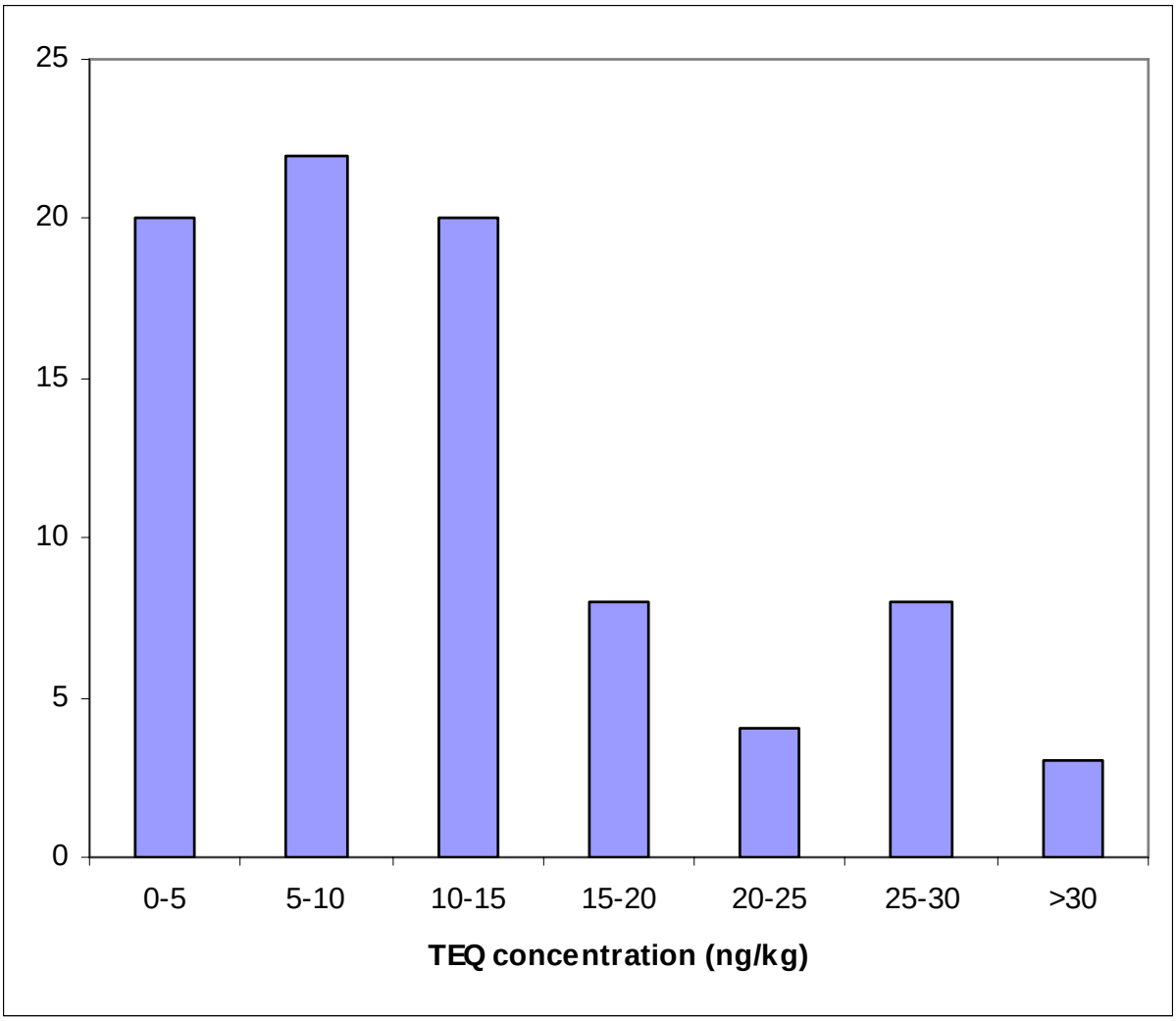


Notes:
Total sample count is 85.
TEQs based on ND=1/2DL.

Figure 3-1. Histogram of TEQ concentrations.

