## Farrell, Robert C

From:

Buchanan, Sabrina

Sent:

Tuesday, December 09, 2014 1:39 PM

To:

Farrell, Robert C

Subject:

FW: 525 N 85 ST- Decommissioning Record

From: Drake, Melodi

Sent: Tuesday, December 09, 2014 1:36 PM

To: Buchanan, Sabrina

Subject: RE: 525 N 85 ST- Decommissioning Record

A permit is not issued unless the work is done. If you note the second page, you will see the sign off from the Fire Marshal's Office Special Hazards Inspector. The inspector was on site for the decommissioning and issued the permit for the work to proceed. Further confirmation would include hiring a decommissioning company to confirm the work.

## Melodi L. Drake, Admin Spec I

Fire Prevention Division/Seattle Fire Department 220 3<sup>rd</sup> Avenue S, 2<sup>nd</sup> Floor Seattle, WA 98104 206.386.1450 www.seattle.gov/fire



## Farrell, Robert C

From:

Buchanan, Sabrina

Sent:

Tuesday, December 09, 2014 11:48 AM

To:

Farrell, Robert C

Subject:

FW: 525 N 85 ST- Decommissioning Record

Attachments:

525 N 85 ST-1.jpg; 525 N 85 ST-2.jpg

From: Drake, Melodi

Sent: Tuesday, December 09, 2014 11:20 AM

To: Buchanan, Sabrina

Subject: 525 N 85 ST- Decommissioning Record

Good morning Sabrina,

Please see the attached decommissioning record for the requested address of 525 N 85 ST.

If you have additional questions or requests, you may contact us at the number noted below or by email at: <a href="mailto:sfd">sfd</a> fmo <a href="mailto:pdr@seattle.gov">pdr@seattle.gov</a>.

Thank you!

Melodi L. Drake, Admin Spec I
Fire Prevention Division/Seattle Fire Department
220 3<sup>rd</sup> Avenue S, 2<sup>nd</sup> Floor
Seattle, WA 98104
206.386.1450
www.seattle.gov/fire



rire Department

# APPLICATION FOR PERMIT



	THE TEMPODARY I	UNERGROUND T	TANK RESERVE DABANDONMENT PERMI
Permit Code No.:	Code Reference: SF	C 79.116	JUN 2 9 1993 / 12/30/93  Date lesued HAZ MAI SECTION
Receipt # or D	ata Entry #	Permit Expirati	tion Date:
Frm Name: City of	Seattle-DAS-1	letsen Mich	14pPhone: 386-1156
Firm Address: 805 5	Charles St.	City Seall	70 State Wa Zip 99134
Job Bite: Green wood &			
JOS SHE. OFFICE DOCA S	Partie St. Nuch	Pres Chief	Phone: _396-1156
	Tank Size	. 1000 0	aler/
Number of Tank(s):			- F
Product(s) Previously Conts	ined: 14 pating 21	4	Hot Work: Ves X No
REMITTANCE FOR PERM	SEATTLE FIRE DEP HAZARDOUS 301 Sec	ARTMENT HEADS MATERIAL PERM OND AVENUE SOUTH WA 96104-2618	RETURNED WITH THIS APPLICATION TO QUARTERS MITS h
Make Checks Payable To:	SEATTLE CITY TREASUR	ER	AND THE RESERVE AND THE AND THE AND
PERMIT CONDITIONS:  1. TANKS MAY BE REMOV	ED ONLY AFTER FIRE DEPA fire extinguishers are to be or	ATMENT INSPECTIC	

- Rope or ribbon barricades must be provided circling 10' from the operation or be enclosed in a fenced yard. 3.
- "No Smoking" signs must be posted in readily visible locations.
- No hot works allowed unless the tanks are certified gas free. A separate Fire Department permit (Code 491) is required for cutting and welding operations.

#### PROCEDURES:

- Call 366-1450, 24 hours prior to removal to arrange for an appointment. Appointments must be confirmed by an Inspector.
- Permits may cover multiple tanks located at a single inspection area. If additional tanks are to be removed or abandoned at later dates, separate permits shall be obtained.
- Additional fees will be charged if inspectors are required to work other than normal business hours. (Normal business hours are 7:30 a.m. to 4:30 p.m.)

To ensure tanks are completely free of all flammable or combustible liquids, a receipt or certificate must be on site indicating the tanks has been pumped and rinsed with an approved material. Product and rinse water must be disposed of in an approved manner. If tanks are being removed, the tanks' atmosphere must be inerted using one of the following approved methods: Solid dry ice a. Compressed gas cylinders releasing CO<sub>2</sub> in the vapor phase Purging using air Specific guidelines for the use of each method is provided in the Seattle Fire Department Inspection Guideline No. 79.6011. Tarries being abandoned must be filled with a lean concrete mixture. Tarries previously containing Class I liquids must be inerted prior to filling with lean concrete. A Fire Marshal's Office Inspector will test the tanks' atmosphere using a gas detector. \* minimum reading of 60% CO, must be obtained prior to tank removal if CO, is used to inert the tank. A missimum reading of 10% LEL must be achieved prior to removal of the tank if the air purging method of inertion in used. CC, fire extinguishers and discharge of liquid CO, from compressed gas cylinders is prohibited. Tanks with baffles to prevent movement of liquid (or tanks without baffles larger than 10,000 gallons) must be certified gas tree by a Manne Chemist or a Petroleum Industry Safety Engineer regularly engaged in that business prior to removal. Terrise being removed must be removed from the ground and relocated to a remote, approved facility on the same day that the permit is issued. 15. After the tanks are removed, if the tank has not already been cleaned, the openings should be sealed so the CO<sub>2</sub> gas will remain in the tank during transit. In addition, tanks large enough to allow a person to enter it to do repair work should be marked on one side with spray paint "NO AIR - INERT GAS." Special Permit Conditions: OK TO MEANDON 1-1K HEATING OIL UST PUMP & RINSE BY MARINE VACUUM SEXULE SEATTLE FIRE DEPARTMENT Expiration Date: 12/50/95



# **Inspection Report**

## Prepared for: Phinney Neighborhood Association - Bill Fenimore

## **Property Address:**

Greenwood Senior Center 525 N 85th St Seattle WA 98103



Inspected by: Michael Linde

Inspection Date: 2/17/2014

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## 1. Introduction & Scope

#### 1.0 Introduction and Scope of the PCA

As per the request of the client, a visual inspection was performed of the property. Our inspection was limited to identifying the existing conditions of the following readily visible building components:

- Exterior Components
- Structural
- Roofing
- Electrical System
- · Ventilation System
- · Heating, Air-Conditioning and Ventilation Systems
- Plumbing Systems
- Insulation
- Interior Components

This assessment meets or exceeds the ASTM standards for Property Condition Assessments. This report provides recommendations and priorities for:

- · remedying major deficiencies,
- · updating aging major components, and
- · undertaking further detailed investigations.

The recommendations are for remedial actions that are considered to be beyond the normal maintenance of the building. This report is intended for the exclusive use of our client. Use of the information contained within the report by any other party is not intended and, therefore, we accept no responsibility for such use.

#### **INSPECTION AUTHORIZATION AND SCOPE**

This report is a professional opinion, based on the accessible features of the building. We evaluated the current physical condition; we did not perform a design analysis. We visually reviewed the performance, looking for evidence of distress. It should be understood that there are limitations to such an inspection. Throughout any inspection, conclusions are often drawn which cannot be confirmed by direct observation. Therefore, it should be understood that we can reduce the number of unforeseen repairs; however, we cannot eliminate them. Consequently, no guarantee or warranty can be offered or implied.

Only the items specifically addressed in this report were examined. No comment is offered on fire protection equipment or on fire regulation, building code and building bylaw compliance, or environmental concerns.

<u>Inspector Qualifications:</u> This property has been inspected by Michael Linde of Northwest Building Inspections. The following is a summary of his qualifications:

As president of Northwest Building Inspections, Mr. Linde has performed over 3,000 inspections in the Greater Seattle area. Residential properties inspected range from condos to \$15M luxury single-family residences. Commercial properties inspected include strip malls, hotels, 100,000+ sqft warehouse buildings, office buildings, 300+ unit multifamily housing, and adult care facilities. Mr. Linde has also provided expert testimony on legal disputes between owners and builders on code and quality control issues. Mr. Linde is a member of National Association of Commercial Building

Inspectors and Thermographers, holds certifications from the International Code Council, including Certified Commercial Building Inspector, and is affiliated with many recognized industry associations.

Prior to starting Northwest Building Inspections, Mr. Linde gained 14 years of experience in almost every aspect of residential and commercial construction, which included framing and supervising crews for large residential developments, owning and operating a framing and siding company specializing in high-end custom homes, and supervising the construction of large commercial projects, including a \$17M school in the remote reaches of the Arctic Circle,

**Report Reviewer Qualifications:** This property condition report (PCR) has been reviewed by Elim Yoon of Northwest Building Inspections. The following is a summary of Ms. Yoon's qualifications:

Ms. Yoon is the business manager for Northwest Building Inspections. Her responsibilities include managing the business and financial aspects of the company. With her background in site assessments and technical report writing, she also prepares and reviews property condition reports.

Prior to her current position at Northwest Building Inspections, Ms. Yoon was a project manager for the Alaska Department of Environmental Conservation (ADEC), tasked with overseeing the U.S. Navy's environmental cleanup of Adak Island. A career highlight was representing the State of Alaska in a three-party (Alaska, EPA, U.S. Navy) negotiation to develop clean-up standards for the remediation of unexploded ordnance, considered to be a first of its kind at the time. Prior to joining ADEC, Ms. Yoon was employed at Jacobs Engineering, a global engineering firm. Her career at Jacobs spanned from being a geotechnical engineer, tasked with mapping excavated tunnel walls for the construction of the Metro Red Line, a subway in Los Angeles, to Task Manager at the company's environmental consulting arm dedicated to managing environmental remediation projects for the Department of Defense. Ms. Yoon holds a Bachelor of Arts degree in Earth Sciences from the University of California, Berkeley.

### 2. General Information

Signed Inspection Agreement: Standards of Practice: In Attendance:

Yes ASTM E2018-08 Client(s)

Type of building: Year Built: Size of the Subject Building:

Office Building Built in 1950, Renovated in 1975 9,587 gross sqft (According to county records)

Temperature: Weather: Rain in last 7 days:

40's to 50's Overcast Yes

## 2.0 General Report Information

The following are definitions of comment descriptions included in this inspection report. All comments and recommendations by the inspector should be considered before purchasing this property. Any recommendations by the inspector to repair or replace suggests a second opinion or further evaluation by a licensed contractor because additional defects can be revealed while performing the work, which may affect your evaluation of the property. Although, every effort is made to inspect the clearly visible areas of the building, we cannot inspect components that are within the walls or obscured for other reasons. All costs associated with repair or replacement of highlighted items, including fees for further evaluation, should be considered before you purchase the property.

**Informational** = General information about a component or system.

**Repair or Replace** = The item, component or unit is not functioning as intended, or needs further inspection by a qualified contractor. Items, components or units that can be repaired to satisfactory condition may not need replacement.

