PDK Aviation Park

Soil Sample Testing

March 18, 2020

DEKALB-PEACHTREE AIRPORT

KOREY BARNES

| 2000 Airport Rd Ste 212 Atlanta, Ga 30341

AVIATION PARK SOIL SAMPLE TESTING

March 18, 2020

Project Background and Description

Lead in Avgas has been a growing concern with communities and its members that live near Peachtree-DeKalb Airport (PDK). The major issue concerning the lead in Avgas is how many individuals, especially children, are exposed to it, how much lead they are being exposed to, and the levels at which it becomes harmful. Lead (pB), being a natural element, is found naturally in the air and soil, these levels are normally observed around 15 to 40 parts per million (ppm) or milligram per kilogram (mg/kg). According to EPA standards, unsafe levels of Lead in bare soil begins at 400 ppm in playground area and 1200 ppm for other areas[1]. PDK is unique in that there is a park located near the Aircraft Movement Area (AMA) that community members and their families can come to enjoy and watch airplanes as they operate on the airfield[2]. Being that children are the primary concern when it comes to the Lead issue the aviation park at PDK is the focus area of this project.

Figure 1-EPA Standards for soil – p2

Project Scope

For This project 5 spots were chosen at random in and around the park area as sampling sites[3]. For each site a sure shape whole was dug measuring approximately 8"X8", as well as 6" to 8" deep depending on the condition of the soil underneath. Wet or dry soil was not taken into consideration as the saturation level of the soil was able to be determined and factored in to determine the lead amount, if any, that was observed in the soil sample. After analyzing and testing were we able to determine the lead amounts in the soil at each of the sample sites.

Figure 2-Aerial view of Park with Sample points – p3

High-Level Testing Requirements

In order to complete this project the soil samples had to be tested by an accredited, county approved facility. For this reason the soil samples were sent to Analytical Environmental Services. Inc. (AES). AES is a highly established and creditable company who has been in the Environmental analyst business for almost 30 years[4].

Figure 3-AES Accreditation and Certificates – p4

Results

After a week of testing the results of the soil samples came back from AES. All spots that were tested fell below the natural occurrence level of lead in bare soil[5] and below the unsafe levels of Lead in soil.

