

April 10, 2023

Sunny Becker, Ecology Site Manager
Department of Ecology - Toxics Cleanup Program
Northwest Region Office
15700 Dayton Avenue North
Shoreline, Washington 98133-9716



Re: Quarterly Progress Report for period ending March 2023

Site Name: **BOTHELL RIVERSIDE-HVOC**
Site Address: Southeast corner of Woodinville Drive (SR 522) and NE 180th Street, Bothell WA 98011
Parcel Numbers: 0826059120 and 0826059036 (King County)
Facility/Site No.: 93061
Agreed Order No.: DE 21531 (Effective date March 22, 2023)

Reporting Period: Jan - Mar 2023

Summary:

The City of Bothell (PLP) initiated work for the Bothell Riverside-HVOC site, in accordance with the Agreed Order (AO) with the Washington State Department of Ecology (Ecology).

Per the requirements of Part C of Section VII of the Agreed Order, the attached quarterly progress report has been prepared for the three-month period preceding this submittal to satisfy the terms described in the Agreed Order.

During this period the work has been geared towards continued operation of the groundwater pumping interim action and initiating planning and scheduling for remedial design and remedial actions to be performed under this Agreed Order. There was also initial coordination work done between the City and Ecology.

The attached progress report provides an update on work accomplished for the period ending March 31, 2022. Please contact me if you have any questions.

Sincerely,

Ryan Roberts
Project Coordinator, City of Bothell
City of Bothell, Public Works Department
Phone: 425.471.1837
Email: ryan.roberts@bothellwa.gov

Public Works Department
18415 101st Ave NE
Bothell, WA 98011
425.806.6800
www.bothellwa.gov

PROGRESS REPORT

Reporting Period: Jan - Mar 2023
Date submitted (electronically): Apr 10, 2023
Date mailed (certified w/return receipt): *(deferred due to COVID-19 Stay at Home Order)*
Prepared by: Scott Adamek, Project Engineer

1. **A list of on-site activities that have taken place during this quarter**

- Supporting Ecology with finalization of the Agreed Order document package.
- Continued operation of the groundwater pumping interim action.
- Initial planning and scheduling for remedial design and action activities.
- Collect discharge samples for KCIW discharge permit monitoring.

2. **Detailed description of any deviations from required tasks not otherwise documented in project plans or amendment requests:**

no deviations identified

3. **Description of all deviations from the Scope of Work and Schedule (Exhibit C) during the current quarter and any planned deviations in the upcoming quarter.:**

no deviations identified

4. **For any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule:**

no deviations identified

5. **All raw data (including laboratory analyses) received during the previous quarter (if not previously submitted to Ecology), together with a detailed description of the underlying samples collected:**

The laboratory analytical report for discharge samples collected for KCIW discharge permit monitoring are attached.

6. **A list of deliverables for the upcoming quarter:**

Draft Pre-Remedial Design Investigation (PRDI) Project Plans with schedule:

- Work Plan
- Sampling and Analysis Plan
- Quality Assurance Project Plan
- Health and Safety Plan

Attachments

KCIW Discharge Permit Monitoring Laboratory Analytical Report



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

March 10, 2023

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82306
Laboratory Reference No. 2303-028

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on March 2, 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", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: March 10, 2023
Samples Submitted: March 2, 2023
Laboratory Reference: 2303-028
Project: 82306

Case Narrative

Samples were collected on March 2, 2023 and received by the laboratory on March 2, 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.

Volatiles EPA 8260D Analysis

The RPD for Methylene Chloride, 1,2-Dichloroethane and 1,2,4-Trichlorobenzene is outside the control limits for the Spike Blank/Spike Blank Duplicate. The percent recoveries on both spike blanks are within recovery limits. The method allows for a percentage of the compounds to fall outside of the control limits due to the large number of analytes being spiked.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: March 10, 2023
 Samples Submitted: March 2, 2023
 Laboratory Reference: 2303-028
 Project: 82306

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RHVOC-2023-03-02					
Laboratory ID:	03-028-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Chloromethane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Vinyl Chloride	0.37	0.20	EPA 8260D	3-6-23	3-6-23	
Bromomethane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Chloroethane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Iodomethane	ND	5.0	EPA 8260D	3-6-23	3-6-23	
Methylene Chloride	ND	1.0	EPA 8260D	3-6-23	3-6-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
(cis) 1,2-Dichloroethene	6.4	0.20	EPA 8260D	3-6-23	3-6-23	
Bromochloromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Chloroform	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Trichloroethene	8.1	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Dibromomethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Bromodichloromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	3-6-23	3-6-23	



Date of Report: March 10, 2023
 Samples Submitted: March 2, 2023
 Laboratory Reference: 2303-028
 Project: 82306

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RHVOC-2023-03-02					
Laboratory ID:	03-028-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Tetrachloroethene	18	0.20	EPA 8260D	3-6-23	3-6-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Dibromochloromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Chlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Bromoform	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Bromobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	3-6-23	3-6-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	3-6-23	3-6-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



Date of Report: March 10, 2023
 Samples Submitted: March 2, 2023
 Laboratory Reference: 2303-028
 Project: 82306

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0306W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Chloromethane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Vinyl Chloride	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Bromomethane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Chloroethane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Iodomethane	ND	5.0	EPA 8260D	3-6-23	3-6-23	
Methylene Chloride	ND	1.0	EPA 8260D	3-6-23	3-6-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Bromochloromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Chloroform	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Trichloroethene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Dibromomethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Bromodichloromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	3-6-23	3-6-23	



Date of Report: March 10, 2023
 Samples Submitted: March 2, 2023
 Laboratory Reference: 2303-028
 Project: 82306

