



Memorandum

Memorandum No: 25-013

Date: February 19, 2025

To: Honorable Mayor, Vice Mayor, and Commissioners

From: Susan Grant, Acting City Manager *Susan Grant*

Re: **Lead Soil Screening and Air Quality Report**

The Fort Lauderdale Executive Airport (FXE) was identified in a United States Environmental Protection Agency (USEPA) study as potentially impacted by lead due to the use of aviation gasoline by aircraft at the Airport. As a result of the USEPA study, residents adjacent to the Airport raised concerns about aircraft fuel emissions deposit contaminating soil and air quality.

The City contracted with GHD Services, Inc (GHD) to screen soil at specific Airport locations for the potential presence of lead contamination from aircraft fuel emissions, deliver a technical report evaluating screening data against State levels, and provide recommendations for a path forward. The soil screening data collected indicated that the soil lead concentrations do not exceed regulatory levels established by the Florida Department of Environmental Protection (FDEP). As a result of the soil screening and evaluation performed, GHD did not recommend additional soil sampling at the Airport.

Residents were concerned that lead contamination from aircraft flying overhead existed in their communities, so the City contracted with GHD to perform additional soil screening and air quality testing in several neighborhoods surrounding the Airport. The soil screening and air sampling were conducted to identify the presence or absence of lead in the soils and air.

Neighborhoods that were investigated include Twin Lakes right of way; Palm Air Village Condos; Palm Aire Village West; and Palm Aire Village East. Unfortunately, the consultant was not granted access to Calvary Chapel, the Lofts of Palm Air Village, and Fort Lauderdale Christian School properties for soil sampling and air quality testing. However, the consultant collected soil samples and performed air quality testing on City-owned Palm Aire Village Park located at 6401 NW 21st Avenue and a vacant property located at 6300 NW 21st Avenue adjacent to Calvary Chapel. Fort Lauderdale Christian Academy is located directly east of Palm Aire Village West and directly south of Palm Aire Village East. The Lofts of Palm Aire Village outer perimeter right of way was used for soil sampling and air quality testing.

The soil screening collected in the neighborhoods, public properties, and outer perimeter right of way in proximity to FXE indicated that soil lead concentrations do not exceed regulatory levels established by FDEP. Additionally, the air samples collected did not indicate the presence of lead in the air. GHD noted that the distribution of lead in the built environment is due to many factors including past use of lead additives, in vehicular fuels, paints, waste incineration, lead solder in pipes, and other manufacturing processes. Additionally, GHD indicated that there is no direct correlation between the lead concentrations found and any lead releases from FXE Airport activities.

As a result of the soil screening and air quality evaluation performed, GHD does not recommend additional sampling at this time.

For additional information, please contact Rufus James, Executive Airport Director at 954-828-4968 or rjames@fortlauderdale.gov

Attachment: Soil Screening and Air Quality Report

c: Anthony G. Fajardo, Assistant City Manager
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GHD ref: 12637594

Your ref: Task Order No. 8

February 12, 2025

Mr. Rufus James
Airport Director
Fort Lauderdale Executive Airport
6000 NW 21st Avenue
Fort Lauderdale, Florida 33309

**Fort Lauderdale Executive Airport
Neighborhood Screening Report
Fort Lauderdale, Broward County, Florida**

Dear Mr. James:

GHD Services, Inc (GHD) is pleased to submit this report detailing the soil and air sampling conducted in and near several neighborhoods and public properties located around the Fort Lauderdale Executive Airport (FXE) in Broward County, Florida. The soil screening and air sampling was conducted to identify the presence or absence of lead in the shallow soils and air. Neighborhoods that were investigated include the Lofts of Palm Aire Village; Twin Lakes; Palm Aire Village Condos; Palm Aire Village West; and Palm Aire Village East. Public properties investigated include the City Park located at 6401 NW 21st Avenue and vacant property located at 6300 NW 21st Avenue. In most cases soil samples were gathered from public right-of-way locations along public streets and roadways. This work was completed under City of Fort Lauderdale (City) Task Order No. 8 pursuant to the General Environmental Engineering Consulting Services Contract No. 12355-106-1 between the City and GHD.

Previous data detailing soil lead concentrations on the FXE airport property were provided in a report titled "FXE Soil Screening Report" dated May 2, 2024.

1. Executive Summary

GHD Services, Inc (GHD) has completed sampling for the presence of lead in soil and air in neighborhoods and public properties around the Fort Lauderdale Executive Airport (FXE) in Broward County, Florida. The sampling was completed to identify potential impacts from FXE operations on its surrounding environs. Soil samples were collected within the upper two (2) feet of the soil column and scanned in the field using an X-Ray Fluorescence (XRF) Analyzer calibrated for lead. A total of 278 soil samples were collected from 139 soil borings. The XRF reading indicated that none of the samples contained lead in excess of the State Residential Soil Cleanup Target Level (SCTL) of 400 milligrams per kilogram (mg/kg). Supplement laboratory analyses was performed on four (4) soil samples as a confirmation of the XRF readings. Samples were analysed using EPA Method 6020 for lead. The laboratory analytical data confirmed that the lead concentrations in the soil are below the Residential SCTL. The data collected across the neighborhoods sampled indicated that the lead concentrations in the upper two (2) feet of the soil column all fall below the Residential SCTL established by Florida Department of Environmental Protection (FDEP), which indicates that soil lead concentrations are not excessively impacted in these neighborhoods.

In addition, ambient air samples for lead were collected using a Cassella Apex 2 model sample pumps and a 0.8-micron mixed cellulose ester (MCE) filter cartridge. Air samples were collected at two locations, within each neighborhood, and submitted for analysis of lead using National Institute for Occupational Safety and Health (NIOSH) Method 7300 and analyzed by Inductively Coupled Argon Plasma (ICP). Lead results were compared with NIOSH's recommended exposure limits (RELs) time weighted average (TWA) of fifty (50) micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The air analytical data indicates that lead was not present in concentrations above the respective laboratory reporting level. The data indicate lead was not present in the air samples collected.

The soil screening and soil analytical data collected in the neighborhoods and public properties, in proximity to FXE, indicated that soil lead concentrations do not exceed regulatory levels established by FDEP. Additionally, the air samples collected did not indicate the presence on lead in air. The data shows that there is no lead in the neighborhoods and/or public properties at levels in excess of State soil lead cleanup levels or National air exposure limits. GHD concludes, based on the results of this study, and in comparison, with soil sampling data from previous studies at FXE, that there is no correlation between the lead concentration results, from the neighborhoods and public properties, and any FXE operations.

2. Completed Scope of Work

2.1 Methodology

Throughout the sampling effort, soil samples were collected within each boring at two depth intervals, from ground surface to 0.5 feet below land surface (ft bls) and from 0.5 to 2.0 ft bls in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures for Field Sampling (SOP FS) 3000 for Soil Sampling. The two sample intervals are commonly used by FDEP to evaluate the exposure potential of potential contaminants to residents and workers in different scenarios. All soil samples were collected using a fully decontaminated stainless steel hand auger. Each soil sample was placed in a clean plastic bag (i.e., Ziploc or equivalent) and the soils mixed to create a homogenous sample. The samples were then screened in the field using an X-Ray Fluorescence (XRF) Analyzer calibrated for lead. The XRF allows for non-destructive testing to identify an element in a given sample based upon its response to an X-Ray source. The XRF data are read in parts per million (ppm), which is equivalent to the milligrams per kilogram (mg/kg) units used in the FDEP standard. The XRF lead concentrations data were compared to the Soil Cleanup Target Level (SCTL) established in Chapter 62-777 Florida Administrative Code (FAC) for both Commercial (1,400 mg/kg) and Residential (400 mg/kg) properties.

The ambient air samples for lead were collected using a Cassella Apex 2 model sample pumps and a 0.8-micron mixed cellulose ester (MCE) filter cartridge. Sample filters intakes were mounted on a tripod at a height of 3 ½ to 4 feet above ground level (AGL). The samples pumps were calibrated and operated at a flow rate of 2.2 liters per minute (L/m). Air samples were collected at two locations within each neighborhood. Each pump was operated from about 5.75 hours to 9.25 hours depending upon daily operational conditions. The cartridges were then shipped to ALS Global of Salt Lake City, Utah for analysis of lead using National Institute for Occupational Safety and Health (NIOSH) Method 7300 and analyzed by Inductively Coupled Argon Plasma (ICP). Lead results were compared with NIOSH's recommended exposure limits (RELs) time weighted average (TWA) of fifty (50) micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

3. Soil Screening and Analytical Results

GHD personnel initially mobilized to the site on November 25 – November 27, 2024 and completed sample collection at locations on publicly owned properties around the Lofts of Palm Aire Village neighborhood (**Figure 1**) and within the City owned public park (**Figure 2**) and vacant property (**Figure 3**) both located along NW 21st Avenue.

Soil samples were collected at 20 locations (SBL001 through SBL020) around the Lofts of Palm Aire Village. In addition, two air sampling stations were established near the neighborhood. Station ARL001 was positioned to the south of the neighborhood, while station ARL002 was established to the west. (**Figure 1**).

The XRF data indicate that the highest lead level detected in the Lofts samples was 18.6 ppm detected in the 0.5 -2.0 ft bls sample from boring SBL020. This boring was located to the west of the neighborhood, at the intersection of W Cypress Creek Road and Hawkins Road. A total of forty (40) soils samples were screen for the Lofts. Of these, eight (8) were screened as Not Detected (ND), or do not have a lead concentration quantifiable above the sample specific detection limit. The average or mean lead concentration is 6.2 ppm, while the median concentration is 5.5 ppm. The soil screening data are summarized on **Table 1**.

At the City Park at total of ten (10) borings were completed (SBP001 through SBP10), while seven borings (SBV001 through SBV007) were completed at the nearby vacant parcel. Boring locations are illustrated on **Figure 2** and **Figure 3**. A total of eleven (11) of the twenty (20) City Park soil samples were screened as ND, while the highest reading, 3.1 ppm, was detected at boring SBP002 in the 0-0.5 ft bls sample. Boring SBP002 is located along the west side of the park near the Calvary Chapel parking lot. The average lead concentration in the park samples was 1.8 ppm, while the median was 1.2 ppm. Of the fourteen (14) samples collected and screened from the vacant parcel, six (6) screened as ND. The average concentration was 4.5 ppm, and the median concentration was 2.7 ppm. The highest lead concentration in the vacant parcel samples was 12.2 ppm from the 0-0.5 ft bls sample collected at boring SBV003. This boring was located in the northern portion of the parcel. The XRF screening data are detailed on **Table 2** and **Table 3**. Two air sampling locations were established within the City Park property, ARP001 and ARP002. The air sampling locations are shown on **Figure 2**. Air sampling stations were not established in the vacant property.