Figure 4-Testing results – p5 *6-AES Technical Sample Results – Appendix p8-p18*

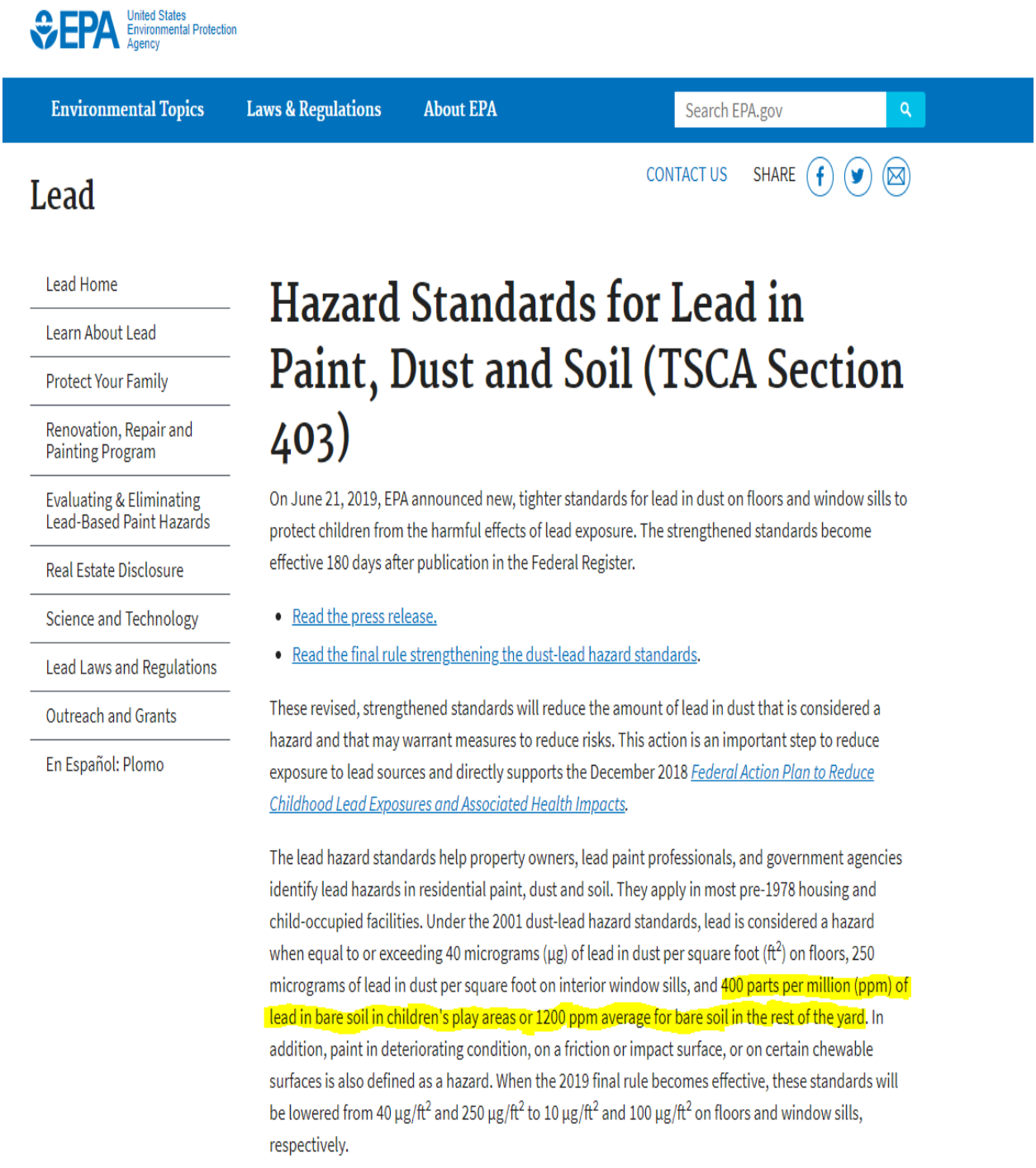

Figure 1: EPA Lead in Soil Standards, *https://www.epa.gov/lead/hazard-standards-lead-paint-dust-and-soil-tsca-section-403*

Figure 2: PDK Aviation Park with Sample Location Points – *Google Earth, 2020*

Figure 3: AES Qualification and Accreditations, *http://12.201.98.205/Certifications.aspx*

Soil Sample Results

(Samples taken Feb 19, 2020)

Sample I.D.	***Parameters***	***Benchmark Value***	***Results***
Location 1	*Lead (pB) Content*	*15 – 40 mg/kg*	*33.2 mg/kg*
Location 2	*Lead (pB) Content*	*15 – 40 mg/kg*	*11.4 mg/kg*
Location 3	*Lead (pB) Content*	*15 – 40 mg/kg*	*25.5 mg/kg*
Location 4	*Lead (pB) Content*	*15 – 40 mg/kg*	*19.8 mg/kg*
Location 5	*Lead (pB) Content*	*15 – 40 mg/kg*	*27.0 mg/kg*

Figure 4: Sample Testing Results, *AES*

Appendix – AES Technical Report

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AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 27, 2020

Korey Barnes
Peachtree Dekalb Airport

2000 Airport Rd
Atlanta GA 30341

RE: Peachtree/Dekalb Airport

Dear Korey Barnes: Order No: 2002K15

Analytical Environmental Services, Inc. received 5 samples on 2/19/2020 3:52:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/19-06/30/20.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective through 06/30/20 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Metals and PCM Asbestos), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/21.
These results relate only to the items tested as received. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Corene Dephillips

Project Manager

3080 Presidential Drive • Atlanta, Georgia 30340 • Tel: 770.457.8177 • Fax: 770.457.8188 • Toll Free: 800.972.4889
www.aesatlanta.com

AES | ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Analytical Environmental Services, Inc.
3080 Presidential Drive, Atlanta, GA 30340-3704

CHAIN OF CUSTODY

Work Order: 2002K15
Page ___ of ___

COMPANY:	ADDRESS:
DeKalb-Peachtree Airport	2000 Airport Rd Ste 212 Atlanta, Ga 30341
PHONE: 770-936-5440	EMAIL: Kbarnes@dekalbcountyga.gov
SAMPLED BY: Korey Barnes	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: Lead	PRESERVATION (see codes)	REMARKS	Number of Containers
1	Spot 1	2/19/2020	1455	✓		Soil	✓			1
2	Spot 2	2/19/2020	1500	✓			✓			1
3	Spot 3	2/19/2020	1503	✓			✓			1
4	Spot 4	2/19/2020	1510	✓			✓			1
5	Spot 5	2/19/20	1515	✓			✓			1
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Korey Barnes	2/19/2020 1552	1.	2/19/2020 1552
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
(Client) FedEx UPS US mail courier
other: _____

PROJECT INFORMATION
PROJECT NAME:
PROJECT #:
SITE ADDRESS: 2000 Airport Rd Ste 212 Atlanta, Ga 30341
SEND REPORT TO: Korey Barnes
INVOICE TO (IF DIFFERENT FROM ABOVE): Camellia Hyde cahyatch@dekalbcountyga.gov
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 5

Turnaround Time (TAT) Request
- [x] Standard
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same-Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Client assumes sole responsibility for damage or loss of samples before we accept them. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arrangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water ST=Stormwater WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + Ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

