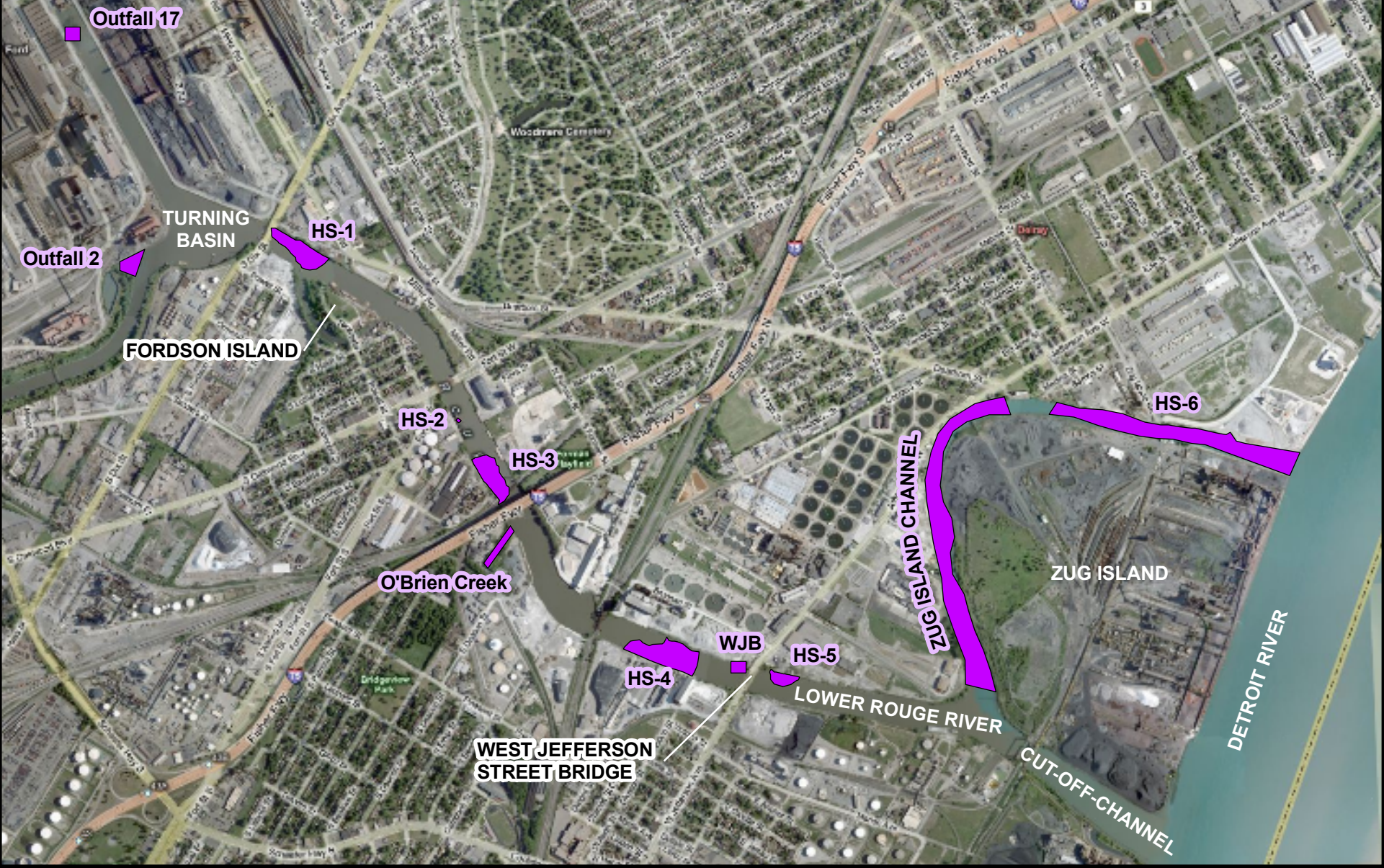

FIGURES

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F1-1_Location_Map.mxd, 20-May-10 08:46, wojdakon

Legend

 Hot Spot & Sampling Areas



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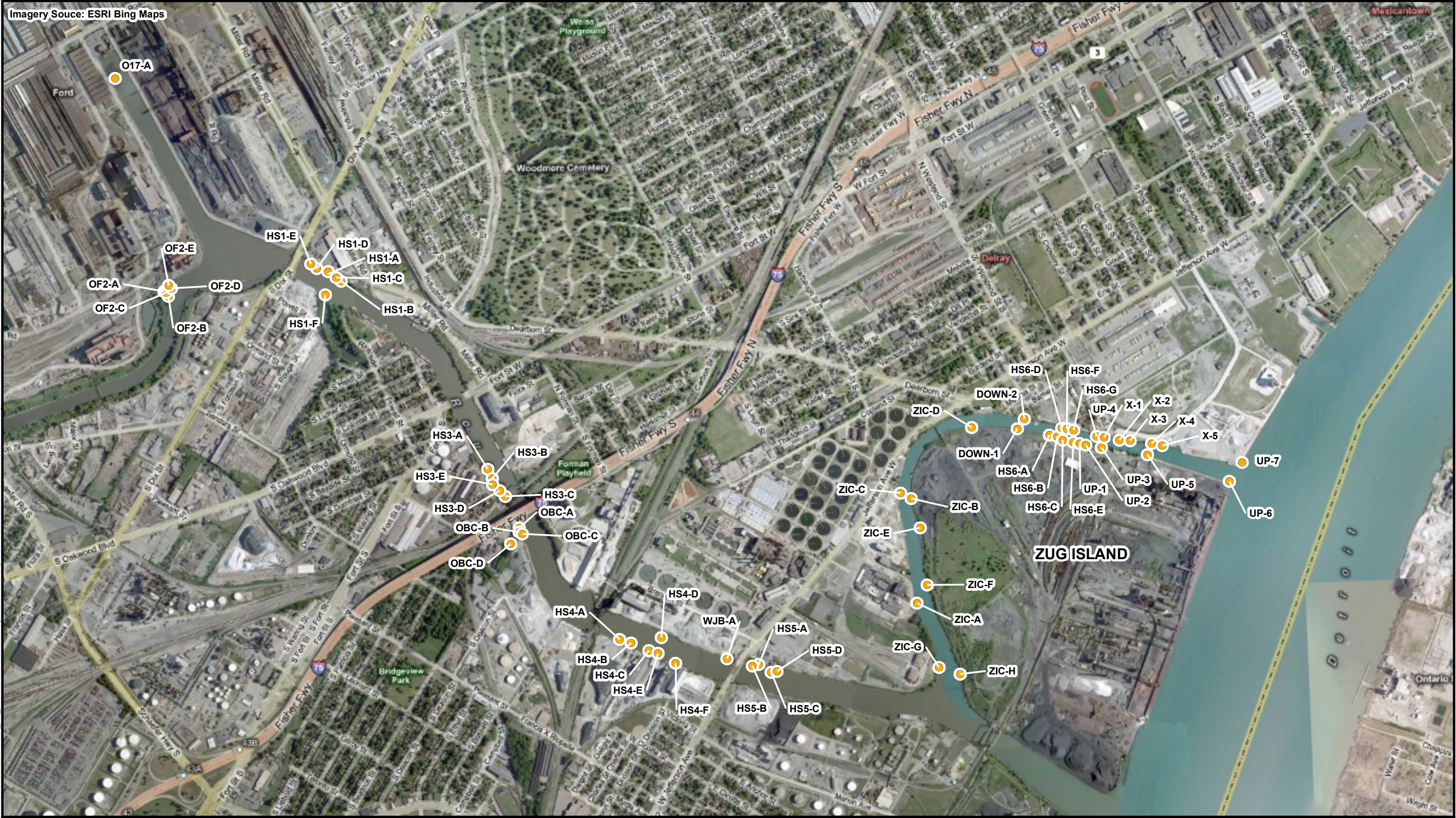


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Figure 1-1
Site Location Map
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-1_All_Locations.mxd, 19-May-10 10:09, wjldakon

Legend

- Sampling Locations



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Figure 2-1
 Sampling Locations
 Lower Rouge River
 Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-2_HS1_Locations.mxd, 19-May-10 10:08, wjojdakon

Legend

● Sampling Locations



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Figure 2-2
Sampling Locations - Hot Spot 1
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-3_HS3_Locations.mxd, 19-May-10 10:11, wojdakon

Legend

● Sampling Locations



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Figure 2-3
Sampling Locations - Hot Spot 3
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-4_HS4_Locations.mxd, 19-May-10 10:13, wjojdakon

Legend

● Sampling Locations



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Figure 2-4
Sampling Locations - Hot Spot 4
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-5_HS5_Locations.mxd, 19-May-10 12:29, wjojdakon

Legend

● Sampling Locations



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Figure 2-5
Sampling Locations - Hot Spot 5 and
West Jefferson Street Bridge
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-6_HS6-ZIC_Locations.mxd, 19-May-10 10:14, wojdakon

Legend

● Sampling Locations

0 700 Feet



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Figure 2-6
Sampling Locations - Hot Spot 6 and
Zug Island Channel
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-7_OBC_Locations.mxd, 19-May-10 10:15, wjojdakon

Legend

● Sampling Locations



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Figure 2-7
Sampling Locations - O'Brien Creek
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-8_OF2_Locations.mxd, 19-May-10 10:15, wojdakon

Legend

● Sampling Locations



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Figure 2-8
Sampling Locations - Outfall 2
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-9_OF17_Locations.mxd, 19-May-10 10:16, wojdakon

Legend

● Sampling Locations



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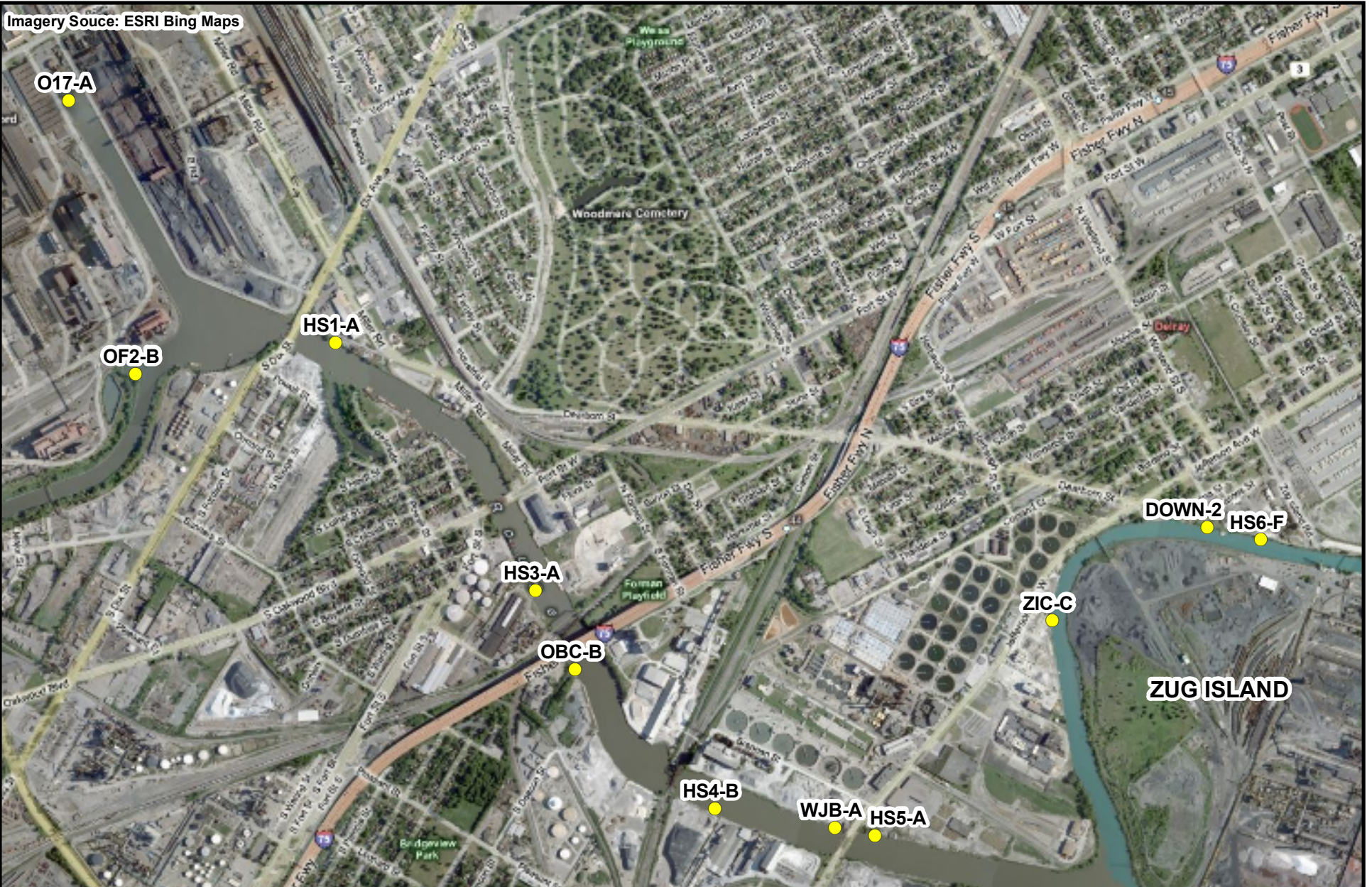


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Figure 2-9
Sampling Locations - Outfall 17
Lower Rouge River
Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F2-10_Tox_Locations.mxd, 19-May-10 10:17, wojdakon

