



April 6, 2023

KA Project No. 066-21115

Page 1 of 4

**Tacoma School District No. 10  
Department of Planning & Construction  
3223 South Union Avenue  
Tacoma, WA, 98409**

**c/o Mr. Robin Brown**  
Vanir Senior Project Director

Tel: (818) 264-5504  
Email: Robin.Brown@vanir.com

**RE: Arsenic & Lead Soil Sampling Summary Letter Report Addendum  
Skyline Elementary School Replacement CO#6  
6301 North 23<sup>rd</sup> Street  
Tacoma, WA, 98406**

Dear Mr. Brown:

Krazan and Associates (Krazan) is providing this Letter Report Addendum in reference to limited sampling of soil at the above referenced address located in Tacoma, Washington. Sample collection was conducted by Krazan representative Mr. Jessep Englert on April 4<sup>th</sup>, 2023. This sampling was performed in accordance with federal, state, local regulatory requirements, and specific request by the Toxics Cleanup Program at the Washington Department of Ecology (WDOE); and was limited to the on-site footprint of the planned site located at 6301 North 23<sup>rd</sup> St, Tacoma, WA.

## **1.0 ANALYTICAL RESULTS**

### **1.1 Project Scope**

Based on sampling requirements, four (4) discrete soil samples were collected at four (4) predetermined locations, with the four (4) samples collected at a depth of 0-6 inches below ground surface (bgs). Four (4) composite samples were also collected, with two (2) from the excavated disposal soil stockpile and two (2) from the imported soil stockpile. A total of eight (8) samples were taken from the site. Each of the discrete soil locations was evenly spaced from the others within the dictated test pit in the 10ft by 10ft by 3ft excavation at DU1-08 from CO#4. See Figure 1. Sample Location Map following the text for soil sample locations.

### **1.2 Sampling Methodology**

The samples were collected by carefully collecting discrete samples, at intervals of 0-6 inches (bgs), and composite samples at evenly spaced sections of the two stockpiles, with a clean stainless-steel hand boring sampler. The samples were placed in clean glass sample containers provided by the accredited laboratory. Sample containers were then placed in an iced cooler for transportation to the laboratory. The sampling instrument was treated between samples with a rinsate wash to decontaminate the tool and minimize the potential cross contamination of subsequent samples, with all rinsate wash returned to the Krazan lab for proper disposal. Data pertinent to each sample (e.g., date, sample number, material description, and material category) was recorded on a chain-of-custody form.

### 1.3 Laboratory Analysis

A total of four (4) discrete and four (4) composite soil samples were collected from the site and delivered to Onsite Environmental Laboratory in Redmond, Washington, under chain-of-custody protocol for analysis. Onsite Environmental Laboratory is a Washington State-accredited laboratory. As per client specifications, discrete samples were run for Total Arsenic (As) using (EPA 6020B Method) and composite samples were run for both Total Arsenic (As) and Total Lead (Pb) using (EPA 6020B). The laboratory analytical data report and chain-of-custody forms are provided in Appendix A.

### 1.4 Laboratory Sample Results

Table 1 includes the sample number, sample location, sample description, and analyte concentrations.

**Table 1 – Summary of Analytical Data**

Original Sample Number (CO#4)	Sample Location	Sample Depth (inches)	Sample Material Description	Percent Moisture (wt%)	Arsenic (As)	Lead (Pb)
DU1-01	47.270712, -122.523695	0-6	Discrete Soil	22.8	3.64	7.31
DU1-08	47.270644, -122.521510	0-6	Discrete Soil	15.7	<b>24.5</b>	42.7
Compliance Sample Number (CO#6)	Sample Location	Sample Depth (inches)	Sample Material Description	Percent Moisture (wt%)	Arsenic (As)	
DU1-08D1	47.270622, -122.521550	0-6	Discrete Soil	13.0	3.1	NA
DU1-08E1	47.270607, -122.521548	0-6	Discrete Soil	17.0	<b>38.0</b>	NA
DU1-08F1	47.270621, -122.521567	0-6	Discrete Soil	14.0	13.0	NA
DU1-08G1	47.270607, -122.521565	0-6	Discrete Soil	17.0	13.0	NA
DU1-08DP1	47.270518, -122.523889	NA	Composite Soil	15.0	7.8	10.0
DU1-08DP2	47.270495, -122.523876	NA	Composite Soil	14.0	16.0	21.0
DU1-08CP1	47.270641, -122.524007	NA	Composite Soil	22.0	3.7	7.9
DU1-08CP2	47.270662, -122.523997	NA	Composite Soil	24.0	3.6	8.3
<b>MTCA Method A Cleanup Limits</b>		NA	Soil	NA	<b>20.0</b>	<b>250</b>

