REVISED CORRECTIVE ACTION PLAN (CAP)
AND FINAL PRELIMINARY RISK EVALUATION
FOR THE
DAVIDSON-KENNEDY COMPANY FACILITY
1195 VICTORY DRIVE
ATLANTA, FULTON COUNTY, GEORGIA

HSI # 10866

DOCUMENT PREPARED FOR:

DAVIDSON KENNEDY COMPANY
5273 REDFIELD ROAD
DUNWOODY, GEORGIA 30338

DOCUMENT SUBMITTED TO:

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MARCH 2015

THE INFORMATION CONTAINED IN THIS REPORT TITLED
"REVISED CORRECTIVE ACTION PLAN (CAP)
AND FINAL PRELIMINARY RISK EVALUATION
FOR THE
DAVIDSON-KENNEDY COMPANY
ATLANTA, FULTON COUNTY, GEORGIA"

HSI#10866

IS INTENDED FOR THE
USE OF DAVIDSON-KENNEDY COMPANY, THEIR OFFICERS
AND DESIGNEES
AND THE
GEORGIA DEPARTMENT OF NATURAL RESOURCES

Project No. 3185

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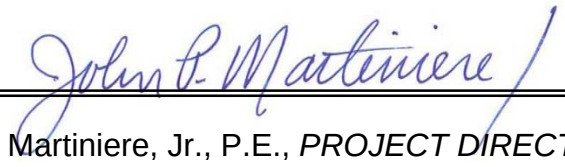

John P. Martiniere, Jr., P.E., *PROJECT DIRECTOR*

MARCH 2015

CERTIFICATION

"I certify that I am a qualified groundwater scientist who has received a baccalaureate or post graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction."

John P. Martiniere, Jr., P.E.
Georgia Registration No. 11858

Peachtree Environmental
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March 20, 2015

Mr. John Maddox
Georgia Environmental Protection Division
Response and Remediation Program
2 Martin Luther King, Jr. Drive SE
Suite 1054 East
Atlanta, GA 30334-9000

Dear Mr. Maddox:

This letter presents the revised Corrective Action Plan (CAP) and the final Preliminary Risk Evaluation (PRE) discussed in our meeting with EPD (the Meeting) on January 26, 2015 and referenced in the 7th Semiannual Progress Report (the 7th Progress Report) submitted in December 2014. The initial PRE was submitted on March 14, 2014 and the initial CAP was submitted in the 6th Semiannual Progress Report submitted in June 2014. Updates on the PRE were submitted in the 7th Semiannual Progress Report submitted in December 2014. The final PRE is presented in **Appendix A** of this report; the revised CAP is presented in the paragraphs below.

CORRECTION ACTION PLAN (CAP)

In the 7th Progress Report and in the Meeting on January 26, 2015, Peachtree reported discovery of additional usable data for near surface lead samples that allowed a more robust Kriging effort to determine what contaminated areas must be removed to provide area averaging results which meet Risk Reduction Standards (RRSs). The paragraphs below summarize the historical progression of domain averaging on the site.

DOMAIN AREA AVERAGING AND GEOSPATIAL ANALYSIS OF SOIL DATA

Areas of urban fill are present throughout the VRP Property. Urban fill presents a unique situation where there is not a reasonably defined source area, but rather a widespread matrix of heterogeneous material exhibiting varying degrees of impact by regulated substances. As such, a cleanup based upon individual soil sample results may incorrectly mischaracterize risk.

The VRP Property was evaluated based upon statistical "averages" of pre-defined exposure domains in order to more realistically characterize the risk for the Property from lead contamination. Lead was evaluated since it is the most widespread regulated constituent in soil.

The initial Kriging of the site was performed in January 2012 and presented to EPD as part of the Second Semiannual VRP Progress Report in June 2012. The Kriging and domain averaging resulted in an identification of 1,100 cubic yards of material on site that needed to be excavated and disposed.

Subsequently, EPD expressed concern with the value used for extensive fill material used on site since only one data point (a composite made up of samples from five locations) was utilized to characterize all fill material. Therefore, in November 2013, a re-analysis of the Kriging model was performed using soil data from 10 samples collected in October 2013 at various points from the backfill utilized in the former (2007) excavation. The re-analysis resulted in an identification of approximately 1,180 cubic yards of lead-impacted soils that required removal to bring the domain area average in each domain into compliance with the HSRA Type 3 RRS for lead of 400 mg/kg (an addition of 80 cubic yards to the previous total). These results were submitted to EPD for their evaluation of the Kriging approach.

EPD provided comments regarding the Kriging model during a June 12, 2013 meeting and via email, and Peachtree responded to the comments and questions in a letter dated December 27, 2013. In a letter dated April 3, 2014, Georgia EPD stated that Peachtree had satisfactorily addressed EPD's questions regarding the geo-statistical soil evaluation, and concurred with the area-averaging approach and the goal of an average lead concentration of less than 400 mg/kg in each exposure domain.