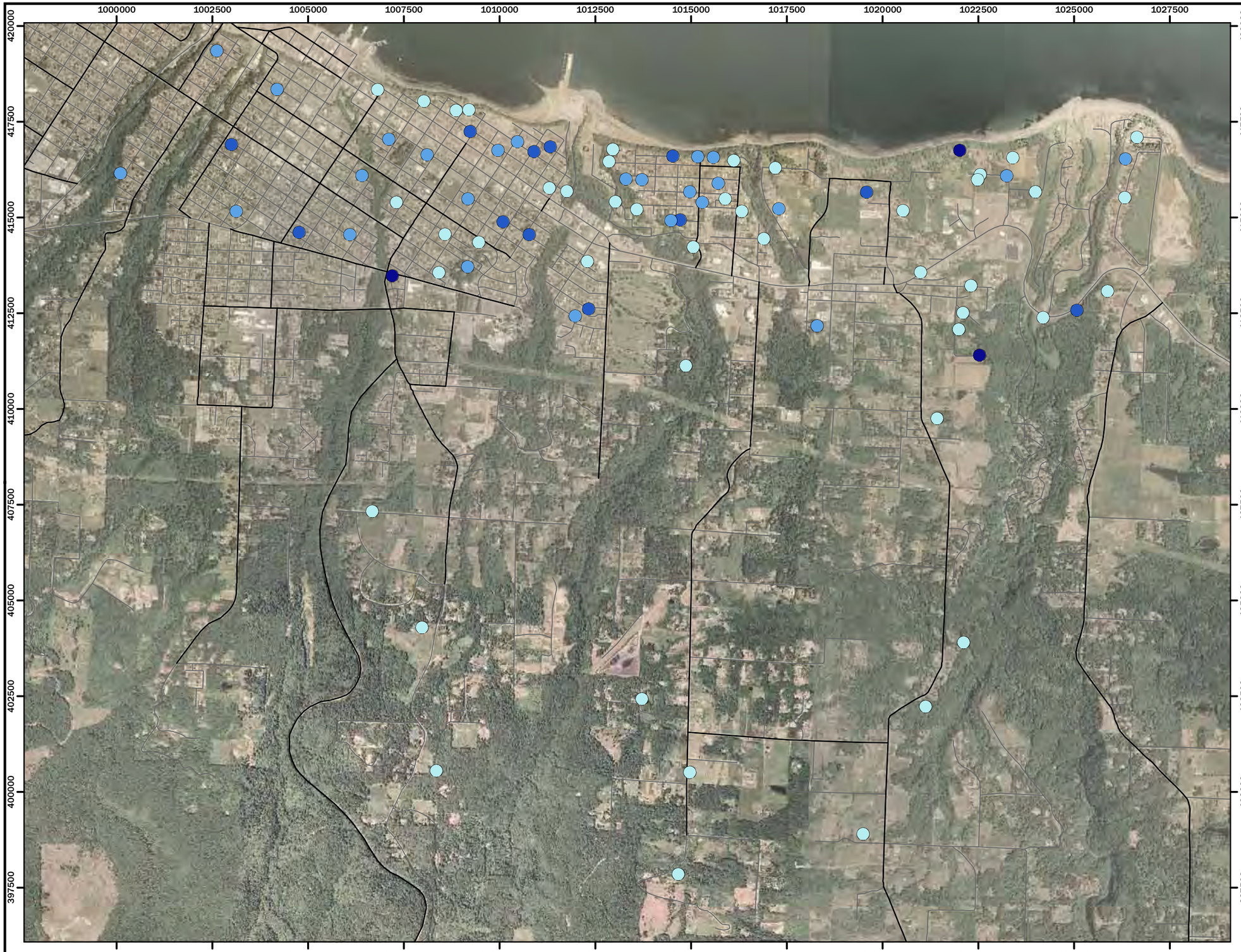


Figure 3-2
Overview of TEQ concentrations across study area. Rayonier Mill Off-Property Soil Dioxin Study Port Angeles, WA.

Legend

TEQ (ND=1/2 DL) concentrations shown in ng/kg
TEQ (ND=1/2 DL) range = 0.8 to 76.3 ng/kg

- 0 to 11
- 11 to 20
- 20 to 30
- > 30
- Arterial or Collector Road
- Road

ecology and environment, inc.
International Specialists in the Environment

HERRERA ENVIRONMENTAL CONSULTANTS

0 1,250 2,500 5,000 feet

Coordinates: Washington State Plane South
NAD 83 (feet)
Aerial: USDA, 2006

N

Produced By: GIS (RDR)
Project:
K:/Projects/06-03386-006/Collected_Samples/TEQ_Calc/TEQ Sample Overview.mxd (02/19/2009)

Figure 3-3
TEQ concentrations in Western zones.
Rayonier Mill Off-Property Soil Dioxin Study Port Angeles, WA.

Legend

TEQ (ND=1/2 DL) concentrations shown in ng/kg

- 0 to 11
- 11 to 20
- 20 to 30
- > 30
- Grid cell boundary
- Arterial or Collector Road
- Road

ecology and environment, inc.
International Specialists in the Environment

HERRERA ENVIRONMENTAL CONSULTANTS

0 600 1,200 2,400 feet

Coordinates: Washington State Plane South
NAD 83 (feet)
Aerial: USDA, 2006

N

Produced By: GIS (RDR)
Project:
K:/Projects/06-03386-006/Collected_Samples/Samples Collected in Western Zone.mxd (02/19/2009)

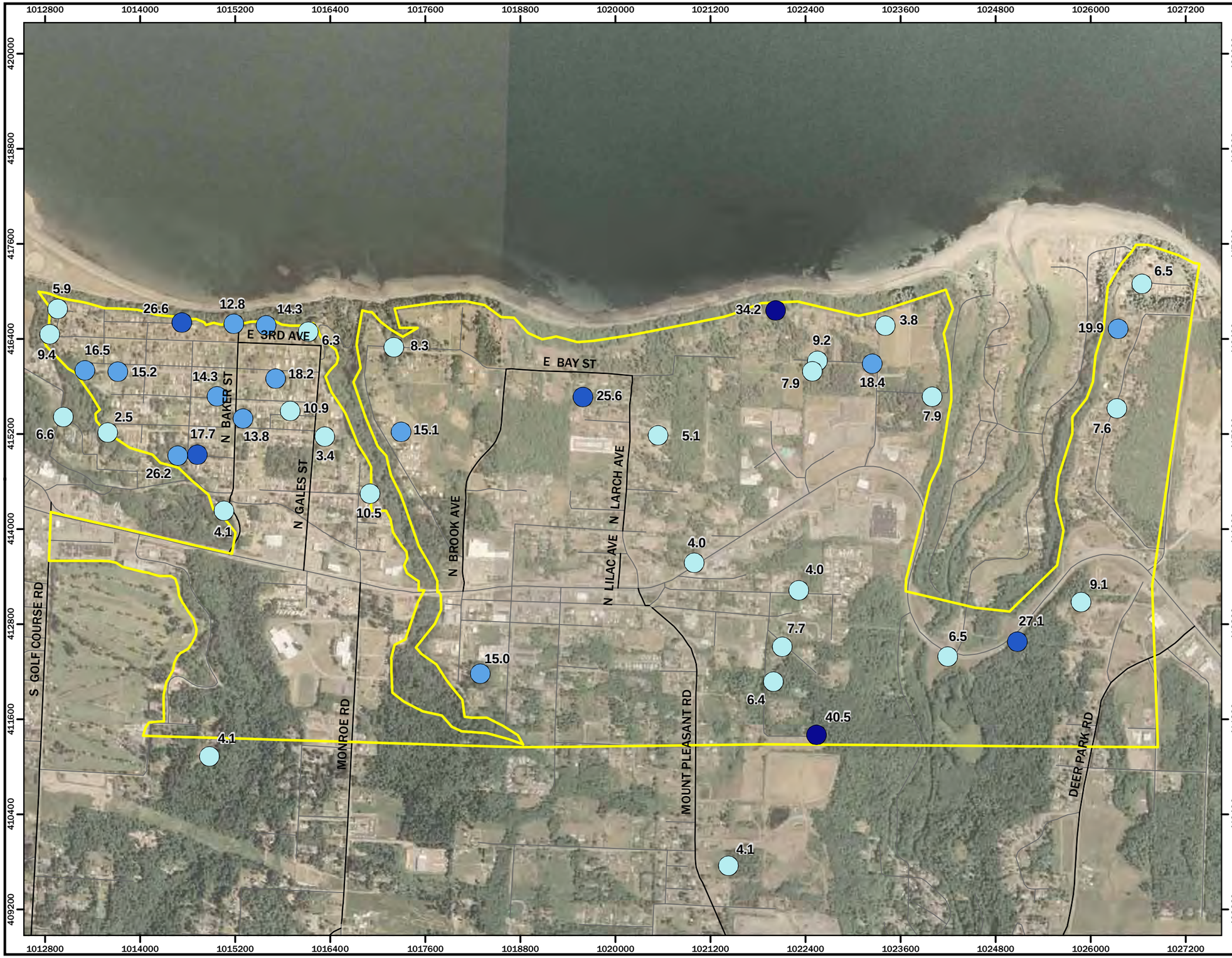


Figure 3-4
TEQ concentrations in Eastern zones.
Rayonier Mill Off-Property Soil Dioxin Study Port Angeles, WA.

