



1180 NW Maple St., Suite 310
Issaquah, WA 98027

T 425.395.0010
TRCcompanies.com

September 13, 2021

Mr. Brian Palmore
Aegis Living
415 118th Avenue Southeast
Bellevue, Washington 98005

Re: Vapor Assessment Report
Aegis Senior Living - Kirkland
6700 Lake Washington Boulevard
Kirkland, Washington 98033
Ecology VCP No. NW2850

TRC Project Number: 416736.0000

Dear Mr. Palmore:

TRC Environmental Corporation (TRC) is pleased to present this *Vapor Assessment Report (VAR)* for the Aegis Senior Living facility located at 6700 Lake Washington Boulevard in Kirkland, Washington (Site). The location of the Site is identified on Figure 1, General Vicinity Map. TRC understands that Aegis Living recently redeveloped the Site and that the Site is now an active senior living facility adjacent to Lake Washington Boulevard.

INTRODUCTION

A vapor assessment was requested by Aegis Living in support of complying with the requirements of the Model Toxic Control Act (RCW 70.105D) and its implementing regulations (Washington Administrative Code [WAC] 173-340; collectively "MTCA"). The Washington State Department of Ecology (Ecology) required the vapor assessment as part of an Environmental Covenant to accompany a No Further Action (NFA) determination through Ecology's Volunteer Cleanup Program (VCP) for the residual petroleum impacts remaining in the soil located beyond the southwestern boundary of the Site in the City of Kirkland Right-of-Way (ROW). The objective of the assessment was to evaluate the effectiveness of a Volclay-bentonite panel that was installed while the Site was being remediated. The vapor assessment activities followed the Ecology-approved *Confirmational Monitoring Plan for Soil Vapor Sampling (CMP; Attachment A)* dated January 22, 2018 and prepared by Environmental Partners, Inc. (EPI).

Petroleum-impacted soil was identified during the removal of the underground storage tanks (USTs) associated with the former Arco Service Station located on the Site. The CMP outlines residual soil impacts from UST removal operations that were inaccessible as they were in the City of Kirkland ROW

(Attachment A). Residual impacts are at an approximate depth of 4 to 6 feet below ground surface, and a horizontal distance of approximately 40 feet along the Site boundary. The approximate location of the residual soil impacts and the Volclay-bentonite panel is shown on Figure 3.

The Ecology-approved CMP required the installation and sampling of three shallow soil gas wells to assess sub-slab vapor intrusion pathways and evaluate the effectiveness of the engineered vapor control barrier. As a part of the requirements of the Environmental Covenant and CMP, Ecology has required the preparation of this Vapor Assessment Report after the initial baseline sampling event of three newly installed permanent soil vapor wells, and periodic vapor sampling of the wells every 5 years. After which, TRC will request an opinion for a No Further Action (NFA) determination from Ecology. TRC implemented the CMP and this VAR describes the procedures and findings of the vapor assessment activities.

VAPOR ASSESSMENT METHODOLOGY

TRC conducted a shallow soil gas vapor assessment according to the CMP requirements. The vapor assessment activities are described in the following sections.

Sub-Slab Soil Vapor Well Installation

TRC installed three shallow soil vapor wells in the sidewalk along the southwestern property boundary, east of the remaining residual impacts located in the City of Kirkland ROW as shown on Figure 3. The shallow soil vapor wells were installed to assess the effectiveness of a Volclay-bentonite panel installed during redevelopment activities, meant to suppress the remaining inaccessible contamination that is beneath Lake Washington Boulevard from migrating through vapor intrusion pathways onto the Site. The locations of the three shallow soil vapor wells are indicated on Figure 2.

At each sampling location, a permanent soil vapor well was installed through the concrete sidewalk by a Washington State licensed well driller using a direct-push technology (DPT) drilling rig. The wells were placed halfway between the existing Volclay-bentonite wall panels and the concrete wall of the structure. The wells were each advanced to a depth of 5 feet. Each vapor well consists of 1-foot of machine slotted, 0.010-inch $\frac{3}{4}$ -inch Schedule 40 polyvinyl chloride (PVC) screen placed at a depth of 4 to 5 feet below ground surface. A fitted end cap was placed on the bottom of the screened interval. The top 4 feet of the well consists of $\frac{3}{4}$ -inch blank Schedule 40 PVC and was fitted with a capped hose barb for connection of vapor sample tubing. A silica sand pack was placed from the bottom of the well to the top of the screened interval. The remaining portion was filled and sealed with hydrated bentonite chips. A 6-inch diameter layer of quick grout was placed around the surface of the well to provide a seal to prevent ambient air from entering the well through the ground surface. The vapor wells were set within a 6-inch flush-mount metal vault. The shallow soil vapor wells were installed on August 13, 2021 and sampled on August 17, 2021, per the CMP.

Sub-Slab Soil Vapor Sampling Procedures

Prior to the baseline sample collection, each shallow soil gas well was allowed to equilibrate for at least 48 hours after construction. At the time of sampling, each well was purged of three well volumes utilizing a vacuum pump and a 1-liter Tedlar bag. The tubing and valve system were checked for leaks using the shut-in testing procedure as described in the CMP. After purging, the wells were connected to a 6-liter Summa canister equipped with a 1-hour sampling regulator. Due to changes in sampling methodology, only 6-liter Summa canisters with a 1-hour regulator were available from the laboratory, unlike the 3-liter Summa canisters with 30-minute regulators described in the CMP. To account for the volume difference, TRC field personnel ceased sample collection after 30 minutes instead of 60 minutes.