On December 2-3, 2024, GHD personnel collected and screened samples in rights-of-way around the Palm Aire Village Condos neighborhood and within the Twin Lakes neighborhood. In Twin Lakes, eighteen (18) soil borings (SBTL001 through SBTL018) were completed, and two air sampling locations (ARTL001 and ARTL002) were established at the locations shown on **Figure 4**. The XRF screening data indicates one (1) sample within Twin Lakes as screening as ND. The highest XRF reading was 182 ppm in the 0-0.5 ft bls sample collected at boring SBTL004 located on NW 46th Street. The average concentration of samples collected within Twin Lakes was 27.5 ppm, while the median concentration was 13.8 ppm. Data for Twin Lakes are summarized on **Table 4**. Two air sampling stations were established within Twin Lakes, ARTL001 and ARTL002, as shown on **Figure 4**.

At the Palm Aire Village Condos, ten (10) sampling locations (SBCondo001 through SBCondo010) were completed in the rights-of-way of the roads around the condominium development. The XRF screening data indicated a maximum lead value of 36.2 ppm in boring SBCondo010 located on NW 68th Street. The sample was collected form the 0-0.5 ft bls sample interval (see **Figure 5**). The twenty samples collected around the condominium development yielded three (3) samples with ND readings. The average lead concentration was 11.8 ppm, and the median value was 10.4 ppm. The XRF data are summarized on **Table 5**. Two air sampling stations, AR Condo001 and ARCondo002, were established near the condominium neighborhood as shown on **Figure 5**.

Finally, on November 19-20, 2024, GHD personnel collected soil and air samples within the Palm Aire Village West and Palm Aire Village East neighborhoods. In Palm Aire Village West, thirty-four (34) soil borings were completed (SBPW001 through SBPW034, **Figure 6**). In addition, two (2) air sampling stations were established (ARPW001 and ARPW002) as shown on **Figure 6**. The highest lead concentration identified was 257 ppm in boring SBPW008 over the 0-0.5 ft bls interval. This boring is located on NW 69th Court near its intersection with the retention pond. Thirty-two (32) of the soil samples from Palm Aire Village West screened as ND, with an average value of 60.1 ppm. The mean value of the soil screening data was 39.5 ppm. The data obtained for Palm Aire Village West are summarized on **Table 6**.

In the Palm Aire Village East neighborhood forty (40) soil borings, labeled as SBPE001 through SBPE040, were completed at the locations shown on **Figure 7**. The maximum lead concentration detected within Palm Aire Village East was 48 ppm at boring SBPE024 over the 0-0.5 ft bls interval. The average lead concentration was 22.9 ppm, while the median was 22 ppm. Soil data from Palm Aire Village East is summarized on **Table 7**.

The data collected across the neighborhoods sampled indicated that the lead concentrations in the upper two (2) feet of the soil column all fall below the Residential SCTL of 400 mg/kg established by FDEP, which indicates that soil lead concentrations are not excessively impacted in these neighborhoods.

In addition to the soil screening data, three soil samples from within the Twin Lakes neighborhood SBTL004, SBTL016 and SBTL018, and one from the Palm Aire Village Condos neighborhood were selected for laboratory analysis of lead using EPA Method 6020. These samples were selected because the field screening data indicated comparatively higher lead XRF readings when compared to the remaining screening data. The laboratory analytical data, summarized on **Table 8**, indicated that the lead concentrations are below the Residential SCTL of 400 mg/kg. The complete laboratory report is included in **Appendix A**.

As another basis of comparison, the US Geological Survey has compiled background lead soil concentration data from sites within all forty-eight (48) contiguous States. These data, collected from 2007 to 2010, provide a compilation of data by state which can be used for comparison to site specific data. The table below provides the USGS background lead data for the State of Florida and a summary of the data gathered for each neighborhood.

Data Source	# of Samples with quantified lead value	Minimum	Maximum	Mean	Median
USGS (FL Specific)	88	0.3	16.3	6.2	4.7
The Lofts	32	1.1	18.6	6.2	5.6
City Park	9	1	3.1	1.8	1.2
Vacant Property	8	1.2	12.2	4.5	2.7
Twin Lakes	35	1.1	182	27.5	13.8
The Condos	17	1.8	36.2	11.8	10.4
Palm Aire West	36	14	257	60.1	36.5
Palm Aire East	33	12	48	22.9	22

Note: The FDEP Residential SCTL for lead in soil is 400 mg/kg, the Commercial/Industrial SCTL is 1,400 mg/kg

As the data show, lead concentrations in soil in the neighborhoods around FXE are not found in excess of State standards. At the City Park and the Vacant Property both the mean and median values are below the State mean and median, while at the Lofts the mean is equal to the State mean and the median value is slightly elevated. At the remaining neighborhoods, the mean and median values are greater than the State values but still well below the Residential SCTL of 400 mg/kg.

The data show, in the table above, that the lead concentrations found during the soil sampling have not been adversely impacted by airport operations or any other activities. All lead concentrations are below the SCTLs for both commercial and residential properties. There is no direct adverse correlation between the lead concentrations found and any lead releases from FXE airport activities.

4. Air Sampling and Analytical Results

The air sample cartridges were analyzed by ALS Global. The data, summarized on **Table 9**, indicates that lead was not present in concentrations above the respective laboratory reporting level. The data indicate lead was not present in the air samples collected. The laboratory reports are included in **Appendix A**.

The air sampling data shows that current FXE airport operations are not impacting the surrounding air quality.

5. Conclusions and Considerations

The soil screening and soil analytical data collected in the neighborhoods and public properties in proximity to FXE indicated that soil lead concentrations do not exceed regulatory levels established by FDEP. Additionally, the air samples collected did not indicate the presence of lead in air. A comparison of lead concentrations from the neighborhoods and the State background indicates that mean and median concentrations are not excessively elevated and are well below the State Residential SCTL.

Further, soil screenings performed on the FXE property during a previous investigation indicated that soil lead levels did not exceed the State establish Residential SCTL.

As a result of this study, GHD does not recommend additional soil or air sampling at this time.

It should be noted that the distribution of lead in a built (not natural or undisturbed state) environment could be due to many factors including past use of lead additives in vehicular (i.e., automobile) fuels, paints, waste incineration, lead solder in pipes and other manufacturing processes.

This report is intended to provide an evaluation of the current soil and air lead concentrations near the FXE property, at the most probable locations which could identify the presence or absence of lead in the shallow soils and the air. The report shows no correlation between the lead concentration results and FXE operations.

We appreciate the opportunity to work with the City of Fort Lauderdale and the Airport. Please contact the undersigned if you require further information or clarification.

Regards,



Digitally signed
by Jose Morales
Date:
2025.02.12
14:56:48 -05'00'

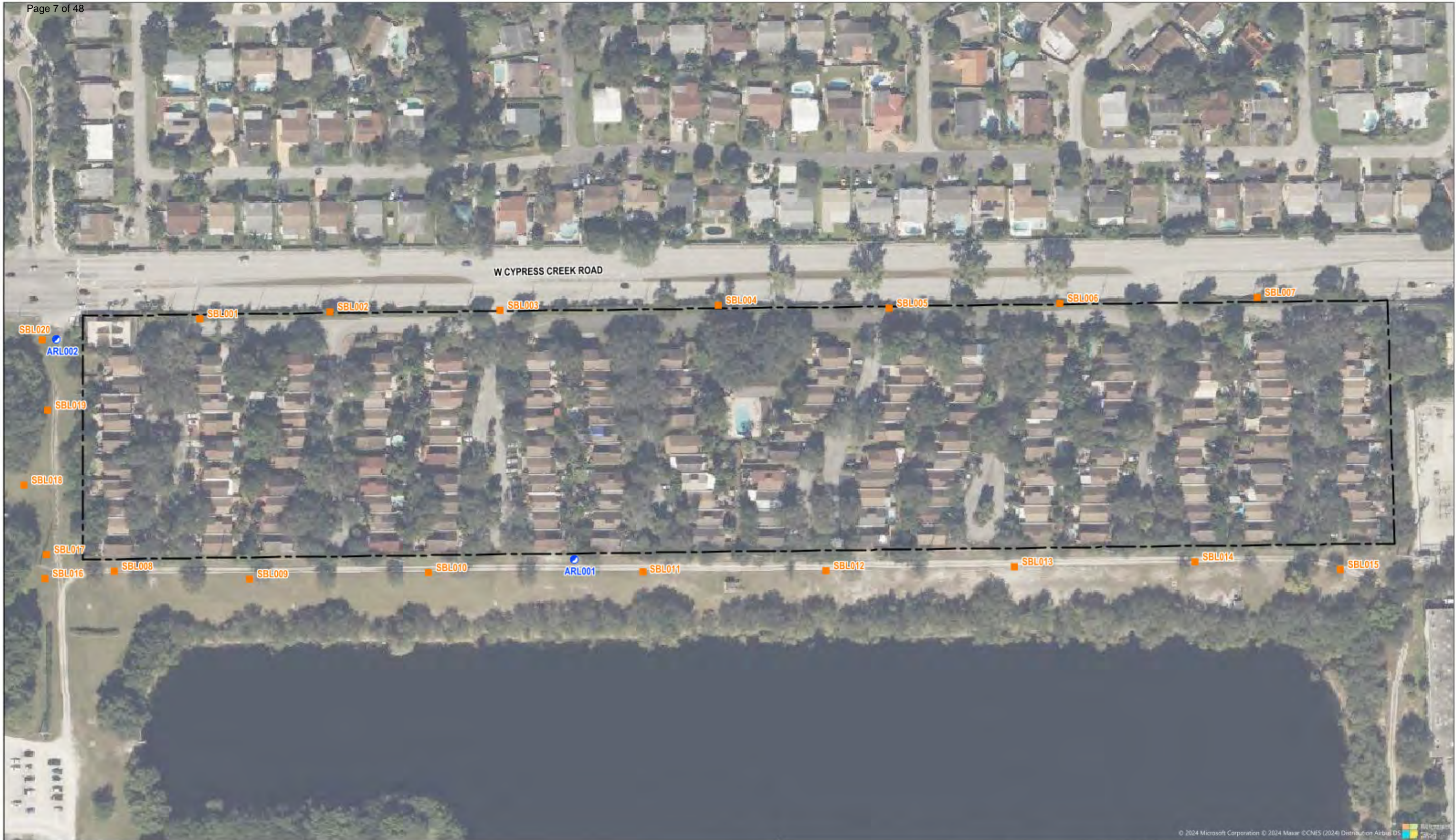
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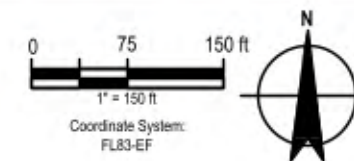
Figures