Legend

TEQ (ND=1/2 DL) concentrations shown in ng/kg

- 0 to 11
- 11 to 20
- 20 to 30
- > 30
- Grid cell boundary
- Arterial or Collector Road
- Road

ecology and environment, inc.
International Specialists in the Environment

HERRERA ENVIRONMENTAL CONSULTANTS

0 600 1,200 2,400 feet

Coordinates: Washington State Plane South
NAD 83 (feet)
Aerial: USDA, 2006

N

Produced By: GIS (RDR)
Project:
K:/Projects/06-03386-006/Collected_Samples/TEQ_Calc/TEQ Samples Collected in Eastern Zone.mxd

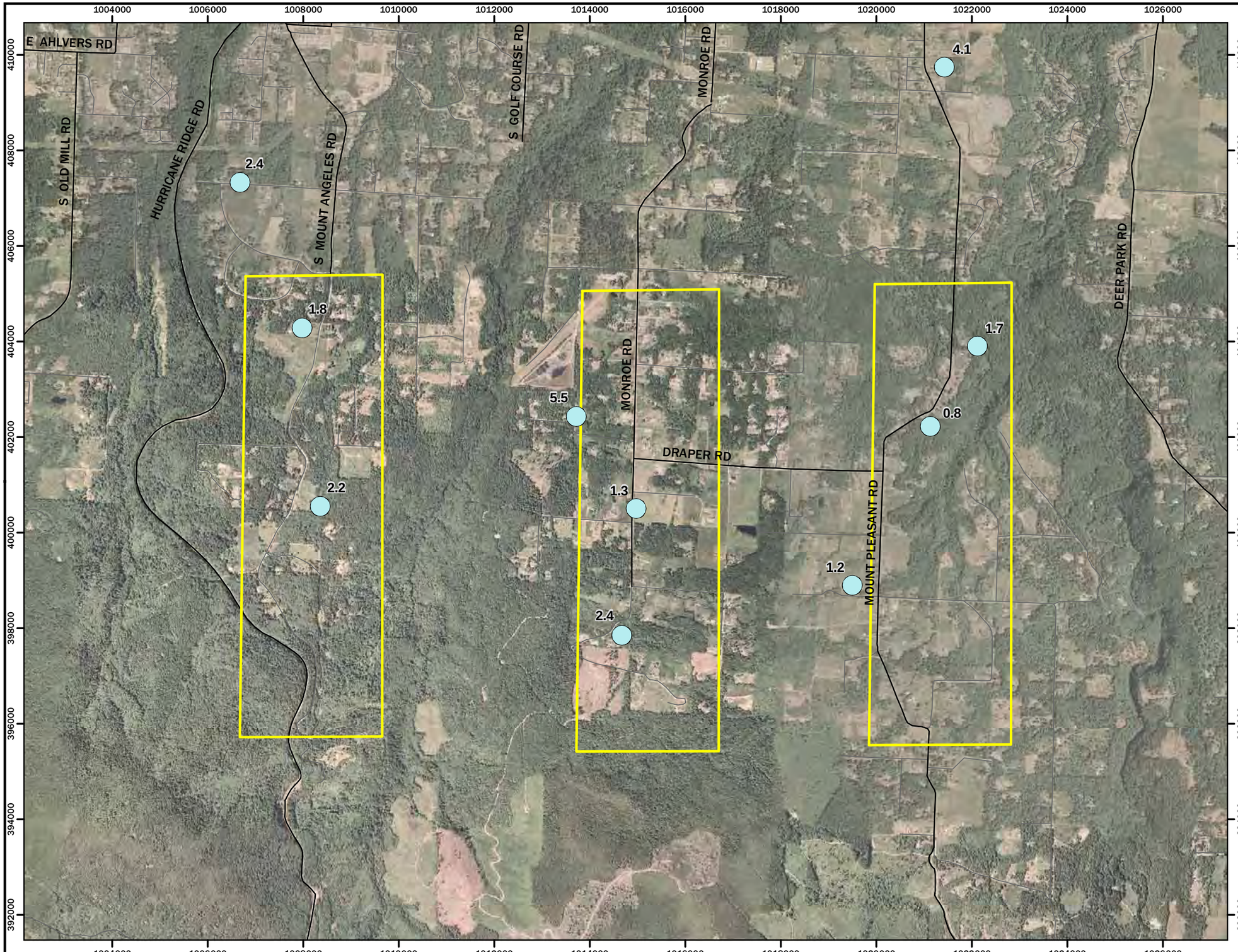


Figure 3-5
TEQ concentrations in upslope transect areas. Rayonier Mill Off-Property Soil Dioxin Study
Port Angeles, WA.

Legend

TEQ (ND=1/2 DL) concentrations shown in ng/kg

- 0 to 11
- 11 to 20
- 20 to 30
- > 30
- Upslope transect boundary
- Arterial or Collector Road
- Road