To start sample collection, the valve on the Summa canister was opened and the time and vacuum pressure were recorded. After 30 minutes, or when the vacuum pressure reached 5 inches of mercury (Hg), the valve was closed, and the time and final vacuum pressure were recorded.

After sample collection, the Summa canisters were labeled and transported under chain-of-custody procedures to Friedman & Bruya, Inc., a Washington State certified laboratory, to be analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using U.S. Environmental Protection Agency (EPA) Method TO-15, and for air phase hydrocarbons (aliphatics) using EPA Method APH.

Analytical Results

Table 1 summarizes the analytical results from the August 2021 sub-slab vapor sampling event. Laboratory analytical reports are provided in Attachment B.

According to the laboratory reports, concentrations of benzene in all samples were near or less than the laboratory method detection limit (MDL) of 2.2 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) with the highest concentration, 2.5 $\mu\text{g}/\text{m}^3$ in sample SG-3, less than the MTCA Method B Sub-Slab Soil Gas Screening Level (screening levels) of 11 $\mu\text{g}/\text{m}^3$ for benzene. Concentrations of toluene, ethylbenzene, and total xylenes were either less than the MDL or less than the screening levels. Concentrations of aliphatics were less than the screening levels. The concentrations of the aromatics were all less than the MDL.

CONCLUSIONS

The following conclusions are based on the findings and analytical data presented above:

- No concentrations of contaminants of concern greater than MTCA Method B Sub-Slab Screening Levels were detected in any of the soil gas vapor samples collected during the sampling event.
- Based on this information, it appears that the remaining soils with concentrations greater than the MTCA Method A Cleanup Levels that were left in place under Lake Washington Boulevard do not appear to be creating vapor intrusion issues at the newly constructed

building. Additionally, the low concentrations detected reveal that the installed Volclay-bentonite panel is effective at preventing *in situ* adjacent petroleum-contaminated soil from migrating onto the Site.

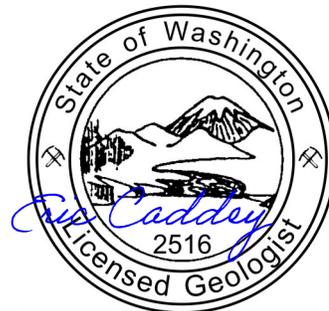
- It is TRC's opinion that the vapor intrusion pathway has been eliminated.
- Per the CMP, the next 5-year vapor sampling event will occur in 2026.

If you have any questions, please contact either of us at any time.

Sincerely,

Wesley Weisberg

Prepared by:
Wesley Weisberg
Project Geologist



ERIC L. CADDEY

Reviewed and approved by:
Eric Caddey, L.G.
Senior Geologist

ENCLOSURES

Table

Table 1 Sub-Slab Soil Vapor Analytical Results

Figures

Figure 1 General Vicinity Map
Figure 2 Site Representation
Figure 3 Soil Gas Analytical Results

Attachments

Attachment A Confirmational Monitoring Plan for Soil Vapor Sampling
Attachment B Laboratory Analytical Report

Table

Table 1
Sub-Slab Soil Vapor Analytical Results
Vapor Assessment Report
Aegis Senior Living - Kirkland
6700 Lake Washington Boulevard, Seattle, Washington

Sample ID	Sample Date	Volatile Organic Compounds ^a					Air Phase Hydrocarbons ^b		
		Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	APH EC5-8 aliphatics	APH EC9-12 aliphatics	APH EC9-10 aromatics
SG-1	8/17/2021	2.2	<130	<3	<6	<3	710	290	<170
SG-2	8/17/2021	<2.2	<130	3.7	15	5.6	1,100	260	<170
SG-3	8/17/2021	2.5	<130	<2.9	<5.8	<2.9	780	250	<170
Sub-Slab Soil Gas Screening Level		11^c	76,000^c	15,000^c	1,500^c	1,500^c	90,000^d	4,700^d	6,000^d

Notes:

Helium results presented as percent (%) Helium, all other results presented in micrograms per cubic meter (µg/m³).

Bold Bold results indicates the analyte detected at a concentration greater than the laboratory reporting limit.

a Analyzed by EPA Method TO-15.

