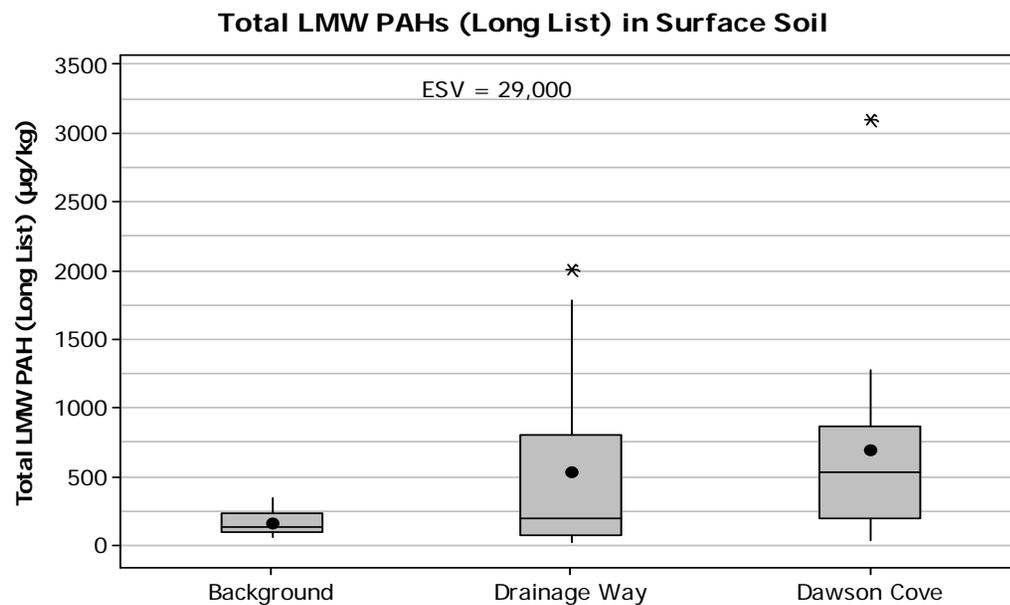
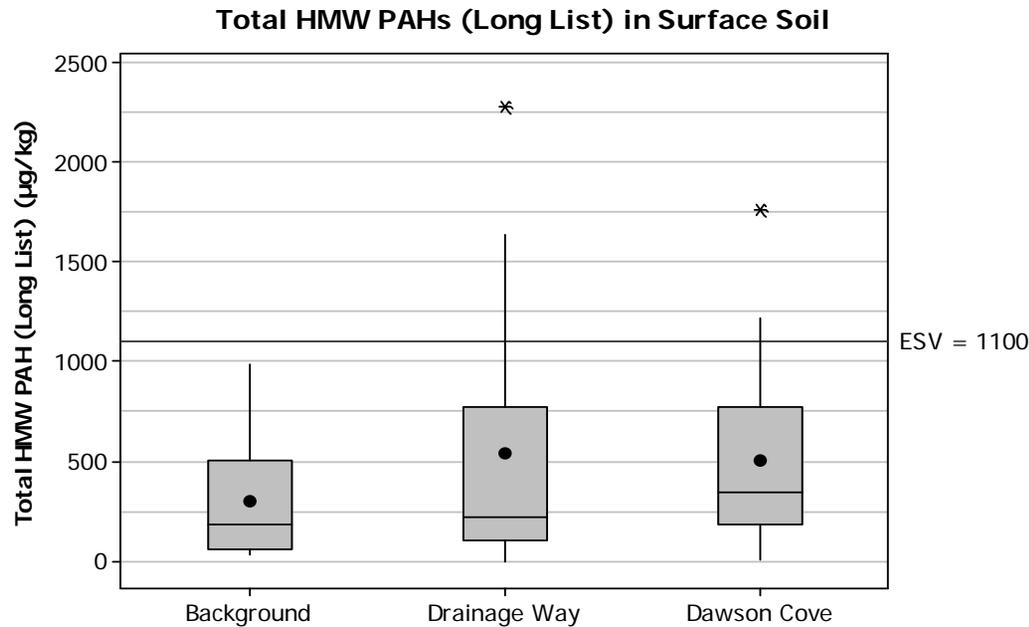




Appendix H

Box Plots



Notes:

1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Total PAH calculation excludes benzo(a)fluoranthene.
6. Abbreviations:

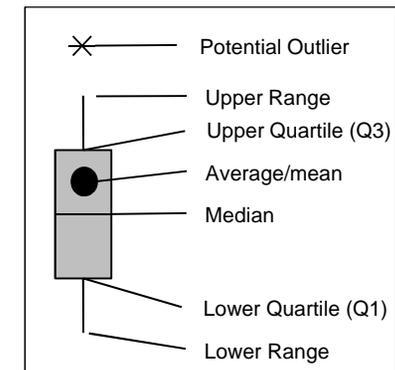
ESV = ecological screening value

HMW = high molecular weight

LMW = low molecular weight

PAH = polycyclic aromatic hydrocarbon

µg/kg = micrograms per kilogram

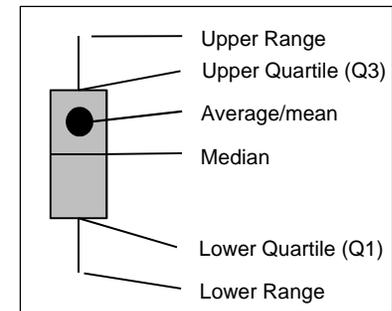
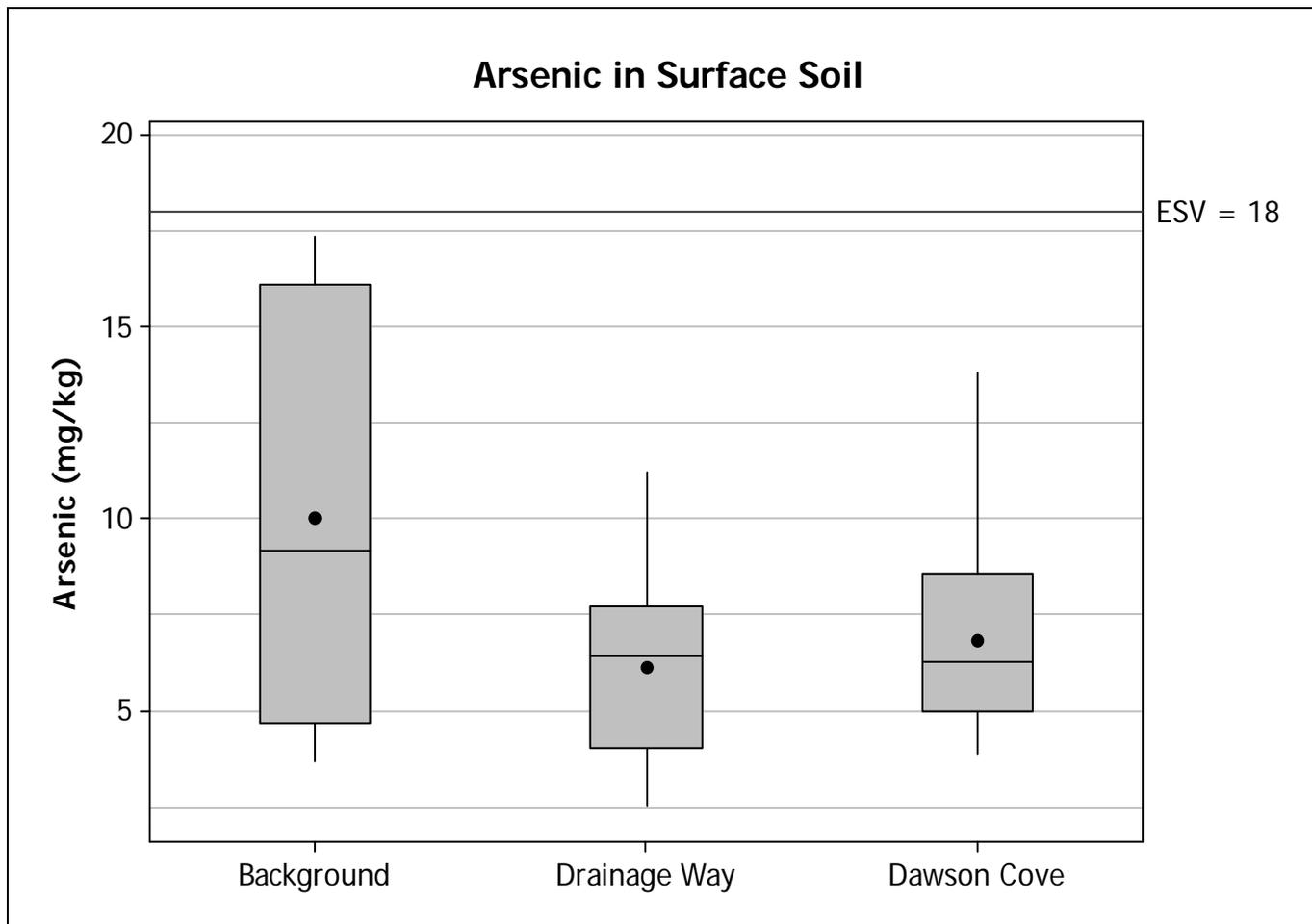


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BOX PLOTS OF TOTAL PAH (LONG LIST) CONCENTRATIONS IN SOILS



FIGURE
H-1



Notes:

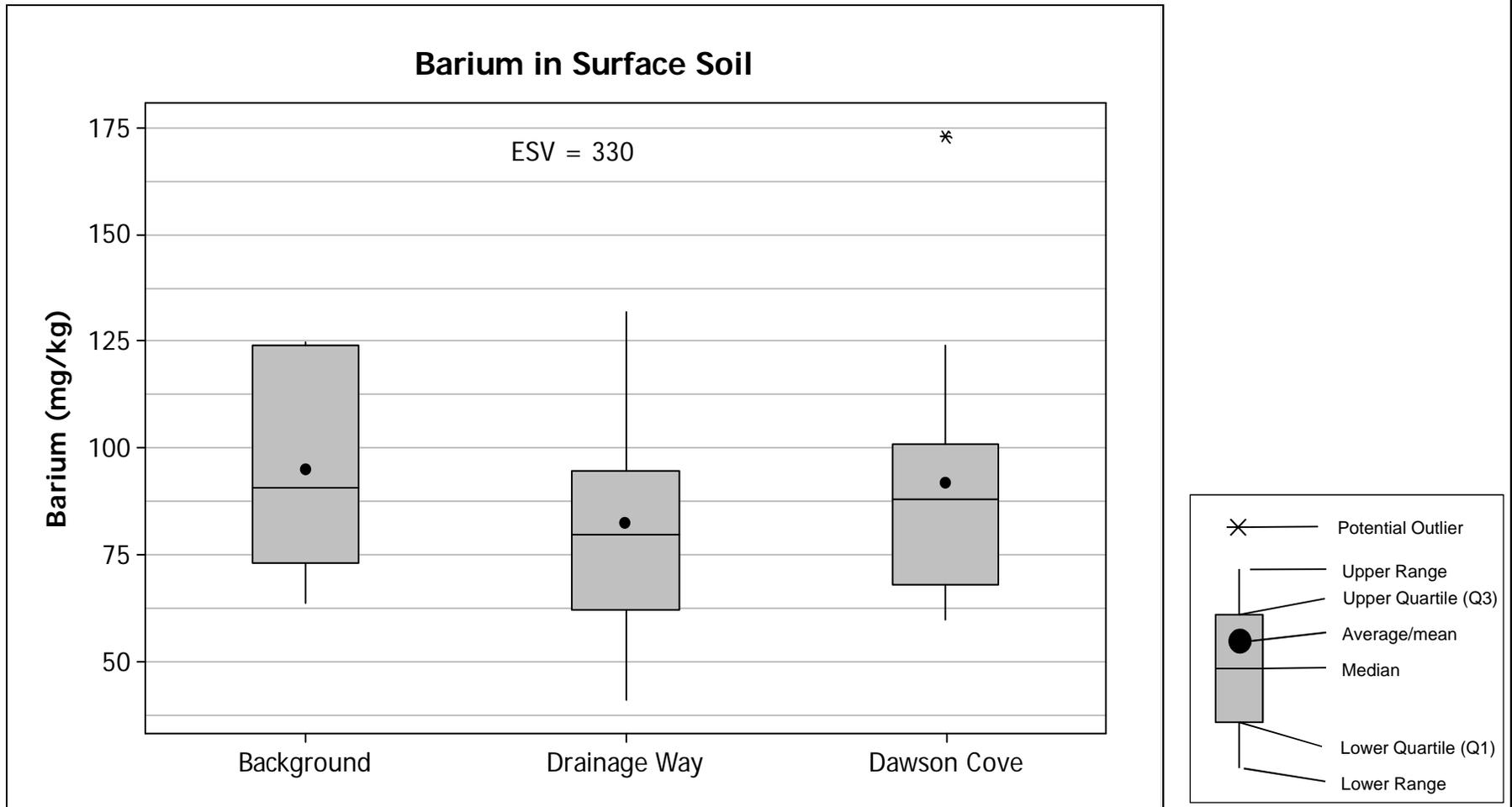
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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BOX PLOTS OF ARSENIC CONCENTRATIONS IN SOILS