ecology and environment, inc.
International Specialists in the Environment

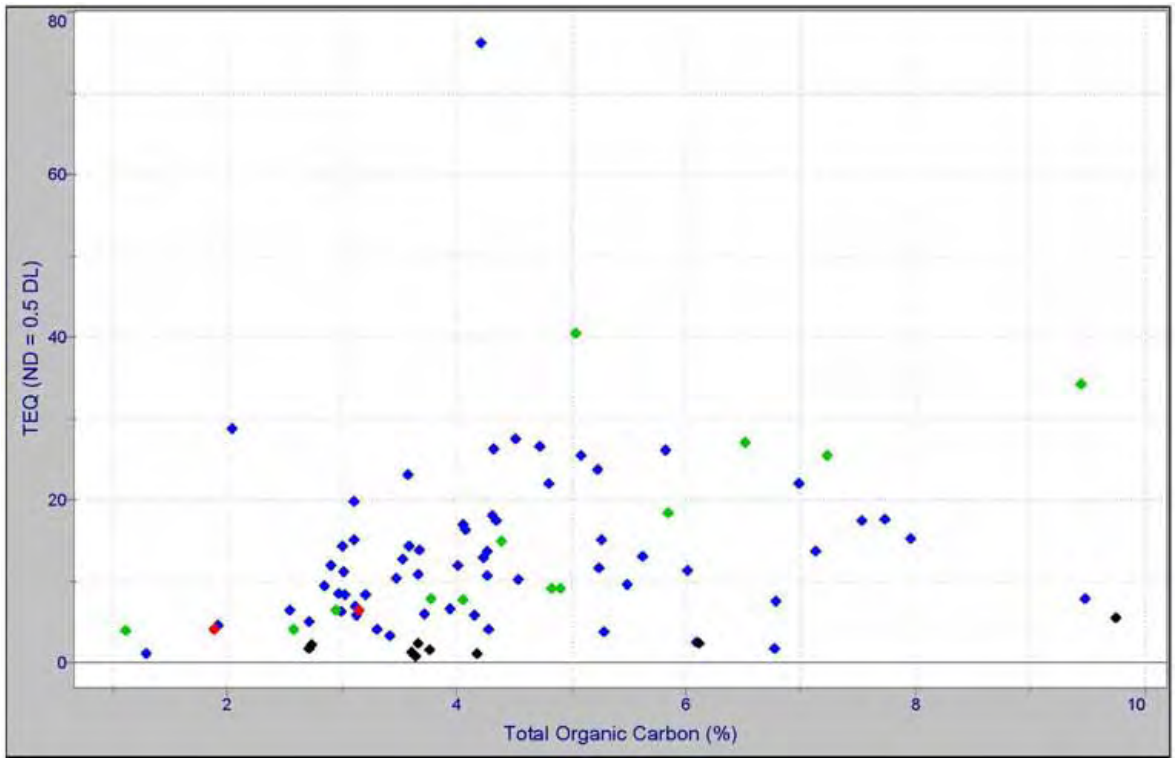
HERRERA ENVIRONMENTAL CONSULTANTS

0 1,000 2,000 4,000 feet

Coordinates: Washington State Plane South
NAD 83 (feet)
Aerial: USDA, 2006

N

Produced By: GIS (RDR)
Project:
K:/Projects/06-03386-006/Collected_Samples/TEQ_Calc/TEQ Samples Collected in Upslope Transects.mxd



Notes:
TEQ (ND = 0.5 DL) calculated assuming non-detected congeners present at one-half of the SDL or MDL, as appropriate.
Concentrations are in ng/kg, dry weight.

Key:

- ♦ = Grid sample
- ♦ = Forested sample
- ♦ = Upslope transect sample
- ♦ = Roadside sample

Figure 3-6. Scatter plot showing TEQ concentrations and percent TOC.

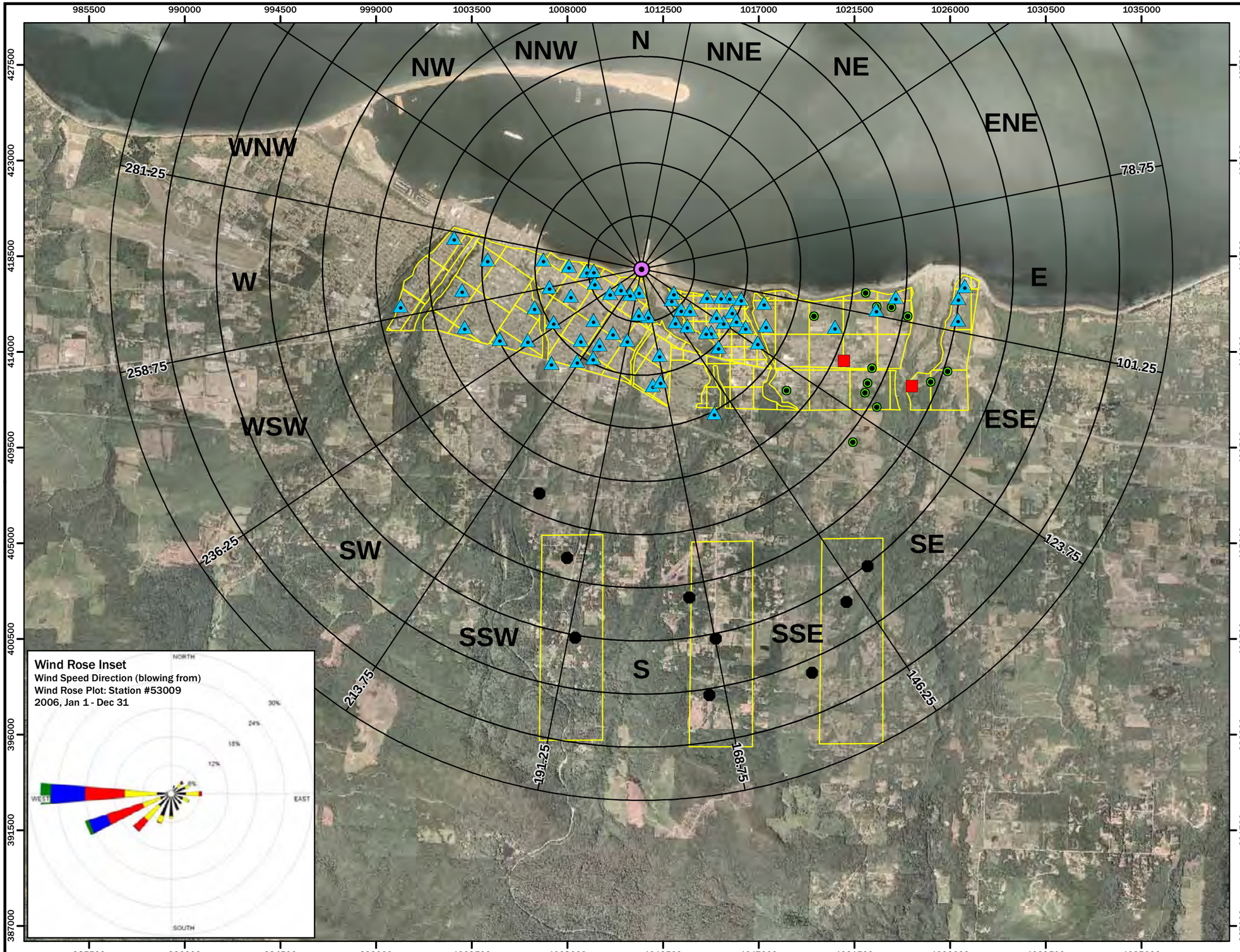


Figure 3-7
Study area showing sample locations and wind and compass roses with former Rayonier Mill hog fuel boiler as point of origin. Rayonier Mill Off-Property Soil Dioxin Study
Port Angeles, WA.