Legend

● Toxicity
Sampling Locations



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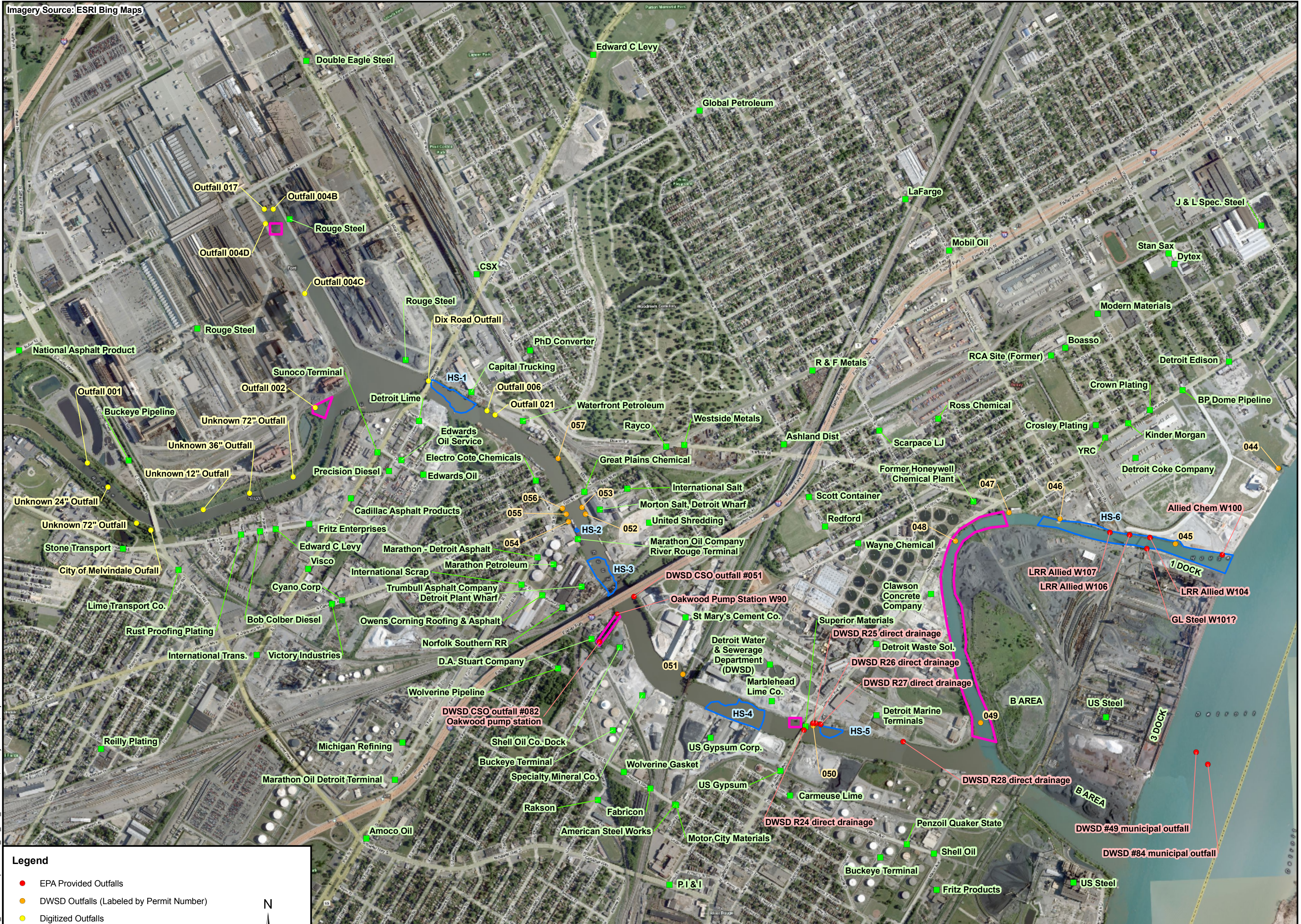
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Figure 2-10
Toxicity Sampling Locations
Lower Rouge River
Detroit, Wayne County, Michigan



File: D:\Lower_Rouge_River\mxd\Report\F2-11_Ind_Fac_Outfalls.mxd, 24-May-10 11:55: wjstakom

Legend

- EPA Provided Outfalls
- DWSD Outfalls (Labeled by Permit Number)
- Digitized Outfalls
- Facilities
- Hot Spot Areas
- Additional Sampling Areas

0 1,000

Feet

N

NOTES:

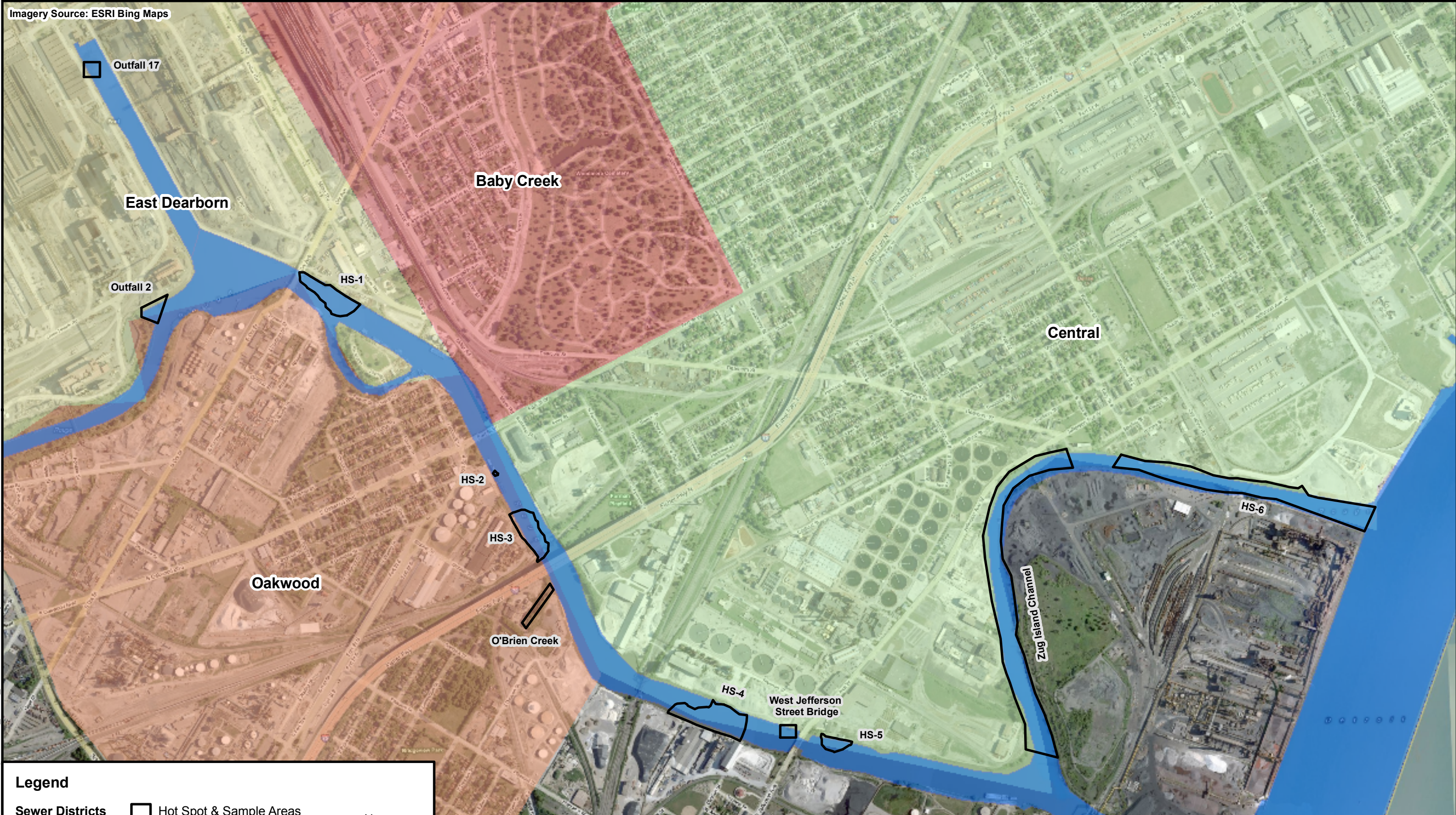
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Vernon Hills, Illinois 60061

Figure 2-11
Industrial Facility and Outfall Locations
Lower Rouge River
Detroit, Wayne Co, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F2-12_Sewer_Districts.mxd, 24-May-10 10:12, wojdakon

Imagery Source: ESRI Bing Maps



Legend

Sewer Districts

- Baby Creek
- Central
- East Dearborn
- Oakwood

Hot Spot & Sample Areas

- Hot Spot & Sample Areas
- Water

0 1,100 Feet



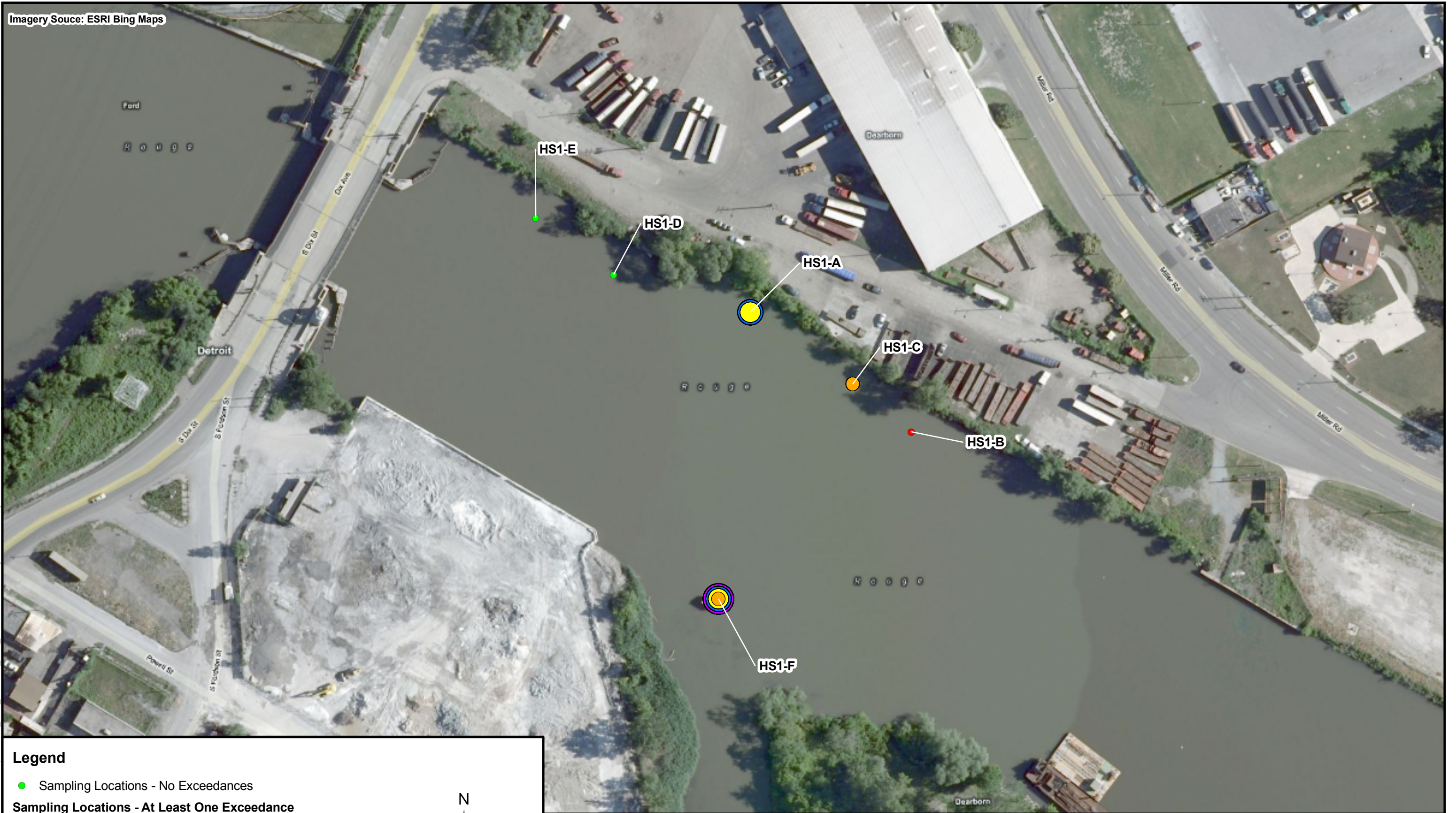
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Figure 2-12
 Lower River Rouge Sewer Districts
 Lower Rouge River
 Detroit, Wayne Co, Michigan

Imagery Source: ESRI Bing Maps



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



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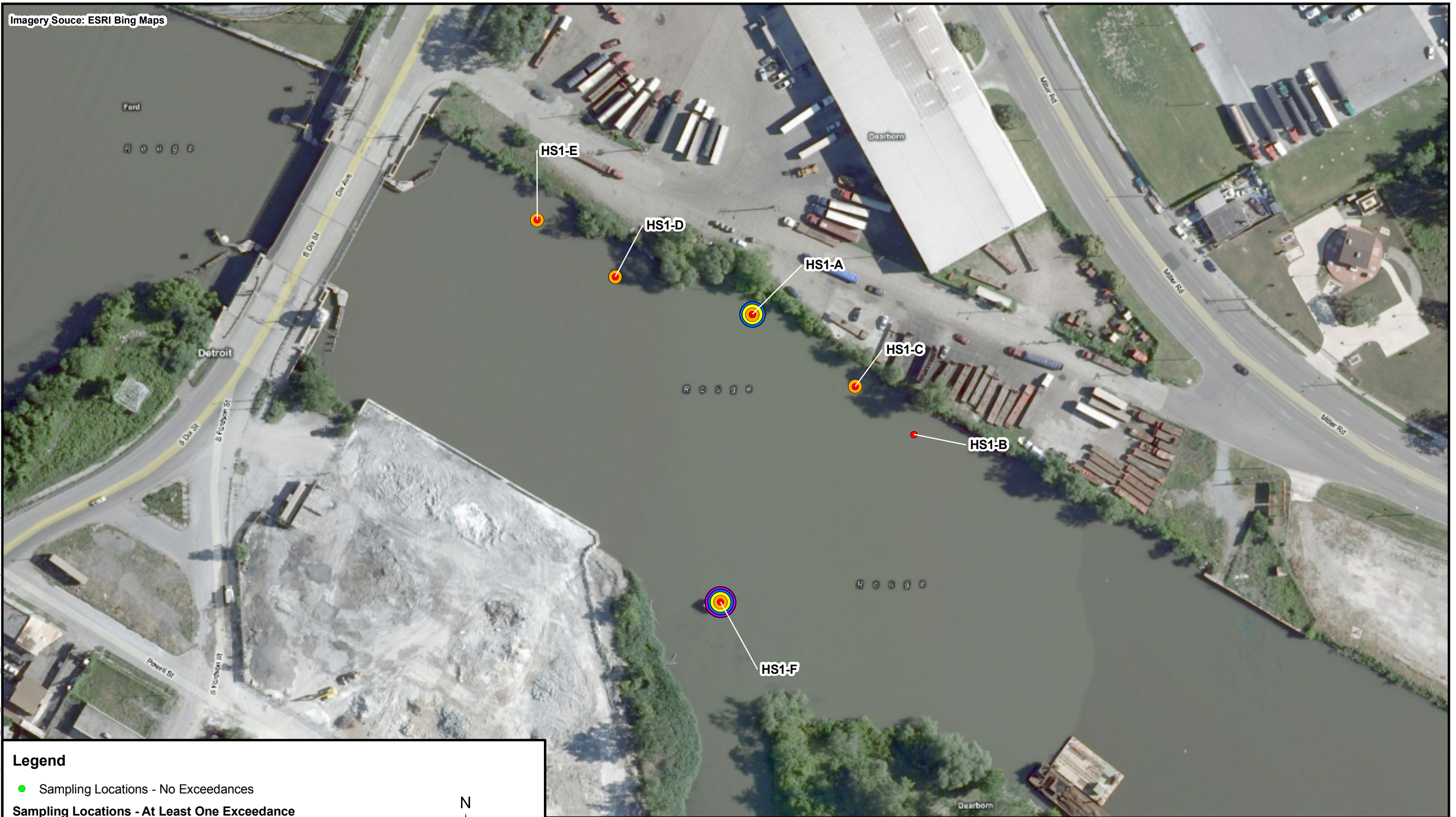


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Figure 3-1
 PEC Exceedances - Metals
 Hot Spot 1
 Lower Rouge River
 Detroit, Wayne County, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F3-1_PEC_Exceeds_HS1_Metals.mxd, 19-May-10 10:24, wojdakon