FIGURE
H-2



Notes:

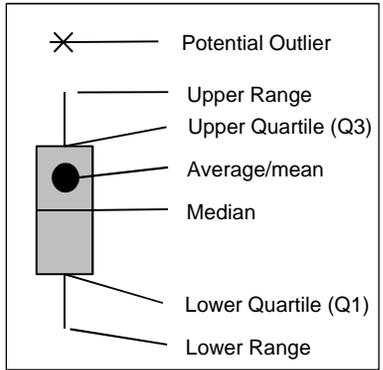
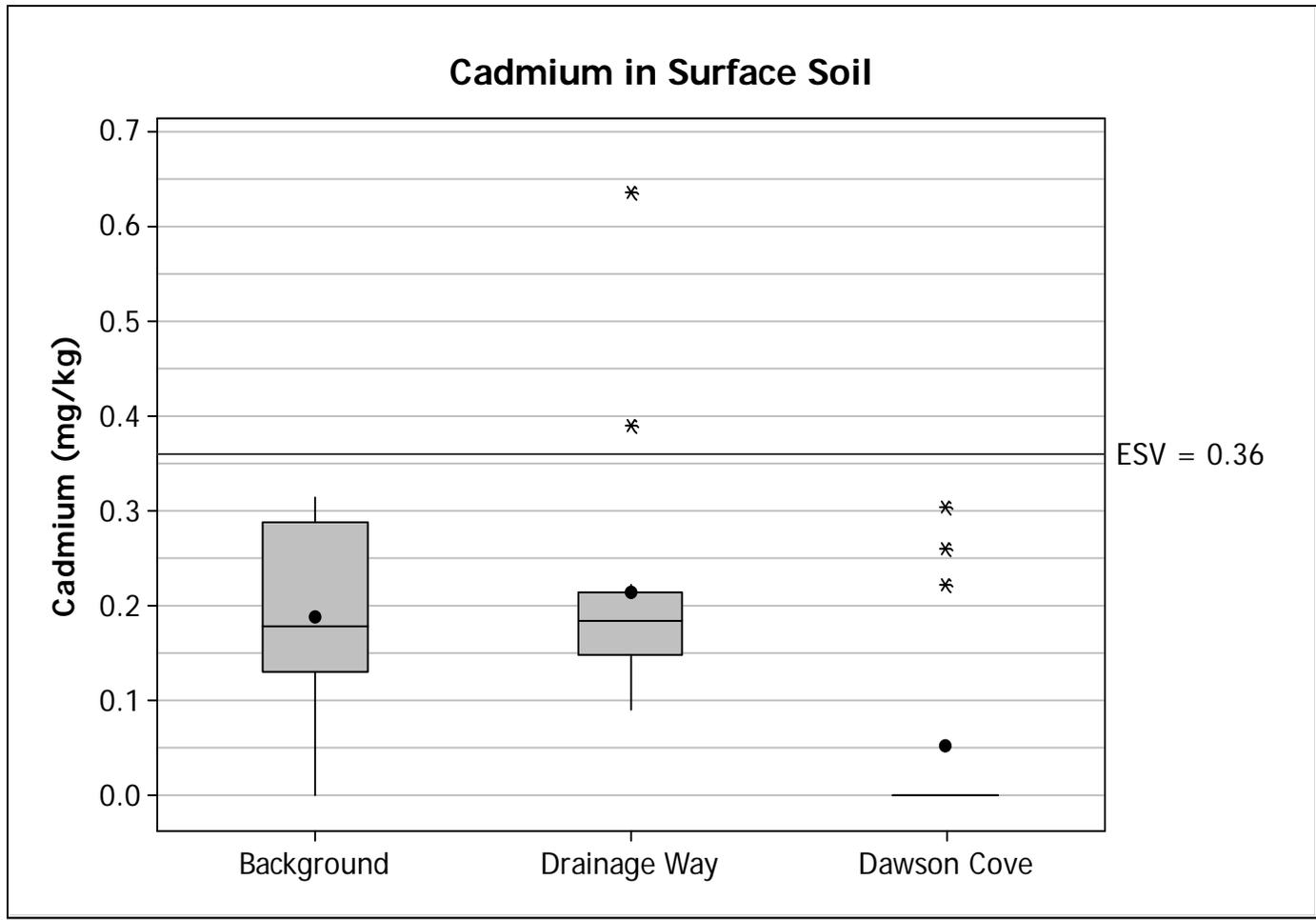
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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BOX PLOTS OF BARIUM CONCENTRATIONS IN SOILS



FIGURE
H-3



Notes:

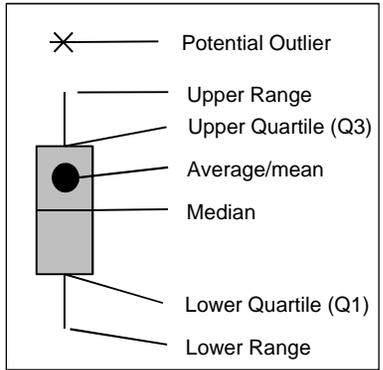
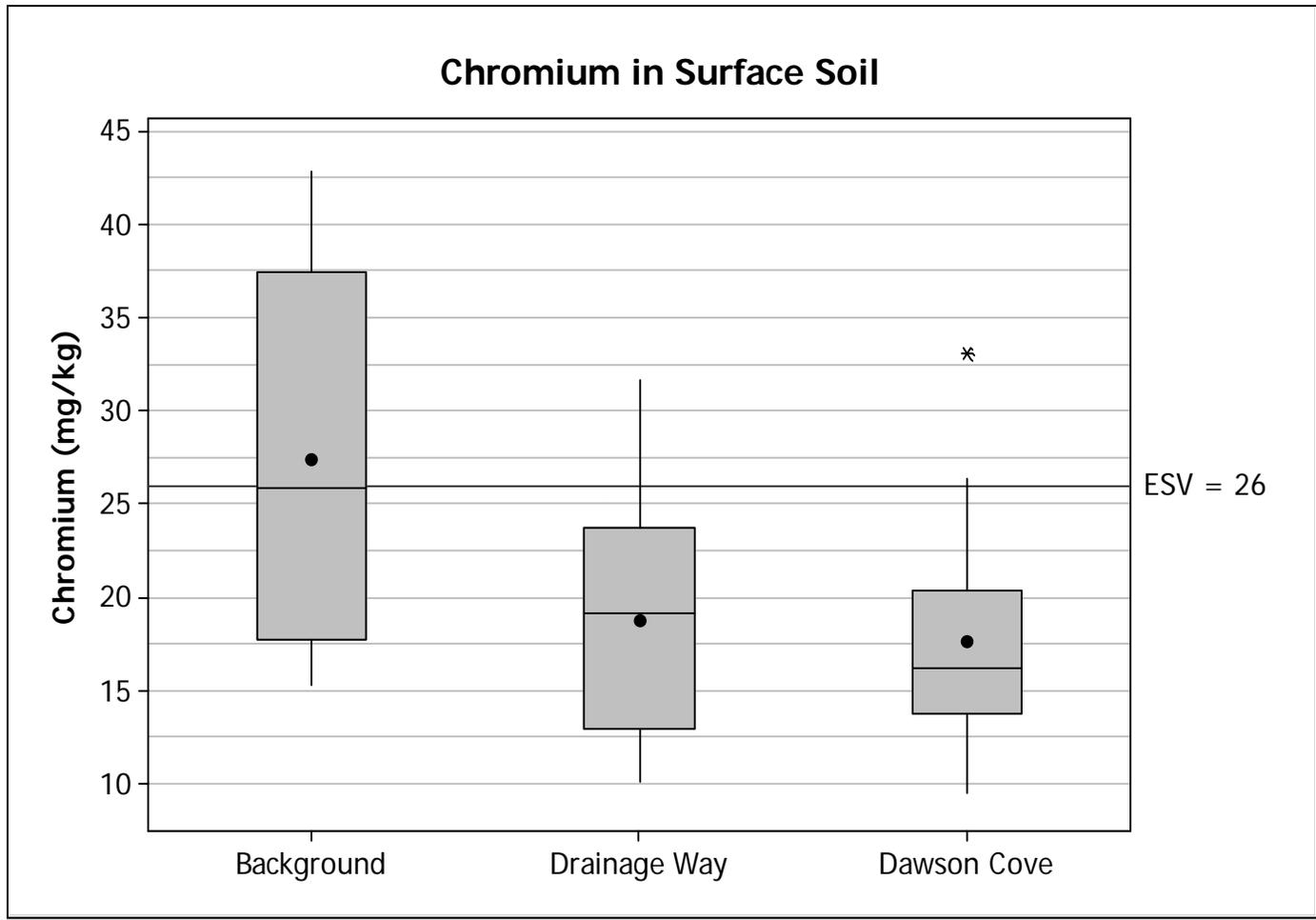
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

MAYFLOWER PIPELINE INCIDENT RESPONSE
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BOX PLOTS OF CADMIUM CONCENTRATIONS IN SOILS



FIGURE
H-4



ESV = 26

Notes:

1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$.
 Potential outliers are data points that are beyond these limits.

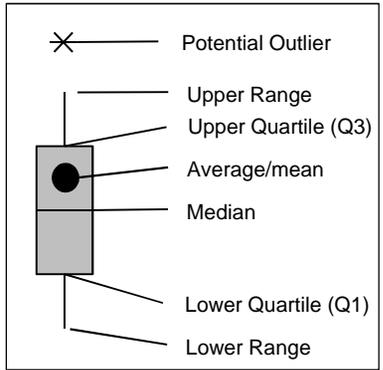
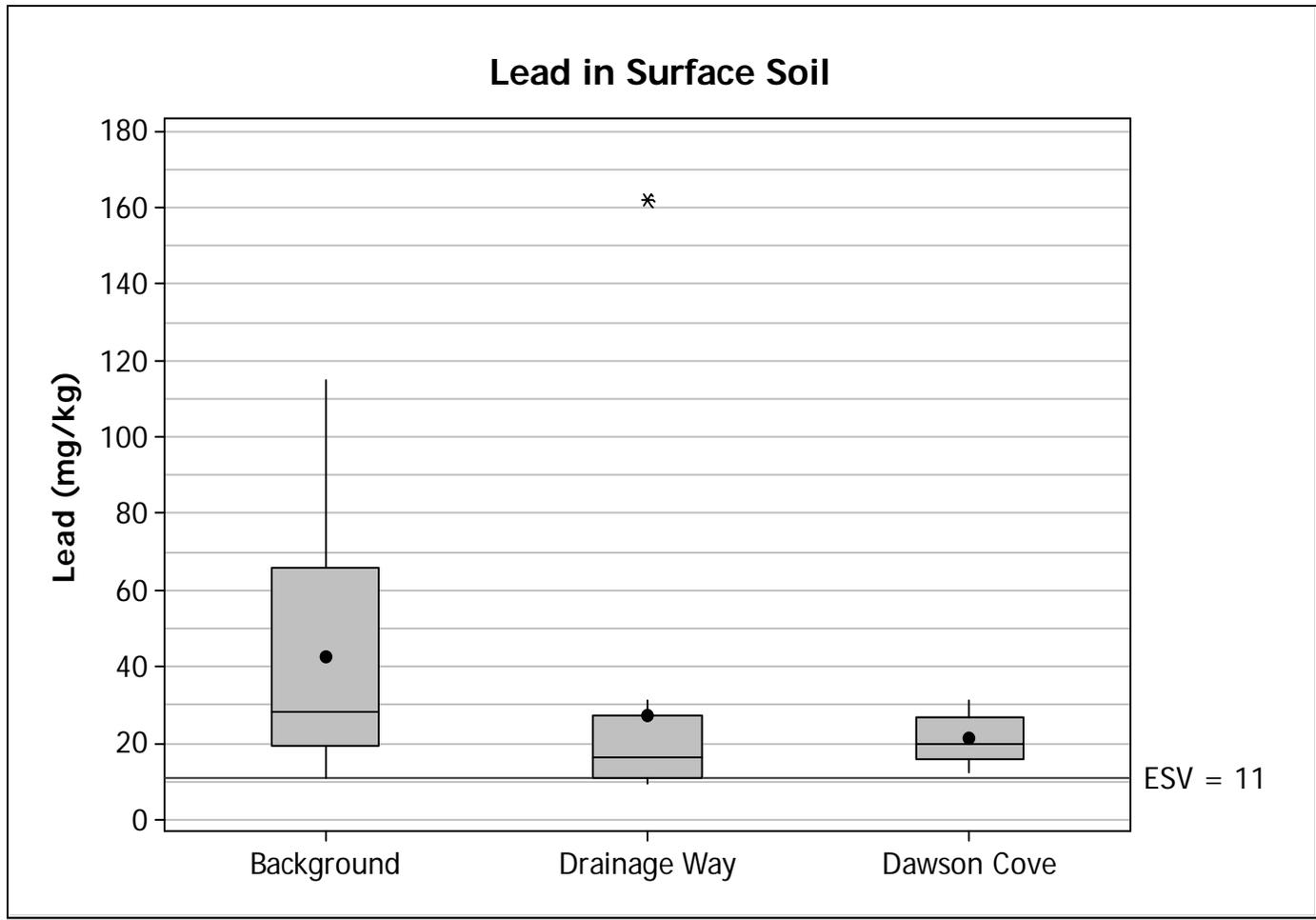
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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BOX PLOTS OF CHROMIUM CONCENTRATIONS IN SOILS