7.15.19_COC

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 27-Feb-20

Client:	Peachtree Dekalb Airport	**Client Sample ID:**	SPOT 1
Project Name:	Peachtree/Dekalb Airport	**Collection Date:**	2/19/2020 2:55:00 PM
Lab ID:	2002K15-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				(SW3050B)				
Lead	33.2	5.23		mg/Kg-dry	293065	1	02/27/2020 14:46	KB
PERCENT MOISTURE D2216								
Percent Moisture	20.6	0		wt%	R418922	1	02/21/2020 00:00	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-20

Client:	Peachtree Dekalb Airport	**Client Sample ID:**	SPOT 2
Project Name:	Peachtree/Dekalb Airport	**Collection Date:**	2/19/2020 3:00:00 PM
Lab ID:	2002K15-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D					(SW3050B)			
Lead	11.4	3.96		mg/Kg-dry	293065	1	02/27/2020 14:35	KB
PERCENT MOISTURE D2216								
Percent Moisture	19.4	0		wt%	R418922	1	02/21/2020 00:00	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-20

Client:	Peachtree Dekalb Airport	**Client Sample ID:**	SPOT 3
Project Name:	Peachtree/Dekalb Airport	**Collection Date:**	2/19/2020 3:03:00 PM
Lab ID:	2002K15-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Lead	25.5	5.29		mg/Kg-dry	293065	1	02/27/2020 14:48	KB
PERCENT MOISTURE D2216								
Percent Moisture	16.4	0		wt%	R418922	1	02/21/2020 00:00	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-20

Client:	Peachtree Dekalb Airport	**Client Sample ID:**	SPOT 4
Project Name:	Peachtree/Dekalb Airport	**Collection Date:**	2/19/2020 3:10:00 PM
Lab ID:	2002K15-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D					(SW3050B)			
Lead	19.8	3.90		mg/Kg-dry	293065	1	02/27/2020 14:51	KB
PERCENT MOISTURE D2216								
Percent Moisture	15.6	0		wt%	R418922	1	02/21/2020 00:00	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-20

Client:	Peachtree Dekalb Airport	**Client Sample ID:**	SPOT 5
Project Name:	Peachtree/Dekalb Airport	**Collection Date:**	2/19/2020 3:15:00 PM
Lab ID:	2002K15-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				(SW3050B)				
Lead	27.0	3.86		mg/Kg-dry	293065	1	02/27/2020 14:53	KB
PERCENT MOISTURE D2216								
Percent Moisture	16.7	0		wt%	R418922	1	02/21/2020 00:00	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC. AES

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Peachtree Dekalb Airport** AES Work Order Number: **2002K15**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ■ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	●	○	○		
7.	Cooler temperature(s) within limits of 0-8°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.7 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 2/19/2020

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	●		
26.	Were trip blanks submitted?	○	○	●	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). CT 2/20/2020

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). CT 2/20/2020

Checklist 6.9.17 Rev 2

Locked

Analytical Environmental Services, Inc

Date: 27-Feb-20

Client: Peachtree Dekalb Airport
Project Name: Peachtree/Dekalb Airport
Workorder: 2002K15

ANALYTICAL QC SUMMARY REPORT

BatchID: 293065

Sample ID: MB-293065	Client ID:			Units: mg/Kg	Prep Date: 02/26/2020	Run No: 419460
SampleType: MBLK	TestCode: METALS, TOTAL SW6010D			BatchID: 293065	Analysis Date: 02/27/2020	Seq No: 9475910

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	BRL	5.00									

Sample ID: LCS-293065	Client ID:			Units: mg/Kg	Prep Date: 02/26/2020	Run No: 419460
SampleType: LCS	TestCode: METALS, TOTAL SW6010D			BatchID: 293065	Analysis Date: 02/27/2020	Seq No: 9475913

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	44.91	5.00	50.00		89.8	80	120				

Sample ID: 2002K15-002AMS	Client ID: SPOT 2			Units: mg/Kg-dry	Prep Date: 02/26/2020	Run No: 419460
SampleType: MS	TestCode: METALS, TOTAL SW6010D			BatchID: 293065	Analysis Date: 02/27/2020	Seq No: 9475915

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	46.09	3.97	39.68	11.41	87.4	75	125				

Sample ID: 2002K15-002AMSD	Client ID: SPOT 2			Units: mg/Kg-dry	Prep Date: 02/26/2020	Run No: 419460
SampleType: MSD	TestCode: METALS, TOTAL SW6010D			BatchID: 293065	Analysis Date: 02/27/2020	Seq No: 9475916

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	50.78	3.97	39.72	11.41	99.1	75	125	46.09	9.69	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

End of Report