A VRP Corrective Action Plan to remove soil in the most heavily impacted areas, including a description of post-excavation confirmation soil samples, was included in the 6th Semiannual VRP Progress Report (Section 4.0) submitted in June 2014.

In the 3rd Quarter of 2014, Peachtree discovered additional usable data from the original confirmation samples utilized to determine the extent of excavation in 2007. These data were actually identified earlier and considered for use, but Peachtree could only find paper copies of the results with illegible labeling of the sample location IDs, from which it would have been difficult to establish necessary locational information. Recognizing that these data would significantly improve confidence in the Kriging results, Peachtree renewed efforts and was able to find the original digital CAD drawings (in the archives of the firm which performed the excavation), which provided legible locational information.

The additional 622 data points added to the approximate 130 data points utilized in the initial efforts allowed re-Kriging of the 5 domains to significantly improve confidence in the results. These results, which reduced the excavation volume required to be removed, were discussed with EPD in the Meeting in early 2015. The presentation showing the re-Kriging assumptions and estimates is presented in **Appendix B.**

At EPD's request, Peachtree has revised the CAP based on the updated Kriging results and hereby presents the revised CAP in the following paragraphs.

REVISED CAP

Between August 2005 and August 2007, Davidson-Kennedy voluntarily implemented assessment and corrective measures at the Property, and removed over 28,000 tons of accessible soil impacted with lead, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) from 13 Excavation Areas, designated A through M. The excavated soil was disposed of at a permitted, off-property Subtitle D landfill. Post-excavation confirmatory sampling consisted of the collection and analysis of over 1,000 soil samples to verify that HSRA Notification Concentrations (NCs) were met in the areas where excavation activities had been conducted.

City of Atlanta Building Permit

Although we had originally planned to obtain a City of Atlanta Building permit, it was decided that since our on site activity will have nothing to do with buildings or structures as stated in the Atlanta Municipal Code, such a permit is not necessary. Similarly, there is no requirement for a Fulton County Land Disturbance Permit since the area of disturbance (~2,500 square feet) is well below the County threshold of 5,000 square feet. Also, there is no requirement for a permit under the National Pollution Discharge Elimination System (NPDES) since the area to be disturbed is less than 1 acre.

On Site Excavation

In an April 3, 2014 letter, EPD approved the Kriging approach. In the Meeting on January 26, 2015, EPD verbally approved the revised Kriging analysis using the expanded data set discussed at the Meeting. The revised Kriging has resulted in the removals discussed in the following paragraphs.

Lead. Accordingly, Peachtree proposes to excavate impacted surficial (0 to 1 feet) lead-contaminated soil in the on-site area identified by the Kriging analysis, referred to as the "Compliance Area". The currently estimated volume of on-site soil to be excavated, between 65 cubic yards and 100 cubic yards (depending on confirmation analyses), will still require removal to bring the VRP Property into compliance with the HSRA Type 3 RRS for lead of 400 mg/kg.

Excavated lead-contaminated material will be placed directly into transportation vehicles (i.e., dump trucks or trailers) or a roll-off box for off-site disposal. However, the extent of excavation of impacted soil will be confirmed through post-excavation verification sampling. The results of the post-excavation verification sampling will be entered into the Kriging model with the excavated soil results removed, and the excavation will continue if warranted based on the model output. The estimated area requiring excavation on–site is illustrated on **Figure 1.**

Confirmation soil samples will be collected along the sidewalls of the Compliance Area

excavation at an approximate rate of one sample for every 20 linear feet of sidewall and at the bottom of the excavation, at an approximate rate of one sample for every 500 square feet. The boundaries of the excavation will be stepped out until XRF analysis indicates the likelihood that confirmation samples taken as described above will show that the contaminated soil has been removed. Then samples will be taken and submitted to a laboratory for analysis.

SVOCs. Soil impacted with SVOCs above the Type 4 RRS will also be excavated. The default Type 4 RRS for benzo(a)pyrene (BAP) is 7.8 mg/kg, and BAP was detected at a concentration of 44 mg/kg in shallow (1' foot) soil sample SB-5, obtained by Peachtree in June 2013, the only sample exhibiting a concentration of SVOCs above the Type 4 standard. This sample location falls within the Compliance Area and thus will be removed with the lead contaminated soil. Confirmation sampling will be conducted as described above in the area of SB-5 and analyzed for SVOCs. The results of the post-excavation verification sampling will be entered into the Kriging model with the excavated soil results removed, and the excavation will continue if warranted based on the model output.