All results displayed in milligrams per kilogram (mg/kg)

MTCA = Model Toxics Control Act

**Bold** = above MTCA Cleanup Limits

NA= Not Applicable

### 1.5 Conclusion

The soil collected from the on-site sample locations **DU1-08D1, DU1-08F1, DU1-08G, DU1-08DP1, DU1-08DP2, DU1-08CP1, and DU1-08CP2** at 6301 North 23<sup>rd</sup> St, Tacoma WA, **did not exceed** the Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) for unrestricted land uses for Total Arsenic or Lead. The composite samples from the excavated disposal soil stockpile and the imported soil stockpile were all below the MTCA Method A CULs for arsenic and lead.

The soil discrete sample collected from the on-site location **DU1-08E1** at 6301 North 23<sup>rd</sup> St, Tacoma WA, **did exceed** the MTCA Method A CULs for unrestricted land uses for Total Arsenic. *However, per the WDOE Toxics Cleanup Program, the average of the four locations (08D1, 08E1, 08F1, and 08G1) at*

---

*that depth interval was 16.775mg/kg, meaning that the locations as a whole fall below the 20mg/kg threshold for averaging and also below the 40mg/kg threshold for a single sample within the average.*

### **LIMITATIONS**

This survey and review of the subject property has been limited in scope to those areas defined by the client. This investigation is undertaken with the risk that visual observations and random sampling alone would not reveal the presence, full nature, and extent of Contaminants of Concern (COCs). Krazan makes no representation as to the COC content of materials not sampled or that were inaccessible to our inspector. The sample locations are approximate, and are based on field notes and diagrams of sample locations. The opinions presented herein apply to the site condition existing at the time of the investigation. Opinions and recommendations provided herein may not apply to future conditions that may exist at the site.

The findings presented in this report were based on field observations and sampling as defined by the client. Therefore, the data obtained are clear and accurate only to the degree implied by the sources and methods used. The information presented herein is based on professional interpretation using presently accepted methods with a degree of conservatism deemed proper as of the report date. We do not warrant that future technical developments cannot supersede such data.

This report is provided for the exclusive use of the client noted on the cover page and is subject to the terms and conditions in the applicable contract between the client and Krazan. The client is the only party to whom Krazan has explained the risks involved and has been involved in the shaping of the scope of services needed to satisfactorily manage those risks, if any, from the client's point of view. Any third-party use of this report, including use by the Client's lender, prospective purchaser, or lessee, will be subject to the terms and conditions governing the contractual work between the Client and Krazan. The unauthorized use of, reliance on, or release of the information contained in this report is strictly prohibited and will be without risk or liability to Krazan.

Laboratory analysis was conducted by a laboratory, or laboratories, accredited by the Washington State Department of Ecology. The results of the analyses are accurate only to the degree of care exercised by the independent laboratories and the representative nature of the samples obtained.

Krazan appreciates the opportunity to provide you with this information and trusts that you will find it useful. If you have any questions or if we may be of further assistance, please do not hesitate to contact our office at (253) 939-2500.

Respectfully submitted,  
KRAZAN & ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'Jesse Englert', with a long horizontal flourish extending to the right.

Jessep Englert, G.I.T  
Field Geologist  
Krazan & Associates

Attachments:

Figure 1. Sample Location Map

Appendix A. Onsite Environmental, Inc. Laboratory Report, April 5, 2023

following text

following figure 1

**Figure 1.**  
Skyline Elementary School Soil Remediation CO #6





**Figure 1.**  
Skyline Elementary School Soil Remediation CO #6

**Legend**  
● CO#6 Compliance Stockpile Sample Locations





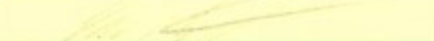
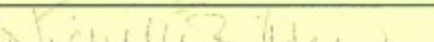
Page 1 of 2

Company:	Kurtz Associates
Project Number:	06-21115
Project Name:	06 Styling Flooring
Project Manager:	Bill Thorne
Sampled by:	James Emlett

Turnaround Request (in working days)	
(Check One)	
<input type="checkbox"/> Same Day	<input checked="" type="checkbox"/> 1 Day
<input type="checkbox"/> 2 Days	<input type="checkbox"/> 3 Days
<input type="checkbox"/> Standard (7 Days)	
<input type="checkbox"/>	_____ (other)