<u>Maintenance Issue</u> = The item, component, or system while perhaps functioning as intended is in need of minor repair, service, or maintenance; is showing signs of wear or deterioration that could result in an adverse condition at some point in the future; or considerations should be made in upgrading the item, component, or system to enhance the function, efficiency, safety, and/or more closely align with current construction standards. Items falling into this category can frequently be addressed by a handyman and are considered to be routine maintenance or recommended upgrades.

<u>Monitor</u> = The item, component, or system while perhaps functioning as intended is in need of minor repair, service, or maintenance; is showing signs of wear or deterioration that could result in an adverse condition at some point in the future.

**Upgrade** = An item that is not required but is a recommended upgrade.

<u>Further Evaluation by a Specialist (FE)</u> = A component or system on the building that is outside the scope of the inspection, but needs to be evaluated by a specialist to inform you on the condition of the component/system.

**Not Inspected (NI)**= The item, component or unit was not inspect, and no representations of whether it was functioning as intended can be made. Typically, a reason for not inspecting will be stated.

Not Present (NP) = This item, component or unit is not in this building.

This building is more than 50 years old and the inspector considers this while inspecting. It is common to have areas that no longer comply with current code. This is not a new building and cannot be expected to meet current code standards. While every effort is made to point out safety issues, this inspection is not a building code inspection. It is common that buildings of any age will have had repairs performed and some repairs may not have been performed with quality workmanship. Although areas that have been repaired may be noted or commented upon, repairs are not graded. There are sometimes signs of water intrusion in crawlspaces or basements that could have been from an issue that was already repaired and that no longer exists. Or, it may be from a currently active issue that still requires attention and repair. Determining the difference can be difficult on an older building, and often dependent on the weather. Always hire qualified licensed contractors or experts for any repairs or further inspections listed in the report.

#### 2.1 Exterior Photos









#### 3. Site

#### 3.0 Access & Egress

Informational

The property can be accessed from North 85th Street. No deficiencies were noted with access to the property.

#### 3.1 Topography

Informational

The building is situated on a slightly sloped lot. No signs of slipping or settling of the building were noted during the inspection. Therefore, a geological evaluation is not considered necessary.

#### 3.2 Landscaping

Informational

Landscaping is an important feature of a commercial building, and the cost of maintenance and improvements should be included in the operating budget.

There is vegetation in contact with the exterior walls and/or the roof. Although these trees and plants are attractive they can introduce pests and rodents and accelerate deterioration of the exterior materials on the building. Therefore, the vegetation should be removed or at least pruned to 12 inches away from the structure, which will allow improved air flow and sunlight to reach the exterior of the building to help keep the siding materials dry. Tree branches should be kept at least 2 feet away from the roof to help prevent rodents from accessing the roof and potentially find a way into the attic.

#### 3.3 Parking Areas

Repair or Replace

The asphalt parking areas are useable, but tree roots have damaged the asphalt in the SW corner of the parking area and needs to be repaired, re-sealed and re-striped. When the parking area is repaired, sealed and re-striped, a proper number of handicap accessible parking spaces should be created. Re-sealing and re-striping should be performed as normal maintenance every 2 to 5 years, depending on the amount of traffic on the asphalt.

Along the west side of the parking area, the curb/guardrail is not sufficient to prevent cars from driving over the embankment. A guardrail or higher curb should be installed to prevent cars from going over the edge of the embankment.



Asphalt parking area is damaged



Install a guardrail or larger curb

#### 3.4 Storm Drains

Informational

There are storm drains located on the property. No visible problems were noted with the storm drains, but you may wish to have a qualified person flush the drains to their termination point to verify that it is functional.

There are indications of water intrusion inside the exterior door on the southwest corner of the basement. Water likely drains beneath the exterior door and into the basement when the storm drain becomes clogged. A licensed asphalt contractor should install an asphalt berm in the parking area uphill from this door to direct rain water away to decrease the likelihood of water intrusion into the basement.



Flush out the storm drain



Flush out the storm drain



Install an asphalt berm to direct water away from the door

#### 3.5 Walkways

Informational

The concrete walkways are in acceptable condition.

## 3.6 Additional Structures on the Property

Not Inspected

There is a storage shed on the property, which is outside the scope of this inspection. We typically do not inspect outbuildings or storage sheds, and limit our inspections to the main building. You may wish to inspect the shed for yourself.

## 3.7 Underground Fuel Storage Tank

Further Evaluation by a Specialist

There is an underground fuel storage tank on the property. The property owner has stated that the tank has been filled. The property owner should provide the receipt of work performed and the permit to verify that the tank has been decommissioned properly.

Underground fuel storage tanks typically last about 40 years. However, there is always a potential for these tanks to leak fuel into the surrounding soils. Therefore, you may wish to contact an environmental consultant to assess the soil conditions before the close of escrow as remediation related to fuel contamination can be costly.

Some counties such as King County require underground fuel storage tanks to be removed if they have not been in service in more than a year. King County bulletin #44 states: "Tanks and piping serving oil-burning equipment which have been out of service for a period of one year shall be removed from the ground or abandoned in place in accordance with Section 3404.2.13.1.3 of the International Fire Code".

## 4. Roofing, Chimneys and Roof Drainage

#### 4.0 General Roofing Comments

Informational

The building has a flat/low sloped roof system and is covered with a modified bitumen roofing material. Flat/low sloped roofs are designed to be waterproof not just water resistant, and to last approximately 20 years. They are rarely flat, and generally slope toward drains in or near surrounding parapet walls. However, it is common for water to pond on these roofs. Water should drain and/or evaporate off the roofing materials within 24 hours after it rains. If it does not, it may be an indication that the drainage needs to be improved. Flat roof systems can be problematic and must be maintained. The roofing material will contract and expand in the daily and sometimes radical temperature extremes, and eventually buckle, split, separate, and finally deteriorate. When this happens, the roof is susceptible to leaks. Although gradual decomposition of the roofing materials is inevitable, most leaks result from poor maintenance or poor installation. Therefore, regardless of the age of the roofing materials, they should be cleaned regularly, so that the roofing material can be easily inspected for damage and to increase its reflectivity, which will help prolong the useful life of the roof.





View of the roof



View of the roof



View of the roof

### 4.1 Roofing Materials

Repair or Replace

No leaks were detected with the roof at the time of the inspection. However, the roofing materials are older and nearing the end of the typical design life for this type of roofing material. Due to the age of the roofing materials, there is an increased risk of developing leaks. It is our opinion that the roofing materials will need to be replaced in the near future.

Several seams on the sloped areas of the rear section of the roof are not sealed properly, which leaves these areas especially vulnerable to leaks. The roof has leaked recently, as indicated by the water damage observed in the women's bathroom on the main level of the building.

A licensed roofing contractor should evaluate the roof to provide you with a second opinion on the condition of the roofing materials and provide you with a cost for replacement. The roofing contractor should perform a cut test to determine how many layers of roofing materials are present. This is required to determine whether the old roofing materials will need to be removed prior to replacement or if the new roofing materials can be installed over the existing layers.



Seams in the roofing materials are not sealed properly

#### 4.2 Roof Flashings

Repair or Replace

The majority of the roof flashings appear to be in acceptable condition. However, there is a small piece of flashing that has been installed on the side of the one vent fan located above the water damaged area in the women's bathroom. It appears this flashing was installed in an attempt to repair the roof leak. However, the flashing was not installed well and serves as a temporary solution at best. The roof should be repaired properly by a licensed roofing contractor.



Incorrect flashing installation

## 4.3 Roof Drainage System

Repair or Replace

The roof drainage system consists of internal drains and scuppers at the edges of the roof. The drains are installed too high and the roof is not sloped properly towards the drains, which is causing water to pond on the upper roof. Having

water pond on the roof for extended periods increases the potential for leaks. A licensed roofing contractor needs to improve the slope of the roof and lower the roof drains so that water can drain freely off the roof.

After the drains on the roof are repaired and the slope of the roof is improved, the contractor should flush out the downspouts and underground drains to their termination point to verify that they are draining properly.

The underground drain lines for the downspouts on the older section of the building are the old concrete type. In has been our experience that this type of old drain is often clogged or broken underground. The drains should be monitored during heavy rains. If the drains are clogged underground, they can either be repaired, or simply cut off at ground level and have extensions added to discharge the water at least four feet away from the building.

One of the downspouts on the front of the building is discharging at the foundation. The downspout should be connected to the underground drainage system so that water drains properly away from the foundation.



Water is ponding on the roof



Drains are installed too high



Old concrete drain system



The downspouts discharge at the foundation

#### 4.4 Chimney(s) Condition

Repair or Replace

The brick chimney is in acceptable condition, but there is no weather cap/spark arrestor installed at the top. A weather cap/spark arrestor should be installed to prevent water from flowing down the chimney.



Install a weather cap on the chimney



## 5. Building Envelope

#### **5.0 General Exterior Comments**

Informational

The exterior of any building needs to be kept well painted to prevent damage from exposure to sun, wind, and rain. The wood and/or composite siding/trim components on the exterior of the building should be re-painted every 5 to 8 years, depending on the quality of the paint that was used and by the quality of the contractor that applied the paint. Typically, the south and west sides of the building will show signs of wear first, since these sides are generally exposed to the most weather. It is always better to be pro-active and repaint the building before the paint begins to peel, because once the paint peels, the old paint must be removed before new paint can be applied, which increases labor costs.

The caulking around all the windows, doors and any other penetration through the siding should be inspected for wear and damage once a year. You should walk around the building before the start of the raining season (winter) and check the caulking for any signs of cracks or areas where caulking is missing, and re-apply a high quality silicone based caulking to maintain a good seal around the windows and doors.

## 5.1 Exterior Wall Cladding

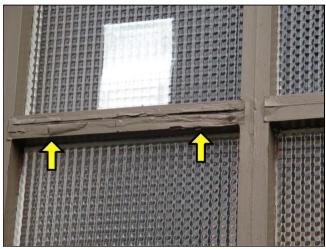
Repair or Replace

The brick veneer on the exterior of the building is in acceptable condition. However, the wood window trim around the large window at the back of the building and the wood trim on the small wall between the lower roof and the upper roof are decayed and need to be replaced. The paint is peeling on the wood siding and trim boards throughout and should be re-caulked and re-painted in the near future to prevent damage to the cladding materials.

When the wood trim is replaced, it should be installed to meet the current building codes, which require all protruding wood trim to be flashed. Having flashing installed above the protruding trim will decrease the likelihood of the trim decaying in the future.



Wood trim is decayed on this window



Decayed window trim



Decayed trim boards



Decayed trim boards



Paint is peeling on the siding



Paint is peeling on the wood siding

## 5.2 Windows

Repair or Replace

The windows in the building are the old metal-framed single pane type windows. The windows are in poor condition and should be replaced to prevent leaks and to reduce heating and cooling costs.



The old windows are in poor condition

#### **5.3 Exterior Doors**

Maintenance Issue

The exterior doors were inspected and found to be functional. However, several of the lower back doors are not aligned properly with their door frames. There are also large gaps beneath two of the lower back doors. A licensed contractor should adjust the doors so that they are aligned with the door frames, and higher thresholds should be installed to close the large gaps and prevent rodents from entering the building.

#### 5.4 Exterior Stairs

Informational

The exterior stairs on the building are in acceptable condition.

