MEMORANDUM

Project No. AS200555

November 14, 2023

To: Anna L. Nguyen, Wactor Environmental Law Group, P.C.

cc: Jon K. Wactor, Wactor Environmental Law Group, P.C.

From:

Eric Marhofer, PE
Principal Environmental Engineer
eric.marhofer@aspectconsulting.com

Re: **2023 Compliance Monitoring Update**
Ballinger Village Shopping Center
Voluntary Cleanup Program No. NW1843

Aspect Consulting, a branch of Geosyntec Consultants, Inc. (Aspect), has prepared this memorandum to document ongoing compliance monitoring activities for the Ballinger Village Shopping Center (the Site). The Site is located at 20120 Ballinger Way NE in Shoreline, Washington (the Property).

The Site received a No Further Action (NFA) Likely determination from the Washington State Department of Ecology (Ecology) in June 2022, predicated on long-term monitored natural attenuation (MNA) of residual groundwater impacts to ensure the remedy remains protective for the duration of MNA (Ecology, 2022).

Compliance monitoring requirements for the Site are detailed in the Compliance Monitoring Plan (CMP) prepared by Aspect (Aspect, 2022), which was included as an enclosure with Ecology's NFA Likely opinion letter. The CMP provides that groundwater performance monitoring and an inspection of existing impervious areas acting as a cap at the Property will be performed annually.

Annual compliance monitoring activities were performed in September 2023, in accordance with the procedures described in the CMP. The results of the cap inspection and groundwater monitoring are summarized in the following sections and confirm that the long-term protectiveness of the MNA remedy remains effective.

Cap Inspection Results

The annual cap inspection includes checking the existing impervious areas on the Property for evidence of significant cracking or other potentially damaging conditions that may compromise the integrity of the asphalt, pavement, or the building covering the Property.

The cap inspection was performed in coordination with the property manager on September 6, 2023. There was no evidence of significant cracking or other permanent damage to the impervious areas covering the Property.

Several new tenancies were noted during the Site visit, which included temporary modification and replacement of discrete areas of the building slab to facilitate utility installation at two tenant spaces as described below:

- **20226/20224 Ballinger Way NE, Seattle Feline Rescue (Units 30 and 32)** – These previously vacant tenant spaces were built out to accommodate a feline rescue in the past year. According to the property manager, improvements to the space included cutting through the slab to install new utilities. The building slab had been replaced at the time of the inspection.

- **20154 Ballinger Way NE, Lumin Laundry (Unit 18)** – This previously vacant tenant space was undergoing improvements at the time of the inspection that included cutting through a discrete portion of the slab and trenching to install new utilities, to be followed by patching. The alley behind this unit was also noted to have evidence of recent trenching to connect utilities to the unit; however, the asphalt had been replaced at the time of the inspection.

A copy of the cap inspection form and an annotated tenant map are included in Appendix A for reference.

Groundwater Performance Monitoring Results

Groundwater performance monitoring includes collection and laboratory analysis of groundwater samples to evaluate the effectiveness of the ongoing MNA remedy. The CMP includes groundwater sampling at nine on-Property wells (HMW-2, HMW-13, HMW-37, HMW-38, HMW-39R, SVE-8, SVE-11, SVE-12, and SVE-13), and two off-Property wells (HMW-28 and HMW-34) to monitor ongoing natural attenuation. Compliance monitoring well locations are shown on Figure 1.

Annual groundwater monitoring was completed in September 2023, in accordance with the procedures specified in the CMP. Groundwater samples were collected using passive diffusion-bag (PDB) sampling methods. The PDBs were deployed in the monitoring wells 14 days prior to sample collection to allow sufficient time for equilibration. Groundwater samples were submitted to Friedman & Bruya, Inc., in Seattle, Washington, for analysis of tetrachloroethene and trichloroethene (PCE and TCE, respectively) by U.S. Environmental Protection Agency (EPA) Method 8260D.