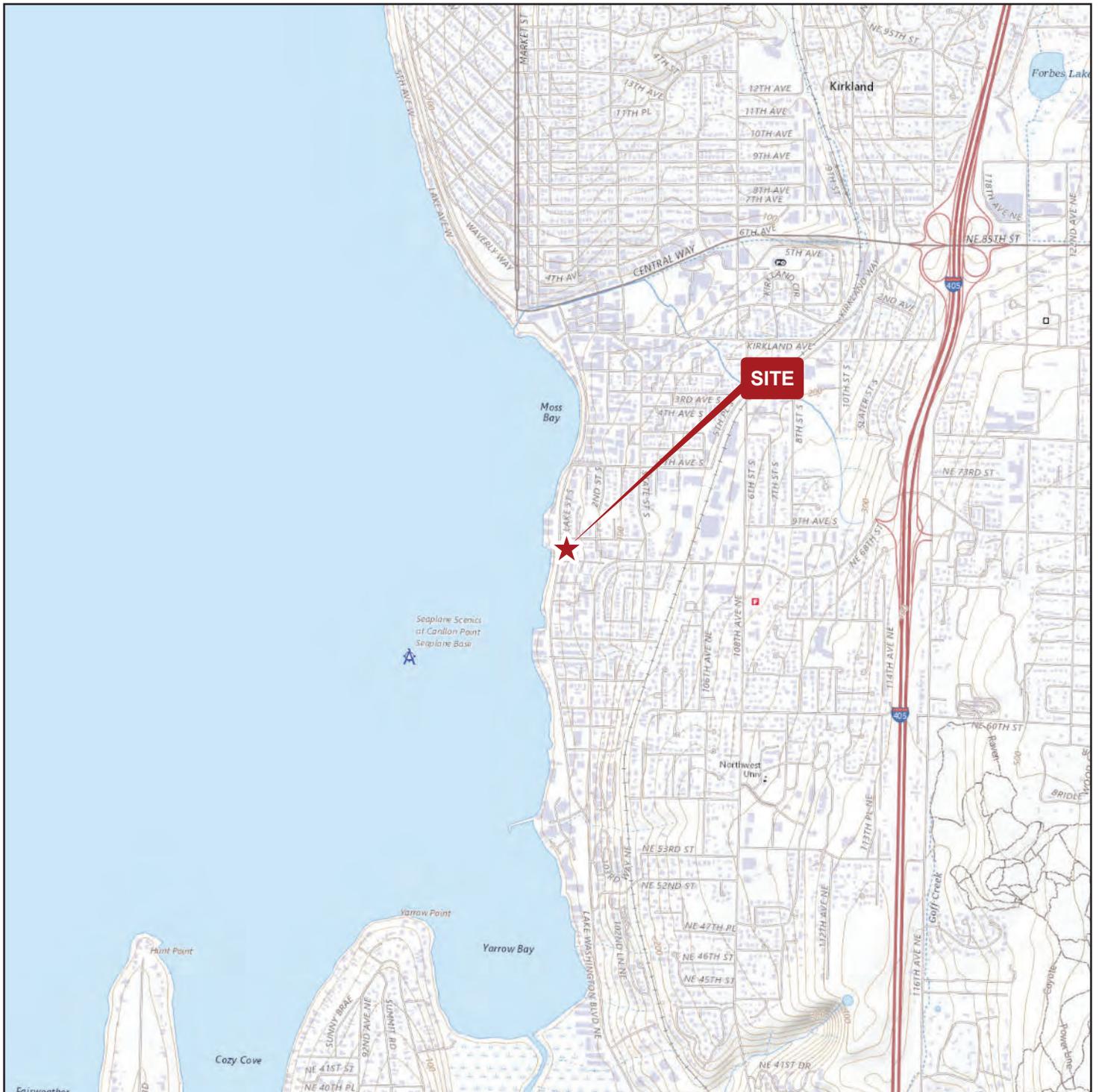
b Analyzed by MA-APH.

c Model Toxics Control Act (MTCA) Method B Sub-slab Soil Gas Screening Levels from Cleanup Levels and Risk Calculations (CLARC) database.

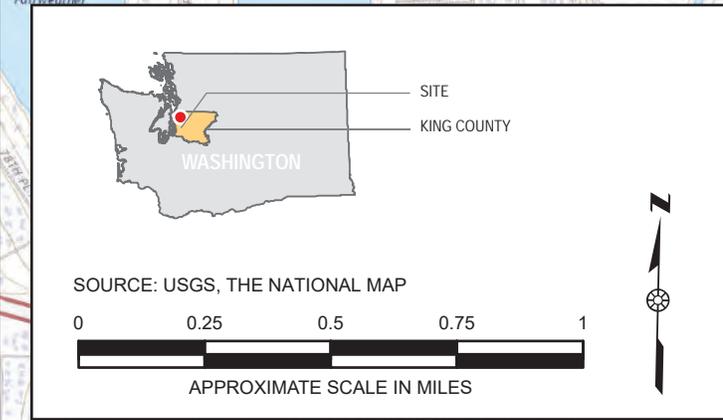
d MTCA Method B Sub-slab Soil Gas Screening Levels, from Draft Vapor Intrusion Guidance Document, Washington Department of Ecology, Table B-1, April 2015. Where levels based on carcinogenic and non-carcinogenic, the lower value is listed.

< Indicates the analyte was not detected at a concentration greater than the listed laboratory reporting limit.

Figures



SITE



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FIGURE 1
 GENERAL VICINITY MAP