FIGURE
H-5



Notes:

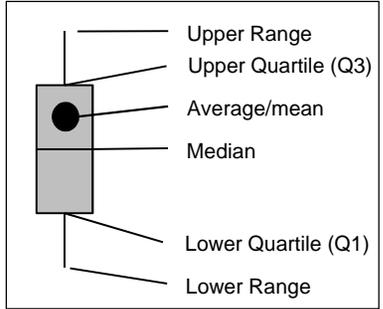
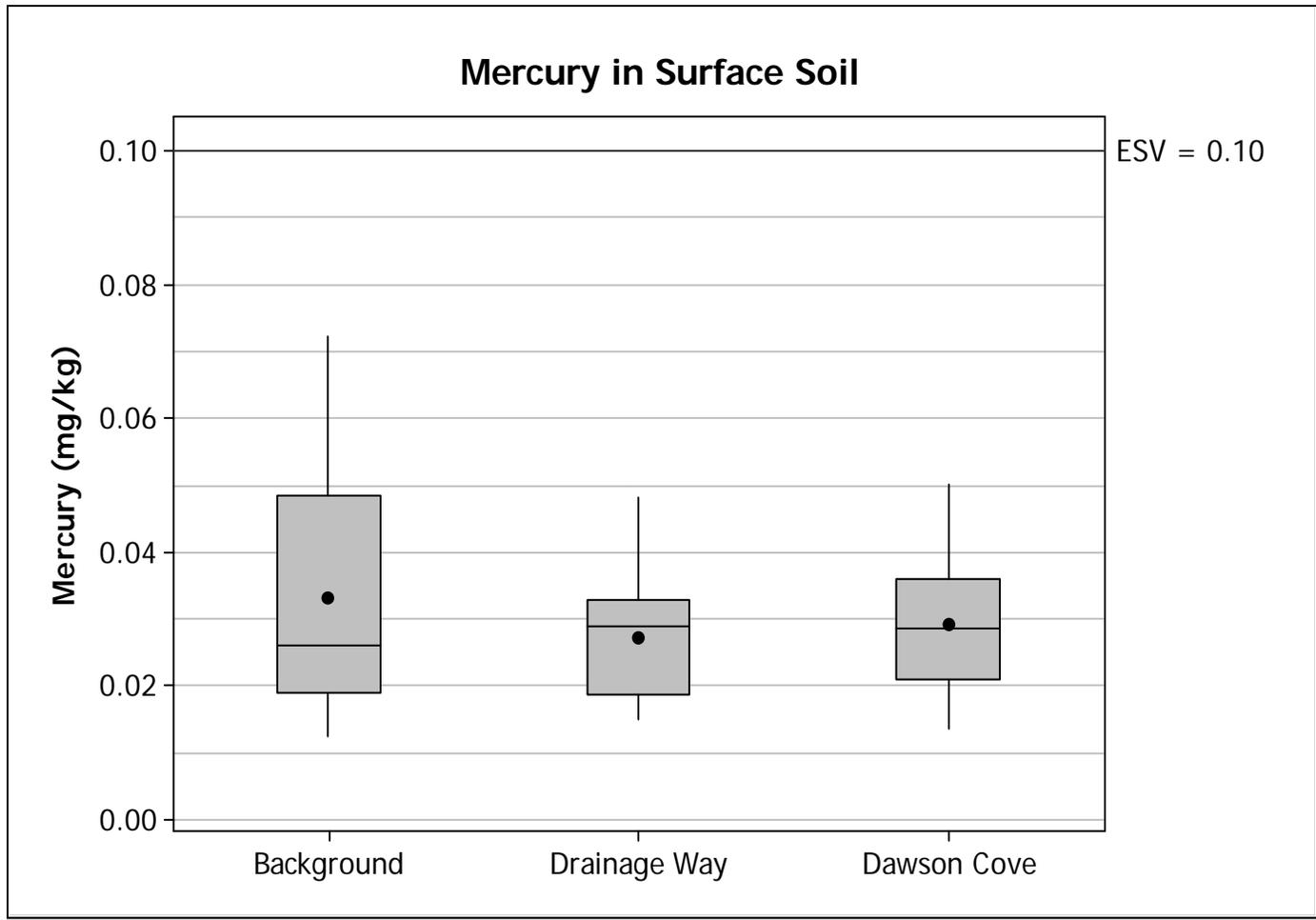
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

MAYFLOWER PIPELINE INCIDENT RESPONSE
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BOX PLOTS OF LEAD CONCENTRATIONS IN SOILS



FIGURE
H-6



Notes:

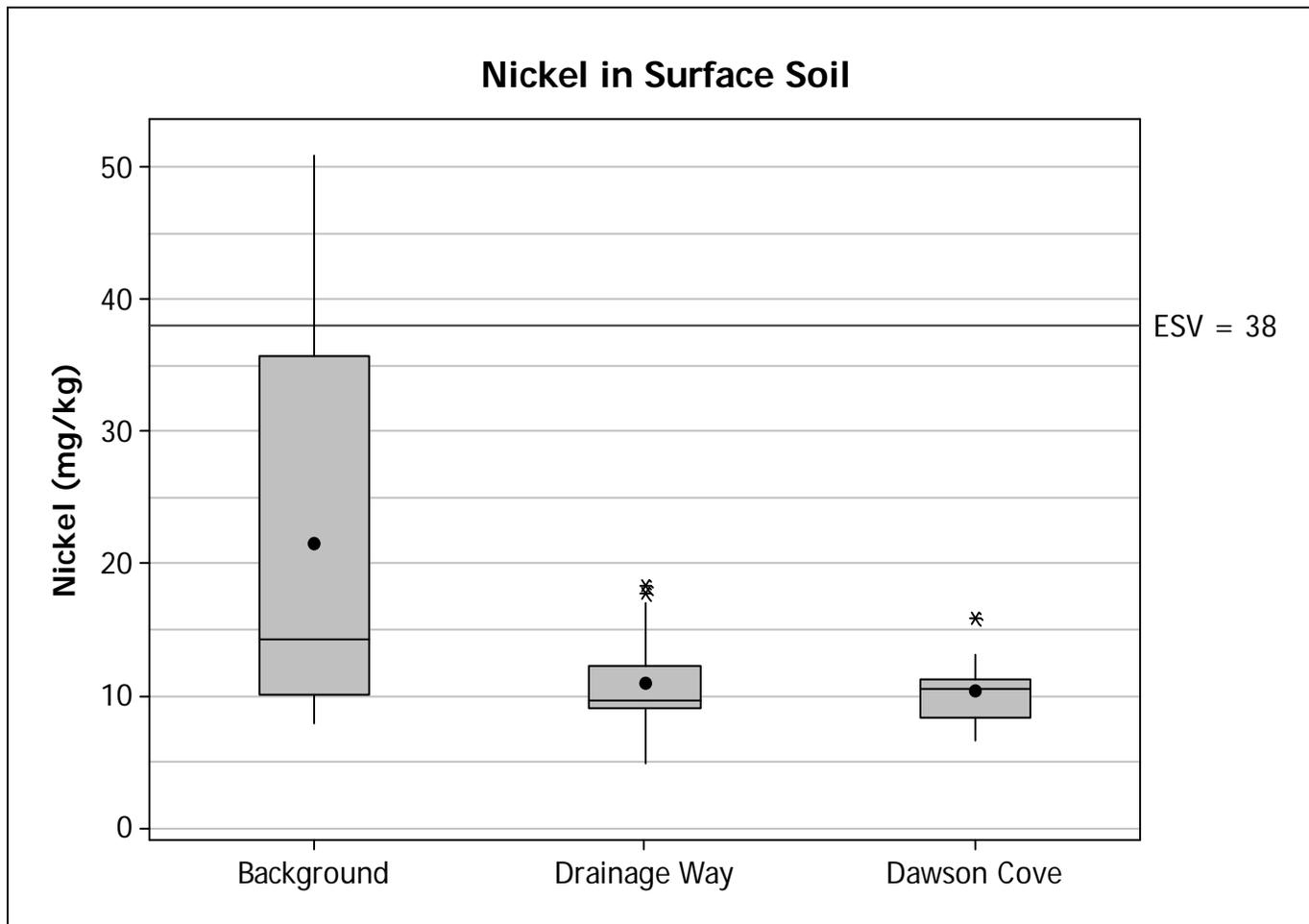
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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BOX PLOTS OF MERCURY CONCENTRATIONS IN SOILS



FIGURE
H-7



Notes:

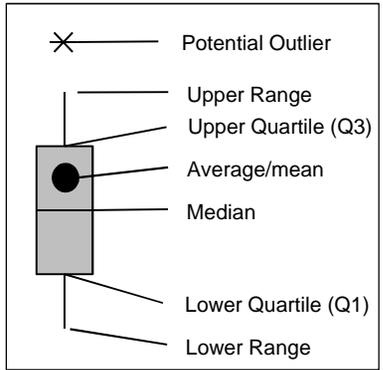
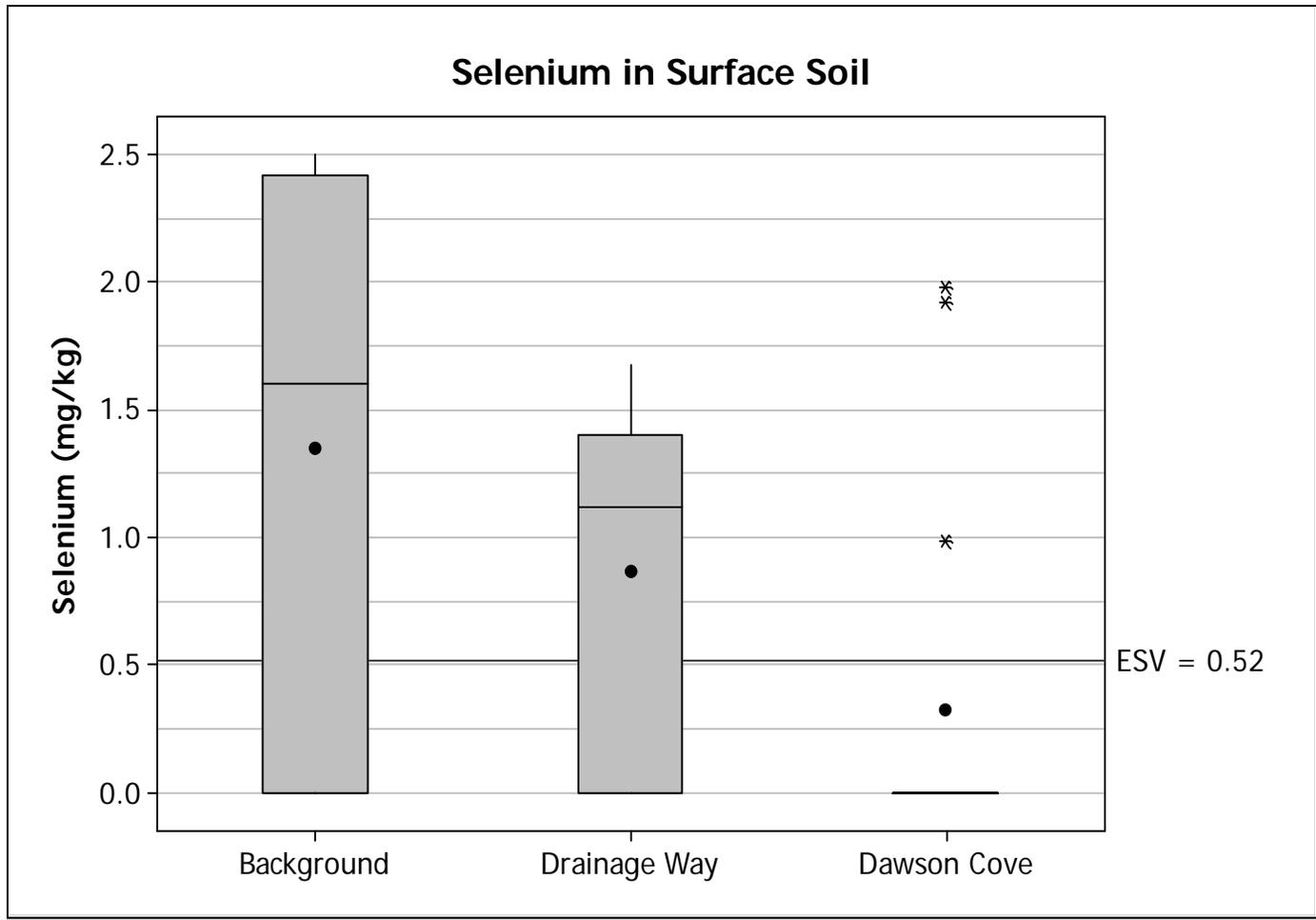
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5*(Q3-Q1))$ and $(Q1 - 1.5*(Q3-Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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BOX PLOTS OF NICKEL CONCENTRATIONS IN SOILS