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0306W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Tetrachloroethene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Dibromochloromethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Chlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
Bromoform	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Bromobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	3-6-23	3-6-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	3-6-23	3-6-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	3-6-23	3-6-23	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260D	3-6-23	3-6-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	3-6-23	3-6-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	3-6-23	3-6-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: March 10, 2023
 Samples Submitted: March 2, 2023
 Laboratory Reference: 2303-028
 Project: 82306

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0306W1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorodifluoromethane	8.60	9.70	10.0	10.0	86	97	34-166	12	21	
Chloromethane	9.41	11.1	10.0	10.0	94	111	63-138	16	18	
Vinyl Chloride	9.30	10.7	10.0	10.0	93	107	71-135	14	20	
Bromomethane	8.40	9.29	10.0	10.0	84	93	20-151	10	36	
Chloroethane	9.95	11.1	10.0	10.0	100	111	76-125	11	20	
Trichlorofluoromethane	9.82	10.7	10.0	10.0	98	107	75-131	9	19	
1,1-Dichloroethene	9.69	11.1	10.0	10.0	97	111	78-125	14	19	
Iodomethane	9.15	10.5	10.0	10.0	92	105	10-155	14	40	
Methylene Chloride	9.88	12.0	10.0	10.0	99	120	80-120	19	15	L
(trans) 1,2-Dichloroethene	9.78	11.4	10.0	10.0	98	114	80-125	15	17	
1,1-Dichloroethane	9.84	11.5	10.0	10.0	98	115	80-125	16	17	
2,2-Dichloropropane	9.93	11.7	10.0	10.0	99	117	80-146	16	21	
(cis) 1,2-Dichloroethene	9.91	11.5	10.0	10.0	99	115	80-129	15	17	
Bromochloromethane	10.6	11.8	10.0	10.0	106	118	80-125	11	18	
Chloroform	9.77	11.4	10.0	10.0	98	114	80-123	15	16	
1,1,1-Trichloroethane	9.40	10.5	10.0	10.0	94	105	80-123	11	18	
Carbon Tetrachloride	9.68	11.0	10.0	10.0	97	110	80-126	13	17	
1,1-Dichloropropene	9.79	10.6	10.0	10.0	98	106	80-126	8	18	
1,2-Dichloroethane	9.19	11.0	10.0	10.0	92	110	80-124	18	15	L
Trichloroethene	10.9	11.6	10.0	10.0	109	116	80-122	6	18	
1,2-Dichloropropane	10.2	10.9	10.0	10.0	102	109	80-123	7	15	
Dibromomethane	11.0	12.2	10.0	10.0	110	122	80-123	10	15	
Bromodichloromethane	10.7	11.5	10.0	10.0	107	115	80-125	7	15	
(cis) 1,3-Dichloropropene	10.5	11.9	10.0	10.0	105	119	80-129	13	15	
(trans) 1,3-Dichloropropene	10.7	11.6	10.0	10.0	107	116	80-134	8	17	



Date of Report: March 10, 2023
 Samples Submitted: March 2, 2023
 Laboratory Reference: 2303-028
 Project: 82306

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0306W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1,2-Trichloroethane	10.6	11.4	10.0	10.0	106	114	77-126	7	20	
Tetrachloroethene	10.3	10.3	10.0	10.0	103	103	80-124	0	18	
1,3-Dichloropropane	10.0	10.2	10.0	10.0	100	102	80-120	2	15	
Dibromochloromethane	11.5	11.9	10.0	10.0	115	119	80-128	3	15	
1,2-Dibromoethane	10.7	11.0	10.0	10.0	107	110	80-127	3	15	
Chlorobenzene	10.0	10.7	10.0	10.0	100	107	80-120	7	17	
1,1,1,2-Tetrachloroethane	10.1	11.0	10.0	10.0	101	110	80-125	9	17	
Bromoform	10.9	11.0	10.0	10.0	109	110	80-130	1	15	
Bromobenzene	10.0	10.7	10.0	10.0	100	107	76-128	7	16	
1,1,2,2-Tetrachloroethane	10.1	10.6	10.0	10.0	101	106	74-130	5	15	
1,2,3-Trichloropropane	10.7	11.6	10.0	10.0	107	116	71-129	8	25	
2-Chlorotoluene	10.3	10.4	10.0	10.0	103	104	80-128	1	18	
4-Chlorotoluene	9.87	10.3	10.0	10.0	99	103	80-130	4	19	
1,3-Dichlorobenzene	10.0	10.7	10.0	10.0	100	107	80-126	7	17	
1,4-Dichlorobenzene	9.85	10.8	10.0	10.0	99	108	80-121	9	17	
1,2-Dichlorobenzene	10.2	11.1	10.0	10.0	102	111	79-125	8	15	
1,2-Dibromo-3-chloropropane	10.7	10.7	10.0	10.0	107	107	73-133	0	15	
1,2,4-Trichlorobenzene	10.2	12.5	10.0	10.0	102	125	80-139	20	18	L
Hexachlorobutadiene	9.37	10.5	10.0	10.0	94	105	80-151	11	18	
1,2,3-Trichlorobenzene	10.0	13.1	10.0	10.0	100	131	75-146	27	28	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					94	108	75-127			
<i>Toluene-d8</i>					103	106	80-127			
<i>4-Bromofluorobenzene</i>					99	102	78-125			



Date of Report: March 10, 2023
Samples Submitted: March 2, 2023
Laboratory Reference: 2303-028
Project: 82306

SETTLEABLE SOLIDS
SM 2540F

Matrix: Water

Units: mL/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RHVOC-2023-03-02					
Laboratory ID:	03-028-01					
Settleable Solids	ND	0.18	SM 2540F	3-3-23	3-3-23	





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