## 6. Structural Components

#### 6.0 Foundation System

Informational

- (1) The foundation for this building consists of a poured concrete footing and stem walls around the perimeter of the building with a concrete slab on the lower level of the building. Our inspection of these foundations conforms to industry standards, which is that of a generalist and not a specialty contractor, and we do not use any specialized instruments to establish that the structure is level. We typically enter all accessible areas, to confirm that foundations are bolted and to look for any evidence of structural deformation or damage, but we may not comment on minor deficiencies, such as on commonplace settling cracks in the stem walls and slight deviations from plumb and level in the intermediate floor framing, which would have little structural significance. There is no absolute standard for evaluating cracks, but those that are less than 1/4 inch and which do not exhibit any vertical or horizontal displacement are generally not regarded as being structurally relevant.
- (2) No deficiencies were noted with the foundation.

#### **6.1 Floor Structure**

Informational

The concrete slab floor in the basement is in acceptable condition. The intermediate wood floor framing is also in acceptable condition. There may be some deviations from plumb, level, etc, but none that poses any serious structural significance.

#### 6.2 Wall Structure

Informational

No issues were noted with the wall structure.

#### 6.3 Roof Structure and Attic Areas

Informational

The roof structure consists of conventional wood framing. The visible sections of the roof structure are in acceptable condition. There is no attic space on this type of roof structure.

## 7. Electrical System

#### 7.0 Electrical General Comments

Informational

There are a wide variety of electrical systems with an even greater variety of components, and any one particular system may not conform to current standards or provide the same degree of service and safety. And, because the national electrical code [NEC] is not retroactive, many commercial systems do not comply with the latest safety standards. Common national safety standards require electrical panels to be weatherproof, readily accessible, and have a minimum of 36 inches of clear space in front of them for service. Also, they should have a main disconnect, and each circuit within the panel should be clearly labeled.

#### 7.1 Service Entrance Conductors

Informational

The main conductor lines are underground, or part of a lateral service entrance. This is characteristic of modern electrical services but, inasmuch as the service lines are underground and cannot be seen, they are not evaluated as part of our service.

#### 7.2 Location and Size of the Main Electrical Panel(s)

Informational

The building is powered by a 350-amp, 120/240 volt panel, located in the utility room in the basement.



Main electrical disconnect breaker

## 7.3 Electrical Panel(s)

Upgrade

The electrical panels and their components have no visible deficiencies, except the panels are not labeled as well as they should be. A licensed electrical contractor should label the panel so that the appropriate load calculations and breaker sizes can be determined. We also recommend marking the floor to identify the area that must be kept clear in front of the panels as per the fire codes. Today's safety codes typically require there to be 36 inches in front of the panels and 30 inches on the sides of the panels for safety reasons. The electrical room door should be labeled so that the main electric panels can be easily located during an emergency.

#### 7.4 Branch Circuit Conductors

Repair or Replace

The building is wired with copper conductors within rigid metal conduit. No deficiencies were noted with the wiring in the building, except there is one electrical conduit that is disconnected from the junction box on the roof. A licensed electrician needs to repair the conduit for safety reasons.



Conduit is disconnected from the junction box

## 7.5 Electrical Outlets, Switches and Lights

Repair or Replace

The original section of the building (office area) is still equipped with the original ungrounded outlets. Ungrounded outlets have been considered unsafe for more than 50 years and should be repaired by a licensed electrician. There are two options for repairing this safety issue. The best option is to have the electrician re-wire the outlets. The other option is to replace all the ungrounded outlets with GFCI-protected outlets and install the accompanying sticker that says "No Equipment Ground" to the front of the outlet.

## 7.6 Backup Generator

Informational

This property does not have a backup generator connected to the main electrical system on the building. Therefore, all power is provided by local utility companies. In order to provide temporary power during utility power outages, you may wish to have a backup generator installed.

## 8. Plumbing System

#### 8.0 Main Water Shutoff Valve

Informational

The main shut off valve is located in the downstairs bathroom.

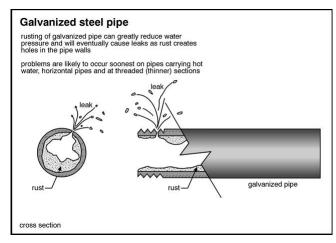


Main water shutoff valve

#### 8.1 Water Supply Piping

Repair or Replace

The building was originally plumbed with galvanized steel water supply pipes. This type of piping material typically lasts 40 to 50 years and will produce rusty looking water from time to time and the water volume in such pipes will gradually be reduced by a build-up of minerals within them. It appears that some of the water pipes have been replaced with copper pipes. However, galvanized steel pipes were observed in the building, and when tested, there was a reduction in water volume when two or more plumbing fixtures were in use at the same time. This indicates the remaining galvanized steel pipes are in poor condition. Therefore, you should budget for replacing the remaining galvanized steel water supply piping in the near future. Ideally, this would be done in the near future before the pipes begin to leak.





Galvanized steel pipes

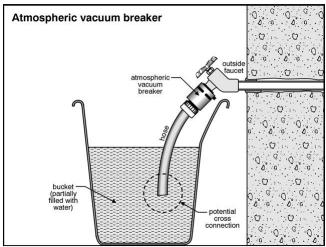
#### 8.2 Hose Bibs on Exterior

Upgrade

The hose bibs do not include anti-siphon valves, which could potentially contaminate the drinking water with water siphoned from the yard if the garden hose is left in a pool of water. For this reason, it is considered a potential health

hazard. These valves are relatively inexpensive and can be purchased at most major hardware stores. Anti-siphon valves should be installed to prevent yard water from being siphoned into the domestic water supply lines.





Install an anti-siphon valve

#### 8.3 Plumbing Drain, Waste and Vent Systems

Repair or Replace

- (1) The waste pipes were evaluated by flushing water at various fixtures and observing the draw. Based on industry recommended water tests, the drainpipes are functional at this time. However, only a video-scan of the main drainpipe could confirm its actual condition. Due to the age of the original building, the main sewer drain line should be video-scanned to confirm its actual condition.
- (2) There are several drain pipes in the main electrical room in the basement that are not connected and do not have caps installed at the ends. It could not be determined whether these pipes are currently in use. A licensed plumber should evaluate these drain pipes and make repairs necessary to prevent leaks into the building.



No cap on the end of the drain pipe

#### 8.4 Water Heater(s) Condition

Repair or Replace

Hot water is provided by a 25-year old, 82-gallon gas-fired water heater located in the boiler room. The 25-year old water heater is functional but is past the typical design life of 10 to 15 years for this type of water heater. It should be replaced due to its age. When the water heater is replaced, it must be installed to meet the current plumbing codes, which would include a drip pan, seismic straps and an expansion tank.



Replace the old water heater

## 8.5 Main Fuel Shutoff Valve

Informational

The main fuel shut off is at the gas meter outside.



Main gas shutoff valve

## 8.6 Gas Piping

Informational

No deficiencies were noted with the gas meter or the gas lines.

## 9. Mechanical Equipment & Components

#### 9.0 HVAC Equipment

Repair or Replace

(1) Heating and cooling for the north side of the building is provided by three roof-mounted heat pump package units. All three of these heat pumps were installed in 1990, which makes them 24 years old. This type of heat pump system typically has a design life of 15 to 20 years. The center unit on the roof is not functioning and should be replaced. The other two units were functional at the time of the inspection, but due to their age, you should budget for increased maintenance and/or replacement.

It is my opinion that two heat pumps are adequate to heat and cool the north side of the building. Therefore, when the defective heat pump is replaced, you may wish to have this heat pump modified so that it provides heating and cooling to the upper office section of the building.

A licensed HVAC contractor should evaluate the heat pumps and provide you with costs for replacement of the heat pumps and provide you with a second opinion regarding the relocation of one of the heat pumps to the upper office area.



Three heat pumps on the roof

(2) Heat for the south side of the building and the basement is provided by a 5-year old boiler in the basement. This type of boiler typically has a design life of 20 to 30 years.

The boiler heats the building through the radiators that are are located throughout the building and by radiant floor heat in the lobby area. The boiler is functional and in acceptable condition. However, a licensed mechanical contractor should evaluate the boiler and verify that the heat is balanced throughout the building, so that the office spaces are not too hot or cold. The mechanical contractor should also provide the building manager with operating instructions for the boiler, thermostats and the heat pumps.



5 year old boiler

#### 9.1 Ventilation Fans

Informational

(1) The large kitchen exhaust fan and fire suppression system have been cleaned and inspected recently and are current with their annual inspections.





Kitchen exhaust hood in acceptable condition

Roof mounted section of the kitchen exhaust fan

- (2) The exhaust fans in the bathrooms were functional and in acceptable condition.
- (3) There is no exhaust fan in the janitors closet in the upper hallway. Janitors closets are required to have exhaust fans because this is where most of the cleaning chemicals are stored. An exhaust fan must be installed in this room.

## 9.2 Flue Vents (for gas water heaters or heating systems)

Inspected and found to be in acceptable condition

## 10. Life Safety & Fire Protection

#### 10.0 Fire Suppression System

Informational

This building is not equipped with a fire suppression system.

#### 10.1 Fire Extinguishers

Informational

There are fire extinguishers located throughout the building. The fire extinguishers were fully charged and their inspection tags were current. The extinguishers were last inspected in June 2013 by Cintas Fire Protection. Their phone number is 253-852-1962.



## 10.2 Alarm Systems

Further Evaluation by a Specialist

The building is equipped with a fire alarm system. Testing the fire alarm system is outside the scope of the inspection. You may wish to have the fire alarm company evaluate the system and provide you with operating instructions.

#### 10.3 Fire Escape Route Signs & Emergency Backup Lighting

Repair or Replace

Exit signs and the emergency backup lights were present and functional, except there is no exit sign above the lower back door and there is no exit sign over the main entry door. The exit sign in the cafeteria is functional, but the light is dim. A qualified contractor should repair or replace the exit sign in the cafeteria and install an exit sign above the main entry door and above the lower back door.

## 11. Interior Components

#### 11.0 General Interior Photos









#### 11.1 General Interior Comments

Informational

This is an older property that has some cosmetic issues. Because the aesthetics of a property are considered subjective, we do not comment on cosmetic issues as part of our inspection service. You should view the cosmetic damages yourself and budget for repairs you deem necessary.

Given the age of the building, asbestos and lead-based paint could be present. In fact, any building built before 1978 should not be assumed to be free from these and other well-known contaminants. Regardless, we do not have the expertise or the authority to detect the presence of environmental contaminants. If this is a concern, you should consult with an environmental hygienist, and particularly if you intend to remodel any area of the building.

Although inspecting and testing for asbestos is outside the scope of this inspection, a large section of the ceiling was observed to be covered with "popcorn" ceiling. This type of material is sometimes found to contain asbestos. You may wish to have the ceiling material tested and properly removed if it is found to contain asbestos.

#### 11.2 Floors

Informational

The flooring materials were inspected and found to be in acceptable condition.