FIGURE
H-8



Notes:

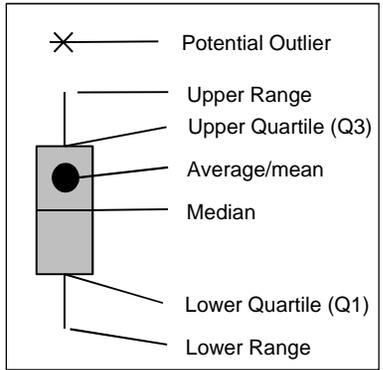
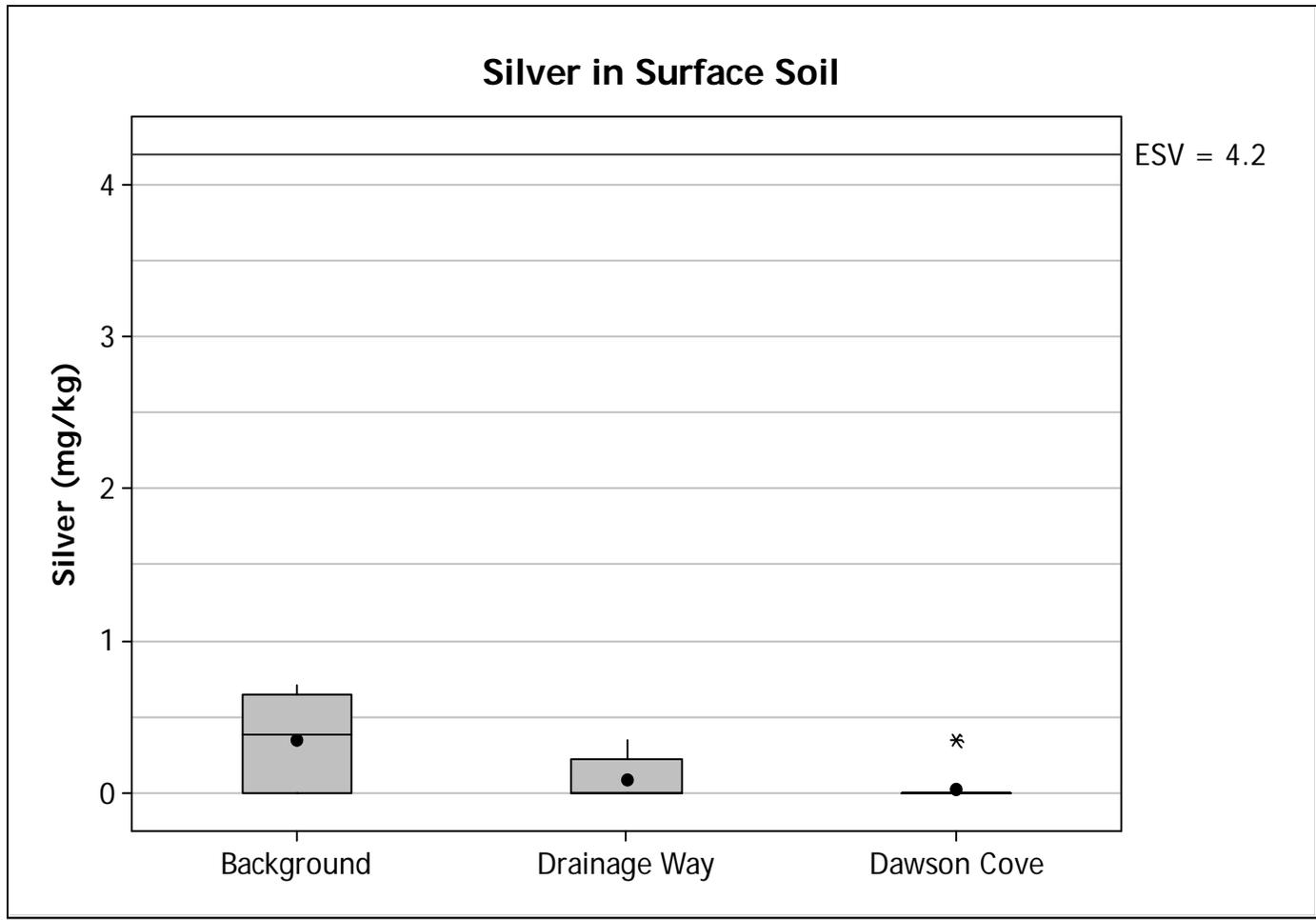
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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BOX PLOTS OF SELENIUM CONCENTRATIONS IN SOILS



FIGURE
H-9



Notes:

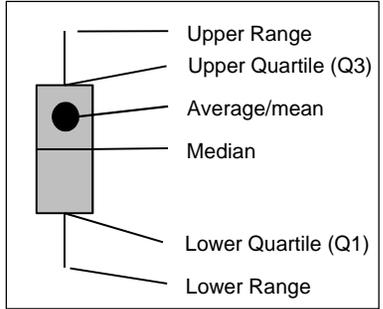
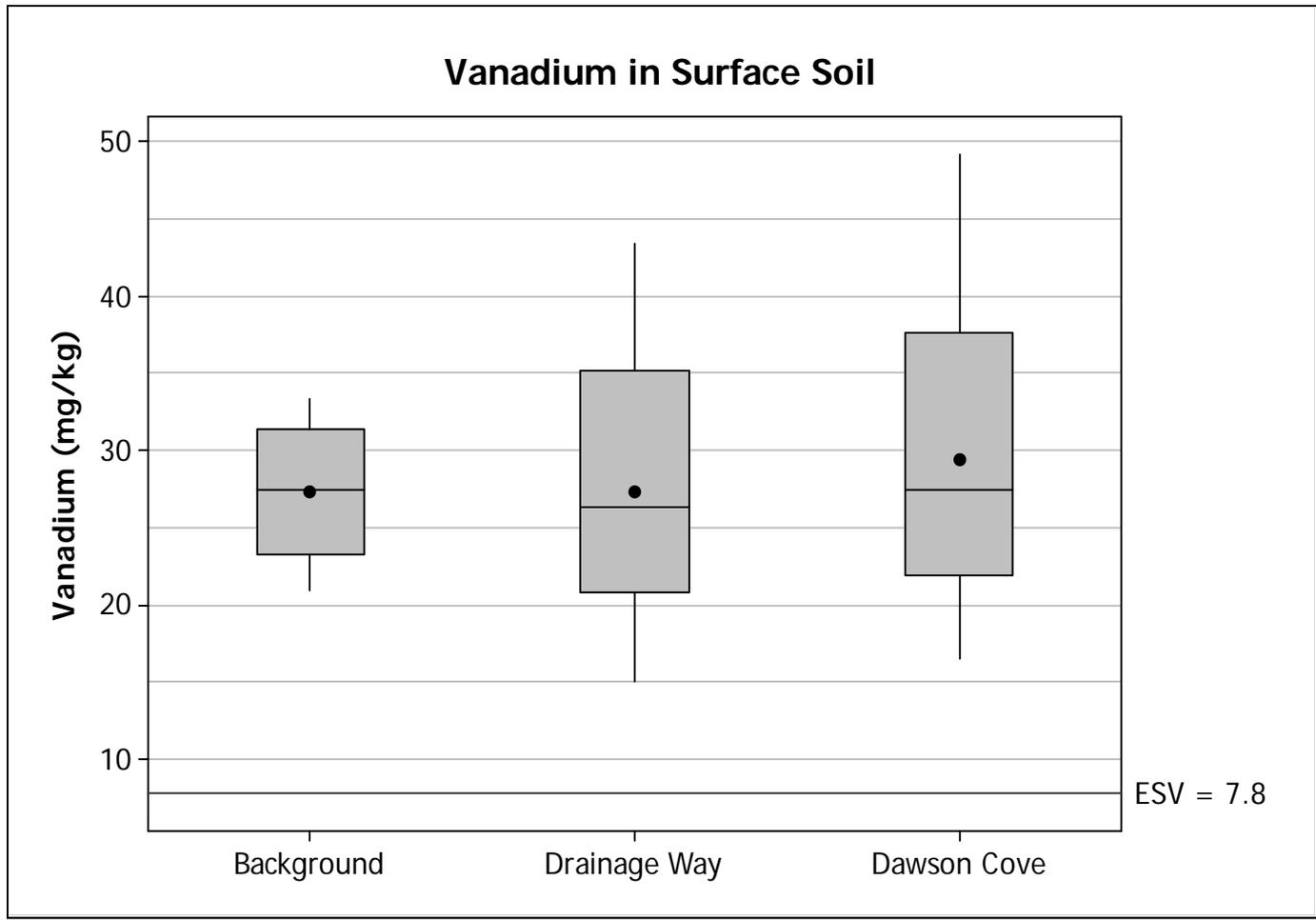
1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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BOX PLOTS OF SILVER CONCENTRATIONS IN SOILS



FIGURE
H-10



Notes:

1. Duplicate samples were excluded from analysis.
2. Surface soil is defined as the depth interval of 0 to 0.5 foot below ground surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

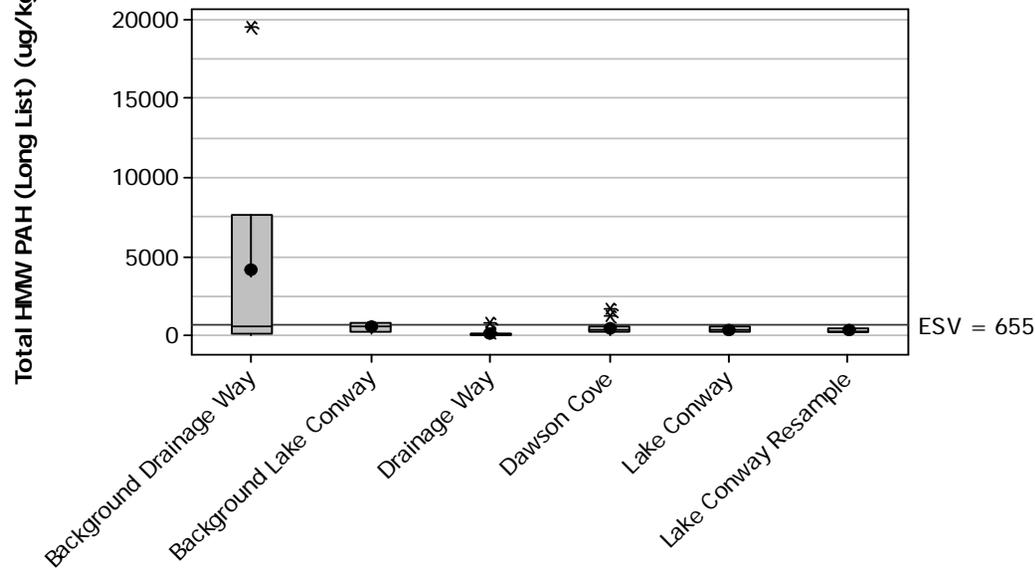
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BOX PLOTS OF VANADIUM CONCENTRATIONS IN SOILS



FIGURE
H-11

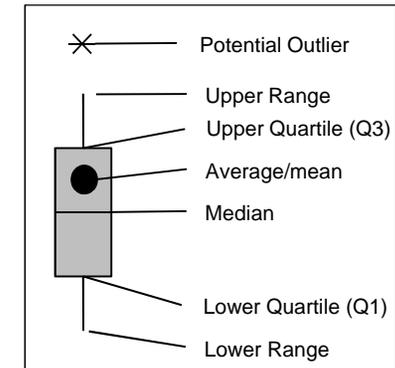
Total HMW PAHs (Priority + 2 List) in Surface Sediment