Legend

Grid cell boundary

Collected sample

- Forested
- Grid
- Highway
- Transect
- Former hog fuel boiler

Wind Rose Inset

Wind speed (knots)

- >=22
- 17 to 21
- 11 to 17
- 7 to 11
- 4 to 7
- 1 to 4

Calms: 0.55%

ecology and environment, inc.
International Specialists in the Environment

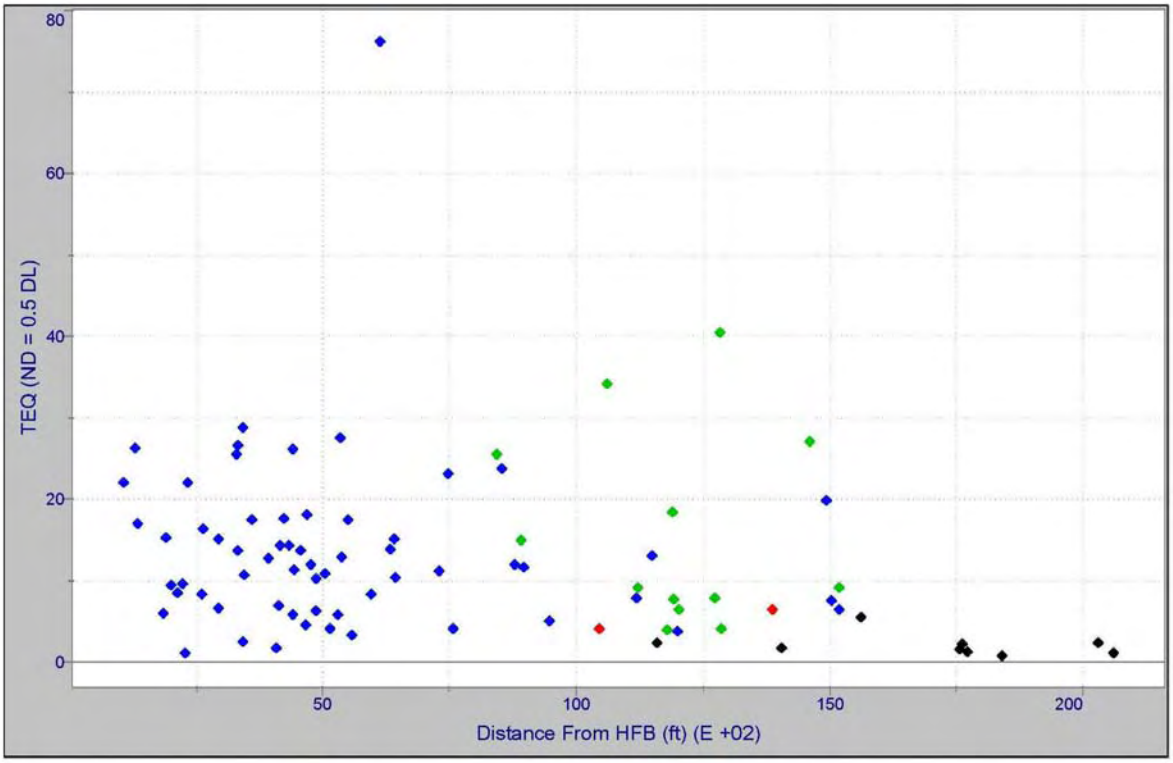
HERRERA ENVIRONMENTAL CONSULTANTS

0 2,250 4,500 9,000 Feet

Coordinates: Washington State Plane South
NAD 83 (feet)
Aerial: USDA, 2006

N

Produced By: GIS (RDR)
Project:
K:/Projects/06-03386-006/Projects/Compass Rose Report.mxd



Notes:
TEQ (ND = 0.5 DL) calculated assuming nondetected congeners present at one-half of the SDL or MDL, as appropriate.
Concentrations are in ng/kg, dry weight.
Distance is in hundreds of feet from the former hog fuel boiler (HFB).

Key:

- ♦ = Grid sample
- ♦ = Upslope transect sample
- ♦ = Roadside sample
- ♦ = Forested sample

Figure 3-8. Scatter plot showing TEQ concentrations and distance of samples from the former Rayonier Mill hog fuel boiler.