Hot Spots. One point of particular concern to both Davidson-Kennedy and EPD was the sample identified as DK-24, which showed a concentration of lead of 28,600 mg/kg, an order of magnitude higher than the next highest reading on site. Although this location was eliminated from the area requiring excavation through the Kriging exercise, this particular "hot spot" remained of concern due to its high concentration. At the request of EPD at the Meeting, this spot was resampled to eliminate any inconsistencies in sampling or analytical techniques. The updated result for lead, taken at a depth of approximately 12 inches similar to the original sample, was 36.3 mg/kg, which is more in line with other samples taken in the proximity. Therefore, the point DK-24 was removed from the data set and is no longer of concern. The laboratory analytical report is included in **Appendix C.**

In addition, if schedule and budget allow, Davidson-Kennedy may voluntarily remediate one or more of three remaining "hot spots" which had results ranging from ~1,200 mg/kg to ~3,500 mg/kg for lead, even though EPD did not indicate continuing concern with these spots at the Meeting. These hot spots would be excavated to a depth of 1 foot. An XRF Analyzer would be utilized to give an indication that the hot spot has been removed; however, no post-excavation sampling and laboratory analysis will be performed on these areas. It should be noted that even if these hot spots are not removed, their inclusion in the data set does not cause their respective exposure domains to exceed the 400 mg/kg standard.

Site Restoration. Since the excavation will most likely only be to a depth of 1 foot in most areas, it is not anticipated that it will be necessary to backfill the excavated areas on site. These areas will be graded over to reduce the potential for pooling of water. On site debris will also be removed during field activities, including scrap tires and other major miscellaneous wastes, and properly disposed.

Off Site Excavation

The EPD collected a total of two (2) samples in August of 2007 on a property located at 1705 Lanier Drive. This property is located immediately adjacent to the eastern boundary of the D-K Property. The EPD-collected samples were split with Kemron Environmental Services, Inc. (Kemron). A total of two (2) surface soil samples, DK-6 and DK-7, were collected and analyzed for RCRA Metals and Semi-volatile Organic Compounds (SVOCs). Sample analytical testing results were as follows:

- DK-6 - EPD Lead Results: 330 mg/kg / Kemron Results: Lead - 468 mg/kg;
- DK-7 - EPD Lead Results: 260 mg/kg / Kemron Results: Lead - 244 mg/kg;

In May 2012, Peachtree installed a total of four (4) soil borings (OS-1 to OS-4) to delineate the previous detections in DK-6 and DK-7. The shallow (0 to 0.5 foot) and deeper subsurface intervals (3 feet) were recovered from each soil boring and submitted for analytical testing for lead via EPA Method 6010. Locations for Peachtree's samples collected for off-property delineation were recorded via a Trimble hand-held GPS unit and plotted on a survey of the D-K Property and adjacent residential lot.

Analytical testing results reported shallow surface interval concentrations of lead ranging from 26.1 mg/kg in sample OS-3-1 to 220 mg/kg in sample OS-1-1. Deeper interval Lead concentrations ranged from 12.0 mg/kg in sample OS-4-3 to 15.8 mg/kg in sample OS-1-3. Analytical results for off-property assessment activities are presented in the 2nd Semiannual Progress Report submitted in June 2012.

Based on a comparison to the calculated anthropogenic lead background concentration of 224 mg/kg, off-site horizontal and vertical delineation of contamination found at DK-6 and DK-7 was deemed to be complete in June 2012.

These sample points are shown on **Figure 2,** with the proposed approximate areas of excavation identified.

Peachtree has obtained off-site access permission from Ms. Tracy Dummett, owner of the off site property at 1705 Lanier Drive. The e-mail with Ms. Dummett's permission is included as **Appendix D.**

The affected off site soil will be excavated at the same time as the soil excavation on the Property. Confirmation sampling will be performed in this area as well. Excavation will initially be performed around the two sample sites in a 5-10 foot square to a depth of 1 foot. The boundaries of the excavation will be stepped out until XRF analysis indicates the likelihood that confirmation samples taken as described above will show that the contaminated soil above the Type 2 RRS has been removed. Then samples will be taken and submitted to a laboratory for analysis. Excavation volume will likely be between 2 cubic yards and 30 cubic yards. The excavated area will be backfilled with clean fill dirt

obtained from an off- site source and analyzed to ensure that it meets Type 1 RRS. The disturbed area will be reseeded.

CAP Cost Estimate

A cost estimate for implementation of this Corrective Action Plan and associated activities is provided as **Appendix E**.