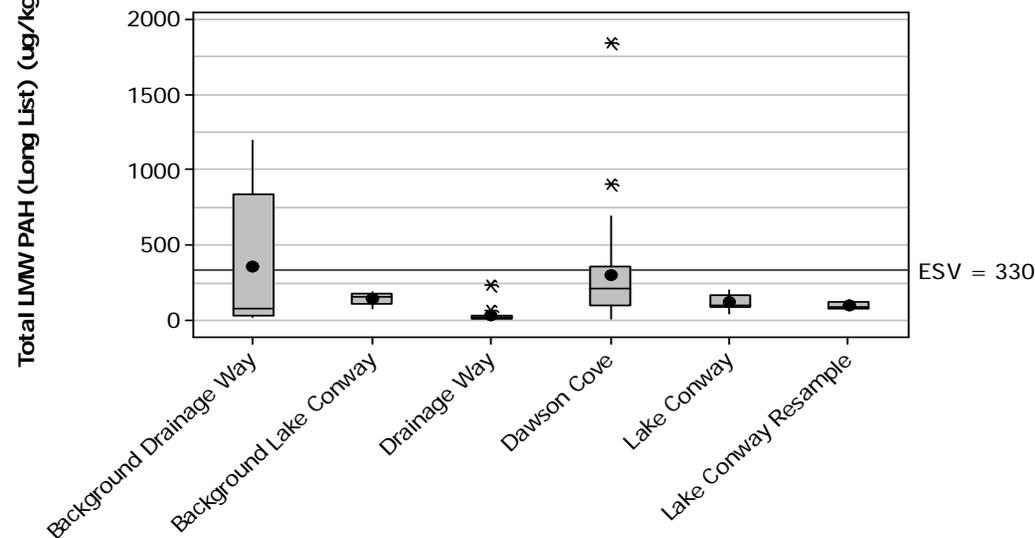
Notes:

1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:

ESV = ecological screening value
 HMW = high molecular weight
 LMW = low molecular weight
 PAH = polycyclic aromatic hydrocarbon
 µg/kg = micrograms per kilogram



Total LMW PAHs (Priority + 2 List) in Surface Sediment

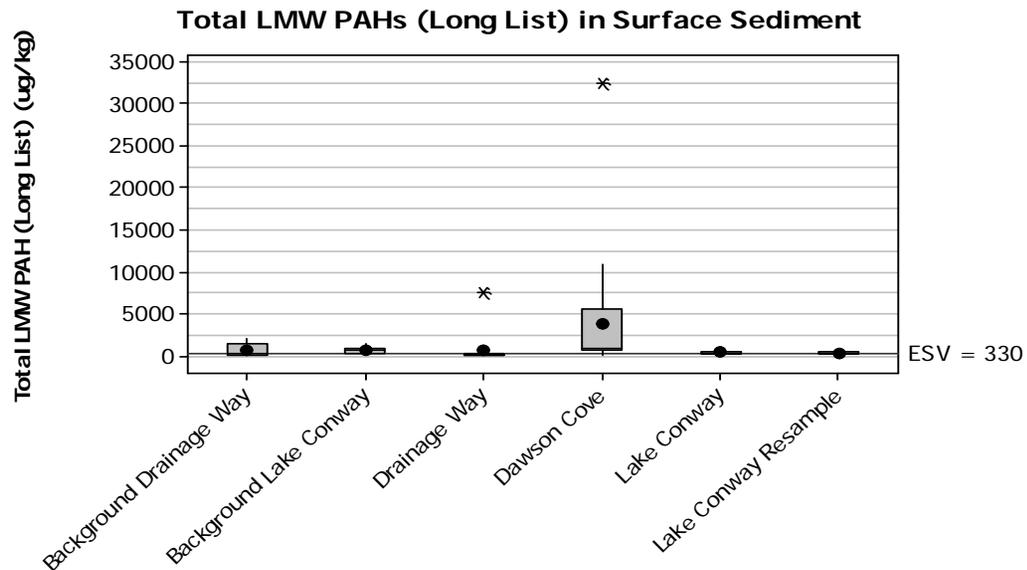
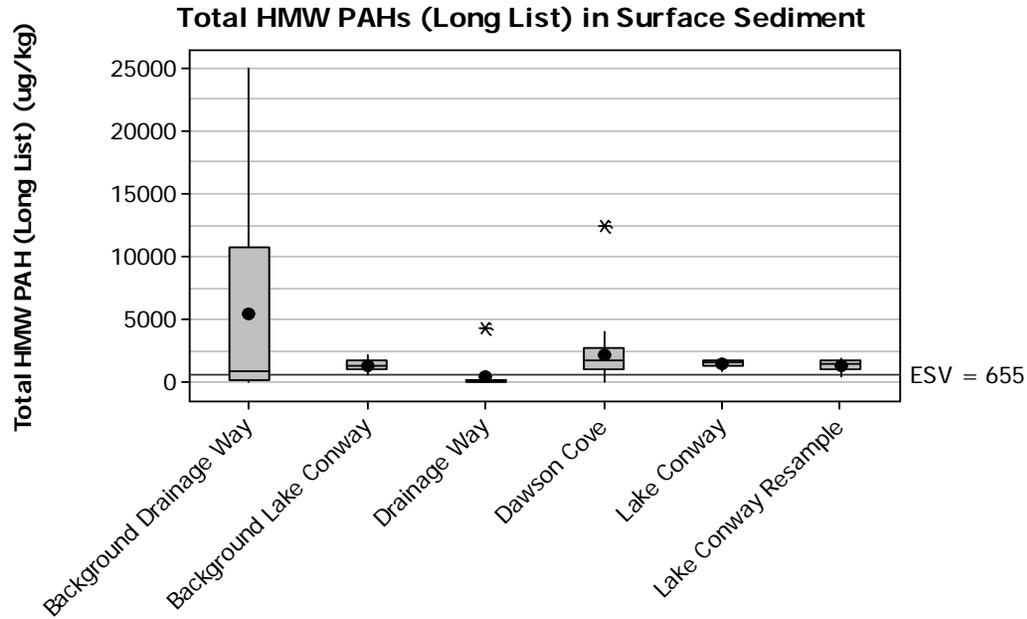


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BOX PLOTS OF TOTAL PAH (PRIORITY + 2 LIST) CONCENTRATIONS IN SEDIMENTS



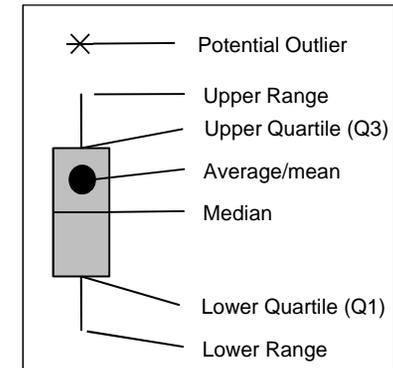
FIGURE
H-12



Notes:

1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:

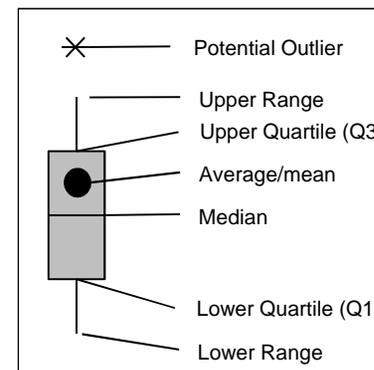
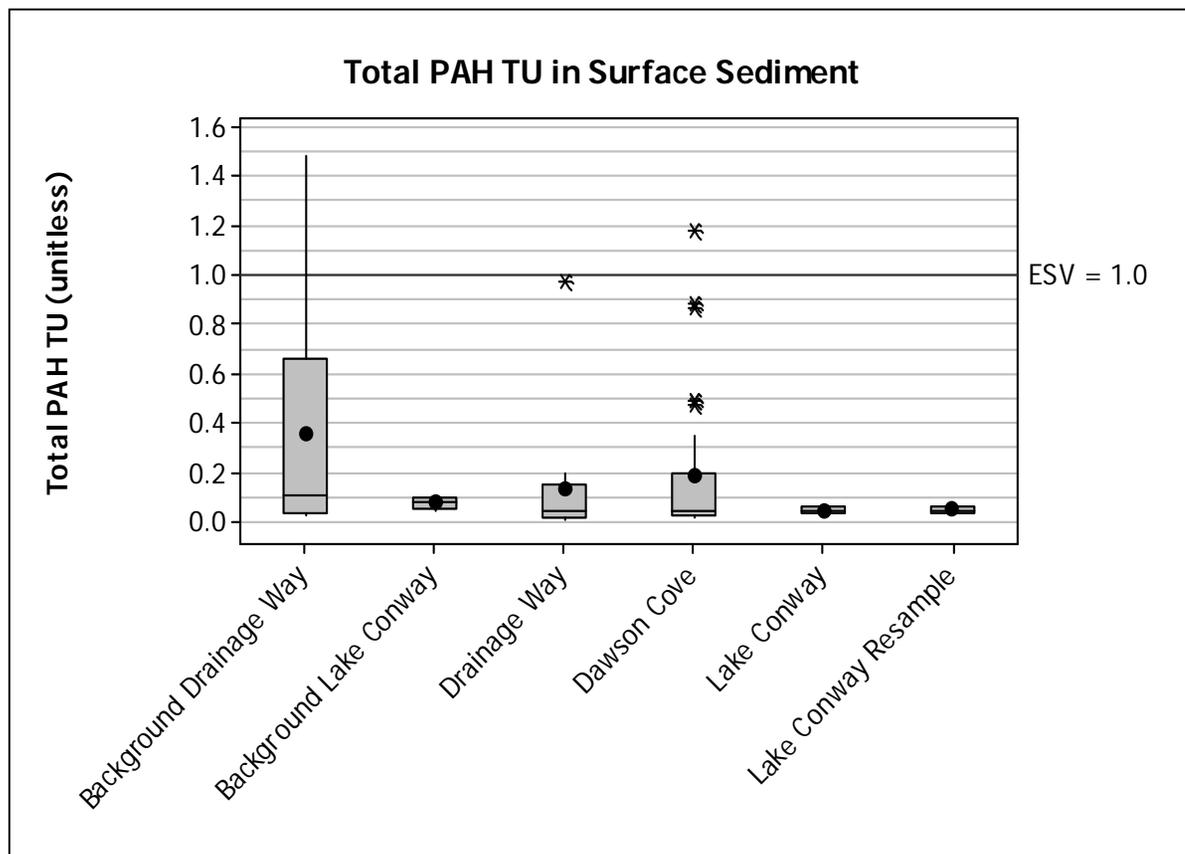
ESV = ecological screening value
 HMW = high molecular weight
 LMW = low molecular weight
 PAH = polycyclic aromatic hydrocarbon
 $\mu\text{g}/\text{kg}$ = micrograms per kilogram



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BOX PLOTS OF TOTAL PAH (LONG LIST) CONCENTRATIONS IN SEDIMENTS





Notes:

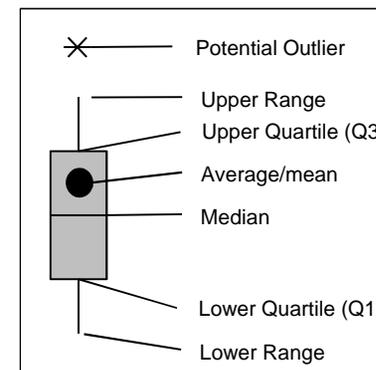
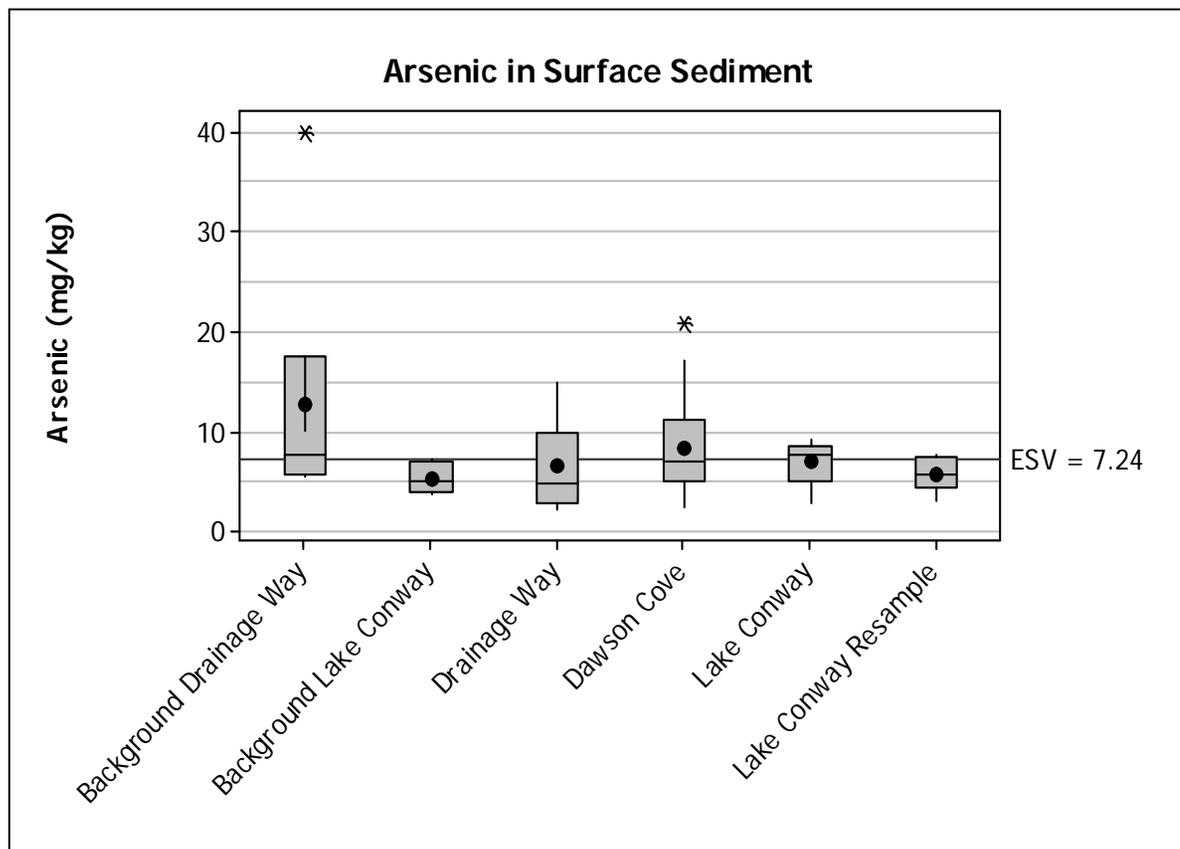
1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 PAH = polycyclic aromatic hydrocarbon
 TU = toxicity unit

