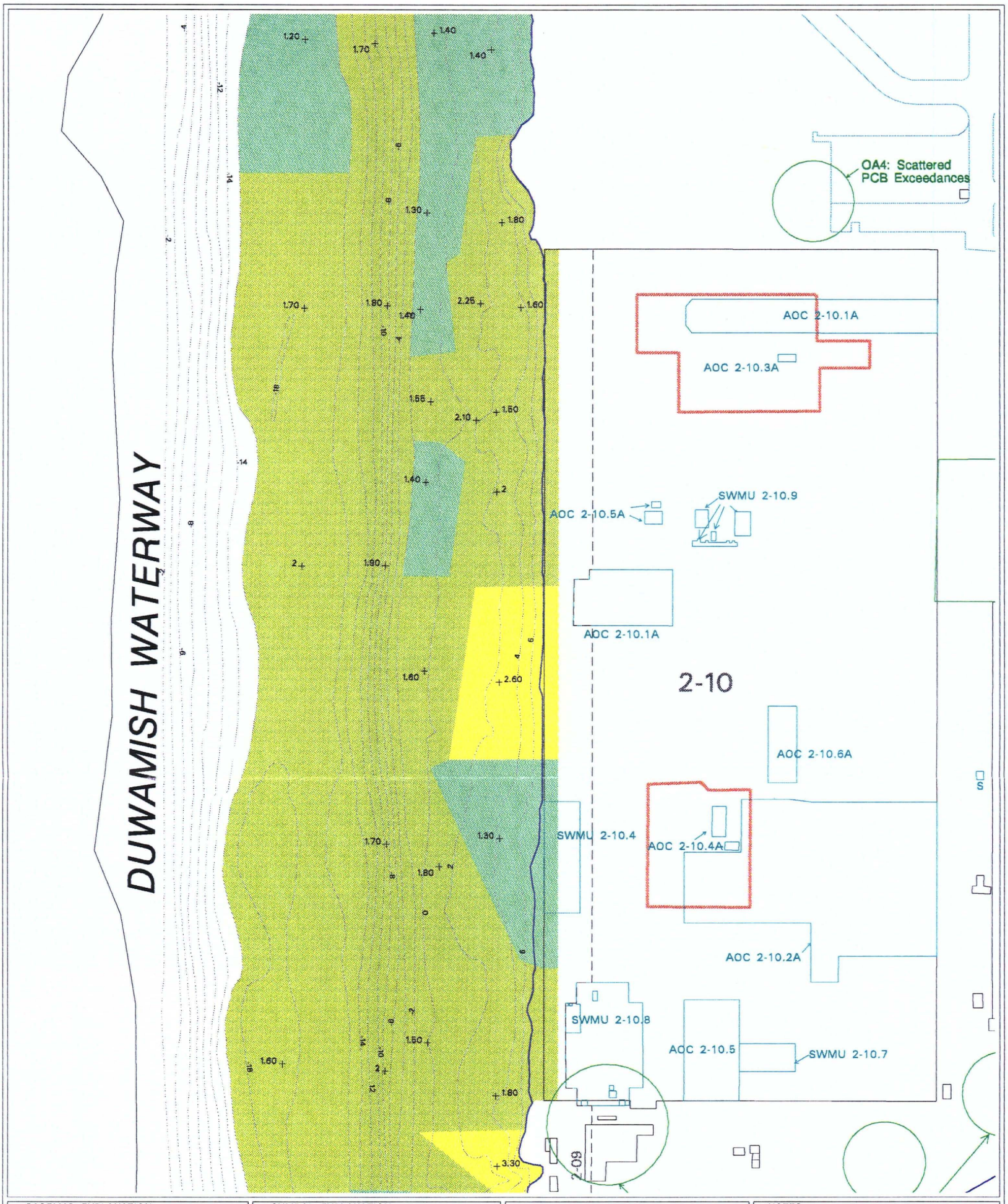
DATE: October 01, 1996 7:27 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Organic Carbon in Surface Sediment

Map 7a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 0.5
- 0.5 - 1.49
- 1.5 - 2.49
- 2.5 - 3.49
- >= 3.5

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

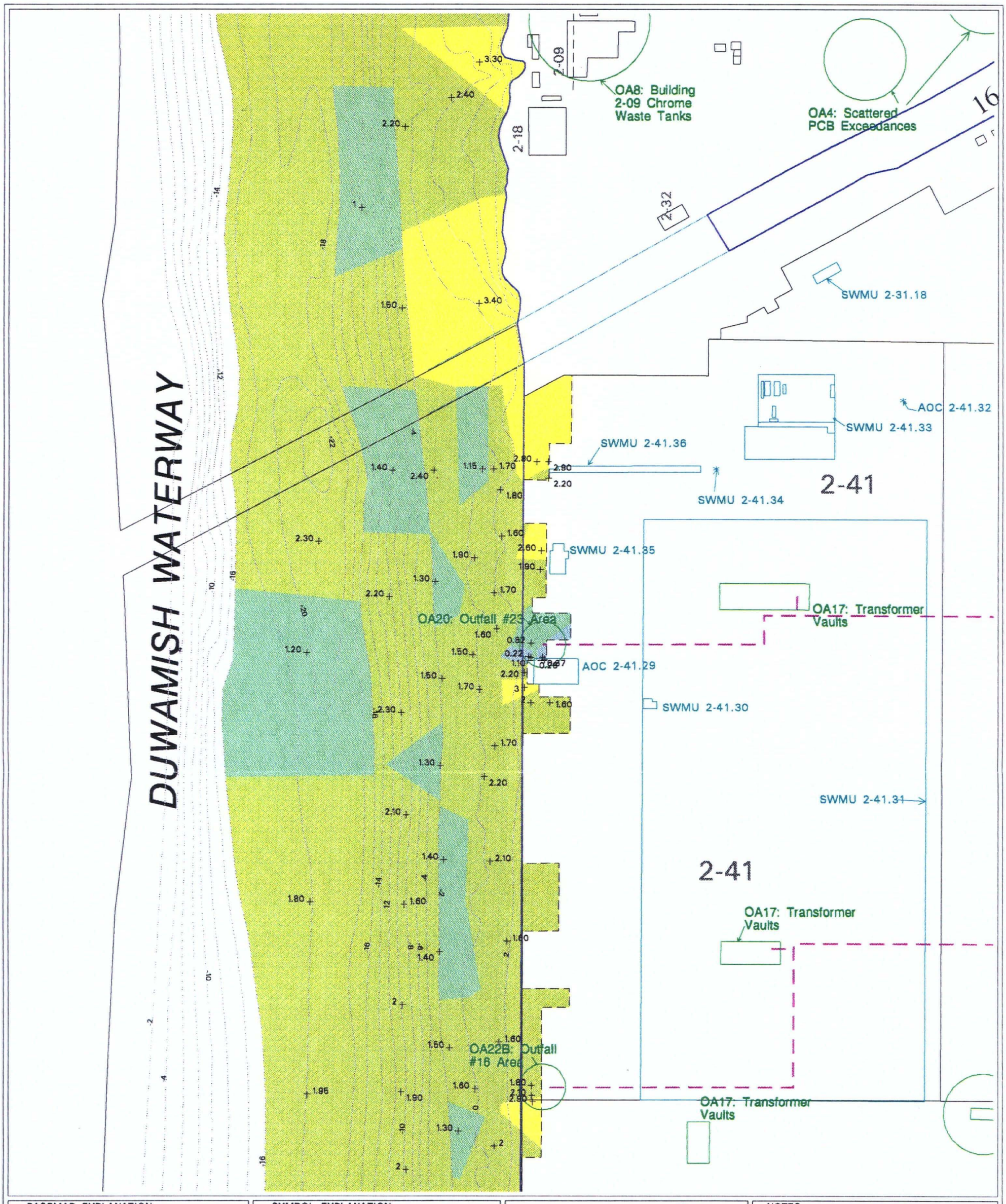
DATE: October 01, 1996 7:23 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Organic Carbon in Surface Sediment

Map 7b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 0.5
- 0.5 - 1.49
- 1.5 - 2.49
- 2.5 - 3.49
- >= 3.5

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON

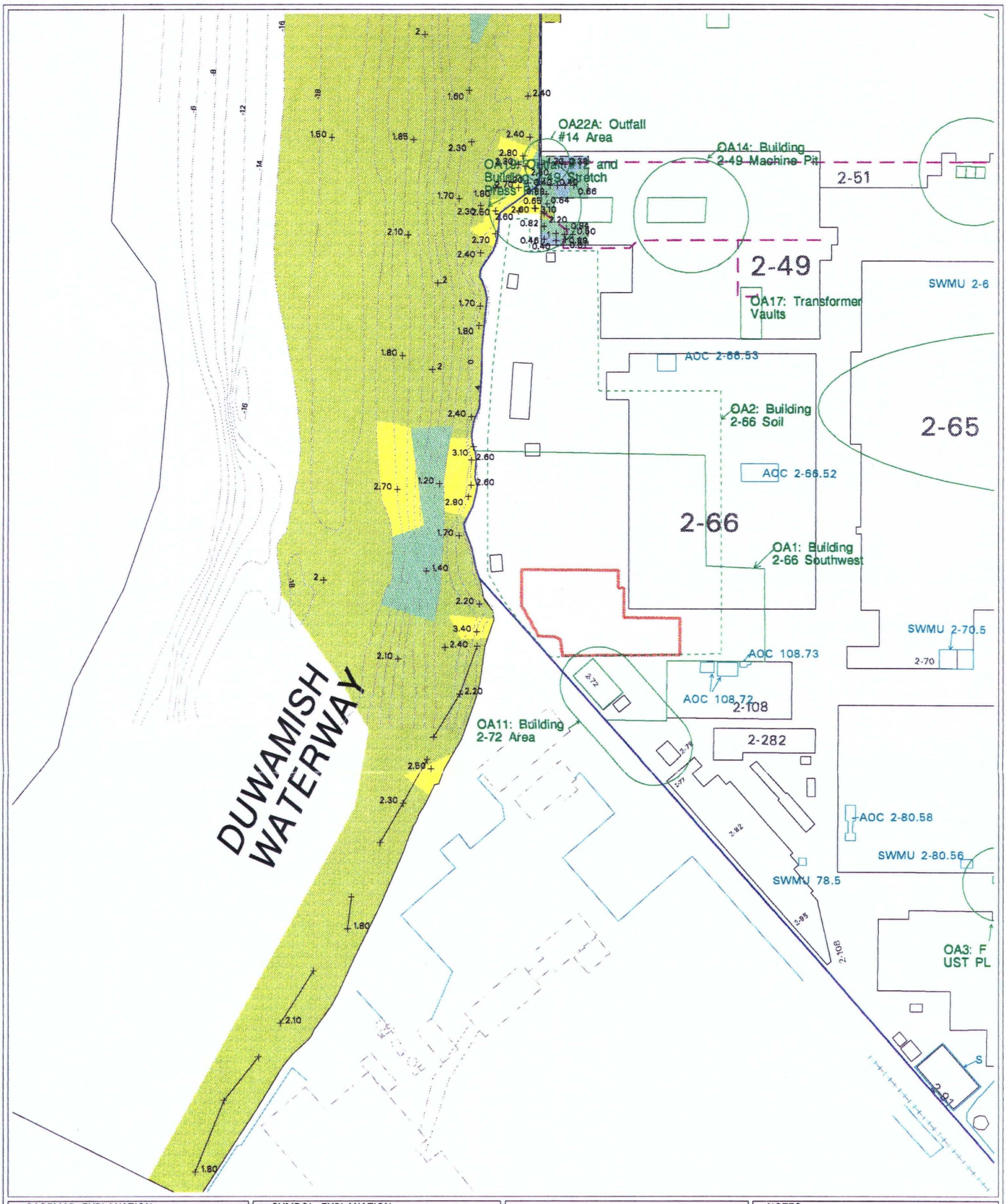
DATE: October 01, 1996 7:19 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Organic Carbon in Surface Sediment

Map 7c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 0.5
- 0.5 - 1.49
- 1.5 - 2.49
- 2.5 - 3.49
- >= 3.5

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

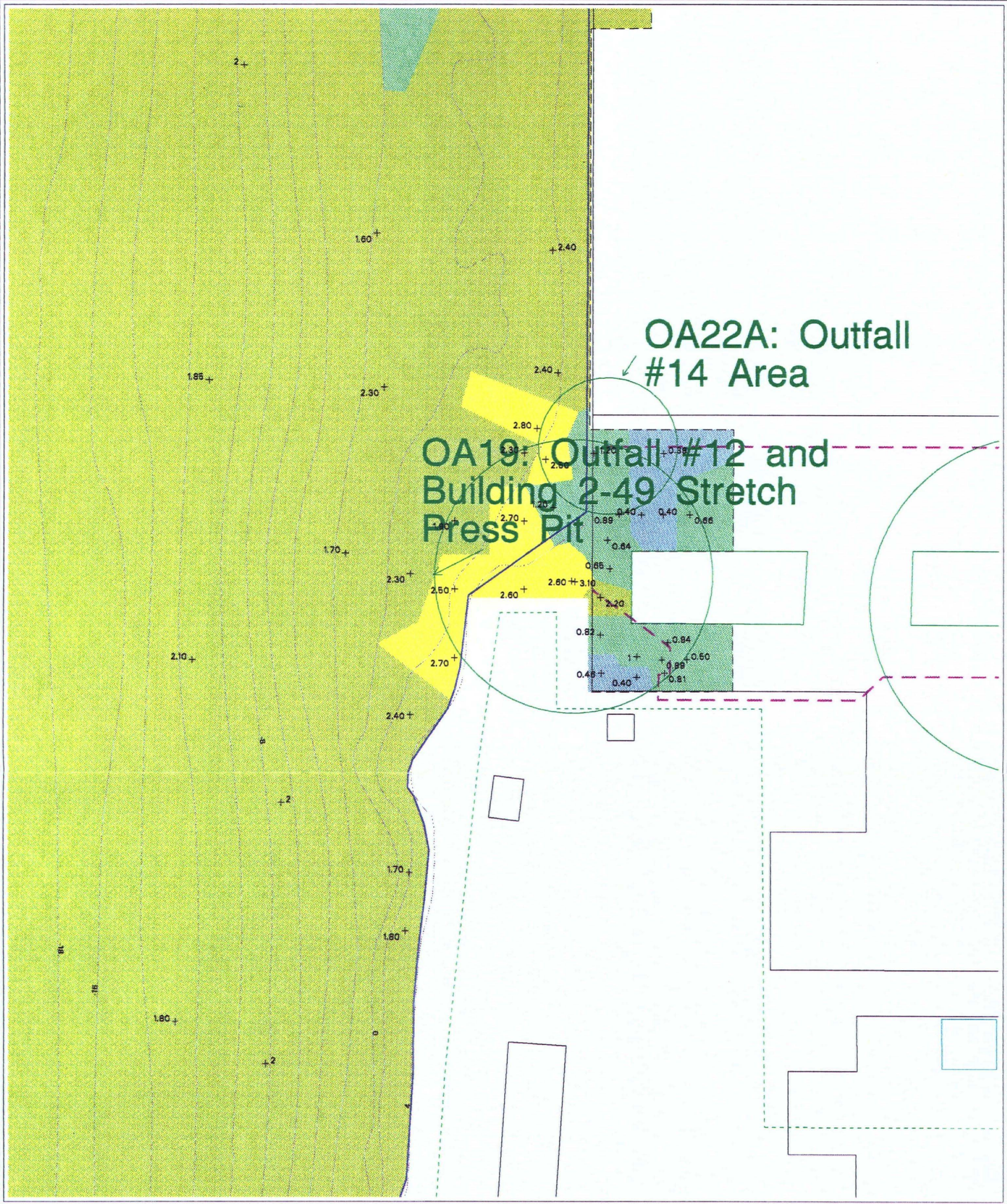
DATE: October 01, 1996 7:15 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Organic Carbon in Surface Sediment

Map 7d

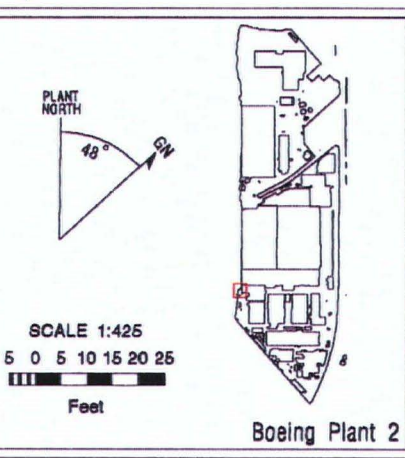


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Surface sediment composite sample

SYMBOL EXPLANATION

- < 0.5
- 0.5 - 1.49
- 1.5 - 2.49
- 2.5 - 3.49
- >= 3.5



NOTES

1) All concentrations in percent.
2) Vertical datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 7:11 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total Organic Carbon in Surface Sediment

Map 7e

OA22A: Outfall #14 Area

OA19: Outfall #12 and Building 2-49 Stretch Press Pit

OA14: Building 2-49 Machine Pit

2-51

2-49

SWMU 2-6

OA17: Transformer Vaults

AOC 2-66.53

OA2: Building 2-66 Soil

2-65

AOC 2-66.52

2-66

OA1: Building 2-66 Southwest

SWMU 2-70.5

2-70

AOC 108.73

AOC 108.72

2-108

OA11: Building 2-72 Area

2-282

AOC 2-80.58

SWMU 2-80.56

SWMU 78.5

OA3: F UST PL

DUWAMISH WATERWAY

160 U

140 U

490 U

2000

130

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

DATE: October 02, 1996 10:43 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1254 in Bank Fill Material

Map 8

OA22A: Outfall #14 Area
OA14: Building 2-49 Machine Pit
OA19: Outfall #12 and Building 2-49 Stretch Press Pit
2-51
2-49
SWMU 2-6
OA17: Transformer Vaults
AOC 2-66.53
OA2: Building 2-66 Soil
2-65
AOC 2-66.52
2-66
OA1: Building 2-66 Southwest
SWMU 2-70.5
2-70
AOC 108.73
AOC 108.72
2-108
OA11: Building 2-72 Area
2-282
AOC 2-80.58
SWMU 2-80.56
SWMU 78.5
OA3: F UST PL
DUWAMISH WATERWAY
2100
1800
1600
1500
200

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 5:46 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1260 in Bank Fill Material

Map 9

OA22A: Outfall #14 Area
OA19: Outfall #12 and Building 2-49 Stretch Press Pit
OA14: Building 2-49 Machine Pit
2-51
2-49
OA17: Transformer Vaults
SWMU 2-6
AOC 2-66.53
OA2: Building 2-66 Soil
2-65
AOC 2-66.52
2-66
OA1: Building 2-66 Southwest
SWMU 2-70.5
2-70
AOC 108.73
AOC 108.72
2-108
OA11: Building 2-72 Area
2-282
AOC 2-80.58
SWMU 2-80.56
SWMU 78.5
OA3: F UST PL
DUWAMISH WATERWAY
63636
1900
1600
106061
15000

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

TOTAL ORGANIC CARBON (TOC) NORMALIZED VALUES

- Non-Detect
- Below TOCN SQS
- Above TOCN SQS
- Above TOCN CSL

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg
   SQS TOC Normalized: 12,000 ug/kg
   CSL TOC Normalized: 65,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 6:17 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total PCBs in Bank Fill Material

Map 10

OA22A: Outfall #14 Area

OA19: Outfall #12 and Building 2-49 Stretch Press Pit

OA14: Building 2-49 Machine Pit

2-51

2-49

OA17: Transformer Vaults

SWMU 2-6

AOC 2-66.53

OA2: Building 2-66 Soil

2-65

AOC 2-66.52

2-66

OA1: Building 2-66 Southwest

SWMU 2-70.5

2-70

AOC 108.73

AOC 108.72

2-108

OA11: Building 2-72 Area

2-282

AOC 2-80.58

SWMU 2-80.56

SWMU 78.5

OA3: F UST PL

DUWAMISH WATERWAY

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 5.1 mg/kg
   CSL: 6.7 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

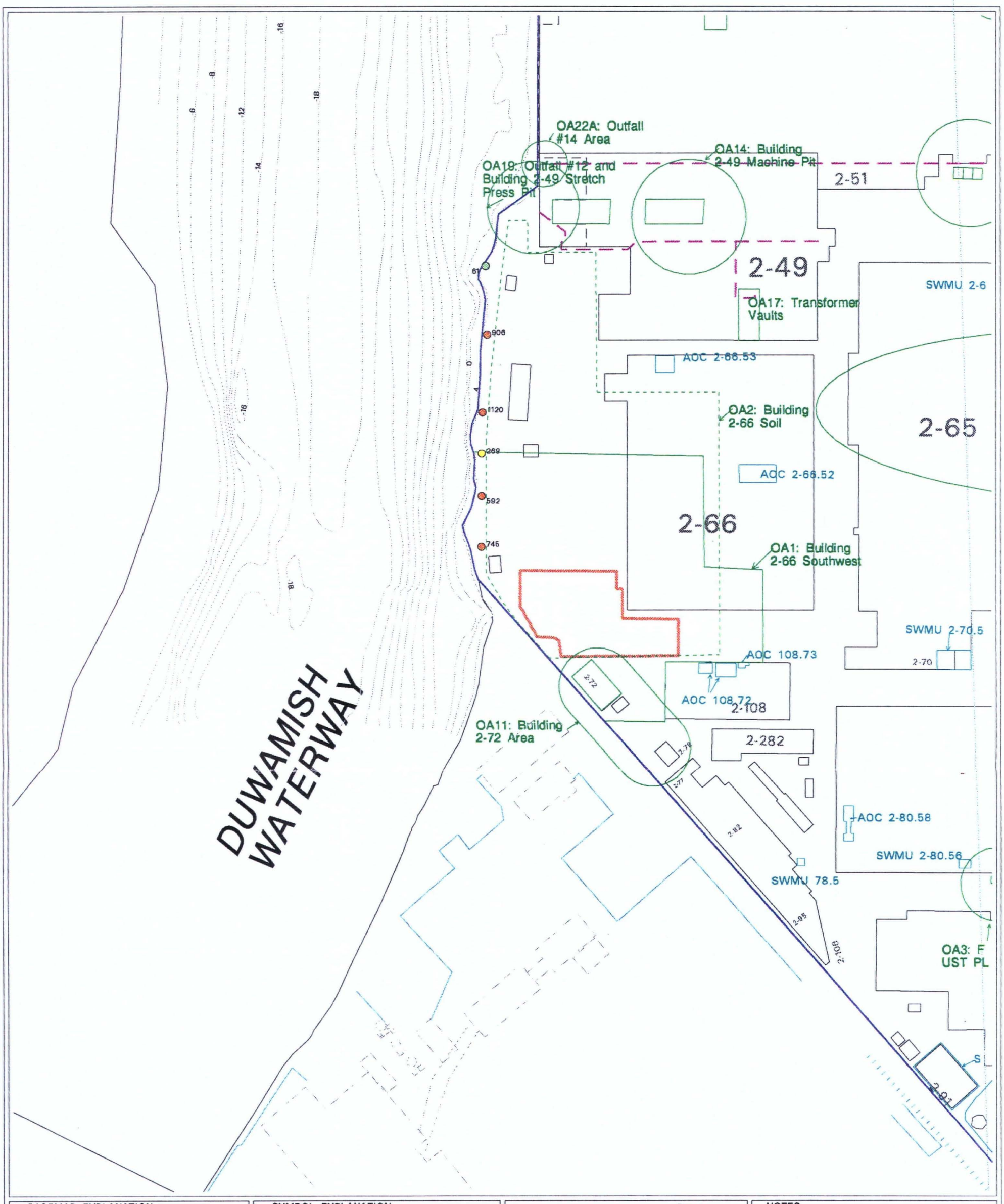
DATE: October 01, 1996 5:54 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Cadmium in Bank Fill Material

Map 11



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 260 mg/kg
   CSL: 270 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

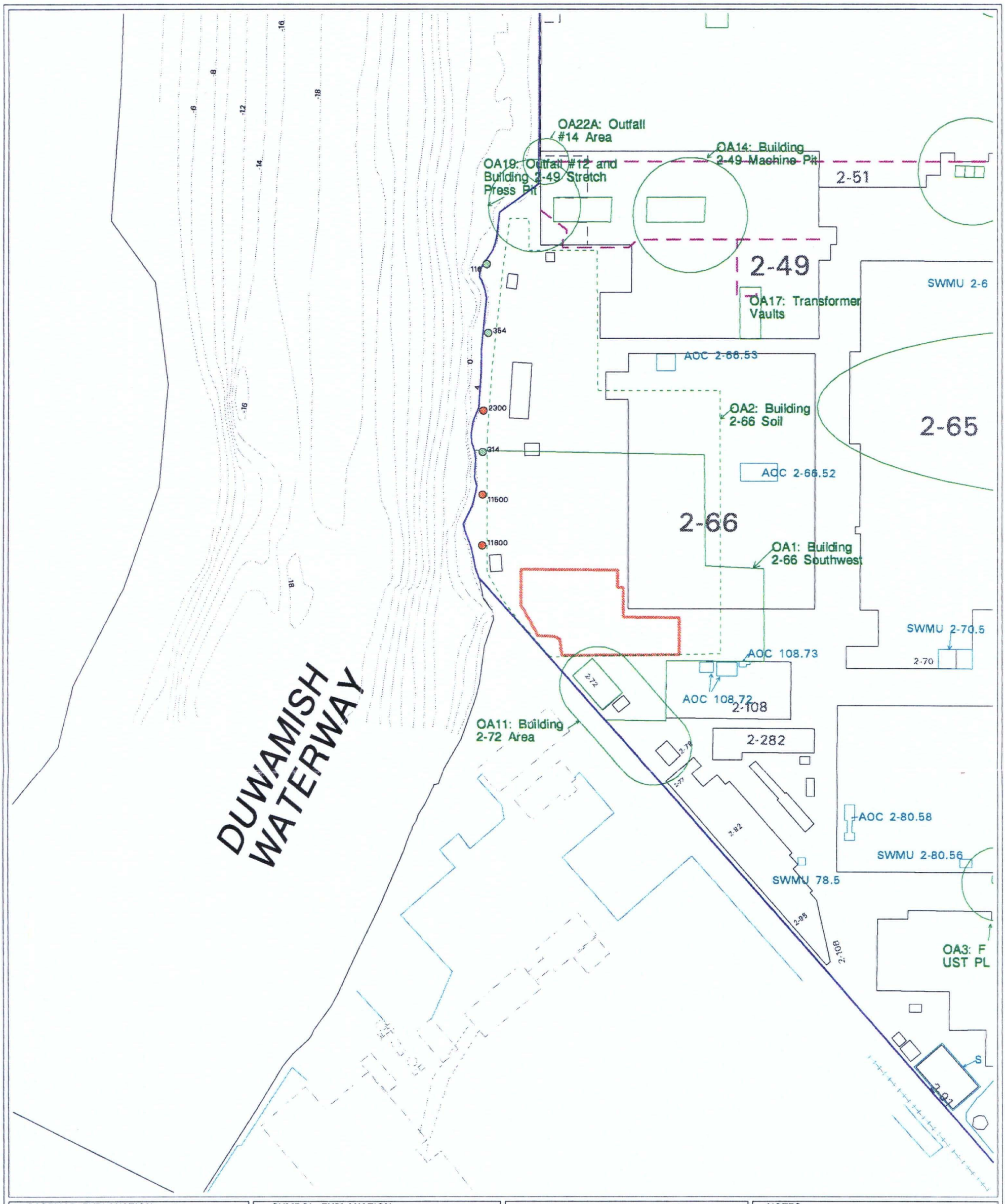
DATE: October 01, 1996 5:50 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Chromium in Bank Fill Material

Map 12



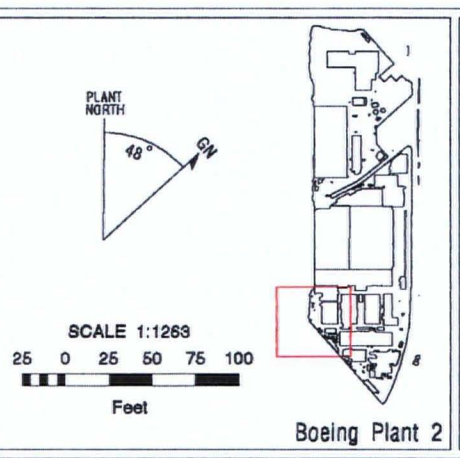
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 390 mg/kg
   CSL: 390 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 5:58 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Copper in Bank Fill Material

Map 13

OA22A: Outfall #14 Area
OA19: Outfall #12 and Building 2-49 Stretch Press Pit
OA14: Building 2-49 Machine Pit
2-51
2-49
OA17: Transformer Vaults
SWMU 2-6
AOC 2-66.53
OA2: Building 2-66 Soil
2-65
AOC 2-66.52
2-66
OA1: Building 2-66 Southwest
SWMU 2-70.5
2-70
AOC 108.73
AOC 108.72
2-108
2-72
OA11: Building 2-72 Area
2-282
AOC 2-80.58
SWMU 2-80.56
SWMU 78.5
OA3: F UST PL
DUWAMISH WATERWAY
2280
187
2980
559
22600
4130

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 450 mg/kg
   CSL: 530 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 01, 1996 6:02 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Lead in Bank Fill Material

Map 14

OA22A: Outfall #14 Area

OA19: Outfall #12 and Building 2-49 Stretch Press Pit

OA14: Building 2-49 Machine Pit

2-51

2-49

OA17: Transformer Vaults

SWMU 2-6

AOC 2-66.53

OA2: Building 2-66 Soil

2-65

AOC 2-66.52

2-66

OA1: Building 2-66 Southwest

SWMU 2-70.5

2-70

AOC 108.73

AOC 108.72

2-108

OA11: Building 2-72 Area

2-282

AOC 2-80.58

SWMU 2-80.56

SWMU 78.5

OA3: F UST PL

DUWAMISH WATERWAY

0.82

0.23

0.54

0.68

1.86

0.23

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 0.41 mg/kg
   CSL: 0.59 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

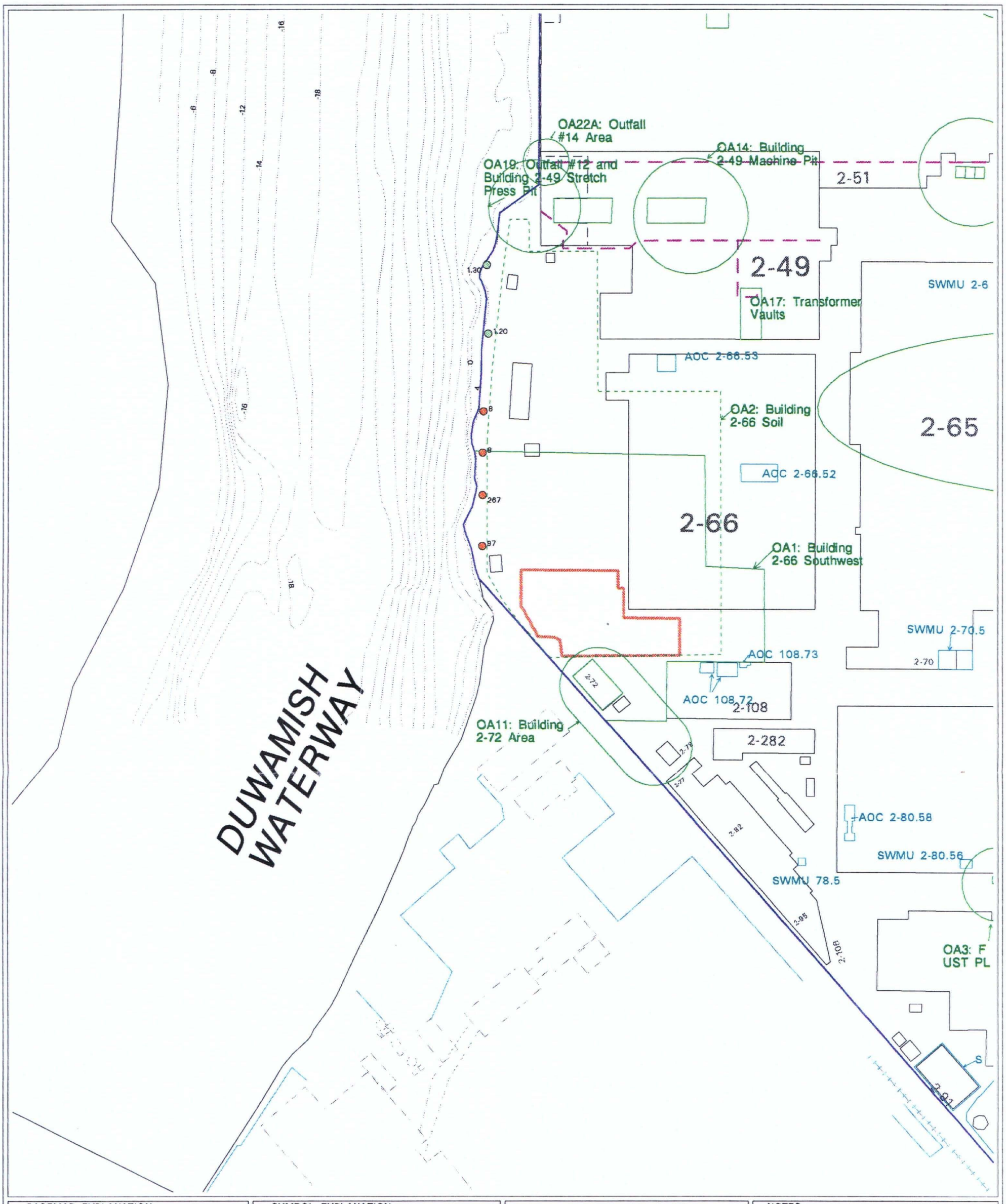
DATE: October 01, 1996 6:06 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Mercury in Bank Fill Material

Map 15



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 6.1 mg/kg
   CSL: 6.1 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

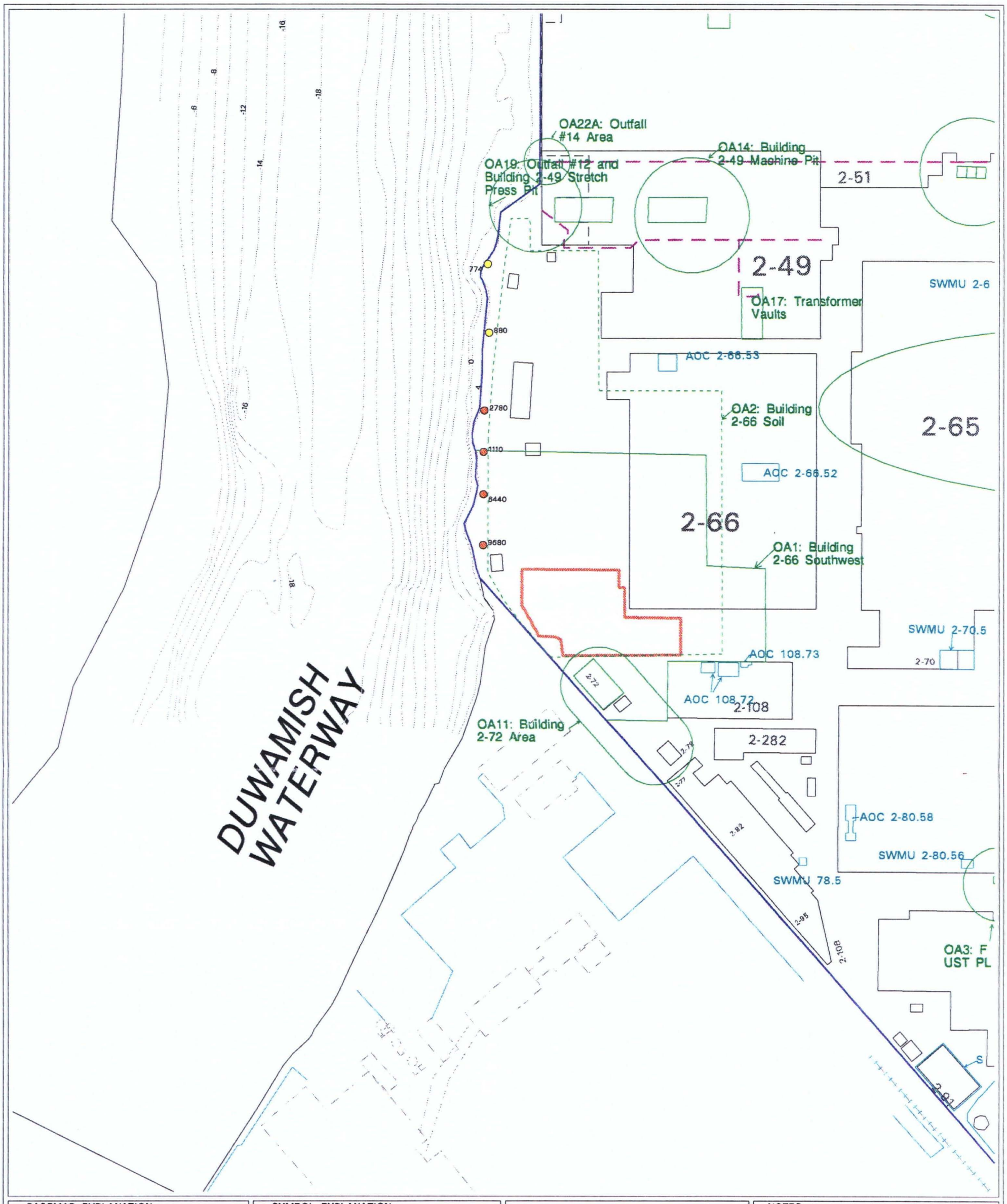
DATE: October 01, 1996 6:09 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Silver in Bank Fill Material

Map 16



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH
48°
GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 410 mg/kg
   CSL: 960 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