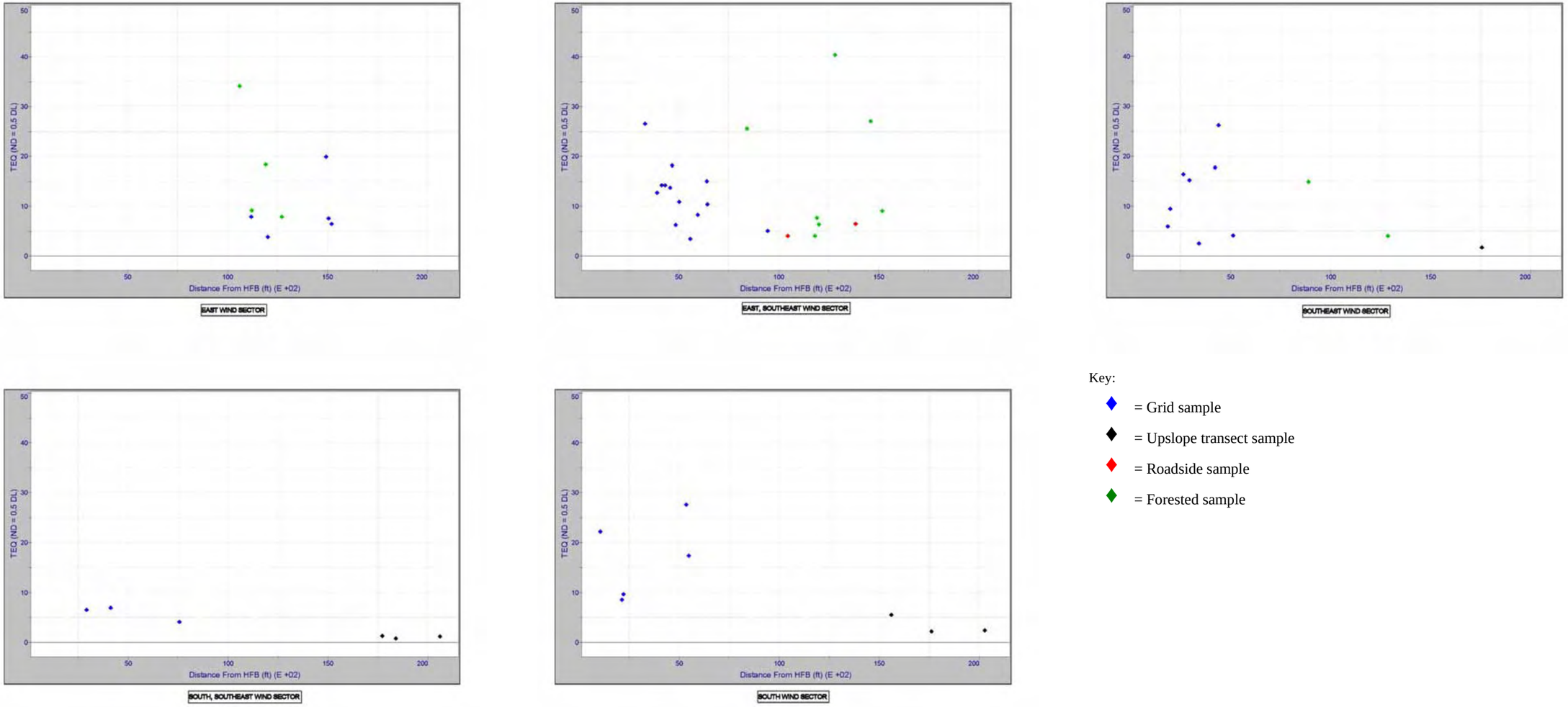
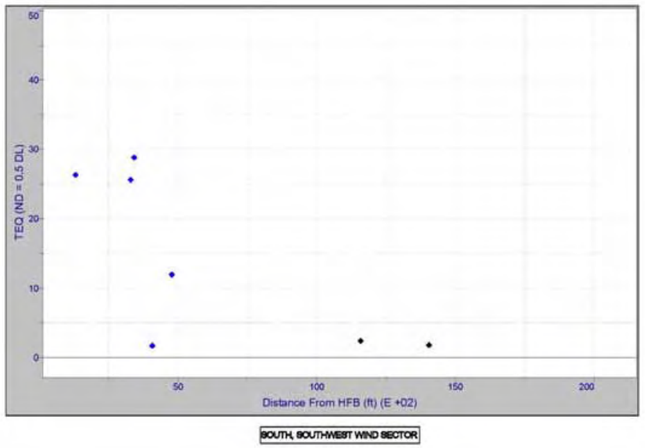
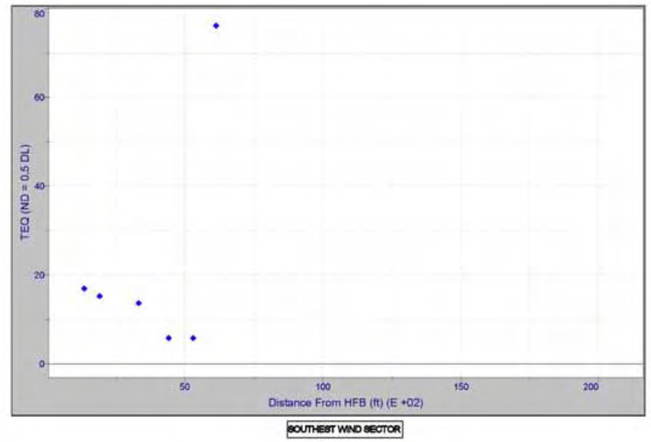
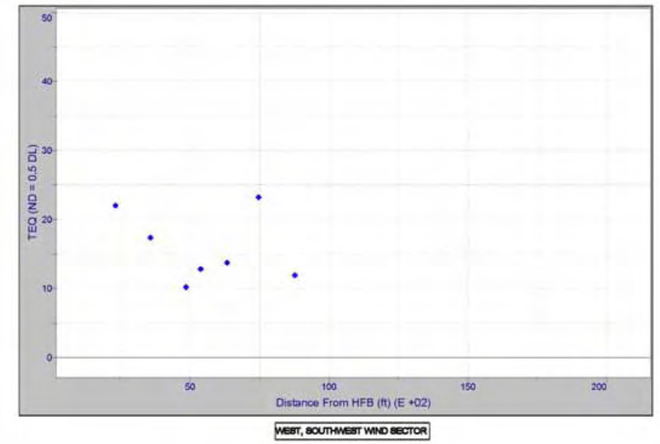
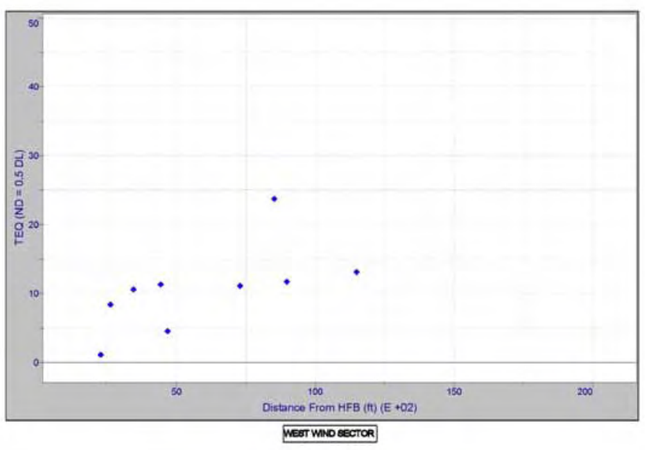


Figure 3-9. Scatter plots showing TEQ concentrations and distance by wind sector.









Key:

- ♦ = Grid sample
- ♦ = Upslope transect sample
- ♦ = Roadside sample
- ♦ = Forested sample

Figure 3-9 (continued). Scatter plots showing TEQ concentrations and distance by wind sector.

