



April 1, 2011

Mr. Tom Brooke
Welch Foods, Inc.
401 Avenue B
Grandview, Washington 98930

Re: February 2011 Quarterly Monitoring and Feasibility Study Support Report, 10 East Bruneau, Kennewick, Washington. PBS Project #62465.00

Dear Mr. Brooke:

PBS Engineering + Environmental (PBS) is pleased to provide the results of February 2011 quarterly groundwater monitoring at 10 East Bruneau, Kennewick, Washington. This information is provided to support the future completion of the Draft Feasibility Study (FS) for the site. This interim report provides and comments on recent new data collected from the site.

The project is being completed in support of previous work at the Welch Foods site and under a Washington State Department of Ecology (WDOE) Agreed Order (AO). Soil and groundwater contamination in heavy oil was detected at the site in 2006 during a Phase II Environmental Site Assessment (ESA). A good faith excavation based remedial action was completed at the site of the former location of two bunker fuel underground storage tanks (USTs), with all accessible contaminated soil removed and disposed offsite. With oversight from the WDOE, PBS completed a Remedial Investigation (RI), with the draft Feasibility Study (FS) currently in progress. Three monitoring wells were installed under WDOE oversight in 2008 with quarterly monitoring and contaminant impact in the wells below WDOE and Model Toxics Control Act (MTCA) Method A cleanup levels. A new monitoring well was completed in September 2010 under WDOE oversight. Well sampling and development was completed in October 2010, with well surveying and groundwater flow direction computations completed in November 2010.

During this sampling effort at least three well volumes of water were purged from each well, with purge water stored onsite for later disposal. Sampling was completed in accordance with the sampling plan for the site as approved by WDOE. Samples collected were submitted to Friedman and Bruya Laboratory in Seattle, Washington. Analytical results requested included total petroleum hydrocarbons, as diesel and diesel extended (NWTPH-Dx); naphthylenes, poly-aromatic hydrocarbons (PAHs) and benzene, toluene, ethylbenzene and xylenes (BTEX). Included with the sampling was collection of field groundwater parameters for conductivity, pH, temperature, dissolved oxygen and oxidation reduction potential (ORP). Table #1 (see attached) provides soil and groundwater field testing and analytical results. Laboratory reports are attached to this report.

DISCUSSION AND FINDINGS

Analytical results indicate minor diesel in water petroleum hydrocarbon constituents impact at below WDOE and MTCA Method A cleanup levels (see attached Table #1). Results indicated that no PAH constituents or naphthalene were detected during the February 2011 sample period. Dissolved volatile constituents BTEX were not detected at the site in any of the wells; this information supports previous findings that few or no volatile petroleum constituents are dissolving into groundwater from the release at this time. Results of testing in MW #4 suggest that the well is very close to the contamination boundary for the released bunker fuel immediately

southwest of that location (see Figure 1). Analytical results for February 2011 are lower than what was detected in October 2010.

To add useful project information, the WDOE requested that PBS collect ORP information through field monitoring. The ORP and dissolved oxygen results indicate that slightly lower oxygen and lower ORP were detected in Well #4. This information suggests that some breakdown of organics (petroleum oil) is occurring close to that well and using up some of the oxygen in groundwater. Other field monitoring results (conductivity, temperature and pH) provided little outstanding information.

Depth to water was measured in each of the wells during the February sampling period, with that information also provided on Table #1 along with groundwater elevation. PBS used the groundwater information to calculate groundwater flow direction at the time samples were collected. The groundwater flow direction indicated a very low gradient at North 11° West. The groundwater flow direction was indicated to be almost exactly toward MW #2 from the former release site. The northwesterly groundwater flow direction is unusual for this site, but still indicates that any mobilized contamination would travel toward the Columbia River.

Recent sampling activity at the site provides a significant amount of new information toward determining the limits of contamination and suggests a smaller contamination zone than originally suggested by the RI.

RECOMMENDATIONS

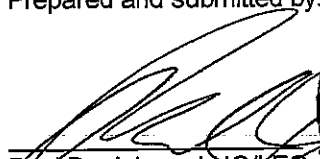
Further groundwater monitoring is recommended for the four wells, which would be scheduled for monitoring in May 2011, unless WDOE provides another option. PBS recommends that this report be submitted to the WDOE for review in accordance with the AO. After four quarters of monitoring is completed in 2011, PBS assumes this information will be used to update the outstanding draft FS.