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LEGEND

- PROPERTY BOUNDARY
- SOIL BORING LOCATION
- AIR SAMPLING LOCATION



FORT LAUDERDALE EXECUTIVE AIRPORT (FXE)
6000 N.W. 21ST AVE., FORT LAUDERDALE, FL

Project No. 12637954
Date January 2025

LOFTS OF PALM AIRE
NW 31ST AVE. @ CYPRESS CREEK RD.
SOIL BORING LOCATIONS

FIGURE 1

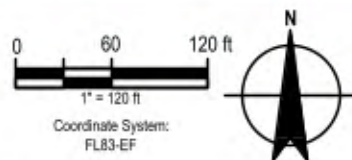


FIGURE 2



LEGEND

■ SOIL BORING LOCATION



FORT LAUDERDALE EXECUTIVE AIRPORT (FXE)
6000 N.W. 21ST AVE., FORT LAUDERDALE, FL

Project No. 12637954
Date January 2025

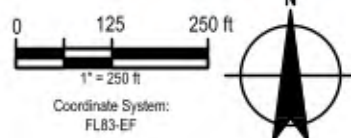
VACANT LAND - 6300 NW 21ST AVE.
SOIL BORING LOCATIONS

FIGURE 3



LEGEND

- NEIGHBOURHOOD BOUNDARY
- SOIL BORING LOCATION
- AIR SAMPLING LOCATION



FORT LAUDERDALE EXECUTIVE AIRPORT (FXE)
6000 N.W. 21ST AVE., FORT LAUDERDALE, FL

Project No. 12637954
Date January 2025

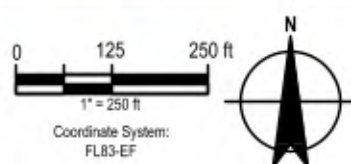
**TWIN LAKES
PROSPECT RD. @ NW15TH AVE.
SOIL BORING LOCATIONS**

FIGURE 4



LEGEND

- NEIGHBOURHOOD BOUNDARY
- SOIL BORING LOCATION
- AIR SAMPLING LOCATION

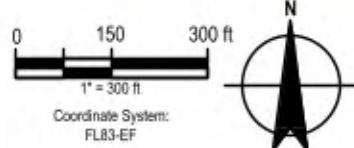


FORT LAUDERDALE EXECUTIVE AIRPORT (FXE)
 6000 N.W. 21ST AVE., FORT LAUDERDALE, FL

Project No. 12637954
 Date January 2025

PALM AIRE VILLAGE CONDOS
 W. McNAB RD. @ NW 31ST AVE.
 SOIL BORING LOCATIONS

FIGURE 5



CITY OF FORT LAUDERDALE, FLORIDA
FXE SAMPLING

Project No. 12637954
Date January 2025

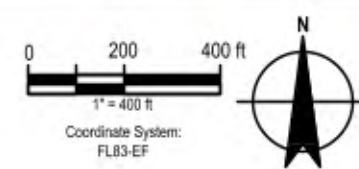
PALM AIRE VILLAGE (WEST)
NW 62ND ST. @ NW 31ST AVE.
SOIL BORING LOCATIONS

FIGURE 6



LEGEND

- NEIGHBOURHOOD BOUNDARY
- PARCEL BOUNDARY
- SUBDIVISION BOUNDARY
- SOIL BORING LOCATION
- AIR SAMPLING LOCATION



CITY OF FORT LAUDERDALE, FLORIDA
 FXE SAMPLING

PALM AIRE VILLAGE (EAST)
W. McNAB RD. @ NW 21ST AVE.
SOIL BORING LOCATIONS

Project No. 12637954
 Date January 2025

FIGURE 7

Tables

TABLE 1
SUMMARY OF SOIL XRF SCREENING - Lofts of Palm Aire Village
Fort Lauderdale Executive Airport
West Cypress Creek Rd & NW 31st Street
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bis)	Date	Collection Time (24 hour)	XRF Lead		Sampling Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)			1400						
SCTL - Residential (mg/kg)			400						
SBL001	0-0.5	11/27/2024	922	6.1	0.9	Lofts	Dark brown FS	26.202196	-80.194817
	0.5-2	11/27/2024	924	2.9	0.9		Dark brown FS		
SBL002	0-0.5	11/27/2024	1040	7.7	1.0	Lofts	Dark brown FS	26.202224	-80.194165
	0.5-2	11/27/2024	1042	1.1	0.9		Dark brown to white FS		
SBL003	0-0.5	11/27/2024	1046	6.6	0.9	Lofts	Dark brown FS	26.202226	-80.193313
	0.5-2	11/27/2024	1048	1.1	0.9		Dark brown FS to white FS		
SBL004	0-0.5	11/27/2024	1052	17.6	1.2	Lofts	Dark brown FS	26.202243	-80.192221
	0.5-2	11/27/2024	1054	5.5	1.1		Dark brown to white FS		
SBL005	0-0.5	11/27/2024	1059	8.9	1.1	Lofts	Medium brown FS	26.202225	-80.191365
	0.5-2	11/27/2024	1101	2.9	1.0		Medium brown FS		
SBL006	0-0.5	11/27/2024	1104	11.4	1.1	Lofts	Medium brown FS	26.202242	-80.190510
	0.5-2	11/27/2024	1106	4.6	0.9		Medium brown to white FS		
SBL007	0-0.5	11/27/2024	1111	13.3	1.2	Lofts	Medium brown FS	26.202263	-80.189522
	0.5-2	11/27/2024	1113	1.3	0.9		White FS		
SBL008	0-0.5	11/25/2024	1251	9.1	1.0	Lofts	Greyish black FS	26.201058	-80.195253
	0.5-2	11/25/2024	1253	3	1.1		Dark grey FS		
SBL009	0-0.5	11/25/2024	1235	6	0.9	Lofts	Greyish white FS	26.201019	-80.194576
	0.5-2	11/25/2024	1240	1.4	0.9		Dark brown FS		
SBL010	0-0.5	11/25/2024	1230	2.5	0.9	Lofts	Dark grey FS	26.201043	-80.193680
	0.5-2	11/25/2024	1232	ND	<1		Greyish white, FS		
SBL011	0-0.5	11/25/2024	1217	3.6	0.9	Lofts	Dark brown FS, some organics	26.201059	-80.193737
	0.5-2	11/25/2024	1219	ND	<1.0		Dark grey FS		
SBL012	0-0.5	11/25/2024	1206	ND	<1.0	Lofts	Dark brown FS	26.201040	-80.191690
	0.5-2	11/25/2024	1208	ND	<1.0		Light grey FS		
SBL013	0-0.5	11/25/2024	1150	ND	<1.0	Lofts	Light grey FS	26.201053	-80.190746
	0.5-2	11/25/2024	1152	2.6	1.1		Greyish white FS		
SBL014	0-0.5	11/25/2024	1136	2.8	0.9	Lofts	Dark brown FS	26.201070	-80.189842
	0.5-2	11/25/2024	1138	ND	<1.0		Brown to grey FS		
SBL015	0-0.5	11/25/2024	1128	ND	<1.0	Lofts	Light brown FS, some organics	26.201031	-80.189115
	0.5-2	11/25/2024	1130	ND	<1.0		Brown to grey, FS		
SBL016	0-0.5	11/25/2024	1407	5.6	1.0	Lofts	Dark grey FS	26.201027	-80.195601
	0.5-2	11/25/2024	1409	1.3	0.9		Grayish white FS		
SBL017	0-0.5	11/25/2024	1400	4.2	1.1	Lofts	Black FS	26.201135	-80.195592
	0.5-2	11/25/2024	1402	12	1.1		Dark greyish black, FS		
SBL018	0-0.5	11/25/2024	1347	10.5	1.2	Lofts	Grey FS, some gravel	26.201456	-80.195588
	0.5-2	11/25/2024	1349	6.8	1.0		Dark brown FS		
SBL019	0-0.5	11/25/2024	1333	9.8	1.0	Lofts	Dark brown FS	26.201801	-80.195540
	0.5-2	11/25/2024	1335	1.3	0.9		Blackish brown FS		
SBL020	0-0.5	11/25/2024	1322	6.54	1.1	Lofts	Dark brown FS	26.202105	-80.195607
	0.5-2	11/25/2024	1324	18.6	1.3		Dark grey FS		

Notes:
ft bis = feet below land surface ppm = parts per million (equivalent to milligrams per kilogram, mg/kg)
SCTL - Commercial (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Commercial/Industrial properties
SCTL - Residential (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Residential properties
SCTL - Leachability (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for leachability based on Groundwater criteria;
*** = leachability criteria derived using SPLP analyses to calculate site specific SCTL

TABLE 2
SUMMARY OF SOIL XRF SCREENING - City Park
Fort Lauderdale Executive Airport
6000 N.W. 21st Avenue
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bls)	Date	Time (24 hour)	XRF Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)			1,400						
SCTL - Residential (mg/kg)			400						
SBL001	0-0.5	11/26/2024	0917	1.9	0.9	Park	Pale grey FS	26.205650	-80.172700
	0.5-2	11/26/2024	0919	ND	<1.0	Park	Pale grey FS to pale tan FS		
SBP002	0-0.5	11/26/2024	0932	3.1	0.9	Park	Pale grey FS	26.205479	-80.172723
	0.5-2	11/26/2024	0934	ND	<1.0	Park	Pale grey to white FS		
SBP003	0-0.5	11/26/2024	0940	ND	<1.0	Park	Pale grey to white FS	26.205149	-80.172650
	0.5-2	11/26/2024	0942	1.2	0.9	Park	Pale grey to white FS		
SBP004	0-0.5	11/26/2024	0949	2.7	0.9	Park	Pale grey FS	26.204995	-80.172662
	0.5-2	11/26/2024	0951	2.6	0.9	Park	Pale grey FS		
SBP005	0-0.5	11/26/2024	0958	1	0.9	Park	Dark grey FS	26.204828	-80.172679
	0.5-2	11/26/2024	1000	1.1	0.9	Park	Pale grey to white FS		
SBP006	0-0.5	11/26/2024	1009	1.2	1	Park	White grey to medium white FS	26.204710	-80.172667
	0.5-2	11/26/2024	1011	1.1	0.9	Park	Pale grey , very FS		
SBP007	0-0.5	11/26/2024	1014	ND	<1.0	Park	Medium brown to pale grey FS	26.204801	-80.172016
	0.5-2	11/26/2024	1016	ND	<1.0	Park	Pale grey to white FS		
SBP008	0-0.5	11/26/2024	1023	ND	<1.0	Park	Dark grey FS to tan FS	26.205211	-80.172058
	0.5-2	11/26/2024	1025	ND	<1.0	Park	Tan FS to white FS		
SBP009	0-0.5	11/26/2024	1044	ND	<1.0	Park	Medium grey FS to pale grey FS	26.205517	-80.172314
	0.5-2	11/26/2024	1046	ND	<1.0	Park	Pale grey FS to white FS		
SBP010	0-0.5	11/26/2024	1035	ND	<1.0	Park	Dark brown to limestone	26.205659	-80.171911
	0.5-2	11/26/2024	1037	ND	<1.0	Park	Limestone pale grey to white FS		

Notes:

ft bls = feet below land surface

ppm = parts per million (equivalent to milligrams per kilogram, mg/kg)