#### 11.3 Walls and Ceilings

Repair or Replace

No deficiencies were noted with the walls or ceilings, with the exception of the following:

- There are water damaged ceiling tiles in the computer room. Because this room is beneath the kitchen, the water damage was likely due to a leak in the kitchen. No active leak was detected at the time of the inspection. You may wish to have the damaged ceiling tiles replaced for cosmetic reasons.
- The ceiling materials in the office next to the top of the stairs are water damaged from an old roof leak. No
  active leak was detected at the time of the inspection. You may wish to have the damaged ceiling materials
  replaced for cosmetic reasons.
- The ceiling and wall materials in the upper women's bathroom are water damaged from an old roof leak. No
  active leak was detected at the time of the inspection. You may wish to have the damaged ceiling and wall
  materials replaced for cosmetic reasons.

#### 11.4 Interior Doors

Informational

The interior doors were tested and found to be functional.

#### 11.5 Interior Stairs and Railings

Informational

The stairs inside the building are in acceptable condition.

#### 11.6 Bathrooms

Informational

The bathrooms were inspected and found to be in acceptable condition. However, the bathroom between the two upper offices is cosmetically in poor condition. You may wish to renovate this bathroom for cosmetic reasons.

### 12. Additional Considerations

#### 12.0 Out of Scope Considerations

Environmental Assessment: There are different types or levels of environmental inspections. Phase One Site Assessments (also referred to as Phase I's) are the most common, and include research of the subject site's prior use and/or history of its immediate surroundings in order to determine risk of environmental contamination. Phase I's typically do not include testing of soils or water, but it may make recommendations for testing should findings deem it necessary.

Phase I's are sometimes mandated by lending institutions during real estate transactions involving commercial property because remediation of a contaminated site can be costly. It is important to note that the objective of a Phase I is limited to the site itself, and does not include the evaluation of the building or its components for environmental/health hazards, such as lead, asbestos or air quality. We do not provide Phase I inspections.

<u>ADA Inspection:</u> The Americans with Disabilities Act, or ADA, was passed in 1990 to set federal building accessibility standards for the accommodation of disabled persons. It was updated in recent years, and the changes are included in the 2010 ADA Standards for Accessible Design. The updated standards went into effect on March 15, 2012. You can read more about this at www.ada.gov.

Loosely interpreted new commercial buildings are required to be designed and built to be in full compliance with ADA laws. Existing buildings are required to make modifications to meet ADA standards if those modifications are considered to be "readily achievable" and/or if/when alterations are made to the building.

As it applies to building inspections, there are three levels of assessment: the first level is the least expensive, and is comprised of a purely visual survey of accessibility; the second level is similar to the first but more specific and includes generalized measurements; the third level entails a complete assessment for compliance with those requirements as updated and included in the 2010 ADA Standards for Accessible Design.

An ADA inspection was outside the scope of this inspection, therefore, not performed. However, because this building is considered open to the general public, it may be required to comply with ADA accessibility standards. If ADA compliance is required, you may wish to consider having a full ADA inspection performed. We are qualified to perform this service.

<u>Fire Suppression Assessment:</u> Depending on the current or intended use of a building, insurance companies will commonly require an evaluation of fire suppression systems and their components, and particularly as it relates to the safety of the public. This is not a service we provide.

<u>Tele-communications Assessment:</u> Telecommunications and data systems are constantly evolving and require an evaluation by specialists, which we are not qualified to provide.



SoundEarth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, Washington 98102

February 20, 2015

Mr. Robert Farrell
City of Seattle
Department of Finance and Administrative Services
PO Box 94689, Suite 5200
Seattle, Washington 98104

SUBJECT:

LIMITED SUBSURFACE INVESTIGATION

Greenwood Senior Center 525 North 85<sup>th</sup> Street Seattle, Washington Project Number: 0987-013

Dear Mr. Farrell:

SoundEarth Strategies, Inc. (SoundEarth) is pleased to provide you with this report documenting the results of the limited subsurface investigation performed by SoundEarth at the Greenwood Senior Center located at 525 North 85<sup>th</sup> Street in Seattle, Washington (the Property). The Property is depicted on Figure 1. The purpose of the limited subsurface investigation was to determine the location, orientation, and dimensions of the abandoned heating oil underground storage tank (UST) at the Property and to assess whether petroleum hydrocarbon impacts are present in the subsurface proximal to the UST.

#### PROPERTY BACKGROUND

The Property consists of a rectangular-shaped tax parcel (King County Parcel No. 6430500322) that covers approximately 21,987 square feet (0.50 acres) of land. The Property is developed with a 1950-vintage, 9,587-square-foot building with basement and associated asphalt-paved parking lot, occupied by Greenwood Senior Center. According to archived building plans, the Property formerly operated as a medical clinic. Reverse phone directories indicate that Greenwood Senior Center has been operating on the Property since at least 1979. Archived building plans indicate that the building was originally heated by a boiler. A City of Seattle Fire Department permit application dated June 29, 1993, indicates that the City of Seattle applied to temporarily abandon a 1,000-gallon heating oil UST at the Property. No records documenting permanent closure of the UST were available for review.

#### **FIELD ACTIVITIES**

The following subsection describes the field activities conducted by SoundEarth at the Property on January 30, 2015.

#### Pre-Field Work

Pre-field work for the project included the following:

- Conducting a site reconnaissance of the Property to identify features associated with a potential heating oil UST, including fill ports, vent lines or product piping, evidence of asphalt patching, or subsidence.
- Coordinating the drilling, laboratory, ground-penetrating radar (GPR) and utility locate subcontractors.
- Preparing a health and safety plan in accordance with the Washington State Model Toxics Control Act (MTCA) Cleanup Regulation and Part 1910.120 of Title 29 of the Code of Federal Regulations before initiating field activities.
- Preparing a work plan.
- Contacting the Northwest Utility Notification Center for public utility locates and performing an additional private utility locate that extended onto the Property.

#### Field Work

Prior to drilling activities, a focused GPR survey was conducted within the parking lot south of the building's boiler room, where a fill port and vent pipe were observed during site reconnaissance. The purpose of the GPR survey was to identify the location, dimensions, and orientation of the potential UST. A private utility locate was also performed to clear the proposed boring locations of any subsurface features or underground utilities.

Drilling activities were conducted on January 30, 2015, under the supervision of a SoundEarth geologist. Drilling services were provided by ESN Northwest, Inc. of Olympia, Washington. Five soil borings (B01 through B05) were advanced in the vicinity of the suspect UST location using a limited-access, direct-push drill rig (Figure 2). The borings were advanced to maximum depths of 20 feet below ground surface (bgs).

After the maximum depth was achieved in each sample interval, relatively undisturbed, discrete soil samples were collected. The soil samples were described in accordance with the Unified Soil Classification System (USCS) and screened in the field for potential evidence of contamination using visual observations and notations of odor, and by conducting headspace analysis using a photoionization detector to detect the presence of volatile organic vapors. The USCS symbol, visual and olfactory notations for the samples, and photoionization detector readings were recorded on boring logs forms. Soil samples selected for laboratory analysis were placed directly into laboratory-prepared glassware, in accordance with U.S. Environmental Protection Agency (EPA) guidelines. Each boring was subsequently decommissioned by backfilling with hydrated bentonite chips to surface grade and patched with asphalt.

After collection, soil samples were labeled with a unique sample ID, placed on ice in a cooler, and delivered to Friedman & Bruya, Inc. of Seattle, Washington, under standard chain-of-custody protocols for laboratory analysis. One sample from each boring was analyzed for diesel-range petroleum hydrocarbons (DRPH) and oil-range petroleum hydrocarbons (ORPH) by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx. In addition, one soil sample collected from boring B02 was also analyzed for Resource Conservation and Recovery Act metals by EPA Method 200.8 for waste profiling purposes. Non-dedicated field sampling equipment was decontaminated between uses and before

leaving the Property. Soil cuttings generated during drilling activities were contained on the Property in a labeled 15-gallon drum.

#### **RESULTS**

The GPR survey conducted to the south of the building indicated that the abandoned UST was approximately 7 feet by 12 feet and was oriented lengthwise in an east—west direction just south of the building.

Soil conditions observed in the borings predominantly consisted of silty sands with gravel throughout the borings. A wet silt layer was encountered in borings B04 and B05 at approximately 4 to 6 feet bgs and extended about 2 to 3 feet. The sand content tended to increase with depth. Organic material was observed in two of the borings in the uppermost 5 feet. No evidence of petroleum contamination was noted in any of the borings. Measurable groundwater was not observed in any of the borings at the time of drilling. Copies of boring logs are provided as Attachment A.

Laboratory testing of the soil samples submitted for analysis did not reveal concentrations of DRPH or ORPH that exceeded the laboratory's lower reporting limit in any of the soil samples. The results for DRPH and ORPH were also below the MTCA Method A cleanup levels (Figure 2; Table 1). A copy of the laboratory analytical report is provided as Attachment B.

#### SUMMARY AND CONCLUSIONS

The results from the GPR survey indicated that the former heating oil UST was still in place at the Property and was oriented lengthwise in an east—west direction. The limited subsurface investigation revealed no evidence of petroleum-contaminated soil in the vicinity of the abandoned heating oil UST. Considering these findings, no additional investigation appears warranted. SoundEarth recommends decommissioning the abandoned UST either by permanently closing it in-place or by removal, in accordance with Seattle Municipal Fire Code Section 3404.2.13.

#### LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report are derived, in part, from data gathered by others, and from conditions evaluated when services were performed, and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant and are not responsible for the accuracy or validity of work performed by others, nor from the impacts of changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the use of segregated portions of this report.

#### Respectfully,

SoundEarth Strategies, Inc.

Audrey Hackett Project Scientist yan K. Bixby, LG(#1)69

President

Attachments:

Figure 1, Property Vicinity Map Figure 2, Soil Analytical Results

Table 1, Summary of Soil Analytical Results

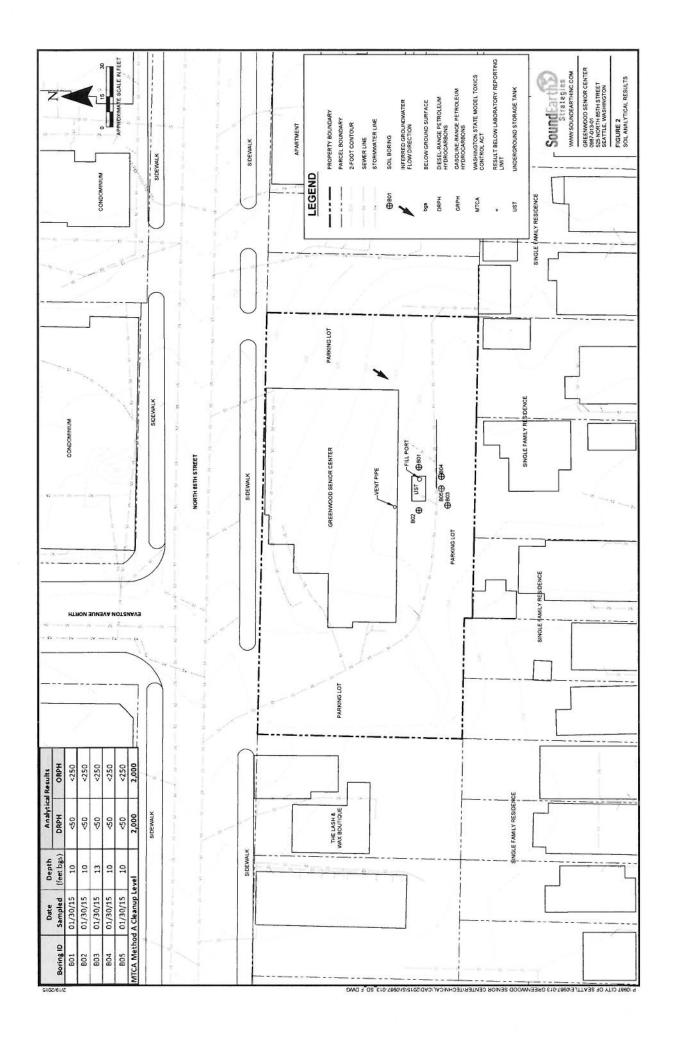
A, Boring Logs

B, Laboratory Analytical Report

Friedman & Bruya, Inc. #501432

APH/RKB:dnm/hsb

# **FIGURES**



# **TABLE**



# Summary of Soil Analytical Results **Greenwood Senior Center** 525 North 85th Street Seattle, Washington Table 1

		Date	Depth				Ana	Analytical Results (	milligrams per ki	ilogram)			
Boring ID	Sample ID Sampled	Sampled	(feet bgs)	DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	Arsenic <sup>(2)</sup>	Barium <sup>(2)</sup>	Cadmium <sup>(2)</sup>	Chromium <sup>(2)</sup>	Lead <sup>(2)</sup>	Mercury <sup>(2)</sup>	Selenium <sup>(2)</sup>	Silver <sup>(2)</sup>
B01	B01-10	01/30/15	10	0\$>	<250	1	1	,	1		;	3	1
500	802-05	21/06/10	2		1	2.75	95.1	V	11.6	4.30	4	4	∇
200	B02-10	01/30/13	10	<50	<250	1	1	1	1	1	1	1	1
803	B03-13	01/30/15	13	<50	<250	1	ſ	1	1	ı	1	1	:
B04	B04-10	01/30/15	10	<50	<250	1	ı	1	1	1	1	1	,
805	B05-10	01/30/15	10	<50	<250	1	ſ	1	1	1	1	1	:
1TCA Method	ATCA Method A Cleanup Level(3)	ivel <sup>(3)</sup>		2,000	2,000	20	NE	2	2,000	250	2	R	R

NOTES: <sup>11</sup> Analyzed by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx.

(2) Analyzed by U.S. Environmental Protection Agency Method 200.8.

<sup>[3]</sup>MTCA Cleanup Regulation, Method A Cleanup Levels, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

-- = not analyzed

DRPH = diesel-range petroleum hydrocarbons bgs = below ground surface

<= not detected at a concentration exceeding the laboratory reporting limit</p>

MTCA = Washington State Model Toxics Control Act

ORPH = oil-range petroleum hydrocarbons NE = not established

# ATTACHMENT A BORING LOGS



Greenwood Senior Center

Project Number: Logged by:

CMP

0987-013

Date Started:

Reviewed by:

1/30/15

Well Location N/S: 10' South from SE corner

Surface Conditions: Asphalt

Well Location E/W: 38.5' West from SE corner APH

BORING | LOG

B01

Site Address: Seattle WA

525 North 85th Street

Water Depth At Time of Drilling

Water Depth
After Completion --

feet bgs

	feet bgs	Water Depth After Completion fe		15	1/30/	te Completed:					
SM Moist, silty SAND with gravel, dark tan, no hydrocarbon odor (40,55,5).  SM Moist, silty SAND with gravel, orangish brown, no hydrocarbon odor (40,55,5)  1' of Moist, sandy SILT with gravel, tannish brown, no hydrocarbon odor (60,35,5).	ell Detail/ ater Depth	1	Lithologic De	Graphic			PID (ppmv)	% Recovery	Blow Count	Interval	
SM hydrocarbon odor (40,55,5).  SM Moist, silty SAND with gravel, orangish brown, no hydrocarbon odor (40,55,5)  ML 1' of Moist, sandy SILT with gravel, tannish brown, no hydrocarbon odor (60,35,5).	×		2" Asphalt		Asphalt						0 -
ML SM hydrocarbon odor (40,55,5)  1' of Moist, sandy SILT with gravel, tannish brown, no hydrocarbon odor (60,35,5).  SM Moist, silty SAND with gravel, light gray, no		el, dark tan, no	Moist, silty SAND with grave hydrocarbon odor (40,55,5).		SM			20			-
ML 1' of Moist, sandy SILT with gravel, tannish brown, no hydrocarbon odor (60,35,5).  Moist, silty SAND with gravel, light gray, no		el, orangish brown, no	Moist, silty SAND with grave hydrocarbon odor (40,55,5)		SM	B01-05	0.0				5-
		gravel, tannish or (60,35,5).	1' of Moist, sandy SILT with brown, no hydrocarbon odo	aaaa	ML						-
		el, light gray, no	Moist, silty SAND with grave hydrocarbon odor (25,70,5).		SM			60			-
ML  0.0  B01-10  ML  0.5' of Moist, sandy SILT with gravel, light gray, no hydrocarbon odor (55,35,10). 4" layer of moist, sandy SILT with gravel, brown, no hydrocarbon odor (55,35,10).		i,10). T with gravel, brown,	no hydrocarbon odor (55,35 4" layer of moist, sandy SIL"		ML	B01-10	0.0				10 —
O.0 B01-12 SP Moist, silty SAND with gravel, light gray, no hydrocarbon odor (25,75,5).		el, light grav, no	Moist, silty SAND with grave		SP	B01-12	0.0			$\bigwedge$	
End of boring at 12' bgs. Backfilled with bentonite.		ckfilled with									
Drilling Co./Driller: ESN/Brian Well/Auger Diameter: inches Notes/Comments:						10-10-20-20-20					Drillin
Drilling Equipment: Push probe Well Screened Interval: feet bgs Notes  Sampler Type: Core tube Screen Slot Size: inches		Notes		ize:	een Slot S	Scr	ore tube	Co	pe:	er Ty	Samp
Hammer Type/Weight:   lbs   Filter Pack Used:   Total Boring Depth: 12   feet bgs   Surface Seal:								100		100	
Total Well Depth: feet bgs Annular Seal: State Well ID No.: Monument Type: Page: 1 of 1	1	Page: 1 of 1	-			(25)					



Greenwood Senior Center

Project Number: Logged by:

0987-013 CMP

Date Started: 1/30/15

Surface Conditions: Asphalt Well Location N/S:

Well Location E/W: Reviewed by:

10' South from SE corner

60' West from SE corner

APH 1/30/15 BORING | B02 LOG

Site Address: Seattle WA

525 North 85th Street

Water Depth At Time of Drilling

feet bgs

Water Depth
After Completion --

				te Completed	j: 1/30		After Completion feet bg:
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description Well Deta Water De
0 -					Asphalt		2" Asphalt
		60			SM		Moist, silty SAND with gravel, brown and dark brown, some organic material, no hydrocarbon odor (35,60,5).
5-			0.2	B02-05			4" same as above
		60			ML		Wet, sandy SILT with gravel, no hydrocarbon odor (65,30,5).
10			0.0	B02-10	SP		4" of moist, silty SAND, light gray, no hydrocarbon odor (30,70,0).  Moist, silty SAND with gravel, light gray, no
			0.0	B02-12	SM		hydrocarbon odor (25,65,10).
							End of boring at 12' bgs. Backfilled with bentonite.
15 Drilling Co./D	Oriller:	FS	SN/Brian	W	ell/Auger D	iameter:	inches Notes/Comments:
Drilling Equip	pment	: Pu	ish probe	We	ell Screene	d Interval:	feet bgs Notes
Sampler Type Hammer Type			ore tube	10.5000	reen Slot S ter Pack U:		inches
Total Boring					rface Seal:		-
Total Well De	pth:			feet bgs An	nular Seal:	:	-
State Well ID	No.:			Mo	onument Ty	ype:	Page:   1 of 1



Greenwood Senior Center

**Project Number:** 

0987-013 CMP

Logged by: Date Started:

1/30/15 Surface Conditions: Asphalt

APH

Well Location N/S: 22' South from SE corner

Well Location E/W: 57.5' West from SE corner Reviewed by:

BORING | B03 LOG

Site Address: Seattle WA

525 North 85th Street

Water Deput Water Depth At

feet bgs



					viewed by: te Completed	APH : 1/30/		Water Depth After Completion feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description Well Detail/ Water Depth
0						Asphalt		2" Asphalt
-			20			SM		Moist, silty SAND with gravel, medium brown, no hydrocarbon odors (30,65,5).
5-				0.0	B03-05			2" same as above.
						SM		4" layer of moist, silty SAND with gravel, dark brown, no hydrocarbon odors (35,60,5).
-			60			ML		Moist, silty SAND to sandy SILT with gravel, mottled orange and brown, no hydrocarbon odors (40,55,5) to (60,35,5).
10				0.0	B03-10	SM		Moist, silty SAND with gravel, light gray, no hydrocarbon odors (60,65,5).
-					B03-13	SM		Moist, silty SAND with gravel, light gray, no hydrocarbon odors (40,55,5).
15				0.0	605-15	SP		Moist, SAND with silt and some gravel, light gray,
Drilling	Co.	Driller	: ES	SN/Brian	Wel	I/Auger Dia	ameter:	inches Notes/Comments:
Drilling				sh probe	Wel	Screened	linterval:	feet bgs Notes
Sample				ore tube		een Slot Si		inches
Hamme Total B						r Pack Us	ed:	w e
Total B			1. 16			face Seal:		-
State W				1		ular Seal: iument Tyj		-
3,2,0					WOI	iument ry	pe.	Page: 1 of 2



Greenwood Senior Center

Project Number:

0987-013 CMP

Logged by: 1/30/15

Date Started: Surface Conditions: Asphalt Well Location N/S:

22' South from SE corner

Well Location E/W: 57.5' West from SE corner Reviewed by:

APH

BORING | B03 LOG

Site Address: Seattle WA

525 North 85th Street

Water Depth At Time of Drilling

feet bgs

Water Depth

Drilling Go-/Driller:  Drilling Go-/Driller: Sampler Type Sampler Type Core tube Sampler Type Sampler Type Sampler Type Core tube Sampler Type Sampl						viewed by: te Completed:	APH : 1/30/		Water Depth After Completion	- feet bgs
25 — Book in the property of the position of t		Interval	Blow Count	% Recovery		Sample	USCS	Lithologic D		
25 — End of boring at 16' bgs. Backfilled with bentonite.  25 — Drilling Co./Driller: ESN/Brian Push probe Sampler Type: Core tube Sampler Type: Core tube Bammer Type/Weight: 16 feet bgs Total Boring Depth: 16 feet bgs Total Well Depth: 16 feet bgs Annular Seat: — inches Filler Pack Used: —	15				0.0			no hydrocarbon odors (25	,70,5).	
Drilling Co/Driller: Drilling Equipment: Push probe Sampler Type: Core tube Hammer Type/Weight: Total Boring Depth: 16 feet bgs Total Well Vauger Diameter: Well/Auger Diameter: Well Screened Interval: Well/Auger Diameter: Well Screened Interval: Screen Slot Size: Filter Pack Used: Screen Slot Size:	1					B03-16		 End of boring at 16' bgs. B bentonite.	ackfilled with	
Drilling Co/Driller: Drilling Equipment: Push probe Sampler Type: Core tube Hammer Type/Weight: Total Boring Depth: 16 feet bgs Total Well Vauger Diameter: Well/Auger Diameter: Well Screened Interval: Well/Auger Diameter: Well Screened Interval: Screen Slot Size: Filter Pack Used: Screen Slot Size:								¥8		
Drilling Co/Driller: Drilling Equipment: Push probe Sampler Type: Core tube Hammer Type/Weight: Total Boring Depth: 16 feet bgs Total Well Vauger Diameter: Well/Auger Diameter: Well Screened Interval: Well/Auger Diameter: Well Screened Interval: Screen Slot Size: Filter Pack Used: Screen Slot Size:				*						
Drilling Co/Driller: Drilling Equipment: Push probe Sampler Type: Core tube Hammer Type/Weight: Total Boring Depth: 16 feet bgs Total Well Vauger Diameter: Well/Auger Diameter: Well Screened Interval: Well/Auger Diameter: Well Screened Interval: Screen Slot Size: Filter Pack Used: Screen Slot Size:										
Drilling Co/Driller: ESN/Brian Well/Auger Diameter: inches feet bgs Sampler Type: Core tube Hammer Type/Weight: Ibs Filter Pack Used: Surface Seal: Annular Seal: Well/Auger Diameter: inches feet bgs inches Notes/Comments: Notes	20 —									
Drilling Co/Driller: ESN/Brian Well/Auger Diameter: inches feet bgs Sampler Type: Core tube Hammer Type/Weight: Ibs Filter Pack Used: Surface Seal: Annular Seal: Well/Auger Diameter: inches feet bgs inches Notes/Comments: Notes										
Drilling Co/Driller: ESN/Brian Well/Auger Diameter: inches feet bgs Sampler Type: Core tube Hammer Type/Weight: Ibs Filter Pack Used: Surface Seal: Annular Seal: Well/Auger Diameter: inches feet bgs inches Notes/Comments: Notes										
Drilling Co/Driller: ESN/Brian Well/Auger Diameter: inches feet bgs Sampler Type: Core tube Hammer Type/Weight: Ibs Filter Pack Used: Surface Seal: Annular Seal: Well/Auger Diameter: inches feet bgs inches Notes/Comments: Notes										
Drilling Co/Driller: ESN/Brian Well/Auger Diameter: inches feet bgs Sampler Type: Core tube Hammer Type/Weight: Ibs Filter Pack Used: Surface Seal: Annular Seal: Well/Auger Diameter: inches feet bgs inches Notes/Comments: Notes										
Drilling Co./Driller: ESN/Brian Well/Auger Diameter: inches Drilling Equipment: Push probe Well Screened Interval: feet bgs Sampler Type: Core tube Screen Slot Size: inches Hammer Type/Weight: lbs Filter Pack Used: Total Boring Depth: 16 feet bgs Surface Seal: Total Well Depth: feet bgs Annular Seal:	25 —									
Drilling Co./Driller: ESN/Brian Well/Auger Diameter: inches Drilling Equipment: Push probe Well Screened Interval: feet bgs Sampler Type: Core tube Screen Slot Size: inches Hammer Type/Weight: lbs Filter Pack Used: Total Boring Depth: 16 feet bgs Surface Seal: Total Well Depth: feet bgs Annular Seal:	-									
Drilling Co./Driller: ESN/Brian Well/Auger Diameter: inches Drilling Equipment: Push probe Well Screened Interval: feet bgs Sampler Type: Core tube Screen Slot Size: inches Hammer Type/Weight: lbs Filter Pack Used: Total Boring Depth: 16 feet bgs Surface Seal: Total Well Depth: feet bgs Annular Seal:	1									
Drilling Co./Driller: ESN/Brian Well/Auger Diameter: inches Drilling Equipment: Push probe Well Screened Interval: feet bgs Sampler Type: Core tube Screen Slot Size: inches Hammer Type/Weight: lbs Filter Pack Used: Total Boring Depth: 16 feet bgs Surface Seal: Total Well Depth: feet bgs Annular Seal:	1									
Drilling Co./Driller: ESN/Brian Well/Auger Diameter: inches Drilling Equipment: Push probe Well Screened Interval: feet bgs Sampler Type: Core tube Screen Slot Size: inches Hammer Type/Weight: lbs Filter Pack Used: Total Boring Depth: 16 feet bgs Surface Seal: Total Well Depth: feet bgs Annular Seal:	1									
Sampler Type: Core tube Screen Slot Size: inches  Hammer Type/Weight: Ibs Filter Pack Used:  Total Boring Depth: 16 feet bgs Surface Seal:  Total Well Depth: feet bgs Filter Pack Used:  State Well ID No.	Drilling								Notes/Comments:	
Hammer Type/Weight: Ibs Filter Pack Used: Surface Seal: State Well ID No Filter Pack Used: State Well ID No Filter Pack Used: Filter									Notes	- 1
Total Well Depth: feet bgs Annular Seal: -	Hamme	er Ty	pe/Wei	ght:	3	bs Filte	er Pack Us			
State Well ID No.				1: 16				-		
									Page:	2 of 2



Greenwood Senior Center

**Project Number:** Logged by:

0987-013

CMP

Date Started: Surface Conditions: Asphalt Well Location N/S:

1/30/15

19' South from SE corner 43.5' West from SE corner

Well Location E/W: Reviewed by: Date Completed:

APH

1/30/15

BORING LOG

**B04** 

Site Address: Seattle WA

525 North 85th Street

Water Depth At Time of Drilling

feet bgs

Water Depth
After Completion --

feet bgs

					te complete	u. 1/30/	13	-== 7ther completion reet bys			
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description Well Detail/ Water Dept			
0						Asphalt	::::::::	2" Asphalt			
-			50			SP		Moist, silty SAND with gravel, dark brown, some organic material, no hydrocarbon odor (30,65,5).  2" layer of moist, silty SAND with gravel, light gray, no hydrocarbon odors (15,80,5).			
5—				0.0	B04-05	SM		Moist, silty SAND with gravel, brown to orangish brown, no hydrocarbon odors (40,55,5).			
			50			ML		Wet, sandy SILT with gravel, brown to orangish brown, no hydrocarbon odors (60,30,10).			
10	-						0.0	B04-10	SP		Moist, silty SAND with gravel, light gray, no hydrocarbon odor, increasing sand content with depth (25,70,5).
	$\backslash / \mid$					SP		1' of moist, SAND with silt and gravel, light gray, no hydrocarbon odors (15,80,5).			
	$\bigwedge$		200	0.0	B04-12	SM		1' of moist, silty SAND with gravel, light gray, no hydrocarbon odors (25,65,10).			
								End of boring at 12' bgs. Backfilled with bentonite.			
15											
Drilling				SN/Brian	3322	/ell/Auger Di		inches Notes/Comments:			
Drilling Sample				ish probe ore tube	1000	ell Screene creen Slot S		feet bgs Notes			
Hamme						iter Pack Us		Titolies .			
Total B	orin	g Depti			feet bgs Si	urface Seal:		-			
Total W State W		700		1	-	nnular Seal:		-			
State Vi	· CII I	J 110			M	onument Ty	he:	Page: 1 of 1			



Greenwood Senior Center

Project Number:

0987-013 CMP

Logged by:

Date Started: 1/30/15 Surface Conditions: Asphalt

Well Location N/S:

19' South from SE corner Well Location E/W: 49.5' West from SE corner

Reviewed by:

APH

Date Completed: 1/30/15 BORING | B05 LOG

Site Address: Seattle WA

525 North 85th Street

Water Depth At Time of Drilling

feet bgs

Water Depth
After Completion -feet bgs

	Date Comple	ted: 1/30/15	After Completion	feet bgs
Depth (feet bgs) Interval Blow Count % Recovery	PID (ppmv) Samp	ole USCS class of Class	Lithologic Description	Well Detail/ Water Depth
		Asphalt SM GP	2" Asphalt 1' of moist, silty SAND with gravel, dark brown, no hydrocarbon odor (35,55,10). 2" layer of gravelly SAND with silt, light gray, no hydrocarbon odor (20,50,30). 4" layer of moist, silty SAND with gravel, black, no hydrocarbon odor (20,60,20).	
50		ML	Moist, sandy SILT with gravel, brown, no hydrocarbon odor (60,30,10).	
5-	0.0 805-05	SM	1' of moist, silty SAND with gravel and organics (wood chunks), black and orangish-brown, no hydrocarbon odor (40,50,10).  0.5' of wet, sandy SILT with gravel, tan and light	
50		SM	brown, no hydrocarbon odor (60,30,10).  Moist, silty SAND with gravel, light gray, no hydrocarbon odor (15,70,15).	
10	0.0 805-10	SM	Moist, silty SAND with gravel, light gray, no hydrocarbon odor (30,60,10).	
80		ML S	Moist, sandy SILT with gravel, light gray, no hydrocarbon odor (60,30,10).  Driller reports subsurface becomes denser at about 13' bgs.	
15	0.0 B05-15	SP	Moist, SAND with silt, light gray, no hydrocarbon odor (20,80,0).	
Drilling Equipment: Po	, (1)	Well/Auger Diameter: Well Screened Interva Screen Slot Size: Filter Pack Used: Surface Seal:	r- inches feet bgs inches r- inches	
Total Well Depth: State Well ID No.:	feet bgs	Annular Seal: Monument Type:	- Page:	1 of 2



Greenwood Senior Center

**Project Number:** 

0987-013

CMP

Logged by: Date Started: 1/30/15 Surface Conditions: Asphalt

Well Location N/S:

19' South from SE corner Well Location E/W: 49.5' West from SE corner

Reviewed by: APH Date Completed:

BORING | LOG

**B05** 

Site Address: Seattle WA

525 North 85th Street

Water Depth At Time of Drilling

feet bgs

Water Depth

L	Date Completed:		i: 1/30/	15	After Completion	feet bgs		
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID		Graphic	Lithologic Description	Well Detail/ Water Depth
15		100	0.1	B05-20	SP		Moist, dense, SAND with silt and trace gravel, light gray, no hydrocarbon odor (10,85,5).	
-						i.	End of boring at 20' bgs. Backfilled with bentonite.	
25 —								
30								
Drilling Co./I Drilling Equip Sampler Type Hammer Type Total Boring Total Well De	pment: e: e/Weig Depth	: Pu Co <b>jht:</b>	f	Sc bs Fill eet bgs Su	ell/Auger Di ell Screened reen Slot S ter Pack Us rface Seal: nular Seal:	d Interval: ize: ed:	inches feet bgs inches inches	
State Well ID					nument Ty		Page:	2 of 2

# ATTACHMENT B LABORATORY ANALYTICAL REPORT

Friedman & Bruya, Inc. #501432

#### **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

February 5, 2015

Audrey Hackett, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Ms. Hackett:

Included are the results from the testing of material submitted on January 30, 2015 from the SOU\_0987-013\_20150130, F&BI 501432 project. There are 7 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 SOU0205R.DOC