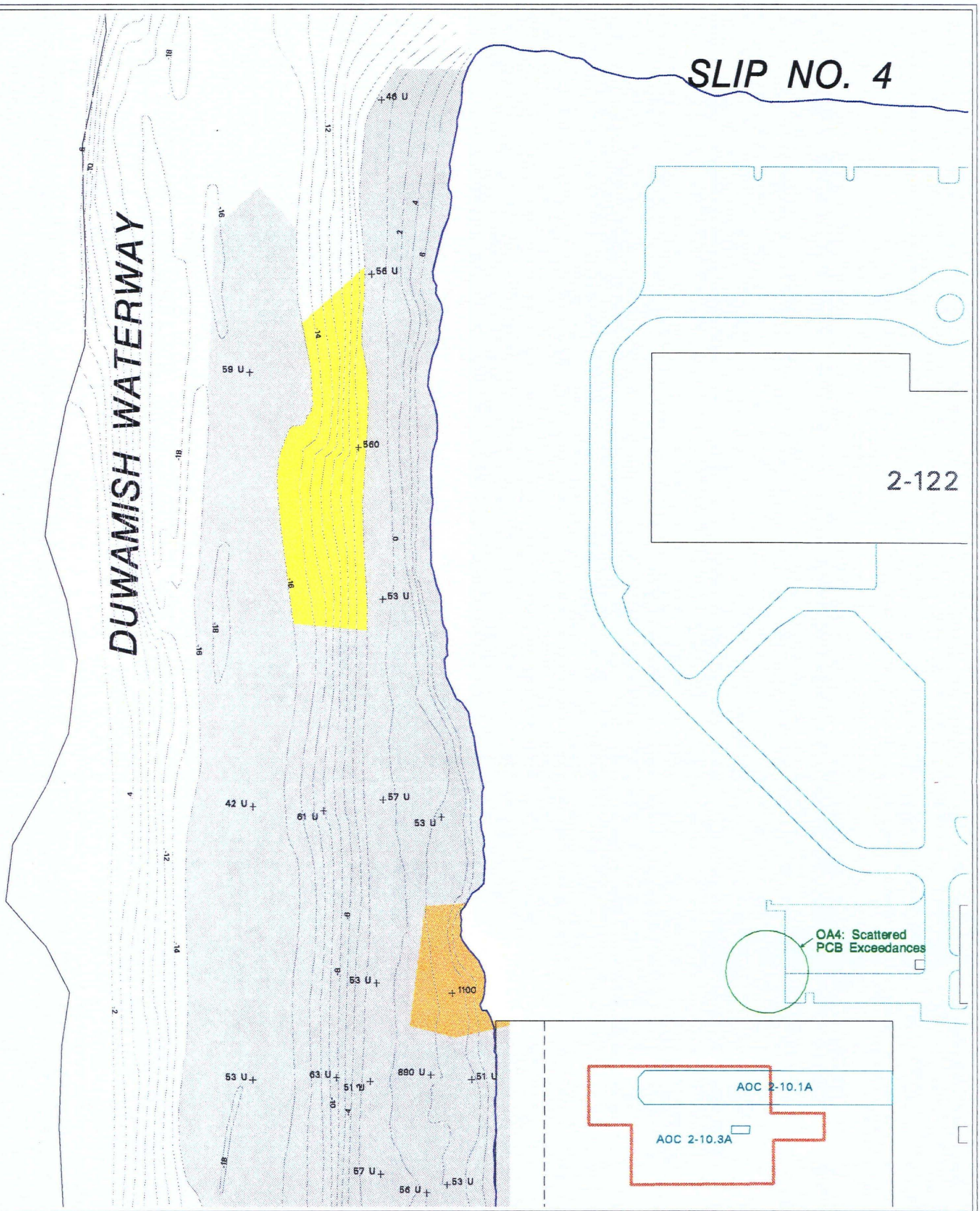
DATE: October 01, 1996 6:13 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: bankfill.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Zinc in Bank Fill Material

Map 17



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

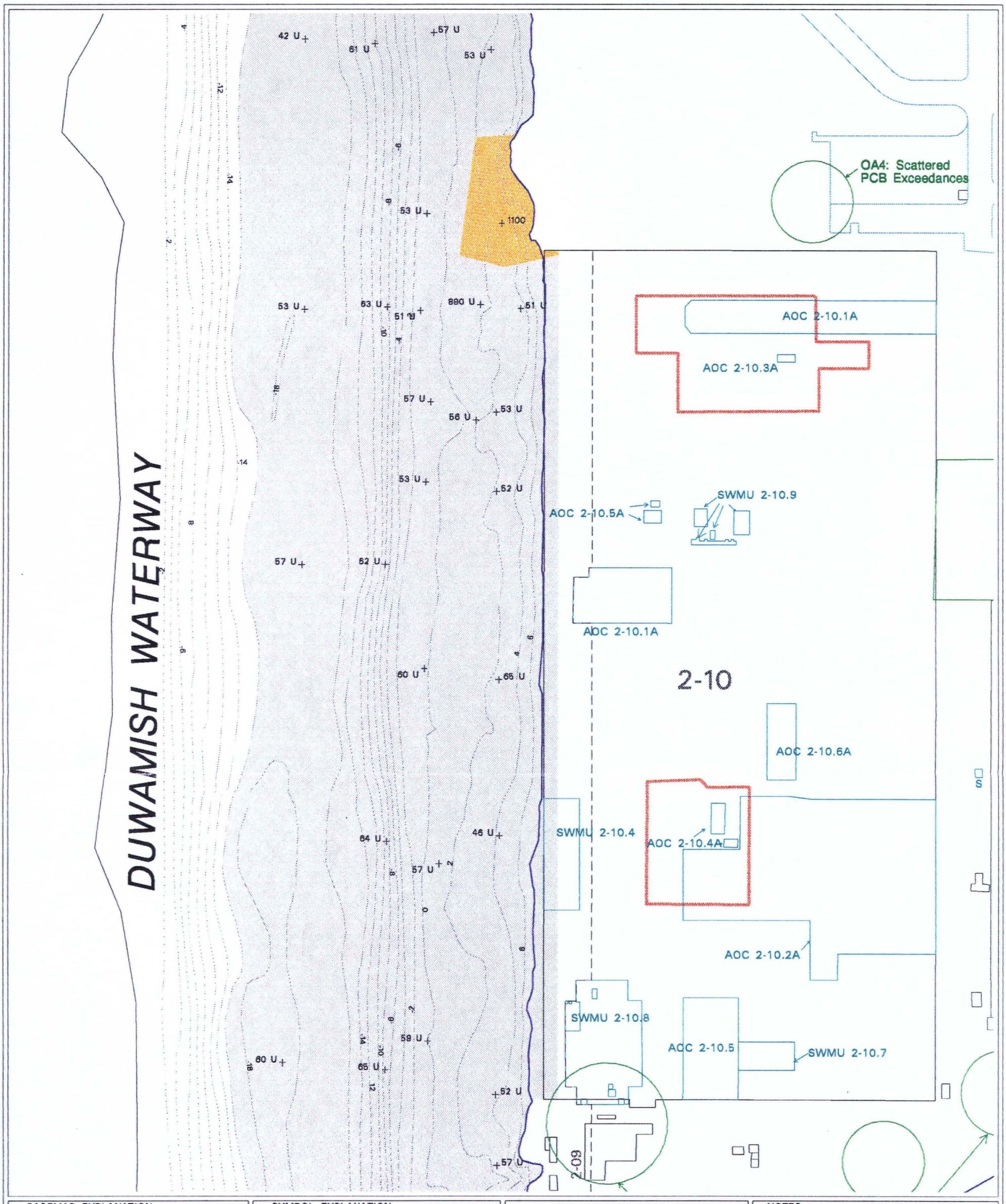
DATE: October 01, 1996 7:51 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1242 in Surface Sediment

Map 18a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

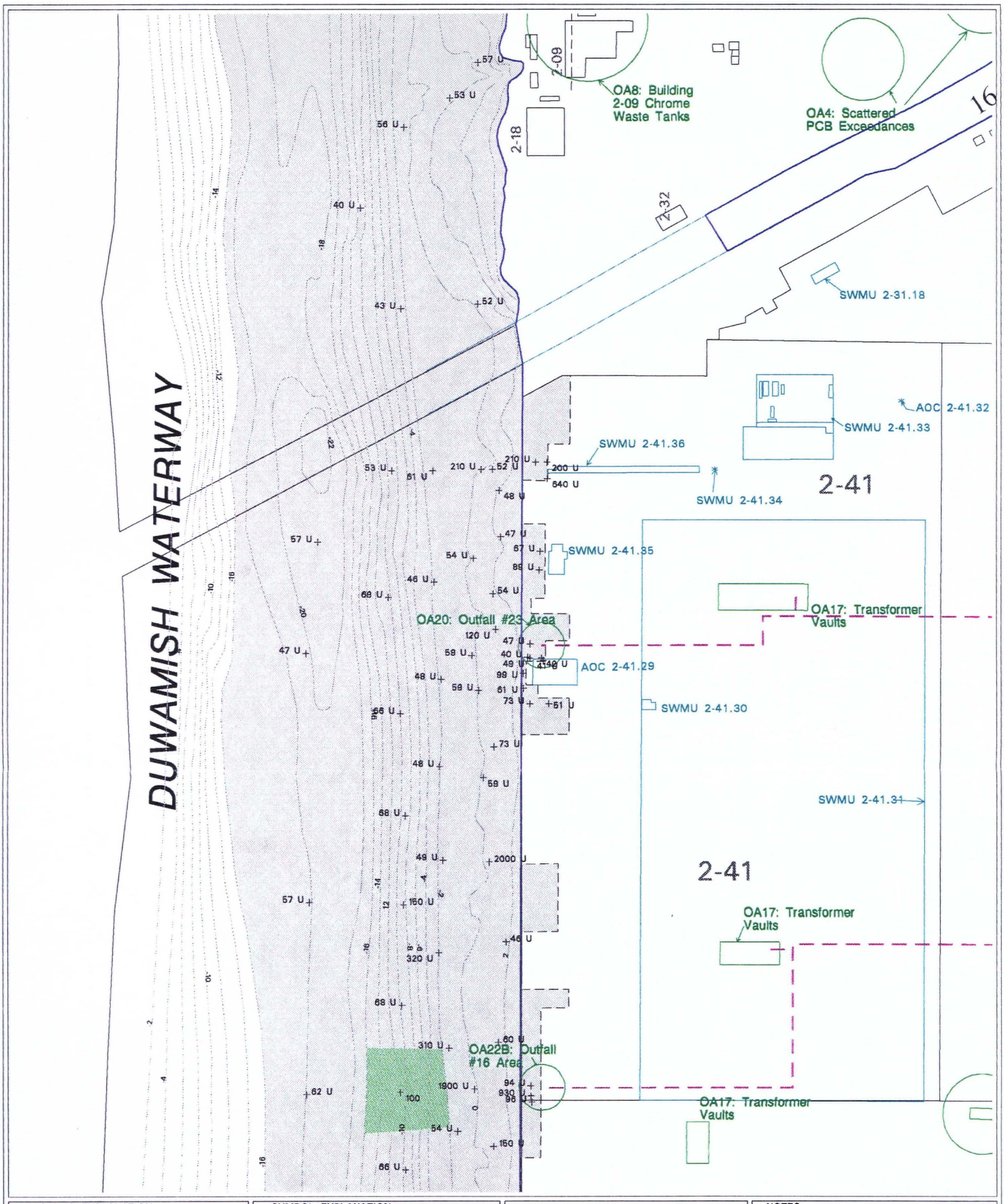
DATE: October 01, 1996 7:47 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1242 in Surface Sediment

Map 18b

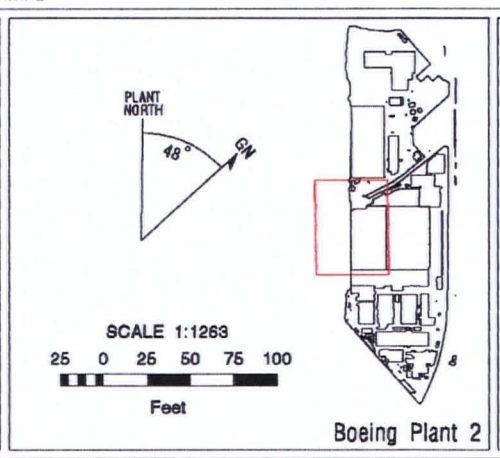


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

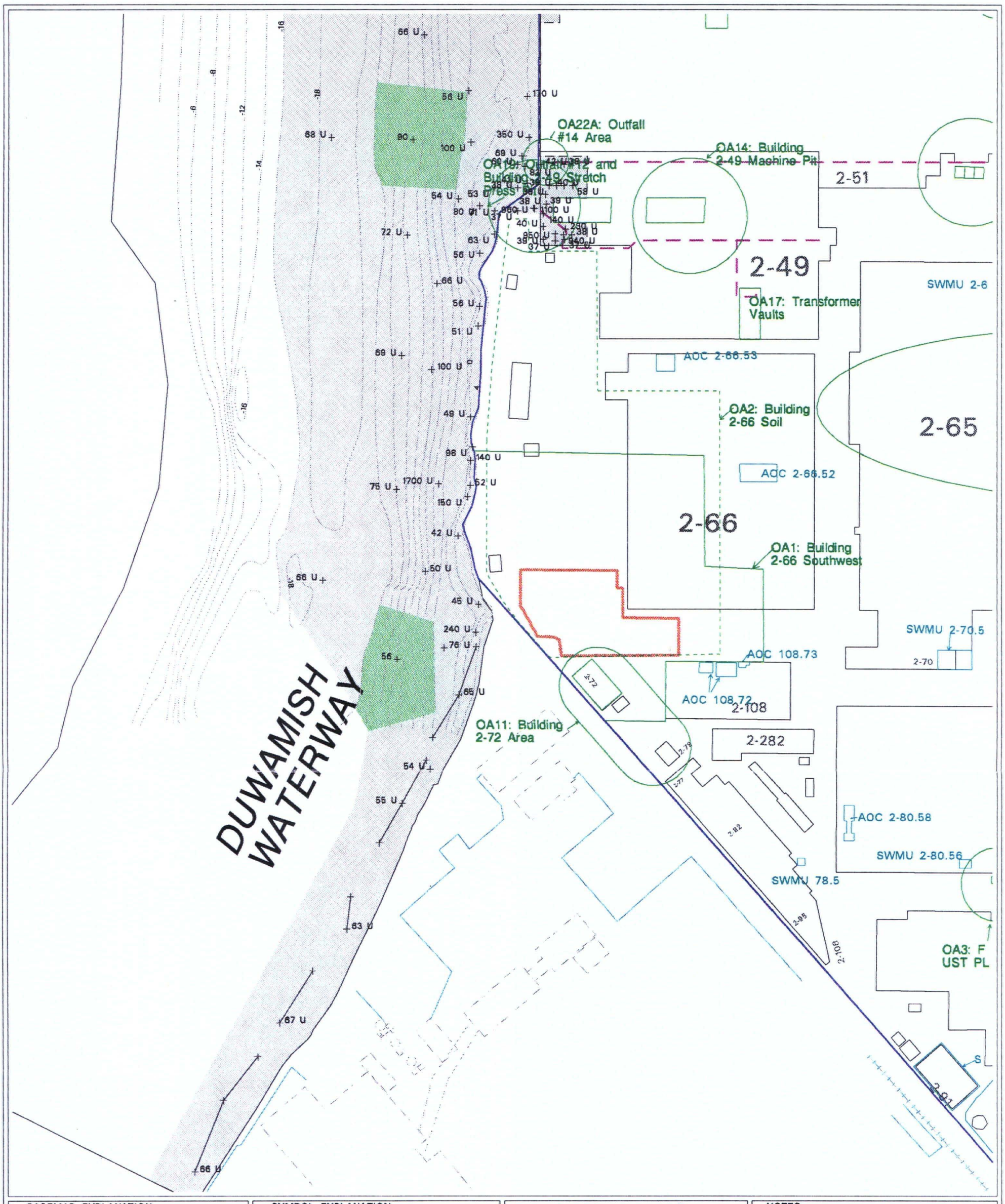
DATE: October 01, 1996 7:42 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1242 in Surface Sediment

Map 18c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

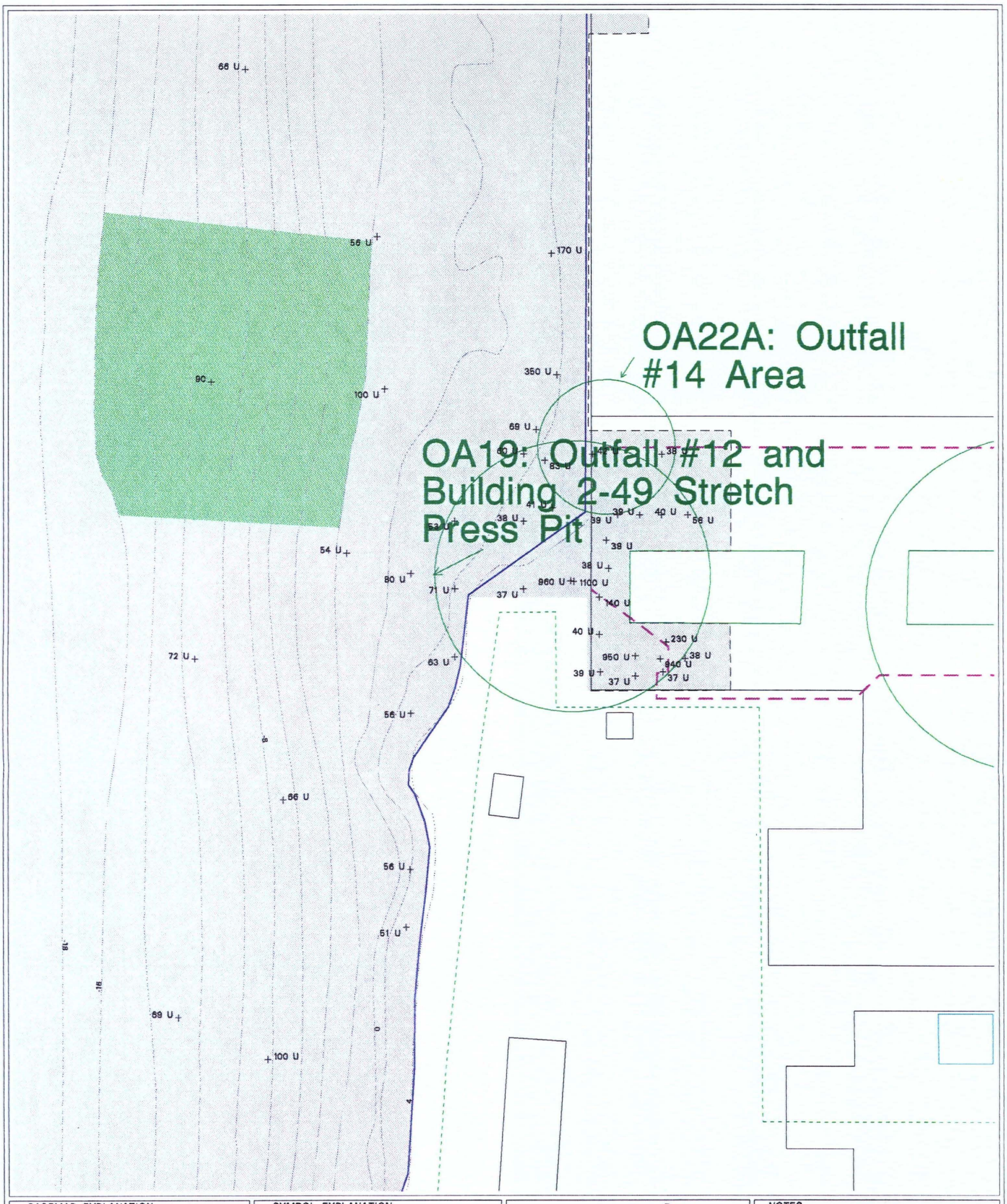
DATE: October 01, 1996 7:38 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1242 in Surface Sediment

Map 18d

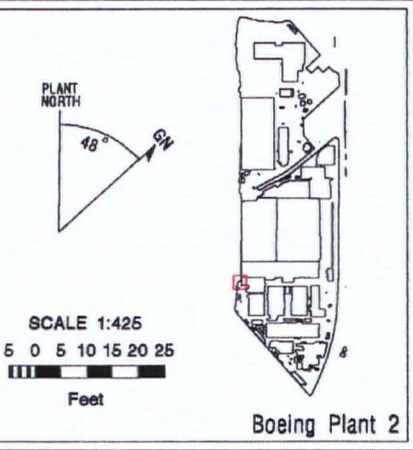


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

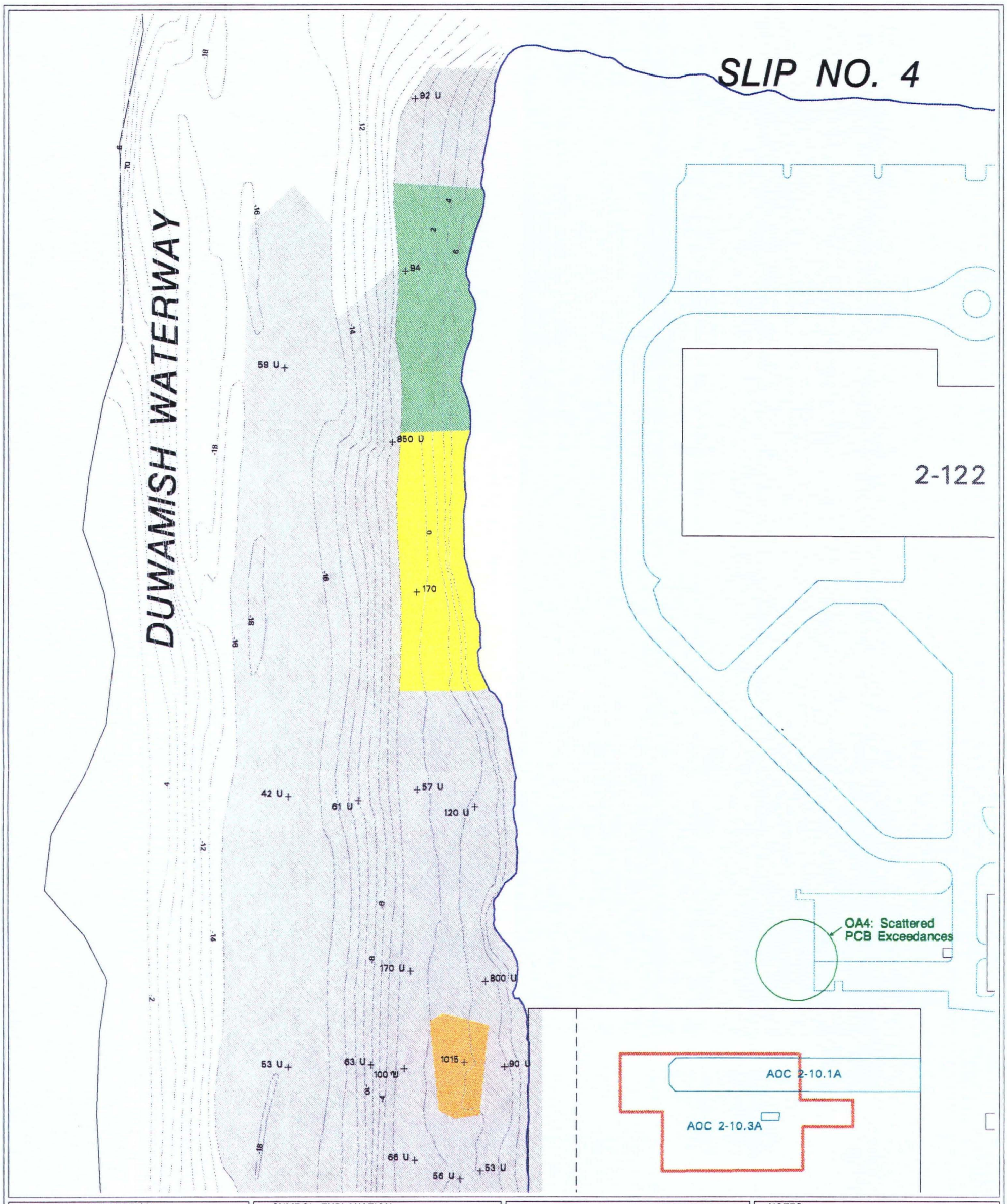
DATE: October 01, 1996 7:34 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1242 in Surface Sediment

Map 18e



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

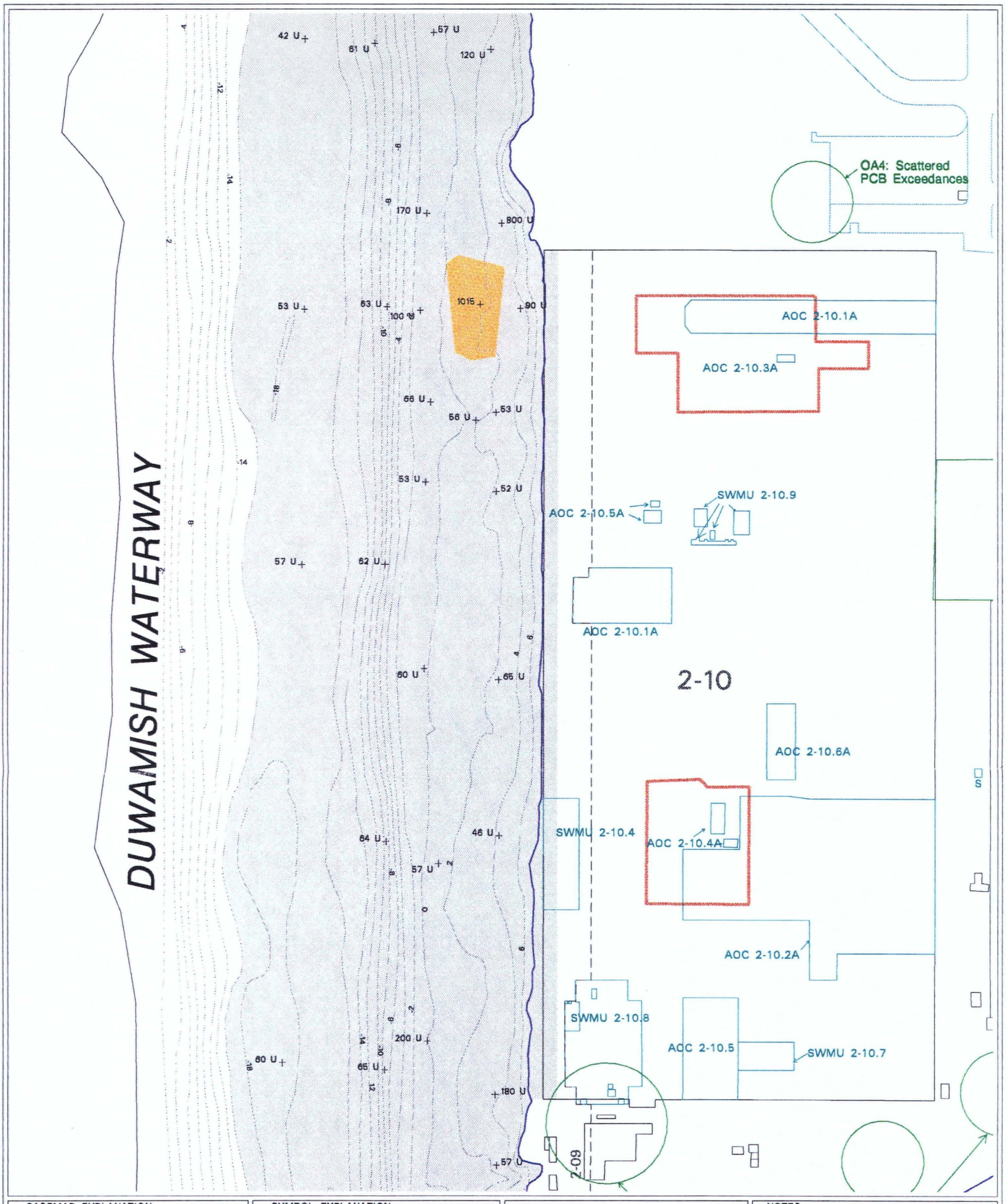
DATE: October 01, 1996 8:14 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1248 in Surface Sediment

Map 19a

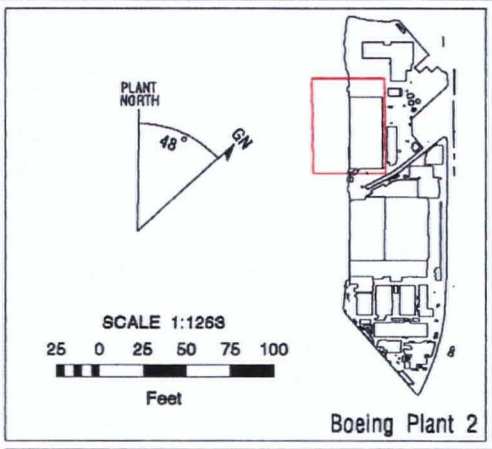


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

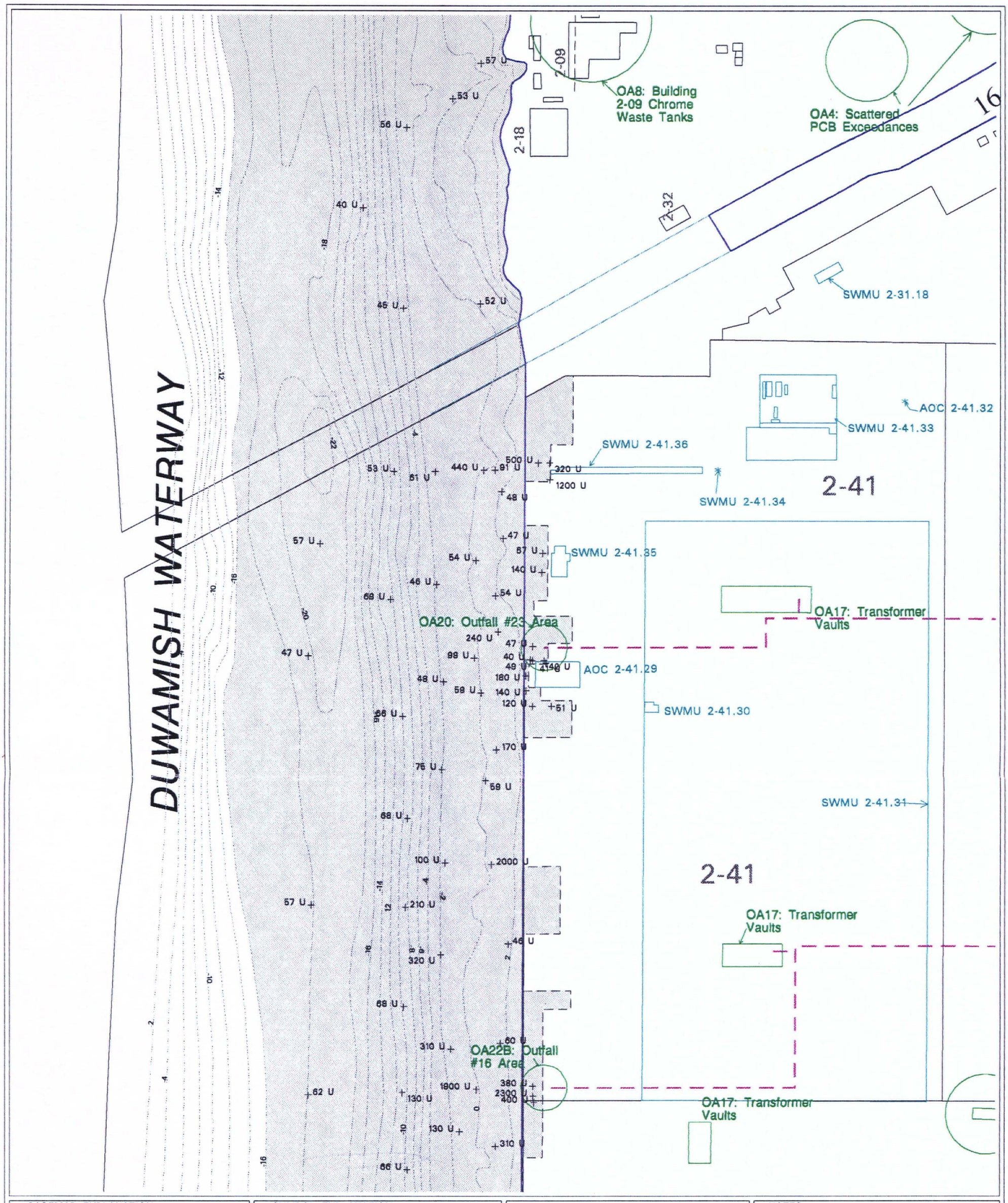
DATE: October 01, 1996 8:10 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1248 in Surface Sediment

Map 19b

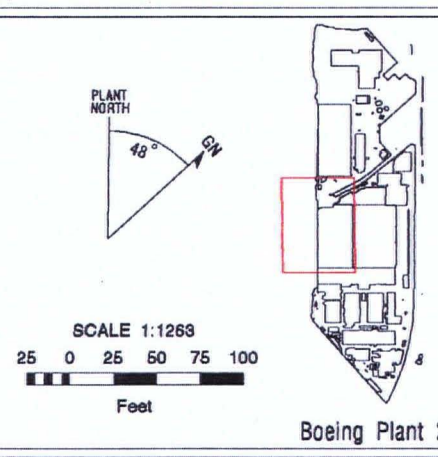


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

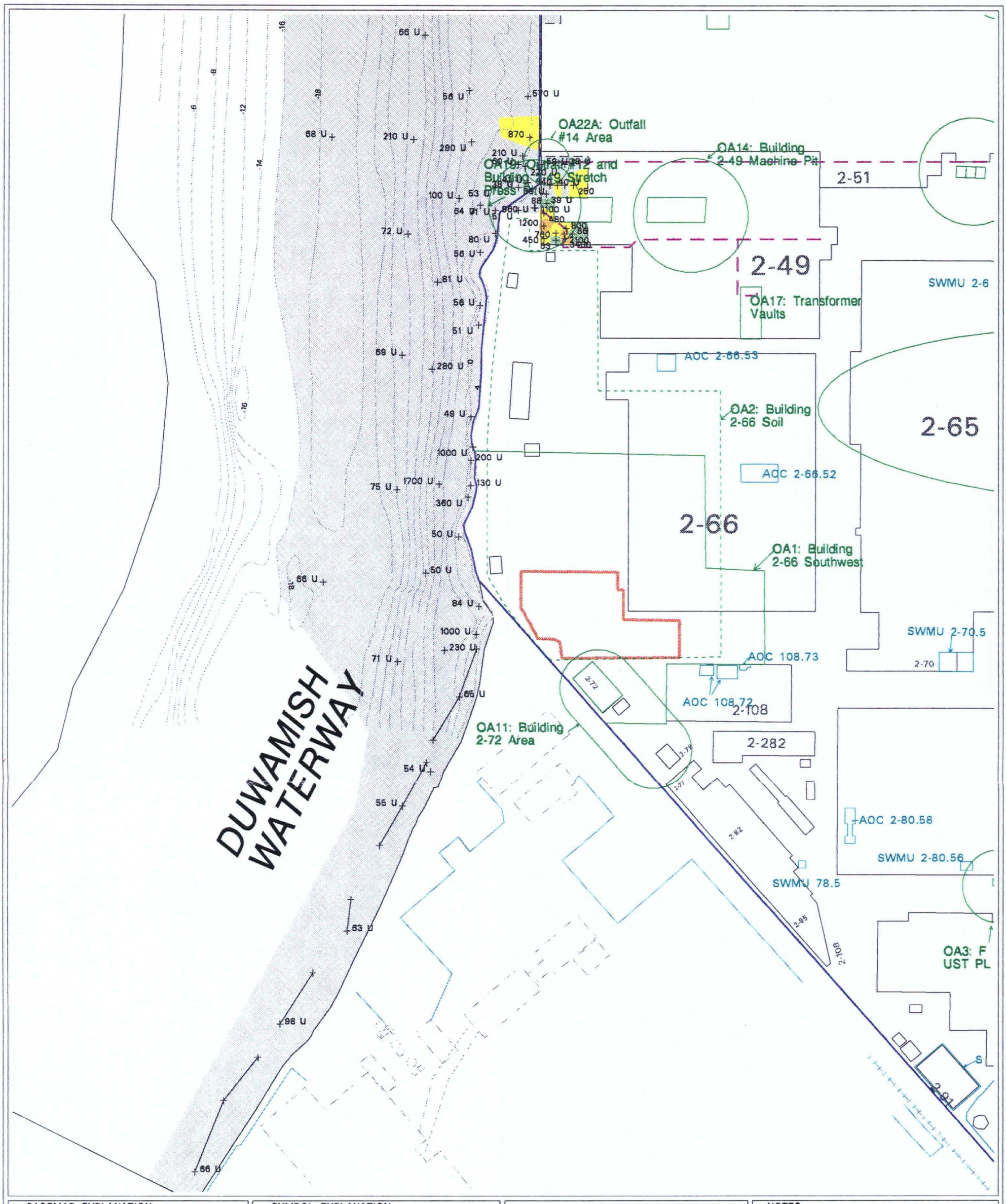
DATE: October 01, 1996 8:06 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1248 in Surface Sediment