AOC = Area of Concern (see Figures 3 -6)

SCTL - Commercial (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Commercial/Industrial properties

SCTL - Residential (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Residential properties

SCTL - Leachability (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for leachability based on Groundwater criteria;

*** = leachability criteria derived using SPLP analyses to calculate site specific SCTL

TABLE 3
SUMMARY OF SOIL XRF SCREENING - Vacant property
Fort Lauderdale Executive Airport
6300 MW 21st Avenue
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bls)	Date	Time (24 hour)	XRF Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)			1,400						
SCTL - Residential (mg/kg)			400						
SBV001	0-0.5	11/26/2024	1319	2.7	0.9	Vacant Lot	Pale grey FS	26.204919	-80.171236
	0.5-2	11/26/2024	1321	2.3	0.9	Vacant Lot	Pale grey FS		
SBV002	0-0.5	11/26/2024	1334	ND	<1.0	Vacant Lot	Pale grey to medium grey FS	26.205067	-80.170885
	0.5-2	11/26/2024	1336	ND	<1.0	Vacant Lot	Medium grey to light grey FS		
SBV003	0-0.5	11/26/2024	1343	12.2	1.1	Vacant Lot	Pale grey FS	26.205100	-80.170556
	0.5-2	11/26/2024	1345	2.7	0.9	Vacant Lot	White FS		
SBV004	0-0.5	11/26/2024	1353	6.1	1.0	Vacant Lot	Medium grey to pale grey FS	26.205047	-80.170222
	0.5-2	11/26/2024	1355	ND	<1.0	Vacant Lot	Pale grey FS		
SBV005	0-0.5	11/26/2024	1410	7.1	1.0	Vacant Lot	Pale grey FS	26.204461	-80.169165
	0.5-2	11/26/2024	1412	ND	<1.0	Vacant Lot	White FS		
SBV006	0-0.5	11/26/2024	1420	1.2	0.9	Vacant Lot	Medium grey FS	26.204916	-80.169043
	0.5-2	11/26/2024	1422	ND	<1.0	Vacant Lot	Tan FS		
SBV007	0-0.5	11/26/2024	1432	2	0.9	Vacant Lot	Medium grey FS	26.205100	-80.169217
	0.5-2	11/26/2024	1434	ND	<1.0	Vacant Lot	Pale grey to light brown FS		

Notes:

ft bls = feet below land surface

ppm = parts per million (equivalent to milligrams per kilogram, mg/kg)

SCTL - Commercial (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Commercial/Industrial properties

SCTL - Residential (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Residential properties

SCTL - Leachability (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for leachability based on Groundwater criteria;

*** = leachability criteria derived using SPLP analyses to calculate site specific SCTL

TABLE 4
SUMMARY OF SOIL XRF SCREENING - Twin Lakes
Fort Lauderdale Executive Airport
Prospect Road and NW 15th Avenue
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bls)	Date	Time (24 hour)	XRF Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)			1400						
SCTL - Residential (mg/kg)			400						
SBTL001	0-0.5	12/2/2024	1609	63.9	1.8	Twin Lakes	Dark brown FS	26.182493	-80.162419
	0.5-2	12/2/2024	1611	1.9	0.9	Twin Lakes	White FS		
SBTL002	0-0.5	12/2/2024	1554	4.1	1.0	Twin Lakes	Dark brown FS	26.183051	-80.16245
	0.5-2	12/2/2024	1556	4.2	0.9	Twin Lakes	Pale grey FS		
SBTL003	0-0.5	12/2/2024	1535	12.4	1.3	Twin Lakes	Medium brown FS	26.184671	-80.162495
	0.5-2	12/2/2024	1537	7.6	1.2	Twin Lakes	Medium brown FS to tan brown FS		
SBTL004	0-0.5	12/3/2024	1414	182	3	Twin Lakes	Medium brown FS	26.184102	-80.160393
	0.5-2	12/3/2024	1416	20.4	1.3	Twin Lakes	Medium brown FS to medium grey FS		
SBTL005	0-0.5	12/3/2024	1351	48	1.7	Twin Lakes	Dark brown FS	26.193449	-80.160727
	0.5-2	12/3/2024	1353	5.1	1.0	Twin Lakes	Medium grey FS		
SBTL006	0-0.5	12/3/2024	1322	37.8	1.5	Twin Lakes	Dark brown FS	26.182740	-80.161094
	0.5-2	12/3/2024	1324	4.7	1	Twin Lakes	Dark brown to pale grey FS		
SBTL007	0-0.5	12/3/2024	1253	15.9	1.2	Twin Lakes	Dark brown FS	26.182095	-80.15932
	0.5-2	12/3/2024	1255	13.1	1.1	Twin Lakes	Pale grey FS		
SBTL008	0-0.5	12/3/2024	1232	52	2	Twin Lakes	Dark brown	26.183503	-80.159311
	0.5-2	12/3/2024	1234	15.5	1.2	Twin Lakes	Dark brown to pale grey FS		
SBTL009	0-0.5	12/3/2024	1125	11.4	1.1	Twin Lakes	Dark brown FS	26.183441	-80.158289
	0.5-2	12/3/2024	1127	15.2	1.1	Twin Lakes	Dark brown to pale grey FS		
SBTL010	0-0.5	12/3/2024	1100	13.8	1.1	Twin Lakes	Dark brown FS	26.183705	-80.157396
	0.5-2	12/3/2024	1102	1.1	0.9	Twin Lakes	Pale grey FS		
SBTL011	0-0.5	12/3/2024	900	17.1	1.2	Twin Lakes	Medium grey	26.182043	-80.156868
	0.5-2	12/3/2024	902	ND	<1.0	Twin Lakes	Medium grey to white FS		
SBTL012	0-0.5	12/3/2024	910	6	1.0	Twin Lakes	Dark brown FS	26.184238	-80.156592
	0.5-2	12/3/2024	912	3.4	1.0	Twin Lakes	Dark brown to pale grey FS		
SBTL013	0-0.5	12/3/2024	924	36	1.5	Twin Lakes	Dark grey FS	26.184801	-80.157241
	0.5-2	12/3/2024	926	1.4	0.9	Twin Lakes	Dark brown FS to pale grey FS		
SBTL014	0-0.5	12/3/2024	1041	23.1	1.3	Twin Lakes	Medium brown FS	26.185734	-80.158026
	0.5-2	12/3/2024	1043	4	1	Twin Lakes	Medium brown to pale grey		
SBTL015	0-0.5	12/3/2024	1017	8.8	1.0	Twin Lakes	Dark grey FS	26.186582	-80.157634
	0.5-2	12/3/2024	1019	2	1.0	Twin Lakes	Medium grey to pale grey FS		
SBTL016	0-0.5	12/3/2024	1003	129	3	Twin Lakes	Medium brown FS	26.187561	-80.156828
	0.5-2	12/3/2024	11005	2.9	0.9	Twin Lakes	Pale grey FS to white FS		
SBTL017	0-0.5	12/3/2024	952	19.1	1.1	Twin Lakes	Medium brown FS	26.186219	-80.156718
	0.5-2	12/3/2024	984	25.1	1.3	Twin Lakes	Medium brown FS		
SBTL018	0-0.5	12/3/2024	936	139	3	Twin Lakes	Medium brown FS	26.189855	-80.156356
	0.5-2	12/3/2024	938	16.6	1.2	Twin Lakes	Pale grey FS		

Notes:

ft bls = feet below land surface

ppm = parts per million (equivalent to milligrams per kilogram, mg/kg)

SCTL - Commercial (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Commercial/Industrial properties

SCTL - Residential (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Residential properties

SCTL - Leachability (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for leachability based on Groundwater criteria;

*** = leachability criteria derived using SPLP analyses to calculate site specific SCTL

TABLE 5
SUMMARY OF SOIL XRF SCREENING - Palm Aire Village Condos
Fort Lauderdale Executive Airport
McNab Road at NW 31st Avenue
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bls)	Date	Time (24 hour)	XRF Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)			1,400						
SCTL - Residential (mg/kg)			400						
SBCondo001	0-0.5	12/2/2024	1057	14.8	1.2	Palm Aire Condos	Medium Grey FS	26.209547	-80.187740
	0.5-2	12/2/2024	1059	14.7	1.1	Palm Aire Condos	Medium brown FS		
SBCondo002	0-0.5	12/2/2024	1117	16.9	1.3	Palm Aire Condos	Medium grey FS	26.209543	-80.187403
	0.5-2	12/2/2024	1119	8.4	1.1	Palm Aire Condos	Medium brown to light brown FS		
SBCondo003	0-0.5	12/2/2024	1131	10.4	1.1	Palm Aire Condos	Light grey FS	26.209175	-80.187403
	0.5-2	12/2/2024	1133	2.8	1.2	Palm Aire Condos	Light grey FS to pale grey FS		
SBCondo004	0-0.5	12/2/2024	1145	12.2	1.2	Palm Aire Condos	Light brown FS	26.208702	-80.156706
	0.5-2	12/2/2024	1147	ND	<1.0	Palm Aire Condos	Light brown FS to pale grey FS		
SBCondo005	0-0.5	12/2/2024	1157	18	1.2	Palm Aire Condos	Pale brown FS	26.208623	-80.186643
	0.5-2	12/2/2024	1159	2.2	0.9	Palm Aire Condos	Pale brown FS to white FS		
SBCondo006	0-0.5	12/2/2024	1206	8.4	1.0	Palm Aire Condos	Pale brown FS	26.208623	-80.186643
	0.5-2	12/2/2024	1208	ND	<1.0	Palm Aire Condos	Pale grey to white FS		
SBCondo007	0-0.5	12/2/2024	1216	6	1.0	Palm Aire Condos	Pale brown FS	26.207171	-80.186622
	0.5-2	12/2/2024	1218	1.8	1.0	Palm Aire Condos	Pale brown FS to white FS		
SBCondo008	0-0.5	12/2/2024	1230	13	1.1	Palm Aire Condos	Pale brown FS	26.206879	-80.186634
	0.5-2	12/2/2024	1232	5.5	1.0	Palm Aire Condos	Pale grey FS to white FS		
SBCondo009	0-0.5	12/2/2024	1241	23.9	1.3	Palm Aire Condos	Bark brown FS	26.208889	-80.187157
	0.5-2	12/2/2024	1243	ND	<1.0	Palm Aire Condos	Light brown FS to tan FS		
SBCondo010	0-0.5	12/2/2024	1248	36.2	2	Palm Aire Condos	Dark brown FS	26.206989	-80.187400
	0.5-2	12/2/2024	1250	6	1.1	Palm Aire Condos	Pale brown FS		

Notes:

ft bls = feet below land surface

ppm = parts per million (equivalent to milligrams per kilogram, mg/kg)

SCTL - Commercial (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Commercial/Industrial properties

SCTL - Residential (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Residential properties

SCTL - Leachability (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for leachability based on Groundwater criteria;