[illegible]

Laboratory Number:					
NWTPH-HCID					
NWTPH-Gx/BTEX (8021 □ 8260 □)					
NWTPH-Gx					
NWTPH-Dx (SG Clean-up □)					
Volatiles 8260					
Halogenated Volatiles 8260					
EDB EPA 8011 (Water Only)					
Semivolatiles 8270/SIM (with low-level PAHs)					
PAHs 8270/SIM (low-level)					
PCBs 8082					
Organochlorine Pesticides 8081					
Organophosphorus Pesticides 8270/SIM					
Chlorinated Acid Herbicides 8151					
Total RCRA Metals					
Total MTCA Metals					
TCLP Metals					
HEM (oil and grease) 1664					
	X	X	X		
% Moisture	X	X	X		

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		Kroger	4/4/23	11:44	
Received		OSE	4/4/23	11:44	
Relinquished					
Received					
Relinquished					
Received					
Reviewed/Date	Reviewed/Date				Data Package: Standard <input checked="" type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>
					Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input type="checkbox"/>





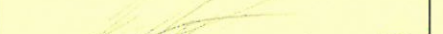
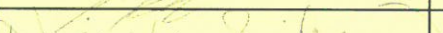
Analytical Laboratory Testing Services  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • [www.onsite-env.com](http://www.onsite-env.com)

Page 2 of 2

Company:	Kierulff Associates
Project Number:	06-21112
Project Name:	CO#6 Styling Plantation
Project Manager:	B.H. Thomas
Sampled by:	Samuel Taylor

Turnaround Request (in working days)	
(Check One)	
<input type="checkbox"/> Same Day	<input checked="" type="checkbox"/> 1 Day
<input type="checkbox"/> 2 Days	<input type="checkbox"/> 3 Days
<input type="checkbox"/> Standard (7 Days)	
<input type="checkbox"/>	_____ (other)

Laboratory Number: 04-023[illegible]

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		Kroger	4/4/23	1644	
Received		OSF	4/4/23	1644	
Relinquished					
Received					
Relinquished					
Received					
Reviewed/Date		Reviewed/Date			Data Package: Standard <input checked="" type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>
					Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input type="checkbox"/>





14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

April 5, 2023

Bill Throne  
Krazan Associates, Inc.  
11715 North Creek Parkway South, Suite C-106  
Bothell, WA 98011

Re: Analytical Data for Project 066-21115  
Laboratory Reference No. 2304-022

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on April 4, 2023.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DeB" followed by a stylized flourish.

David Baumeister  
Project Manager

Enclosures



Date of Report: April 5, 2023  
Samples Submitted: April 4, 2023  
Laboratory Reference: 2304-022  
Project: 066-21115

### **Case Narrative**

Samples were collected on April 4, 2023 and received by the laboratory on April 4, 2023. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 5, 2023  
 Samples Submitted: April 4, 2023  
 Laboratory Reference: 2304-022  
 Project: 066-21115

**TOTAL ARSENIC  
EPA 6020B**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>DU1-08D1</b>					
Laboratory ID:	04-022-01					
Arsenic	<b>3.1</b>	1.2	EPA 6020B	4-5-23	4-5-23	

<b>Client ID:</b>	<b>DU1-08E1</b>					
Laboratory ID:	04-022-03					
Arsenic	<b>38</b>	1.2	EPA 6020B	4-5-23	4-5-23	

<b>Client ID:</b>	<b>DU1-08F1</b>					
Laboratory ID:	04-022-05					
Arsenic	<b>13</b>	1.2	EPA 6020B	4-5-23	4-5-23	

<b>Client ID:</b>	<b>DU1-08G1</b>					
Laboratory ID:	04-022-07					
Arsenic	<b>13</b>	1.2	EPA 6020B	4-5-23	4-5-23	





Date of Report: April 5, 2023  
 Samples Submitted: April 4, 2023  
 Laboratory Reference: 2304-022  
 Project: 066-21115

**TOTAL ARSENIC  
 EPA 6020B  
 QUALITY CONTROL**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0405SM1					
Arsenic	ND	0.25	EPA 6020B	4-5-23	4-5-23	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>DUPLICATE</b>								
Laboratory ID:	04-022-01							
	ORIG	DUP						
Arsenic	2.67	2.93	NA	NA	NA	NA	9	20