Map 19c

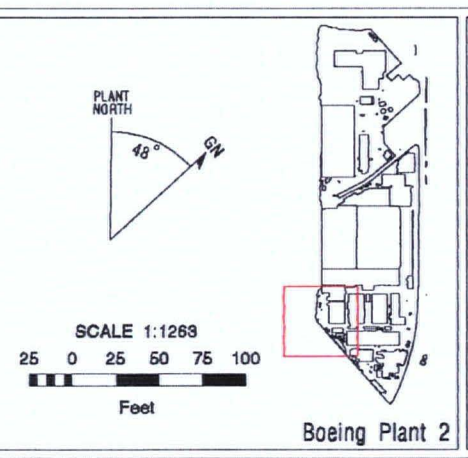


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

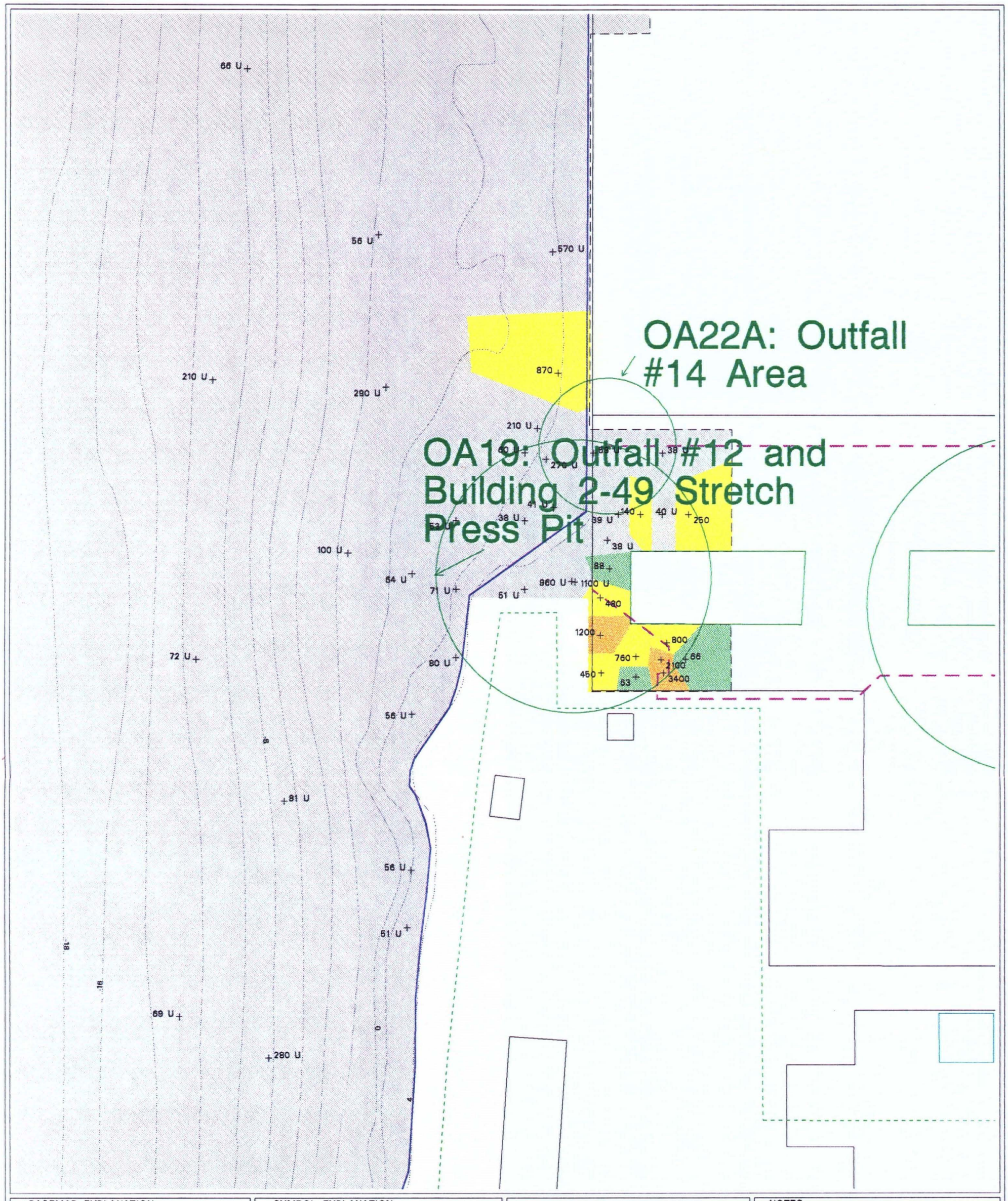
DATE: October 01, 1996 8:02 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of PCB Aroclor 1248 in Surface Sediment

Map 19d



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH
48°
GN

SCALE 1:425
5 0 5 10 15 20 25
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
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JOB NUMBER: 03709-034-300-3543
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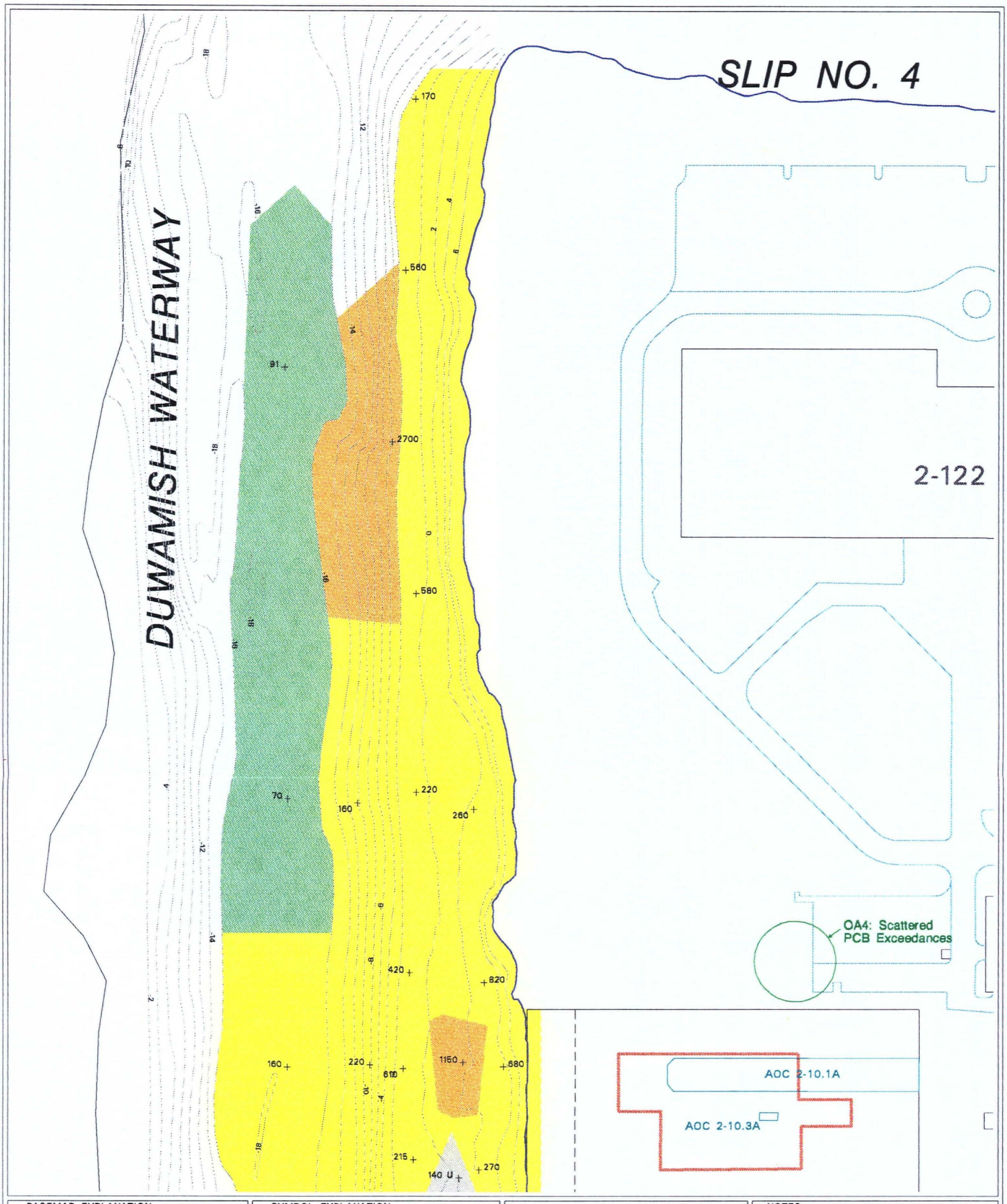
Exceedance of PCB Aroclor 1248 in Surface Sediment

Map 19e



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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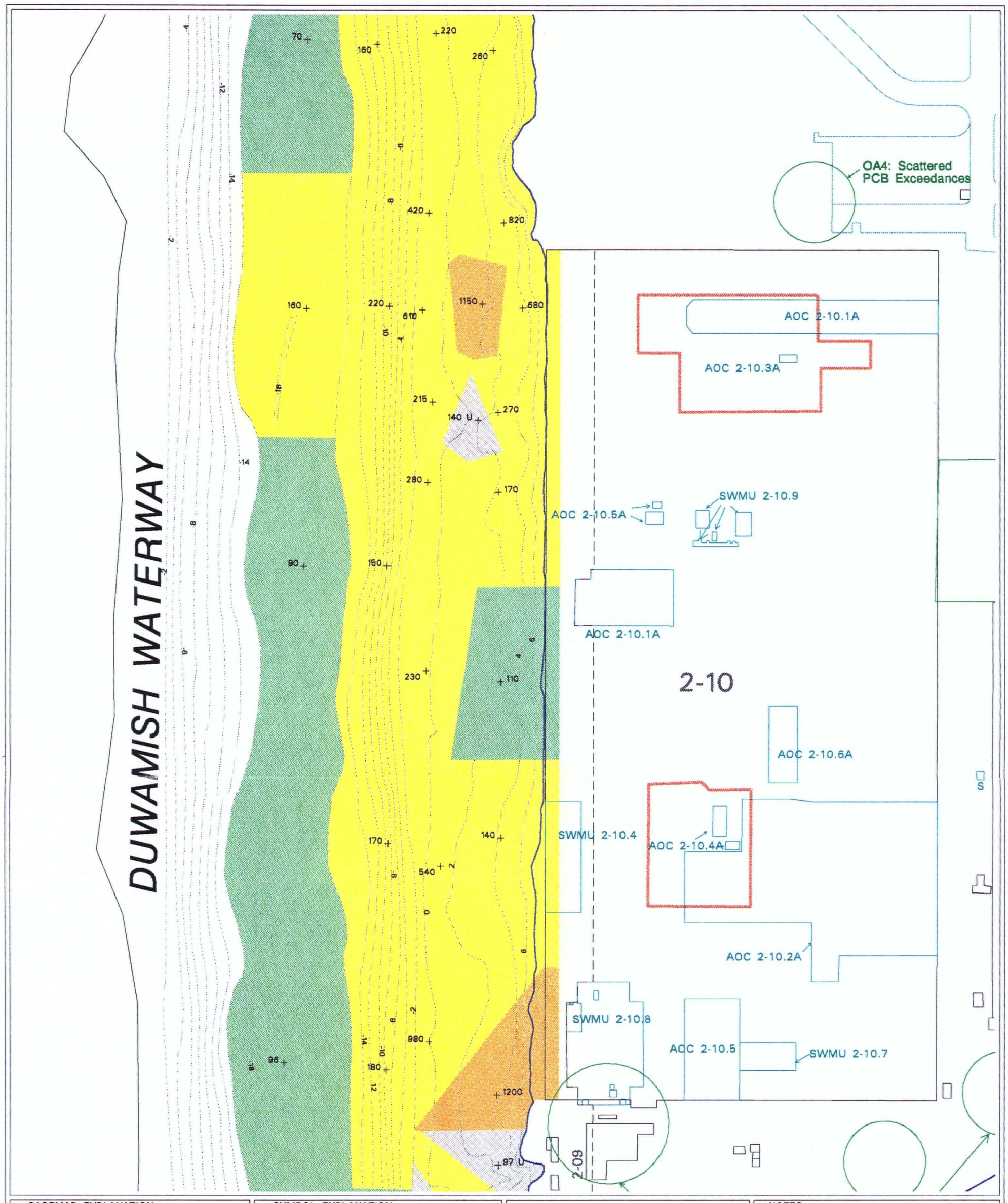
Exceedance of PCB Aroclor 1254 in Surface Sediment

Map 20a

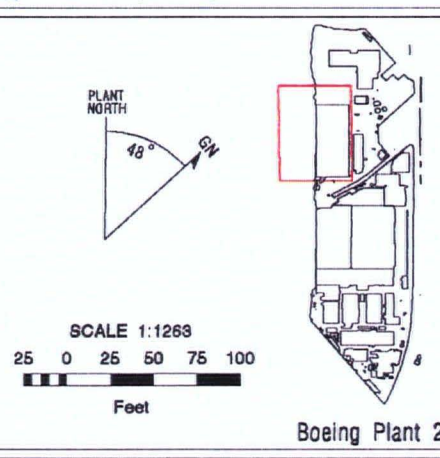


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
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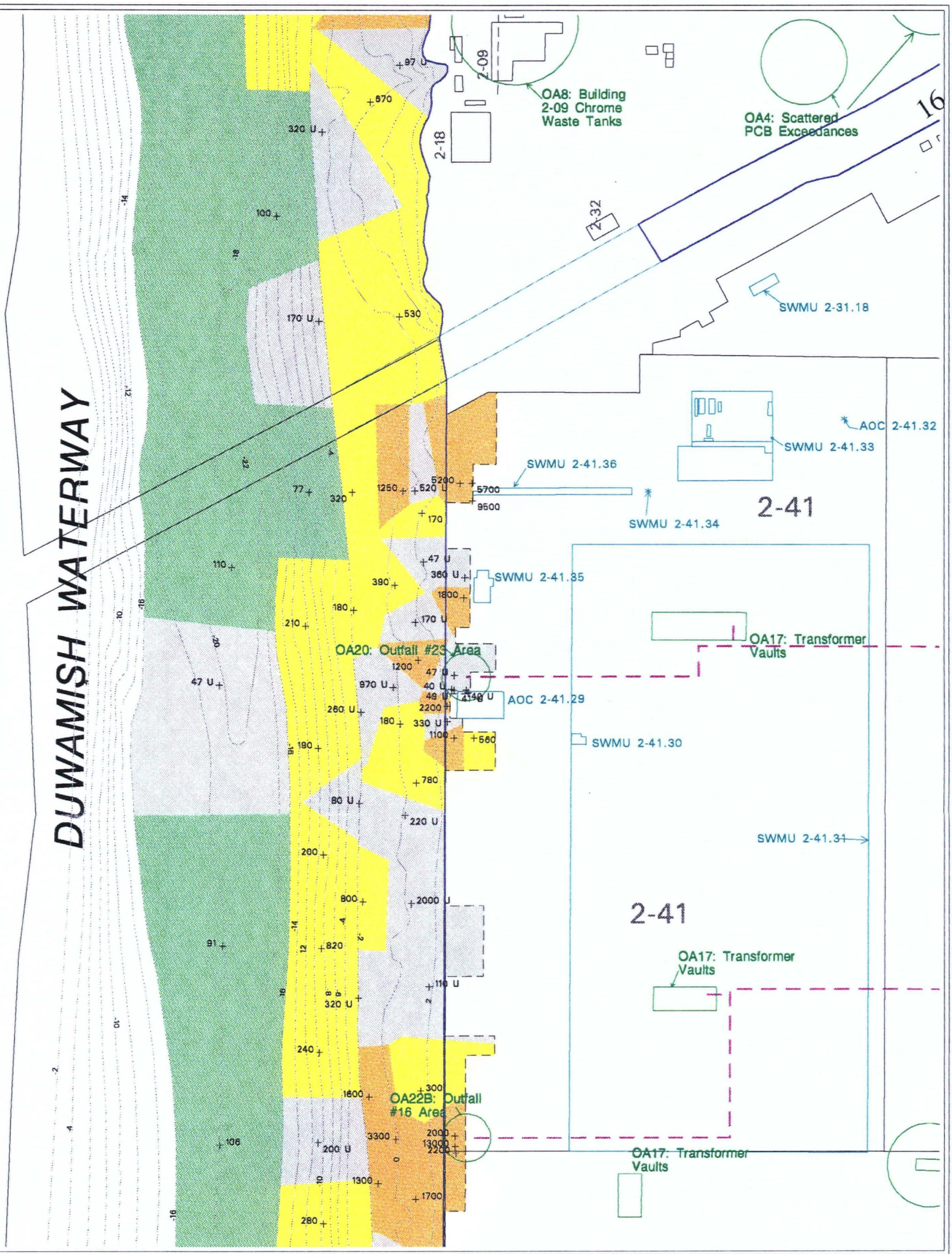
Exceedance of PCB Aroclor 1254 in Surface Sediment

Map 20b

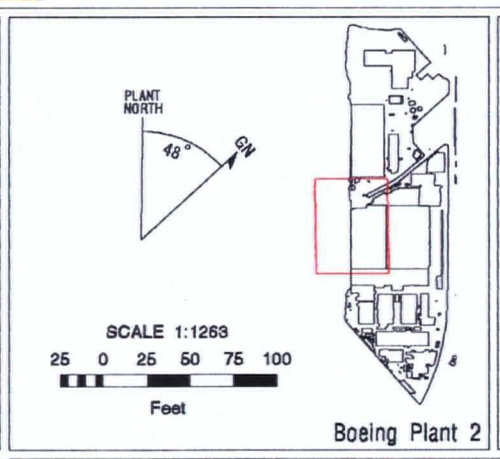


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
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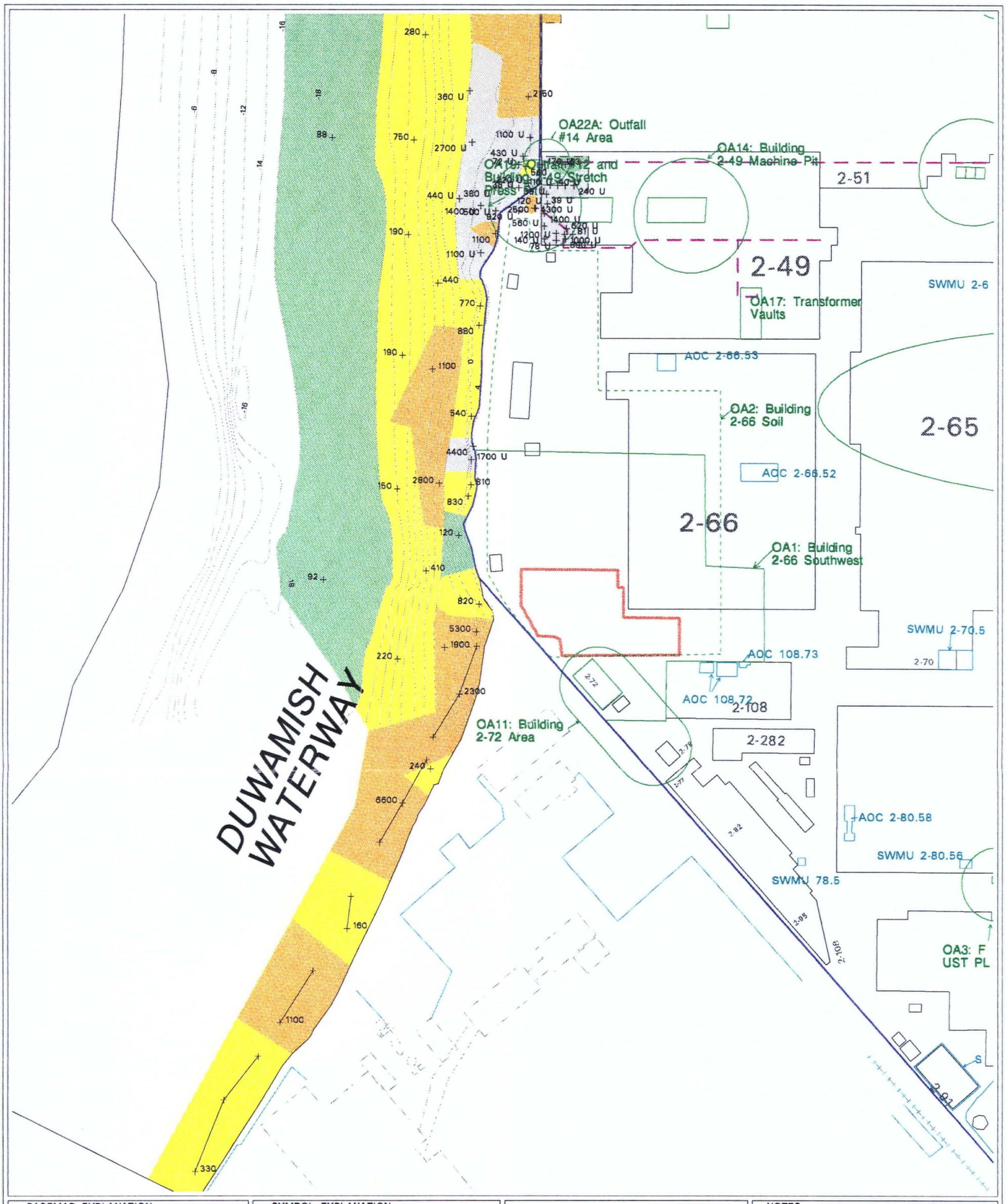
Exceedance of PCB Aroclor 1254 in Surface Sediment

Map 20c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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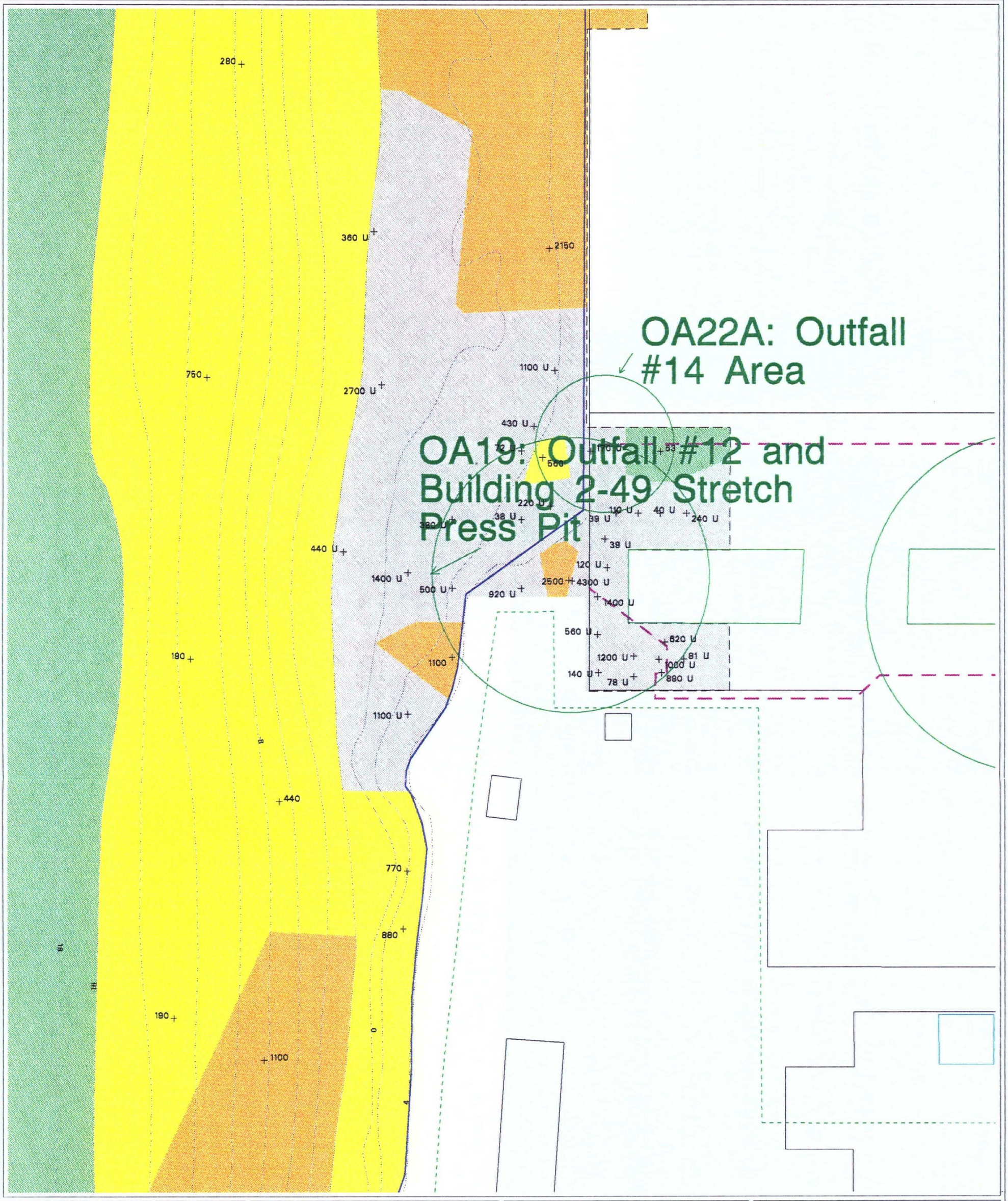
Exceedance of PCB Aroclor 1254 in Surface Sediment

Map 20d

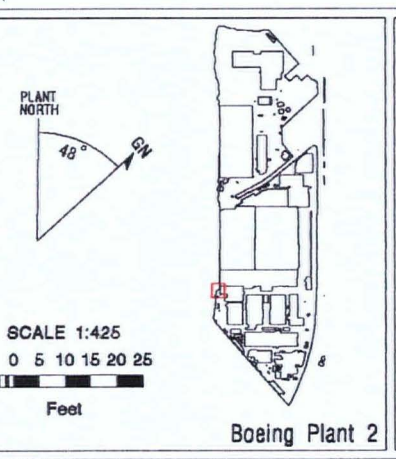


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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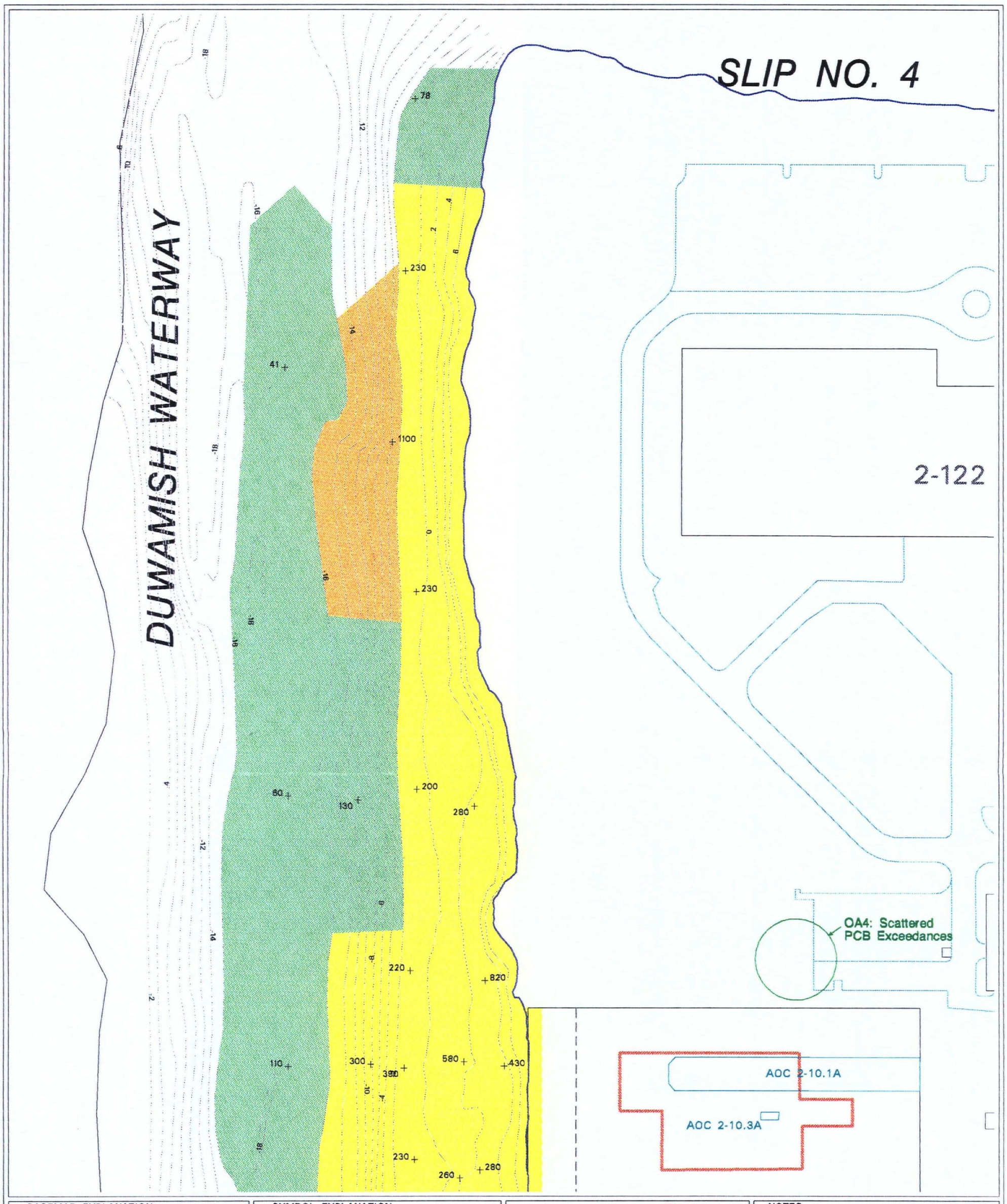
Exceedance of PCB Aroclor 1254 in Surface Sediment

Map 20e



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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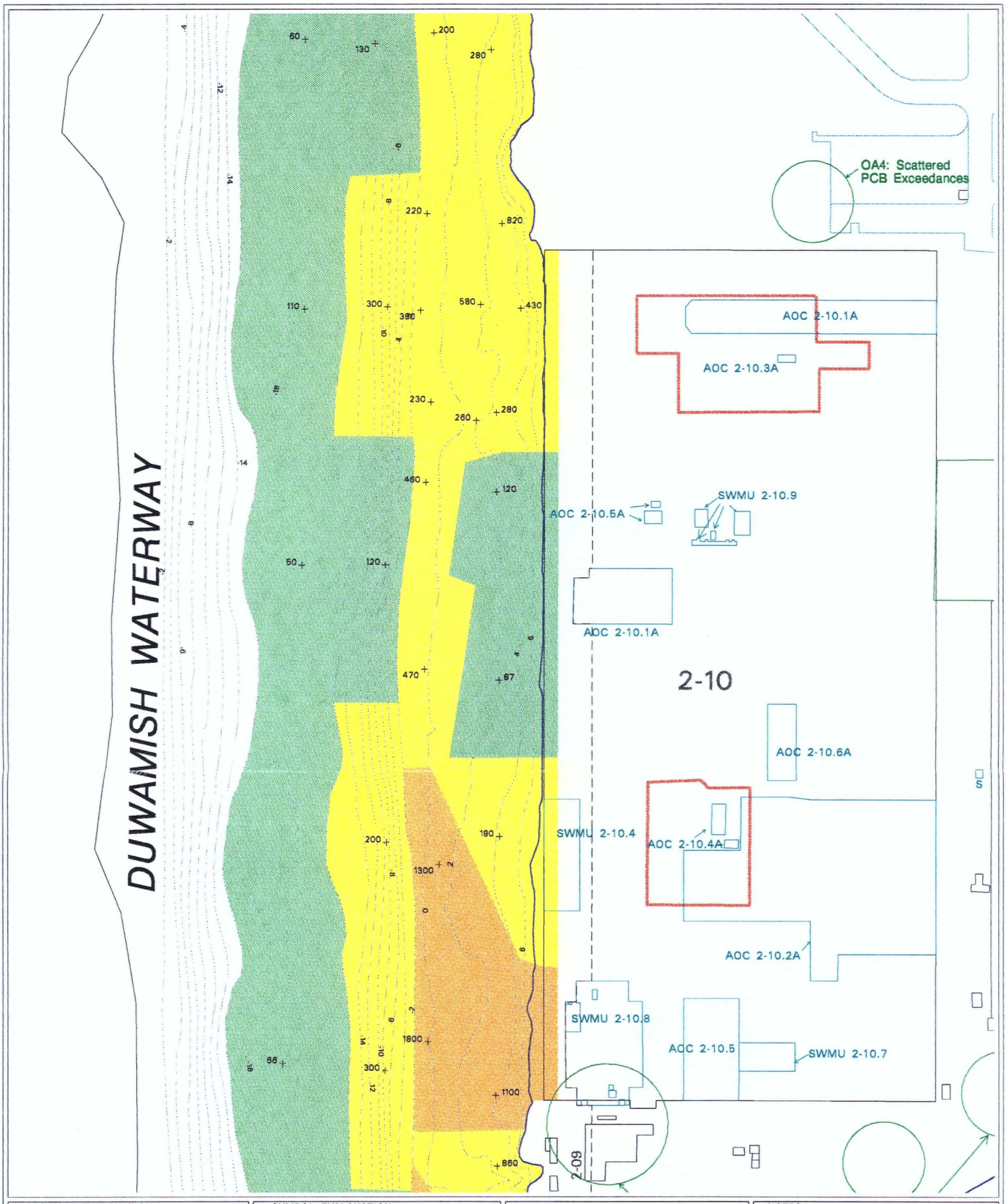
Exceedance of PCB Aroclor 1260 in Surface Sediment

Map 21a

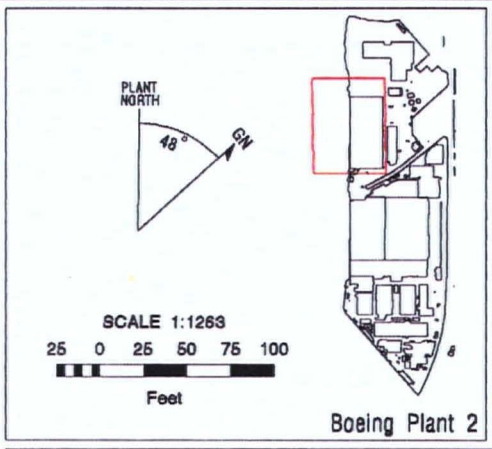


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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LEAD GIS ANALYST: K. Palmer
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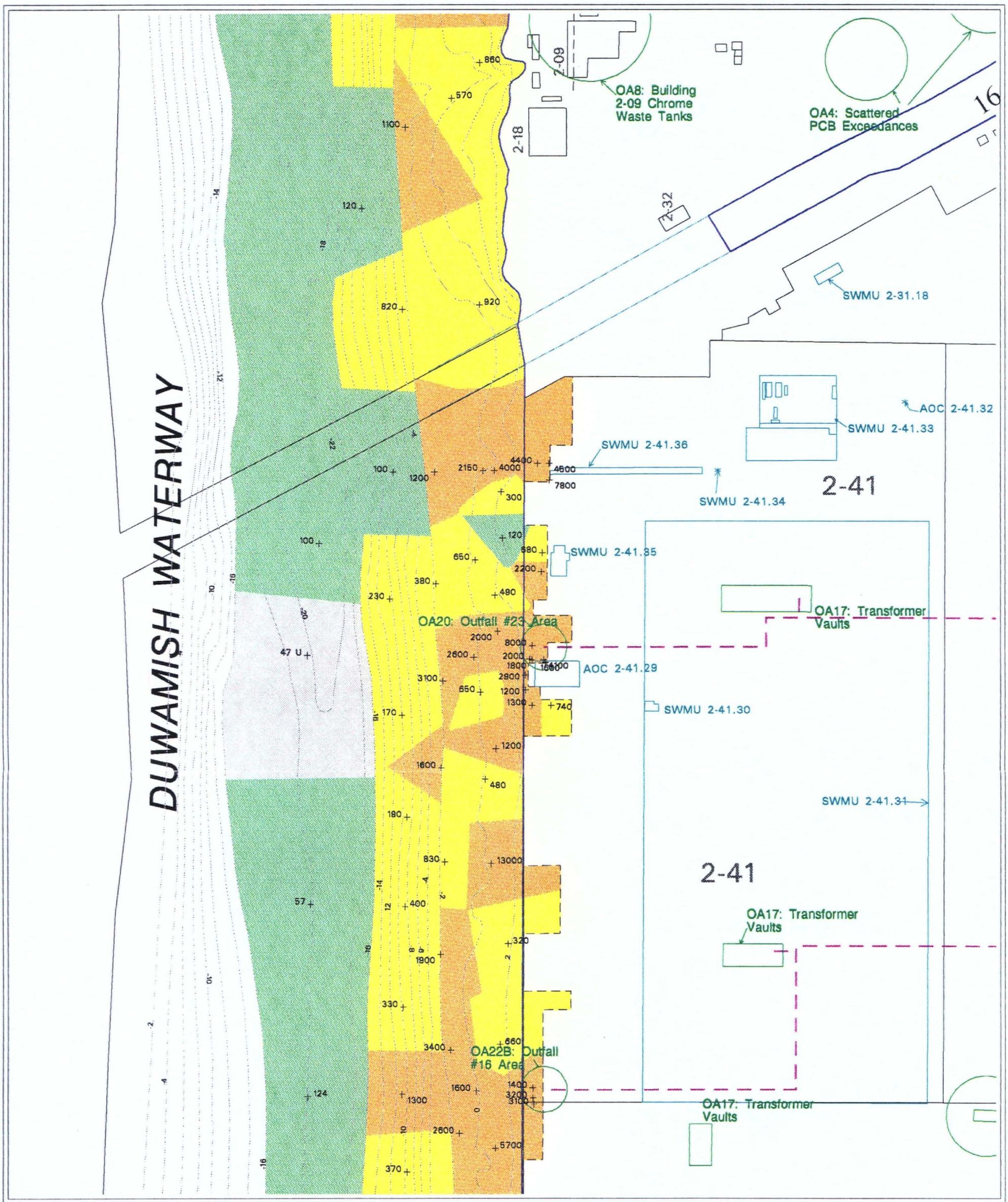
Exceedance of PCB Aroclor 1260 in Surface Sediment

Map 21b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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MANAGERS DESIGNERS/CONSULTANTS