For monitoring wells with prior detections of PCE above the unrestricted Model Toxics Control Act (MTCA) Method A cleanup level, the results of groundwater sampling showed a decline in concentrations from the previous sampling event at all but one monitoring well location (HMW-39R remained about the same). The PCE concentration at one well location also fell below the cleanup level (HMW-37). TCE was not detected at the Site above the cleanup level.

Groundwater monitoring results are summarized in Tables 1 and 2. The laboratory analytical report is provided in Appendix B for reference. The groundwater results were also submitted to Ecology's

Environmental Information Management System (EIMS) on October 25, 2023, to satisfy regulatory reporting requirements.

Conclusions

The results of compliance monitoring activities confirm the long-term protectiveness of the final MNA remedy remains effective. The groundwater PCE plume appears to be stable or shrinking and, with the exception for temporary penetrations in the building slab for tenant improvements, which have been or will be patched, the impervious cap over the Property remains in place.

References

Aspect Consulting, LLC (Aspect), 2022, Compliance Monitoring Plan, Ballinger Village Shopping Center, May 10, 2022.

Washington State Department of Ecology (Ecology), 2022, Opinion on Proposed Cleanup, Ballinger Village Shopping Center, June 21, 2022.

Limitations

Work for this project was performed for the Wactor Environmental Law Group (Client), and this memorandum was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This memorandum does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Attachments:
Table 1 – Groundwater Sampling Results
Table 2 – Groundwater Elevations
Figure 1 – Monitoring Well Locations
Appendix A – Cap Inspection Form
Appendix B – Laboratory Analytical Report

V:\Deliverables\220555 Ballinger Village\Deliverables\2023 Compliance Monitoring Update\Final\2023 Update Memo_Final.docx

TABLES

Table 1. Groundwater Sampling Results

Project No. 220555, Ballinger Village Shopping Center, Shoreline, Washington

		Analyte	Tetrachloroethene (PCE)	Trichloroethene (TCE)
		Unit	ug/L	ug/L
		MTCA Method A Cleanup Level [1]	5	5
Location	**Period**	**Date**		
HMW-02	Pre-Remediation	11/28/2012	**79**	**3.6**
	Active Remediation	03/25/2013	**12**	< 1 U
		09/26/2013	**9.9**	< 1 U
		12/19/2013	**11**	< 1 U
		03/26/2014	**8.4**	< 1 U
		09/24/2014	**5.1**	< 1 U
		03/12/2015	**5.4**	< 1 U
		09/09/2015	**4.7**	< 1 U
		03/18/2016	**3.9**	< 1 U
		09/14/2016	**10**	< 1 U
		09/15/2017	**2.4**	< 1 U
		10/02/2018	**7.2**	< 1 U
		09/30/2019	**8.8**	< 1 U
		09/07/2021	**7.2**	< 0.5 U
	Post-Remedation	09/21/2023	**7.1**	< 0.5 U
HMW-13	Pre-Remediation	11/28/2012	**110**	**1.5**
	Active Remediation	03/25/2013	**44**	< 1 U
		09/26/2013	**22**	< 1 U
		12/19/2013	**45**	< 1 U
		03/26/2014	**76**	**1.2**
		09/24/2014	**20**	< 1 U
		03/12/2015	**18**	< 1 U
		09/09/2015	**13**	< 1 U
		03/18/2016	**7.5**	< 1 U
		09/14/2016	**9.7**	< 1 U
		09/15/2017	**2.7**	< 1 U
		10/02/2018	**7.5**	< 1 U
		09/30/2019	**10**	< 1 U
		11/16/2020	**13**	< 1 U
		09/07/2021	**17**	< 0.5 U
	Post-Remediation	09/21/2023	**11**	< 0.5 U
HMW-28	Pre-Remedation	11/27/2012	**19**	**1.7**
	Active Remediation	09/24/2014	**20**	**1.9**
		09/09/2015	**11**	**1.2**
		09/14/2016	**20**	**2.9**
		09/15/2017	**18**	**1.9**
		10/02/2018	**17**	**1.8**
		09/30/2019	**18**	**2.1**
		06/22/2020	**21.9**	**1.89**
		09/07/2021	**30**	**3**
	Post-Remedation	09/21/2023	**28**	**3.7**
HMW-34	Pre-Remedation	11/27/2012	< 1 U	< 1 U
	Active Remediation	09/24/2014	< 1 U	< 1 U
		09/09/2015	< 1 U	< 1 U
	Post-Remediation	09/21/2023	< 1 U	< 0.5 U