*** = leachability criteria derived using SPLP analyses to calculate site specific SCTL

FS = Fine sand

TABLE 6
SUMMARY OF SOIL XRF SCREENING - Palm Aire Village West
Fort Lauderdale Executive Airport
NW 62nd Avenue and NW 31st Avenue
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bls)	Date	Time (24 hour)	Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)		1,400							
SCTL - Residential (mg/kg)		400							
SBPW001	0-0.5	12/20/2024	0830	110	9	Palm Aire West	Dark brown sand	26.20281	-80.193570
	0.5-2	12/20/2024	0839	ND	<8.8	Palm Aire West	tan sand		
SBPW002	0-0.5	12/20/2024	0844	56	5.4	Palm Aire West	dark brown sand	26.2031	-80.19506
	0.5-2	12/20/2024	0848	ND	<10	Palm Aire West	light brown sand		
SBPW003	0-0.5	12/20/2024	0857	35	5.2	Palm Aire West	dark brown sand	26.20404	-80.19517
	0.5-2	12/20/2024	0901	ND	<13	Palm Aire West	lime stone		
SBPW004	0-0.5	12/20/2024	0907	24	4.4	Palm Aire West	dark brown sand	26.20588	-80.1951
	0.5-2	12/20/2024	0911	ND	<8.6	Palm Aire West	light brown sand		
SBPW005	0-0.5	12/20/2024	0922	32	4.3	Palm Aire West	Dark brown sand	26.207	-80.19502
	0.5-2	12/20/2024	0926	ND	<9.7	Palm Aire West	brown sand		
SBPW006	0-0.5	12/20/2024	0936	ND	<9.3	Palm Aire West	Dark brown sand	26.20749	-80.19549
	0.5-2	12/20/2024	0940	ND	<10	Palm Aire West	dark brown sand		
SBPW007	0-0.5	12/20/2024	0957	88	7.8	Palm Aire West	dark brown sand	26.20742	-80.19248
	0.5-2	12/20/2024	1000	ND	<8.7	Palm Aire West	broawn sand		
SBPW008	0-0.5	12/20/2024	1009	257	13	Palm Aire West	dark brown sand	26.20872	-80.19212
	0.5-2	12/20/2024	1013	112	9.8	Palm Aire West	limestone		
SBPW009	0-0.5	12/20/2024	1026	22	4.1	Palm Aire West	dark brown sand	26.208000	-80.192520
	0.5-2	12/20/2024	1030	ND	<11	Palm Aire West	tan sand		
SBPW010	0-0.5	12/20/2024	1039	16	3.9	Palm Aire West	dark brown sand	26.20909	-80.195090
	0.5-2	12/20/2024	1047	ND	<8.9	Palm Aire West	brown sand		
SBPW011	0-0.5	12/20/2024	1058	23	5	Palm Aire West	dark brown sand	26.20814	-80.19146
	0.5-2	12/20/2024	1112	ND	<9.9	Palm Aire West	dark brown sand		
SBPW012	0-0.5	12/20/2024	1136	53	5.7	Palm Aire West	dark brown sand	26.20888	-80.19026
	0.5-2	12/20/2024	1140	ND	<8.9	Palm Aire West	brown sand		
SBPW013	0-0.5	12/20/2024	1150	103	8.4	Palm Aire West	dark brown sand	26.20886	-80.18945
	0.5-2	12/20/2024	1154	ND	<11	Palm Aire West	brown sand		
SBPW014	0-0.5	12/20/2024	1210	138	9.7	Palm Aire West	dark brown sand	26.20883	-80.18888
	0.5-2	12/20/2024	1215	ND	<9.2	Palm Aire West	tan sand		
SBPW015	0-0.5	12/20/2024	1122	21	4.2	Palm Aire West	dark brown sand	26.20807	-80.19038
	0.5-2	12/20/2024	1126	ND	<8.5	Palm Aire West	dark brown sand		
SBPW016	0-0.5	12/20/2024	1236	39	5.1	Palm Aire West	dark brown fine sand	26.206663	-80.191292
	0.5-2	12/20/2024	1238	ND	<11	Palm Aire West	dark brown fine sand to white fine sand		
SBPW017	0-0.5	12/20/2024	1237	19	4	Palm Aire West	dark brown sand	26.20749	-80.19134
	0.5-2	12/20/2024	1240	ND	<2.9	Palm Aire West	brown sand		
SBPW018	0-0.5	12/20/2024	1247	31	4.6	Palm Aire West	dark brown sand	26.20741	-80.1903
	0.5-2	12/20/2024	1251	ND	<8.7	Palm Aire West	brown sand		
SBPW019	0-0.5	12/20/2024	1314	120	8.8	Palm Aire West	dark brown fine sand to light brown fine sand	26.207641	-80.188703
	0.5-2	12/20/2024	1316	ND	<3.3	Palm Aire West	lime stone to fine sand		
SBPW020	0-0.5	12/20/2024	1256	220	4.2	Palm Aire West	dark brown fine sand	26.206831	-80.189194
	0.5-2	12/20/2024	1258	ND	<8.5	Palm Aire West	white fine sand		
SBPW021	0-0.5	12/20/2024	1124	22	4.1	Palm Aire West	dark brown fine sand	26.206113	-80.190075
	0.5-2	12/20/2024	1226	ND	<8.3	Palm Aire West	dark brown fine sand to pale grey fine sand		
SBPW022	0-0.5	12/20/2024	1211	58	6	Palm Aire West	dark brown fine sand	26.206149	-80.188687
	0.5-2	12/20/2024	1213	ND	<9.3	Palm Aire West	dark brown fine sand to pale grey fine sand		
	0-0.5	12/20/2024	843	20	4.3	Palm Aire West	medium brown fine sand	26.202855	-80.191788

**TABLE 6
SUMMARY OF SOIL XRF SCREENING - Palm Aire Village West
Fort Lauderdale Executive Airport
NW 62nd Avenue and NW 31st Avenue
Fort Lauderdale, Broward County, Florida**

Boring ID	Depth (ft bls)	Date	Time (24 hour)	Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)		1,400							
SCTL - Residential (mg/kg)		400							
SBPW023	0.5-2	12/20/2024	845	ND	<3.7	Palm Aire West	white fine sand		
SBPW024	0-0.5	12/20/2024	854	20	5	Palm Aire West	dark brown fine sand to pea gravel	26.202856	-80.107500
	0.5-2	12/20/2024	856	ND	<9.7	Palm Aire West	pea gravel to pale fine sand		
SBPW025	0-0.5	12/20/2024	925	51	5.9	Palm Aire West	dark brown fine sand	26.20307	-80.188586
	0.5-2	12/20/2024	927	ND	<9.0	Palm Aire West	3" lime stone to white fine sand		
SBPW026	0-0.5	12/20/2024	941	14	2.4	Palm Aire West	dark brown fine sand	26.204379	-80.188229
	0.5-2	12/20/2024	943	35	5.2	Palm Aire West	dark brown fine sand to pale grey fine sand		
SBPW027	0-0.5	12/20/2024	954	41	5.4	Palm Aire West	dark brown fine sand	26.204990	-80.188629
	0.5-2	12/20/2024	956	91	8.8	Palm Aire West	dark brown fine sand to pale grey fine sand		
SBPW028	0-0.5	12/20/2024	1036	49	5.4	Palm Aire West	dark brown fine sand	26.205090	-80.192318
	0.5-2	12/20/2024	1038	55	4.6	Palm Aire West	medium brown fine sand		
SBPW029	0-0.5	12/20/2024	1055	ND	<12	Palm Aire West	dark brown fine sand	26.204926	-80.193812
	0.5-2	12/20/2024	1057	ND	<9.7	Palm Aire West	medium brown fine sand		
SBPW030	0-0.5	12/20/2024	1114	40	5.2	Palm Aire West	dark brown fine sand	26.204270	-80.192816
	0.5-2	12/20/2024	1116	ND	<8.4	Palm Aire West	pale grey fine sand		
SBPW031	0-0.5	12/20/2024	1142	ND	<8.7	Palm Aire West	dark brown fine sand	26.206621	-80.191688
	0.5-2	12/20/2024	1144	ND	<3.3	Palm Aire West	medium grey fine sand to pale grey fine sand		
SBPW032	0-0.5	12/20/2024	1129	45	5.3	Palm Aire West	dark brown silty fine sand	26.203577	-80.190125
	0.5-2	12/20/2024	1131	24	4.2	Palm Aire West	medium brown fine sand to pale grey fine sand		
SBPW033	0-0.5	12/20/2024	1004	39	5.5	Palm Aire West	medium brown fine sand	26.204832	-80.190016
	0.5-2	12/20/2024	1006	ND	<11	Palm Aire West	medium brown fine sand		
SBPW034	0-0.5	12/20/2024	907	39	5.1	Palm Aire West	dark brown silty fine sand	26.20297	-80.189389
	0.5-2	12/20/2024	909	ND	<1.2	Palm Aire West	medium brown fine sand to pale grey fine sand		

ft bls = feet below land surface

ppm = parts per million (equivalent to milligrams per kilogram, mg/kg)

SCTL - Commercial (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Commercial/Industrial properties

SCTL - Residential (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Residential properties

SCTL - Leachability (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for leachability based on Groundwater criteria;