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**BOX PLOTS OF TOXICITY UNITS IN
 SEDIMENTS**

 **ARCADIS**

FIGURE
H-14



Notes:

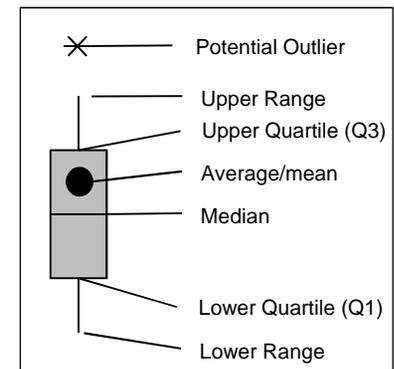
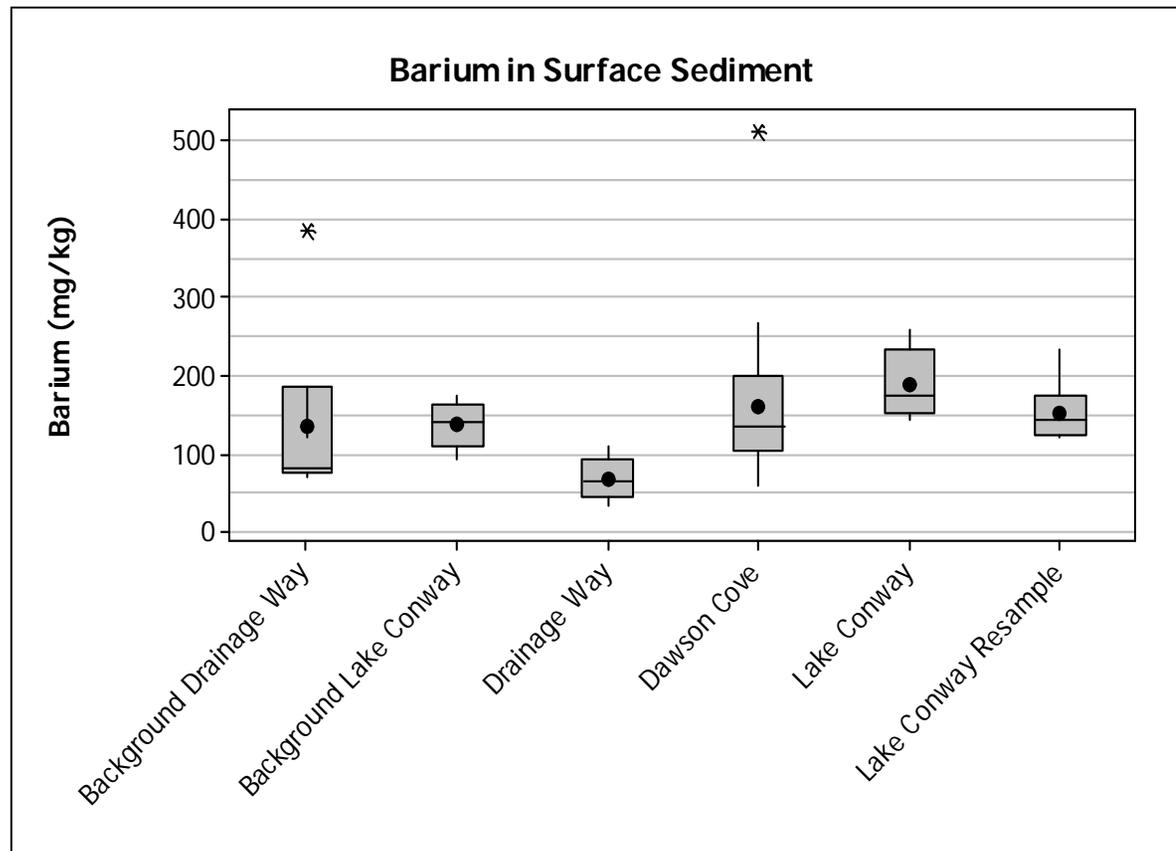
1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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**BOX PLOTS OF ARSENIC
 CONCENTRATIONS IN SEDIMENTS**



FIGURE
H-15



Notes:

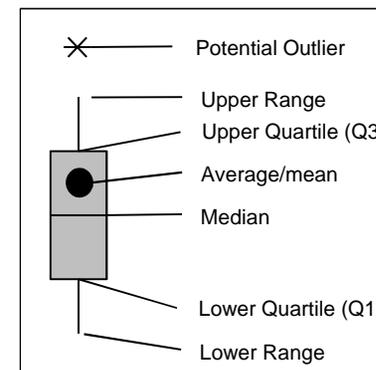
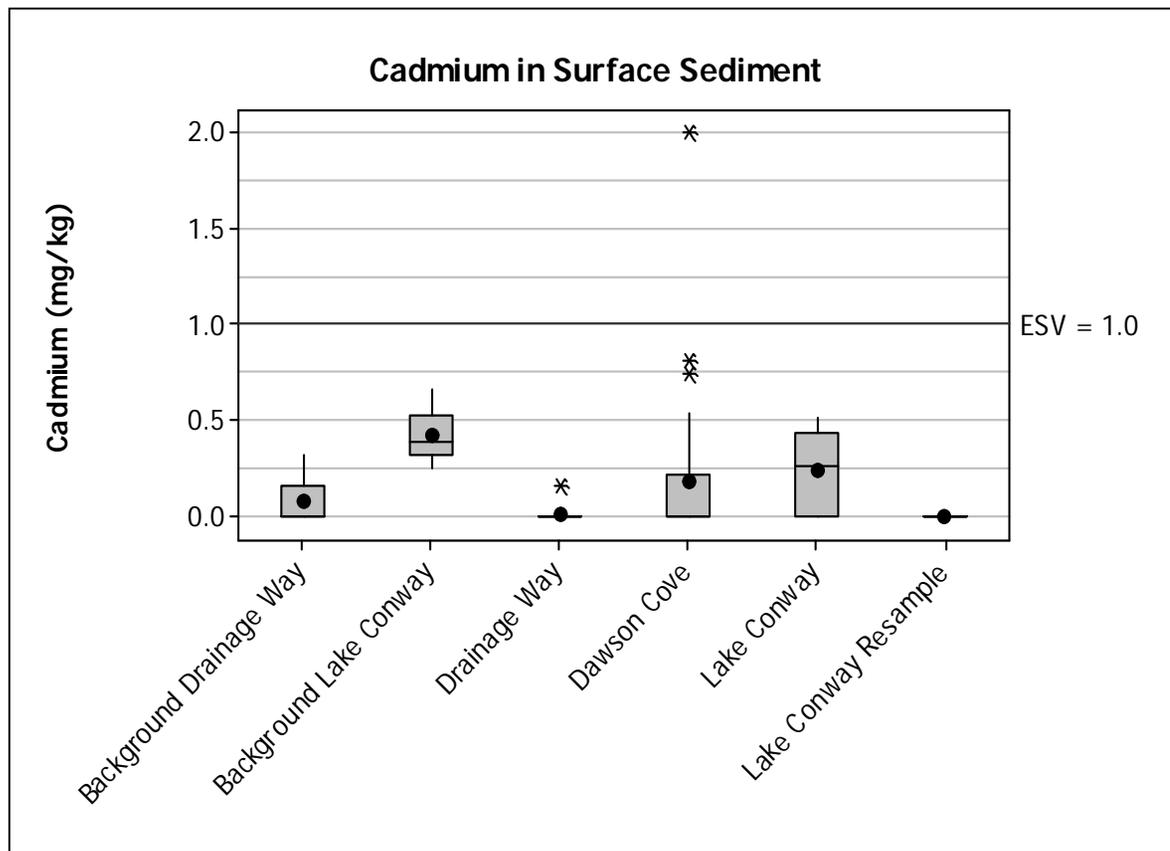
1. Duplicate samples were excluded from analysis.
2. Surface sediment are defined as the depth intervals of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. ESV for barium is not available.
5. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
6. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

MAYFLOWER PIPELINE INCIDENT RESPONSE
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**BOX PLOTS OF BARIUM
 CONCENTRATIONS IN SEDIMENTS**



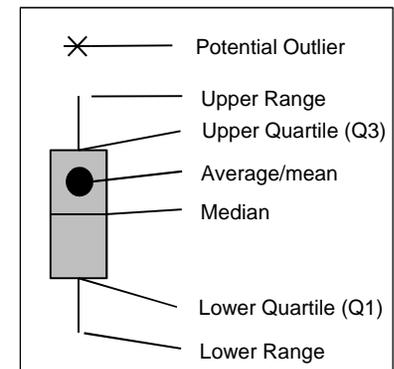
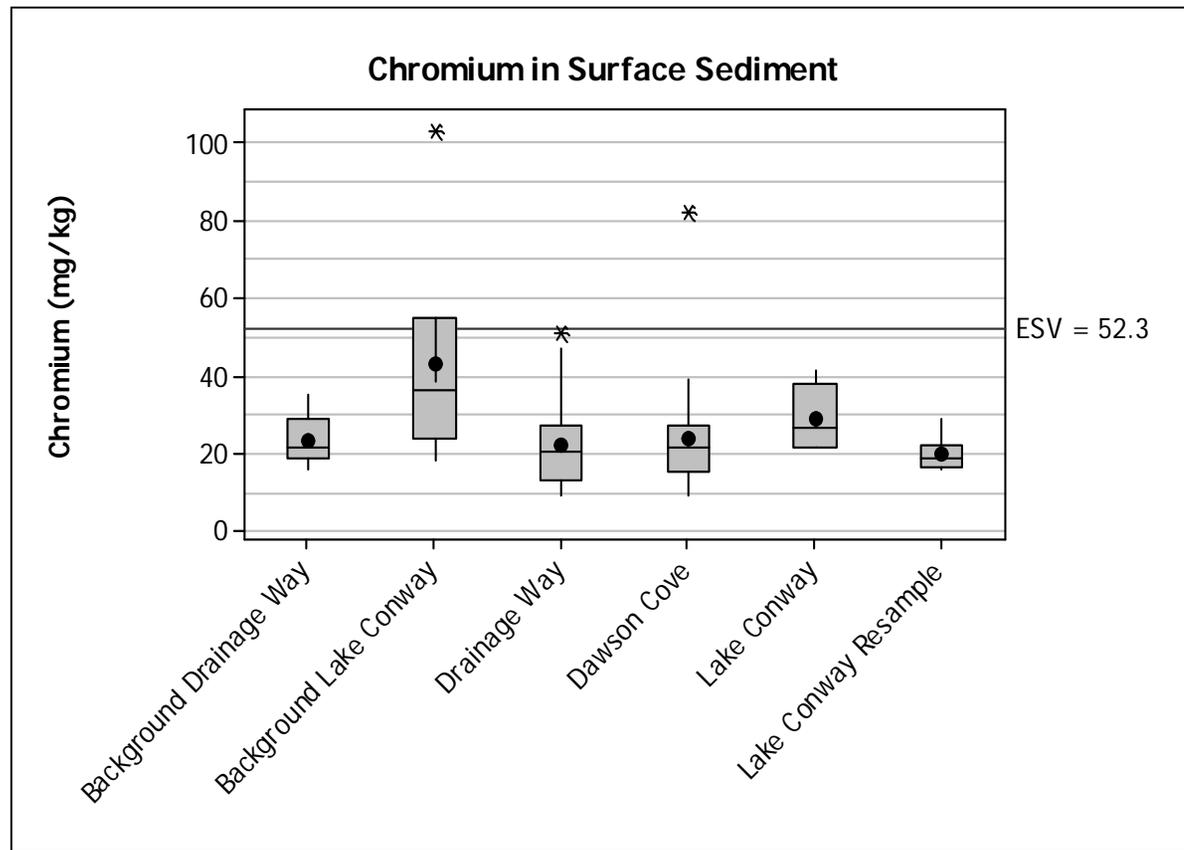
FIGURE
H-16