Table 1. Groundwater Sampling Results

Project No. 220555, Ballinger Village Shopping Center, Shoreline, Washington

		Analyte	Tetrachloroethene (PCE)	Trichloroethene (TCE)
		Unit	ug/L	ug/L
		MTCA Method A Cleanup Level [1]	5	5
Location	**Period**	**Date**		
HMW-37	Pre-Remedation	11/27/2012	**11**	< 1 U
	Active Remediation	03/26/2014	**1.9**	< 1 U
		09/24/2014	**10**	< 1 U
		03/12/2015	**8.6**	< 1 U
		09/09/2015	**4.7**	< 1 U
		03/18/2016	**5.2**	< 1 U
		09/14/2016	**2.4**	< 1 U
		03/31/2017	**3.4**	< 1 U
		07/03/2017	**9.4**	< 1 U
		09/15/2017	**7.1**	< 1 U
		12/26/2017	**4.5**	< 1 U
		10/02/2018	**11**	< 1 U
		09/30/2019	**8.2**	< 1 U
		09/07/2021	**8**	< 0.5 U
	Post-Remedation	09/21/2023	**1.2**	< 0.5 U
HMW-38	Pre-Remediation	11/27/2012	**45**	< 1 U
	Active Remediation	09/26/2013	**45**	< 1 U
		12/19/2013	**32**	< 1 U
		03/26/2014	**47**	< 1 U
		09/24/2014	**35**	< 1 U
		03/12/2015	**33**	< 1 U
		09/09/2015	**22**	< 1 U
		03/18/2016	**26**	< 1 U
		09/14/2016	**12**	< 1 U
		09/15/2017	**12**	< 1 U
		10/02/2018	**11**	< 1 U
		09/30/2019	**17**	< 1 U
		06/22/2020	**21.5**	< 0.500 U
		09/07/2021	**21**	< 0.5 U
	Post-Remedation	09/21/2023	**12**	< 0.5 U
HMW-39	Pre-Remediation	11/27/2012	**77**	**1.5**
	Active Remediation	03/25/2013	**38**	**1.1**
		09/26/2013	**71**	**2.3**
		12/19/2013	**51**	**1.2**
		03/26/2014	**49**	**1**
		09/24/2014	**41**	< 1 U
		03/12/2015	**33**	< 1 U
		09/09/2015	**35**	< 1 U
		03/18/2016	**28**	< 1 U
		09/14/2016	**12**	< 1 U
		09/15/2017	**15**	< 1 U
		10/02/2018	**15**	< 1 U
		09/30/2019	**14**	< 1 U
HMW-39R [2]	Post-Remediation	09/21/2023	**17**	< 0.5 U