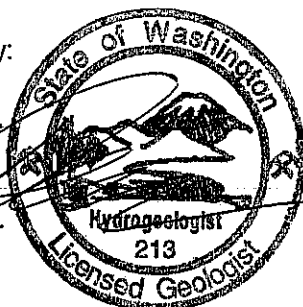
LIMITATIONS

This work was performed in accordance with the generally accepted practices of consultants undertaking similar studies at the same time and in the same geographical area. PBS observed a degree of care and skill generally exercised by other consultants under similar circumstances and conditions. Findings and conclusions must be considered not as scientific certainties, but as opinions based on professional judgment concerning the significance of the data gathered during the course of monitoring. Other than this, no warranty is implied or intended.

We appreciate the opportunity to provide this report. If you have any questions or need further services please contact us at (509) 735-2698.

Prepared and submitted by:


Paul Danielson, LHG/LEG.
Project Manager



Paul E. Danielson

Table #1
Welch Foods Site Monitoring Results February, 2011

Sample #	Matrix	Depth to Water	Relative Groundwater Elevation	Diesel ppb	Diesel Extended ppb	BTEX ppb	PAHs ppb	Naphthalene ppb	Temperature °C	pH	Conductivity Micromho/cm	ORP Millivolts	Dissolved Oxygen ppm
MW #1	Water	20.56'	80.20	66	ND	ND/ND/ND/ND	ND	ND	17.0	7.33	543	269	5.0
MW #2	Water	20.04'	80.09	ND	ND	ND/ND/ND/ND	ND	ND	16.3	7.29	582	160	7.1
MW #3	Water	19.59'	80.13	ND	ND	ND/ND/ND/ND	ND	ND	16.7	7.33	601	223	5.6
MW #4	Water	19.41'	80.15	51	ND	ND/ND/ND/ND	ND	ND	16.4	7.15	574	118	2.9

Notes: ND indicates non-detected by analytical results

NA indicates not analyzed by laboratory

ppb = micrograms per Liter (ug/L) water analysis only

ORP = oxidation reduction potential

BTEX = benzene, toluene, ethylbenzene and xylenes

PAHs = poly aromatic hydrocarbons – none in list detected (EPA Method 8270D SIM)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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March 10, 2011

Paul Danielson, Project Manager
PBS Engineering and Environmental, Inc.
320 N. Johnson St. Suite 700
Kennewick, WA 99336

Dear Mr. Danielson:

Included are the results from the testing of material submitted on March 2, 2011 from the 62465.00, F&BI 103017 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
PBS0310R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 2, 2011 by Friedman & Bruya, Inc. from the PBS Engineering and Environmental 62465.00, F&BI 103017 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>PBS Engineering and Environmental</u>
103017-01	62465.00-1
103017-02	62465.00-2
103017-03	62465.00-3
103017-04	62465.00-4

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/10/11
 Date Received: 03/02/11
 Project: 62465.00, F&BI 103017
 Date Extracted: 03/07/11
 Date Analyzed: 03/07/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
 USING EPA METHOD 8021B**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery) Limit (52-124)</u>
62465.00-1 103017-01	<1	<1	<1	<3	82
62465.00-2 103017-02	<1	<1	<1	<3	80
62465.00-3 103017-03	<1	<1	<1	<3	79
62465.00-4 103017-04	<1	<1	<1	<3	70
Method Blank 01-0388 MB	<1	<1	<1	<3	68

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/10/11
Date Received: 03/02/11
Project: 62465.00, F&BI 103017
Date Extracted: 03/02/11
Date Analyzed: 03/02/11

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 50-150)
62465.00-1 103017-01	66 x	<250	91
62465.00-2 103017-02	<50	<250	103
62465.00-3 103017-03	<50	<250	105
62465.00-4 103017-04	51 x	<250	95
Method Blank 01-0360 MB	<50	<250	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: 62465.00-1	Client: PBS Engineering and Environmental
Date Received: 03/02/11	Project: 62465.00, F&BI 103017
Date Extracted: 03/02/11	Lab ID: 103017-01
Date Analyzed: 03/05/11	Data File: 030514.D
Matrix: Water	Instrument: GCMS6
Units: ug/L (ppb)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	50	150
Benzo(a)anthracene-d12	88	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: 62465.00-2	Client: PBS Engineering and Environmental
Date Received: 03/02/11	Project: 62465.00, F&BI 103017
Date Extracted: 03/02/11	Lab ID: 103017-02
Date Analyzed: 03/05/11	Data File: 030511.D
Matrix: Water	Instrument: GCMS6
Units: ug/L (ppb)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	50	150
Benzo(a)anthracene-d12	100	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: 62465.00-3	Client: PBS Engineering and Environmental
Date Received: 03/02/11	Project: 62465.00, F&BI 103017
Date Extracted: 03/02/11	Lab ID: 103017-03
Date Analyzed: 03/05/11	Data File: 030512.D
Matrix: Water	Instrument: GCMS6
Units: ug/L (ppb)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	50	150
Benzo(a)anthracene-d12	96	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: 62465.00-4	Client: PBS Engineering and Environmental
Date Received: 03/02/11	Project: 62465.00, F&BI 103017
Date Extracted: 03/02/11	Lab ID: 103017-04
Date Analyzed: 03/05/11	Data File: 030513.D
Matrix: Water	Instrument: GCMS6
Units: ug/L (ppb)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	50	150
Benzo(a)anthracene-d12	98	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: Method Blank	Client: PBS Engineering and Environmental
Date Received: NA	Project: 62465.00, F&BI 103017
Date Extracted: 03/02/11	Lab ID: 01358 mb
Date Analyzed: 03/05/11	Data File: 030505.D
Matrix: Water	Instrument: GCMS6
Units: ug/L (ppb)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	50	150
Benzo(a)anthracene-d12	95	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/10/11
 Date Received: 03/02/11
 Project: 62465.00, F&BI 103017