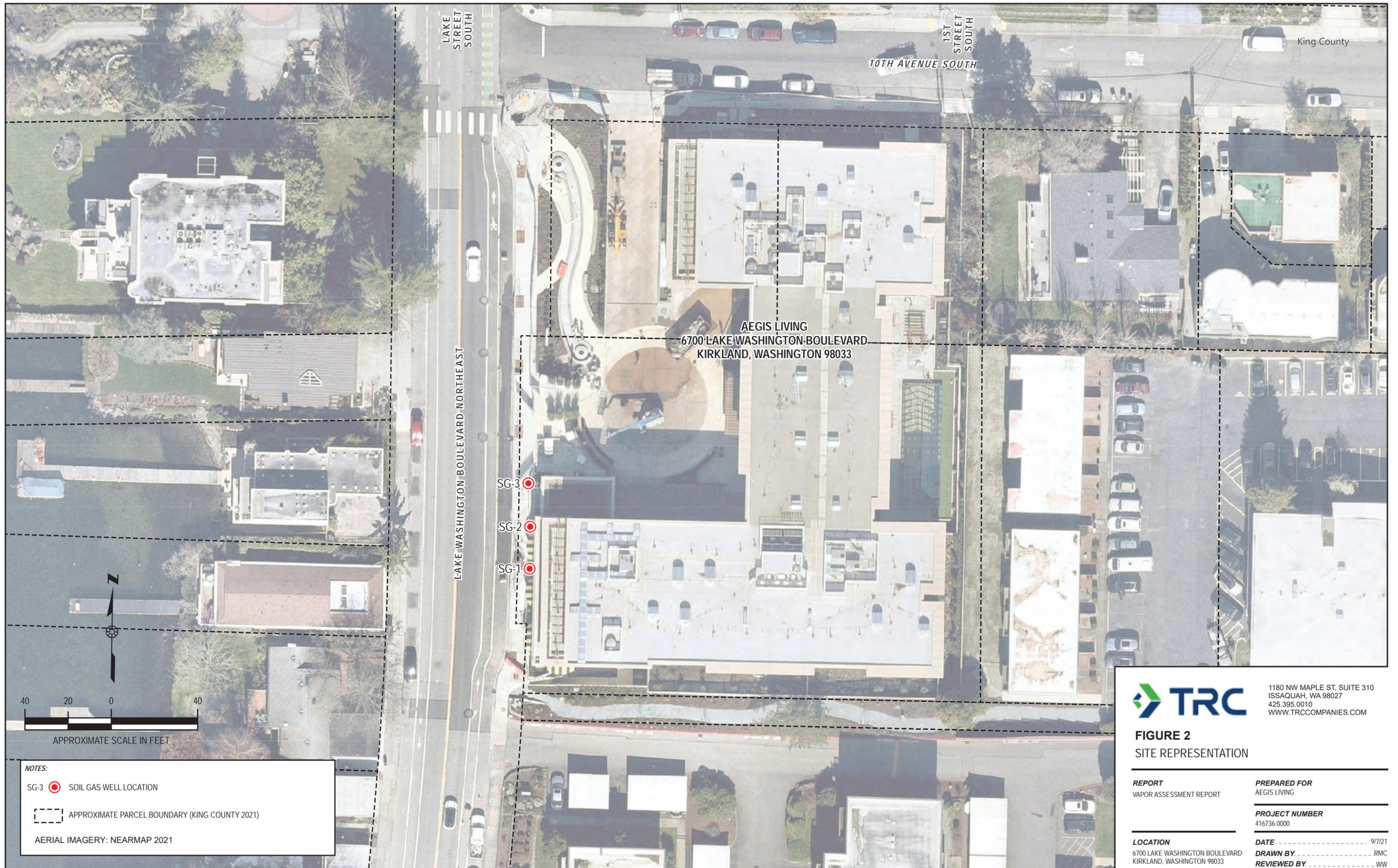
REPORT
 VAPOR ASSESSMENT REPORT

PREPARED FOR
 AEGIS LIVING

PROJECT NUMBER
 416736.0000

LOCATION
 6700 LAKE WASHINGTON BOULEVARD
 KIRKLAND, WASHINGTON 98033

DATE 9/7/21
DRAWN BY VPB
REVIEWED BY WW



LAKE STREET SOUTH

1ST STREET SOUTH

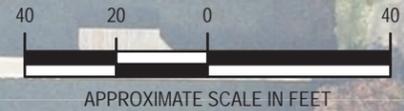
10TH AVENUE SOUTH

King County

LAKE WASHINGTON BOULEVARD NORTHEAST

AEGIS LIVING
6700 LAKE WASHINGTON BOULEVARD
KIRKLAND, WASHINGTON 98033

SG-3
SG-2
SG-1



APPROXIMATE SCALE IN FEET

NOTES:
 SG-3 SOIL GAS WELL LOCATION
 APPROXIMATE PARCEL BOUNDARY (KING COUNTY 2021)
 AERIAL IMAGERY: NEARMAP 2021



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FIGURE 2
 SITE REPRESENTATION

REPORT
 VAPOR ASSESSMENT REPORT

PREPARED FOR
 AEGIS LIVING

LOCATION
 6700 LAKE WASHINGTON BOULEVARD
 KIRKLAND, WASHINGTON 98033

PROJECT NUMBER
 416736.0000

DATE 9/7/21
DRAWN BY RMC
REVIEWED BY WW

Sample ID	Sample Date	Volatile Organic Compounds ^a					Air Phase Hydrocarbons ^b		
		Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	APH EC5-8 aliphatics	APH EC9-12 aliphatics	APH EC9-10 aromatics
SG-1	8/17/2021	2.2	<130	<3	<6	<3	710	290	<170
SG-2	8/17/2021	<2.2	<130	3.7	15	5.6	1,100	260	<170
SG-3	8/17/2021	2.5	<130	<2.9	<5.8	<2.9	780	250	<170
Sub-Slab Soil Gas Screening Level		11^c	76,000^c	15,000^c	1,500^c	1,500^c	90,000^d	4,700^d	6,000^d

Notes:
Helium results presented as percent (%) Helium, all other results presented in micrograms per cubic meter (µg/m3).
Bold results indicates the analyte detected at a concentration greater than the laboratory reporting limit.
^a Analyzed by EPA Method TO-15.
^b Analyzed by MA-APH.
^c Model Toxics Control Act (MTCA) Method B Sub-slab Soil Gas Screening Levels from Cleanup Levels and Risk Calculations (CLARC) database.
^d MTCA Method B Sub-slab Soil Gas Screening Levels, from Draft Vapor Intrusion Guidance Document, Washington Department of Ecology, Table B-1, April 2015. Where levels based on carcinogenic and non-carcinogenic, the lower value is listed.
< Indicates the analyte was not detected at a concentration greater than the listed laboratory reporting limit.