Table 1. Groundwater Sampling Results

Project No. 220555, Ballinger Village Shopping Center, Shoreline, Washington

		Analyte	Tetrachloroethene (PCE)	Trichloroethene (TCE)
		Unit	ug/L	ug/L
		MTCA Method A Cleanup Level [1]	5	5
Location	Period	Date		
SVE-08	Pre-Remediation	11/27/2012	**92**	< 1 U
	Active Remediation	03/25/2013	**25**	< 1 U
		09/26/2013	**30**	< 1 U
		12/19/2013	**9.8**	< 1 U
		03/26/2014	**8.5**	< 1 U
		09/24/2014	**7**	< 1 U
		03/12/2015	**4.6**	< 1 U
		09/09/2015	**4.2**	< 1 U
		03/18/2016	**1.8**	< 1 U
		09/14/2016	**4.1**	< 1 U
		03/31/2017	**2.7**	< 1 U
		07/03/2017	**20**	< 1 U
		09/15/2017	**7.9**	< 1 U
		12/26/2017	**10**	< 1 U
		10/02/2018	**15**	< 1 U
		10/01/2019	**17**	< 1 U
		09/07/2021	**15**	< 0.5 U
	Post-Remediation	09/21/2023	**8.2**	< 0.5 U
SVE-11	Pre-Remediation	11/28/2012	**7.9**	< 1 U
	Active Remediation	03/26/2014	**9**	< 1 U
		09/24/2014	**7.8**	< 1 U
		03/12/2015	**6.3**	< 1 U
		09/09/2015	**6.5**	< 1 U
		03/18/2016	**7.2**	< 1 U
		09/14/2016	**6.1**	< 1 U
		03/31/2017	**8.2**	< 1 U
		07/03/2017	**9.2**	< 1 U
		09/15/2017	**6.6**	< 1 U
		12/26/2017	**7.4**	< 1 U
		10/02/2018	**7**	< 1 U
		09/30/2019	**5.5**	< 1 U
		09/07/2021	**4.7**	< 0.5 U
	Post-Remediation	09/21/2023	**3.7**	< 0.5 U
SVE-12	Pre-Remediation	11/28/2012	< 1 U	< 1 U
	Active Remediation	09/26/2013	**3.9**	< 1 U
		12/19/2013	**14**	< 1 U
		03/26/2014	**2.7**	< 1 U
		09/24/2014	**2.2**	< 1 U
		03/12/2015	**1.2**	< 1 U
		09/09/2015	**1.4**	< 1 U
		03/18/2016	< 1 U	< 1 U
		09/14/2016	< 1 U	< 1 U
		09/15/2017	< 1 U	< 1 U
		09/19/2018	< 1 U	< 1 U
		09/30/2019	< 1 U	< 1 U
		09/07/2021	**1**	< 0.5 U
	Post-Remediation	09/21/2023	**3.9**	< 0.5 U

Table 1. Groundwater Sampling Results

Project No. 220555, Ballinger Village Shopping Center, Shoreline, Washington

		Analyte	Tetrachloroethene (PCE)	Trichloroethene (TCE)
		Unit	ug/L	ug/L
		MTCA Method A Cleanup Level [1]	5	5
Location	**Period**	**Date**		
SVE-13	Pre-Remediation	11/28/2012	**120**	**6.1**
	Active Remediation	03/25/2013	**20**	**1.3**
		09/26/2013	**21**	**1.4**
		12/19/2013	**14**	< 1 U
		03/26/2014	**14**	< 1 U
		09/24/2014	**9.3**	< 1 U
		03/12/2015	**7.9**	< 1 U
		09/09/2015	**5.6**	< 1 U
		03/18/2016	**7**	< 1 U
		09/14/2016	**11**	< 1 U
		09/15/2017	**3.3**	< 1 U
		10/02/2018	**9.1**	< 1 U
		09/30/2019	**16**	< 1 U
		09/07/2021	**16**	**0.85**
	Post-Remedation	09/21/2023	**8.2**	**0.66**

Notes:

Results in bold indicate the analyte was detected above the laboratory reporting limit.

U = Analyte not detected at or above the laboratory Reporting Limit (RL) shown.

[1] Model Toxics Control Act (MTCA) unrestricted Method A Cleanup Level for Groundwater

[2] Monitoring well HMW-39 was used as an injection well for an in-situ chemical injection pilot test in 2020 and was subsequently replace by HMW-39R, approximately 14 feet southeast of the orginal HMW-39 location.

All results in micrograms per liter (ug/L).