#### **ENVIRONMENTAL CHEMISTS**

#### CASE NARRATIVE

This case narrative encompasses samples received on January 30, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0987-013\_20150130, F&BI 501432 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
501432 -01	B01-05
501432 -02	B01-10
501432 -03	B01-12
501432 -04	B02-05
501432 -05	B02-10
501432 -06	B02-12
501432 -07	B03-05
501432 -08	B03-10
501432 -09	B03-13
501432 -10	B03-16
501432 -11	B04-05
501432 -12	B04-10
501432 -13	B04-12
501432 -14	B05-05
501432 -15	B05-10
501432 -16	B05-15
501432 -17	B05-20

All quality control requirements were acceptable.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 02/05/15 Date Received: 01/30/15

Project: SOU\_0987-013\_20150130, F&BI 501432

Date Extracted: 01/30/15 Date Analyzed: 01/30/15

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	$\frac{\text{Diesel Range}}{\text{(C}_{10}\text{-C}_{25})}$	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 53-144)
B01-10 501432-02	<50	<250	100
B02-10 501432-05	<50	<250	87
B03-13 501432-09	<50	<250	98
B04-10 501432-12	<50	<250	87
B05-10 501432-15	<50	<250	101
Method Blank 05-216 MB	<50	<250	96

# ENVIRONMENTAL CHEMISTS

Client:

Project:

Lab ID:

Data File:

Operator:

Instrument:

SoundEarth Strategies

501432-04

ICPMS1

AP

501432-04.048

 $SOU\_0987\text{-}013\_20150130,\,F\&BI\,\,501432$ 

# Analysis For Total Metals By EPA Method 200.8

Client ID:	B02-05
Date Received:	01/30/15
Date Extracted:	01/30/15
Date Analyzed:	01/30/15
Matrix:	Soil
Units:	mg/kg (ppm) Dry W

Units:	mg/kg (ppm) Dry Weight	
Internal Standard:	% Recovery:	
~ .		

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	93	60	125
Indium	91	60	125
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.75
Barium	95.1
Cadmium	<1
Chromium	11.6
Lead	4.30
Mercury	<1
Selenium	<1
Silver	<1

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank
Date Received:	NA
Date Extracted:	01/30/15
Date Analyzed:	01/30/15
Matrix:	Soil

Units:

mg/kg (ppm) Dry Weight

Client:

SoundEarth Strategies

Project: Lab ID: SOU\_0987-013\_20150130, F&BI 501432

Data File:

I5-052 mb.033

I5-052 mb

Instrument: ICPMS1

Operator:

AP

		Lower	$_{ m Upper}$
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	88	60	125
Indium	94	60	125
Holmium	97	60	125

Concentration Analyte: mg/kg (ppm) Arsenic <1 Barium <1 Cadmium <1 Chromium <1 Lead <1 Mercury <1 Selenium <1 Silver <1

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 02/05/15 Date Received: 01/30/15

Project: SOU\_0987-013\_20150130, F&BI 501432

# QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 501396-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	90	90	64-133	0

Laboratory Code: Laboratory Control Sample

			Percent	
Analyte	Reporting Units	Spike Level	Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	91	58-147

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 02/05/15 Date Received: 01/30/15

Project: SOU\_0987-013\_20150130, F&BI 501432

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 501414-11 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.19	94	92	70-118	2
Barium	mg/kg (ppm)	50	66.0	109	100	60-141	9
Cadmium	mg/kg (ppm)	5	<1	103	105	83-116	2
Chromium	mg/kg (ppm)	20	6.59	87	80	57-128	8
Lead	mg/kg (ppm)	10	5.35	96	96	59-148	0
Mercury	mg/kg (ppm	10	<1	96	97	50-150	1
Selenium	mg/kg (ppm)	5	<1	86	87	64-117	1
Silver	mg/kg (ppm)	5	<1	97	95	73-122	2

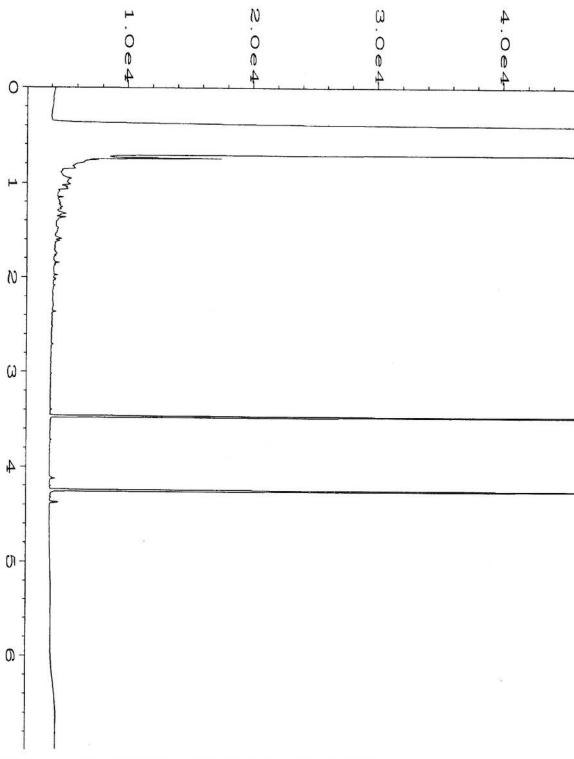
Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	95	83-113
Barium	mg/kg (ppm)	50	102	85-116
Cadmium	mg/kg (ppm)	5	101	54-114
Chromium	mg/kg (ppm)	20	97	78-121
Lead	mg/kg (ppm)	10	101	80-120
Mercury	mg/kg (ppm)	10	98	70-130
Selenium	mg/kg (ppm)	5	98	84-115
Silver	mg/kg (ppm)	5	97	81-116

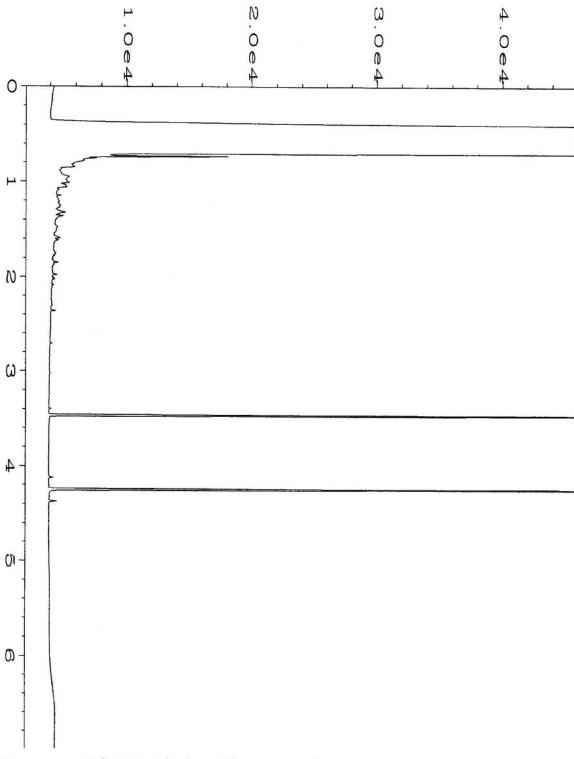
#### **ENVIRONMENTAL CHEMISTS**

#### Data Qualifiers & Definitions

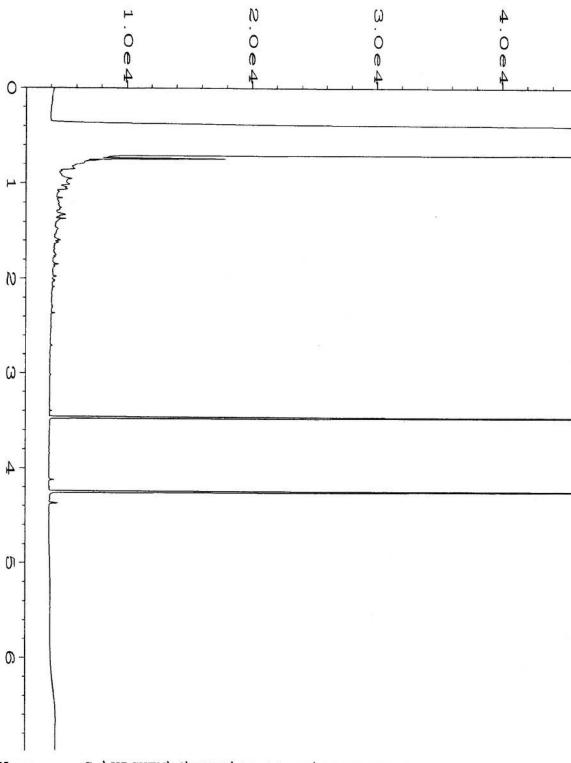
- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be 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 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. 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. Compounds in the sample matrix interfered with the quantitation of the analyte.
- 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.



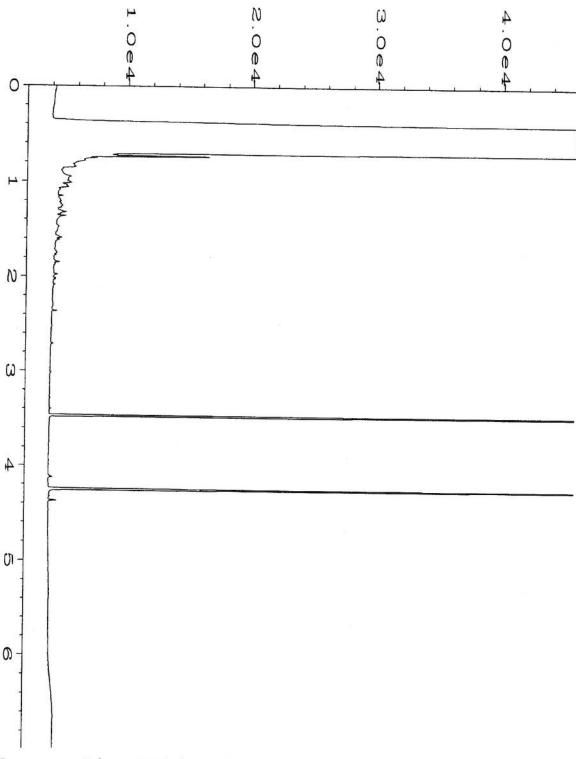
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Data File Name
Operator
                 : mwdl
                                                Page Number
Instrument
                                                Vial Number
                 : GC #6
Sample Name
                 : 501432-02
                                                Injection Number: 1
Run Time Bar Code:
                                                Sequence Line
Acquired on
                : 30 Jan 15 05:15 PM
                                                Instrument Method: DX.MTH
Report Created on: 02 Feb 15 09:51 AM
                                               Analysis Method : DX.MTH
```



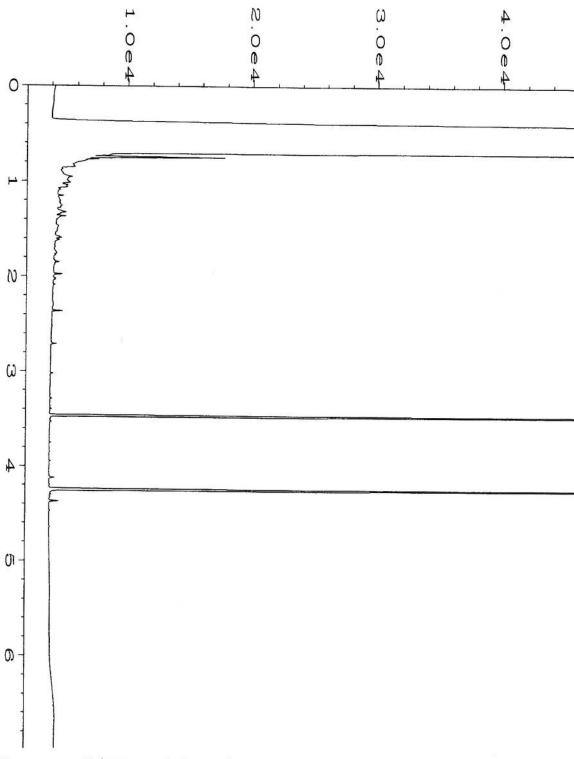
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Data File Name
Operator
                 : mwdl
                                               Page Number
Instrument
                 : GC #6
                                               Vial Number
                                                                : 29
Sample Name
                 : 501432-05
                                               Injection Number: 1
Run Time Bar Code:
                                               Sequence Line
                                                               : 7
Acquired on
            : 30 Jan 15
                             05:26 PM
                                               Instrument Method: DX.MTH
Report Created on: 02 Feb 15 09:51 AM
                                               Analysis Method : DX.MTH
```