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FIGURE 3
SOIL GAS ANALYTICAL RESULTS

REPORT VAPOR ASSESSMENT REPORT	PREPARED FOR AEGIS LIVING
	PROJECT NUMBER 416736.0000
LOCATION 6700 LAKE WASHINGTON BOULEVARD KIRKLAND, WASHINGTON 98033	DATE 9/7/21 DRAWN BY RMC REVIEWED BY WW

NOTES:
SG-3 SOIL GAS WELL LOCATION
 REMAINING CONTAMINATION LINE
 VOLCLAY-BENTONITE PANEL
 APPROXIMATE PARCEL BOUNDARY (KING COUNTY 2021)
AERIAL IMAGERY: NEARMAP 2021

Attachment A
Confirmational Monitoring Plan for
Soil Vapor Sampling

January 22, 2018

Mr. Walter Braun
Aegis Living
415 118th Avenue Southeast
Bellevue, Washington 98005

Re: Confirmational Monitoring Plan for Soil Vapor Sampling
 Aegis Kirkland (Formerly Potala Village)
 6700 Lake Washington Boulevard
 Kirkland, Washington 98033
 Ecology VCP No. NW2850

Dear Mr. Braun:

Environmental Partners, Inc. (EPI) is pleased to present this Confirmational Monitoring Plan (CMP) for the former Potala Village property located at 6700 Lake Washington Boulevard, in Kirkland, Washington (Property). The location of the Property is identified on Figure 1, General Vicinity Map. EPI understands that ASC Kirkland, LLC, recently purchased the Property and plans to redevelop the Property as a senior living community.

INTRODUCTION

This CMP has been requested by Aegis Living in support of complying with the requirements of the Model Toxics Control Act (RCW 70.105D) and its implementing regulations (WAC 173-340; collectively "MTCA"). The Washington State Department of Ecology (Ecology) has requested this CMP as part of an Environmental Covenant to accompany a No Further Action Determination (NFA) through Ecology's Volunteer Cleanup Program (VCP) for residual petroleum impacts remaining in the soil under the City of Kirkland Right-Of-Way located beyond the southwestern Property boundary. All buildings have been demolished and the Property is currently vacant land with gravel cover. The general area of remaining soil impacts is shown on the Site Representation in Figure 2.

Petroleum impacted soil was identified during the removal of the underground storage tanks (USTs) associated with the former Arco Service Station located on the Property. Earth Solutions Northwest (ESNW) conducted remedial actions and removed the soil impacted with petroleum contaminants concentrations greater than the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (CULs). The results of confirmational soil sampling indicated gasoline-range organics (GRO) greater than the MTCA Method A CULs remained in the soils below and west of the sidewalk in the City of Kirkland Right-of-Way. ESNW constructed an impermeable Volclay bentonite panel along the southwestern property boundary to prevent vapors from migrating onto the Property from the City of Kirkland Right-Of-Way. The residual soil impacts are located at an approximate depth of 4-6 feet, and

a horizontal distance of approximately 40 feet along the Property boundary. The approximate location of the residual soil impacts and the Volclay panel is shown on Figure 3. ESNW's remedial actions are documented in their Cleanup Action Report dated May 16, 2014.

As part of the requirements of the Environmental Covenant, Ecology has required the preparation of this CMP for the installation and sampling of three permanent soil vapor probes, and periodic vapor sampling of the wells every five years.

Soil Vapor Well Installation

The three permanent soil vapor wells will be installed by a Washington State licensed well drilling company using a direct-push technology (DPT) drilling rig. The wells will be placed along the southwestern property boundary, east of the remaining residual impacts located in the City of Kirkland Right-Of-Way as shown on Figure 3. The wells will be placed half way between the existing Volclay wall panels and the concrete wall of the structure when it is constructed. The final location of the wells will be dependent on actual site conditions at the time of drilling as well as the location of subsurface utilities and the proposed building walls and footings. The vapor wells will be placed at locations that are accessible, yet protected from damage.

Three soil borings will be advanced to a maximum depth of five feet. Each vapor well will consist of one-foot of machine slotted, 0.010 slot ¾-inch Schedule 40 PVC screen placed at a depth of 4 to 5 feet below the ground surface. A fitted end cap will be placed on the bottom of the screened interval. The top four feet of the well will consist of ¾-inch blank Schedule 40 PVC and will be fitted with a hose barb or similar connection for the vapor sample tubing. A silica sand pack will be placed from the bottom of the well to the top of the screened interval. The remaining portion will be filled and sealed with hydrated bentonite chips. A 12-inch diameter layer of quick grout will be placed around the surface of the well to provide a seal to prevent ambient air from entering the well through the ground surface. The vapor wells will be set within a 12-inch flush-mount metal vault.