Table 2. Groundwater Elevations

Project No. 220555, Ballinger Village Shopping Center, Shoreline, Washington

Well Name	Installation Date	Screen Interval in (ft bgs)			Top of Casing Elevation (ft)	September 21, 2023	
						Depth to Water (ft)	Groundwater Elevation (ft)
HMW-2	5/25/05	23	to	33	318.98	26.09	292.89
HMW-13	1/23/06	29	to	39	323.41	29.27	294.14
HMW-28	3/30/10	15	to	25	285.44	13.02	272.42
HMW-34	9/14/10	10	to	25	268.70	11.72	256.98
HMW-37	4/25/12	10	to	35	322.05	27.28	294.77
HMW-38	5/10/12	10	to	35	321.91	27.38	294.53
HMW-39R	6/22/20	27	to	37	NA	26.37	NA
SVE-8	8/26/11	10	to	35	322.64	27.10	295.54
SVE-11	4/25/12	10	to	35	323.48	27.29	296.19
SVE-12	4/23/12	10	to	35	314.09	21.31	292.78
SVE-13	4/30/12	10	to	35	317.09	24.57	292.52

Notes:

NA = Not Available

ft = feet

ft bgs = feet below ground surface

FIGURE

Mountlake Terrance Cleaners Site

NE 205TH ST

SHELL STATION PROPERTY
(Remediation being performed by others)

HMW-14 HMW-06 HMW-23 SVE-05 HMW-05 SVE-06 HMW-09 HMW-17 SVE-04 HMW-24B HMW-24A HMW-15 SVE-3 HMW-16 HMW-25 SVE-10 SVE-11 HMW-19 HMW-12 SVE-16 SVE-8 HMW-37 HMW-18 HMW-30 SVE-15 HMW-26 HMW-31 HMW-1 SVE-7 HMW-38 SVE-09 HMW-20 SVE-1 HMW-13 HMW-27 SVE-2 SVE-14 HMW-39 HMW-39R HMW-4a HMW-04B HMW-2 MW-19 SVE-13 SVE-12 EW-1

A B C D

305 300 295 290 285 280 275 270 265 260

WILLOWS PROPERTY

ANNEX PROPERTY

HMW-33 HMW-28 HMW-34 HMW-35 HMW-36 HMW-29

FOREST PARK DR NE 15TH AVE NE

NE 200TH CT

BALLINGER WAY NE 19TH AVE NE

NE 199TH ST

20TH AVE NE

0 75 150
Feet

N

Compliance Monitoring Well
Site Monitoring Well
Building
Subject Property
Location of Former Dry Cleaners
Tax Parcel
Groundwater Contour Elevations (feet)
Note: Water levels measured September 7, 2021

Monitoring Well Locations

Compliance Monitoring Update
Ballinger Village Shopping Center
Shoreline, Washington

Aspect Consulting	NOV-2023	BY: NLK	FIGURE NO. 1
	PROJECT NO. 200555	REVISED BY: EJM	

APPENDIX A

Cap Inspection Form

Cap Inspection Form

Date: 9/6/2023

Project Name: Ballinger Village Shopping Center

Inspector's Name: David Mackay

Project No.: 200555

Inspector's Signature:

Weather Conditions: Partly cloudy, 64 degrees F

Inspector's Title/Affiliation: Staff Geologist / Aspect Consulting

INSPECTION RECORD

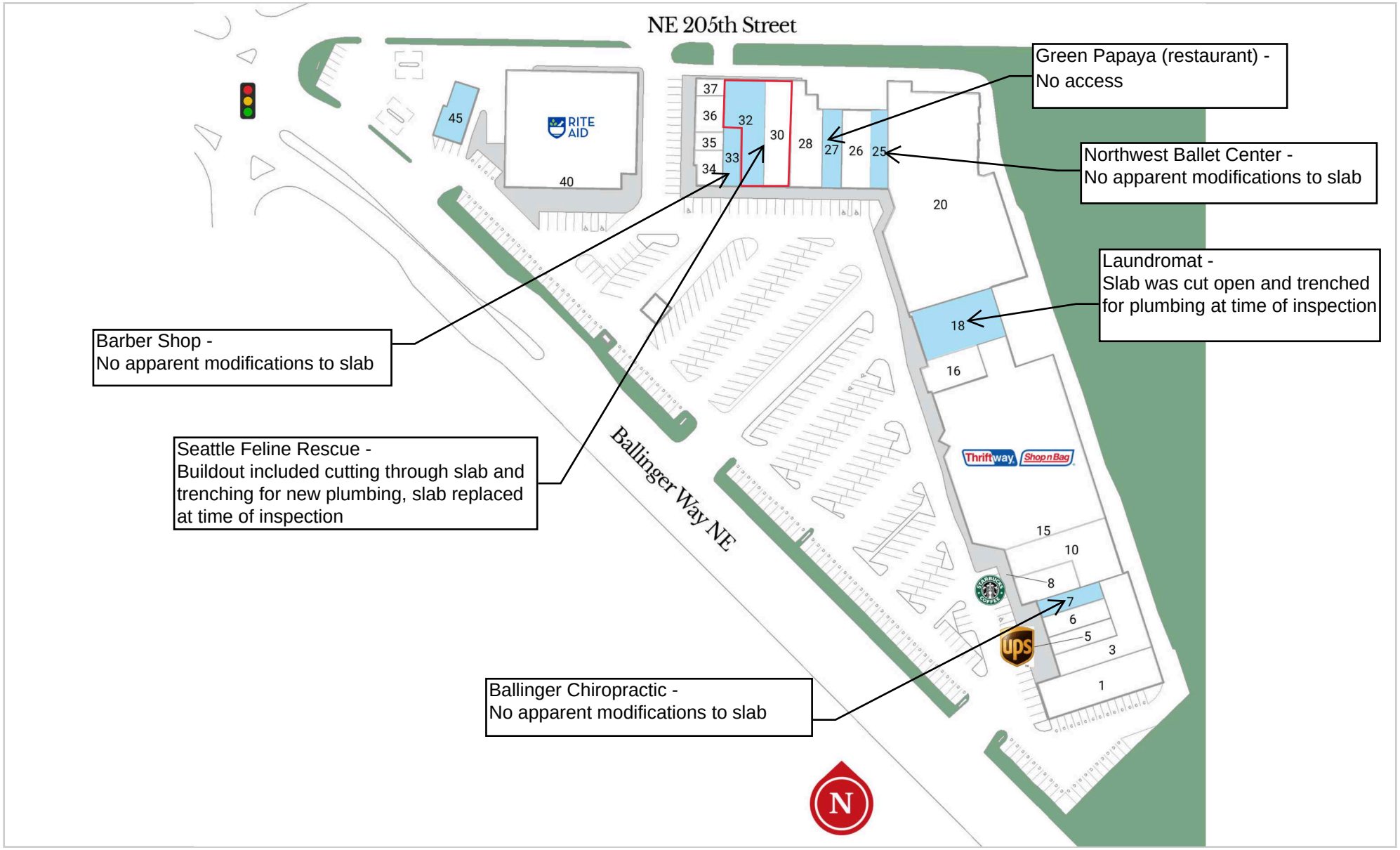
INSPECTION ITEM	YES	NO	COMMENTS/NOTES
1. Property Boundary Landscaping Cover			
a. Any modifications since last inspection?		X	No changes noted or reported.
b. Evidence of any recent landscaping removal?		X	
c. Evidence of soil disturbance?		X	
2. Paved Areas Cover			
a. Any pavement or gravel modifications since last inspection?		X	No changes reported by property management, no changes observed in parking area.
b. Evidence of pavement disturbance, damage, or open cracks?	X		Minor cracks in pavement present throughout parking area. Evidence of recent trenching in alley behind new laundromat (Unit 18), likely related to plumbing updates, asphalt replaced.
c. Evidence of surface spills or standing water?		X	No evidence observed.
3. Building Slab Cover			
a. Any modifications since last inspection?	X		See comment section for updates.
b. Have there been any tenant changes since the last inspection?	X		See comment section for updates.
c. Photos taken for Items #1-3?	X		

Deficient Action Items & Other Comments:

Address	Unit	Business	Notes
20228	Unit 33	Barber Shop	Updates do not appear to have impacted the slab based on visual inspection through winder. Was not able to access interior.
20226, 20224	Unit 32, 30	Seattle Feline Rescue	Based on verbal discussion with property manager, buildout included cutting through the slab and trenching for new plumbing, slab replaced at time of inspection.
20216	Unit 27	Green Papaya	Appears to be a new restaurant. Was not able to access interior or inspect through window.
20206	Unit 25	Northwest Ballet Center	Updates do not appear to have impacted the slab based on visual inspection through winder. Was not able to access interior.
20154	Unit 18	Lumin Laundry	Slab was cut open and actively being trenched for new plumbing at time of inspection.
20130	Unit 7	Ballinger Chiropractic	Inspected and talked with owner, slab currently covered by new flooring. Owner stated updates did not impact the slab.