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
 SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
 AND XYLENES
 USING EPA METHOD 8021B**

Laboratory Code: 103049-03 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	98	65-118
Toluene	ug/L (ppb)	50	96	72-122
Ethylbenzene	ug/L (ppb)	50	97	73-126
Xylenes	ug/L (ppb)	150	98	74-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/10/11

Date Received: 03/02/11

Project: 62465.00, F&BI 103017

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	108	115	63-142	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/10/11

Date Received: 03/02/11

Project: 62465.00, F&BI 103017

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	5	88	92	64-100	4
2-Methylnaphthalene	ug/L (ppb)	5	86	90	41-130	5
1-Methylnaphthalene	ug/L (ppb)	5	91	94	64-109	3
Acenaphthylene	ug/L (ppb)	5	91	96	67-104	5
Acenaphthene	ug/L (ppb)	5	91	96	65-103	5
Fluorene	ug/L (ppb)	5	93	97	64-106	4
Phenanthrene	ug/L (ppb)	5	89	94	66-106	5
Anthracene	ug/L (ppb)	5	88	94	67-112	7
Fluoranthene	ug/L (ppb)	5	95	99	69-116	4
Pyrene	ug/L (ppb)	5	95	99	68-115	4
Benz(a)anthracene	ug/L (ppb)	5	87	91	59-100	4
Chrysene	ug/L (ppb)	5	92	98	66-103	6
Benzo(b)fluoranthene	ug/L (ppb)	5	102	110	59-114	8
Benzo(k)fluoranthene	ug/L (ppb)	5	102	103	55-111	1
Benzo(a)pyrene	ug/L (ppb)	5	99	102	54-111	3
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	100	101	35-124	1
Dibenz(a,h)anthracene	ug/L (ppb)	5	98	92	35-116	6
Benzo(g,h,i)perylene	ug/L (ppb)	5	97	92	39-114	5

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 - More than one compound of similar molecule structure was identified with equal probability.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte indicated may be due to carryover from previous sample injections.
- d - The sample was diluted. Detection limits may be raised due to dilution.
- ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb - Analyte present in the blank and the sample.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht - Analysis performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The result is below normal reporting limits. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the compound indicated is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

103017

SAMPLE CHAIN OF CUSTODY

ME 03/02/11 V2/A04

Send Report To Paul Danielson

Company PBS Engineering and Environmental, Inc

Address 320 N Johnson St., Suite 700

City, State, ZIP Kennecook, WA 99336

Phone # (509) 735-2698 Fax # (509) 735-1867

SAMPLERS *(signature)* ME 03/02/11 V2/A04 of TURNAROUND TIME

PROJECT NAME/NO. 62465.00 PO #

REMARKS Diesel extracted

Standard (2 Weeks)

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED							Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PAH/B270C	
62465.00 - 1	01 A.F	3-1-11	11 AM	H2O	6	X	X	X	X	X	X	X	
↓ - 2	02 A.F	↓	↓	↓	↓	X	X	X	X	X	X	X	
↓ - 3	03 A.F	↓	↓	↓	↓	X	X	X	X	X	X	X	
↓ - 4	04 A.F	↓	↓	↓	↓	X	X	X	X	X	X	X	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>(Signature)</i>	Paul Danielson	BES	3-1-11	1 PM
<i>(Signature)</i>	Nhan Phau	F e B I	3/2/11	0910
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

Samples received at: 4 °C