Initial Soil Vapor Sampling

An initial vapor sample (baseline sample) will be collected after well installation. Each well will be allowed to equilibrate for at least 30 minutes after construction. Prior to sample collection, the wells will be purged of three well volumes utilizing a peristaltic pump and a 6-Liter Tedlar bag. After purging, the wells will be connected to a three liter Summa canister equipped with a 30-minute sampling regulator. The tubing and valve system will be checked for leaks using the shut-in testing procedure.

After sample collection, sample containers will be labeled and transported under chain-of-custody procedures to a Washington State Certified laboratory for analysis of benzene, toluene, and total xylenes (BTEX) using EPA Method TO-15, and for gasoline-range organics (GRO) using EPA Method APH.

Prior to commencing any field activities, a site-specific Health and Safety Plan (HASP) will be prepared as required by the Code of Federal Regulations (CFR) Title 29 1910.120 and by the Washington State Department of Labor and Industries. The HASP is a document that establishes site objectives,

anticipates job hazards, provides implementation of a hazard communication and injuries/illness prevention program, and establishes policies and procedures to be followed in both routine and emergency situations.

Prior to drilling, the Washington One Call Service will be contacted to identify publicly-owned subsurface utilities at the Property. The notification will be initiated a minimum of 3 business days prior to scheduled field activities. In addition, a private utility locator will be used to clear each sampling location prior to advancing borings.

Any investigation-derived waste (IDW) in the form of soil cuttings and decontamination water generated during the installation of the wells will be disposed of as non-hazardous waste. The soil vapor wells will be placed within clean, imported backfill. As a precaution, drill cuttings will be screened with a Photo-ionization Detector (PID).

Periodic Soil Vapor Sampling

Soil vapor samples will be collected from the soil vapor wells every five years, with the first five year sampling event occurring five years after the collection of the baseline samples. Sampling and purging procedures will be the same as described above for the baseline samples. Sample analysis will be the same as described above.

Prior to sampling, each well will be inspected for cracks or visual damage. The wells will be repaired prior to sampling if damage is observed.

Reporting

A report documenting the well installation and baseline sampling results will be submitted to Ecology within 30 days of receipt of final analytical results. The report will include vapor sampling procedures, as-built well diagrams, actual well locations in relation to Property structures, and final laboratory reports. Any deviations from this CMP will also be discussed.

The five-year periodic sampling reports will be submitted within 30 days of receipt of final laboratory reports.

If damage to the well vaults or wells are discovered, the damage will be reported to Ecology within forty-eight (48) hours of discovery. Unless an alternative plan has been approved by Ecology in writing, the damage will be promptly repaired, and a report documenting the repairs will be submitted to Ecology within thirty (30) days of completing the repairs.

If you have any questions, please contact me at any time.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. L. Caddey". The signature is stylized and written in a cursive-like font.