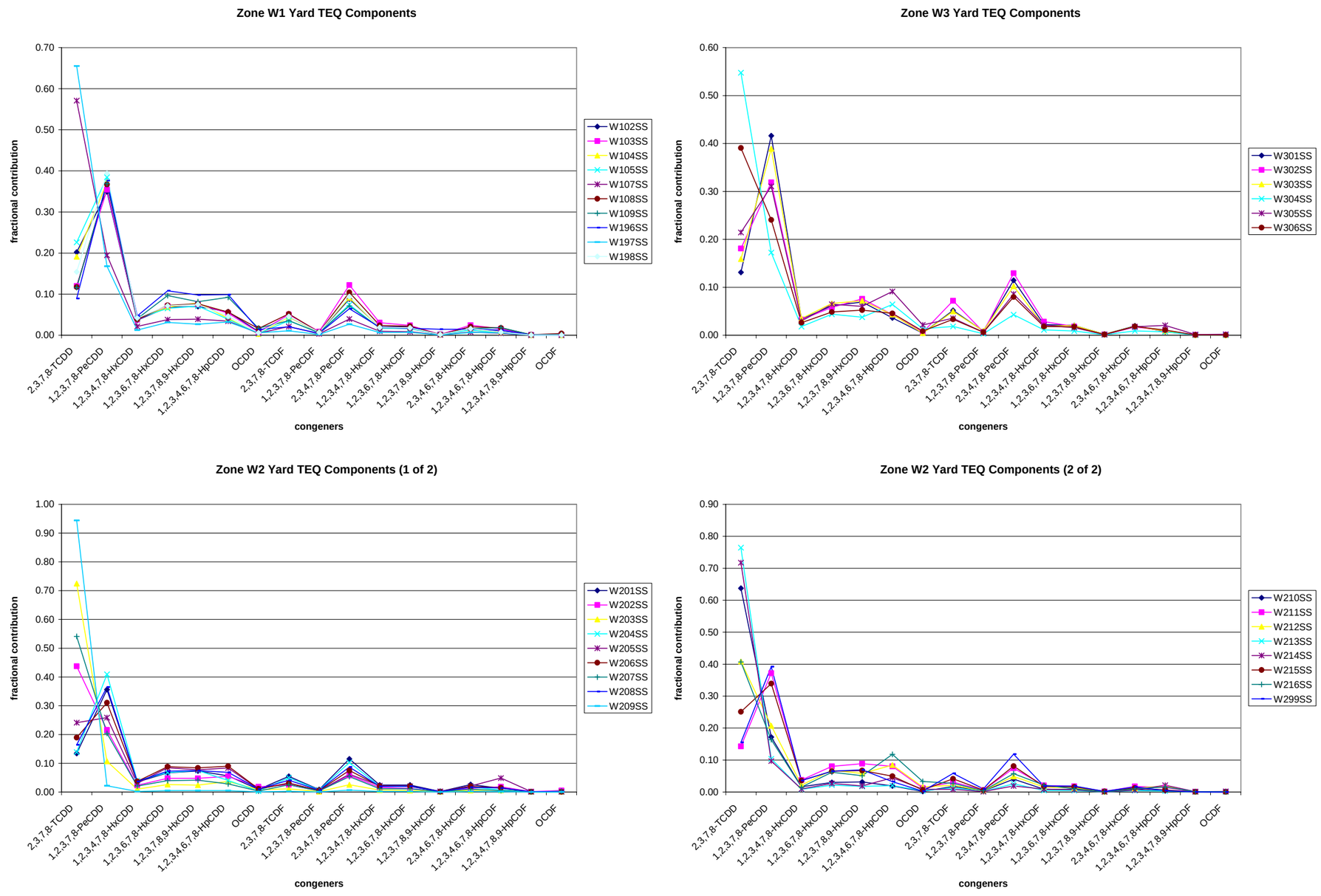


Figure 3-10. Line plots showing fractional contributions of congeners to TEQ results.