FIGURES

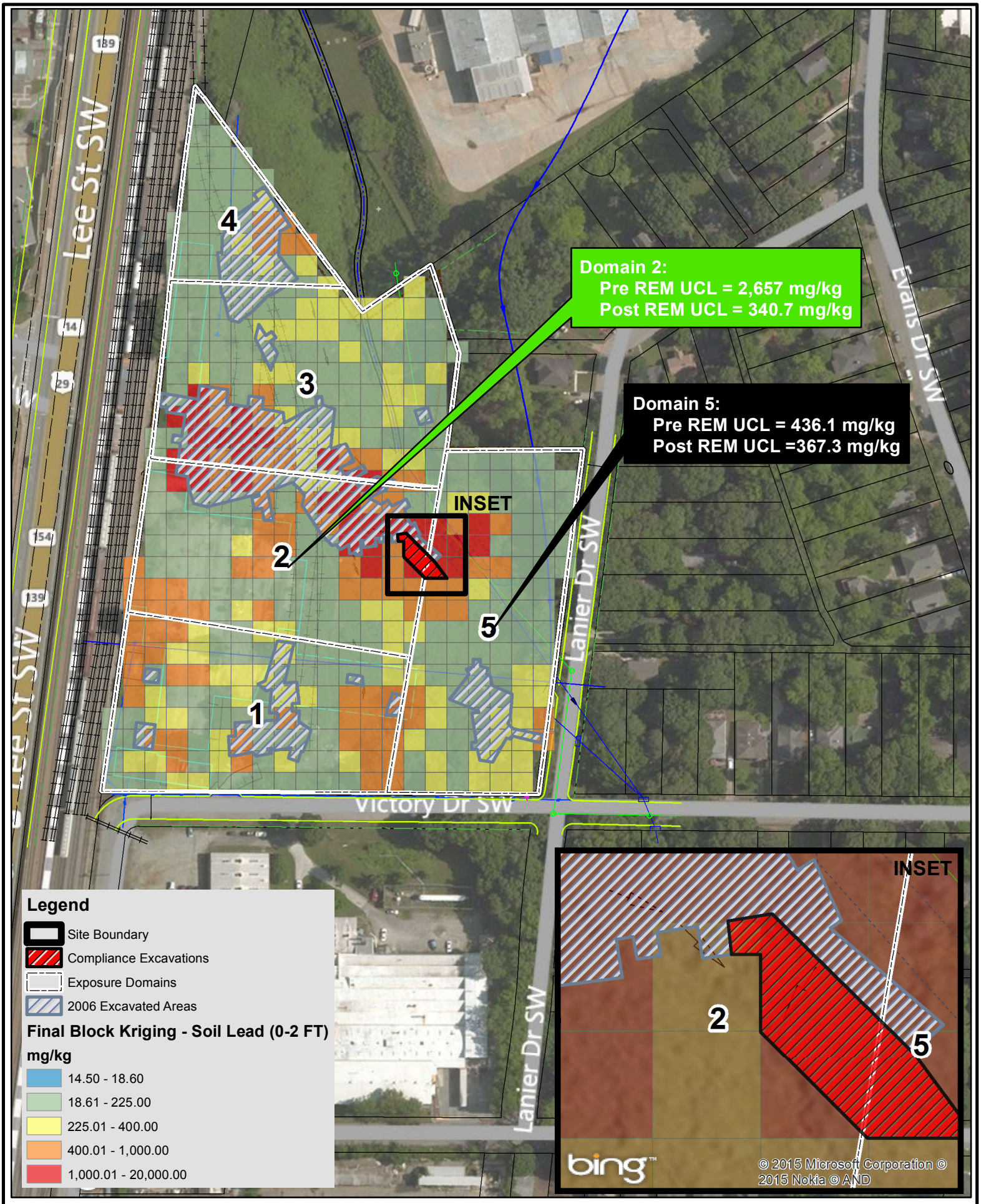

Figure No. 1

Davison-Kennedy Site
Corrective Action Plan

Soil Kriging Results

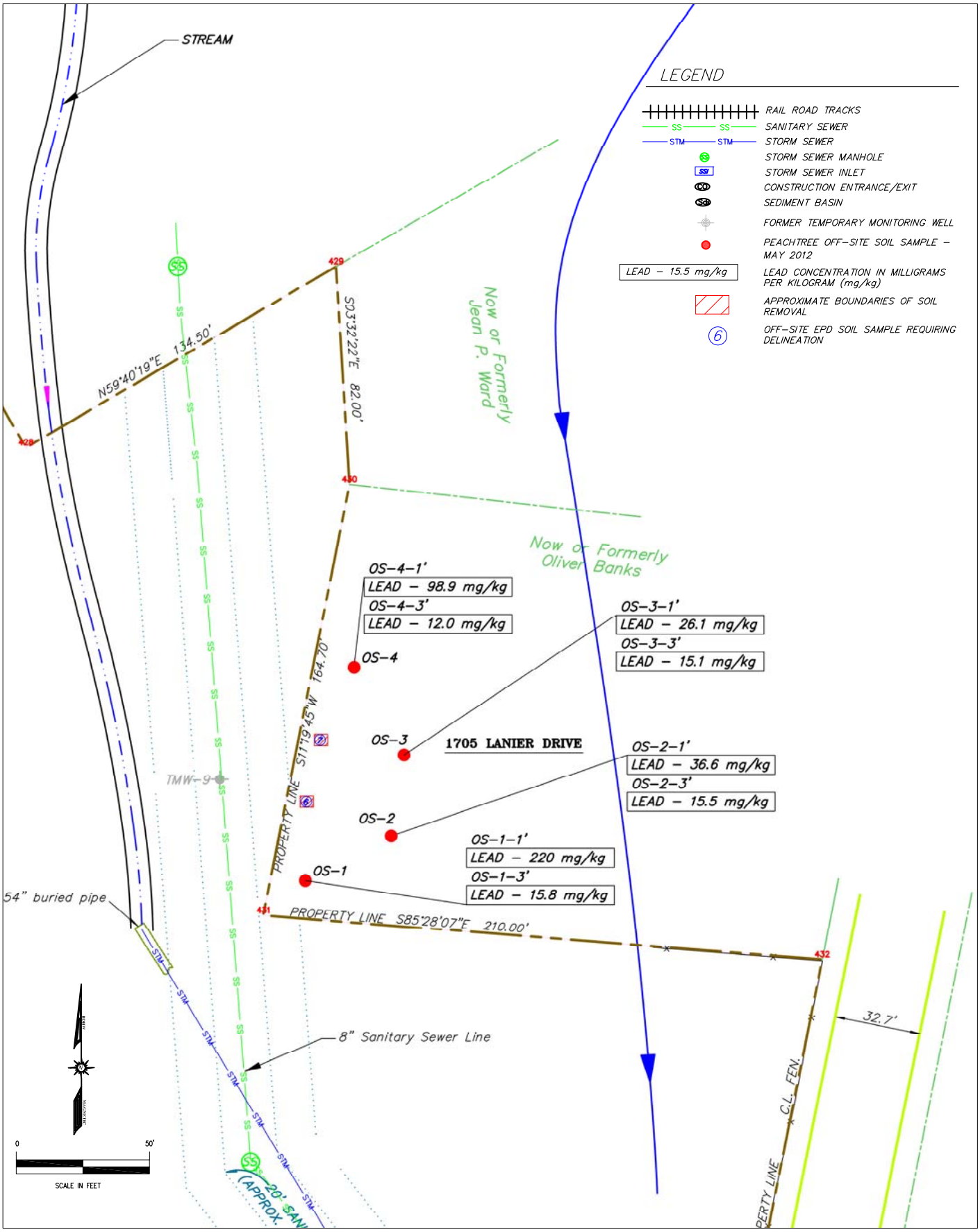

FIGURE NO.	DAVIDSON-KENNEDY COMPANY 1195 VICTORY DRIVE ATLANTA, GEORGIA	
2	OFF-SITE SOIL SAMPLE LOCATIONS	Peachtree Environmental
DAVIDSON-KENNEDY 3185		

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 03/03/15 DWN BY MRH DES BY KEMRON CHK BY JPM APP BY AJN Map Source:

APPENDIX A

DAVIDSON-KENNEDY PRE

PRELIMINARY RISK EVALUATION FOR THE DAVIDSON-KENNEDY COMPANY SITE 1195 VICTORY DRIVE ATLANTA, FULTON COUNTY, GEORGIA HSI NO. 10866

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MARCH 2015

PRELINIMARY RISK EVALUATION (PRE)

DAVIDSON-KENNEDY COMPANY SITE

The Davidson-Kennedy Site is located at 1195 Victory Drive in an urbanized area of Atlanta, Fulton County, Georgia. The approximate 9-acre Site is more fully described below under Step 1, but is generally a kudzu-dominated, successional shrubland formed from former industrial property with an intermittent headwater stream flowing toward the east in the northern portion of the Site. The stream enters an on-site culvert that conveys the surface water to an off-site, downstream discharge point. A few small stands of hardwood trees occur near the property boundaries. No on-site wetlands were identified on the U.S. Fish & Wildlife Service Wetlands Inventory Map. Sediment and surface water samples have been obtained from the stream, and soil and groundwater samples have been obtained elsewhere on the Site.

A Preliminary Risk Evaluation (PRE) has been initiated to evaluate whether ecological receptors may be adversely affected by exposure to lead in sediment and surface water (Peachtree Environmental, 2010). A PRE is the initial, screening-level component of an ecological risk assessment. The purpose of a PRE is to reach a conclusion as to whether or not contaminants from the Site pose a threat to ecological receptors (U.S. EPA, 1997). If there are sufficient data to determine that ecological threats are negligible, the ecological risk assessment is complete at this step with a finding of negligible ecological risk. If the data indicate that there is (or might be) a risk of adverse effects to ecological receptors, the ecological risk assessment process will continue.

SITE HISTORY

The Site consists of 9.17 acres of former industrial property located in an upland area of the Southern Outer Piedmont ecoregion of Georgia. The Site is situated on relatively flat land with topographic relief to the east-southeast. An intermittent headwater stream occupies a valley in the northern portion of the Site. After entering the property at the northern property boundary, the stream flows approximately 200 feet south into a subgrade pipe which eventually outfalls approximately 150 feet southeast of the property into an unnamed, southeast-flowing tributary to the South River. The unnamed tributary flows approximately 1.3 miles to its confluence with the South River. The South River is a 63.5-mile-long tributary of the Ocmulgee River, originating in the city of East Point and eventually flowing into Lake Jackson, where it joins the Yellow River and the Alcovy River to form the Ocmulgee River.

There are currently no active operations at the Site, and except for an unoccupied office building and some former building slabs, former structures have been demolished and removed from the property. The Site is now mostly covered with successional field overgrowth dominated by kudzu, with a few sparse stands of hardwood trees along the property boundaries.