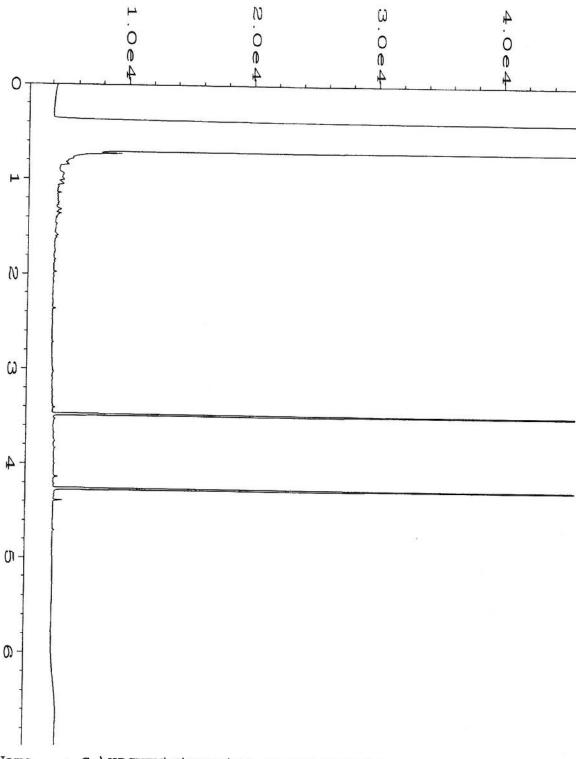
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Operator
                 : mwdl
                                                Page Number
                 : GC #6
                                                Vial Number
Instrument
                                                                 : 30
Sample Name
                 : 501432-09
                                                Injection Number: 1
                                                Sequence Line
Run Time Bar Code:
Acquired on
                : 30 Jan 15
                              05:37 PM
                                                Instrument Method: DX.MTH
Report Created on: 02 Feb 15 09:51 AM
                                                Analysis Method : DX.MTH
```



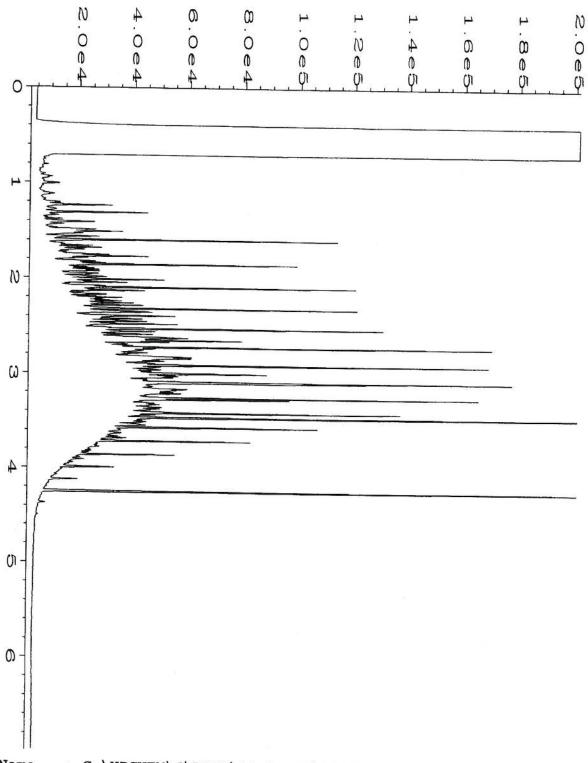
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Data File Name
Operator
                 : mwdl
                                               Page Number
                                                                : 1
Instrument
                 : GC #6
                                               Vial Number
                                                                : 31
Sample Name
                 : 501432-12
                                               Injection Number: 1
Run Time Bar Code:
                                               Sequence Line
Acquired on : 30 Jan 15 05:48 PM
                                               Instrument Method: DX.MTH
Report Created on: 02 Feb 15 09:52 AM
                                               Analysis Method : DX.MTH
```



```
: C:\HPCHEM\6\DATA\01-30-15\032F0701.D
Data File Name
Operator
                                               Page Number
                 : mwdl
                                                                : 1
Instrument
                 : GC #6
                                               Vial Number
                                                                : 32
Sample Name
                 : 501432-15
                                               Injection Number: 1
Run Time Bar Code:
                                               Sequence Line
Acquired on : 30 Jan 15 05:58 PM
                                               Instrument Method: DX.MTH
Report Created on: 02 Feb 15 09:52 AM
                                               Analysis Method : DX.MTH
```



```
Data File Name
                 : C:\HPCHEM\6\DATA\01-30-15\023F0701.D
Operator
                 : mwdl
                                                Page Number
Instrument
                 : GC #6
                                                Vial Number
                                                                 : 23
Sample Name
                 : 05-216 mb
                                                Injection Number: 1
Run Time Bar Code:
                                                Sequence Line
Acquired on
                 : 30 Jan 15 04:24 PM
                                                Instrument Method: DX.MTH
Report Created on: 02 Feb 15 09:52 AM
                                                Analysis Method : DX.MTH
```



```
Data File Name
                 : C:\HPCHEM\6\DATA\01-30-15\003F0201.D
Operator
                 : mwdl
                                                Page Number
Instrument
                 : GC #6
                                                Vial Number
                                                                 : 3
Sample Name
                 : 500 Dx 44-94C
                                                Injection Number: 1
Run Time Bar Code:
                                                Sequence Line
                                                                : 2
Acquired on
                 : 30 Jan 15
                              08:49 AM
                                                Instrument Method: DX.MTH
Report Created on: 02 Feb 15 09:52 AM
                                                Analysis Method : DX.MTH
```

501432

Send Report to Audrey Hackett

ME 01-30-15 SAMPLE CHAIN OF CUSTODY

SAMPLERS (signature) Greenwood 098 PROJECT NAME/

Page # of TURNAROUND TIM

SAMPLE DISPOSAL Dispose after 30 days

Return samples Will call with instructions

Rush charges authorized by: XStandard (2 Weeks) RUSH

2811 Fairview Avenue E. Suite 2000

SoundEarth Strategies, Inc.

Company

Address

PRMARKS

	d Senor Center 87-013
--	--------------------------

NEWARAS.	
98102	206-306-1907
ashington 98	Fax#
Seattle, Washingt	206-306-1900
ZIP	8
City, State, ZIP	Phone #

	No										
_											
TESTE	RCRA 8 MEMAS				×						
SREOL	HOCD -	×	×	×	×	×	×	×	×	×	X
ANALYSES REQUESTED	SAOC® PA 8510										
7	VOCs by 8260										
	BLEX Py 8021B										
	*D-H4TWN										
	MWTPH-Dz		×			×				×	
	# of Jars	_	-	_	_	-	_	-	-	-	-
	Matrix	50,1	Ś	1.95	Š	13	1.00	3	9	Ş	Ī
	Time	ORNO		0630	5530		2635	04,90		OR 43.	Sest.
	Date Sampled	sikel1								ì	>
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	Sample Depth	5	<u>၁</u> ၊	7	5		7			13	
	Sample Location	Bel	1301	Bol	Boz	Boa	Box	1303	(30.3	Bo 3	303
	Sample ID	B01-05	BO1-10	1301-12	B02-05	BC.2-10	(302-13	303-05	1303-10	1303-13	B03-16

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

PORMINGOCNOCIDOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TTME
Relinquished by:	Corpus Brks	Socraffich	13051	
Received by:	206.10	京	=	11.11
Relinquished by:			-	
Received by:		1	3	,

Send Report to Audrey Hackett

SAMPLE CHAIN OF CUSTODY

3

ME 01-30-15 #0d PROJECT NAME/NO.

Greenwood Senior Center
0987-013 SAMPLERS (signature) REMARKS

2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

SoundEarth Strategies, Inc.

Company Address\_

Page # 2 of 2 Rush charges authorized by: &Dispose after 30 days Return samples Will call with instructions SAMPLE DISPOSAL Standard (2 Weeks) RUSH

206-306-1907

Fax #

Phone # 206-306-1900

Г							_				_	
	Notes											
						T			T	1		
ANALYSES REQUESTED	४८६४ ४				T			T	T	T	1	
SREQU	-cnoH	-	4×	4	4	4	×	1		T	T	
ALYSE	SVOCa by 8270			T	T	T	T	T	T.		Ħ	
A	VOC. by 8280						T			1	H	
	BIEK by 8021B							T		M	+	
	NWTPH-Gx	Γ	T						-	1	+	
	AU-H4TWN		>			×	1		6	1	1	
	# of Jars	-	-	-	-	_	_	_			1	
	Matrix	-9	8	3	1.36	8	56.7	9			$\dagger$	
	Time					2.5	-	0935 60.			+	
	Date Sampled	134K 0900	_					4			T	
	38	17	2	13	14	رح	16	17			T	
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Friedman & Bruya, Inc 3012 16th Avenue West Seattle, WA 98119-2025 Fax (206) 283-5044 Ph. (206) 285-8282 PORMB\COC\COC.DOC

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#### Farrell, Robert C

From:

Audrey Hackett <ahackett@soundearthinc.com>

Sent:

Friday, February 20, 2015 9:21 AM

To:

Farrell, Robert C

Cc:

Ryan Bixby

Subject:

Greenwood Senior Center Limited Subsurface Investigation Report

Attachments:

0987-013\_2015LtdSI\_F.PDF

#### Bob,

Please find attached SoundEarth's report documenting the limited subsurface investigation at the Greenwood Senior Center. The limited subsurface investigation revealed no evidence of petroleum-contaminated soil in the vicinity of the abandoned heating oil UST. Considering these findings, no additional investigation appears warranted. SoundEarth recommends decommissioning the abandoned UST either by permanently closing it in-place or by removal.

We are coordinating disposal of the 15-gallon drum containing non-hazardous soil cuttings. I will let you know when we receive confirmation that the drum has been removed. Please contact me if you have any questions or comments. Thank you.

Audrey Hackett Project Scientist



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