**MATRIX SPIKES**

Laboratory ID:	04-022-01							
	MS	MSD	MS	MSD		MS	MSD	
Arsenic	99.0	101	100	100	2.67	96	98	75-125
								2
								20



Date of Report: April 5, 2023  
Samples Submitted: April 4, 2023  
Laboratory Reference: 2304-022  
Project: 066-21115

**% MOISTURE**

<b>Client ID</b>	<b>Lab ID</b>	<b>% Moisture</b>	<b>Date Analyzed</b>
<b>DU1-08D1</b>	04-022-01	<b>13</b>	4-5-23
<b>DU1-08E1</b>	04-022-03	<b>17</b>	4-5-23
<b>DU1-08F1</b>	04-022-05	<b>14</b>	4-5-23
<b>DU1-08G1</b>	04-022-07	<b>17</b>	4-5-23





### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference







14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

April 5, 2023

Bill Throne  
Krazan Associates, Inc.  
11715 North Creek Parkway South, Suite C-106  
Bothell, WA 98011

Re: Analytical Data for Project 066-21115  
Laboratory Reference No. 2304-023

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on April 4, 2023.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', followed by a long horizontal flourish.

David Baumeister  
Project Manager

Enclosures



---

OnSite Environmental, Inc. 14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 5, 2023  
Samples Submitted: April 4, 2023  
Laboratory Reference: 2304-023  
Project: 066-21115

### Case Narrative

Samples were collected on April 4, 2023 and received by the laboratory on April 4, 2023. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 5, 2023  
 Samples Submitted: April 4, 2023  
 Laboratory Reference: 2304-023  
 Project: 066-21115

**TOTAL METALS  
 EPA 6020B**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>DUI-08DP1</b>					
Laboratory ID:	04-023-01					
Arsenic	<b>7.8</b>	1.2	EPA 6020B	4-5-23	4-5-23	
Lead	<b>10</b>	1.2	EPA 6020B	4-5-23	4-5-23	

<b>Client ID:</b>	<b>DUI-08DP2</b>					
Laboratory ID:	04-023-02					
Arsenic	<b>16</b>	1.2	EPA 6020B	4-5-23	4-5-23	
Lead	<b>21</b>	1.2	EPA 6020B	4-5-23	4-5-23	

<b>Client ID:</b>	<b>DUI-08CP1</b>					
Laboratory ID:	04-023-03					
Arsenic	<b>3.7</b>	1.3	EPA 6020B	4-5-23	4-5-23	
Lead	<b>7.9</b>	1.3	EPA 6020B	4-5-23	4-5-23	

<b>Client ID:</b>	<b>DUI-08CP2</b>					
Laboratory ID:	04-023-04					
Arsenic	<b>3.6</b>	1.3	EPA 6020B	4-5-23	4-5-23	
Lead	<b>8.3</b>	1.3	EPA 6020B	4-5-23	4-5-23	





Date of Report: April 5, 2023  
 Samples Submitted: April 4, 2023  
 Laboratory Reference: 2304-023  
 Project: 066-21115

**TOTAL METALS  
 EPA 6020B  
 QUALITY CONTROL**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0405SM1					
Arsenic	ND	0.25	EPA 6020B	4-5-23	4-5-23	
Lead	ND	1.0	EPA 6020B	4-5-23	4-5-23	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>DUPLICATE</b>								
Laboratory ID:	04-022-01							
	ORIG	DUP						
Arsenic	2.67	2.93	NA	NA	NA	9	20	
Lead	3.08	3.72	NA	NA	NA	19	20	

**MATRIX SPIKES**

Laboratory ID:	04-022-01									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	99.0	101	100	100	2.67	96	98	75-125	2	20
Lead	235	228	250	250	3.08	93	90	75-125	3	20



Date of Report: April 5, 2023  
Samples Submitted: April 4, 2023  
Laboratory Reference: 2304-023  
Project: 066-21115

**% MOISTURE**

<b>Client ID</b>	<b>Lab ID</b>	<b>% Moisture</b>	<b>Date Analyzed</b>
<b>DUI-08DP1</b>	04-023-01	<b>15</b>	4-5-23
<b>DUI-08DP2</b>	04-023-02	<b>14</b>	4-5-23
<b>DUI-08CP1</b>	04-023-03	<b>22</b>	4-5-23
<b>DUI-08CP2</b>	04-023-04	<b>24</b>	4-5-23





### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference