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VIEW FILE: sedplymaps.view

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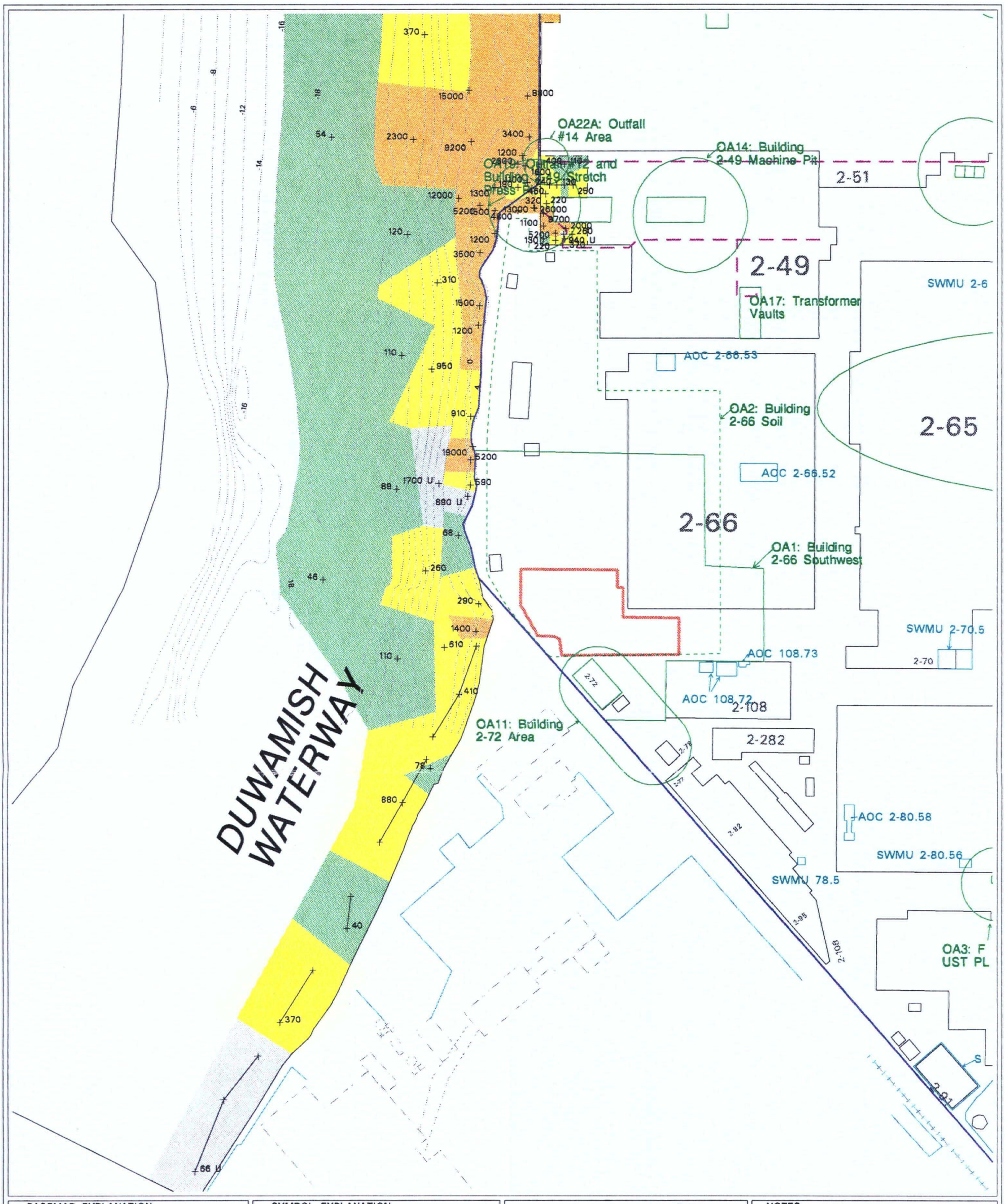
Exceedance of PCB Aroclor 1260 in Surface Sediment

Map 21c

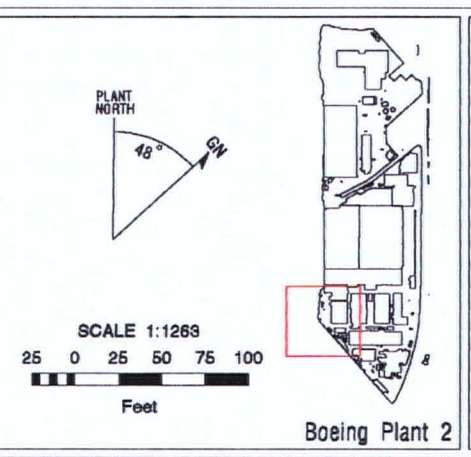


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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LEAD GIS ANALYST: K. Palmer
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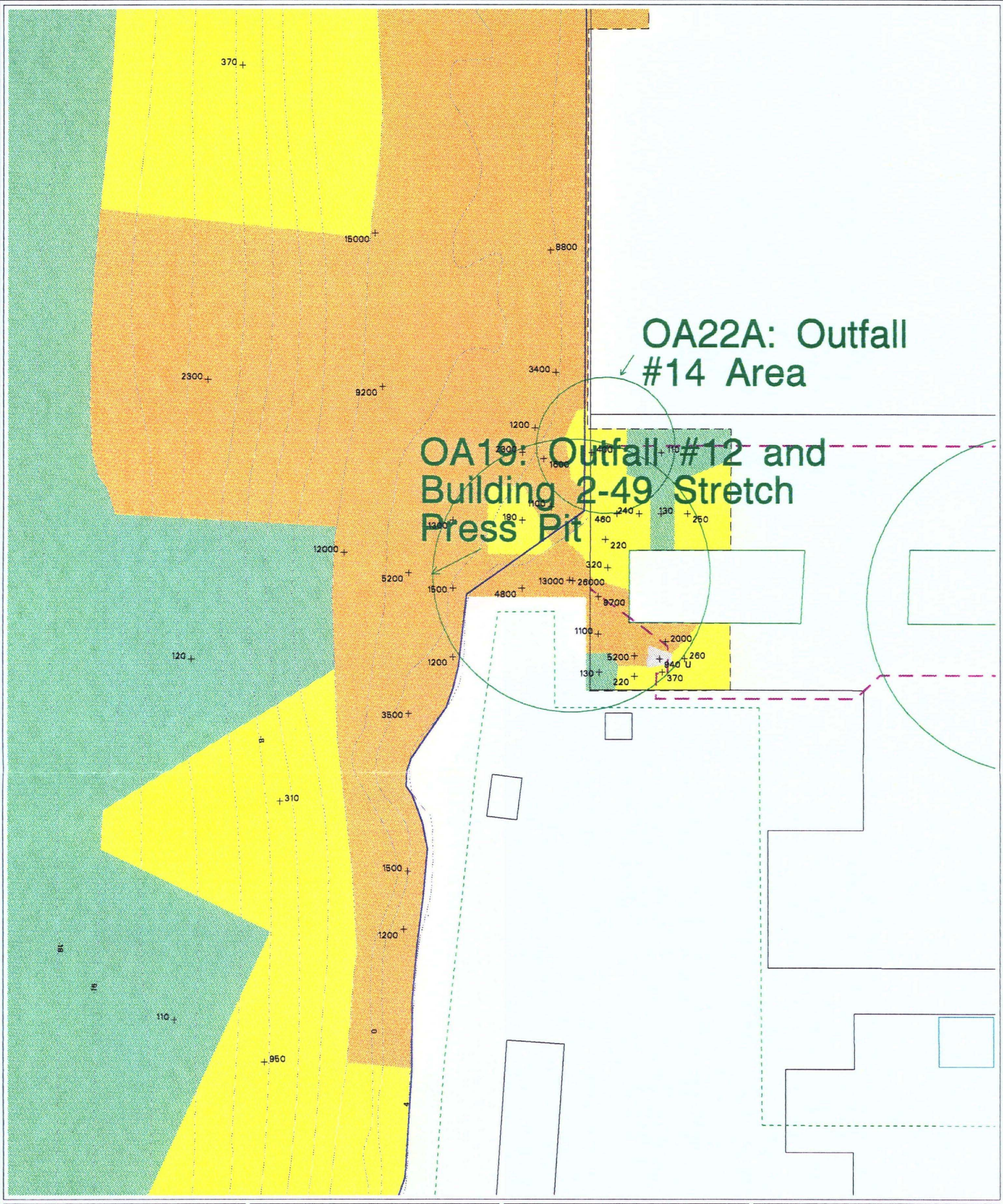
Exceedance of PCB Aroclor 1260 in Surface Sediment

Map 21d



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET for Total PCBs
- Above LAET for Total PCBs
- Above 2LAET for Total PCBs

PLANT NORTH
48°
GN

SCALE 1:425
5 0 5 10 15 20 25
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   LAET (Total PCBs): 130 ug/kg
   2LAET (Total PCBs): 1,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

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JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
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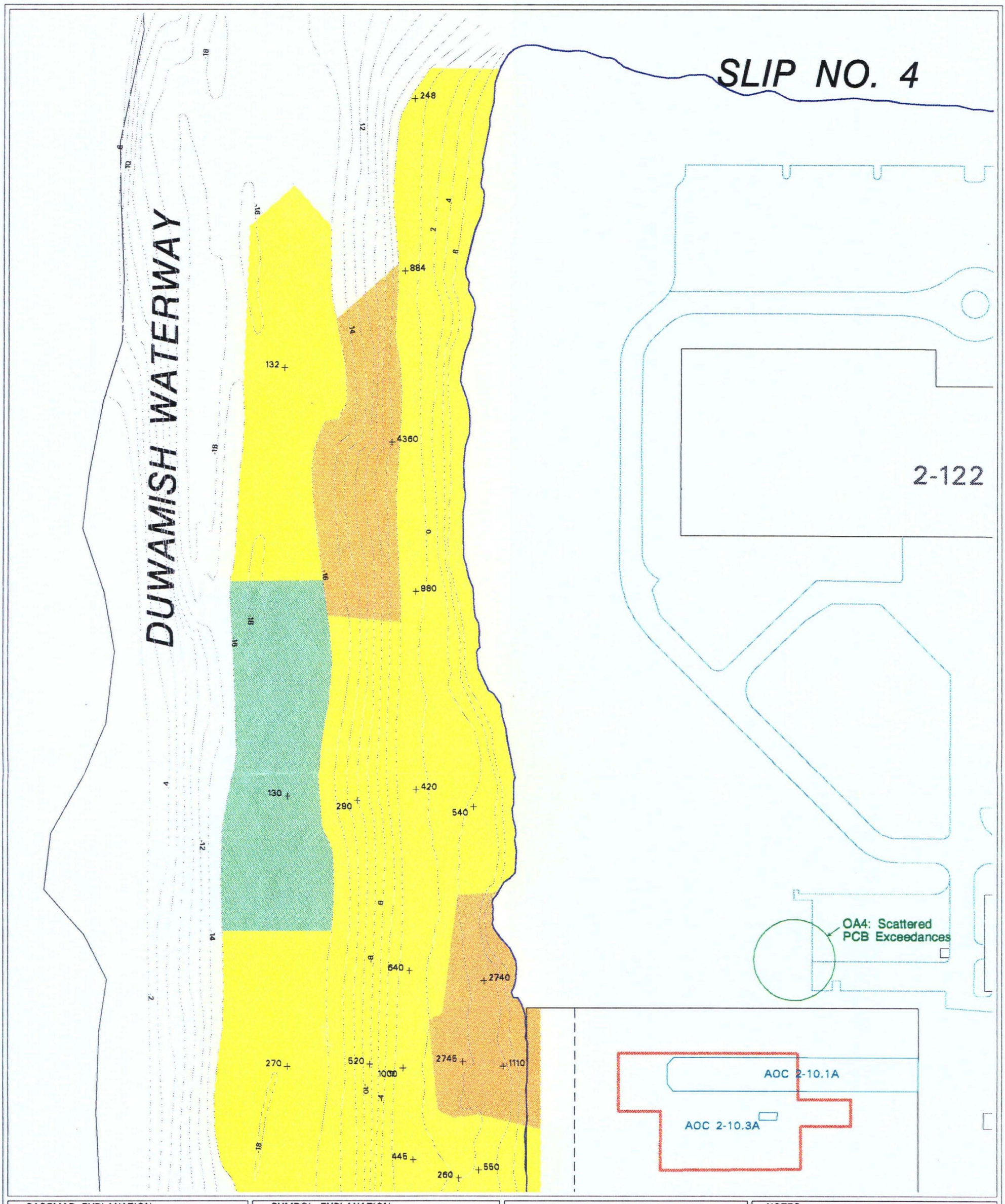
APPROVED BY: _____

Exceedance of PCB Aroclor 1260 in Surface Sediment

Map 21e



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) Total Dry Weight PCBs
2) All concentrations in ug/kg.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg

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JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

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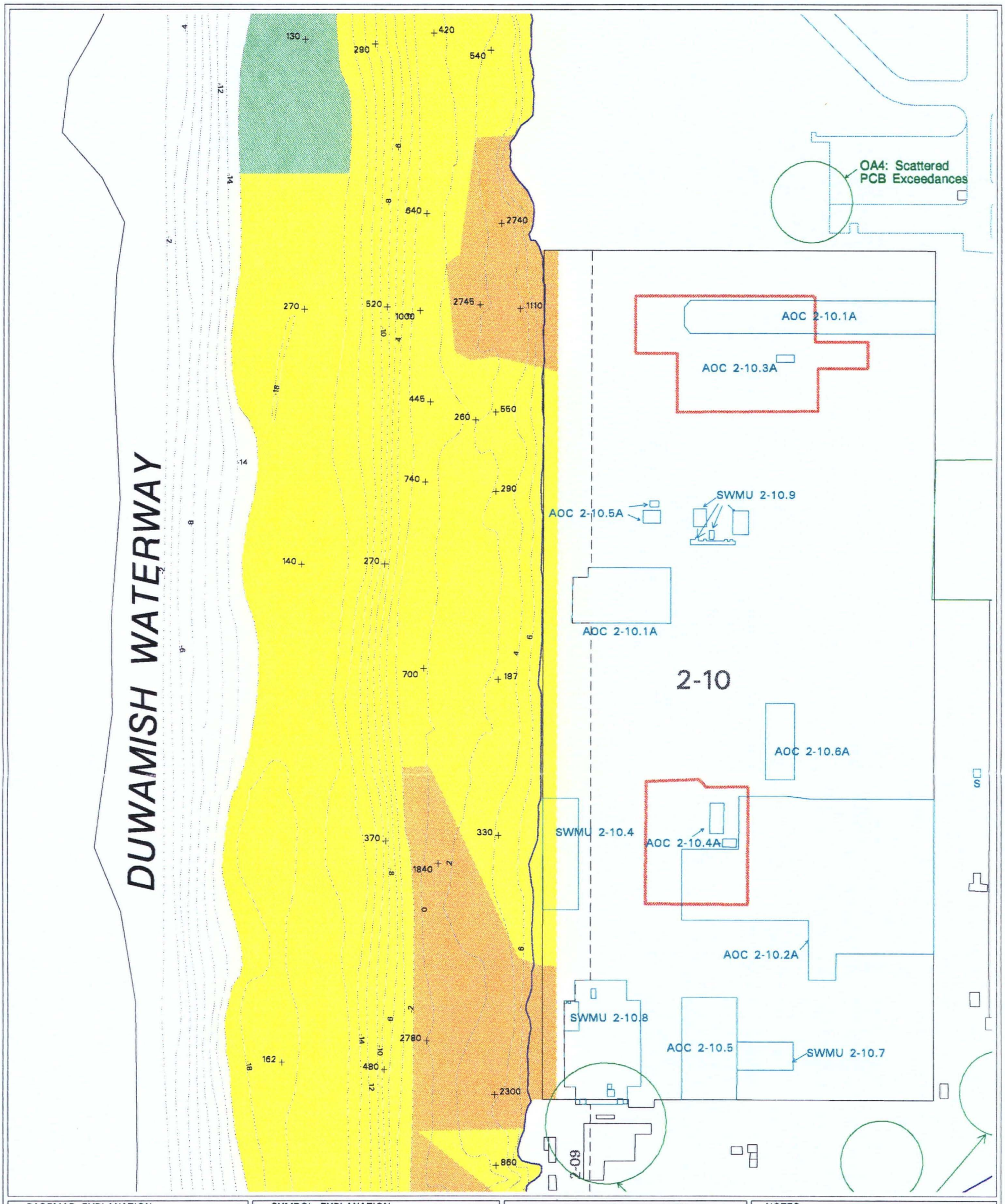
Concentrations of Total PCBs (Dry Weight) in Surface Sediment

Map 22a

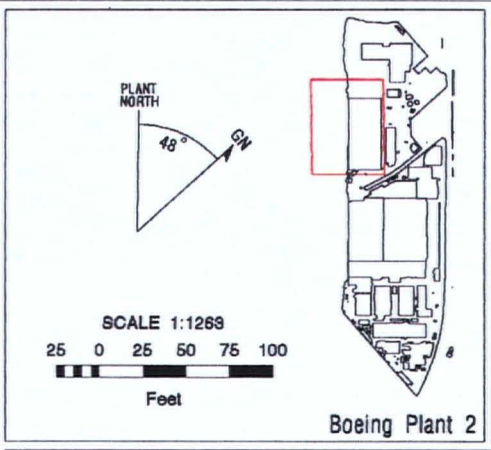


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET



NOTES

1) Total Dry Weight PCBs
2) All concentrations in ug/kg.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg

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JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

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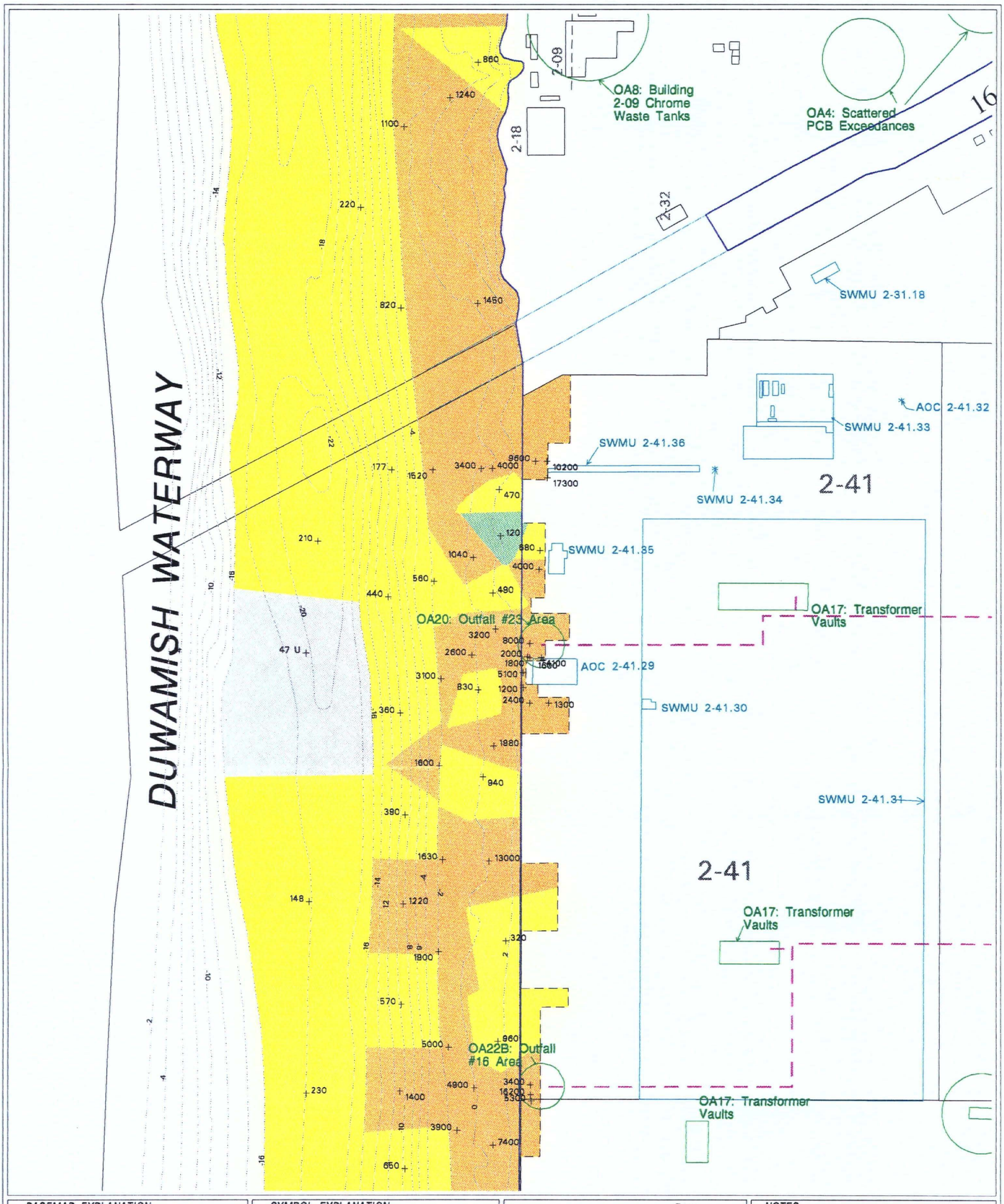
APPROVED BY: _____

Concentrations of Total PCBs (Dry Weight) in Surface Sediment

Map 22b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) Total Dry Weight PCBs
2) All concentrations in ug/kg.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg

WESTON MANAGERS DESIGNERS/CONSULTANTS

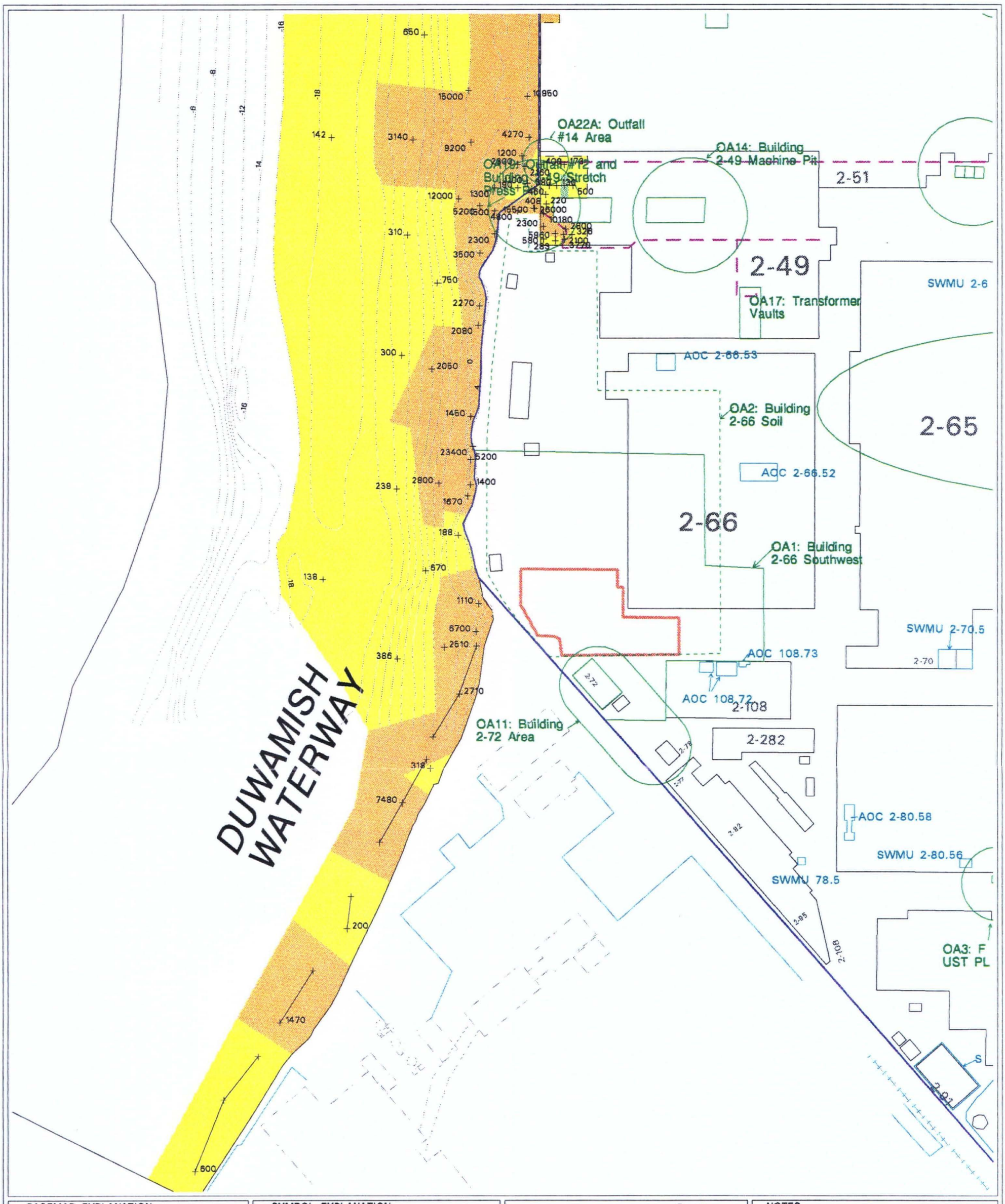
DATE: October 10, 1996 1:13 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

CHECKED BY: _____

APPROVED BY: _____

Concentrations of Total PCBs (Dry Weight) in Surface Sediment

Map 22c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) Total Dry Weight PCBs
2) All concentrations in ug/kg.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg

WESTON
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DATE: October 10, 1996 1:09 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: sedplymaps.view

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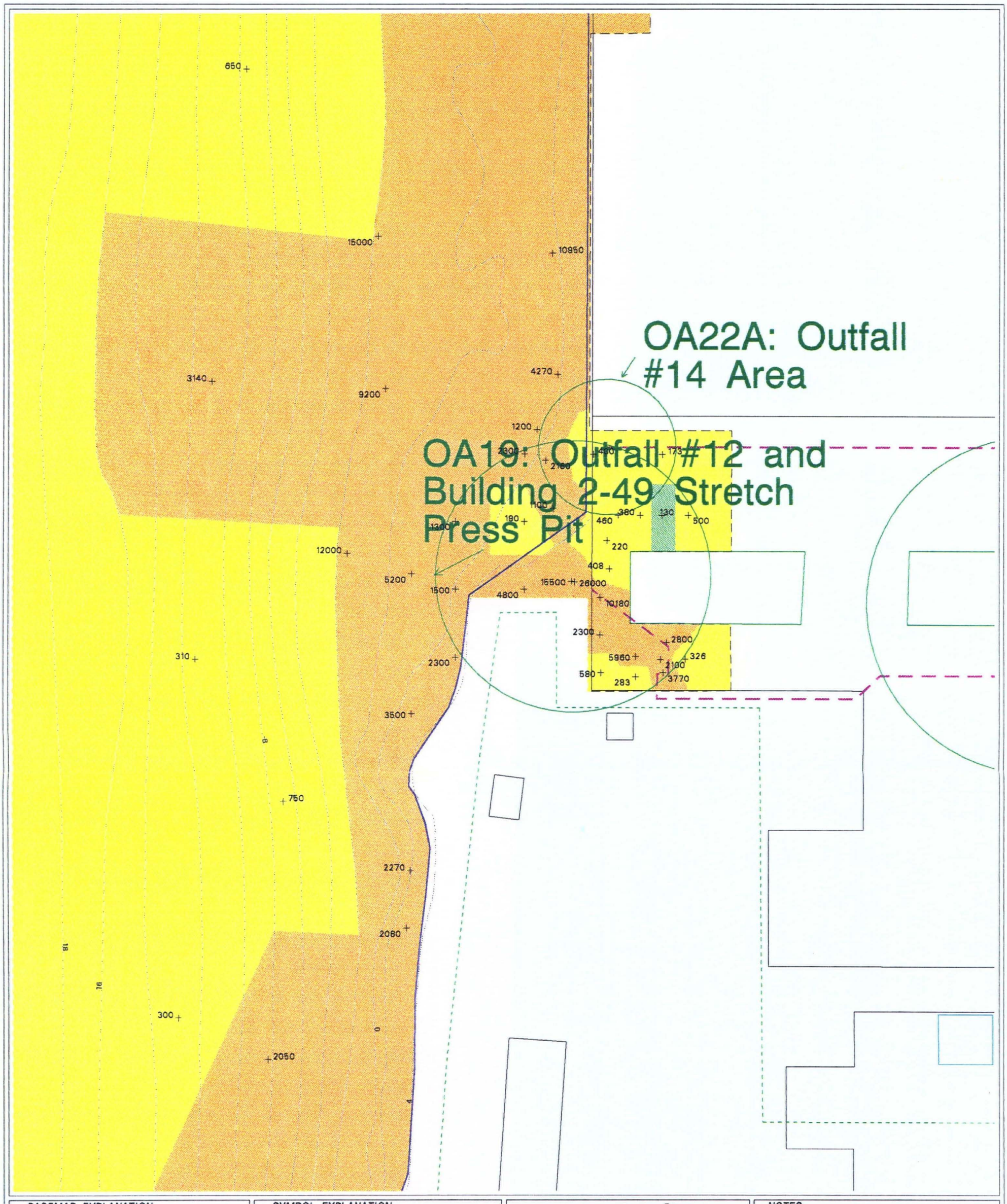
Concentrations of Total PCBs (Dry Weight) in Surface Sediment

Map 22d

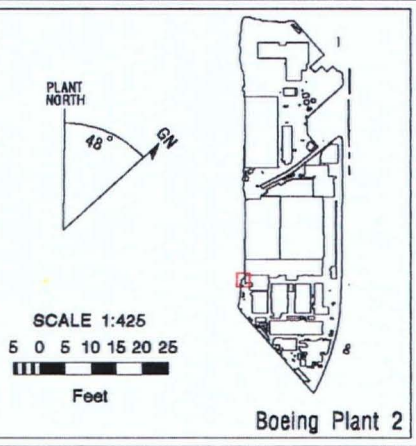


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET



NOTES

1) Total Dry Weight PCBs
2) All concentrations in ug/kg.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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LEAD GIS ANALYST: K. Palmer
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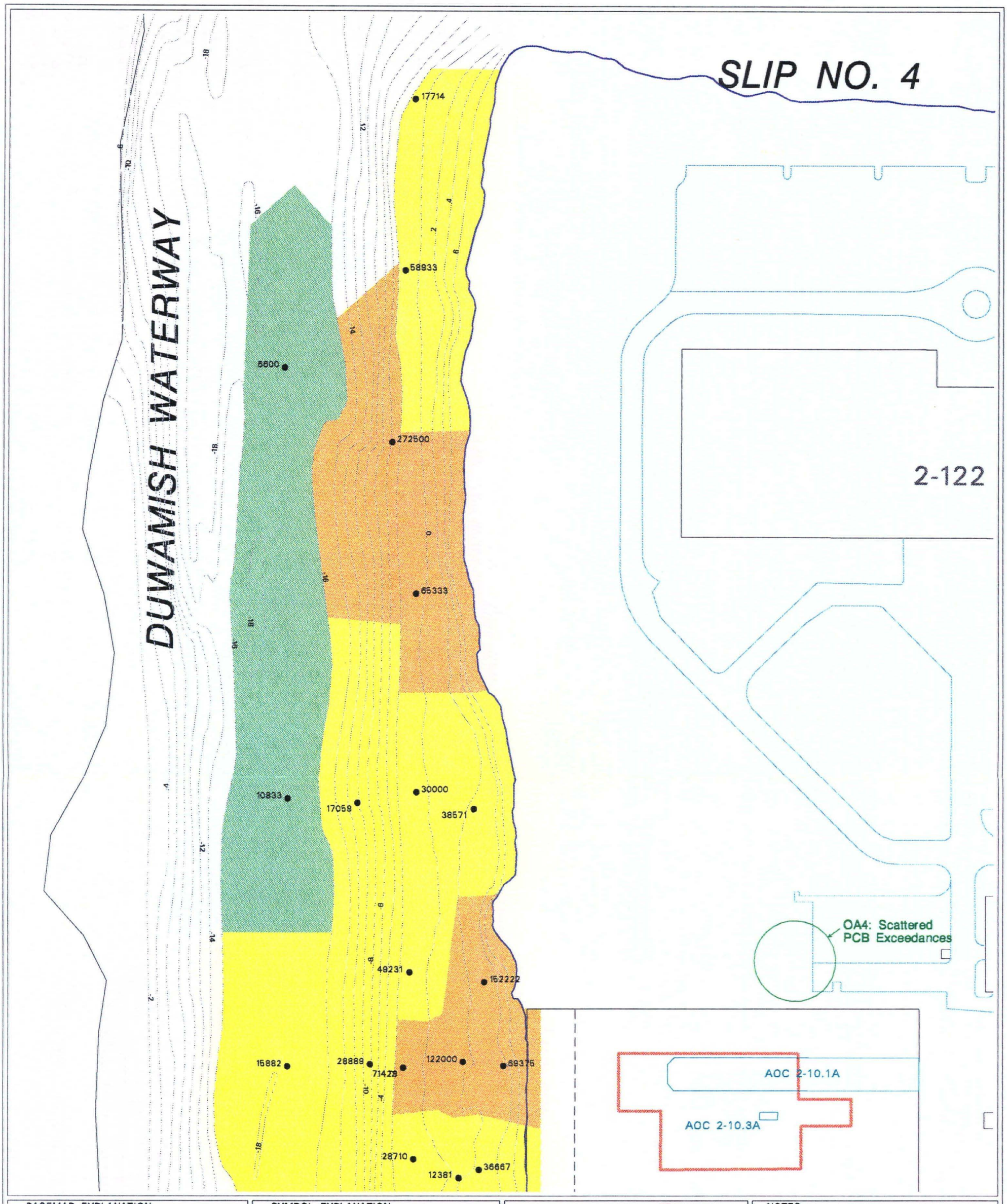
Concentrations of Total PCBs (Dry Weight) in Surface Sediment

Map 22e

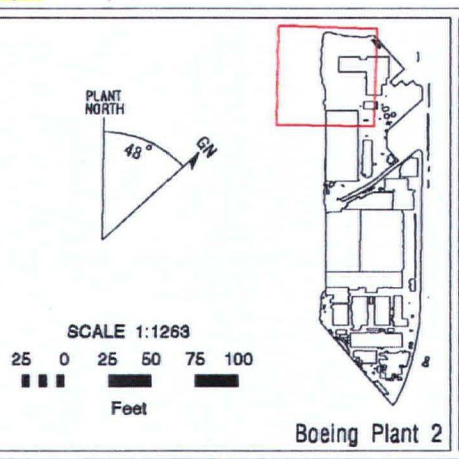


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET or Below TOCN SQS
- Above LAET or Above TOCN SQS
- Above 2LAET or Above TOCN CSL
- + Dry-weight concentration
- ● TOC-normalized concentration



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg
   SQS TOC Normalized: 12,000 ug/kg
   CSL TOC Normalized: 65,000 ug/kg
4) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

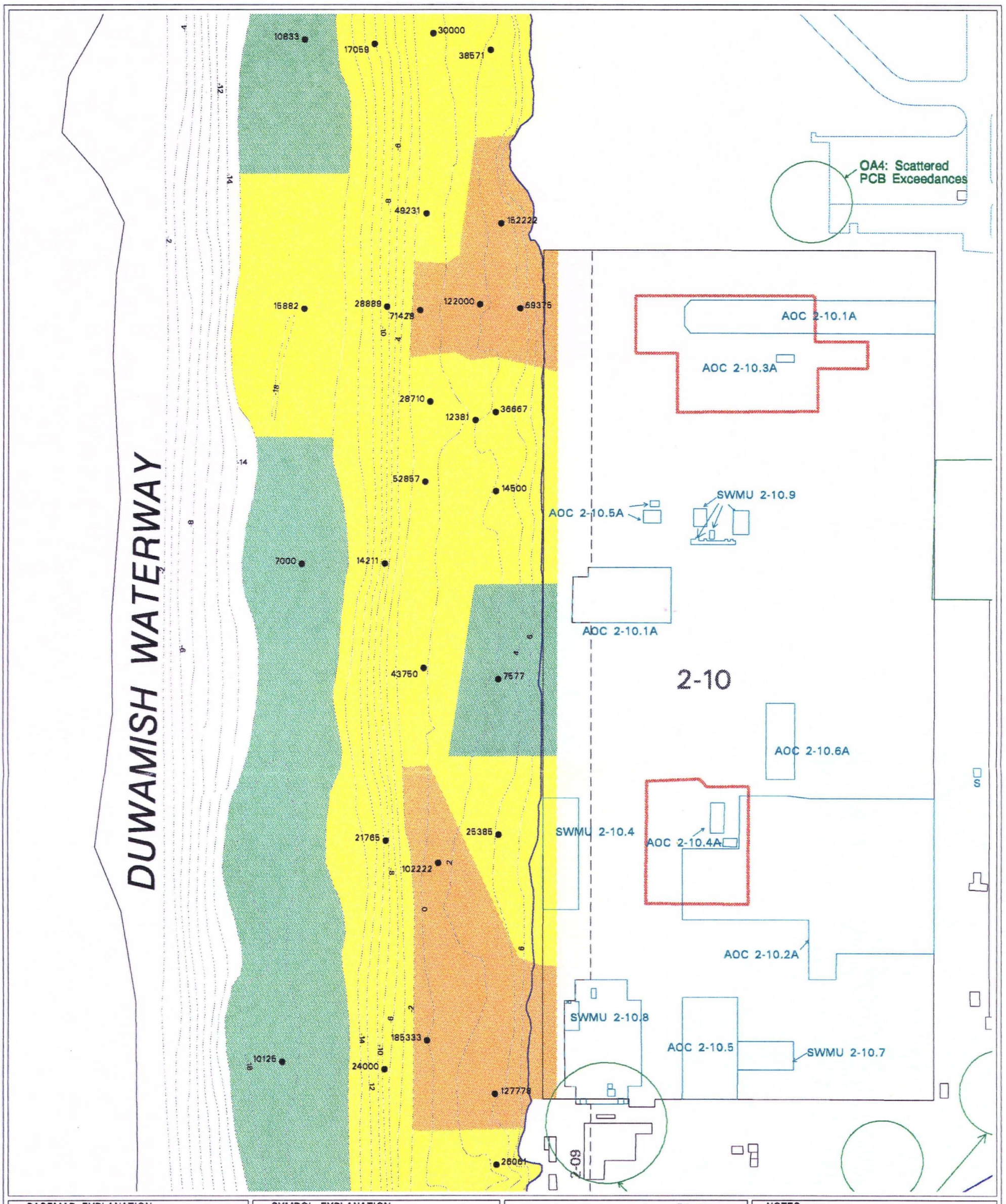
DATE: October 02, 1996 10:39 AM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: totpcbply.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total PCBs in Surface Sediment

Map 23a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET or Below TOCN SQS
- Above LAET or Above TOCN SQS
- Above 2LAET or Above TOCN CSL
- + Dry-weight concentration
- ● TOC-normalized concentration

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg
   SQS TOC Normalized: 12,000 ug/kg
   CSL TOC Normalized: 65,000 ug/kg
4) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

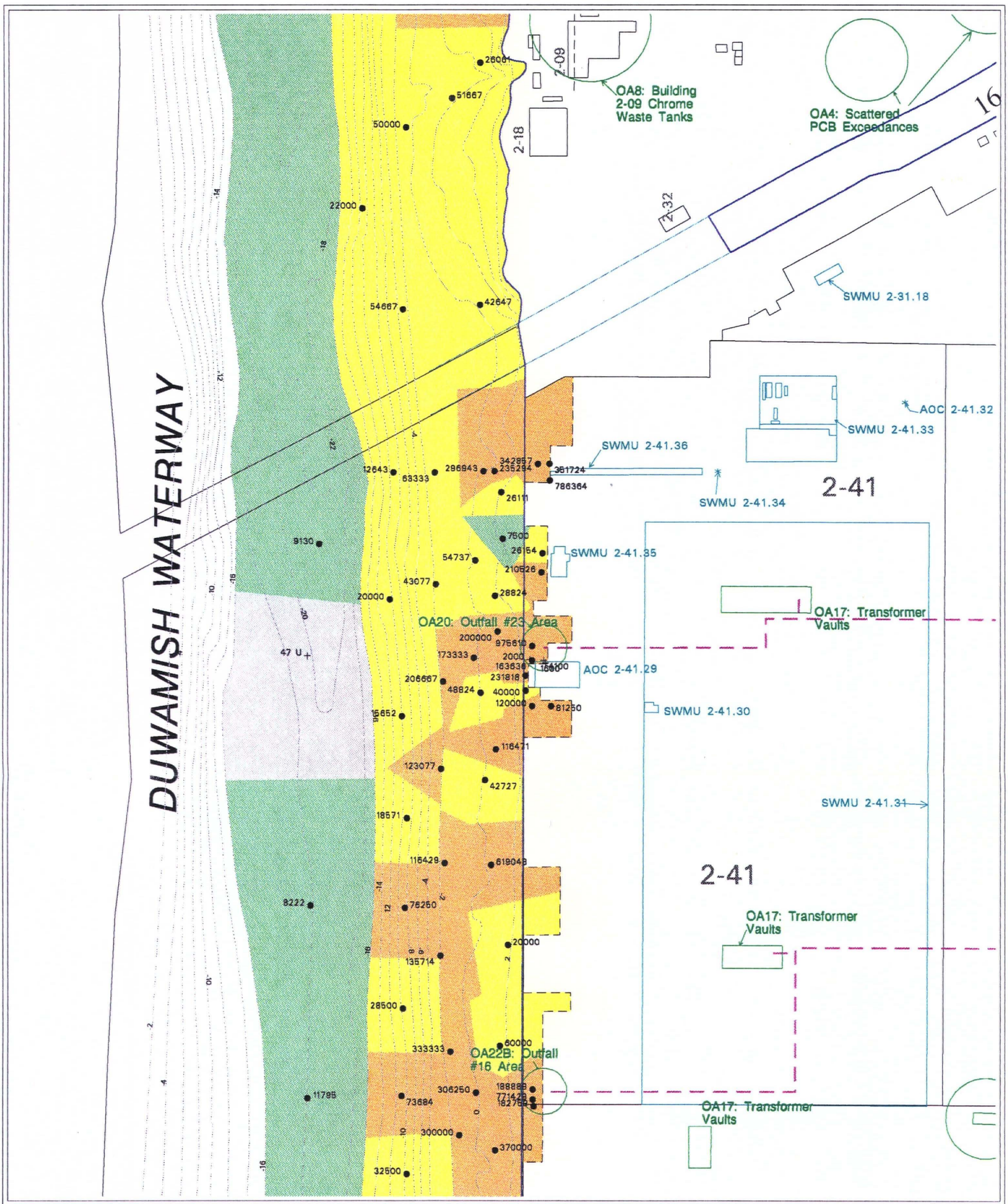
DATE: October 02, 1996 10:35 AM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: totpcbply.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total PCBs in Surface Sediment

Map 23b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET or Below TOCN SQS
- Above LAET or Above TOCN SQS
- Above 2LAET or Above TOCN CSL
- + Dry-weight concentration
- ● TOC-normalized concentration

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg
   SQS TOC Normalized: 12,000 ug/kg
   CSL TOC Normalized: 65,000 ug/kg
4) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

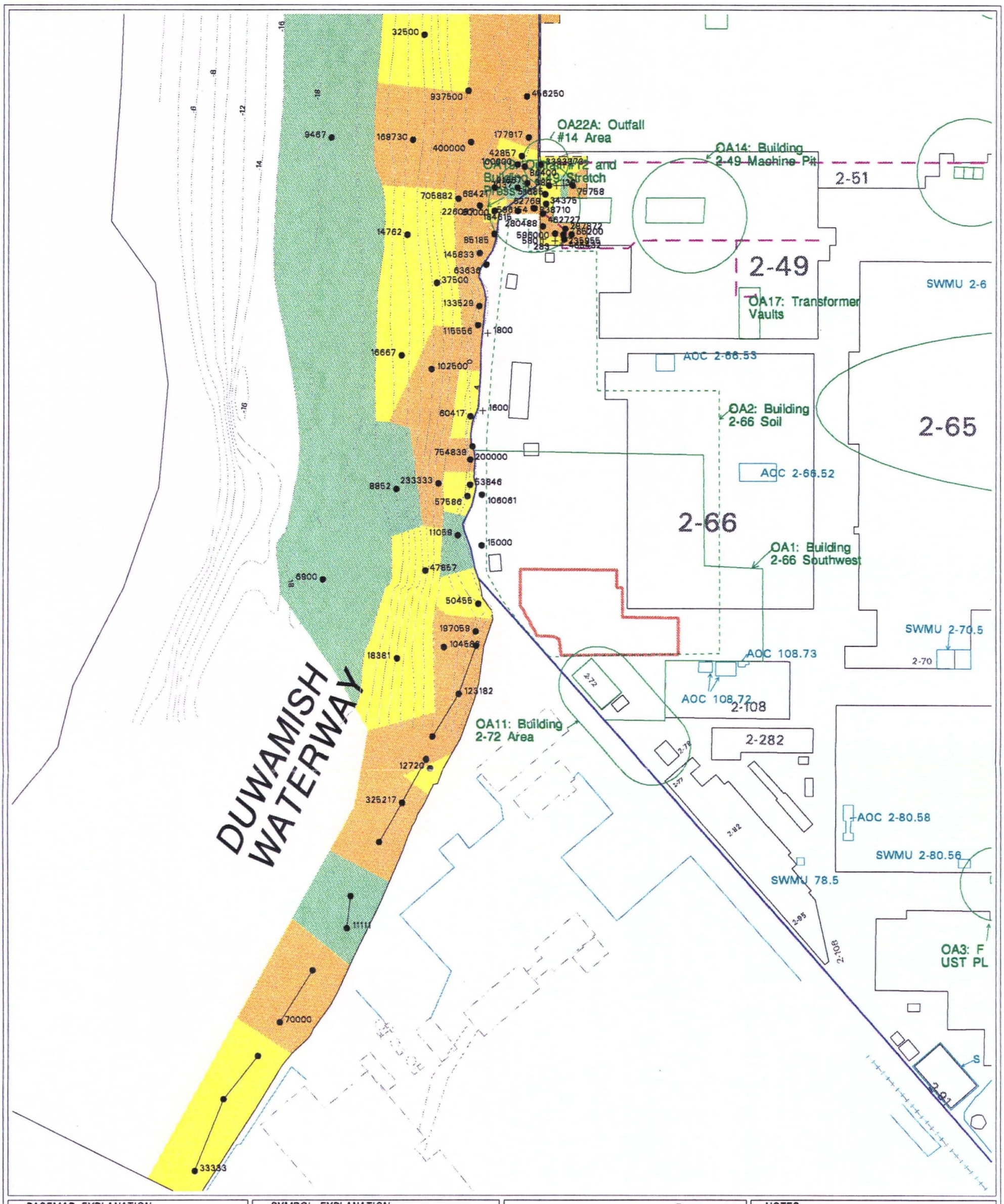
DATE: October 02, 1996 10:30 AM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: totpcbply.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total PCBs in Surface Sediment

Map 23c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET or Below TOCN SQS
- Above LAET or Above TOCN SQS
- Above 2LAET or Above TOCN CSL
- + Dry-weight concentration
- ● TOC-normalized concentration

PLANT NORTH 48° GN

SCALE 1:1269

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg
   SQS TOC Normalized: 12,000 ug/kg
   CSL TOC Normalized: 65,000 ug/kg
4) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON

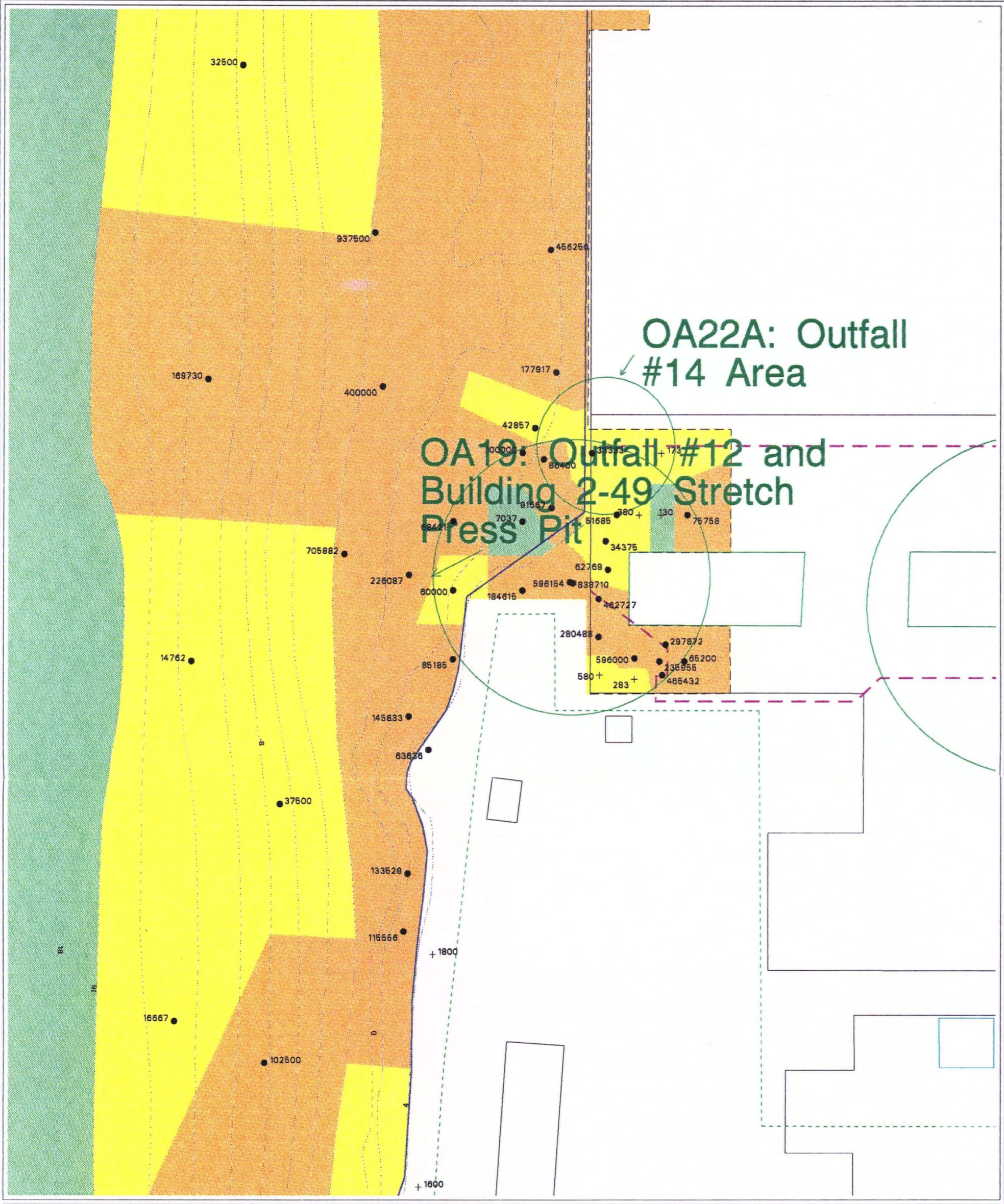
DATE: October 02, 1996 10:26 AM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: totpcbply.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total PCBs in Surface Sediment

Map 23d

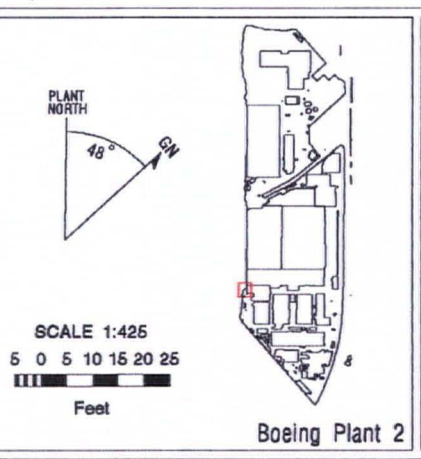


BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

- Non-Detect
- Below LAET or Below TOCN SQS
- Above LAET or Above TOCN SQS
- Above 2LAET or Above TOCN CSL
- + Dry-weight concentration
- ● TOC-normalized concentration



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference Concentrations:
   LAET: 130 ug/kg
   2LAET: 1000 ug/kg
   SQS TOC Normalized: 12,000 ug/kg
   CSL TOC Normalized: 65,000 ug/kg
4) Vertical Datum is: Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

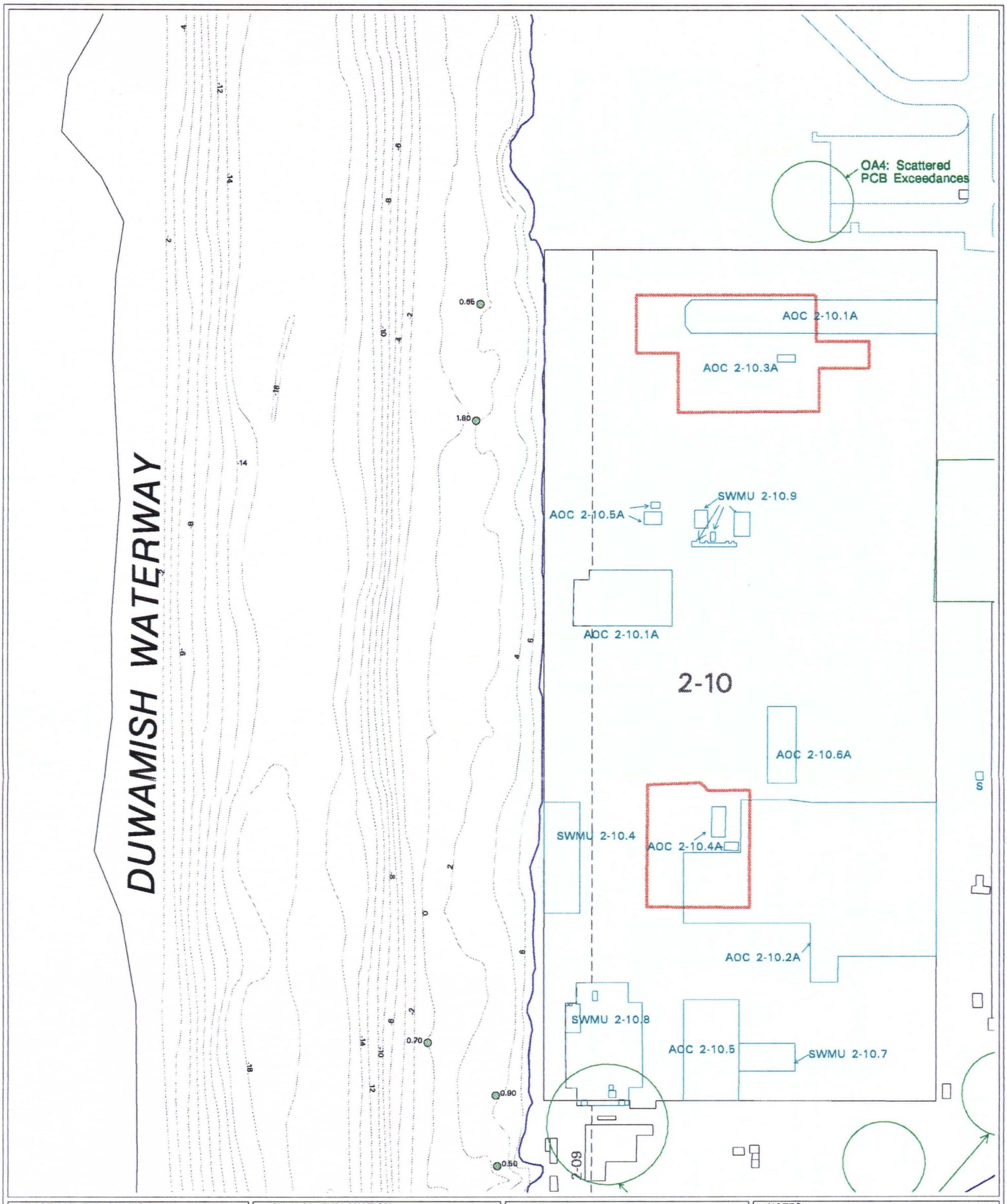
DATE: October 02, 1996 10:22 AM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: totpcbply.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total PCBs in Surface Sediment

Map 23e



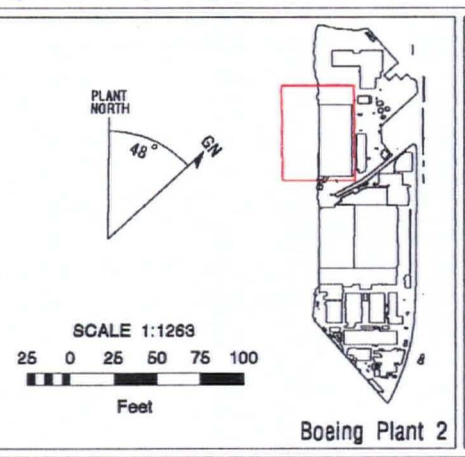
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 5.1 mg/kg
   CSL: 6.7 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

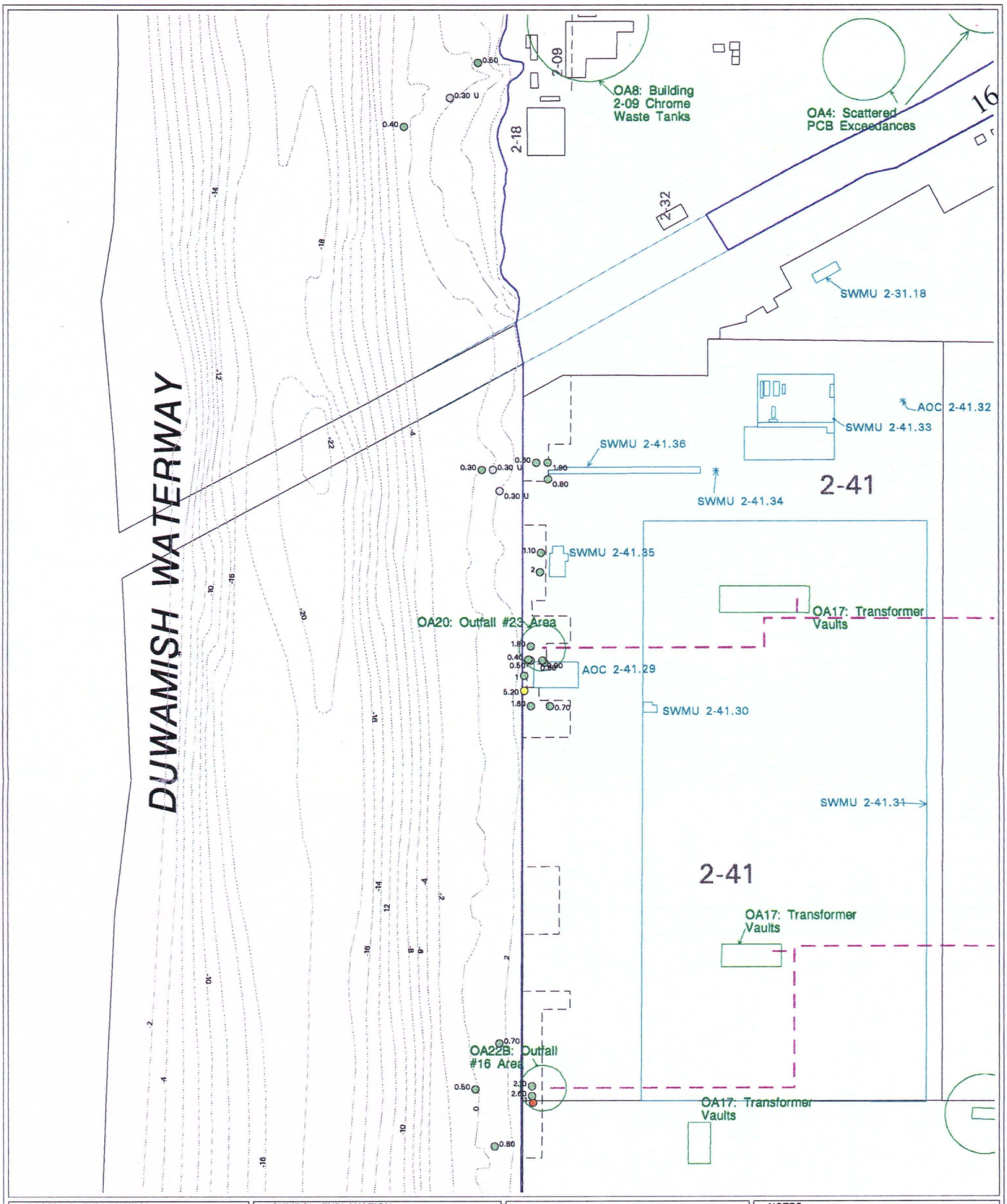
DATE: October 02, 1996 11:32 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Cadmium in Surface Sediment

Map 24a



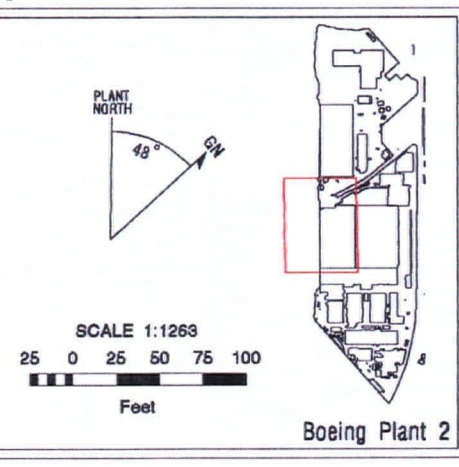
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 5.1 mg/kg
   CSL: 6.7 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

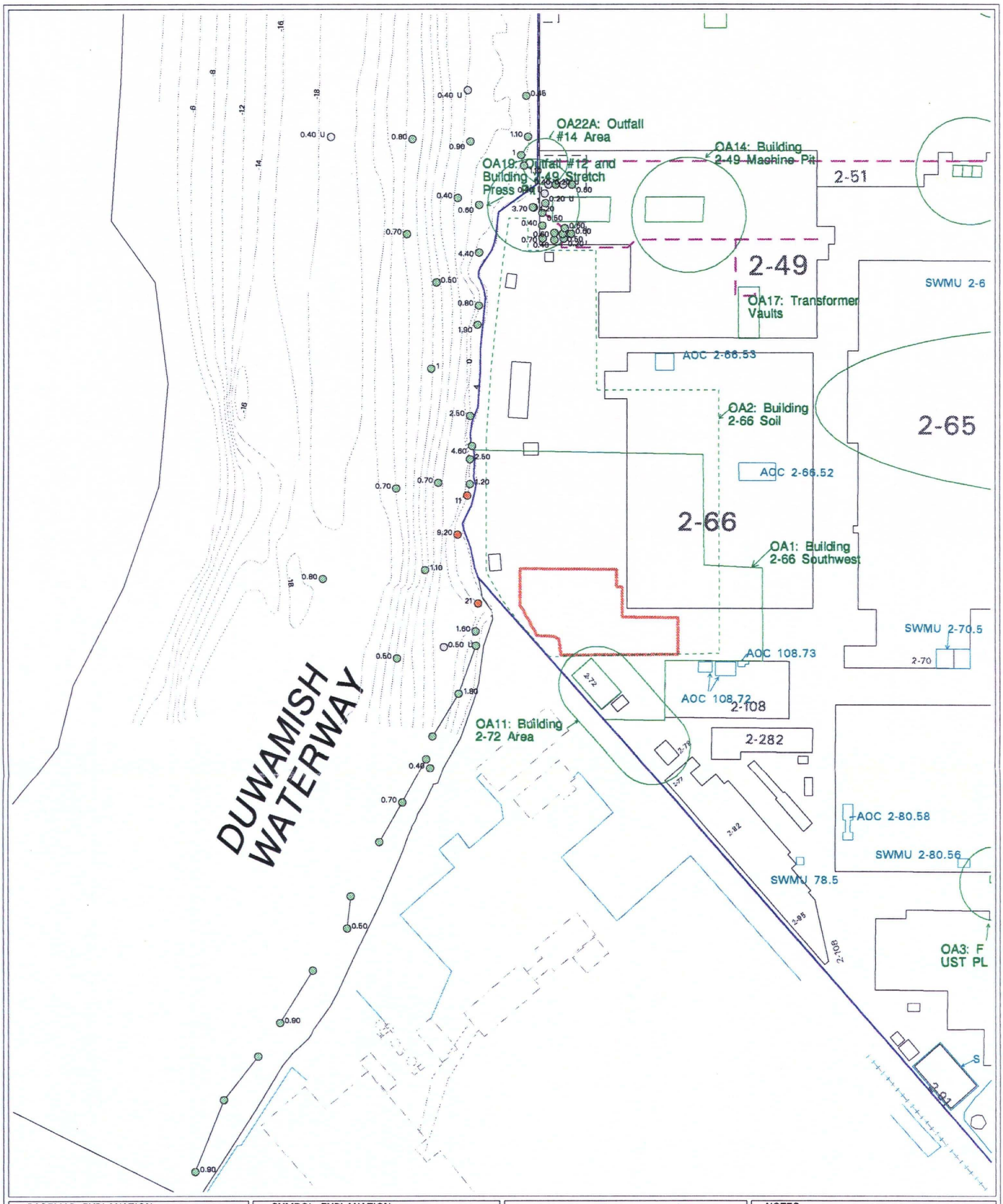
DATE: October 02, 1996 11:28 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Cadmium in Surface Sediment

Map 24b



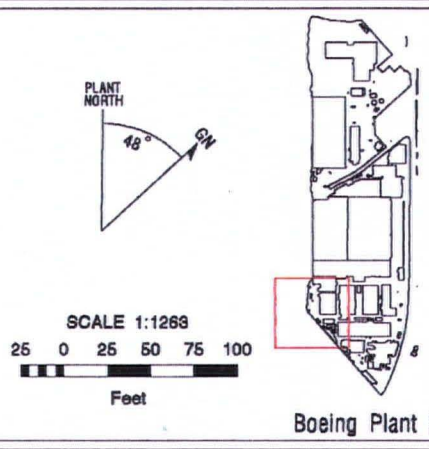
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 5.1 mg/kg
   CSL: 6.7 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

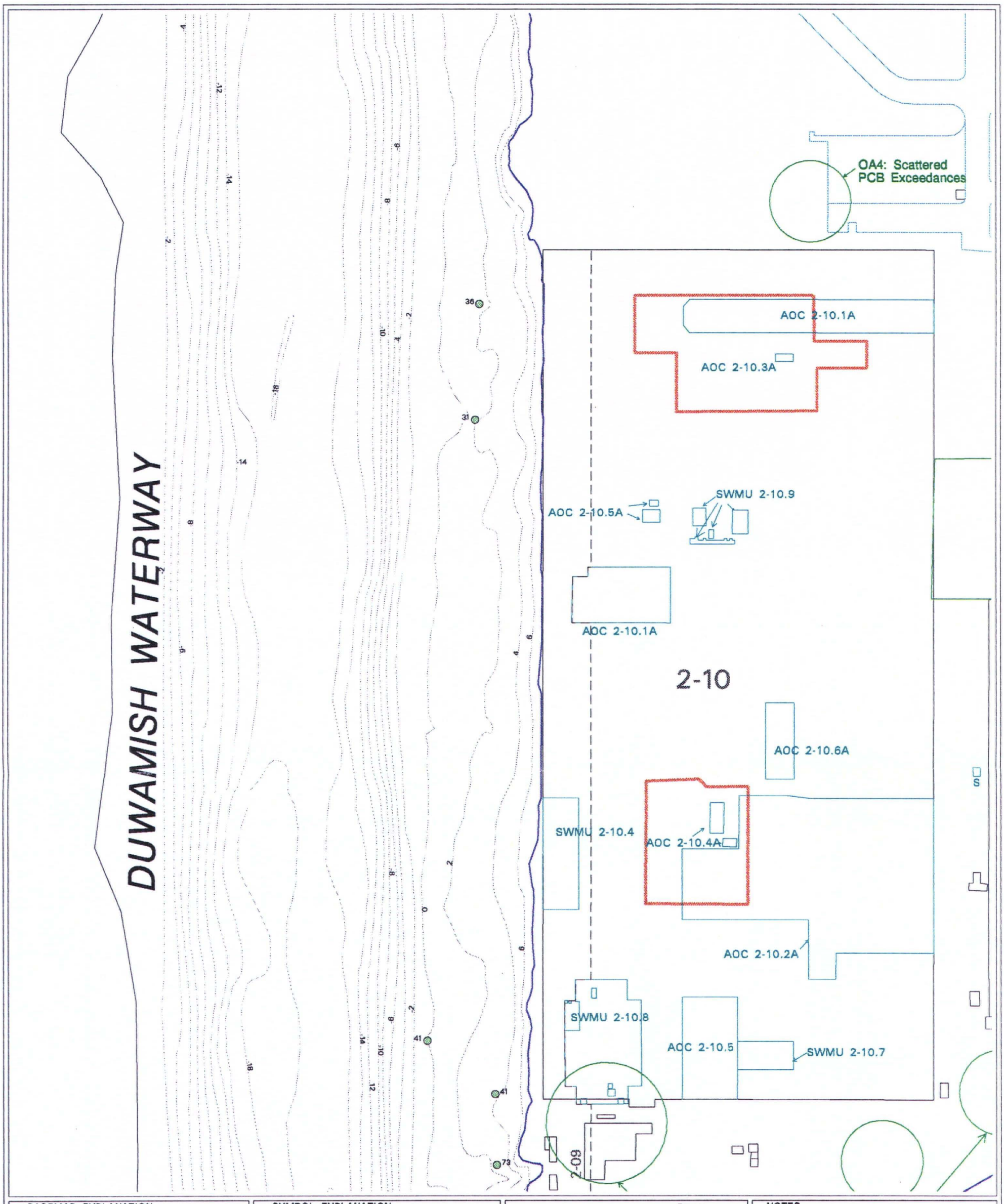
DATE: October 02, 1996 11:24 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Cadmium in Surface Sediment

Map 24c



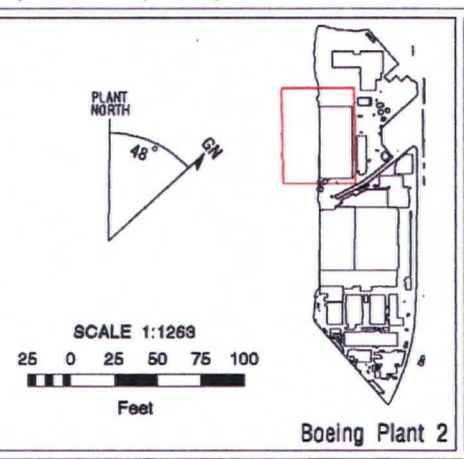
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 390 mg/kg
   CSL: 390 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

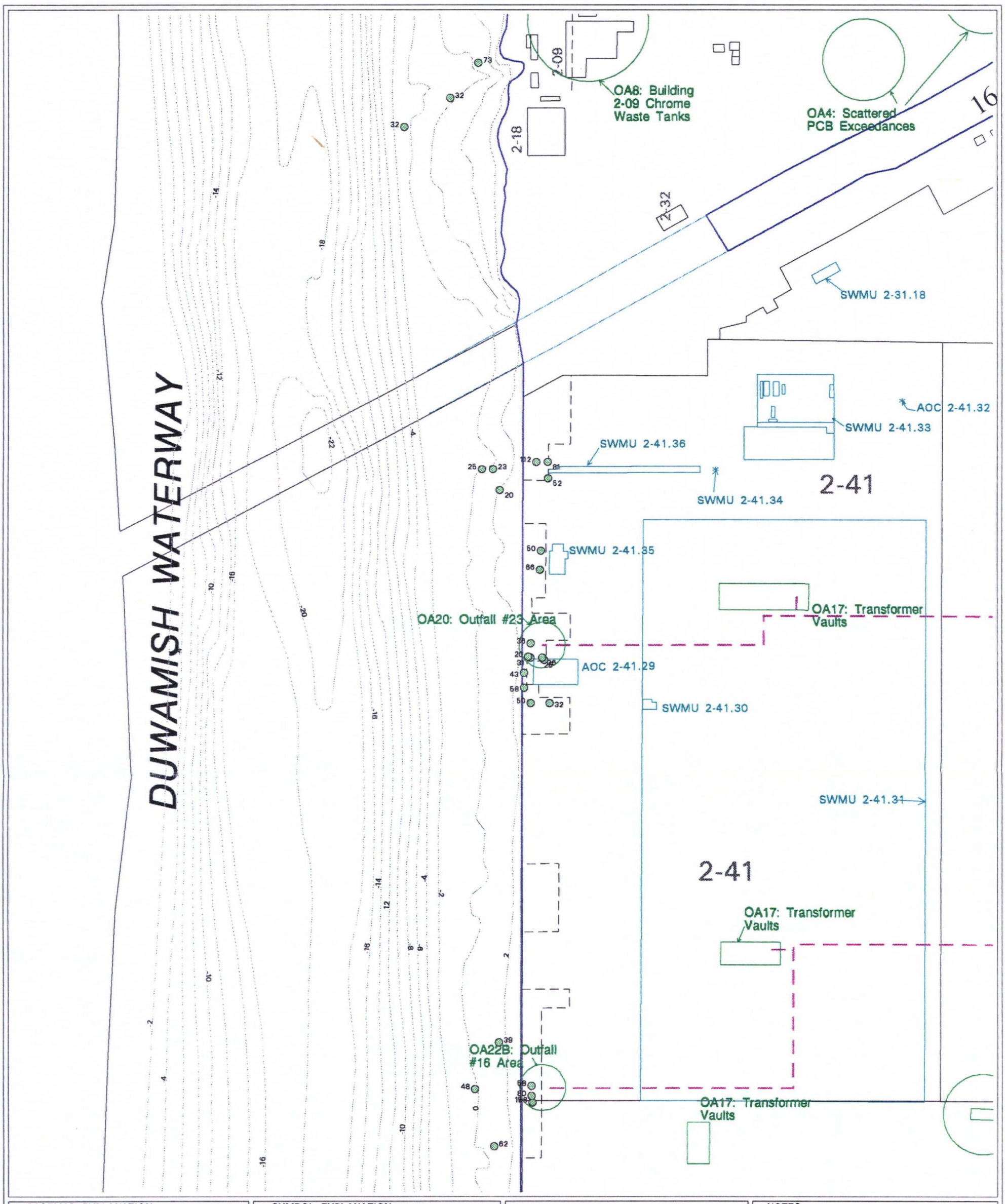
DATE: October 02, 1996 11:49 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Copper in Surface Sediment

Map 25a



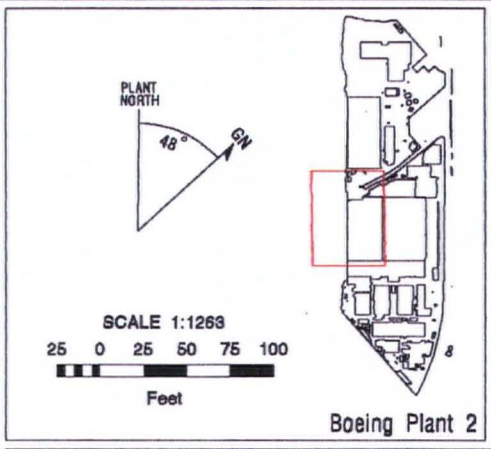
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 390 mg/kg
   CSL: 390 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