*** = leachability criteria derived using SPLP analyses to calculate site specific SCTL

FS = Fine sand

TABLE 7
SUMMARY OF SOIL XRF SCREENING - Palm Aire Village East
Fort Lauderdale Executive Airport
West McNab Road and NW 21st Avenue
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bls)	Date	Time (24 hour)	Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)		1,400							
SCTL - Residential (mg/kg)		400							
SBPE001	0-0.5	12/19/2024	1046	22	4.2	Palm Aire East	dark brown fine sand	26.208614	-80.185383
	0.5-2.0	12/19/2024	1048	ND	<9.4	Palm Aire East	medium brown to lt grey sand		
SBPE002	0-0.5	12/19/2024	1101	ND	<11	Palm Aire East	medium brown sand	26.208377	-80.184656
	0.5-2.0	12/19/2024	1103	ND	<3.5	Palm Aire East	light grey sand		
SBPE003	0-0.5	12/19/2024	1113	18	3.9	Palm Aire East	dark to medium brown sand	26.207829	-80.184313
	0.5-2.0	12/19/2024	1115	ND	<9	Palm Aire East	light brown sand		
SBPE004	0-0.5	12/19/2024	1120	22	4.1	Palm Aire East	dark brown sand	26.20723	-80.18419
	0.5-2.0	12/19/2024	1124	ND	<9.4	Palm Aire East	lt brown sand		
SBPE005	0-0.5	12/19/2024	1104	43	5.4	Palm Aire East	brown sand	26.20691	-80.18469
	0.5-2.0	12/19/2024	1109	ND	<8.6	Palm Aire East	white sand		
SBPE006	0-0.5	12/19/2024	1050	25	4.6	Palm Aire East	dark brown sand	26.20689	-80.18568
	0.5-2.0	12/19/2024	1055	ND	<12	Palm Aire East	lt brown to white sand		
SBPE007	0-0.5	12/19/2024	1129	13	3.5	Palm Aire East	dark brown sand	26.208744	-80.184311
	0.5-2.0	12/19/2024	1131	ND	<3.4	Palm Aire East	lt brown to lt grey sand		
SBPE008	0-0.5	12/19/2024	1147	ND	<3.9	Palm Aire East	dark to medium brown sand	26.206989	-80.183598
	0.5-2.0	12/19/2024	1149	ND	<3.4	Palm Aire East	light grey sand		
SBPE009	0-0.5	12/19/2024	1157	ND	<11	Palm Aire East	dark to medium brown sand	26.207860	-80.193520
	0.5-2.0	12/19/2024	1159	ND	<9.5	Palm Aire East	light grey sand		
SBPE010	0-0.5	12/19/2024	1209	ND	<9.6	Palm Aire East	dark to pale brown sand	26.208618	-80.182791
	0.5-2.0	12/19/2024	1211	ND	<9.0	Palm Aire East	pale brown to white sand		
SBPE011	0-0.5	12/19/2024	1144	18	4	Palm Aire East	dark brown sand	26.20866	-80.18146
	0.5-2.0	12/19/2024	1148	ND	<8.4	Palm Aire East	brown sand		
SBPE012	0-0.5	12/19/2024	1154	22	4.4	Palm Aire East	dark brown sand	26.2087	-80.18027
	0.5-2.0	12/19/2024	1158	ND	<3.4	Palm Aire East	lt brown sand		
SBPE013	0-0.5	12/19/2024	1209	26	4.5	Palm Aire East	dark brown sand	26.20768	-80.18028
	0.5-2.0	12/19/2024	1212	ND	<10	Palm Aire East	grey sand		
SBPE014	0-0.5	12/19/2024	1221	18	3.9	Palm Aire East	dark brown sand	26.20753	-80.18122
	0.5-2.0	12/19/2024	1225	ND	<8.5	Palm Aire East	lt brown sand		
SBPE015	0-0.5	12/19/2024	1231	13	3.5	Palm Aire East	dark brown sand	26.20730	-80.18194
	0.5-2.0	12/19/2024	1235	ND	<9.0	Palm Aire East	lt brown sand		
SBPE016	0-0.5	12/19/2024	1227	37	5.9	Palm Aire East	dark brown silty sand	26.207042	-80.182751
	0.5-2.0	12/19/2024	1229	ND	<8.7	Palm Aire East	road base		
SBPE017	0-0.5	12/19/2024	1248	ND	<12	Palm Aire East	road base with brown to white sand	26.206416	-80.184352
	0.5-2.0	12/19/2024	1250	ND	<3.1	Palm Aire East	dark brown sand		
SBPE018	0-0.5	12/19/2024	1309	21	4.1	Palm Aire East	medium to lt grey sand	26.206472	-80.182675
	0.5-2.0	12/19/2024	1311	ND	<9.3	Palm Aire East	dark brown sand		
SBPE019	0-0.5	12/19/2024	1326	22	4.6	Palm Aire East	medium brown sans	26.206505	-80.181158
	0.5-2.0	12/19/2024	1328	ND	<3.8	Palm Aire East	light brown sand		
SBPE020	0-0.5	12/19/2024	1307	32	4.8	Palm Aire East	dark brown sand	26.20642	-80.18030
	0.5-2.0	12/19/2024	1310	ND	<8.4	Palm Aire East	lt brown sand		
SBPE021	0-0.5	12/19/2024	1251	13	3.5	Palm Aire East	dark brown sand	26.20663	-80.17847
	0.5-2.0	12/19/2024	1256	ND	<8.6	Palm Aire East	lt brown sand		
SBPE022	0-0.5	12/19/2024	1400	12	3.4	Palm Aire East	dark brown sand	26.20752	-80.178909
	0.5-2.0	12/19/2024	1402	ND	<8.6	Palm Aire East	light grey sand		
SBPE023	0-0.5	12/19/2024	1411	ND	<9.6	Palm Aire East	dark brown to lt grey sand	26.207673	-80.178000

TABLE 7
SUMMARY OF SOIL XRF SCREENING - Palm Aire Village East
Fort Lauderdale Executive Airport
West McNab Road and NW 21st Avenue
Fort Lauderdale, Broward County, Florida

Boring ID	Depth (ft bls)	Date	Time (24 hour)	Lead		Area	Comment	Latitude	Longitude
				(ppm)	(+/-)				
SCTL - Commercial (mg/kg)		1,400							
SCTL - Residential (mg/kg)		400							
	0.5-2.0	12/19/2024	1413	ND	<8.6	Palm Aire East	white sand		
SBPE024	0-0.5	12/19/2024	1422	48	5.8	Palm Aire East	dark brown sand	26.207734	-80.176662
	0.5-2.0	12/19/2024	1424	ND	<9.9	Palm Aire East	light grey sand		
SBPE025	0-0.5	12/19/2024	1417	23	4.1	Palm Aire East	dark brown sand	26.20783	-80.17588
	0.5-2.0	12/19/2024	1421	ND	<3.3	Palm Aire East	brown sand		
SBPE026	0-0.5	12/19/2024	1406	19	3.9	Palm Aire East	dark brown sand	26.2091	-80.17593
	0.5-2.0	12/19/2024	1410	ND	<8.9	Palm Aire East	lt brown sand		
SBPE027	0-0.5	12/19/2024	1439	27	4.6	Palm Aire East	darl brown sand	26.208020	-80.175233
	0.5-2.0	12/19/2024	1441	ND	<9.8	Palm Aire East	dark brown silty sand		
SBPE028	0-0.5	12/19/2024	1456	17	3.9	Palm Aire East	dark brown sand	26.209051	-80.174674
	0.5-2.0	12/19/2024	1458	ND	<10	Palm Aire East	medium brown sand		
SBPE029	0-0.5	12/19/2024	1455	18	4.2	Palm Aire East	dark brown sand	26.20852	-80.17379
	0.5-2.0	12/19/2024	1500	ND	<8.7	Palm Aire East	brown sand		
SBPE030	0-0.5	12/19/2024	1511	17	3.6	Palm Aire East	dark brown sand	26.209342	-80.173018
	0.5-2.0	12/19/2024	1513	ND	<9.1	Palm Aire East	medium brown sand		
SBPE031	0-0.5	12/19/2024	1441	35	5	Palm Aire East	dark brown sand	26.20859	-80.17235
	0.5-2.0	12/19/2024	1445	ND	<9.9	Palm Aire East	brown sand		
SBPE032	0-0.5	12/19/2024	1428	32	5.0	Palm Aire East	dark brown sand	26.20852	-80.1719
	0.5-2.0	12/19/2024	1434	14	3.7	Palm Aire East	brown sand		
SBPE033	0-0.5	12/19/2024	1527	28	4.6	Palm Aire East	dark brown sand	26.20736	-80.17523
	0.5-2.0	12/19/2024	1530	ND	<9.6	Palm Aire East	brown sand		
SBPE034	0-0.5	12/19/2024	1551	ND	<11	Palm Aire East	dark brown sand	26.20677	-80.1745
	0.5-2.0	12/19/2024	1555	ND	<10	Palm Aire East	brown sand		
SBPE035	0-0.5	12/19/2024	1623	15	3.5	Palm Aire East	dark brown sand	26.20684	-80.17313
	0.5-2.0	12/19/2024	1627	ND	<11	Palm Aire East	brown sand		
SBPE036	0-0.5	12/19/2024	1543	25	4.5	Palm Aire East	dark brown sand	26.206909	-80.172316
	0.5-2.0	12/19/2024	1545	ND	<8.3	Palm Aire East	medium brown sand		
SBPE037	0-0.5	12/19/2024	1529	30	4.8	Palm Aire East	dark brown sand	26.207606	-80.172230
	0.5-2.0	12/19/2024	1531	ND	<32	Palm Aire East	light brown sand		
SBPE038	0-0.5	12/19/2024	1554	18	4	Palm Aire East	dark brown sand	26.207512	-80.173100
	0.5-2.0	12/19/2024	1556	ND	<10	Palm Aire East	medium brown sand		
SBPE039	0-0.5	12/19/2024	1606	14	3.5	Palm Aire East	dark brown sand	26.207330	-80.173870
	0.5-2.0	12/19/2024	1610	ND	<11	Palm Aire East	light brown to grey sand		
SBPE040	0-0.5	12/19/2024	1536	ND	<9	Palm Aire East	dark brown sand	26.20775	-80.17453
	0.5-2.0	12/19/2024	1540	ND	<10	Palm Aire East	lt brown to brown sand		

ft bls = feet below land surface

ppm = parts per million (equivalent to milligrams per kilogram, mg/kg)

SCTL - Commercial (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Commercial/Industrial properties

SCTL - Residential (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for Residential properties

SCTL - Leachability (mg/kg) = Soil Cleanup Target Level established in Chapter 62-777 FAC for leachability based on Groundwater criteria;

*** = leachability criteria derived using SPLP analyses to calculate site specific SCTL

FS = Fine sand

**TABLE 8
 SUMMARY OF SOIL LABORATORY ANALYSIS
 Fort Lauderdale Executive Airport
 Various Locations
 Fort Lauderdale, Broward County, Florida**

Boring ID	Depth (ft bls)	Date	Time (24 hour)	XRF Lead		Lab Lead (mg/kg)	Area
				(ppm)	(+/-)		
SCTL - Commercial (mg/kg)			1400				
SCTL - Residential (mg/kg)			400				
SBTL004	0-0.5	12/3/2024	1414	182	3	150	Twin Lakes
SBTL016	0-0.5	12/3/2024	1003	129	3	56	Twin Lakes
SBTL018	0-0.5	12/3/2024	936	139	3	69	Twin Lakes
SBCondo010	0-0.5	12/2/2024	1248	36.2	2	140	Palm Aire Condos

Notes:

ppm = parts per million

mg/kg = milligrams per kilo gram

1 ppm equals 1 mg/kg

TABLE 9
SUMMARY OF AIR SAMPLING DATA
Fort Lauderdale Executive Airport
Various Neighborhoods Around the Airport
Fort Lauderdale, Broward County, Florida