Imagery Source: ESRI Bing Maps



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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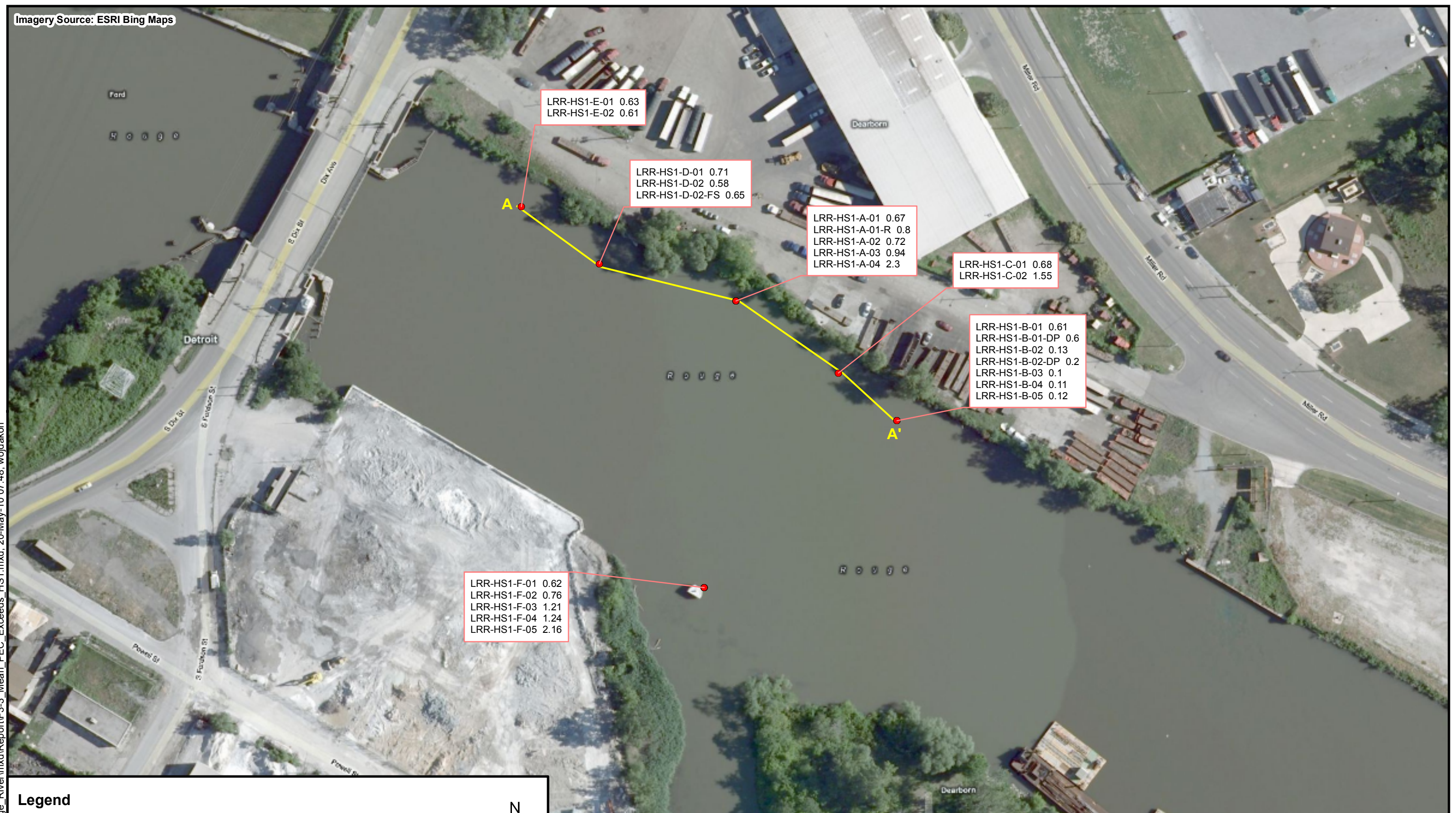


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Figure 3-2
 PEC Exceedances - Total PAHs
 Hot Spot 1
 Lower Rouge River
 Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps

File: D:\Lower_Rouge_River\mxd\Report\F3-3_Mean_PEC_Exceeds_HS1.mxd, 20-May-10 07:48, wjoidakon



Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location

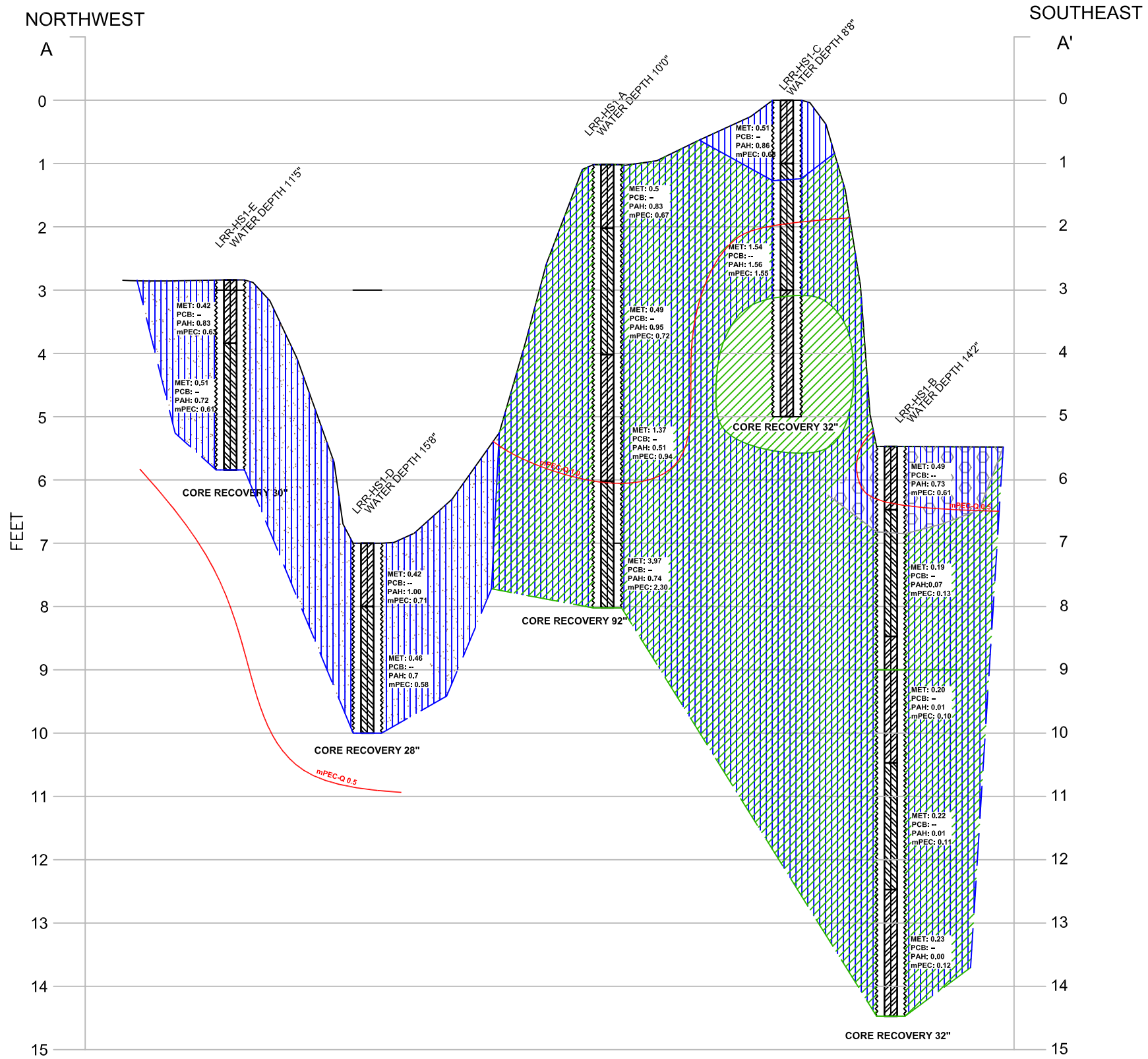


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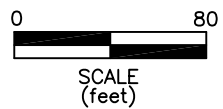
Figure 3-3
 Mean PEC-Q Exceedances
 Hot Spot 1
 Lower Rouge River
 Detroit, Wayne County, Michigan



LEGEND

| | |
|--|----------------------------|
| | SEDIMENT SAMPLE INTERVAL |
| | CORE SAMPLE |
| | SAND |
| | SILT |
| | CLAY |
| | GRAVEL |
| | SANDY SILT/SILTY SAND |
| | CLAYEY SILT/SILTY CLAY |
| | GRAVELLY SILT/SILTY GRAVEL |

NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probably Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 - mean Probable Effect Concentration Quotient Threshold



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**PEC-Q AND MEAN PEC-Q
 CROSS SECTION A-A'
 HOT SPOT 1
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**

FIGURE 3-4

Imagery Source: ESRI Bing Maps



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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Figure 3-5
 PEC Exceedances - Metals
 Hot Spot 3
 Lower Rouge River
 Detroit, Wayne County, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F3-5_PEC_Exceeds_HS3_Metals.mxd, 19-May-10 10:36, wojdakon

Imagery Source: ESRI Bing Maps



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



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Figure 3-6
 PEC Exceedances - Total PAHs
 Hot Spot 3
 Lower Rouge River
 Detroit, Wayne County, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F3-6_PEC_Exceeds_HS3_PAHs.mxd, 19-May-10 10:36, wojdakon



Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location

0 100 Feet

N



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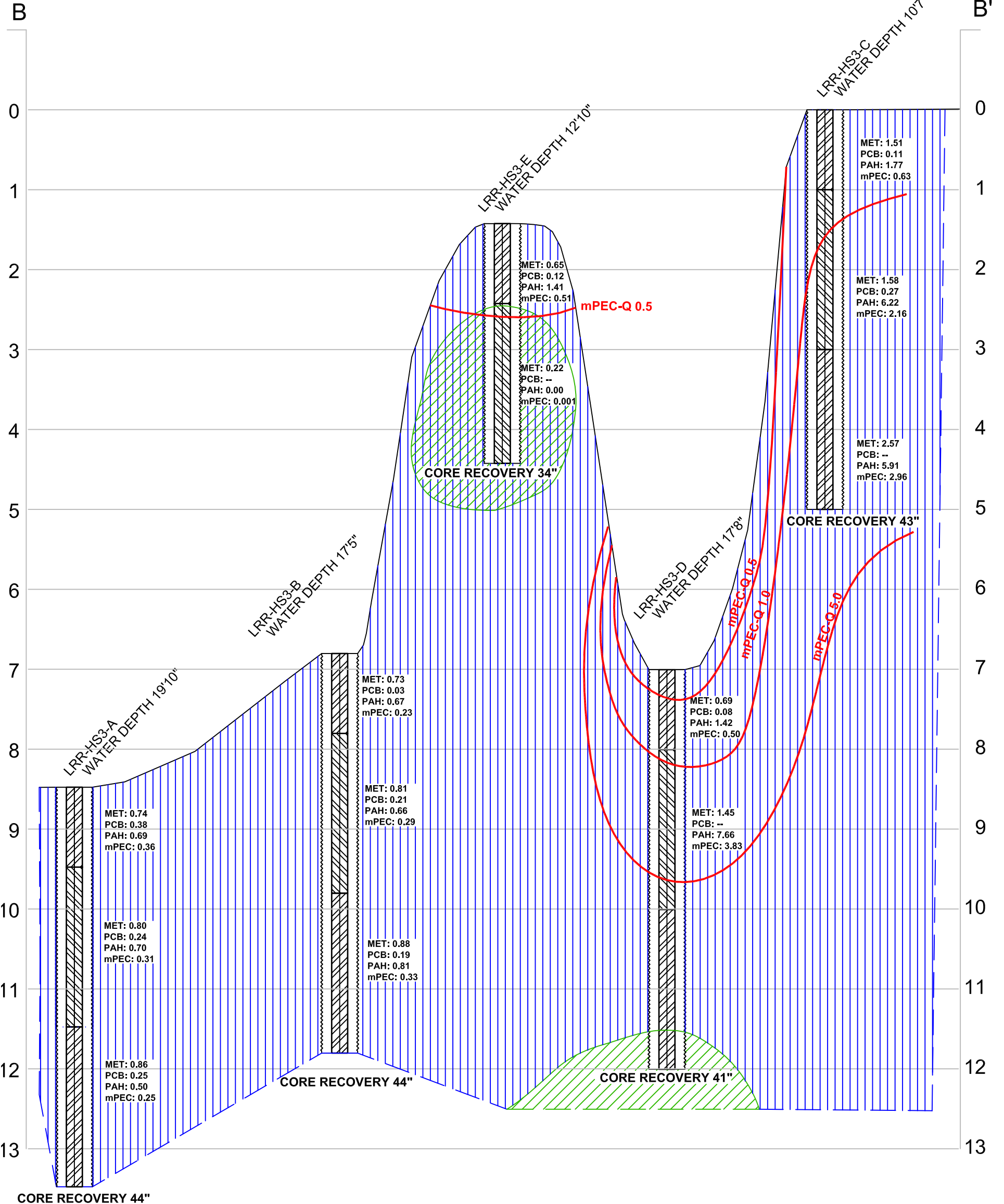


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Figure 3-7
 Mean PEC-Q Exceedances
 Hot Spot 3
 Lower Rouge River
 Detroit, Wayne County, Michigan

NORTHWEST

SOUTHEAST



- LEGEND**
- SEDIMENT SAMPLE INTERVAL
 - CORE SAMPLE
 - SAND
 - SILT
 - CLAY
 - GRAVEL
 - SANDY SILT/SILTY SAND
 - CLAYEY SILT/SILTY CLAY
 - GRAVELLY SILT/SILTY GRAVEL

NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 - mean Probable Effect Concentration Quotient Threshold

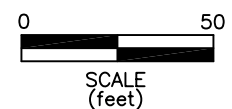


FIGURE 3-8

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**PEC-Q AND MEAN PEC-Q
 CROSS SECTION B-B'
 HOT SPOT 3
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F3-9_PEC_Exceeds_HS4_Metals.mxd, 19-May-10 10:40, wojdakon

Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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Figure 3-9
 PEC Exceedances - Metals
 Hot Spot 4
 Lower Rouge River
 Detroit, Wayne County, Michigan



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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Figure 3-10
 PEC Exceedances - Total PCBs
 Hot Spot 4
 Lower Rouge River
 Detroit, Wayne County, Michigan