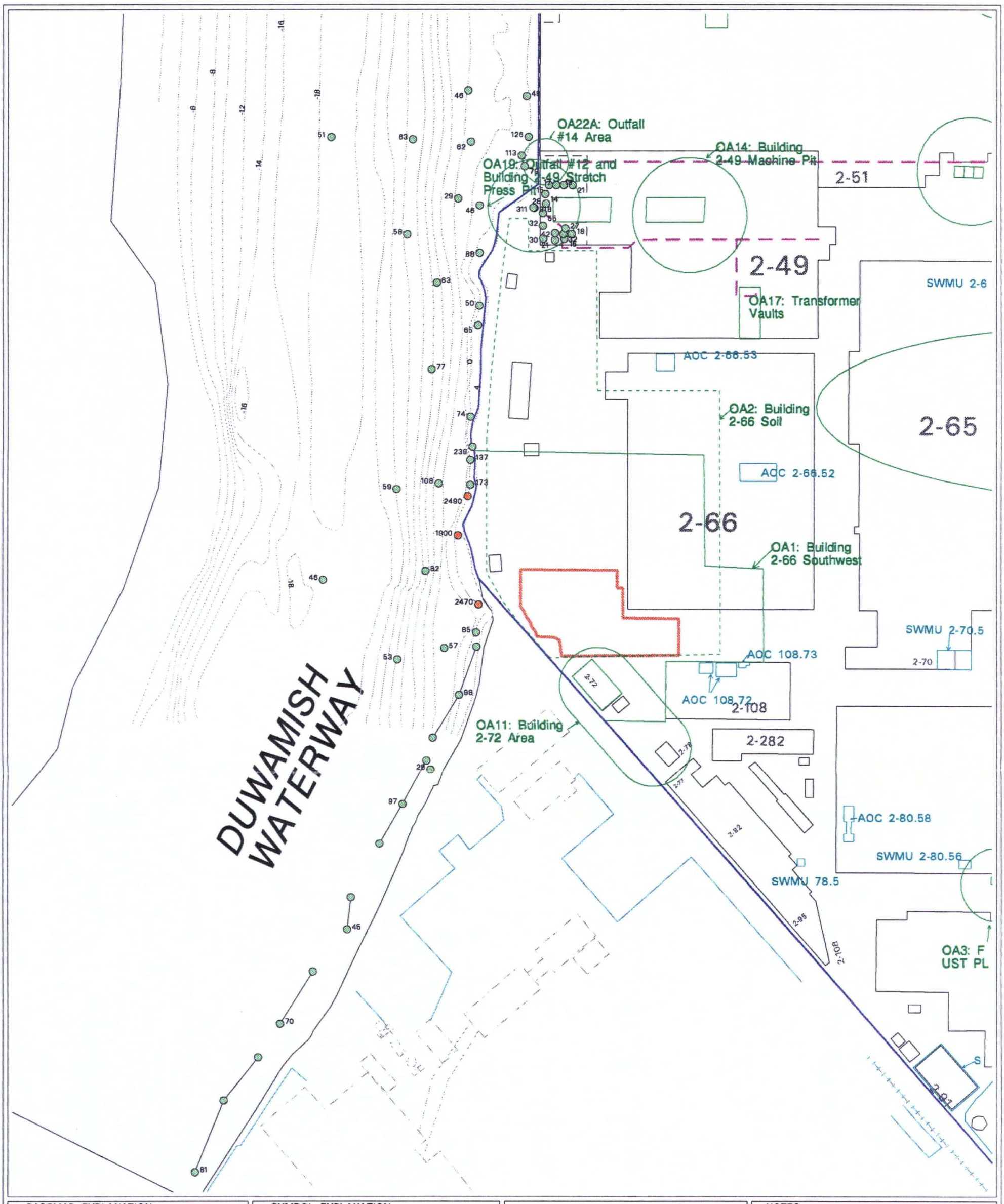
DATE: October 02, 1996 11:45 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Copper in Surface Sediment

Map 25b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 390 mg/kg
   CSL: 390 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

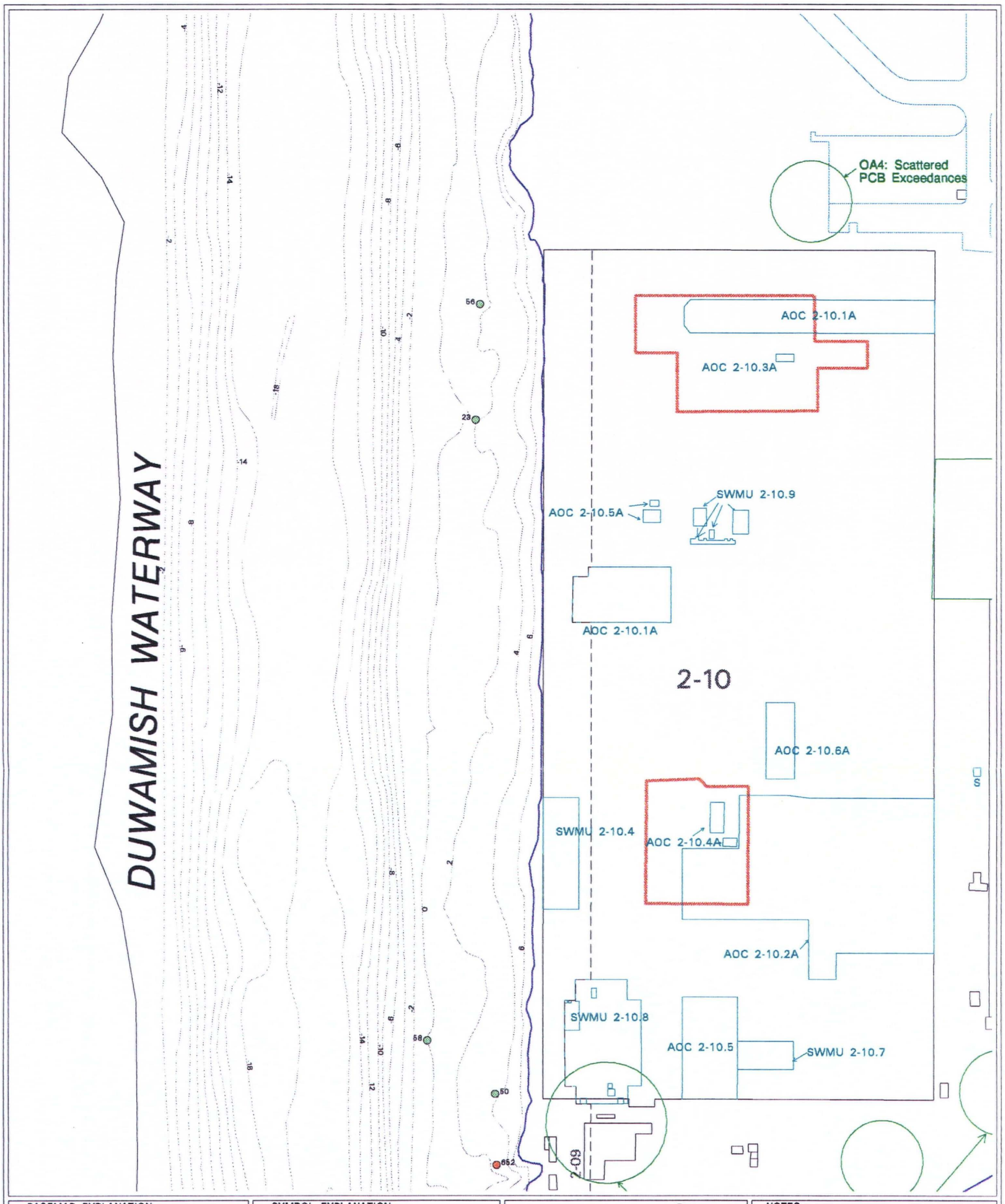
DATE: October 02, 1996 11:40 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Copper in Surface Sediment

Map 25c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 450 mg/kg
   CSL: 530 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

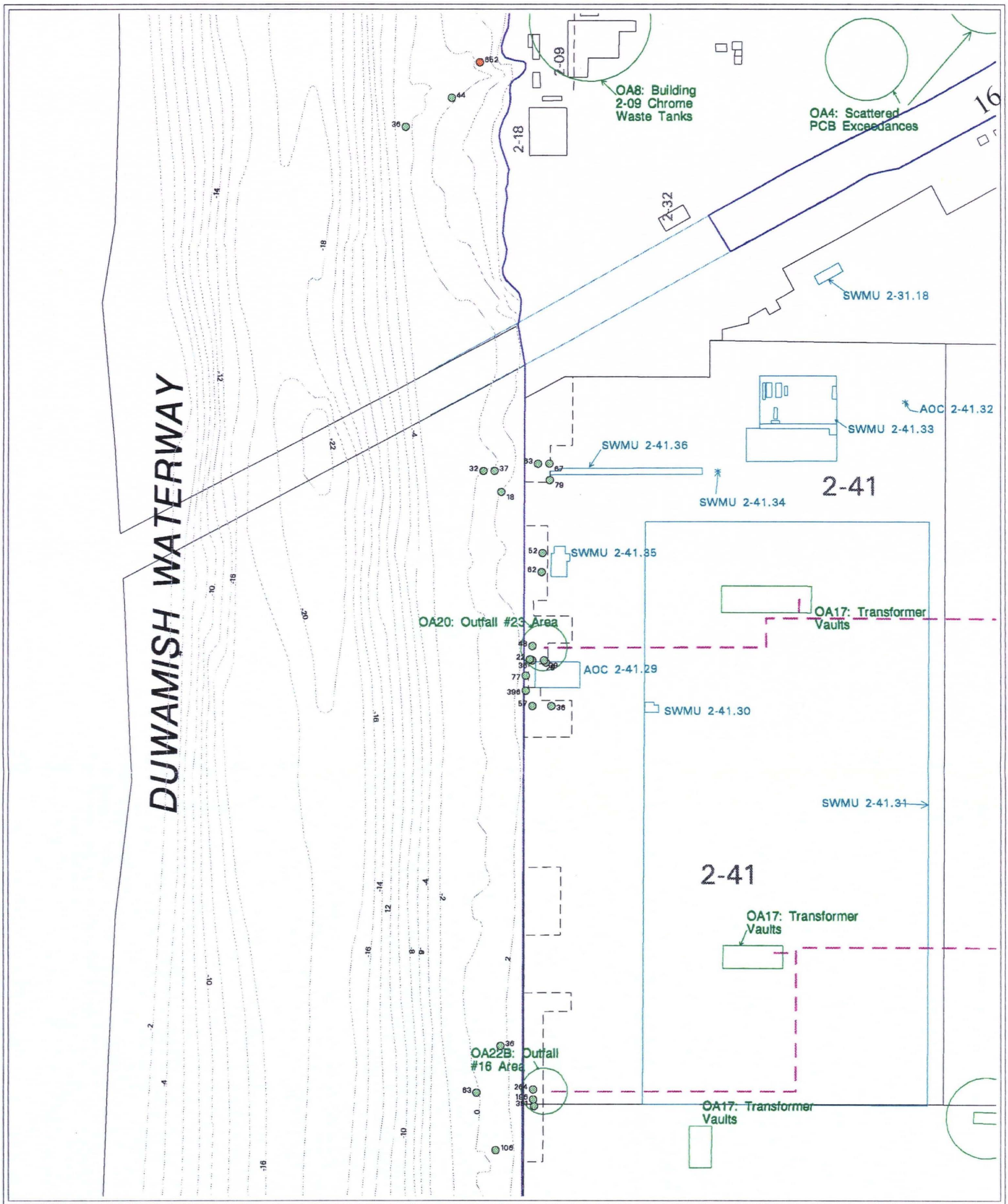
DATE: October 02, 1996 12:05 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Lead in Surface Sediment

Map 26a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH
48°
GN

SCALE 1:1268

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 450 mg/kg
   CSL: 530 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 02, 1996 12:01 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Lead in Surface Sediment

Map 26b

OA22A: Outfall #14 Area

OA19: Outfall #12 and Building 2-49 Stretch Press Pit

OA14: Building 2-49 Machine Pit

2-51

2-49

OA17: Transformer Vaults

SWMU 2-6

AOC 2-66.53

OA2: Building 2-66 Soil

2-65

AOC 2-66.52

2-66

OA1: Building 2-66 Southwest

SWMU 2-70.5

2-70

AOC 108.73

AOC 108.72

2-108

OA11: Building 2-72 Area

2-282

AOC 2-80.58

SWMU 2-80.56

SWMU 78.5

OA3: F UST PL

DUWAMISH WATERWAY

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 450 mg/kg
   CSL: 530 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

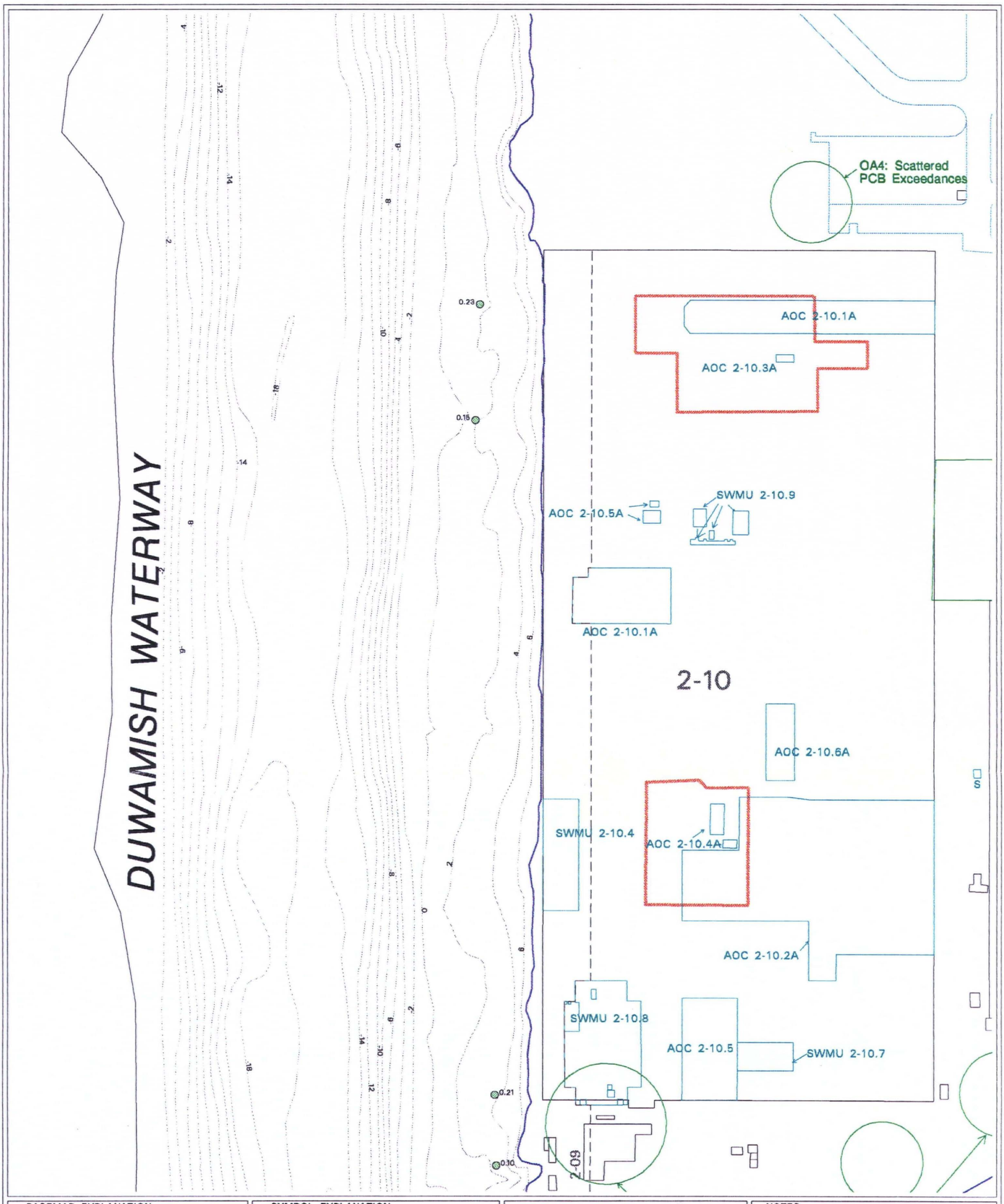
DATE: October 02, 1996 11:56 AM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Lead in Surface Sediment

Map 26c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 0.41 mg/kg
   CSL: 0.59 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

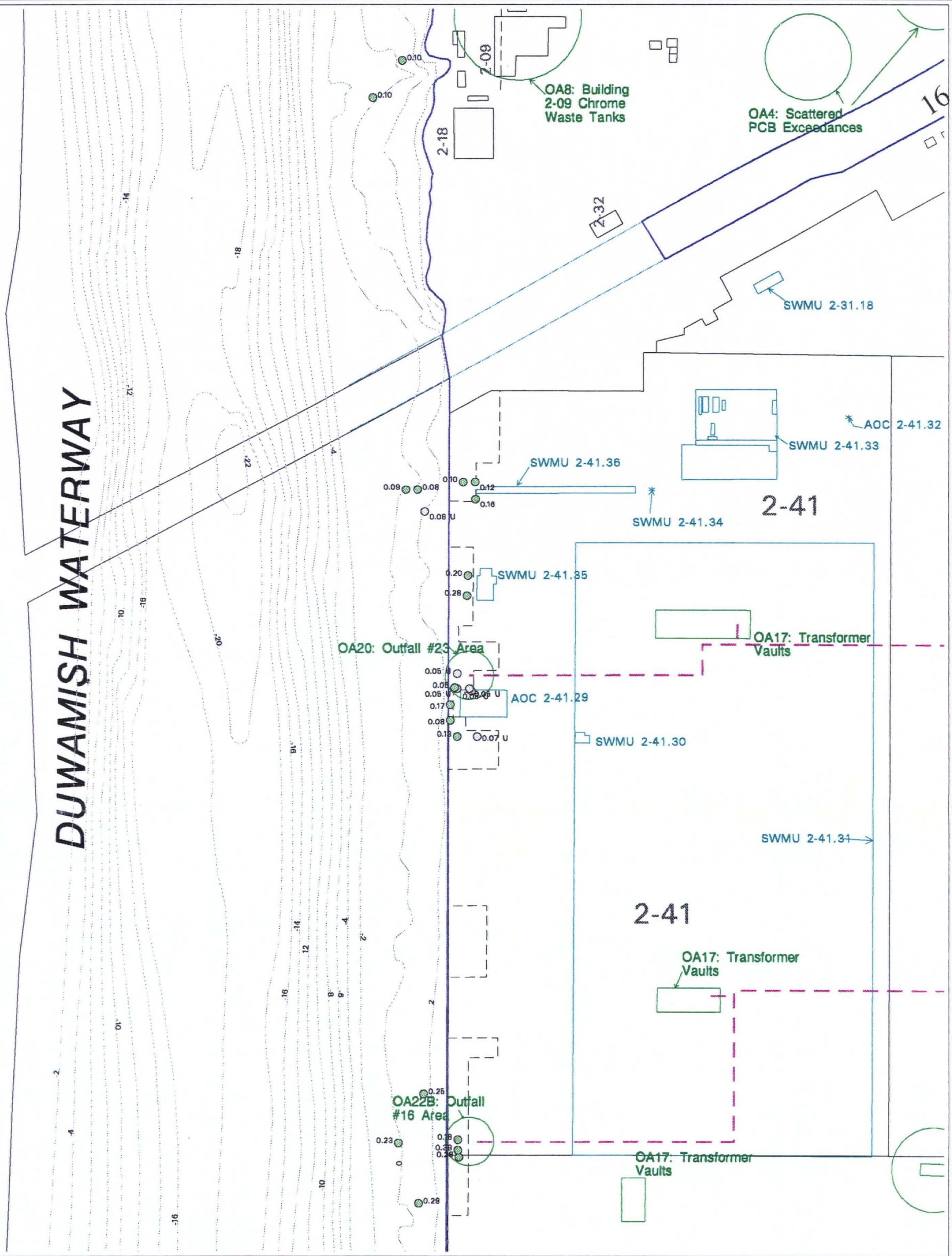
DATE: October 02, 1996 12:21 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Mercury in Surface Sediment

Map 27a



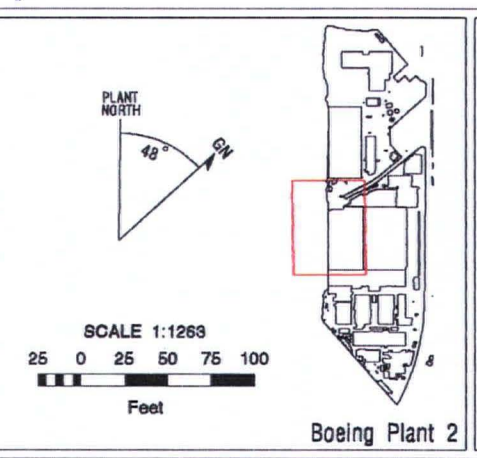
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 0.41 mg/kg
   CSL: 0.59 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

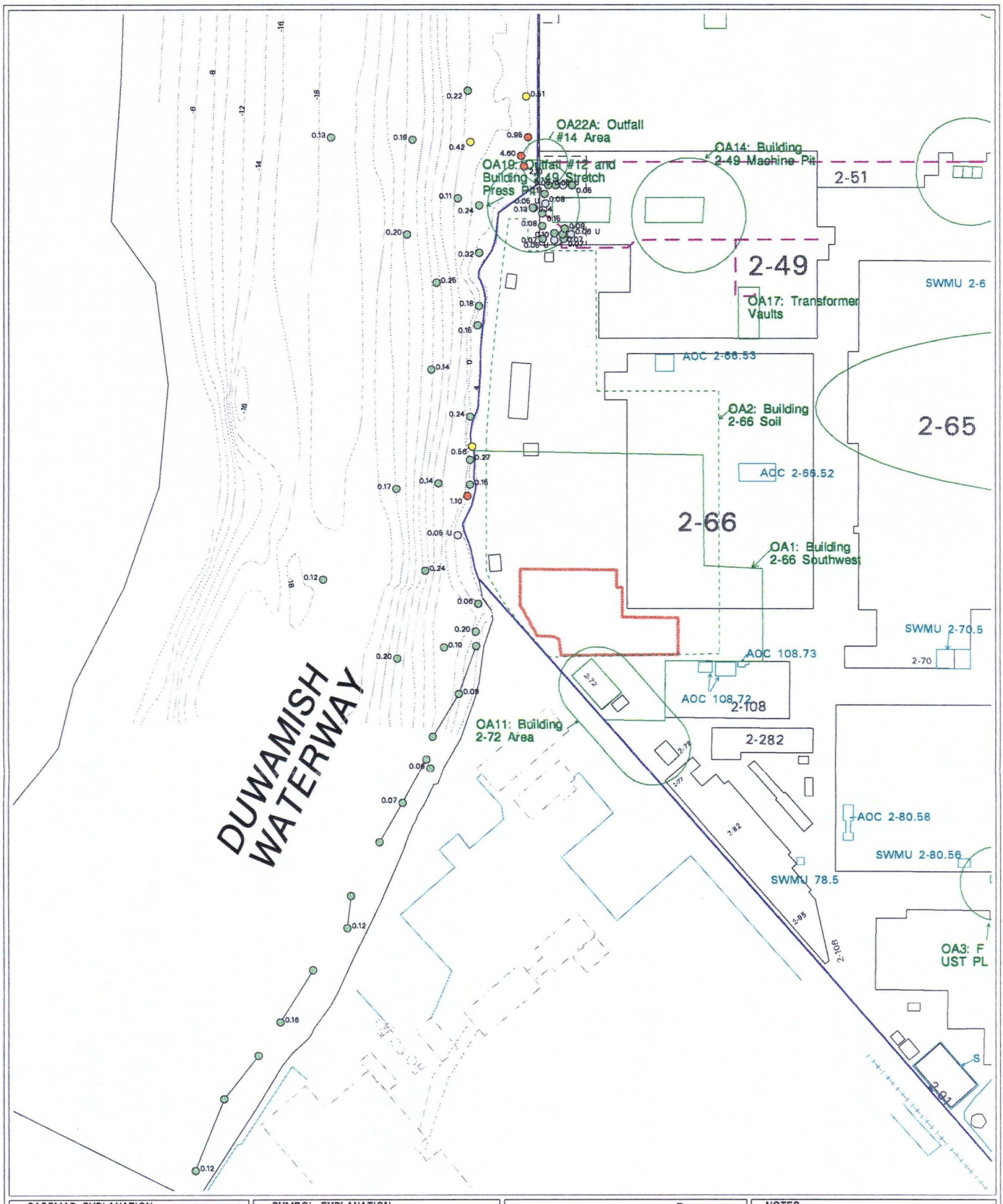
DATE: October 02, 1996 12:17 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Mercury in Surface Sediment

Map 27b



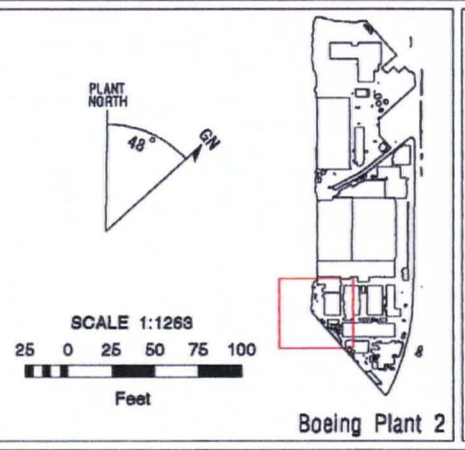
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 0.41 mg/kg
   CSL: 0.59 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

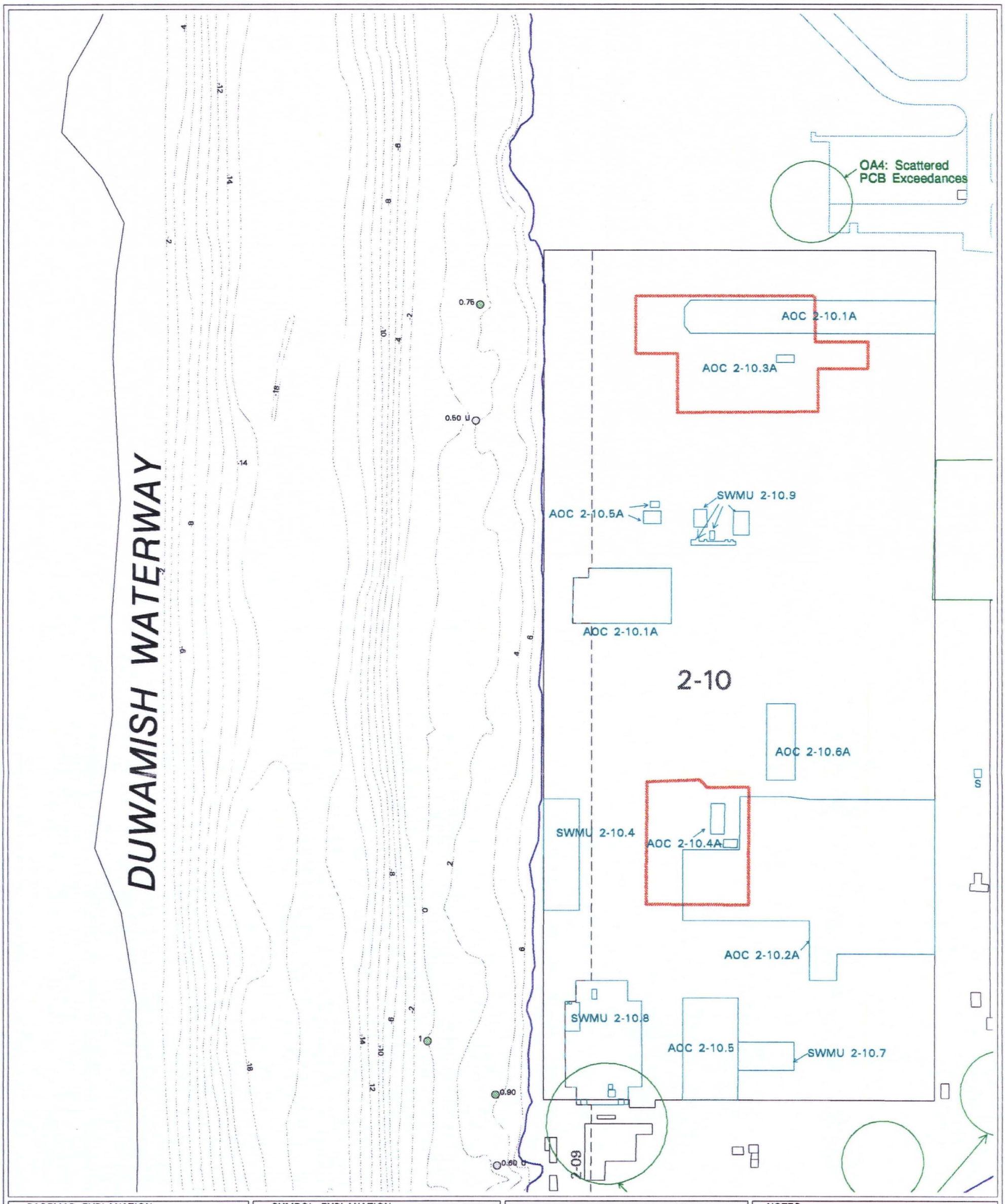
DATE: October 02, 1996 12:13 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Mercury in Surface Sediment

Map 27c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 6.1 mg/kg
   CSL: 6.1 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

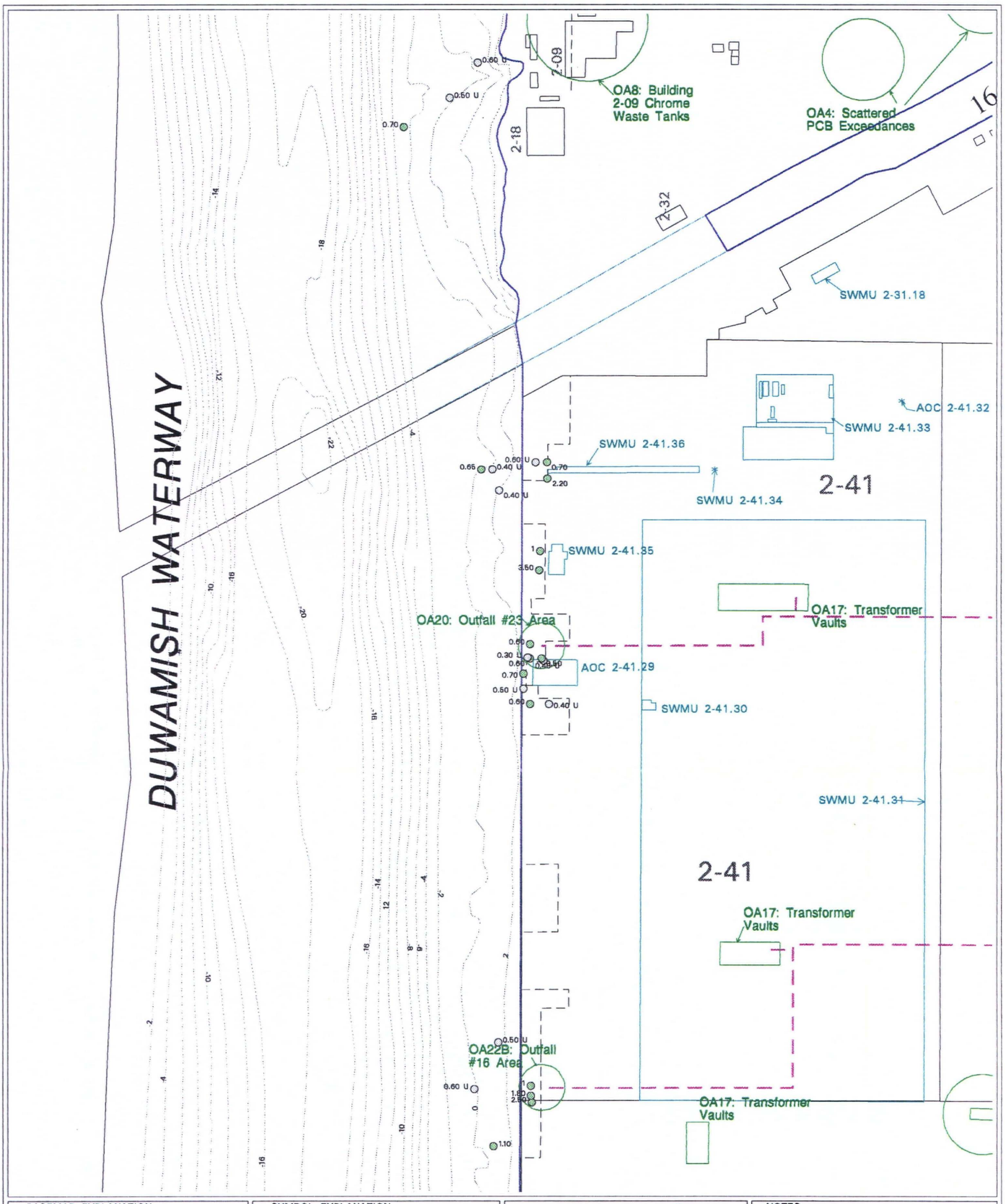
DATE: October 02, 1996 12:37 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Silver in Surface Sediment

Map 28a



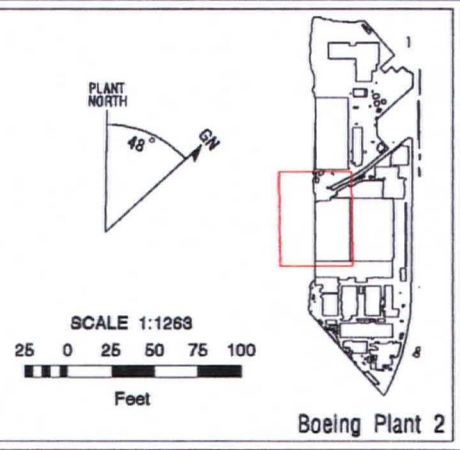
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 6.1 mg/kg
   CSL: 6.1 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

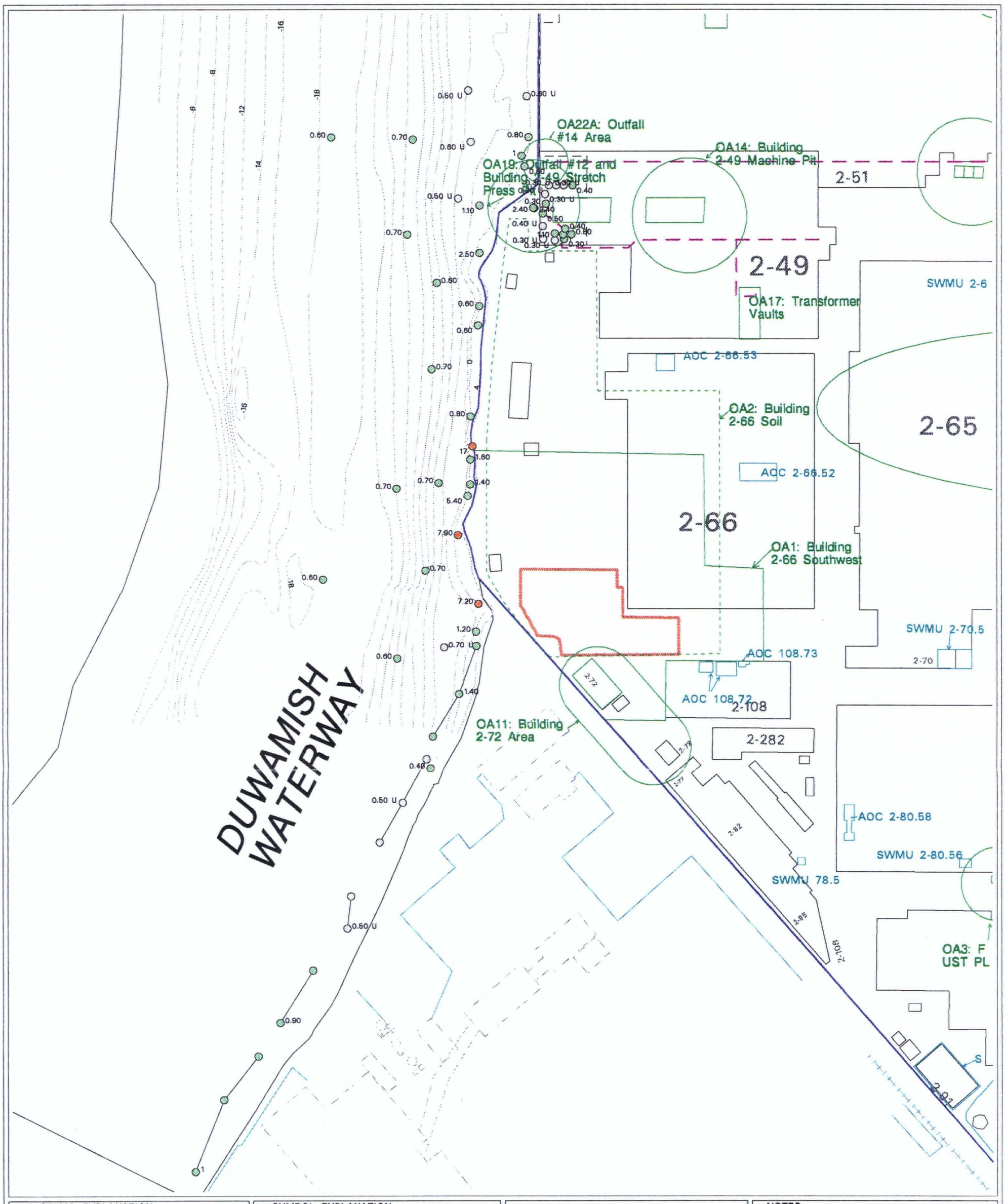
DATE: October 02, 1996 12:33 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Silver in Surface Sediment

Map 28b



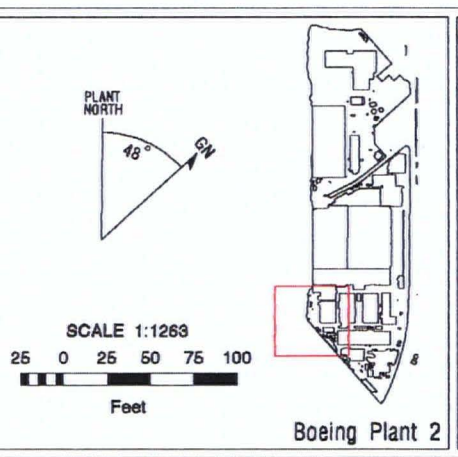
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 6.1 mg/kg
   CSL: 6.1 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

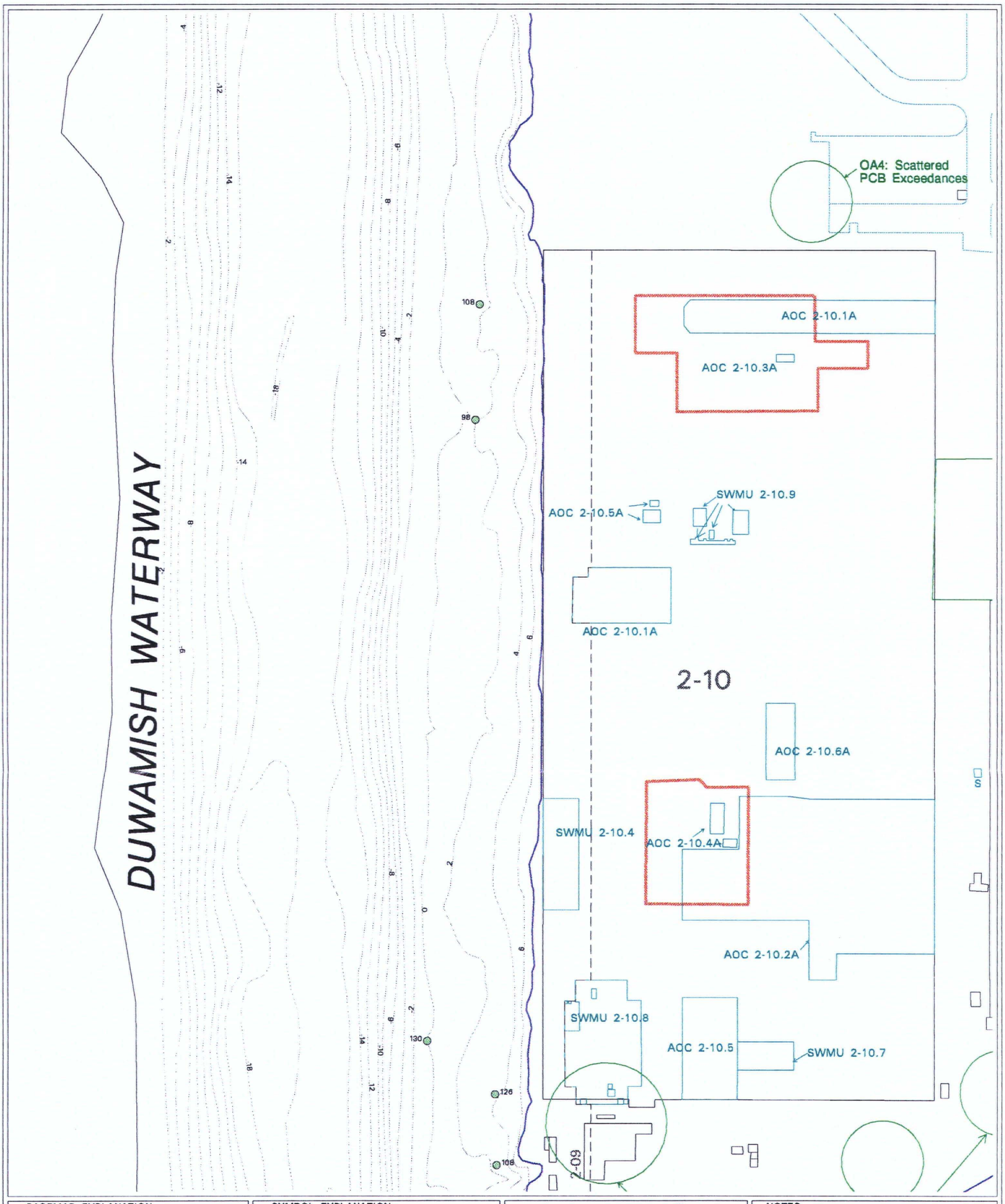
DATE: October 02, 1996 12:29 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Silver in Surface Sediment

Map 28c



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH
48°
GN

SCALE 1:1263
25 0 25 50 75 100
Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 410 mg/kg
   CSL: 960 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

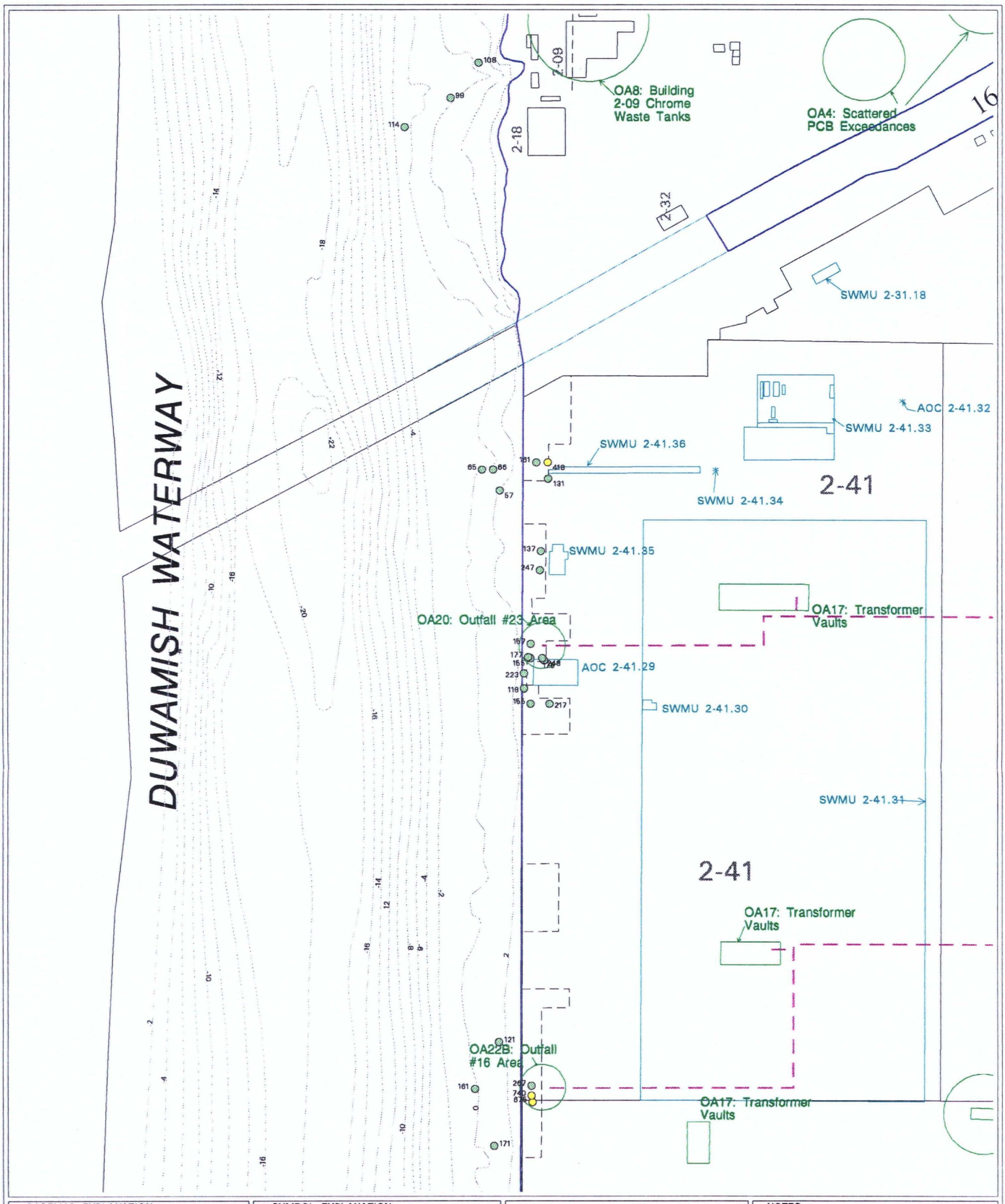
DATE: October 02, 1996 12:53 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Zinc in Surface Sediment

Map 29a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH 48° GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 410 mg/kg
   CSL: 960 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

DATE: October 02, 1996 12:49 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Zinc in Surface Sediment

Map 29b

OA22A: Outfall #14 Area

OA19: Outfall #12 and Building 2-49 Stretch Press Pit

OA14: Building 2-49 Machine Pit

2-51

2-49

OA17: Transformer Vaults

SWMU 2-6

AOC 2-66.53

OA2: Building 2-66 Soil

2-65

AOC 2-66.52

2-66

OA1: Building 2-66 Southwest

SWMU 2-70.5

2-70

AOC 108.73

AOC 108.72

2-108

OA11: Building 2-72 Area

2-282

AOC 2-80.58

SWMU 2-80.56

SWMU 78.5

OA3: F UST PL

DUWAMISH WATERWAY

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 410 mg/kg
   CSL: 960 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

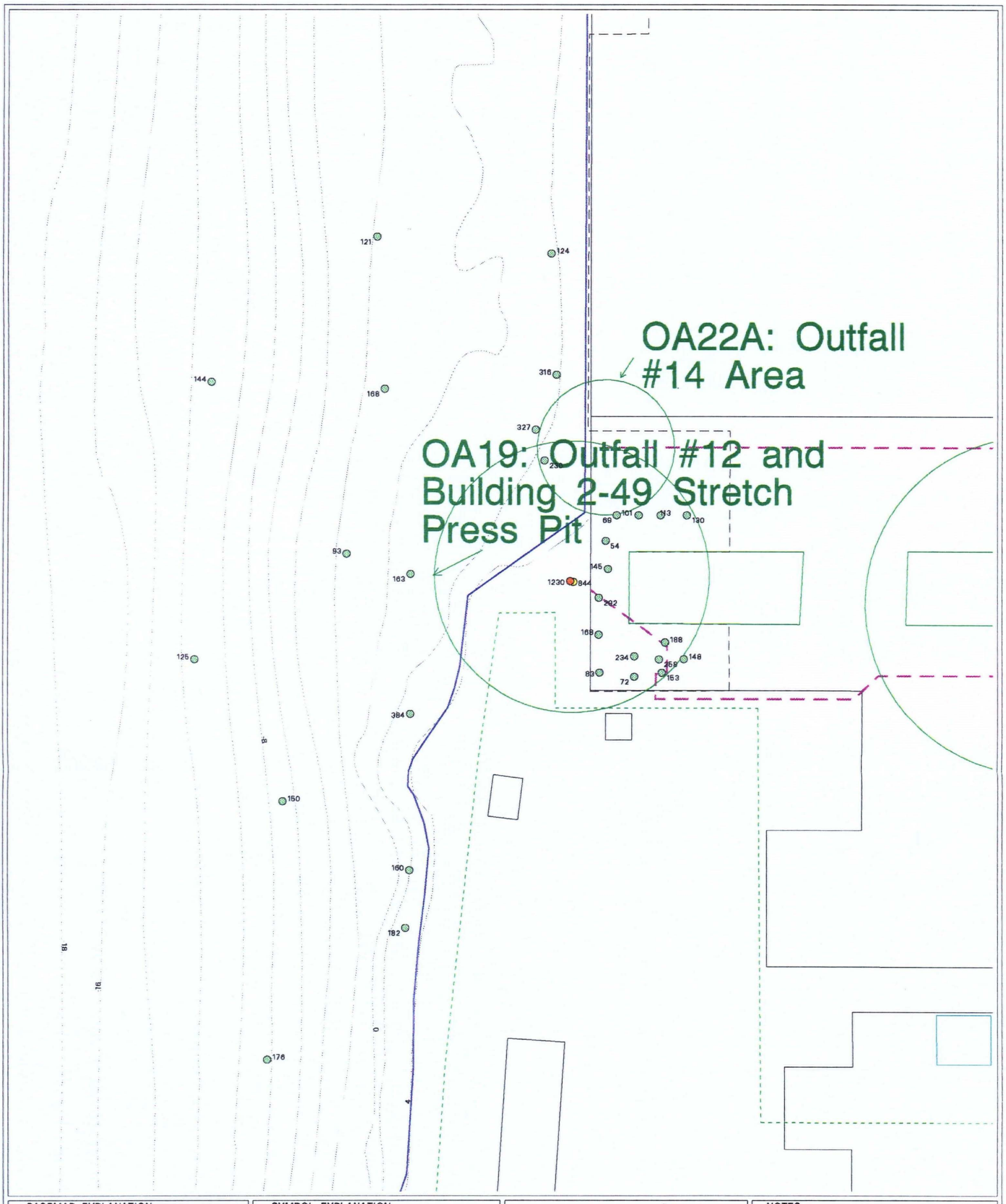
DATE: October 02, 1996 12:45 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Zinc in Surface Sediment

Map 29c



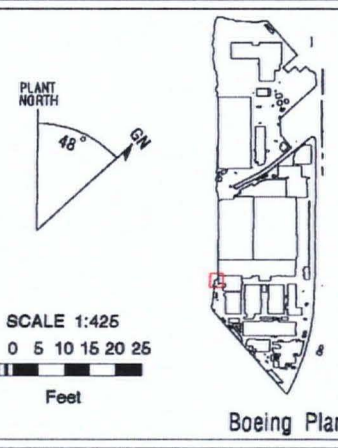
BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour
- Surface sediment composite sample

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below SQS
- Above SQS
- Above CSL



NOTES

1) All concentrations in mg/kg.
2) U - Analyte not detected. Value shown is the sample detection limit.
3) Reference concentration:
   SQS: 410 mg/kg
   CSL: 960 mg/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

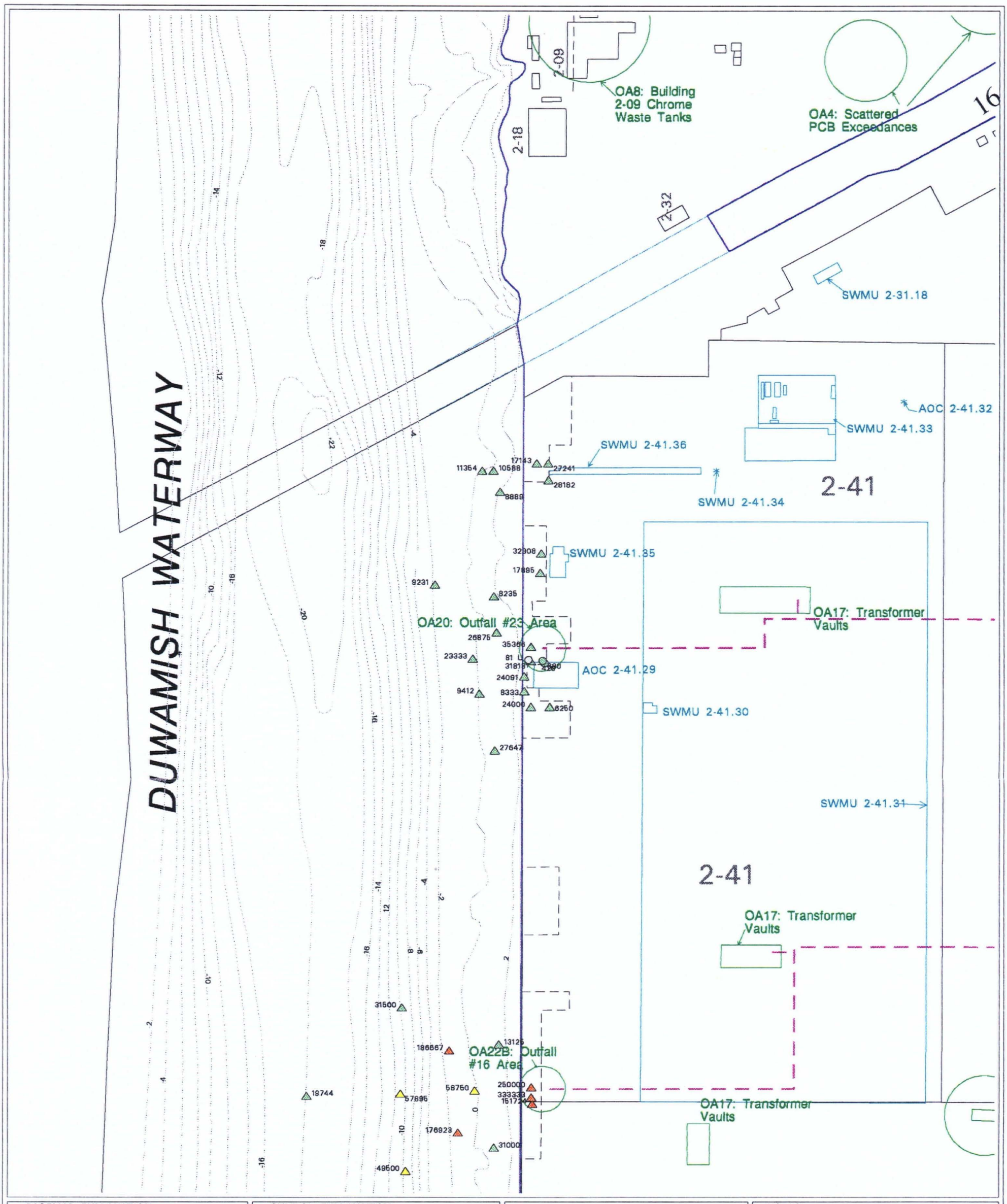
DATE: October 10, 1996 1:25 PM
JOB NUMBER: 03709-034-300-3543
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Total Zinc in Surface Sediment

Map 29d



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

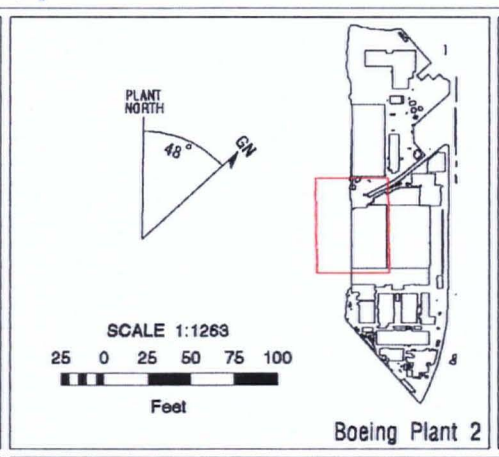
SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

TOTAL ORGANIC CARBON (TOC) NORMALIZED VALUES

- Non-Detect
- Below TOCN SQS
- Above TOCN SQS
- Above TOCN CSL



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the dry-weight sample detection limit.
3) Reference Concentrations:
   LAET: 1,300 ug/kg
   2LAET: 1,900 ug/kg
   SQS TOC Normalized: 47,000 ug/kg
   CSL TOC Normalized: 78,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

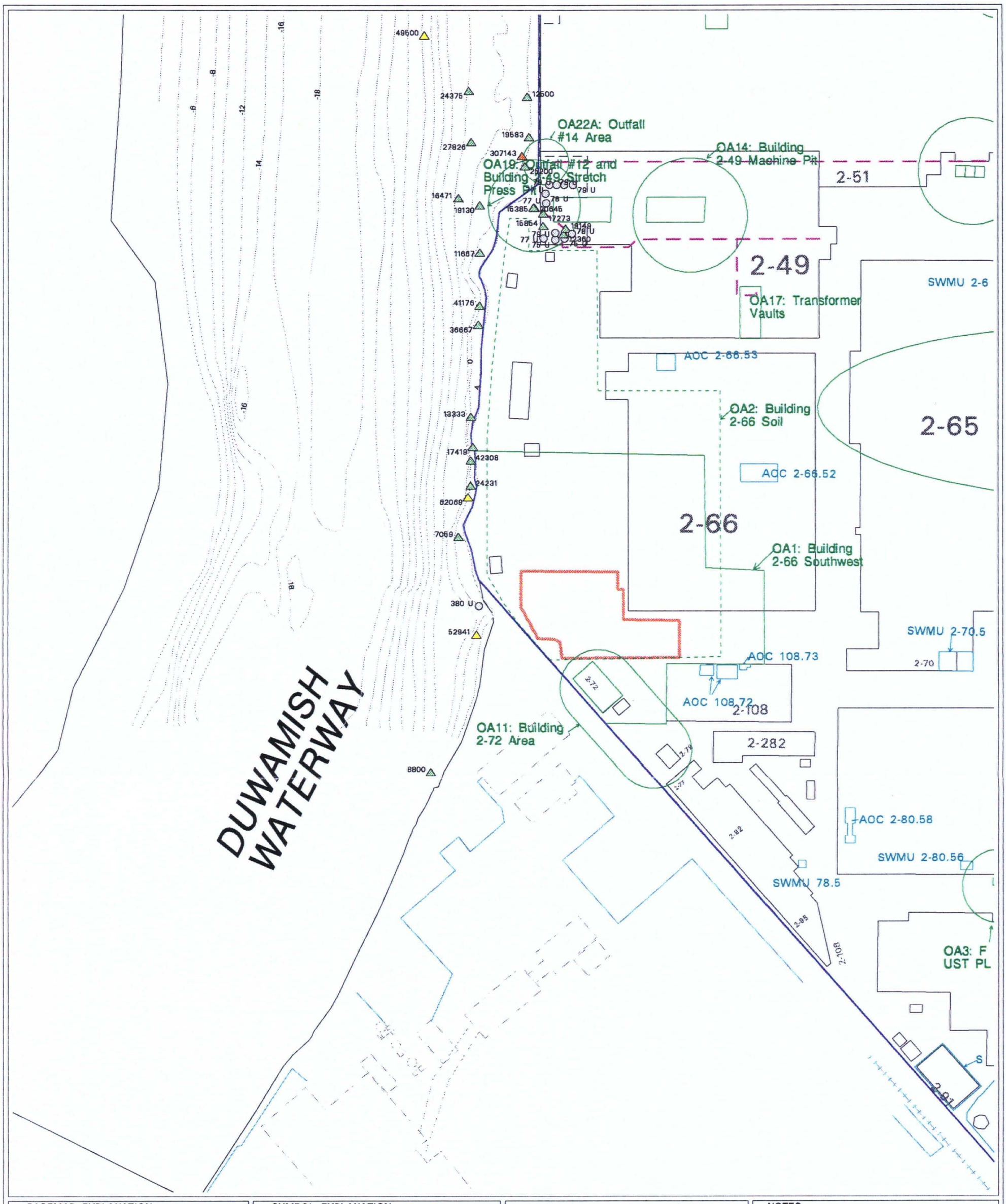
DATE: October 10, 1996 1:29 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of bis(2-Ethylhexyl)phthalate in Surface Sediment

Map 30a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

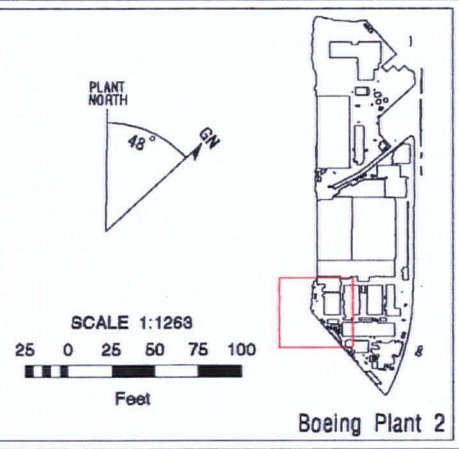
SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

TOTAL ORGANIC CARBON (TOC) NORMALIZED VALUES

- Non-Detect
- Below TOCN SQS
- Above TOCN SQS
- Above TOCN CSL



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the dry-weight sample detection limit.
3) Reference Concentrations:
   LAET: 1,300 ug/kg
   2LAET: 1,900 ug/kg
   SQS TOC Normalized: 47,000 ug/kg
   CSL TOC Normalized: 78,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

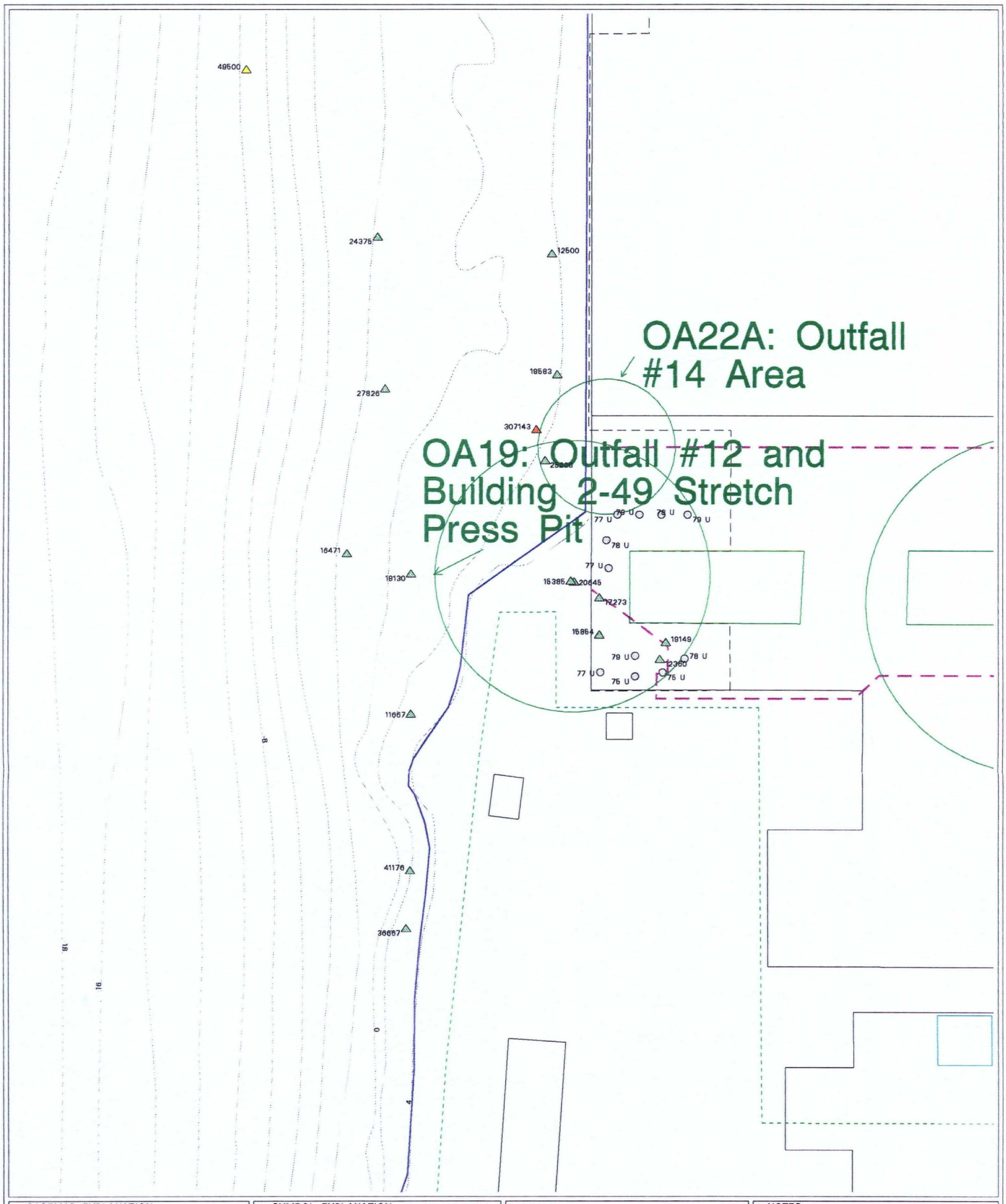
DATE: October 10, 1996 1:33 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of bis(2-Ethylhexyl)phthalate in Surface Sediment

Map 30b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

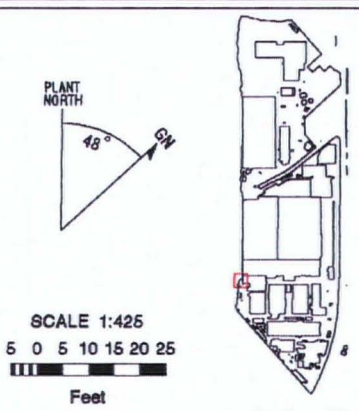
SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

TOTAL ORGANIC CARBON (TOC) NORMALIZED VALUES

- Non-Detect
- Below TOCN SQS
- Above TOCN SQS
- Above TOCN CSL



Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the dry-weight sample detection limit.
3) Reference Concentrations:
   LAET: 1,300 ug/kg
   2LAET: 1,900 ug/kg
   SQS TOC Normalized: 47,000 ug/kg
   CSL TOC Normalized: 78,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DATE: October 10, 1996 1:37 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of bis(2-Ethylhexyl)phthalate in Surface Sediment

Map 30c

DUWAMISH WATERWAY

OA8: Building 2-09 Chrome Waste Tanks

OA4: Scattered PCB Exceedances

2-09

2-18

2-32

SWMU 2-31.18

AOC 2-41.32

SWMU 2-41.33

SWMU 2-41.36

SWMU 2-41.34

2-41

SWMU 2-41.35

OA17: Transformer Vaults

OA20: Outfall #23 Area

AOC 2-41.29

SWMU 2-41.30

SWMU 2-41.31

2-41

OA17: Transformer Vaults

OA22B: Outfall #16 Area

OA17: Transformer Vaults

BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

TOTAL ORGANIC CARBON (TOC) NORMALIZED VALUES

- Non-Detect
- Below TOCN SQS
- Above TOCN SQS
- Above TOCN CSL

PLANT NORTH

48°

GN

SCALE 1:1263

25 0 25 50 75 100

Feet

Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the dry-weight sample detection limit.
3) Reference Concentrations:
   LAET: 63 ug/kg
   2LAET: 900 ug/kg
   SQS TOC Normalized: 4900 ug/kg
   CSL TOC Normalized: 64,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON

MANAGERS DESIGNERS/CONSULTANTS

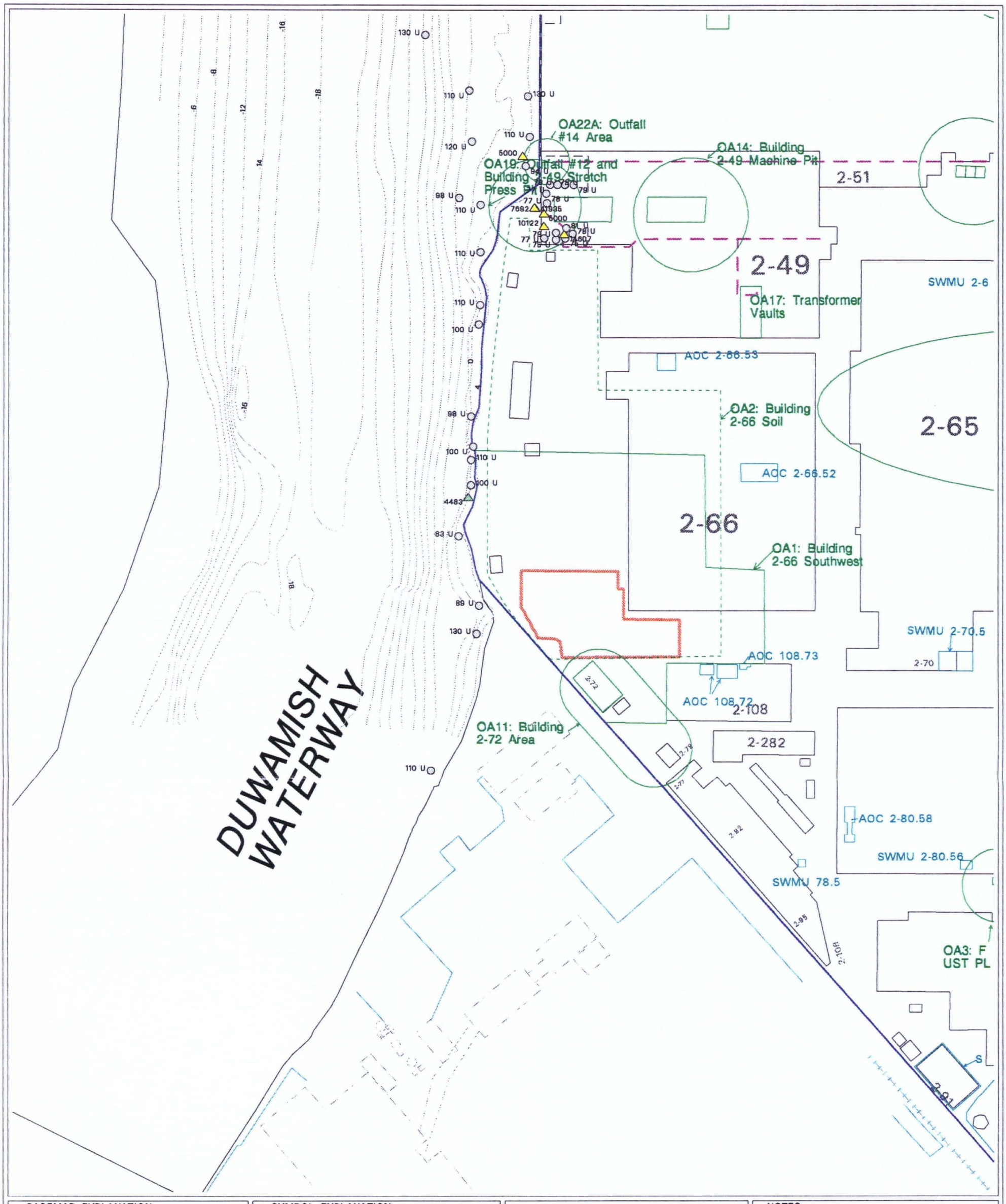
DATE: October 10, 1996 1:41 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Butylbenzylphthalate in Surface Sediment

Map 31a



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

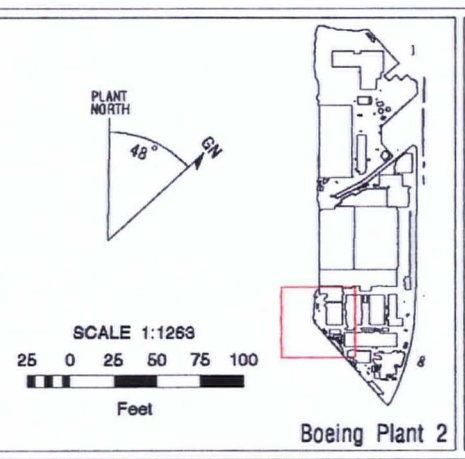
SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

TOTAL ORGANIC CARBON (TOC) NORMALIZED VALUES

- Non-Detect
- Below TOCN SQS
- Above TOCN SQS
- Above TOCN CSL



NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the dry-weight sample detection limit.
3) Reference Concentrations:
   LAET: 63 ug/kg
   2LAET: 900 ug/kg
   SQS TOC Normalized: 4900 ug/kg
   CSL TOC Normalized: 64,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

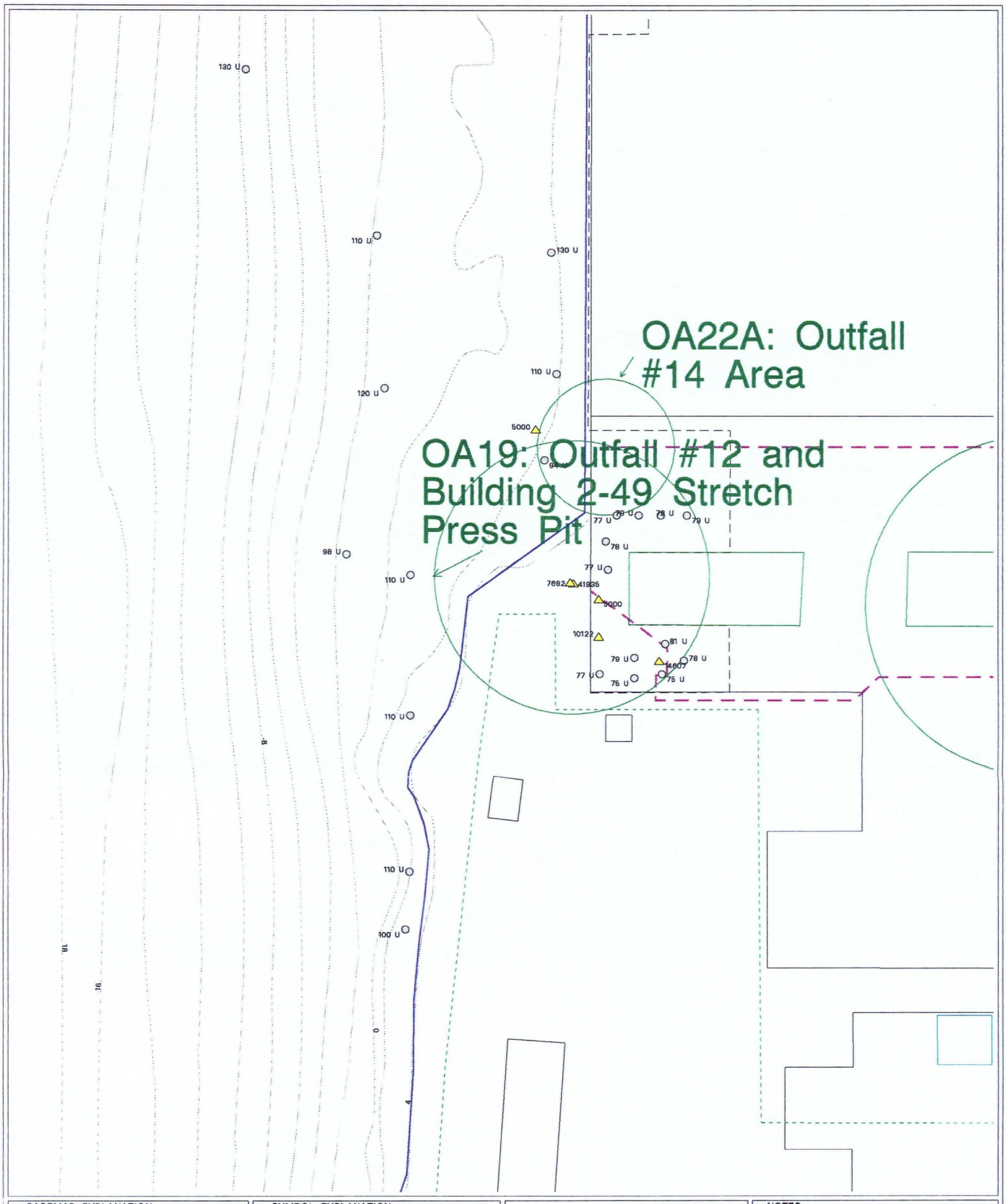
DATE: October 10, 1996 1:46 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