Ballinger Village Shopping Center

20120 Ballinger Way NE, Shoreline, WA 98155



Ballinger Village Shopping Center

20120 Ballinger Way NE, Shoreline, WA 98155

Current Tenants

1	Immediate Clinic	5,081 SF
3	Massage Envy	4,011 SF
5	The UPS Store	1,364 SF
6	Sole Perfection Shoes	1,364 SF
8	Starbucks Coffee	1,760 SF
10	Stella Nail Lounge	4,240 SF
15	Thriftway	24,713 SF
16	Wells Fargo (Coming Soon)	2,009 SF
20	Emerald City Athletics (C...	24,711 SF
26	Tree House Dentistry for ...	2,432 SF
28	Shoreline Veterinary Hosp...	2,885 SF
30	Seattle Sun Tan	3,003 SF
34	Subway	1,003 SF
35	Blue Harbor Nails	493 SF
36	Teriyaki Town	1,101 SF
37	Farmers Insurance	528 SF
40	Rite Aid	16,692 SF

Available/Coming Soon

7	Available	1,308 SF
18	Available	4,681 SF
25	Available	1,563 SF
27	Available	1,500 SF
32	Available	3,405 SF
33	Available	1,002 SF
45	Available	2,340 SF

APPENDIX B

Laboratory Analytical Report

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

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Seattle, WA 98108
(206) 285-8282
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www.friedmanandbruya.com

September 27, 2023

Daniel Babcock, Project Manager
Aspect Consulting, LLC
710 2nd Ave S, Suite 550
Seattle, WA 98104

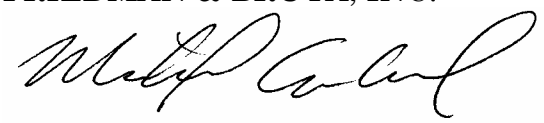
Dear Mr Babcock:

Included are the results from the testing of material submitted on September 21, 2023 from the Ballinger Village 220555, F&BI 309320 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Aspect Data
ASP0927R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 21, 2023 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Ballinger Village 220555, F&BI 309320 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting, LLC
309320 -01	SVE-8-092123
309320 -02	SVE-11-092123
309320 -03	HMW-37-092123
309320 -04	HMW-39R-092123
309320 -05	HMW-38-092123
309320 -06	HMW-13-092123
309320 -07	SVE-12-092123
309320 -08	SVE-13-092123
309320 -09	HMW-2-092123
309320 -10	HMW-34-092123
309320 -11	HMW-28-092123
309320 -12	Trip Blank

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	SVE-8-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-01
Date Analyzed:	09/23/23	Data File:	092254.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	78	126
Toluene-d8	103	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	8.2

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	SVE-11-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-02
Date Analyzed:	09/22/23	Data File:	092209.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	90	71	132
Toluene-d8	92	68	139
4-Bromofluorobenzene	98	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	3.7

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	HMW-37-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-03
Date Analyzed:	09/22/23	Data File:	092210.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	71	132
Toluene-d8	99	68	139
4-Bromofluorobenzene	96	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	1.2

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	HMW-39R-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-04
Date Analyzed:	09/22/23	Data File:	092211.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	71	132
Toluene-d8	91	68	139
4-Bromofluorobenzene	98	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	17

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	HMW-38-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-05
Date Analyzed:	09/22/23	Data File:	092212.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	71	132
Toluene-d8	90	68	139
4-Bromofluorobenzene	98	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	12