The Site had been utilized for industrial purposes since at least 1925; Sanborn Fire Insurance maps and historical City Directories indicate metal fabricating businesses were present on

portions of the Site from 1925 to 1977. Since the late 1970s, the Site had been utilized as a rail car repair facility. Metals have been detected in soil, sediment, and surface water samples, volatile organic compounds (VOCs) have been detected in groundwater samples, and semi-volatile organic compounds (SVOCs) have been detected in soil and groundwater samples.

Topography of the surrounding area has been modified by urban development. The Site is bordered to the south by Victory Drive with industrial facilities beyond; Lanier Drive SW and residential properties to the east; industrial facilities to the north; and MARTA/Norfork Southern rail lines, Georgia Highway 29, and Fort MacPherson beyond to the west.

SITE VISIT

A site visit was conducted on February 19, 2014 and an ecological checklist was completed. The ecological checklist is included as **Attachment A**. Most of the Site is occupied by a kudzu-dominated, successional open shrubland formed on the former industrial property. Kudzu (*Pueraria montana*) is a vine native to China and introduced to Japan and, from Japan, into the United States. An invasive species, it has formed extensive populations in the Southeastern United States. Kudzu primarily invades disturbed landscapes ranging from road rights-of-way to old fields. Relatively undisturbed natural drainage areas can also be invaded by kudzu, and kudzu may interfere with normal plant succession in abandoned fields (Simberloff and others, 1997).

As indicated on the ecological checklist, the stream has a variable substrate, including silt, cobbles, muck, and debris. The stream is generally two to three feet wide, and up to 12 inches deep. No vertebrate or invertebrate fauna were observed in the stream; the only flora observed was filamentous algae, single-cell organisms that form long visible chains, threads, or filaments that intertwine, forming a mat that resembles wet wool. Filamentous algae starts growing along the bottom of shallow water bodies or attached to structures in the water such as rocks. Often filamentous algae float to the surface forming large mats, which are commonly referred to as “pond scums”. There are many species of filamentous algae and often more than one species may be present at the same time. Although filamentous algae has no known direct food value to wildlife (Texas A&M AgriLife Extension Service, 2014), submerged portions of all aquatic plants may provide habitats for invertebrates (i.e. bugs, worms, etc.). These invertebrates in turn may be used as food by fish and other wildlife species (e.g., amphibians, reptiles, birds, etc.). However, no vertebrate or invertebrate fauna were observed in the stream.

The Site is located in an urban area of Atlanta. Residential and industrial areas associated with the City of Atlanta are located adjacent to the Site.

PROBLEM FORMULATION

Peachtree personnel performed sediment and surface water sampling within the on-site stream on December 1, 2014. The samples were collected in general accordance with the U.S. Environmental Protection Agency (EPA) Region 4 Science and Ecosystem Support Division (SESD) Operating Procedures for Surface Water Sampling, dated February 28, 2013, and Sediment Sampling, dated August 21, 2014. The sample locations are depicted on **Figure 1**.

The samples were collected and placed into clean laboratory-provided containers and immediately placed on ice and transported to Analytical Environmental Services, Inc. (AES) in Atlanta, Georgia under proper chain of custody. The sampling parameters for the surface water and sediment samples were determined based on previous sampling conducted at the Site. The samples were analyzed for semi-volatile organic compounds (SVOCs) by EPA Method 8270D and RCRA Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA Methods 7470C and 6010C. In addition, the surface water samples were also analyzed for copper and zinc by EPA Method 6010C.

Based on the laboratory analytical results for the surface water and sediment samples collected at the Site, select metals and/or SVOCs were detected at concentrations above the EPA Region 4 Screening Values. The analytical results for the surface water samples are summarized in **Table 1**, while the analytical results for the sediment samples are summarized in **Table 2**.

A Conceptual Site Model showing contaminant migration pathways is provided as Figure 1. Releases of metals likely occurred from aerial deposition and industrial operations from the surrounding area and from historical on-site metal-fabricating operations, impacting surface soil. From the surface soil, the metals may have percolated/infiltrated through subsurface soils to groundwater. The metals detected in sediment and surface water may have migrated to the stream via erosion and runoff of surface soil, aerial deposition, or migration groundwater flow and subsequent discharge to surface water.

However, although there are transport mechanisms and exposure routes, there are no aquatic receptors in the stream other than filamentous algae (pond scum); therefore, there is no complete pathway of exposure. Further, the corrective actions already completed and those being proposed for the Site, primarily excavation of impacted soil, will reduce or eliminate the metals being transported to the stream by erosion and runoff, as well as reduce the percolation and infiltration of metals to groundwater and subsequent discharge to surface water.

In addition, the company representative, Mr. Joe Rubin, and former Peachtree owner Chuck MacPherson, both familiar with this site for more than five years, have stated that the stream actually dries up at certain times time of the year and should be considered an intermittent stream. Even so, Peachtree has performed certain elements of a risk evaluation, as outlined above.