Sample ID	Date	Pumping Rate (L/min)	Start Time (24 hour)	Stop Time (24 hour)	Sample Volume rate x time	Lead in Air NIOSH 7300 Modified $\mu\text{g}/\text{m}^3$	NIOSH REL $\mu\text{g}/\text{m}^3$	Area
ARL001	11/25/2024	2.2	1010	1554	757	<0.66	50	Loft of Palm Aire
ARL002	11/26/2024	2.2	0721	1541	1100	<0.45	50	Loft of Palm Aire
ARP001	11/25/2024	2.2	1052	1804	950	<0.53	50	City Park
ARP002	11/26/2024	2.2	0738	1556	1096	<0.46	50	City Park
ARTL001	12/2/2024	2.2	0945	1745	1056	<0.47	50	Twin Lakes
ARTL002	12/3/2024	2.2	0738	1616	1140	<0.44	50	Twin Lakes
ARCondo001	12/2/2024	2.2	1033	1833	1056	<0.47	50	Palm Aire Village Condos
ARCondo002	12/3/2024	2.2	0710	1510	1056	<0.47	50	Palm Aire Village Condos
ARPW001	12/19/2024	2.2	0947	1903	1223	<0.41	50	Palm Aire Village West
ARPW002	12/20/2024	2.2	0758	1551	1041	<0.48	50	Palm Aire Village West
ARPE001	12/19/2024	2.2	1017	1849	1122	<0.45	50	Palm Aire Village East
ARPE002	12/20/2024	2.2	0723	1537	1087	<0.46	50	Palm Aire Village East

Notes:

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

L/min = liters per minute

Appendix

Appendix A

Laboratory Reports



ANALYTICAL REPORT

Report Date: December 11, 2024

Gabrielle Enos
GDH
5904 Hampton Oaks Pkwy Suite F
Tampa, FL 33610

E-mail: gabriella.enos@gdh.com

Workorder: **34-2434121**

Client Project ID: FXE Neighborhoods
Purchase Order: NA
Project Manager: Patrick Noteboom

Analytical Results

Sample ID: ARL001	Sampling Location: FXE Neighborhoods		Collected: 11/25/2024
Lab ID: 2434121001			Received: 12/05/2024
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter	Instrument: ICP13	
Dilution: 1	Sampling Parameter: Air Volume 756.8 L	Prepared: 12/09/2024 (323388)	
		Analyzed: 12/10/2024 (323443)	
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.66	0.50

Sample ID: ARL002	Sampling Location: FXE Neighborhoods		Collected: 11/26/2024
Lab ID: 2434121002			Received: 12/05/2024
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter	Instrument: ICP13	
Dilution: 1	Sampling Parameter: Air Volume 1100 L	Prepared: 12/09/2024 (323388)	
		Analyzed: 12/10/2024 (323443)	
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.45	0.50

Sample ID: ARP001	Sampling Location: FXE Neighborhoods		Collected: 11/25/2024
Lab ID: 2434121003			Received: 12/05/2024
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter	Instrument: ICP13	
Dilution: 1	Sampling Parameter: Air Volume 950.4 L	Prepared: 12/09/2024 (323388)	
		Analyzed: 12/10/2024 (323443)	
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.53	0.50



ANALYTICAL REPORT

Workorder: **34-2434121**

Client Project ID: FXE Neighborhoods

Purchase Order: NA

Project Manager: Patrick Noteboom

Analytical Results

Sample ID: ARP002	Collected: 11/26/2024		
Lab ID: 2434121004	Received: 12/05/2024		
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter		
Dilution: 1	Instrument: ICP13		
Sampling Location: FXE Neighborhoods	Prepared: 12/09/2024 (323388)		
Sampling Parameter: Air Volume 1095.6 L	Analyzed: 12/10/2024 (323443)		
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.46	0.50

Sample ID: ARTL001	Collected: 12/02/2024		
Lab ID: 2434121005	Received: 12/05/2024		
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter		
Dilution: 1	Instrument: ICP13		
Sampling Location: FXE Neighborhoods	Prepared: 12/09/2024 (323388)		
Sampling Parameter: Air Volume 1056 L	Analyzed: 12/10/2024 (323443)		
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.47	0.50

Sample ID: ARCondo001	Collected: 12/02/2024		
Lab ID: 2434121006	Received: 12/05/2024		
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter		
Dilution: 1	Instrument: ICP13		
Sampling Location: FXE Neighborhoods	Prepared: 12/09/2024 (323388)		
Sampling Parameter: Air Volume 1056 L	Analyzed: 12/10/2024 (323443)		
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.47	0.50

Sample ID: ARTL002	Collected: 12/03/2024		
Lab ID: 2434121007	Received: 12/05/2024		
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter		
Dilution: 1	Instrument: ICP13		
Sampling Location: FXE Neighborhoods	Prepared: 12/09/2024 (323388)		
Sampling Parameter: Air Volume 1140 L	Analyzed: 12/10/2024 (323443)		
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.44	0.50

Sample ID: ARCondo002	Collected: 12/03/2024		
Lab ID: 2434121008	Received: 12/05/2024		
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter		
Dilution: 1	Instrument: ICP13		
Sampling Location: FXE Neighborhoods	Prepared: 12/09/2024 (323388)		
Sampling Parameter: Air Volume 1056 L	Analyzed: 12/10/2024 (323443)		
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.47	0.50



ANALYTICAL REPORT

Workorder: **34-2434121**

Client Project ID: FXE Neighborhoods

Purchase Order: NA

Project Manager: Patrick Noteboom

Comments

Quality Control: - (Batch: 323388)

LMB 876696 was above the reporting limit for zinc. It appears to have been contaminated during prep. LRB 876695 and RLVS 876899 did not appear to have zinc contamination. NC/CAR 2,875 was initiated due to this occurrence.

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method (Analysis Batch)	Analyst	Peer Review
NIOSH 7300 Mod., MCE (323443)	/S/ Joanna C. Sanchez 12/10/2024 15:28	/S/ Kristie F. Bitner 12/11/2024 08:34

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alsit.lab@ALSGlobal.com
Web: www.alsglobal.com/sit

General Lab Comments

The results provided in this report relate only to the items tested.
Samples were received in acceptable condition unless otherwise noted.
The following was provided by the client: Sample ID, Collection Date, Sampling Location, Media Type, Sampling Parameter.
Collection Date, Media Type, and Sampling Parameter can potentially affect the validity of the results.
Samples have not been blank corrected unless otherwise noted.
This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP)	101574	http://www.aihaaccreditedlabs.org
	DOECAP-AP	L24-29	http://www.pllabs.com
	Washington	C596	https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation



ANALYTICAL REPORT

Workorder: **34-2434121**

Client Project ID: FXE Neighborhoods

Purchase Order: NA

Project Manager: Patrick Noteboom

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

NA = Not Applicable.

** No result could be reported, see sample comments for details.

< Means this testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.



ANALYTICAL REPORT

Report Date: December 31, 2024

Gabrielle Enos
GDH
5904 Hampton Oaks Pkwy Suite F
Tampa, FL 33610

E-mail: Gabrielle.enos@ghd.com

Workorder: **34-2436216**

Client Project ID: FXE Neighborhoods
Purchase Order: 340-022083
Project Manager: Patrick Noteboom

Analytical Results

Sample ID: ARPW001	Sampling Location: FXE Neighborhoods		Collected: 12/19/2024
Lab ID: 2436216001			Received: 12/27/2024
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter	Instrument: ICP13	
Dilution: 1	Sampling Parameter: Air Volume 1223.2 L	Prepared: 12/30/2024 (323934)	
		Analyzed: 12/30/2024 (323961)	
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.41	0.50

Sample ID: ARPE001	Sampling Location: FXE Neighborhoods		Collected: 12/19/2024
Lab ID: 2436216002			Received: 12/27/2024
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter	Instrument: ICP13	
Dilution: 1	Sampling Parameter: Air Volume 1122 L	Prepared: 12/30/2024 (323934)	
		Analyzed: 12/30/2024 (323961)	
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.45	0.50

Sample ID: ARPE002	Sampling Location: FXE Neighborhoods		Collected: 12/20/2024
Lab ID: 2436216003			Received: 12/27/2024
Method: NIOSH 7300 Mod., MCE	Media: MCE Filter	Instrument: ICP13	
Dilution: 1	Sampling Parameter: Air Volume 1086.8 L	Prepared: 12/30/2024 (323934)	
		Analyzed: 12/30/2024 (323961)	
Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.46	0.50



ANALYTICAL REPORT

Workorder: **34-2436216**

Client Project ID: FXE Neighborhoods

Purchase Order: 340-022083

Project Manager: Patrick Noteboom

Analytical Results

Sample ID: **ARPW002** Collected: 12/20/2024
 Lab ID: 2436216004 Received: 12/27/2024
 Sampling Location: FXE Neighborhoods

Method: **NIOSH 7300 Mod., MCE** Media: MCE Filter Instrument: ICP13
 Dilution: 1 Sampling Parameter: Air Volume 1040.6 L Prepared: 12/30/2024 (323934)
Analyzed: 12/30/2024 (323961)

Analyte	Result (ug/sample)	Result (ug/m ³)	RL (ug/sample)
Lead	<0.50	<0.48	0.50

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method (Analysis Batch)	Analyst	Peer Review
NIOSH 7300 Mod., MCE (323961)	/S/ Ethan Hamilton 12/30/2024 16:22	/S/ Kristie F. Bitner 12/31/2024 12:12

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alsit.lab@ALSGlobal.com
Web: www.alsglobal.com/sit

General Lab Comments

The results provided in this report relate only to the items tested.
 Samples were received in acceptable condition unless otherwise noted.
 The following was provided by the client: Sample ID, Collection Date, Sampling Location, Media Type, Sampling Parameter, Collection Date, Media Type, and Sampling Parameter can potentially affect the validity of the results.
 Samples have not been blank corrected unless otherwise noted.
 This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP)	101574	http://www.aihaaccreditedlabs.org
	DOECAP-AP Washington	L24-29 C596	http://www.pjilabs.com https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation



ANALYTICAL REPORT

Workorder: **34-2436216**

Client Project ID: FXE Neighborhoods

Purchase Order: 340-022083

Project Manager: Patrick Noteboom

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

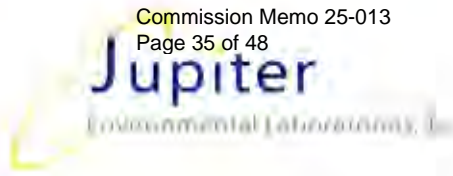
ND = Not Detected, Testing result not detected above the LOD or LOQ.

NA = Not Applicable.

** No result could be reported, see sample comments for details.

< Means this testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.



Jupiter Environmental Laboratories, Inc.
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December 12, 2024

Gabrielle Enos
GHD Tampa
5904 Hampton Oaks Parkway
Suite F
Tampa, FL 33610

RE: LOG# 2493374
Project ID: Ft Lauderdale Exec Airport

Dear Gabrielle Enos:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, December 05, 2024. Results reported herein conform to the most current NELAC standards, where applicable, unless indicated by * in the body of the report. The enclosed Chain of Custody is a component of this package and should be retained with the package and incorporated therein.

Results for all solid matrices are reported in dry weight unless otherwise noted. Results for all liquid matrices are reported as received in the laboratory unless otherwise noted. Results relate only to the samples received. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

Samples are disposed of after 30 days of their receipt by the laboratory unless extended storage is requested in writing. The laboratory maintains the right to charge storage fees for archived samples. This report will be archived for 5 years after which time it will be destroyed without further notice, unless prior arrangements have been made.