Legend


Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location

0 100 Feet

N

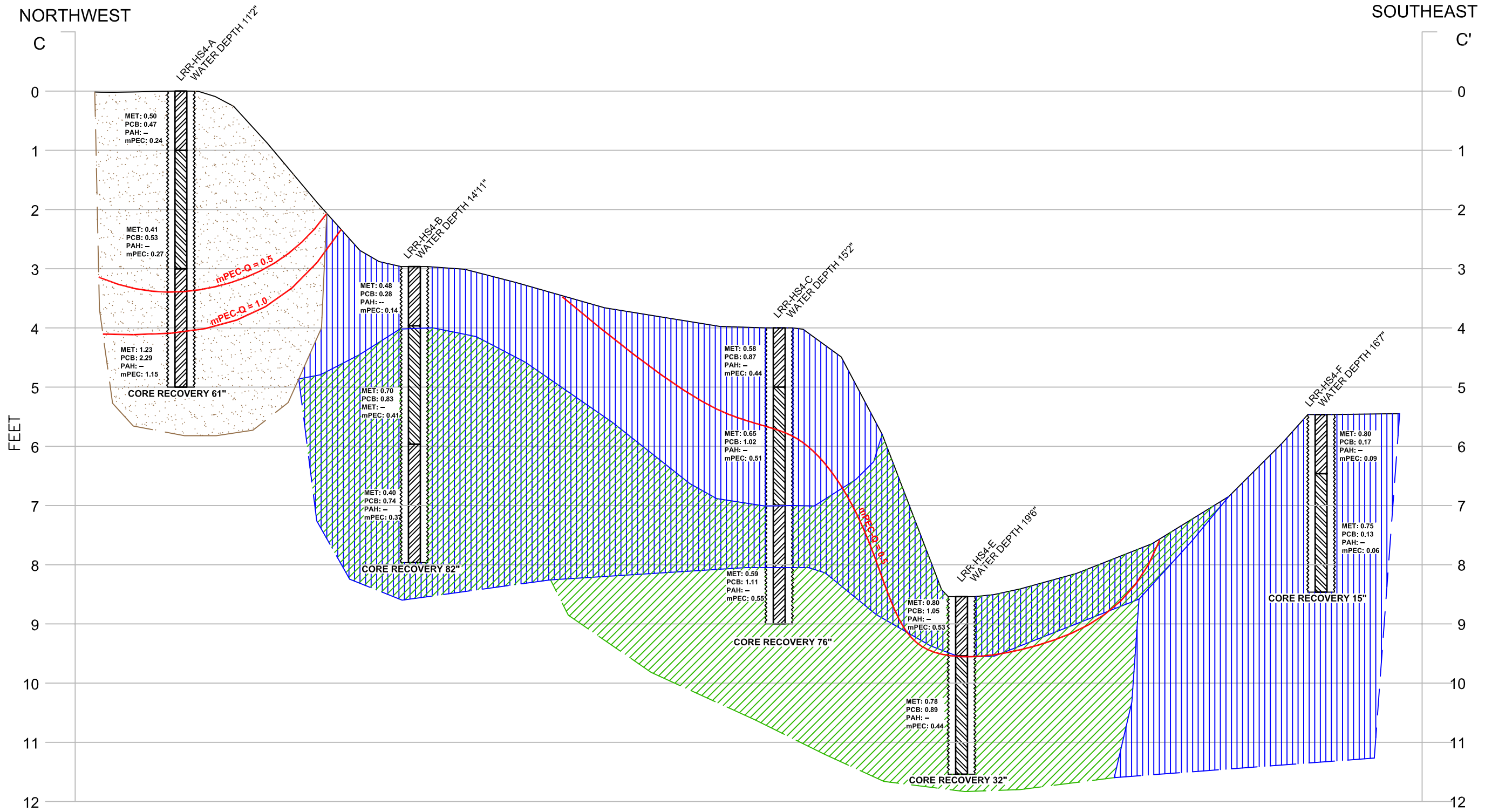


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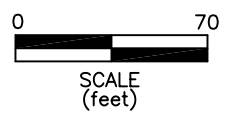
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Figure 3-11
 Mean PEC-Q Exceedances
 Hot Spot 4
 Lower Rouge River
 Detroit, Wayne County, Michigan



LEGEND

| | |
|--|----------------------------|
| | SEDIMENT SAMPLE INTERVAL |
| | CORE SAMPLE |
| | SAND |
| | SILT |
| | CLAY |
| | GRAVEL |
| | SANDY SILT/SILTY SAND |
| | CLAYEY SILT/SILTY CLAY |
| | GRAVELLY SILT/SILTY GRAVEL |



NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 - mean Probable Effect Concentration Quotient Threshold

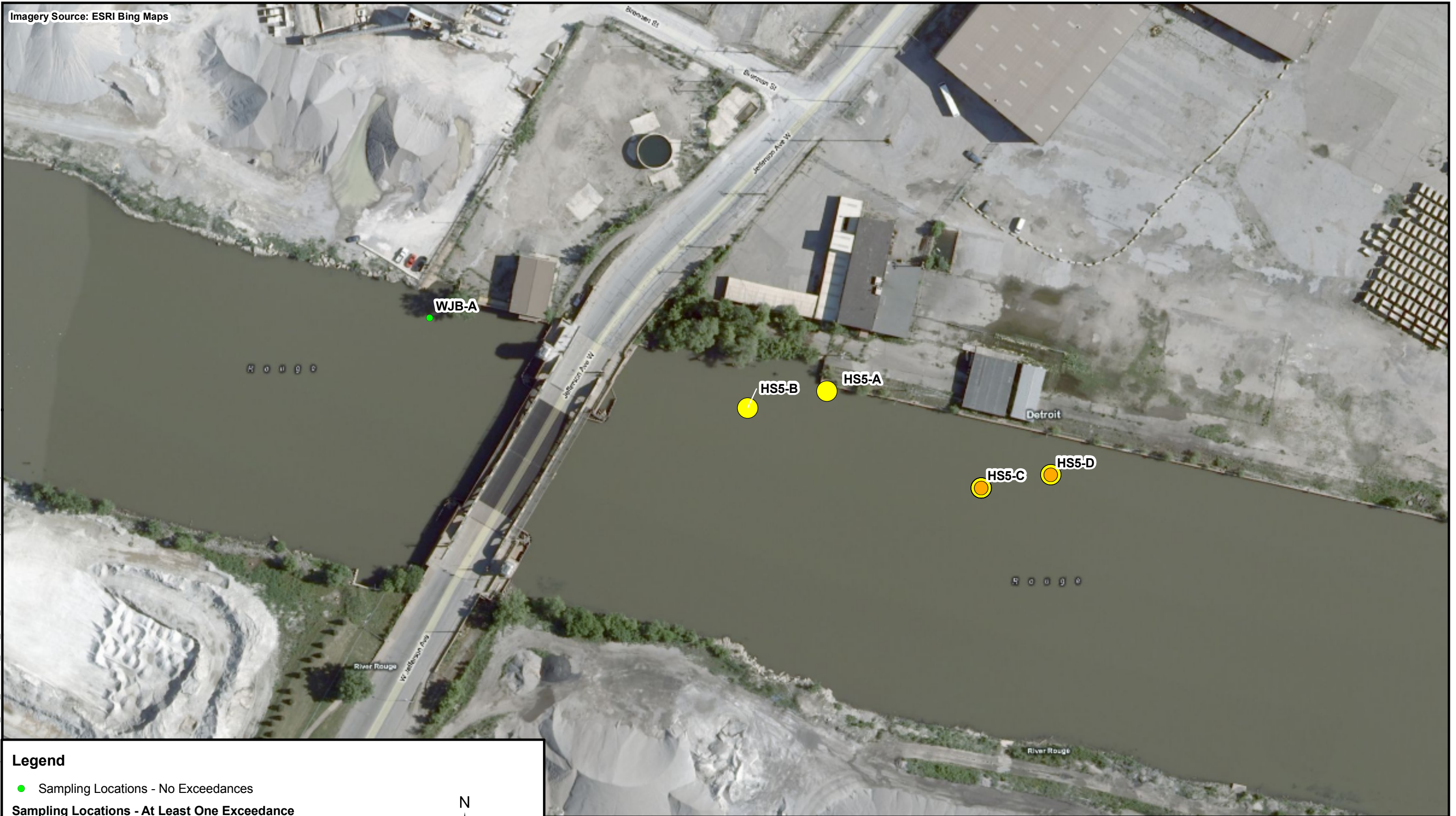
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**PEC-Q AND MEAN PEC-Q
 CROSS SECTION C-C'
 HOT SPOT 4
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**

FIGURE 3-12

Imagery Source: ESRI Bing Maps



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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Figure 3-13
 PEC Exceedances - Metals
 Hot Spot 5 and West Jefferson Street Bridge
 Lower Rouge River
 Detroit, Wayne County, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F3-13_PEC_Exceeds_HS5_WJB_Metals.mxd, 19-May-10 10:45, wjldakon

Imagery Source: ESRI Bing Maps



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



File: D:\Lower_Rouge_River\mxd\Report\F3-14_PEC_Exceeds_HS5_WJB_PCBs.mxd, 19-May-10 10:46, wojdakon



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Figure 3-14
 PEC Exceedances - Total PCBs
 Hot Spot 5 and West Jefferson Street Bridge
 Lower Rouge River
 Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss

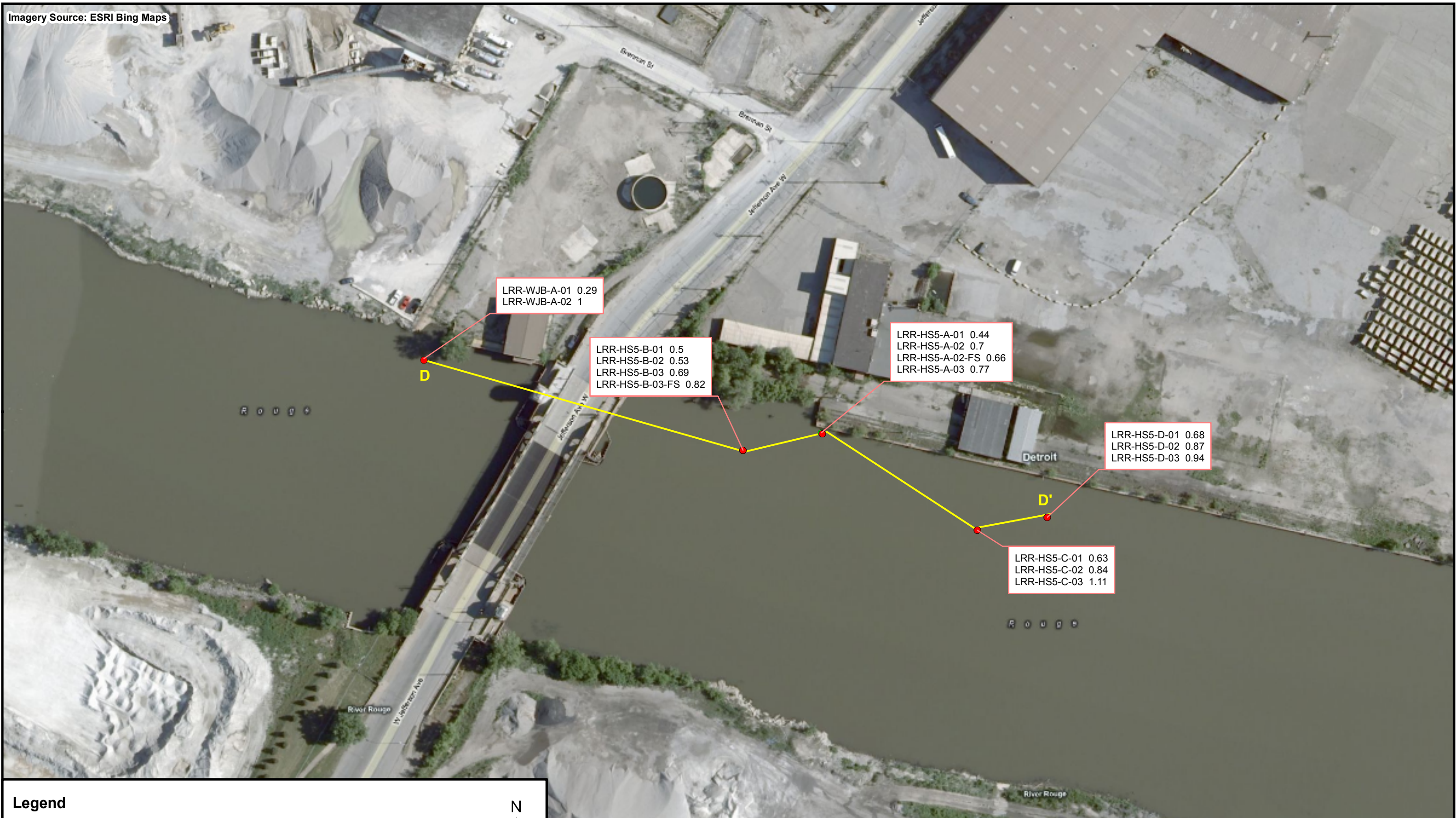


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Figure 3-15
 PEC Exceedances - Total PAHs
 Hot Spot 5 and West Jefferson Street Bridge
 Lower Rouge River
 Detroit, Wayne County, Michigan

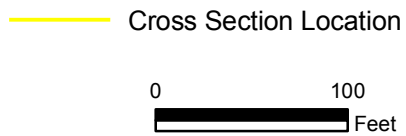


File: D:\Lower_Rouge_River\mxd\Report\F3-16_Mean_PEC_Exceeds_HS5.mxd, 20-May-10 07:52, wojdakon

Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded



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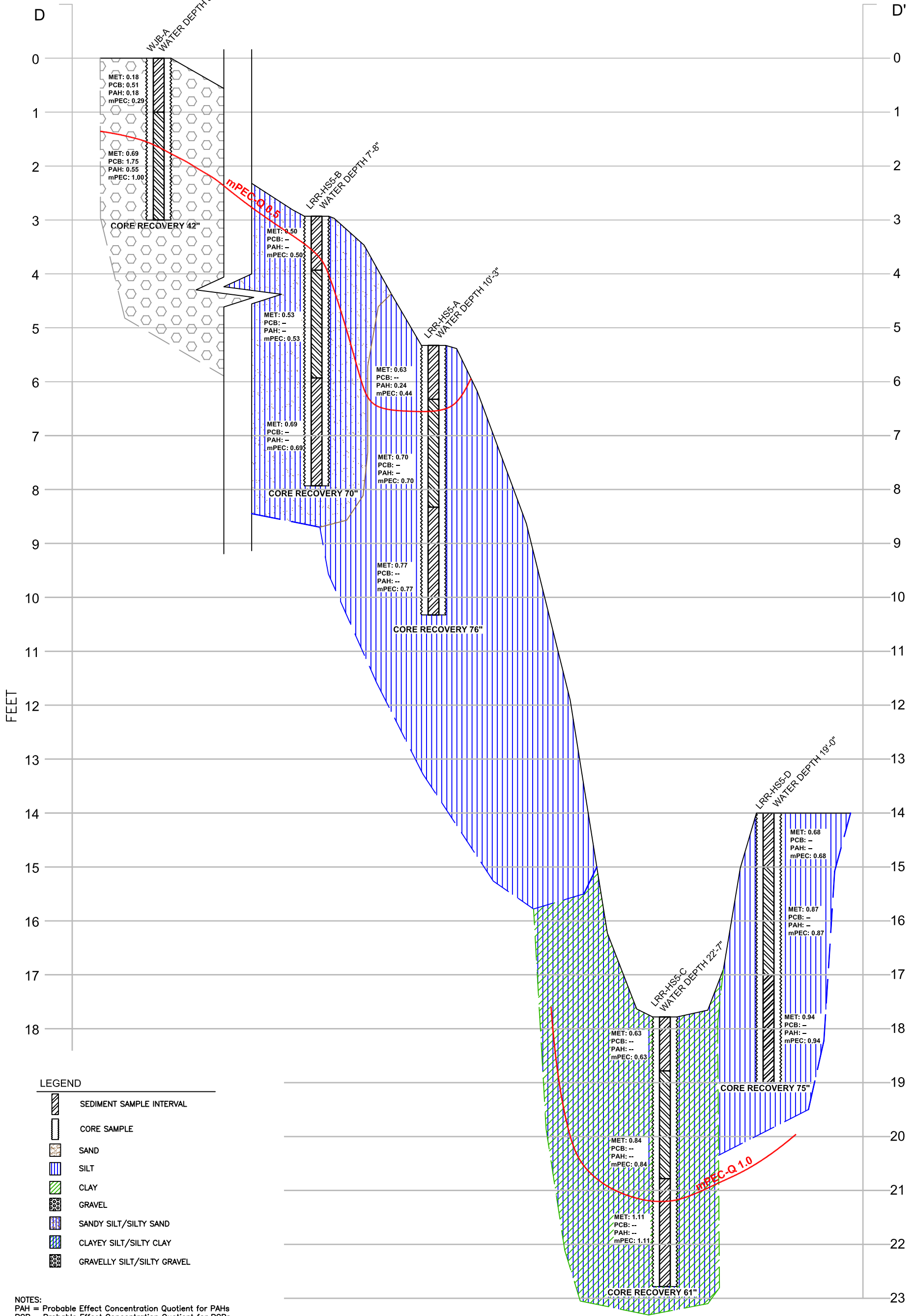