CONCLUSIONS

Peachtree has not observed any receptors (benthic macroinvertebrates, fish, birds, mammals, etc.) in the on-site intermittent stream, and the only aquatic vegetation observed in the stream has been filamentous algae. In addition, no threatened and/or endangered plant or animal species have been identified at the Site. Therefore, despite the screening value exceedances, based on the absence of observed receptors and the intermittent nature of the on-site stream, there is adequate information to conclude that ecological risks are negligible and therefore there is no need for remediation on the basis of ecological risk. Further, any remediation activities (e.g., sediment removal) would likely cause undue harm to the any potential habitats associated with the on-site stream.

REFERENCES

Peachtree Environmental, 2010, *Voluntary Remedial Program Application for the Davidson-Kennedy Company Facility, 1195 Victory Drive, Atlanta, Fulton County, Georgia, HSI # 10866*; Peachtree Environmental, May 2010

Simberloff, Scmitz, and Brown, 1997, *Strangers in Paradise, Impact and Management of Nonindigenous Species in Florida*; Island Press, Washington, DC

Texas A&M AgriLife Extension Service, 2014, *AquaPlant, A Pond Manager Diagnostics Tool;* http://aquaplant.tamu.edu/plant-identification/alphabetical-index/filamentous-algae/; accessed February 21, 2014

U.S. EPA, 1997, *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final*; Solid Waste and Emergency Response, EPA-540-R-97-006, OSWER 9285.7-25

TABLES

Davidson-Kennedy Company Facility
1195 Victory Drive, Atlanta, Fulton County, Georgia
HSI No. 10866

TABLE 1
Summary of Surface Water Analytical Results

Compound	Sample Date	EPA Region 4 Screening Values	Sample Locations		
			DK-3	DK-4	DK-5
		µg/L			
Barium	12/01/14	N/A	100	77.7	73.3
Copper	12/01/14	6.54	BRL	**11.7**	BRL
Zinc	12/01/14	58.91	BRL	**75.2**	57.2

NOTES:

Bolded value indicates concentration is above EPA Region 4 Screening Value
µg/L - micrograms per liter
N/A - screening value not available
BRL - below laboratory reporting limit
For compounds that were BRL in all samples, the individual compounds are not shown.

Davidson-Kennedy Company Facility
1195 Victory Drive, Atlanta, Fulton County, Georgia
HSI No. 10866

TABLE 2
Summary of Sediment Analytical Results

Compound	Sample Date	EPA Region 4 Screening Values	Sample Locations		
			DK-3	DK-4	DK-5
		mg/kg			
Metals					
Barium	12/01/14	N/A	34.5	12.4	41.0
Chromium	12/01/14	52.3	16.6	12.0	19.0
Lead	12/01/14	30.2	16.3	10.3	**36.2**
SVOCs					
Benz(a)anthracene	12/01/14	0.33	BRL	BRL	**0.57**
Benzo(a)pyrene	12/01/14	0.33	BRL	BRL	**0.49**
Benzo(b)fluoranthene	12/01/14	N/A	BRL	BRL	0.70
Chrysene	12/01/14	0.33	BRL	BRL	**0.67**
Fluoranthene	12/01/14	0.33	**0.57**	BRL	**1.7**
Phenanthrene	12/01/14	0.33	BRL	BRL	**0.82**
Pyrene	12/01/14	0.33	**0.41**	BRL	**1.3**

NOTES:

Bolded value indicates concentration is above EPA Region 4 Screening Value
mg/kg - milligrams per kilogram
N/A - screening value not available
BRL - below laboratory reporting limit
For compounds that were BRL in all samples, the individual compounds are not shown.