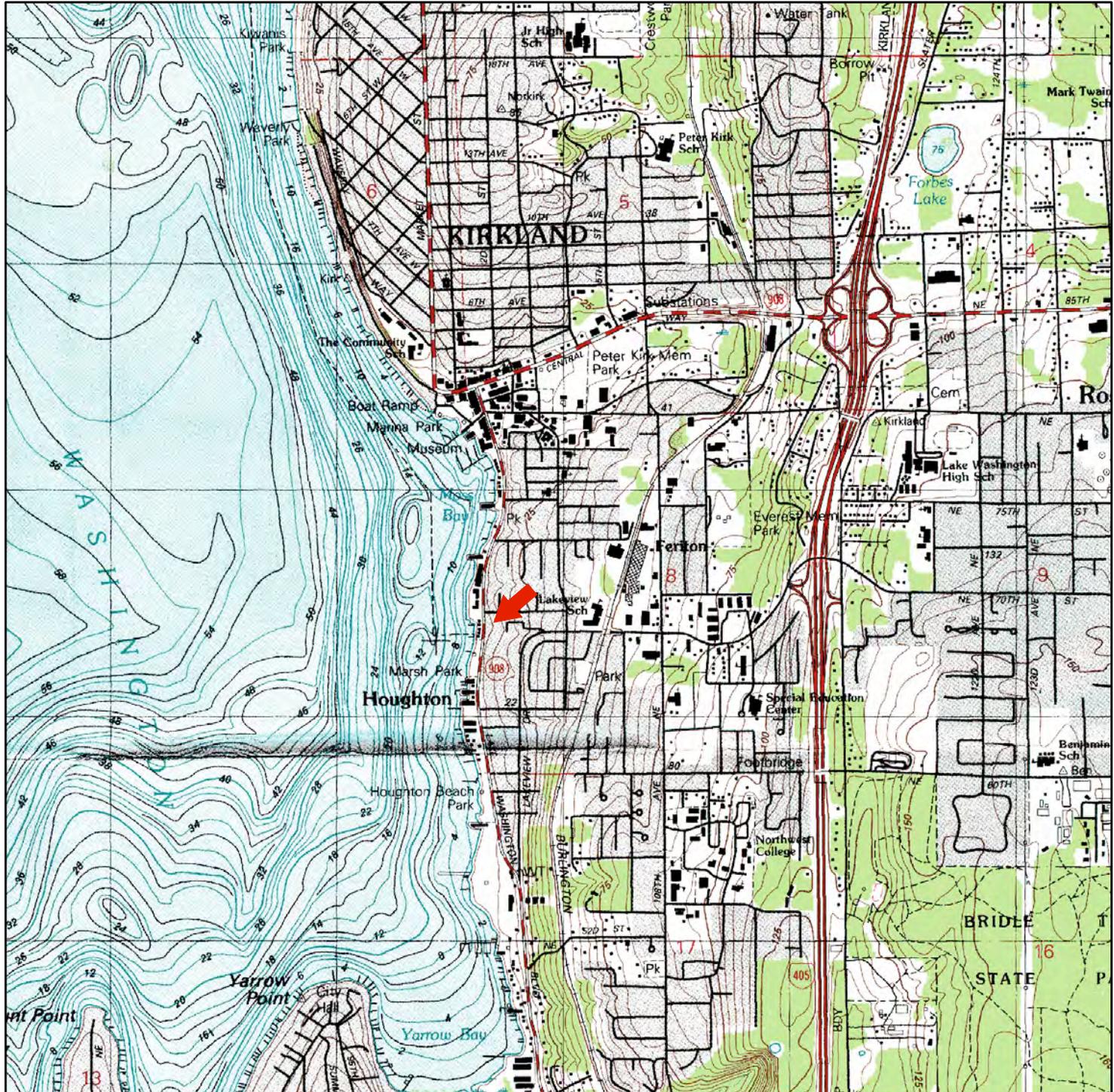
Eric L. Caddey, L.G.
Senior Geologist

FIGURES

Figure 1 – General Vicinity Map

Figure 2 – Site Representation

Figure 3 – Proposed Locations for Permanent Soil Vapor Wells



NOTES:

SOURCE: USGS 7.5 MINUTE QUADRANGLE (TOPOGRAPHIC)

BELLEVUE NORTH, WA 1977

REVISED 1982

SCALE = 1:25,000

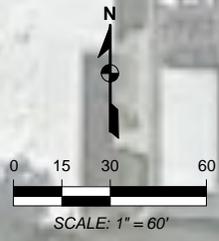
FIGURE 1			
GENERAL VICINITY MAP			
PREPARED BY	 ENVIRONMENTAL PARTNERS INC		
REPORT	CONFIRMATION MONITORING PLAN - SOIL VAPOR SAMPLING		
LOCATION	POTALA VILLAGE 6700 LAKE WASHINGTON BLVD, KIRKLAND, WASHINGTON		
PREPARED FOR	EARTH SOLUTIONS NW, LLC		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
5/15/17	CLM	ELC	48111.1



FIGURE 2
SITE REPRESENTATION

PREPARED BY	 ENVIRONMENTAL PARTNERS INC		
REPORT	CONFIRMATION MONITORING PLAN - SOIL VAPOR SAMPLING		
LOCATION	POTALA VILLAGE 6700 LAKE WASHINGTON BLVD, KIRKLAND, WASHINGTON		
PREPARED FOR	EARTH SOLUTIONS NW, LLC		
DATE 5/15/17	DRAWN BY CLM	REVIEWED BY ELC	PROJECT NUMBER 48111.1

- NOTES:**
-  APPROXIMATE SUBJECT PROPERTY BOUNDARY
 -  APPROXIMATE PARCEL BOUNDARY
 -  AREA OF RESIDUAL PETROLEUM SOIL IMPACTS
 -  VOLCLAY-BENTONITE PANAL



AERIAL SOURCE: GOOGLE EARTH (6/28/2016)
PARCELS INTERPRETED FROM KING COUNTY WASHINGTON GIS DATA

LAKE WASHINGTON BLVD

SIDEWALK

FUTURE LANDSCAPING

POSSIBLE BUILDING LOCATION

SG-3

SG-2

SG-1



SCALE: 1" = 5'

NOTES:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- UNDERGROUND NATURAL GAS
- UNDERGROUND ELECTRIC
- AREA OF RESIDUAL PETROLEUM SOIL IMPACTS
- VOLCLAY-BENTONITE PANAL
- PROPOSED PERMANENT SOIL GAS PROBE LOCATION

FIGURE 3

PROPOSED LOCATIONS FOR PERMANENT SOIL VAPOR WELLS

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	CONFIRMATION MONITORING PLAN - SOIL VAPOR SAMPLING		
LOCATION	POTALA VILLAGE 6700 LAKE WASHINGTON BLVD, KIRKLAND, WASHINGTON		
PREPARED FOR	EARTH SOLUTIONS NW, LLC		
DATE 5/15/17	DRAWN BY CLM	REVIEWED BY ELC	PROJECT NUMBER 48111.1

Attachment B
Laboratory Analytical Report

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 27, 2021

Wesley Weisberg, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Aegis Living Kirkland 416736, F&BI 108265

Dear Mr Weisberg:

Included are the results from the testing of material submitted on August 17, 2021 from the Aegis Living Kirkland 416736, F&BI 108265 project. There are 12 pages included in this report.