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	HMW-13-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-06
Date Analyzed:	09/22/23	Data File:	092213.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	71	132
Toluene-d8	100	68	139
4-Bromofluorobenzene	96	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	11

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	SVE-12-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-07
Date Analyzed:	09/22/23	Data File:	092214.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	71	132
Toluene-d8	102	68	139
4-Bromofluorobenzene	95	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	3.9

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	SVE-13-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-08
Date Analyzed:	09/22/23	Data File:	092215.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	71	132
Toluene-d8	91	68	139
4-Bromofluorobenzene	96	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	0.66
Tetrachloroethene	8.2

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	HMW-2-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-09
Date Analyzed:	09/22/23	Data File:	092216.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	71	132
Toluene-d8	98	68	139
4-Bromofluorobenzene	94	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	7.1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	HMW-34-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-10
Date Analyzed:	09/22/23	Data File:	092217.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	71	132
Toluene-d8	94	68	139
4-Bromofluorobenzene	96	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	HMW-28-092123	Client:	Aspect Consulting, LLC
Date Received:	09/21/23	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	309320-11
Date Analyzed:	09/22/23	Data File:	092218.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	71	132
Toluene-d8	97	68	139
4-Bromofluorobenzene	94	62	136

Compounds:	Concentration ug/L (ppb)
Trichloroethene	3.7
Tetrachloroethene	28

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Ballinger Village 220555
Date Extracted:	09/22/23	Lab ID:	03-2151 mb
Date Analyzed:	09/22/23	Data File:	092208.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	78	126
Toluene-d8	99	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)
Trichloroethene	<0.5
Tetrachloroethene	<1

Date of Report: 09/27/23
Date Received: 09/21/23
Project: Ballinger Village 220555, F&BI 309320

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 309320-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Trichloroethene	ug/L (ppb)	10	<0.5	112	35-149
Tetrachloroethene	ug/L (ppb)	10	8.2	118 b	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Trichloroethene	ug/L (ppb)	10	109	98	70-130	11
Tetrachloroethene	ug/L (ppb)	10	107	108	70-130	1

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.

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 the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. 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 laboratory control sample(s) percent recovery and/or RPD were 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte 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 with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.

309320

SAMPLE CHAIN OF CUSTODY

09/21/23 VWS

Page # 1 of 2

Report To: Daniel Babcock

Company: Aspect Consulting

Address:

City, State, ZIP:

Phone: 316.617.0499 Email: dbabcock@aspectconsulting.com

SAMPLERS (*signature*):

PROJECT NAME	PO #
Billinger Village	220555
REMARKS Project specific RLs? - Yes / No	INVOICE TO

TURNAROUND TIME
- ☐ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	PCE+TCE by EPA 8260D				Notes
SVE-8-092123	01 A-C	9/21/23	0925	water	3								X				
SVE-11-092123	02		0935														
~~SVE~~ DRB HMW-37-092123	03		0945														
HMW-39R-092123	04		1010														
HMW-38-092123	05		1020														
HMW-13-092123	06		1035														
SVE-12-092123	07		1055														
SVE-13-092123	08		1100														Samples received at 0 °C
HMW-2-092123	09		1120														
HMW-34-092123	10		1135														

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Daniel Babcock	Aspect	9/21/23	
Received by:	ARYAPHANI	FSB	09/21/23	13:13
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

309320

SAMPLE CHAIN OF CUSTODY

09/21/23 VWS

Report To Daniel Babcock

Company Aspect Consulting

Address

City, State, ZIP

Phone 316-617-0499 Email dbabcock@aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME	PO #
Ballinger Village	220555
REMARKS Project specific RLs? - Yes / No	INVOICE TO

Page # 2 of 2

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Archive samples
- [ ] Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	PCE + TCE BY EPA 8260				Notes
HMW-28-092123	11 A-C	9/21/23	1145	water	3								X				
Trip Blank	12 A-B	—	—	water	2												Added at lab (AP) 09/21/23
								Samples received at					Ø	°C			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Daniel Babcock	Aspect	9/21/23	
Received by:	ANHPHAN	FSD	09/21/23	13:13
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282