APPROVED BY: _____

Exceedance of Butylbenzylphthalate in Surface Sediment

Map 31b



BASEMAP EXPLANATION

- Facility Boundary
- Building
- SWMU/AOC
- Non-Boeing Building
- Building Bulkhead/Fill Boundary
- Sheet Pile Alignment
- Storm Drain
- Bathymetric Contour

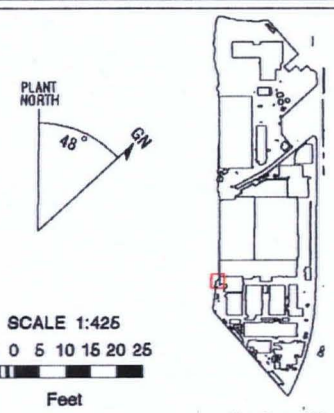
SYMBOL EXPLANATION

DRY WEIGHT VALUES

- Non-Detect
- Below LAET
- Above LAET
- Above 2LAET

TOTAL ORGANIC CARBON (TOC) NORMALIZED VALUES

- Non-Detect
- Below TOCN SQS
- Above TOCN SQS
- Above TOCN CSL



Boeing Plant 2

NOTES

1) All concentrations in ug/kg.
2) U - Analyte not detected. Value shown is the dry-weight sample detection limit.
3) Reference Concentrations:
   LAET: 63 ug/kg
   2LAET: 900 ug/kg
   SQS TOC Normalized: 4900 ug/kg
   CSL TOC Normalized: 64,000 ug/kg
4) Vertical Datum is:
   Mean Lower Low Water (MLLW)

WESTON MANAGERS DESIGNERS/CONSULTANTS

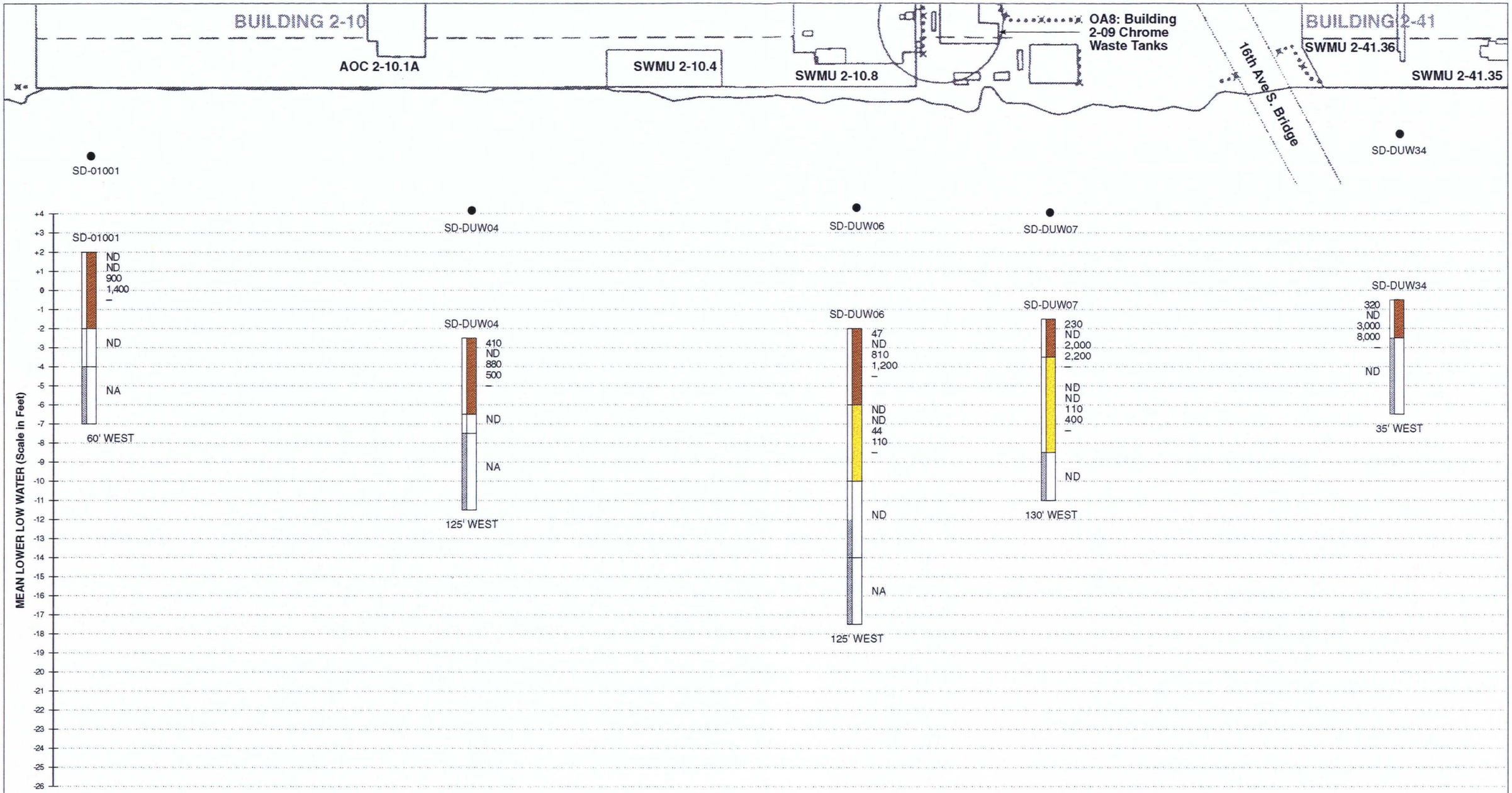
DATE: October 10, 1996 1:50 PM
JOB NUMBER: 03709-034-300-3543-00
LEAD GIS ANALYST: K. Palmer
VIEW FILE: duwamsed.view

CHECKED BY: _____

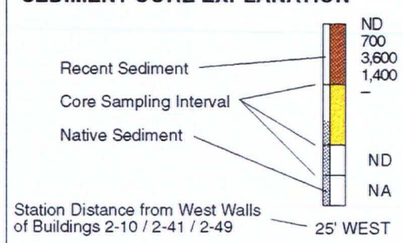
APPROVED BY: _____

Exceedance of Butylbenzylphthalate in Surface Sediment

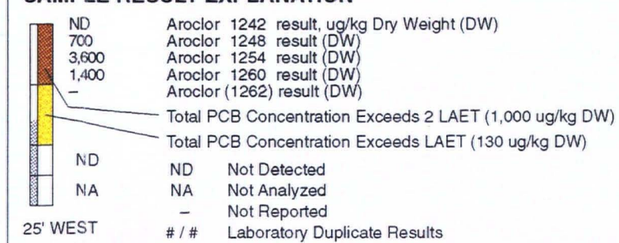
Map 31c



SEDIMENT CORE EXPLANATION



SAMPLE RESULT EXPLANATION



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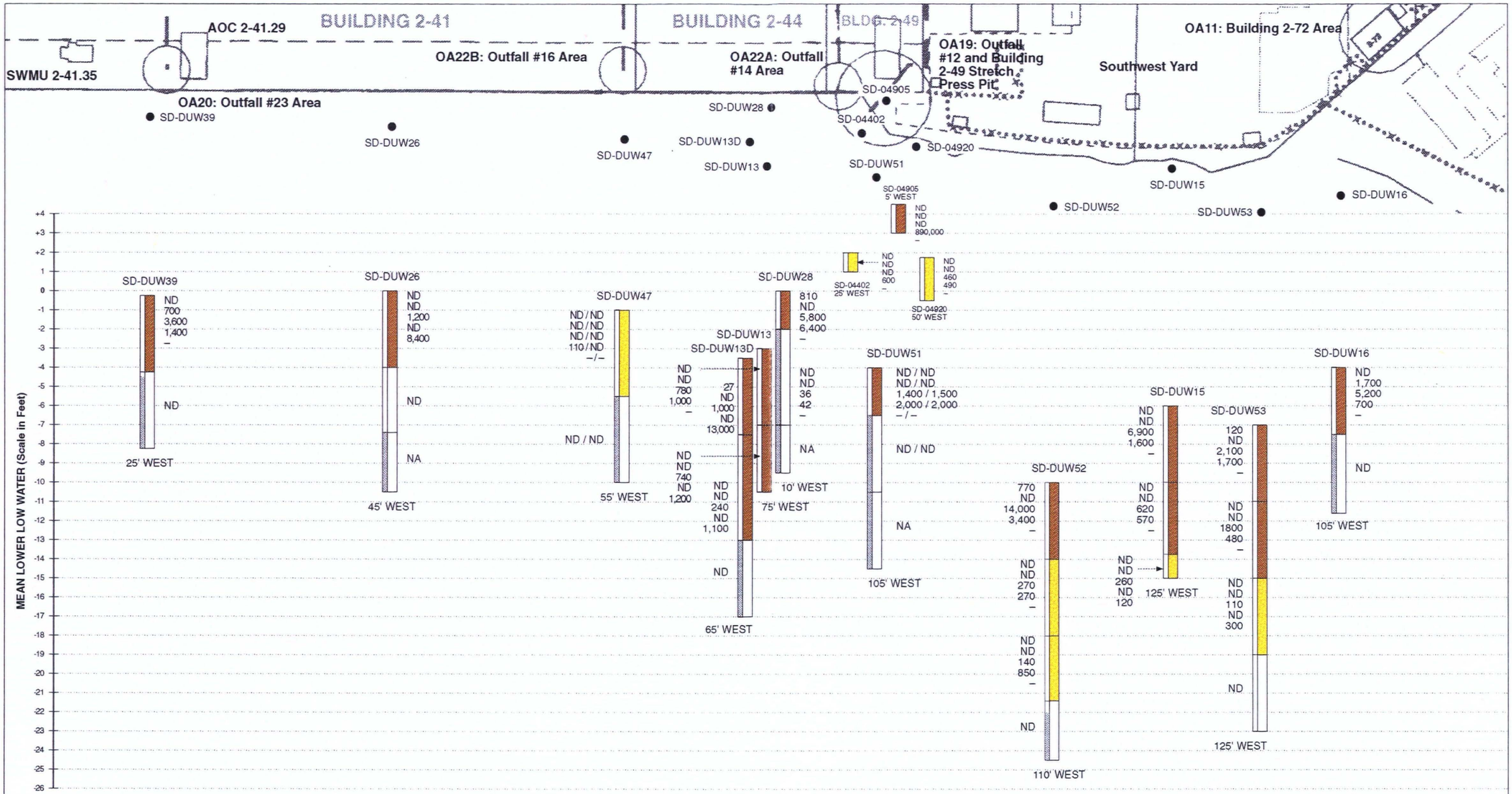
3709-34-300-3508-00
June 1996

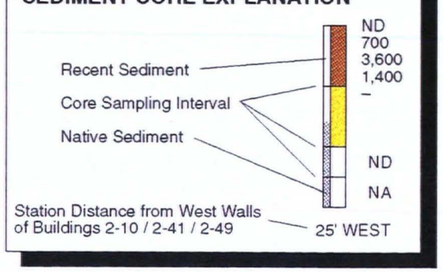
0 50 100
Horizontal Scale
Vertical Exaggeration = 20

Subsurface Sediment Aroclor Concentrations

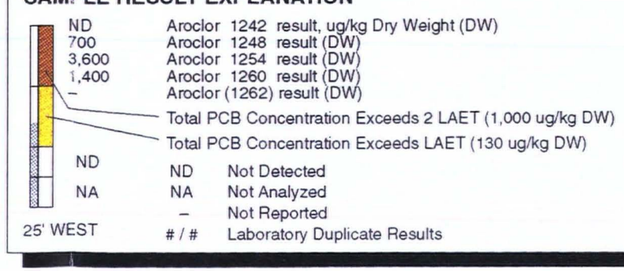
Map
32a



SEDIMENT CORE EXPLANATION



SAMPLE RESULT EXPLANATION



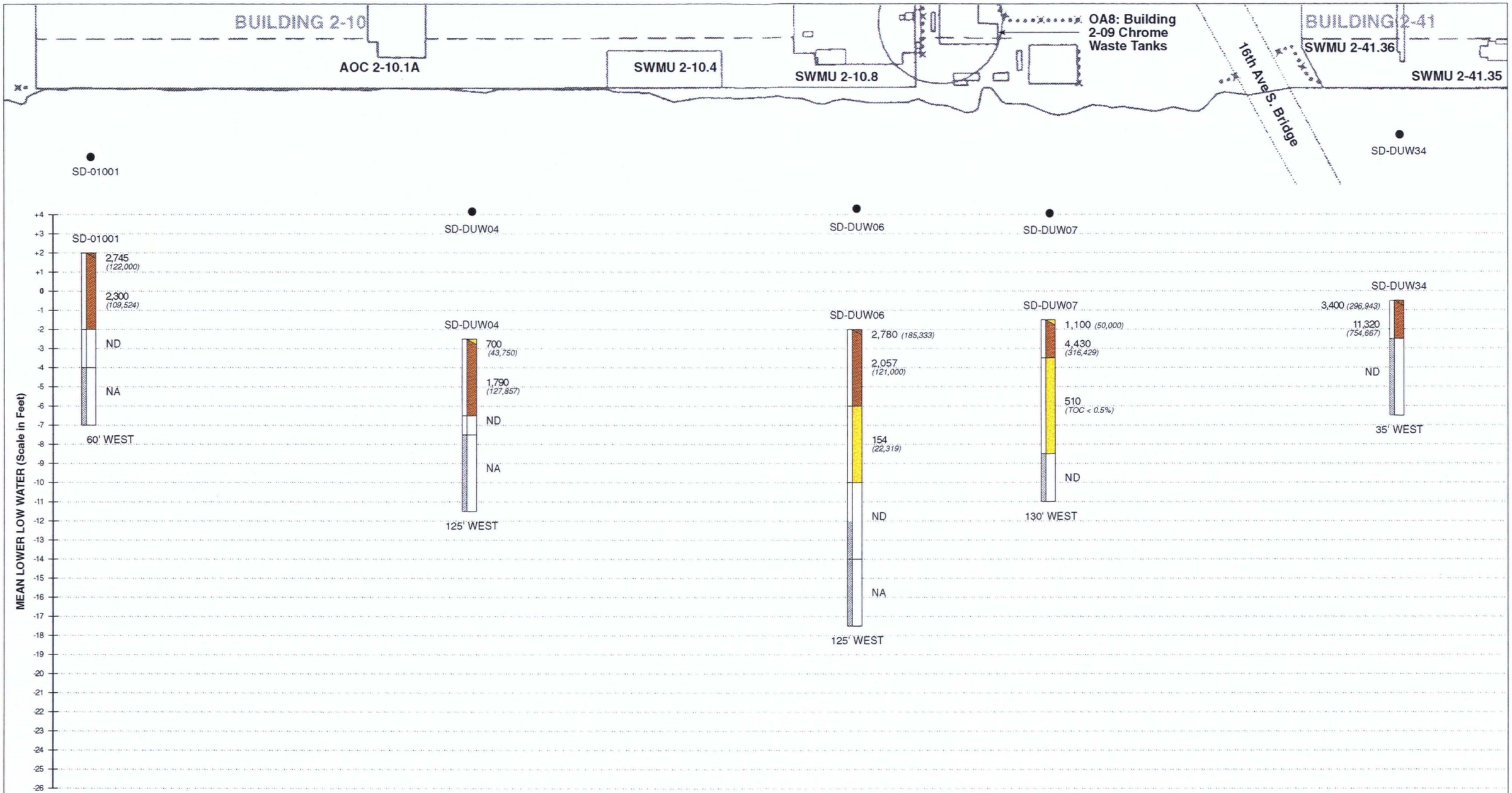
WESTON
MANAGERS DESIGNERS/CONSULTANTS

3709-34-300-3508-00
June 1996

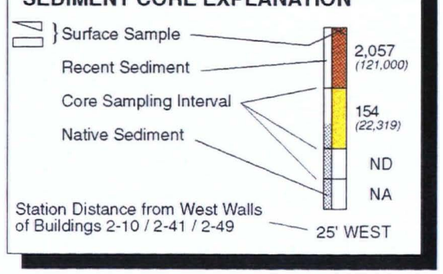
0 50 100
Horizontal Scale
Vertical Exaggeration = 20

Subsurface Sediment Aroclor Concentrations

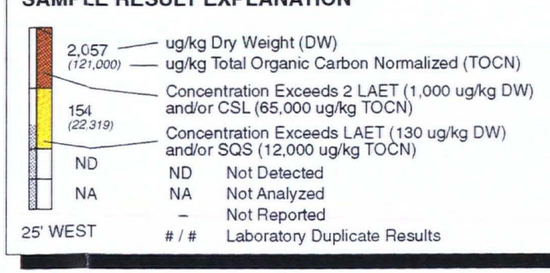
Map
32b



SEDIMENT CORE EXPLANATION



SAMPLE RESULT EXPLANATION



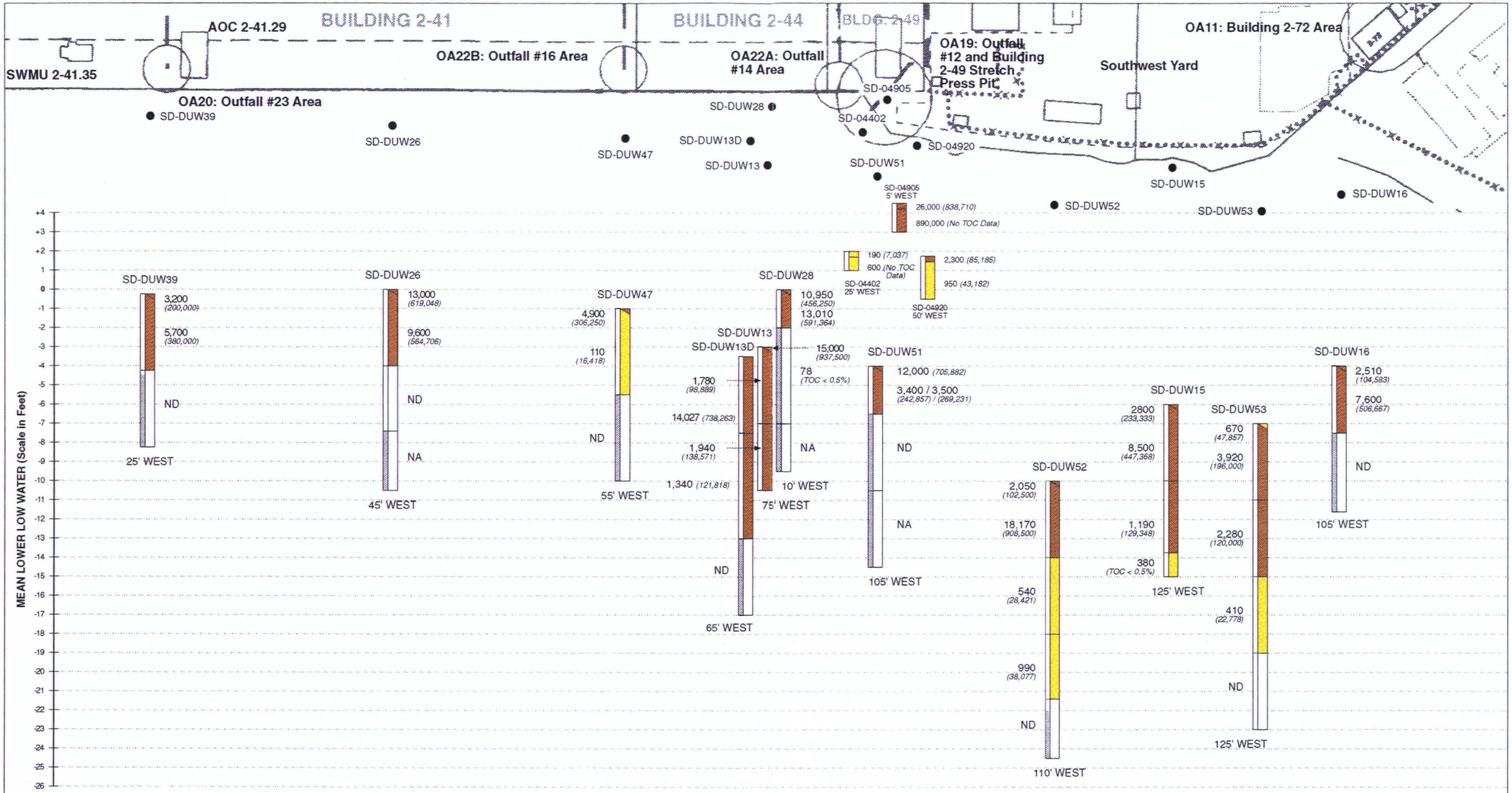
WESTON
MANAGERS DESIGNERS/CONSULTANTS

3709-34-300-3508-00
June 1996

0 50 100
Horizontal Scale
Vertical Exaggeration = 20

Subsurface Sediment Total PCB Concentrations

Map
33a



SEDIMENT CORE EXPLANATION

- Surface Sample
- Recent Sediment
- Core Sampling Interval
- Native Sediment

2,057 (121,000)
154 (22,319)
ND
NA

Station Distance from West Walls of Buildings 2-10 / 2-41 / 2-49 — 25' WEST

SAMPLE RESULT EXPLANATION

2,057 (121,000) — ug/kg Dry Weight (DW); ug/kg Total Organic Carbon Normalized (TOCN)

154 (22,319) — Concentration Exceeds 2 LAET (1,000 ug/kg DW) and/or CSL (65,000 ug/kg TOCN)

ND — Concentration Exceeds LAET (130 ug/kg DW) and/or SQS (12,000 ug/kg TOCN)

NA

25' WEST

ND	Not Detected
NA	Not Analyzed
–	Not Reported
# / #	Laboratory Duplicate Results

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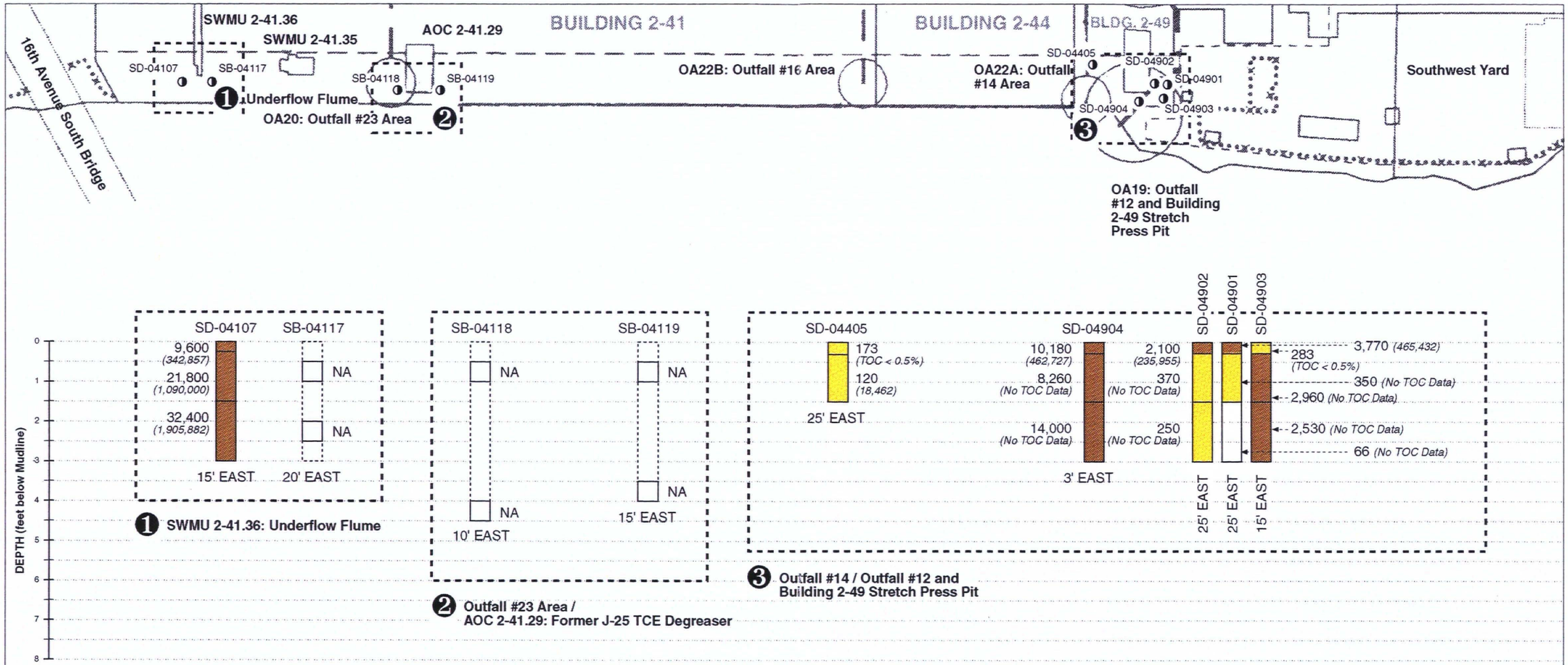
3709-34-300-3508-00
June 1996

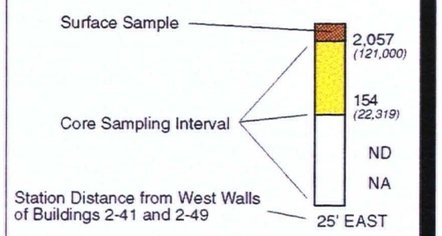
0 50 100
Horizontal Scale
Vertical Exaggeration = 20

Subsurface Sediment Total PCB Concentrations

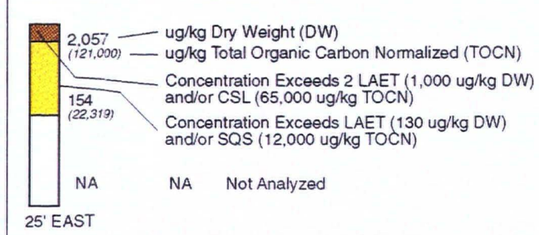
Map
33b



SEDIMENT CORE EXPLANATION



SAMPLE RESULT EXPLANATION



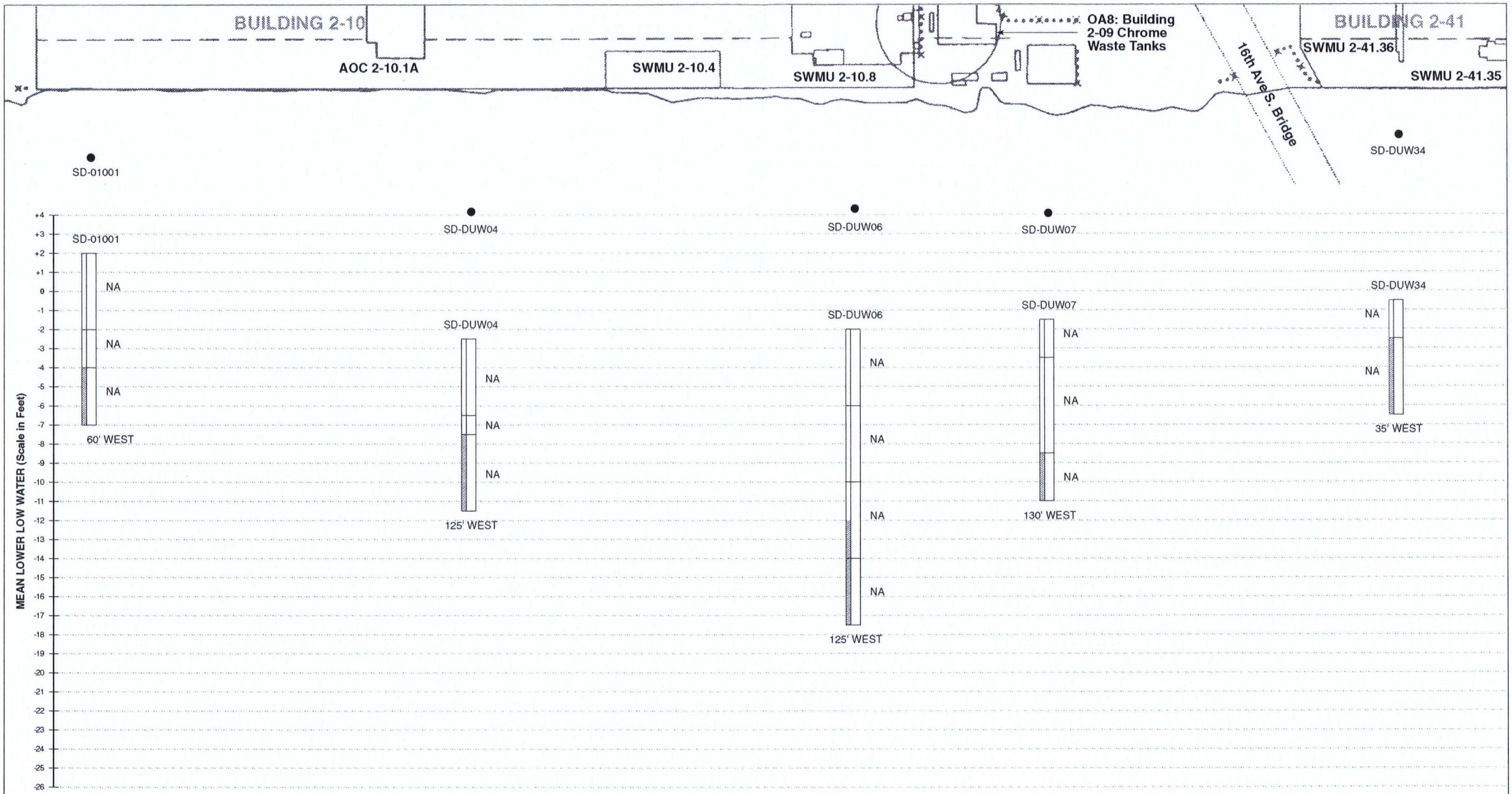
WESTON
MANAGERS DESIGNERS/CONSULTANTS

3709-34-300-3508-00
July 1996

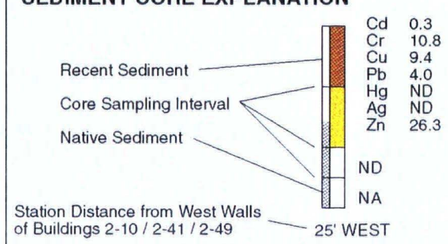
0 50 100
Horizontal Scale of cross section

Subsurface Sediment Total PCB Concentrations

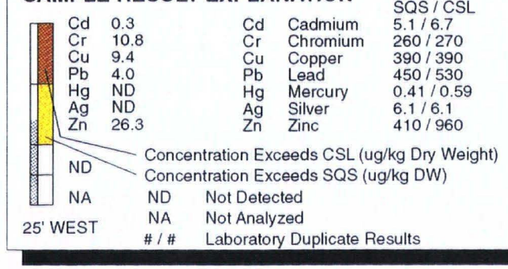
Map
33c



SEDIMENT CORE EXPLANATION



SAMPLE RESULT EXPLANATION



			SQS / CSL
Cd	Cadmium		5.1 / 6.7
Cr	Chromium		260 / 270
Cu	Copper		390 / 390
Pb	Lead		450 / 530
Hg	Mercury		0.41 / 0.59
Ag	Silver		6.1 / 6.1
Zn	Zinc		410 / 960

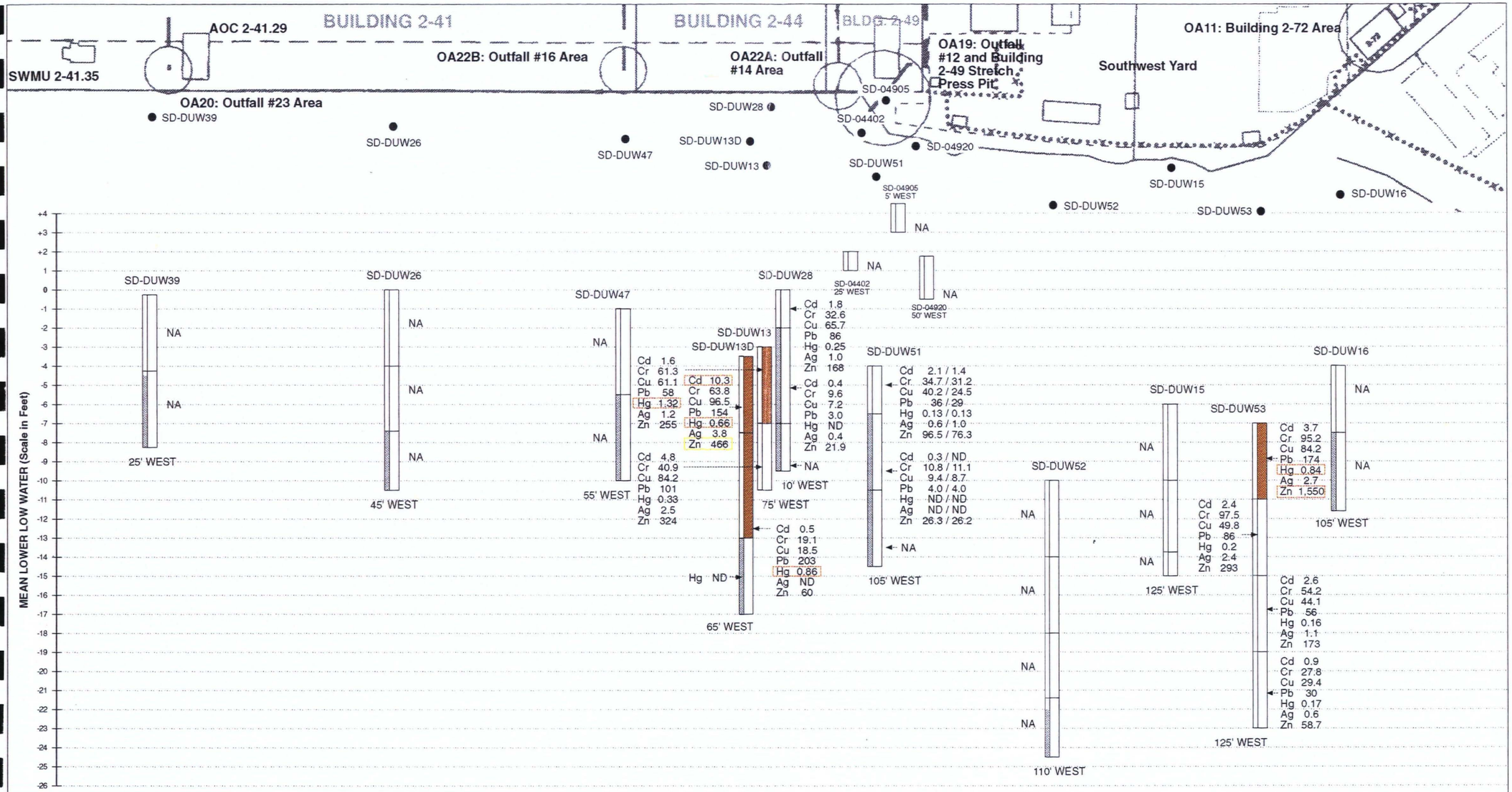
WESTON
MANAGERS DESIGNERS/CONSULTANTS

3709-34-300-3508-00
June 1996

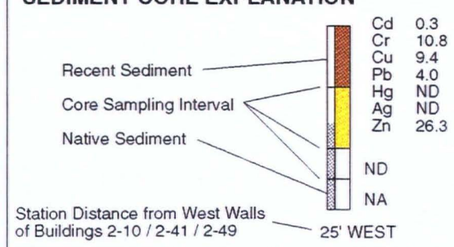
0 50 100
Horizontal Scale
Vertical Exaggeration = 20

Subsurface Sediment Metals Concentrations

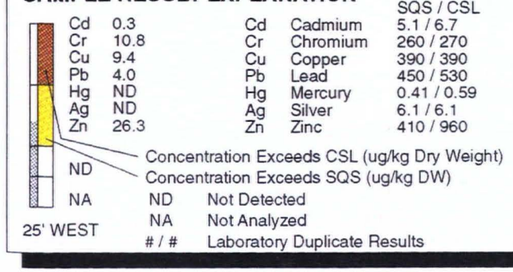
Map
34a



SEDIMENT CORE EXPLANATION



SAMPLE RESULT EXPLANATION



		SQS / CSL
Cd	Cadmium	5.1 / 6.7
Cr	Chromium	260 / 270
Cu	Copper	390 / 390
Pb	Lead	450 / 530
Hg	Mercury	0.41 / 0.59
Ag	Silver	6.1 / 6.1
Zn	Zinc	410 / 960

WESTON MANAGERS DESIGNERS/CONSULTANTS

3709-34-300-3508-00
June 1996

0 50 100
Horizontal Scale
Vertical Exaggeration = 20

Subsurface Sediment Metals Concentrations

Map
34b