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 Detroit, Michigan 48235

Figure 3-16
 Mean PEC-Q Exceedances
 Hot Spot 5 and West Jefferson Street Bridge
 Lower Rouge River
 Detroit, Wayne County, Michigan

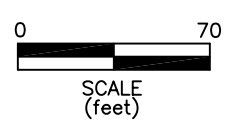
NORTHWEST

SOUTHEAST



- LEGEND**
- SEDIMENT SAMPLE INTERVAL
 - CORE SAMPLE
 - SAND
 - SILT
 - CLAY
 - GRAVEL
 - SANDY SILT/SILTY SAND
 - CLAYEY SILT/SILTY CLAY
 - GRAVELLY SILT/SILTY GRAVEL

NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 = mean Probable Effect Concentration Quotient Threshold



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 TDD NO: S05-0008-0805-012
 DCN: 451-2A-AGWU

WESTON SOLUTIONS
 Prepared by:
 WESTON SOLUTIONS, INC.
 7800 West Outer Drive, Ste. 200
 Detroit, MI

**PEC-Q AND MEAN PEC-Q
 CROSS SECTION D-D'
 HOT SPOT 5 & WEST JEFFERSON STREET
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**

FIGURE 3-17

Imagery Source: ESRI Bing Maps



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



File: D:\Lower_Rouge_River\mxd\Report\F3-18_PEC_Exceeds_HS6_ZIC_Metals.mxd, 19-May-10 10:52, wojdakon



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 Contract No.: EP-S5-0604
 TDD: S05-0008-0805-012
 DCN: 451-2A-AGWU



Prepared By:
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 7800 West Outer Drive, Suite 200
 Detroit, Michigan 48235

Figure 3-18
 PEC Exceedances - Metals
 Hot Spot 6 and Zug Island Channel
 Lower Rouge River
 Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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Figure 3-19
 PEC Exceedances - Total PCBs
 Hot Spot 6 and Zug Island Channel
 Lower Rouge River
 Detroit, Wayne County, Michigan

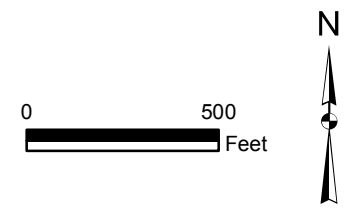
File: D:\Lower_Rouge_River\mxd\Report\F3-19_PEC_Exceeds_HS6_ZIC_PCBs.mxd, 19-May-10 10:53, wojdakon

Imagery Source: ESRI Bing Maps



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
 - 0 - 1 ft bss
 - 1 - 3 ft bss
 - 3 - 5 ft bss
 - 5 - 7 ft bss
 - 7 - 9 ft bss



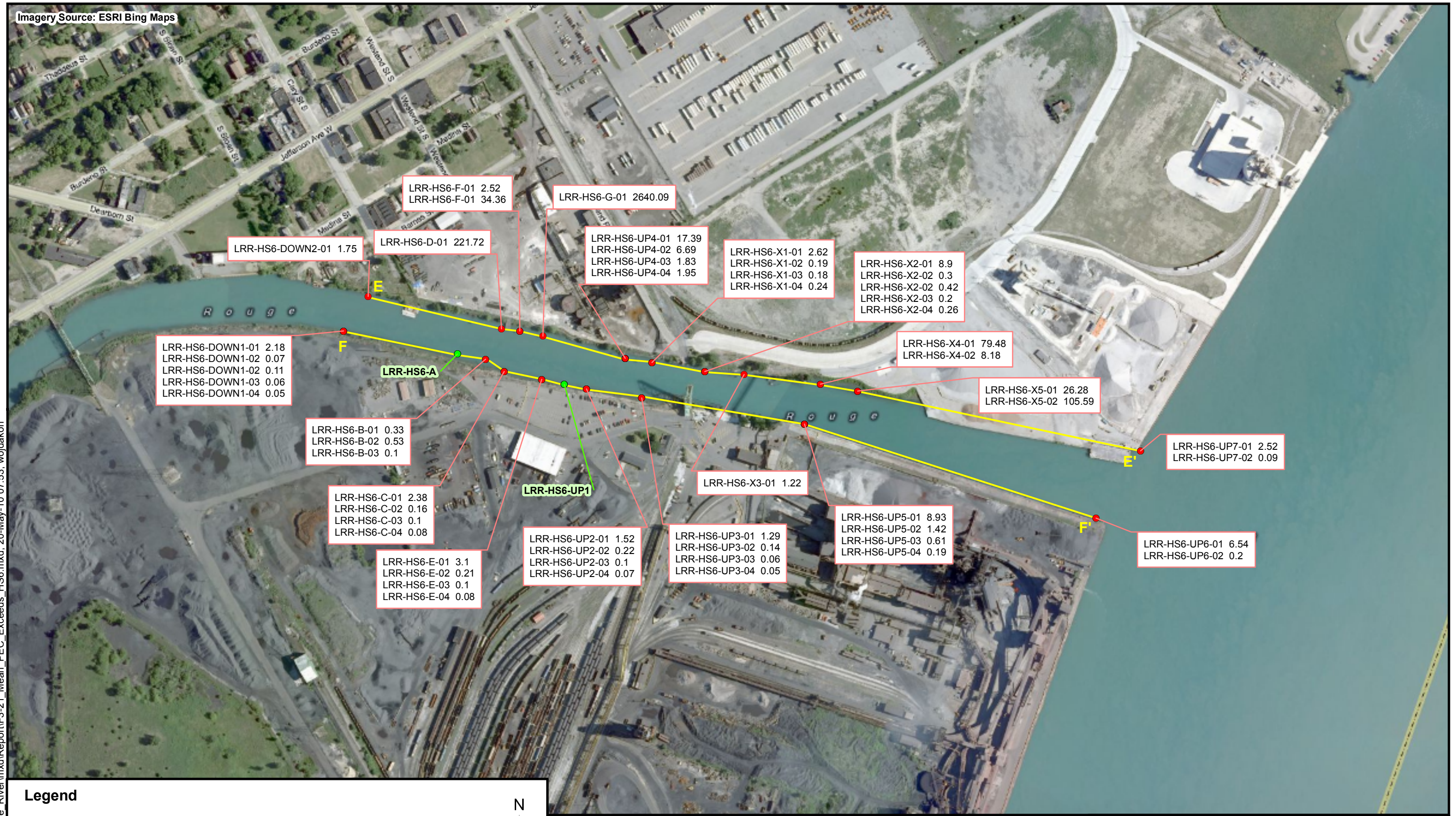
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 Detroit, Michigan 48235

Figure 3-20
 PEC Exceedances - Total PAHs
 Hot Spot 6 and Zug Island Channel
 Lower Rouge River
 Detroit, Wayne County, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F3-20_PEC_Exceeds_HS6_ZIC_PAHs.mxd, 19-May-10 10:54, wojdakon



Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location

0 350 Feet

N

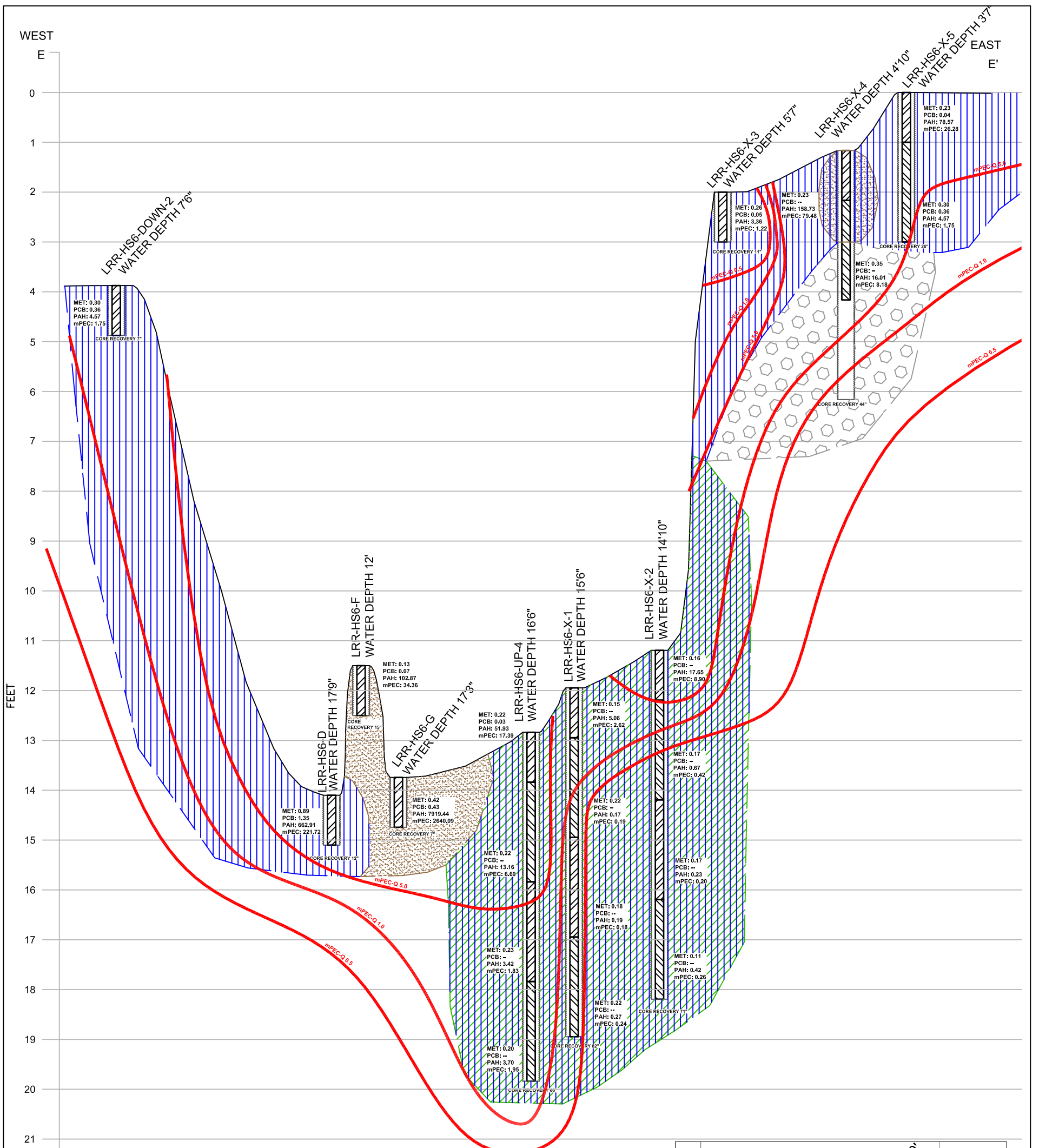


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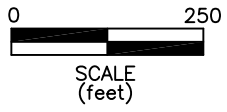


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Figure 3-21
 Mean PEC-Q Exceedances
 Hot Spot 6
 Lower Rouge River
 Detroit, Wayne County, Michigan



- LEGEND**
- SEDIMENT SAMPLE INTERVAL
 - CORE SAMPLE
 - SAND
 - SILT
 - CLAY
 - GRAVEL



NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 = mean Probable Effect Concentration Quotient Threshold

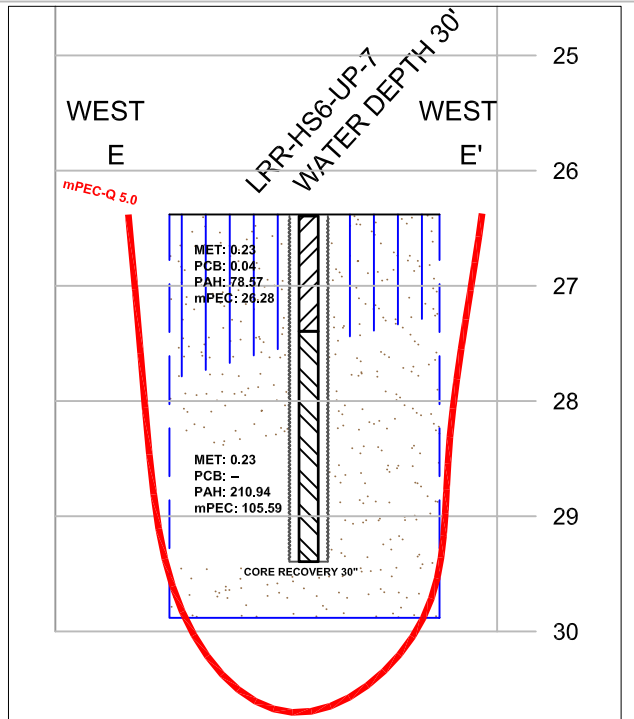
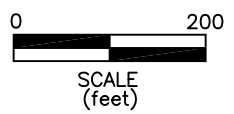
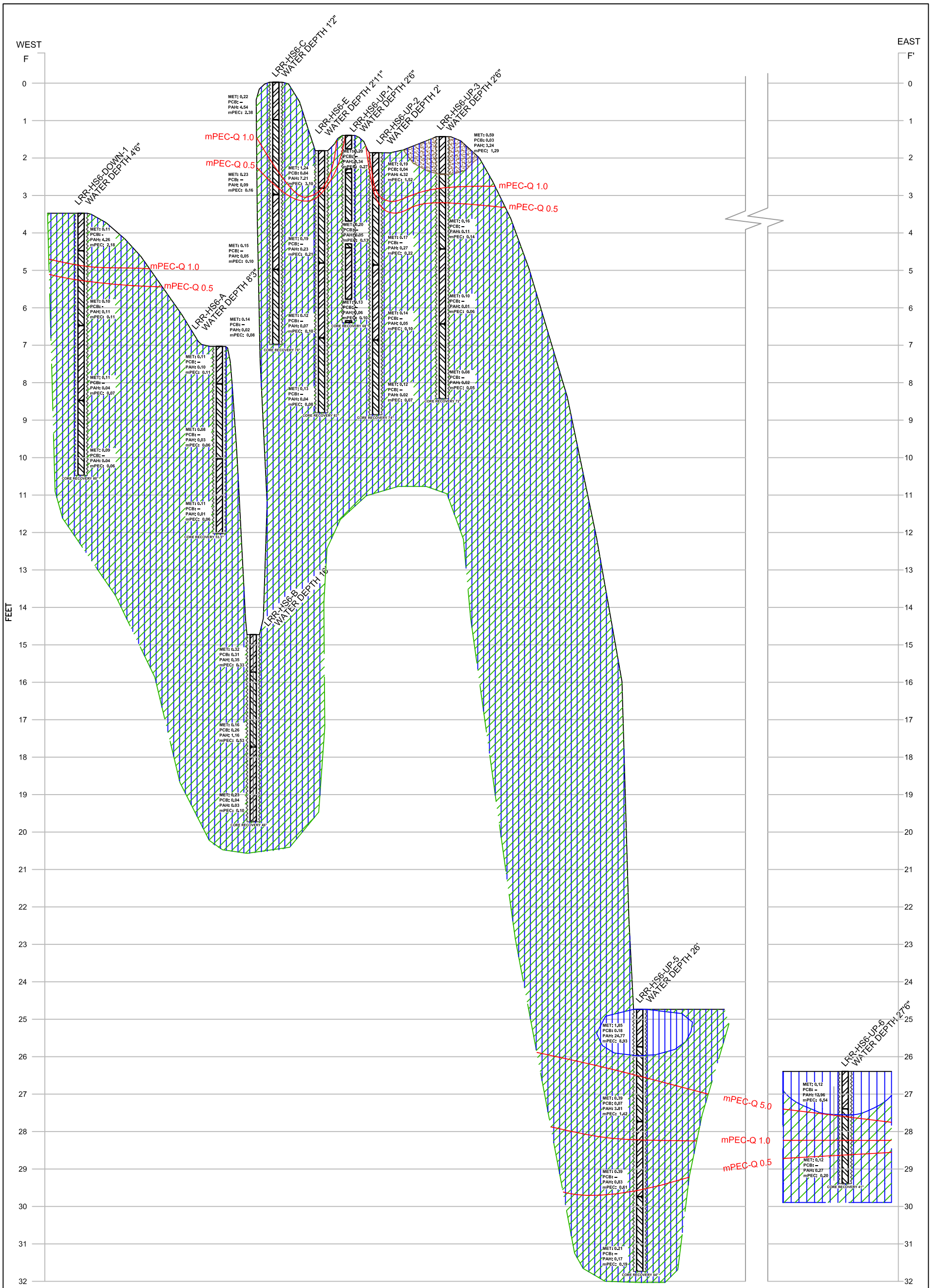