Notes:

1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

MAYFLOWER PIPELINE INCIDENT RESPONSE EXXONMOBIL ENVIRONMENTAL SERVICES COMPANY DOWNSTREAM AREAS DATA ASSESSMENT REPORT	
BOX PLOTS OF CADMIUM CONCENTRATIONS IN SEDIMENTS	
	FIGURE H-17



Notes:

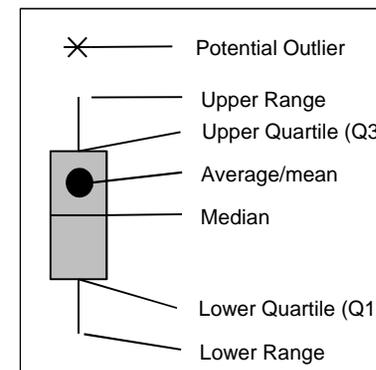
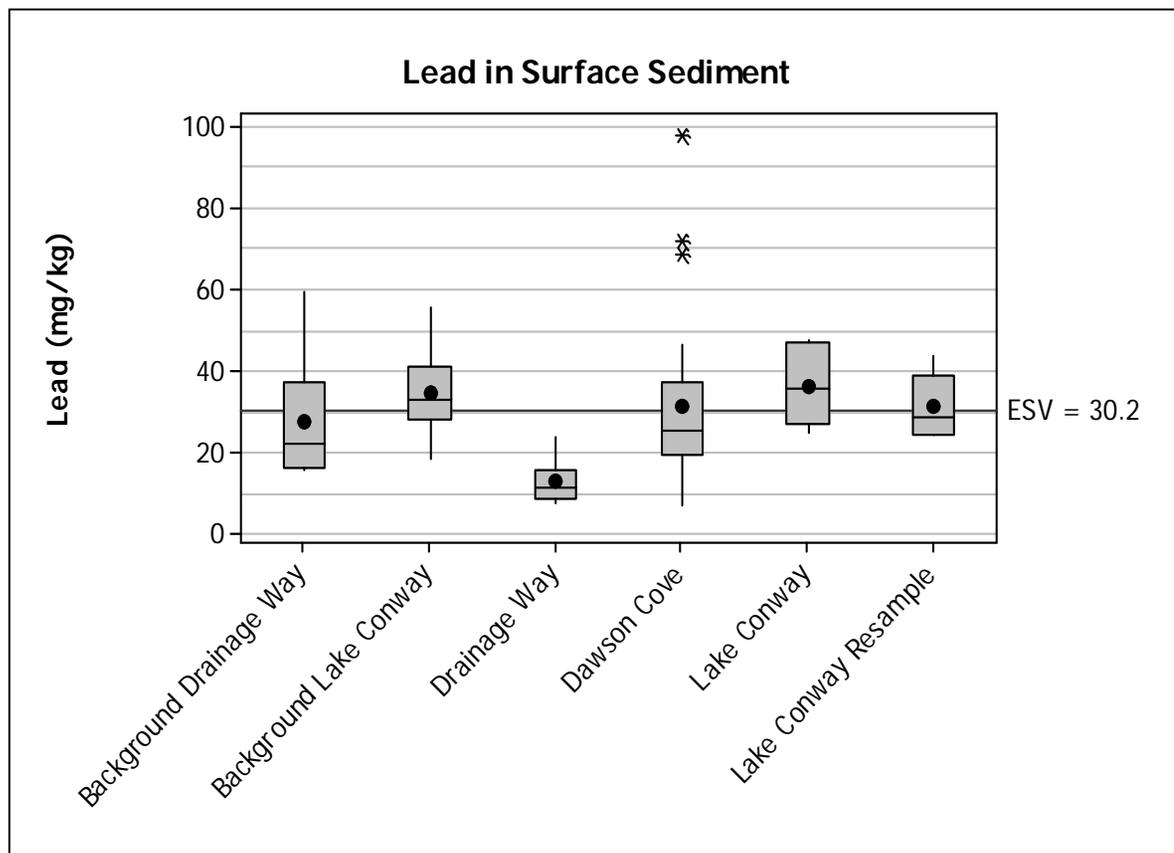
1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

MAYFLOWER PIPELINE INCIDENT RESPONSE
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**BOX PLOTS OF CHROMIUM
 CONCENTRATIONS IN SEDIMENTS**



FIGURE
H-18



Notes:

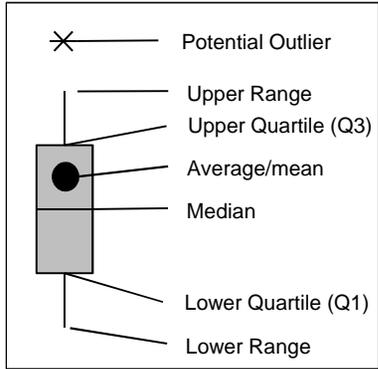
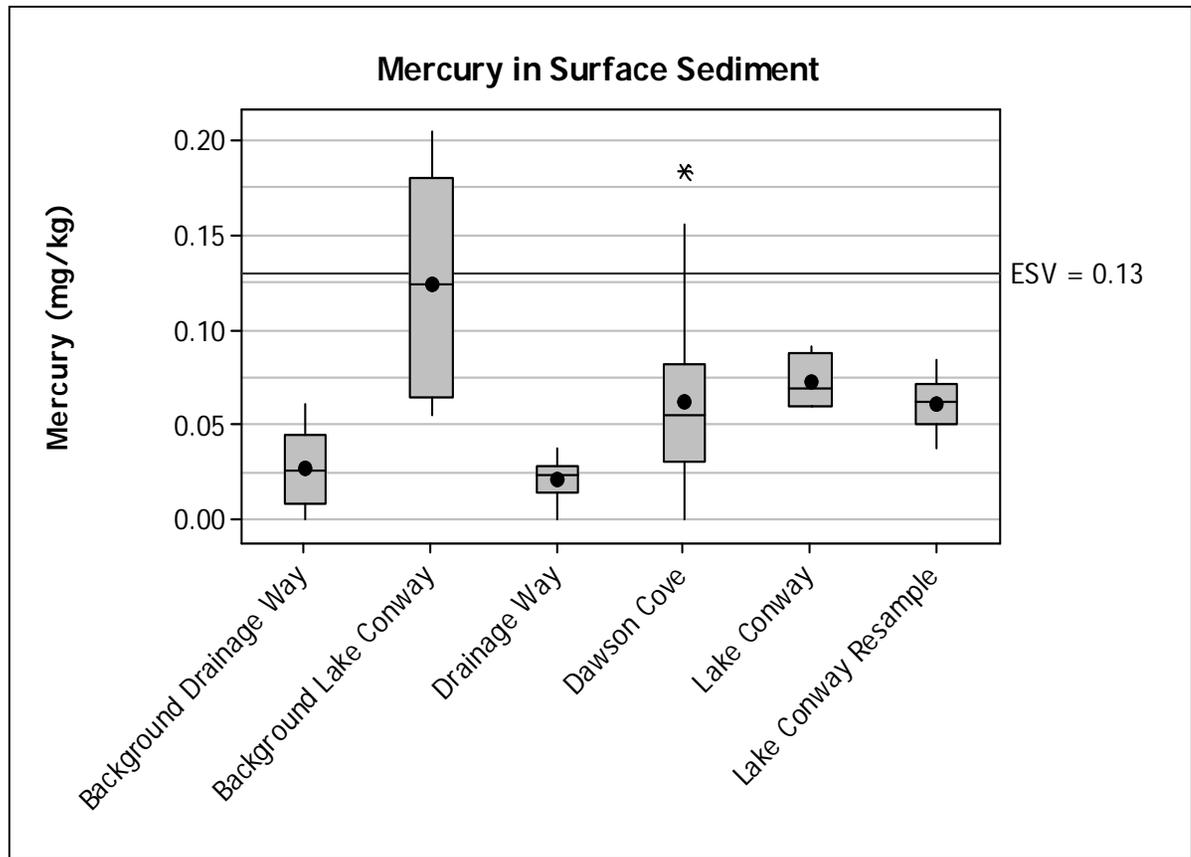
1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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**BOX PLOTS OF LEAD
 CONCENTRATIONS IN SEDIMENTS**



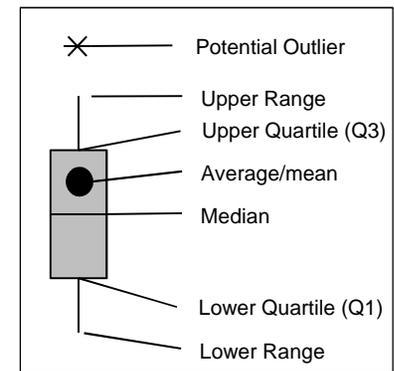
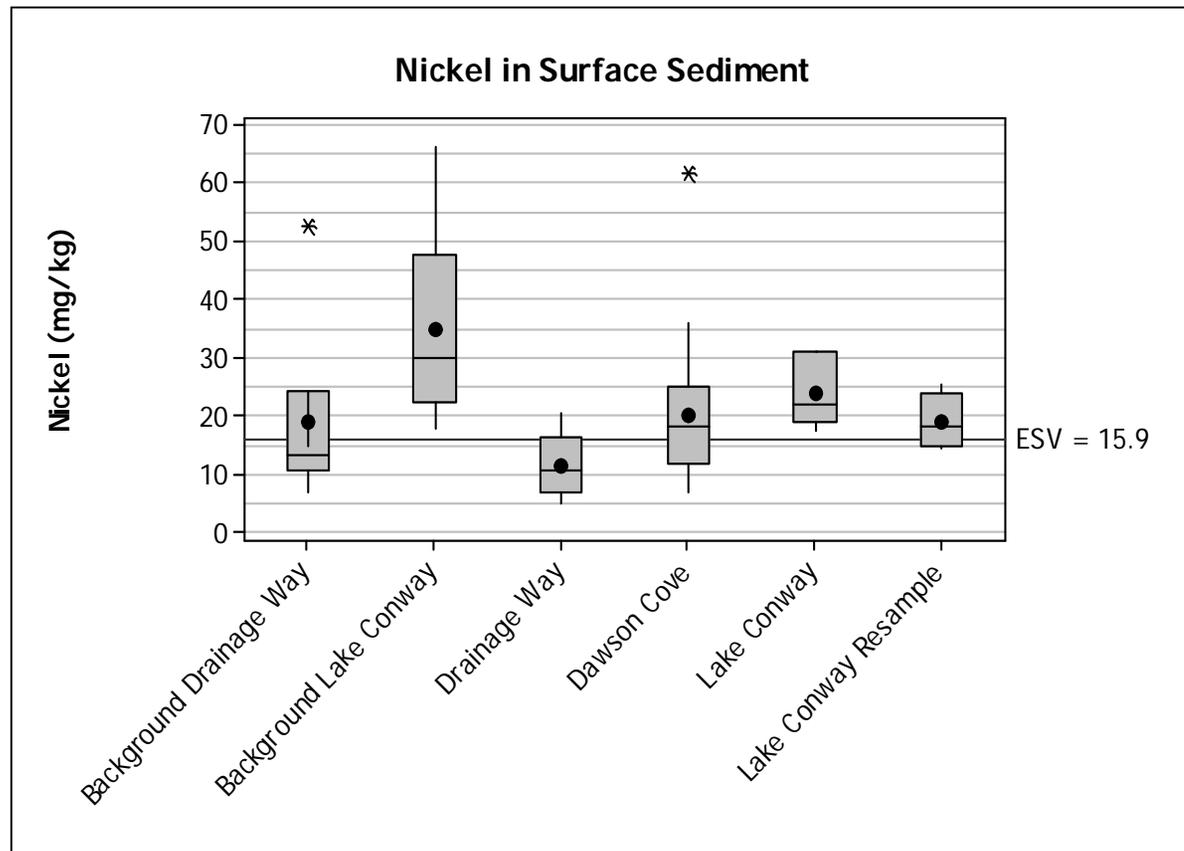
FIGURE
H-19



Notes:

1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

MAYFLOWER PIPELINE INCIDENT RESPONSE EXXONMOBIL ENVIRONMENTAL SERVICES COMPANY DOWNSTREAM AREAS DATA ASSESSMENT REPORT	
BOX PLOTS OF MERCURY CONCENTRATIONS IN SEDIMENTS	
	FIGURE H-20



Notes:

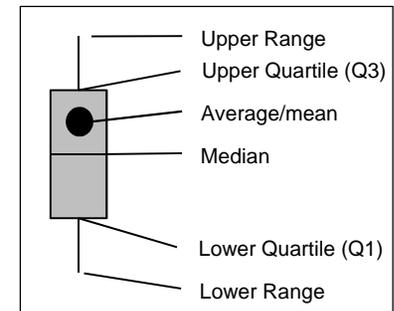
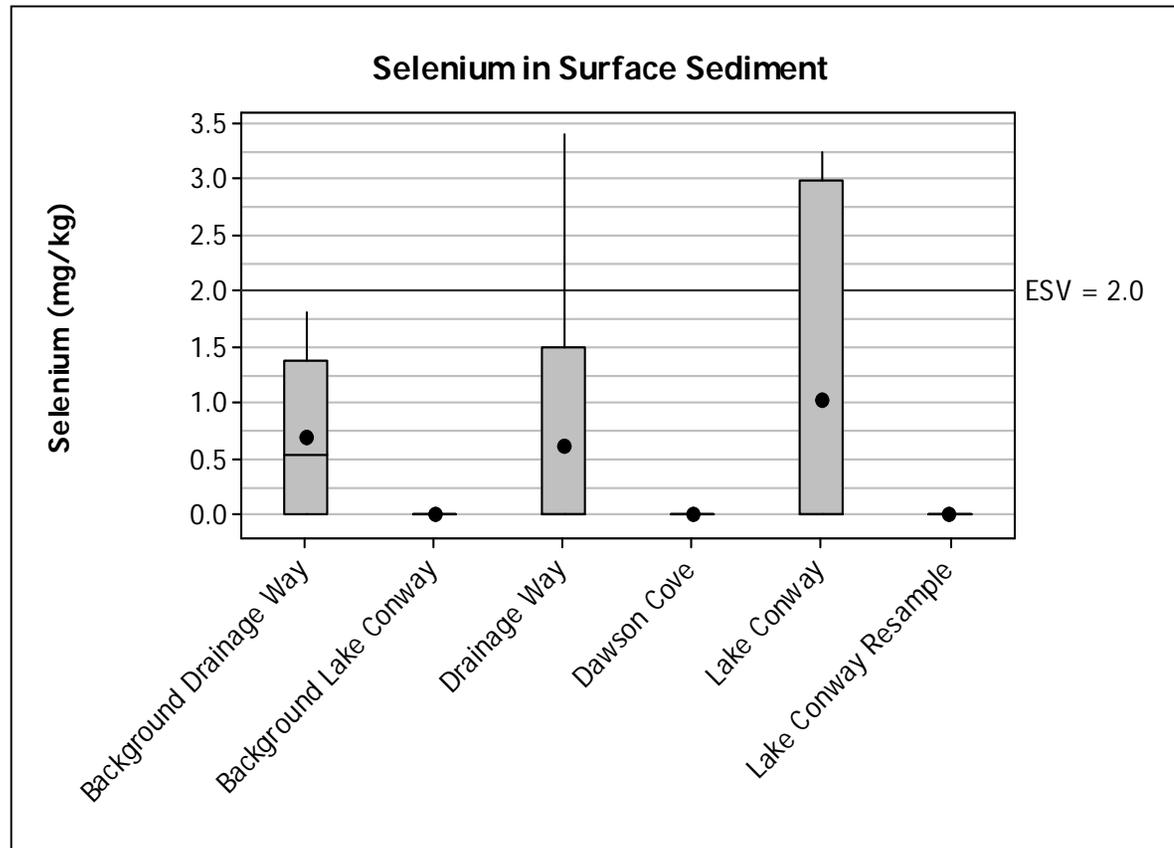
1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5*(Q3-Q1))$ and $(Q1 - 1.5*(Q3-Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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**BOX PLOTS OF NICKEL
 CONCENTRATIONS IN SEDIMENTS**



FIGURE
H-21



Notes:

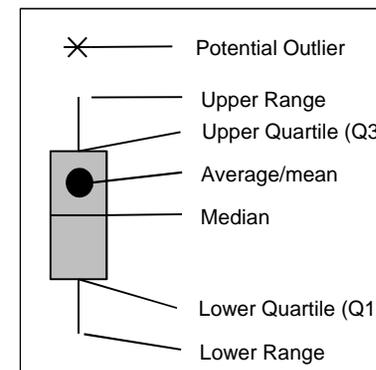
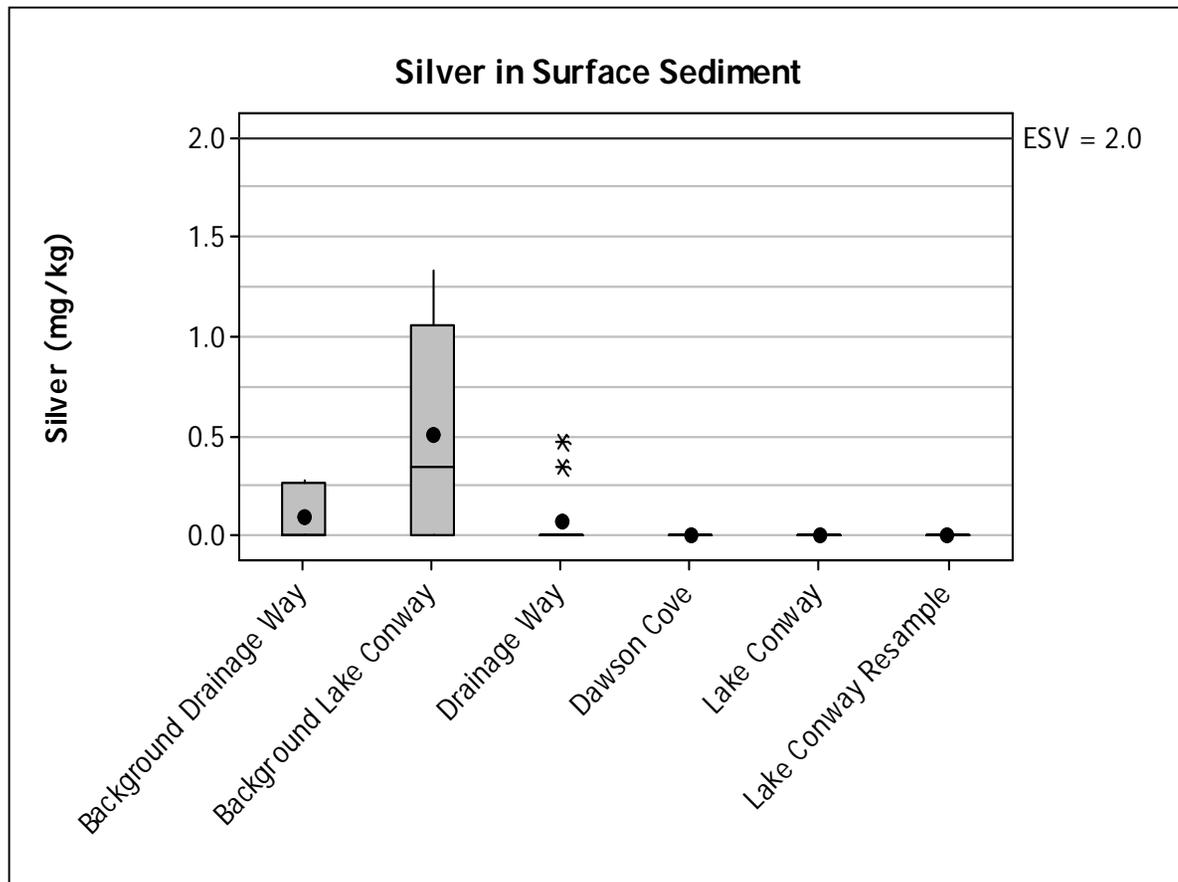
1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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**BOX PLOTS OF SELENIUM
 CONCENTRATIONS IN SEDIMENTS**

 **ARCADIS**

FIGURE
H-22



Notes:

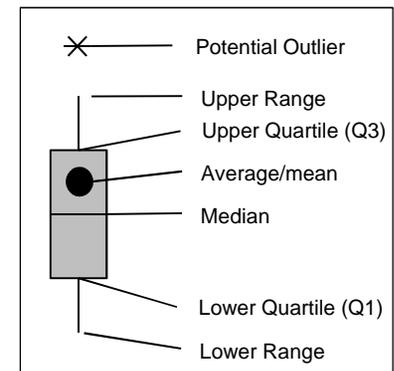
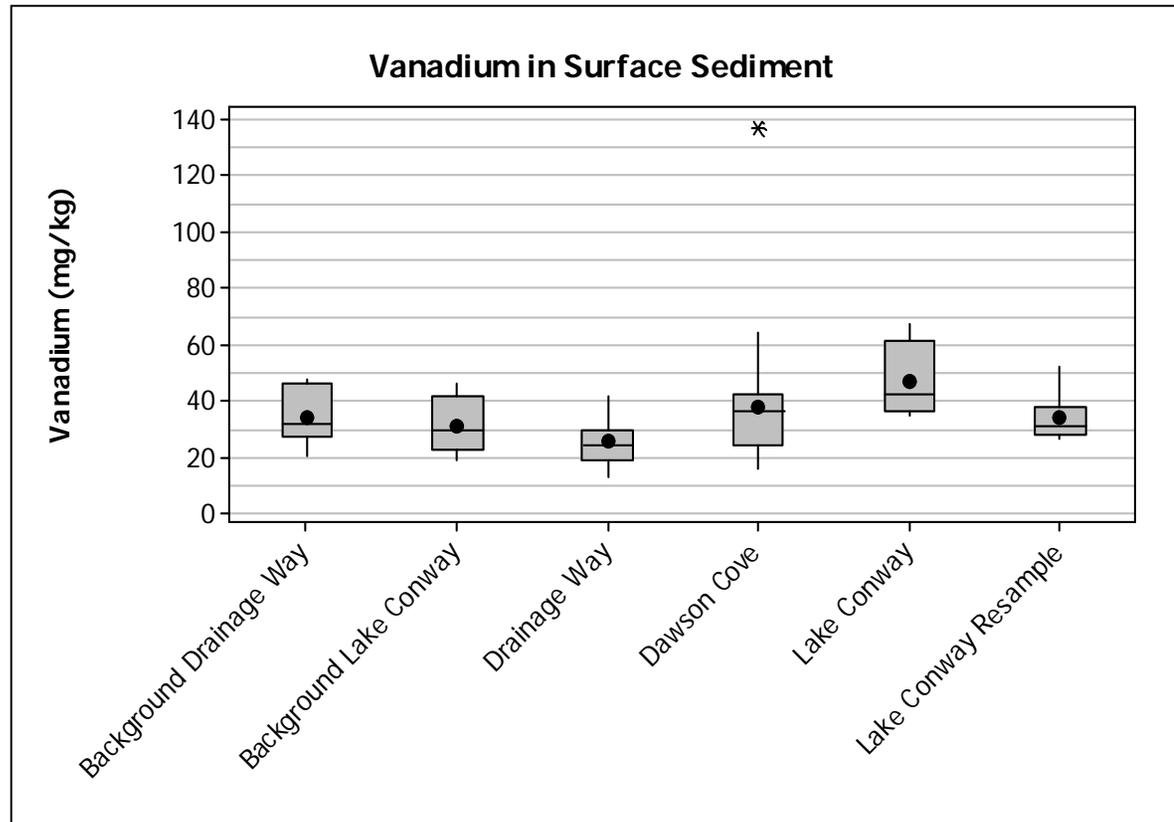
1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5*(Q3-Q1))$ and $(Q1 - 1.5*(Q3-Q1))$. Potential outliers are data points that are beyond these limits.
5. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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**BOX PLOTS OF SILVER
 CONCENTRATIONS IN SEDIMENTS**



FIGURE
H-23



Notes:

1. Duplicate samples were excluded from analysis.
2. Surface sediment is defined as the depth interval of 0 to 0.5 foot below sediment surface.
3. Non-detect results were represented with a value of zero.
4. ESV for vanadium is not available.
5. The Upper Range and Lower Range represent the highest and lowest data point falling within the following limits: $(Q3 + 1.5 \cdot (Q3 - Q1))$ and $(Q1 - 1.5 \cdot (Q3 - Q1))$. Potential outliers are data points that are beyond these limits.
6. Abbreviations:
 ESV = ecological screening value
 mg/kg = milligrams per kilogram

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**BOX PLOTS OF VANADIUM
 CONCENTRATIONS IN SEDIMENTS**



FIGURE
H-24