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: Cynthia Moon
TRC0827R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 17, 2021 by Friedman & Bruya, Inc. from the TRC Environmental Aegis Living Kirkland 416736, F&BI 108265 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
108265-01	SG-1
108265-02	SG-2
108265-03	SG-3

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-1	Client:	TRC Environmental
Date Received:	08/17/21	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	08/17/21	Lab ID:	108265-01 1/6.9
Date Analyzed:	08/20/21	Data File:	082016.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	710
APH EC9-12 aliphatics	290
APH EC9-10 aromatics	<170

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-2	Client:	TRC Environmental
Date Received:	08/17/21	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	08/17/21	Lab ID:	108265-02 1/6.8
Date Analyzed:	08/20/21	Data File:	082017.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	1,100
APH EC9-12 aliphatics	260
APH EC9-10 aromatics	<170

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SG-3	Client:	TRC Environmental
Date Received:	08/17/21	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	08/17/21	Lab ID:	108265-03 1/6.7
Date Analyzed:	08/20/21	Data File:	082018.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	780
APH EC9-12 aliphatics	250
APH EC9-10 aromatics	<170

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	Not Applicable	Lab ID:	01-1853 MB
Date Analyzed:	08/20/21	Data File:	082010.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-1	Client:	TRC Environmental
Date Received:	08/17/21	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	08/17/21	Lab ID:	108265-01 1/6.9
Date Analyzed:	08/20/21	Data File:	082016.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	100	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Benzene	2.2	0.70
Toluene	<130	<34
Ethylbenzene	<3	<0.69
m,p-Xylene	<6	<1.4
o-Xylene	<3	<0.69

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-2	Client:	TRC Environmental
Date Received:	08/17/21	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	08/17/21	Lab ID:	108265-02 1/6.8
Date Analyzed:	08/20/21	Data File:	082017.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	101	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Benzene	<2.2	<0.68
Toluene	<130	<34
Ethylbenzene	3.7	0.86
m,p-Xylene	15	3.6
o-Xylene	5.6	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG-3	Client:	TRC Environmental
Date Received:	08/17/21	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	08/17/21	Lab ID:	108265-03 1/6.7
Date Analyzed:	08/20/21	Data File:	082018.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	100	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Benzene	2.5	0.80
Toluene	<130	<33
Ethylbenzene	<2.9	<0.67
m,p-Xylene	<5.8	<1.3
o-Xylene	<2.9	<0.67

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	Aegis Living Kirkland 416736, F&BI 108265
Date Collected:	Not Applicable	Lab ID:	01-1853 MB
Date Analyzed:	08/20/21	Data File:	082010.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Benzene	<0.32	<0.1
Toluene	<19	<5
Ethylbenzene	<0.43	<0.1
m,p-Xylene	<0.87	<0.2
o-Xylene	<0.43	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/21

Date Received: 08/17/21

Project: Aegis Living Kirkland 416736, F&BI 108265

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 108288-03 1/5.6 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	1,500	1,200	22
APH EC9-12 aliphatics	ug/m3	1,800	1,800	0
APH EC9-10 aromatics	ug/m3	<140	<140	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	81	70-130
APH EC9-12 aliphatics	ug/m3	67	107	70-130
APH EC9-10 aromatics	ug/m3	67	106	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/21

Date Received: 08/17/21

Project: Aegis Living Kirkland 416736, F&BI 108265

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 108288-03 1/5.6 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Benzene	ug/m3	<1.8	<1.8	nm
Toluene	ug/m3	<110	<110	nm
Ethylbenzene	ug/m3	2.7	2.6	4
m,p-Xylene	ug/m3	5.5	5.4	2
o-Xylene	ug/m3	2.5	2.5	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/m3	43	105	70-130
Toluene	ug/m3	51	105	70-130
Ethylbenzene	ug/m3	59	104	70-130
m,p-Xylene	ug/m3	120	104	70-130
o-Xylene	ug/m3	59	105	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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. 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 lowest calibration standard. 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.

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.

108263

SAMPLE CHAIN OF CUSTODY ME 08/17/21

SAMPLERS (signature)

Page # 1 of 1

Report To Wesley Weisberg

Company TRC

Address 1160 NW Maple St. Suite 310

City, State, ZIP Issaquah WA 98027

Phone 425-345-0910 Email wweisberg@trccorp.com

PROJECT NAME & ADDRESS

AEGIS LIVING, Kirkland, WA
6700 Lake Washington Blvd

PO #

NOTES: 416736

INVOICE TO

TURNAROUND TIME
 Standard
 RUSH
Rush charges authorized by: _____
SAMPLE DISPOSAL
 Default: Clean after 3 days
 Archive (Fee may apply)

SAMPLE INFORMATION

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. (uHg)	Field Initial Time	Final Vac. (uHg)	Field Final Time	TO15 Full Scan	TO15 BTEXM	TO15 cVOCs	APH	Helium	Notes
SG-1	01	18564	01	IA / SG	8-17-21	1057	11:27	86 uHg	12:41	X	X	X			Gas King & organic A/E M/Ph/Th/Ke
SG-2	02	108594	17	IA / SG	8-17-21	1211	8:46	12:41		X	X	X			
SG-3	03	18565	21	IA / SG	8-17-21	1502	8:28	8:33		X	X	X			
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											

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Seattle, WA 98119-2029

Ph. (206) 285-8282

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FORMS\DOC\COCTO-15.DOC

SIGNATURE

Relinquished by: _____

Received by: ma

PRINT NAME

Lithka Birt

Khoi Hoang

COMPANY

TRC

FB I

DATE

8/17/21 14:50

8/17/21 14:50

TIME

Samples received at 20 : 00