FIGURE 3-22

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 DCN: 451-2A-AGWU

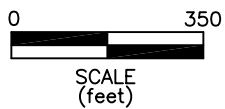
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**PEC-Q AND MEAN PEC-Q
 CROSS SECTION E-E'
 HOT SPOT 6
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**



LEGEND

- SEDIMENT SAMPLE INTERVAL
- CORE SAMPLE
- SAND
- SILT
- CLAY
- GRAVEL



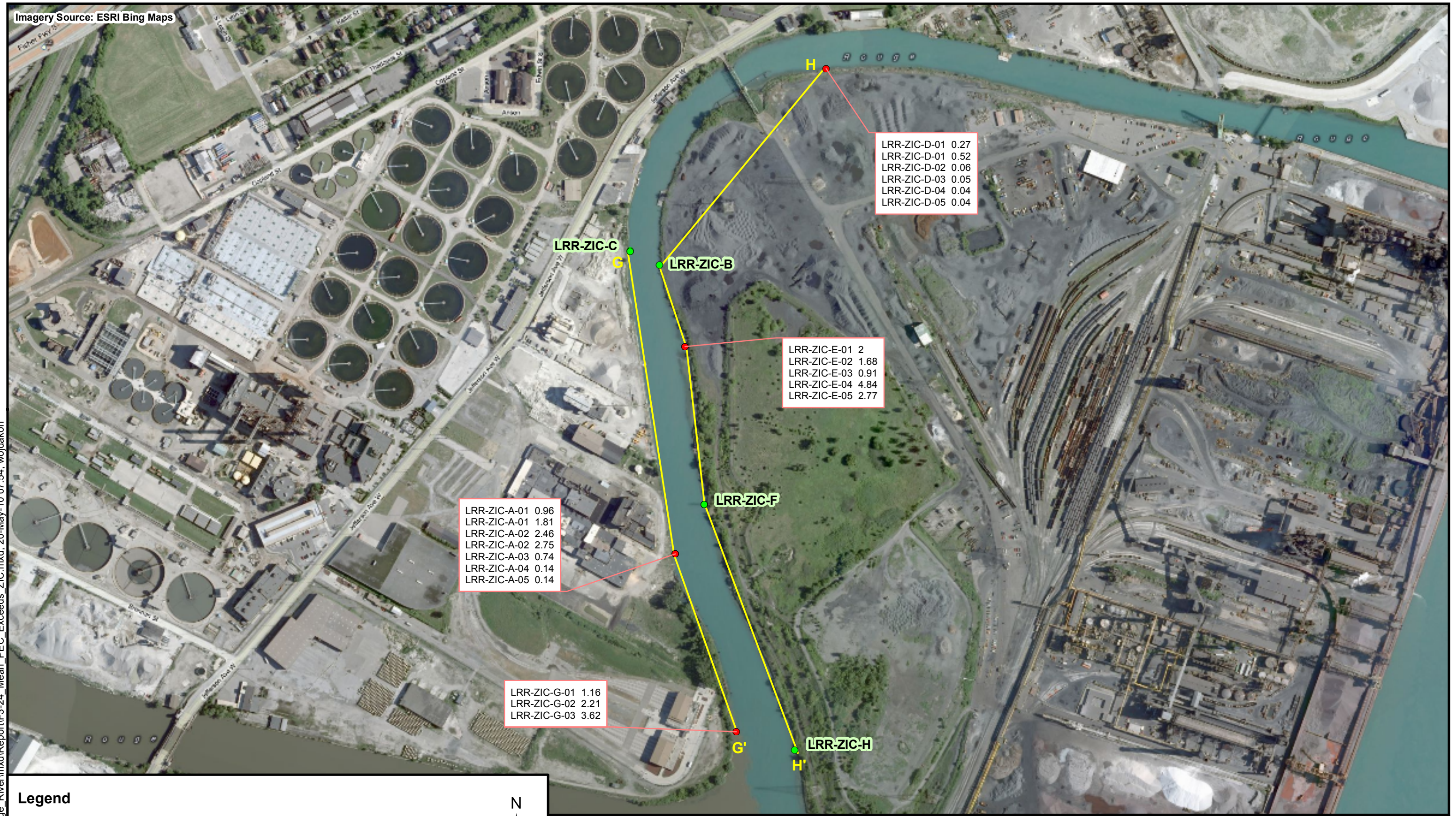
NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 - mean Probable Effect Concentration Quotient Threshold

FIGURE 3-23

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**PEC-Q AND MEAN PEC-Q
 CROSS SECTION F-F'
 HOT SPOT 6
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**



LRR-ZIC-A-01 0.96
 LRR-ZIC-A-01 1.81
 LRR-ZIC-A-02 2.46
 LRR-ZIC-A-02 2.75
 LRR-ZIC-A-03 0.74
 LRR-ZIC-A-04 0.14
 LRR-ZIC-A-05 0.14

LRR-ZIC-G-01 1.16
 LRR-ZIC-G-02 2.21
 LRR-ZIC-G-03 3.62

LRR-ZIC-E-01 2
 LRR-ZIC-E-02 1.68
 LRR-ZIC-E-03 0.91
 LRR-ZIC-E-04 4.84
 LRR-ZIC-E-05 2.77

LRR-ZIC-D-01 0.27
 LRR-ZIC-D-01 0.52
 LRR-ZIC-D-02 0.06
 LRR-ZIC-D-03 0.05
 LRR-ZIC-D-04 0.04
 LRR-ZIC-D-05 0.04

Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location

0 450
 Feet

N



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Prepared By:
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 Detroit, Michigan 48235

Figure 3-24
 Mean PEC-Q Exceedances
 Zug Island Channel
 Lower Rouge River
 Detroit, Wayne County, Michigan

NORTH

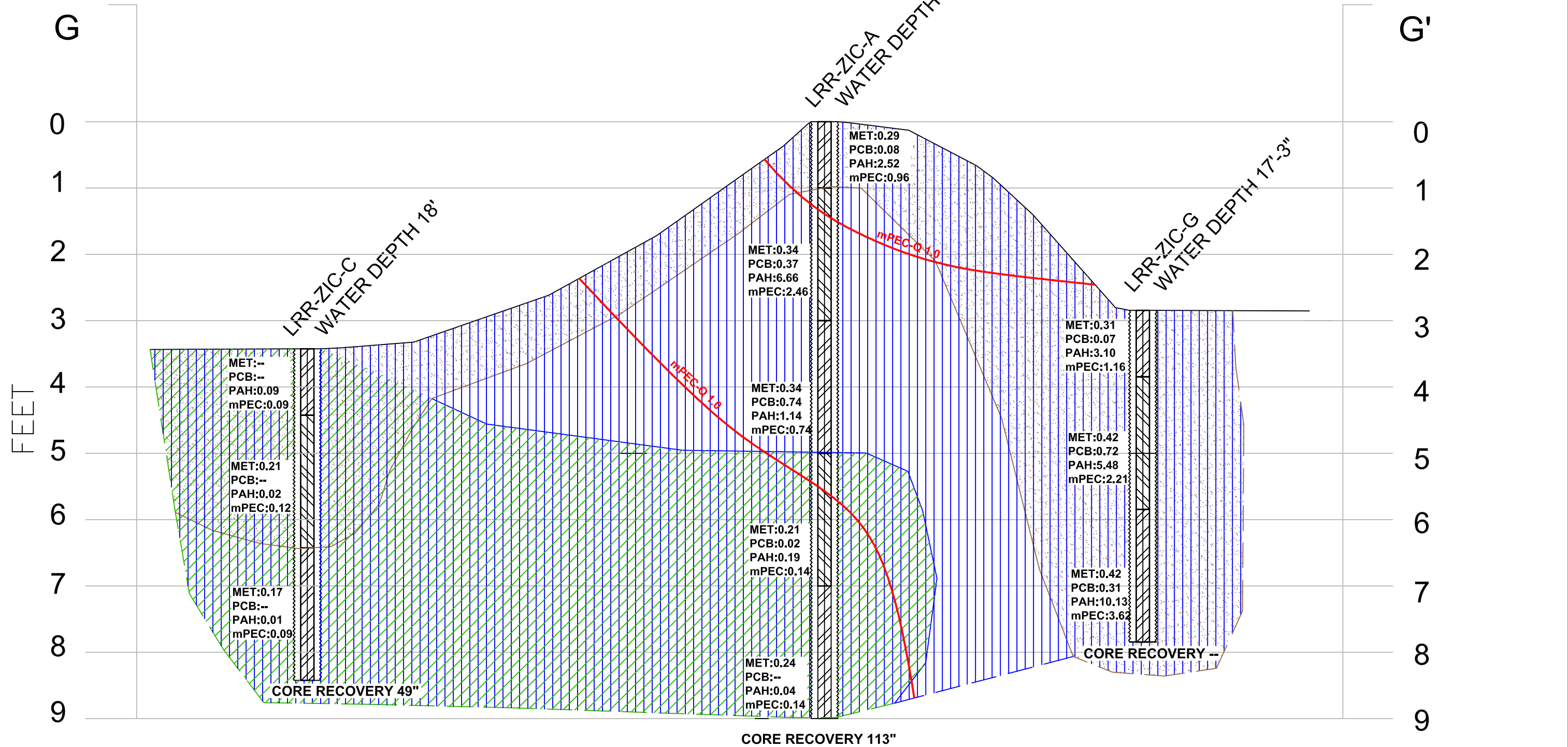
SOUTH

G

G'

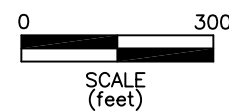
0
1
2
3
4
5
6
7
8
9

0
1
2
3
4
5
6
7
8
9



LEGEND

- SAND
- SILT
- CLAY
- GRAVEL
- SEDIMENT SAMPLE INTERVAL
- CORE SAMPLE



NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 - mean Probable Effect Concentration Quotient Threshold

FIGURE 3-25

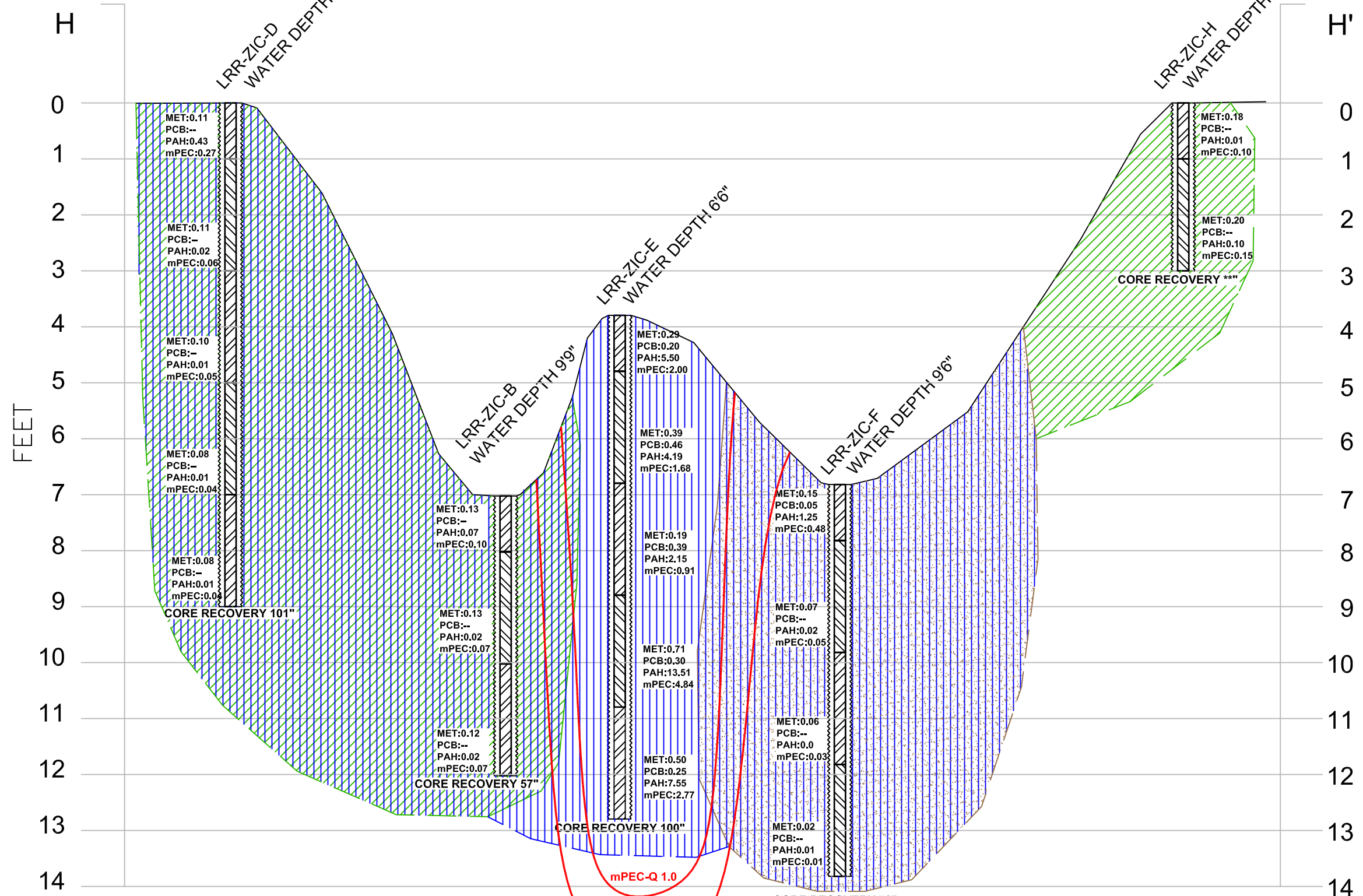
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**PEC-Q AND MEAN PEC-Q
 CROSS SECTION G-G'
 ZUG ISLAND CHANNEL
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**