Certain analyses are subcontracted to outside NELAC certified laboratories, please see the Project Summary section of this report for NELAC certification numbers of laboratories used. A Statement of Qualifiers is available upon request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole Leing for
Kacia Baldwin
kaciab@jupiterlabs.com



CASE NARRATIVE

Jupiter Environmental Laboratories Inc. Lab Reference No./SDG: 2493374

Client: GHD Tampa

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

The following samples were diluted:

ClientID	LabID	Method	Dilution
SBCondo010 (0-.5)	2493374001	EPA 6020B	2
SBTL018 (0-.5)	2493374002	EPA 6020B	2
SBTL016 (0-.5)	2493374003	EPA 6020B	2
SBTL004 (0-.5)	2493374004	EPA 6020B	2

II. METHODS

Samples were analyzed according to JEL's Standard Operating Procedures for following Method(s):
EPA 6020B, SM 2540G

III. Analysis

Sample analysis proceeded normally with the exception of following:

Exceptions:

Method: EPA 6020B

Flag: J4h|MS/MSD recovery exceeded control limits due to high background sample concentration.

LCS/LCSD recovery was within acceptable range.

Following Samples/Analytes were flagged:

- LabID: 321215; MS
Analytes: Lead

- LabID: 2493374004; SampleID: SBTL004 (0-.5)
Analytes: Lead

Flag: L1|Reported value is above the calibration range but is within the instrument LDR (Linear Dynamic Range).

Following Samples/Analytes were flagged:

- LabID: 2493374001; SampleID: SBCondo010 (0-.5)
Analytes: Lead

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Jupiter Environmental Laboratories, Inc., both technically and for completeness, for other than the conditions detailed in the SDG Narrative. Release of the data contained in this hardcopy data package and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

SIGNED: DATE: 12/12/24



SAMPLE ANALYTE COUNT

Workorder: 2493374

Project ID: Ft Lauderdale Exec Airport

Lab ID	Sample ID	Method	Analytes Reported
2493374001	SBCondo010 (0- 5)	EPA 6020B	1
		SM 2540G	1
2493374002	SBTL018 (0- 5)	EPA 6020B	1
		SM 2540G	1
2493374003	SBTL016 (0- 5)	EPA 6020B	1
		SM 2540G	1
2493374004	SBTL004 (0- 5)	EPA 6020B	1
		SM 2540G	1



SAMPLE SUMMARY

Workorder: 2493374

Project ID: Ft Lauderdale Exec Airport

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2493374001	SBCondo010 (0-.5)	Soil/Solid	12/2/2024 12:48	12/5/2024 08:30
2493374002	SBTL018 (0-.5)	Soil/Solid	12/3/2024 09:36	12/5/2024 08:30
2493374003	SBTL016 (0-.5)	Soil/Solid	12/3/2024 10:03	12/5/2024 08:30
2493374004	SBTL004 (0-.5)	Soil/Solid	12/3/2024 14:14	12/5/2024 08:30



ANALYTICAL RESULTS

Workorder: 2493374

Project ID: Ft Lauderdale Exec Airport

Lab ID: **2493374001** Date Received: 12/5/2024 08:30 Matrix: Soil/Solid
Sample ID: **SBCondo010 (0-5)** Date Collected: 12/2/2024 12:48

Parameters	Results	Units	PQL	MDL	DF Prepared	By	Analyzed	By	Qual
Wet Chemistry									
Analysis Desc: 2540G Percent Solids (Dryweight)					Analytical Method: SM 2540G				
Percent Solids (Dryweight)	94.7	%	0.1		1		12/10/2024 11:23	NI	
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B (mod)				
					Analytical Method: EPA 6020B				
Lead	140	mg/Kg	0.53	0.082	2	12/6/2024 15:36	DB	12/7/2024 00:42	DB L1



ANALYTICAL RESULTS

Workorder: 2493374
Project ID: Ft Lauderdale Exec Airport

Lab ID: **2493374002** Date Received: 12/5/2024 08:30 Matrix: Soil/Solid
Sample ID: **SBTL018 (0-.5)** Date Collected: 12/3/2024 09:36

Parameters	Results	Units	PQL	MDL	DF Prepared	By	Analyzed	By	Qual
Wet Chemistry									
Analysis Desc: 2540G Percent Solids (Dryweight)					Analytical Method: SM 2540G				
Percent Solids (Dryweight)	96.1	%	0.1		1		12/10/2024 11:23	NI	
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B (mod)				
					Analytical Method: EPA 6020B				
Lead	69	mg/Kg	0.52	0.081	2	12/6/2024 15:36	DB	12/7/2024 00:46	DB



ANALYTICAL RESULTS

Workorder: 2493374
 Project ID: Ft Lauderdale Exec Airport

Lab ID: **2493374003** Date Received: 12/5/2024 08:30 Matrix: Soil/Solid
 Sample ID: **SBTL016 (0-.5)** Date Collected: 12/3/2024 10:03

Parameters	Results	Units	PQL	MDL	DF Prepared	By	Analyzed	By	Qual
Wet Chemistry									
Analysis Desc: 2540G Percent Solids (Dryweight)					Analytical Method: SM 2540G				
Percent Solids (Dryweight)	95.5	%	0.1		1		12/10/2024 11:27	NI	
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B (mod)				
					Analytical Method: EPA 6020B				
Lead	56	mg/Kg	0.52	0.082	2	12/6/2024 15:36	DB	12/7/2024 00:51	DB



ANALYTICAL RESULTS

Workorder: 2493374
Project ID: Ft Lauderdale Exec Airport

Lab ID: **2493374004** Date Received: 12/5/2024 08:30 Matrix: Soil/Solid
Sample ID: **SBTL004 (0-.5)** Date Collected: 12/3/2024 14:14

Parameters	Results	Units	PQL	MDL	DF Prepared	By	Analyzed	By	Qual
Wet Chemistry									
Analysis Desc: 2540G Percent Solids (Dryweight)					Analytical Method: SM 2540G				
Percent Solids (Dryweight)	96.4	%	0.1		1		12/10/2024 11:26	NI	
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B (mod)				
					Analytical Method: EPA 6020B				
Lead	150	mg/Kg	0.52	0.081	2	12/6/2024 15:36	DB	12/7/2024 00:55	DB J41





ANALYTICAL RESULTS QUALIFIERS

Workorder: 2493374

Project ID: Ft Lauderdale Exec Airport

PARAMETER QUALIFIERS

- J4h MS/MSD recovery exceeded control limits due to high background sample concentration. LCS/LCSD recovery was within acceptable range.
- L1 Reported value is above the calibration range but is within the instrument LDR (Linear Dynamic Range).

PROJECT COMMENTS

- 2493374 A reported value of U indicates that the compound was analyzed for but not detected above the MDL. A value flagged with an "I" flag indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit.





QUALITY CONTROL DATA

Workorder: 2493374

Project ID: Ft Lauderdale Exec Airport

QC Batch:	MXX/16723	Analysis Method:		EPA 6020B		
QC Batch Method:	EPA 3050B (mod)					
Associated Lab Samples:	2493374001	2493374002	2493374003	2493374004	2493392021	2493392022
	2493392023	2493392024	2493392025	2493392026	2493392027	2493392028
	2493392029	2493392030				

METHOD BLANK: 321211

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Lead	mg/Kg	U	0.039	

LABORATORY CONTROL SAMPLE & LCSD: 321212 321213

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Lead	mg/Kg	10	9.3	9.2	93.2	91.5	80-120	1.08	20	

MATRIX SPIKE SAMPLE: 321215 Original: 2493374004

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/Kg	150	20	180	151	75-125	J4H

SAMPLE DUPLICATE: 321214 Original: 2493374004

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Lead	mg/Kg	150	160	0	20	



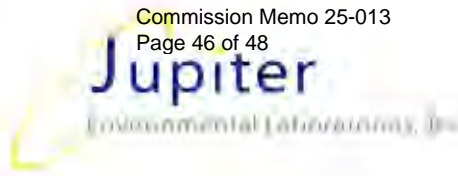
QUALITY CONTROL DATA QUALIFIERS

Workorder: 2493374
Project ID: Ft Lauderdale Exec Airport

QUALITY CONTROL PARAMETER QUALIFIERS

J4H MS/MSD recovery exceeded control limits due to high background sample concentration. LCS/LCSD recovery was within acceptable range.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 2493374

Project ID: Ft Lauderdale Exec Airport

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2493374001	SBCondo010 (0-.5)	EPA 3050B (mod)	MXX/16723	EPA 6020B	MMS/14858
2493374002	SBTL018 (0-.5)	EPA 3050B (mod)	MXX/16723	EPA 6020B	MMS/14858
2493374003	SBTL016 (0-.5)	EPA 3050B (mod)	MXX/16723	EPA 6020B	MMS/14858
2493374004	SBTL004 (0-.5)	EPA 3050B (mod)	MXX/16723	EPA 6020B	MMS/14858
2493374001	SBCondo010 (0-.5)	SM 2540G	WGR/6479		
2493374002	SBTL018 (0-.5)	SM 2540G	WGR/6479		
2493374003	SBTL016 (0-.5)	SM 2540G	WGR/6479		
2493374004	SBTL004 (0-.5)	SM 2540G	WGR/6479		



SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	2493374	Profile:	2177
Client:	GHD Tampa	Project:	Gabriele Eno
Level:	1	Date Rec'd:	12/5/2024 8:30:00 AM
Rec'd via:	courier		

Cooler Check

ID	Temp (C)	# of samples	Arrived on Ice	Security Present	Tape Intact	Comments	Temp Gun ID
	4.7	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Temp Gun 2

Checked By: AW

Sample Verification

Loose Caps?	No	All Samples on COC accounted For?	Yes
Broken Containers?	No	All Samples on COC?	Yes
pH Verified?	No	Written on Internal COC?	No
pH Strip Lot #		Sample Vol. Suff. For Analysis?	Yes
Acid Preserved Samples Lot #		Samples Rec'd W/ Hold Time?	Yes
Base Preserved Samples Lot #		Are All Samples to be Analyzed?	Yes
Samples Received From	courier	Correct Sample Containers?	Yes
Soil Origin (Domestic/Foreign)	Domestic	COC Comments written on COC?	No
Site Location/Project on COC?	Yes	Samplers Initials on COC?	Yes
Client Project # on COC?	Yes	Sample Date/Time Indicated?	Yes
Project Mgr. Indicated on COC	Yes	TAT Requested:	STD
COC relinquished/Dated by Client?	Yes	Client Requests Verbal Results?	No
COC Received/Dated by JEL	Yes	Client Notified of discrepancies?	No
JEL to Conduct ALL Analyses?	Yes	Do VOC vials have headspace or a bubble >6mm (1/4")?	N/A
Number of Encores	0	Number of Lab Filtered Metals	0

Samples Labeled by AW o 12/5/2024 Labels Confirmed by o

Subcontract Analysis

Parameter	Via	Lab Name	Comments
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