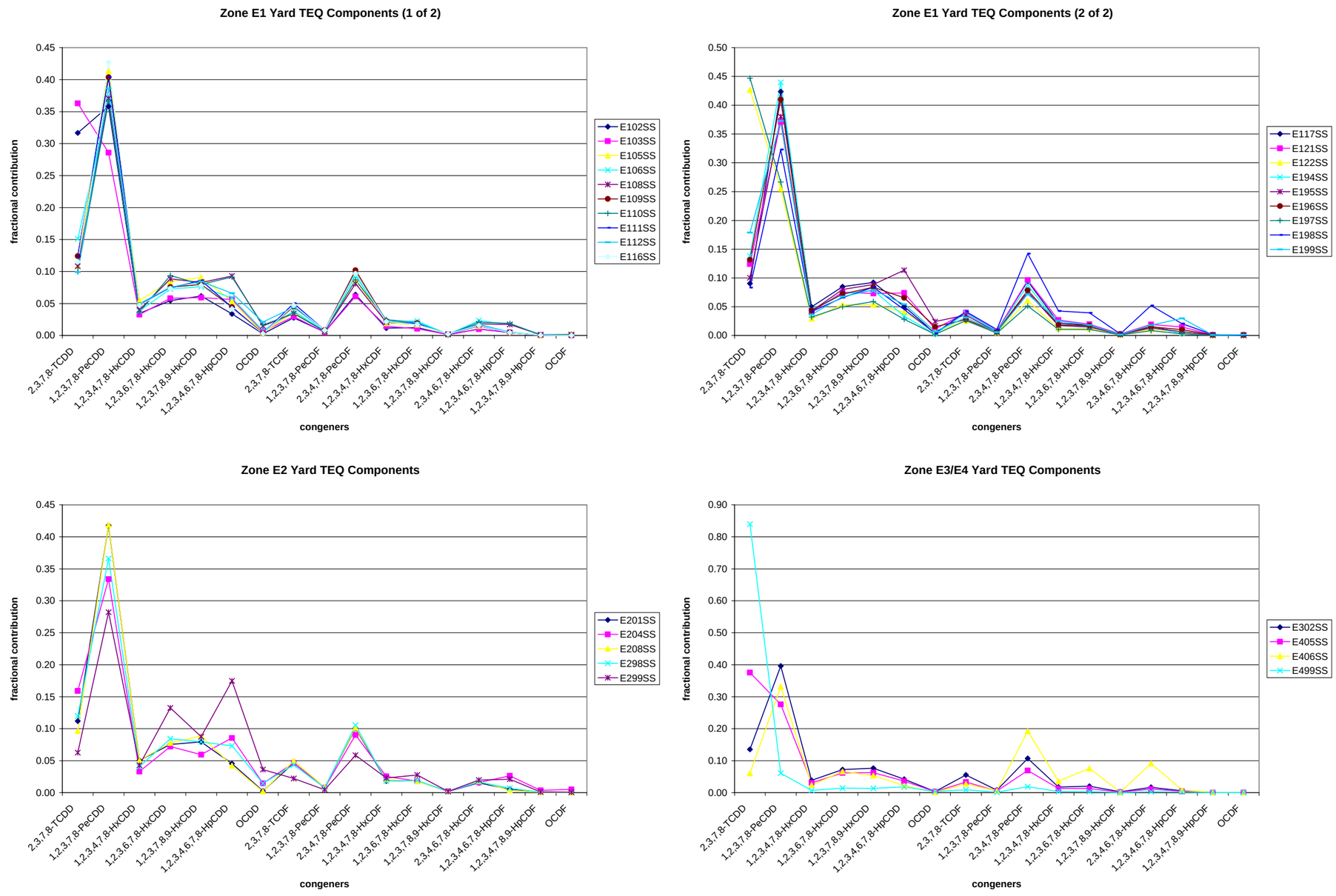
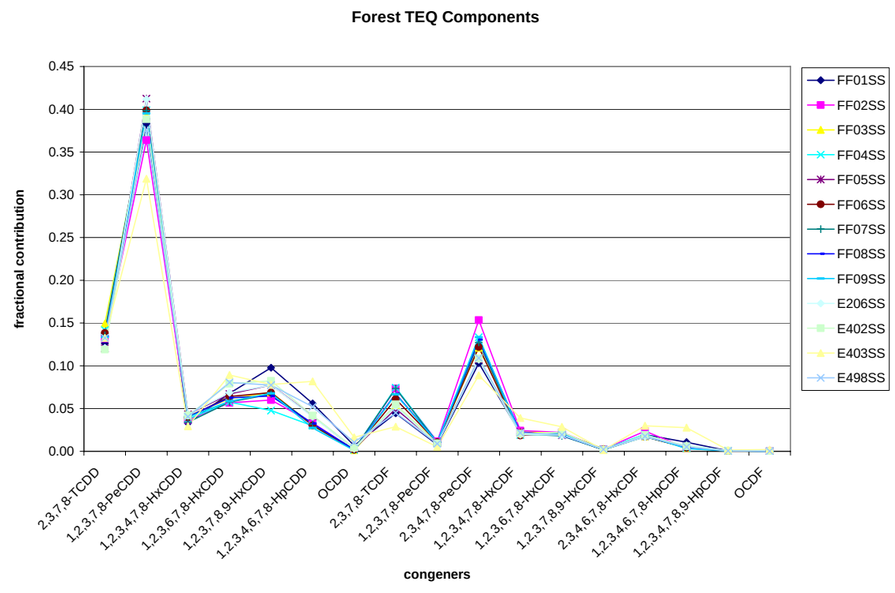
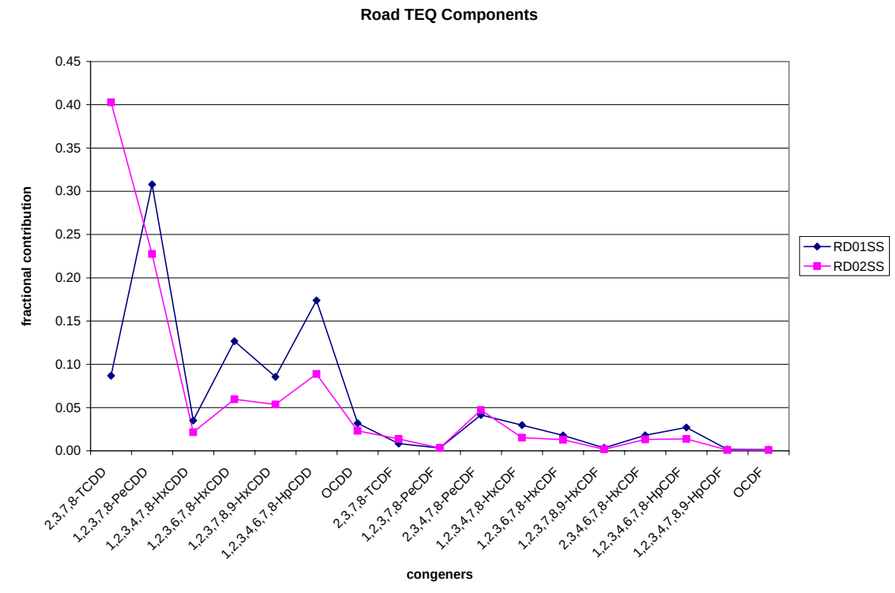


Figure 3-10 (continued). Line plots showing fractional contributions of congeners to TEQ results.





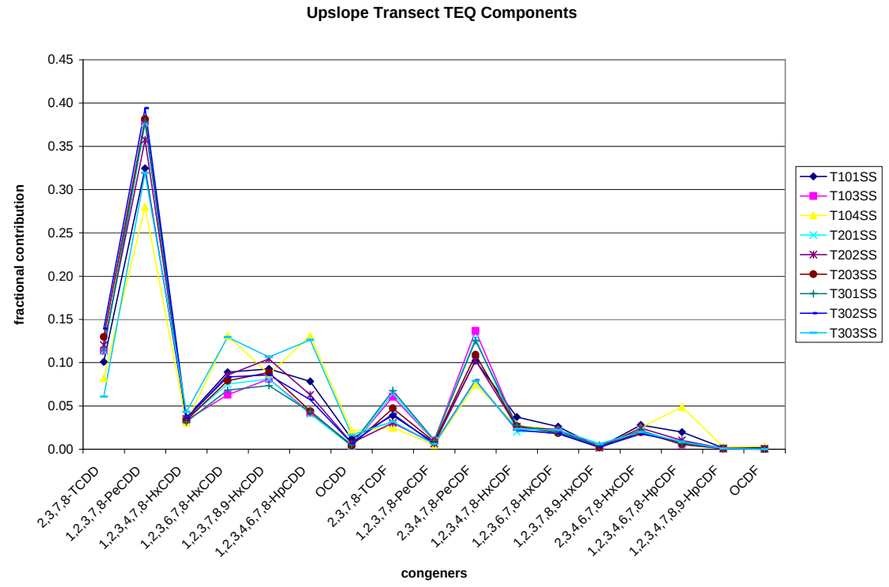


Figure 3-10 (continued). Line plots showing fractional contributions of congeners to TEQ results.