NORTH

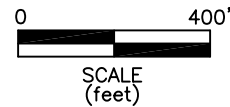
SOUTH



LEGEND

- SAND
- SILT
- CLAY
- GRAVEL
- SEDIMENT SAMPLE INTERVAL
- CORE SAMPLE

NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 - mean Probable Effect Concentration Quotient Threshold



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 Detroit, MI

**PEC-Q AND MEAN PEC-Q
 CROSS SECTION H-H'
 ZUG ISLAND CHANNEL
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**

FIGURE 3-26

Imagery Source: ESRI Bing Maps



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



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Prepared By:
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 Detroit, Michigan 48235

Figure 3-27
 PEC Exceedances - Metals
 Outfall 2
 Lower Rouge River
 Detroit, Wayne County, Michigan

Imagery Source: ESRI Bing Maps



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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Figure 3-28
 PEC Exceedances - Total PCBs
 Outfall 2
 Lower Rouge River
 Detroit, Wayne County, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F3-28_PEC_Exceeds_OF2_PCBs.mxd, 19-May-10 11:18, wojdakon



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss

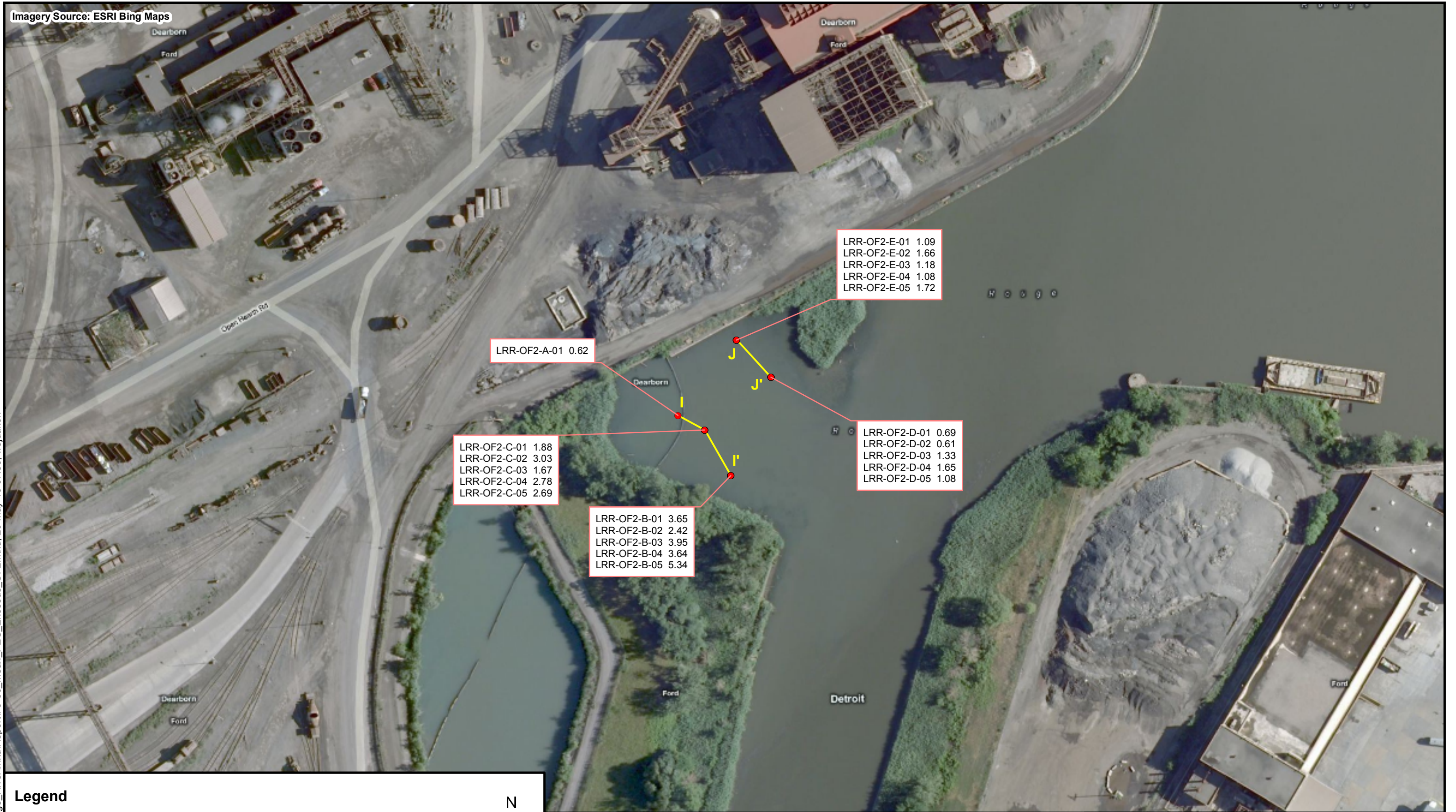


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 Detroit, Michigan 48235

Figure 3-29
 PEC Exceedances - Total PAHs
 Outfall 2
 Lower Rouge River
 Detroit, Wayne County, Michigan



Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location



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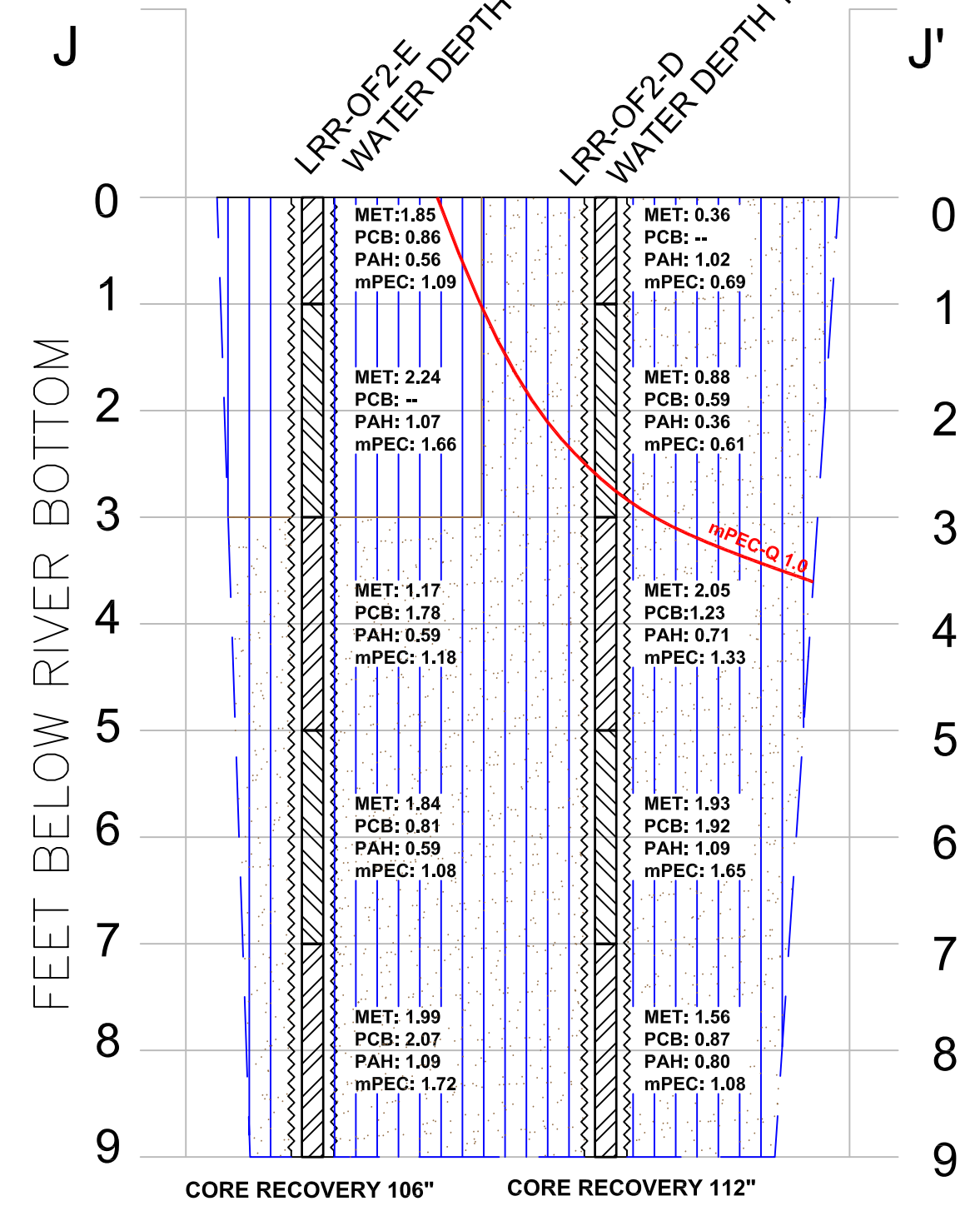
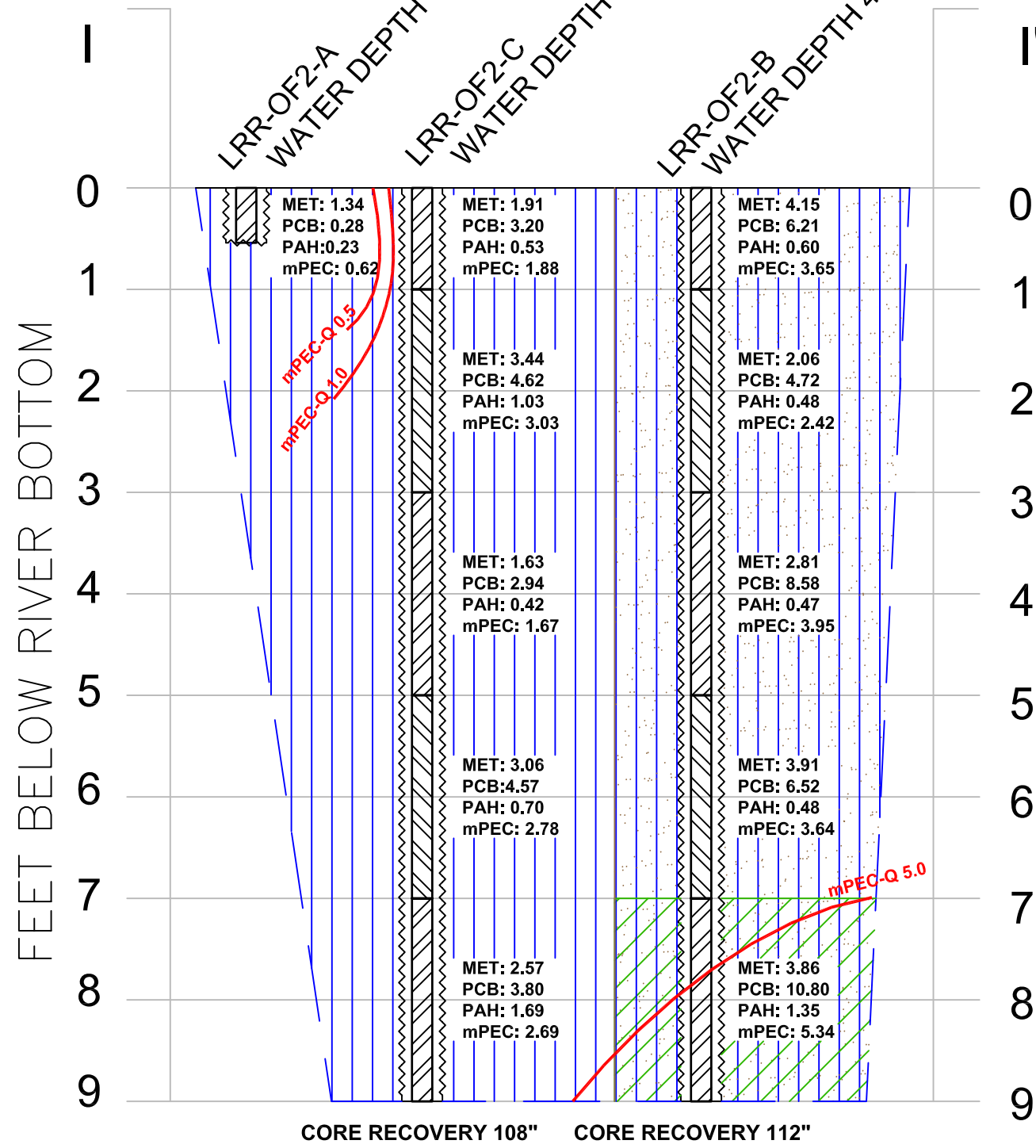
Figure 3-30
 Mean PEC-Q Exceedances
 Outfall 2
 Lower Rouge River
 Detroit, Wayne County, Michigan

NORTH

SOUTH

NORTH

SOUTH



FEET BELOW RIVER BOTTOM

FEET BELOW RIVER BOTTOM

LEGEND

- SAND
- SILT
- CLAY
- GRAVEL
- SEDIMENT SAMPLE INTERVAL
- CORE SAMPLE

NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 – mean Probable Effect Concentration Quotient Threshold

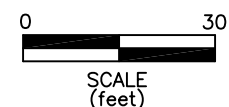


FIGURE 3-31

| | | |
|--|--|---|
| Prepared for: U.S. EPA. REGION V Contract No: EP-S5-06-04 TDD NO: S05-0008-0805-012 DCN: 451-2A-AGWU | Prepared by: WESTON SOLUTIONS, INC. 7800 West Outer Drive, Ste. 200 Detroit, MI | PEC-Q AND MEAN PEC-Q CROSS SECTION I-I' AND J-J' OUTFALL 2 LOWER ROUGE RIVER SITE WAYNE COUNTY, MICHIGAN |
|--|--|---|



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



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Prepared By:
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 Detroit, Michigan 48235

Figure 3-32
 PEC Exceedances - Metals
 Outfall 17
 Lower Rouge River
 Detroit, Wayne County, Michigan



File: D:\Lower_Rouge_River\mxd\Report\F3-33_PEC_Exceeds_OF17_PCBs.mxd, 19-May-10 11:24, wojdakon

Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



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Figure 3-33
 PEC Exceedances - Total PCBs
 Outfall 17
 Lower Rouge River
 Detroit, Wayne County, Michigan



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



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 Detroit, Michigan 48235

Figure 3-34
 PEC Exceedances - Total PAHs
 Outfall 17
 Lower Rouge River
 Detroit, Wayne County, Michigan



| | |
|--------------|-------|
| LRR-O17-A-01 | 0.64 |
| LRR-O17-A-02 | 2.08 |
| LRR-O17-A-03 | 14.54 |
| LRR-O17-A-04 | 14.61 |
| LRR-O17-A-05 | 18.74 |

Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location

0 100 Feet

N



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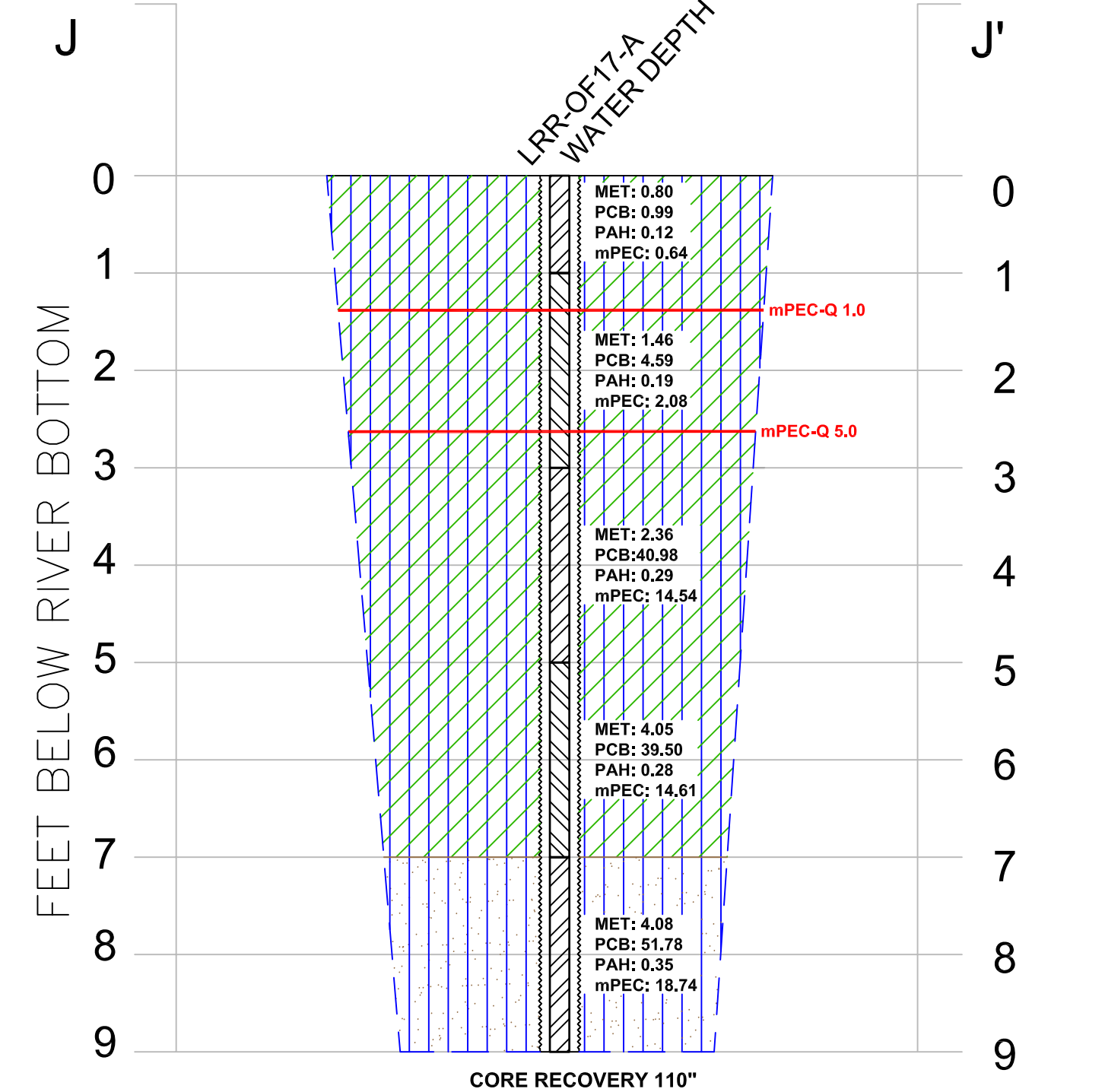


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 Detroit, Michigan 48235







Figure 3-35
 Mean PEC-Q Exceedances
 Outfall 17
 Lower Rouge River
 Detroit, Wayne County, Michigan

NORTH

SOUTH



LEGEND

-  SAND
-  SILT
-  CLAY
-  GRAVEL
-  SEDIMENT SAMPLE INTERVAL
-  CORE SAMPLE

NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 – mean Probable Effect Concentration Quotient Threshold

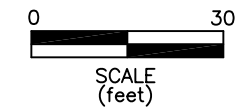


FIGURE 3-36

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 Prepared by:
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 7800 West Outer Drive, Ste. 200
 Detroit, MI

**PEC-Q AND MEAN PEC-Q
 CROSS SECTION K-K'
 OUTFALL 17
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**

Imagery Source: ESRI Bing Maps



Legend

- Sampling Locations - No Exceedances
- Sampling Locations - At Least One Exceedance**
- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss



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 Contract No.: EP-S5-0604
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 DCN: 451-2A-AGWU



Prepared By:
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 Detroit, Michigan 48235

Figure 3-37
 PEC Exceedances - Metals
 O'Brien Creek
 Lower Rouge River
 Detroit, Wayne County, Michigan

File: D:\Lower_Rouge_River\mxd\Report\F3-37_PEC_Exceeds_OBC_Metals.mxd, 19-May-10 11:29, wojdakon

Imagery Source: ESRI Bing Maps



File: D:\Lower_Rouge_River\mxd\Report\F3-38_PEC_Exceeds_OBC_PCBs.mxd, 19-May-10 11:30, wojdakon

Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss ● 5 - 7 ft bss
- 1 - 3 ft bss ● 7 - 9 ft bss
- 3 - 5 ft bss



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Prepared By:
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 7800 West Outer Drive, Suite 200
 Detroit, Michigan 48235

Figure 3-38
 PEC Exceedances - Total PCBs
 O'Brien Creek
 Lower Rouge River
 Detroit, Wayne County, Michigan



Legend

● Sampling Locations - No Exceedances

Sampling Locations - At Least One Exceedance

- 0 - 1 ft bss
- 1 - 3 ft bss
- 3 - 5 ft bss
- 5 - 7 ft bss
- 7 - 9 ft bss

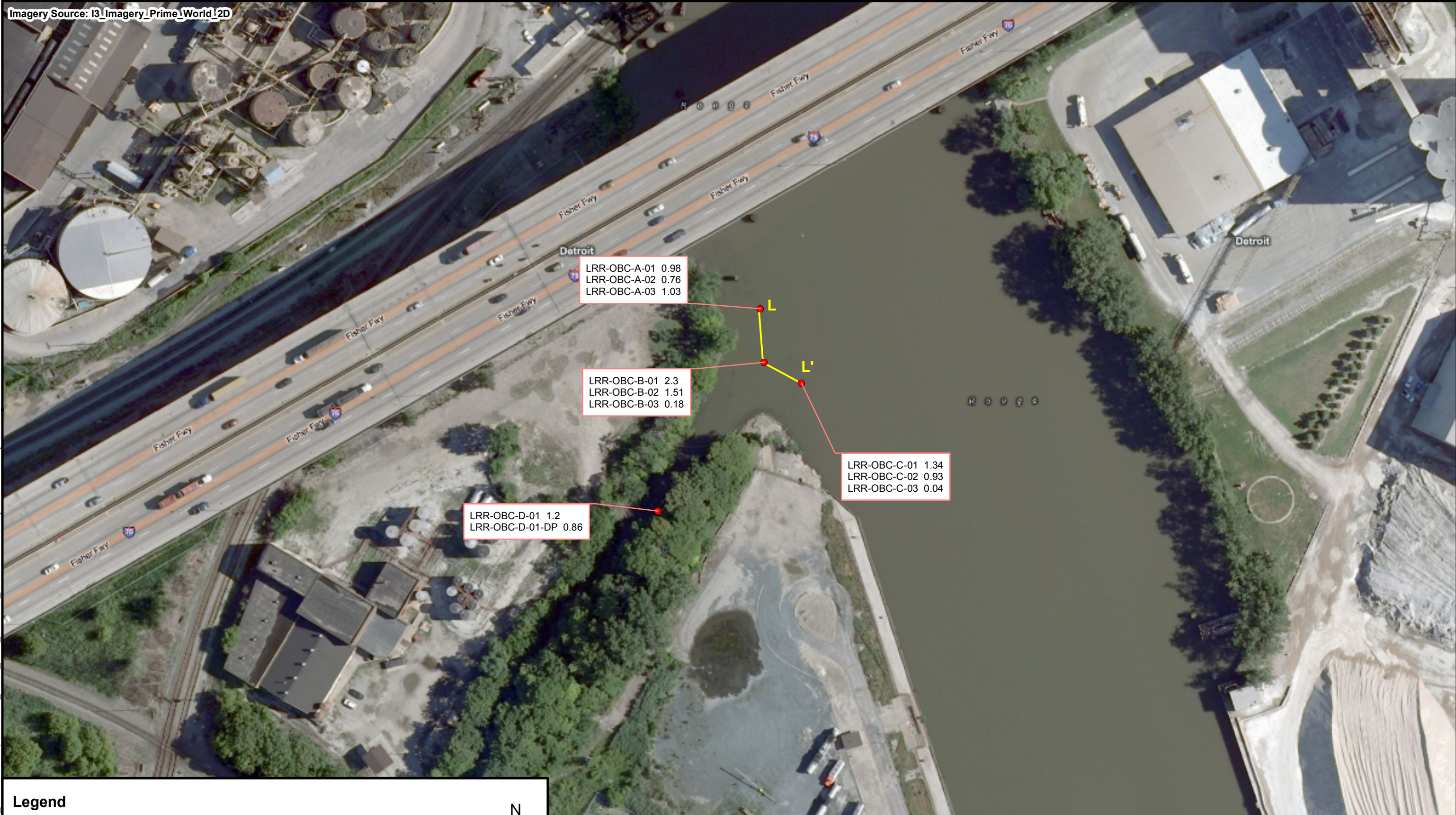


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 DCN: 451-2A-AGWU



Prepared By:
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 Detroit, Michigan 48235

Figure 3-39
 PEC Exceedances - Total PAHs
 O'Brien Creek
 Lower Rouge River
 Detroit, Wayne County, Michigan



File: D:\Lower_Rouge_River\mxd\Report\F3-40_Mean_PEC_Exceeds_OBC.mxd, 20-May-10 07:58, wojdakon

Legend

Sampling Locations

- No Exceedances
- m-PEC-Q threshold Value 0.5 Exceeded

— Cross Section Location

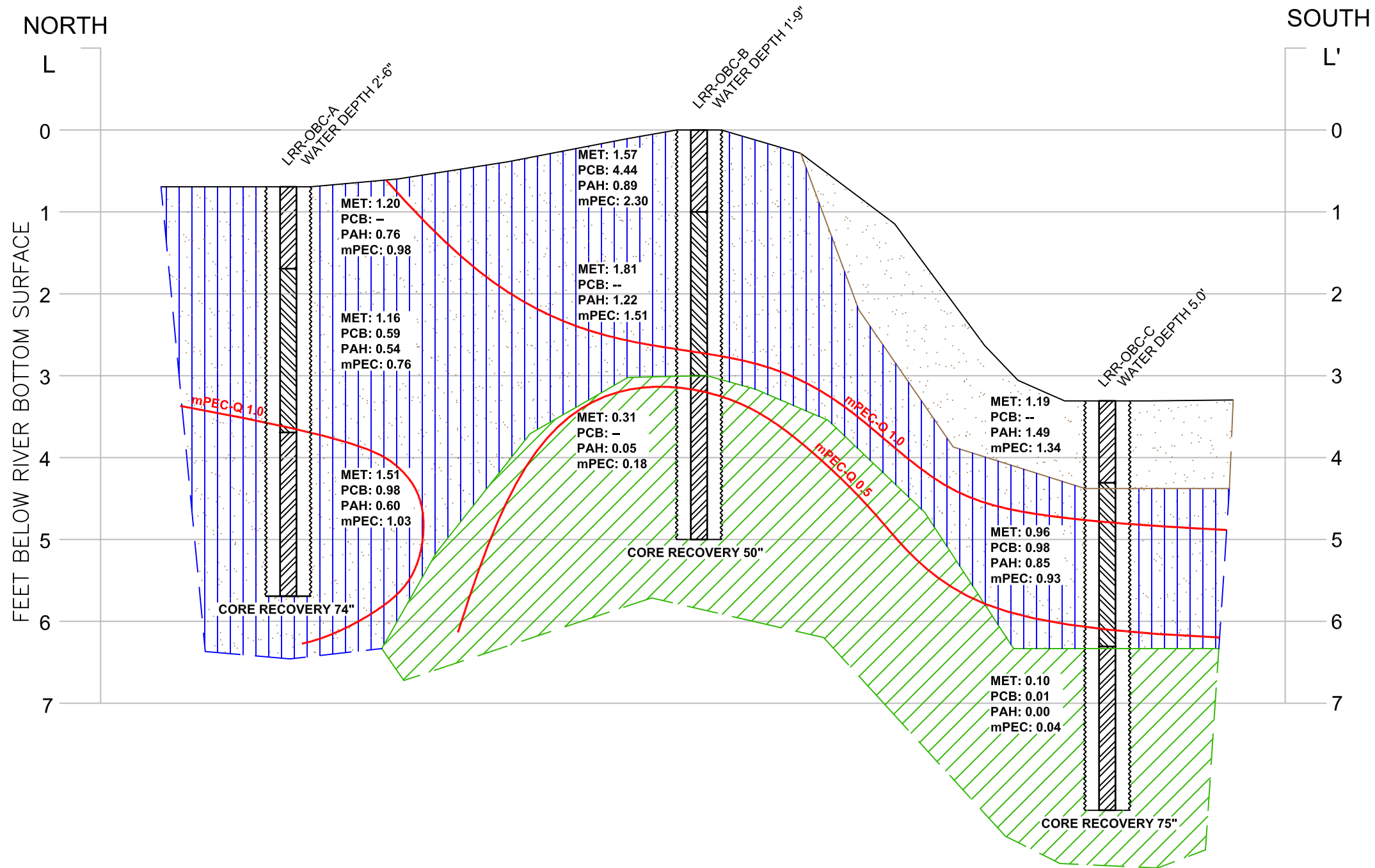
0 100
 Feet

N

Prepared For:
U.S. EPA REGION V
 Contract No.: EP-S5-0604
 TDD: S05-0008-0805-012
 DCN: 451-2A-AGWU

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Figure 3-40
 Mean PEC-Q Exceedances
 O'Brien Creek
 Lower Rouge River
 Detroit, Wayne County, Michigan



LEGEND

- | | | | |
|--|--------|--|--------------------------|
| | SAND | | SEDIMENT SAMPLE INTERVAL |
| | SILT | | CORE SAMPLE |
| | CLAY | | |
| | GRAVEL | | |

NOTES:
 PAH = Probable Effect Concentration Quotient for PAHs
 PCB = Probable Effect Concentration Quotient for PCBs
 MET = Probable Effect Concentration Quotient for Metals
 mPEC = mean Probable Effect Concentration Quotient
 mPEC-Q=1.0 – mean Probable Effect Concentration Quotient Threshold

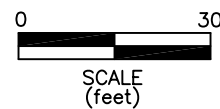


FIGURE 3-41

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**PEC-Q AND MEAN PEC-Q
 CROSS SECTION L-L'
 O'BRIEN CREEK
 LOWER ROUGE RIVER SITE
 WAYNE COUNTY, MICHIGAN**