FIGURES

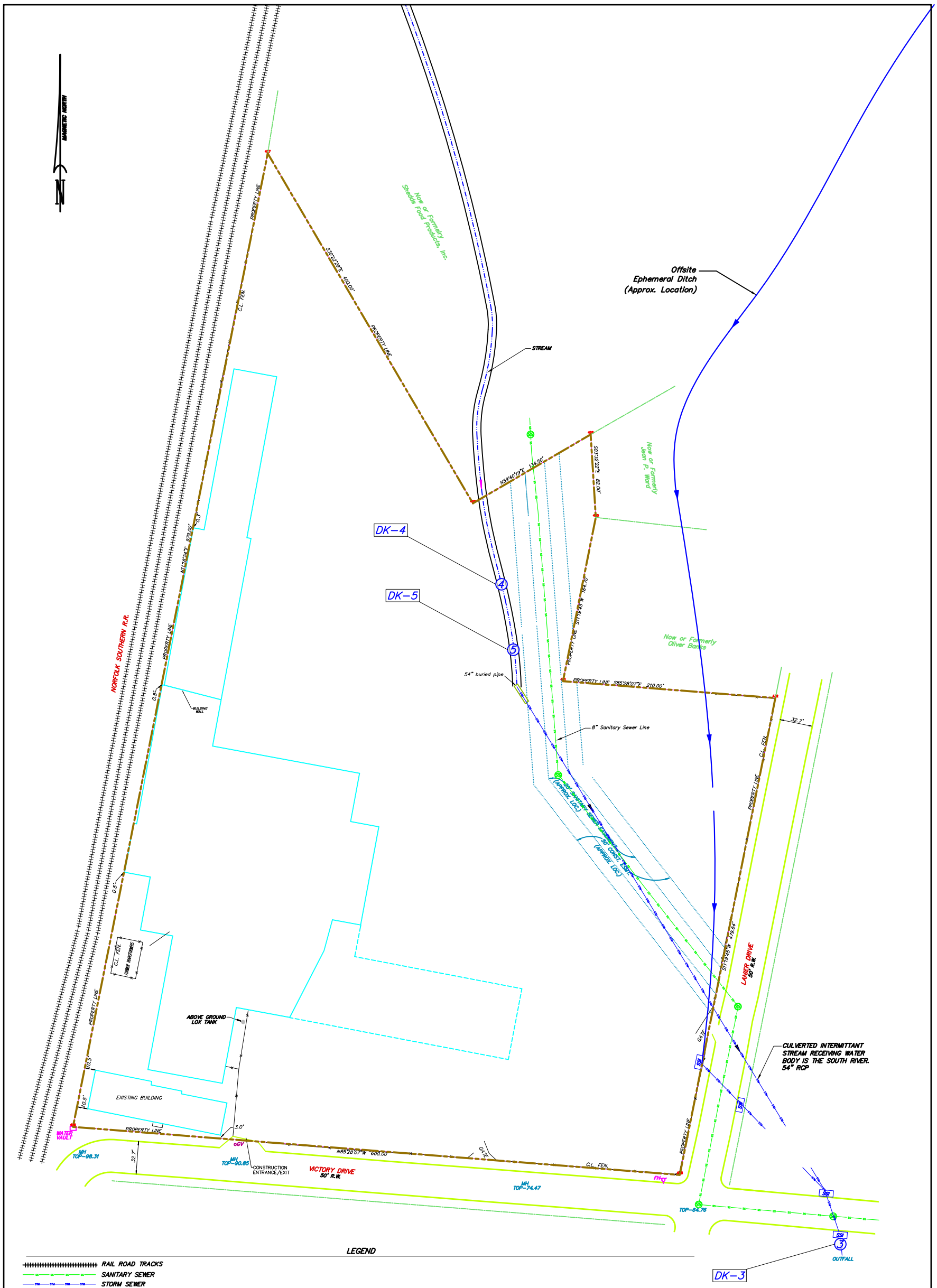


FIGURE NO. 1

DAVIDSON-KENNEDY 3185

DAVIDSON-KENNEDY COMPANY
1195 VICTORY DRIVE
ATLANTA, GEORGIA

SURFACE WATER AND SEDIMENT SAMPLE LOCATION PLAN

Peachtree Environmental

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 12/23/14 DWN BY KEMRON CHK BY JPM DES BY BDW APP BY JPM

ATTACHMENT A

Checklist for Ecological Assessment/Sampling

I. SITE DESCRIPTION

1. Site Name: Davidson-Kennedy Company Facility

   Location: 1195 Victory Drive

   _____

   County: Fulton City: Atlanta State: Georgia

2. Latitude: 33° 42' 27'.41" Longitude: 84° 25' 35.39"

3. What is the approximate area of the site? 9.17 acres

4. Is this the first site visit? ☒ yes ☐ no If no, attach trip report of previous site visit(s), if available.

   Date(s) of previous site visit(s):_____.

5. Please attach to the checklist USGS topographic map(s) of the site, if available.

   See VRP Application (Peachtree Environmental, 2010)

6. Are aerial or other site photographs available? ☐ yes ☒ no If yes, please attach any available photo(s) to the site map at the conclusion of this section.

7. The land use on the site is:

_____% Urban

_____% Rural

_____% Residential

_100_% Industrial (☒ light ☐ heavy)

_____% Agricultural

(Crops:_____)

_____% Recreational

(Describe; note if it is a park, etc.)

_____

_____

_____% Undisturbed

_____% Other

The area surrounding the site is:
_____0.25_____ mile radius

_____% Urban

_____% Rural

_50_% Residential

_25_% Industrial (☐ light ☐ heavy)

_____% Agricultural

(Crops:_____)

_____% Recreational

(Describe; note if it is a park, etc.)

_____

_____

_____% Undisturbed

_25_% Other Institutional (Ft. MacPherson)

8. Has any movement of soil taken place at the site? ☒ yes ☐ no. If yes, please identify the most likely cause of this disturbance:

_____ Agricultural Use _____ Heavy Equipment _____ Mining

_____ Natural Events _X_ Erosion _X_ Other

Please describe:

Historical grading of the site has occurred to level the ground surface for former industrial buildings. In addition, a total of 28,106.62 tons of soil was excavated and shipped off-site for disposal.

9. Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site, e.g., Federal and State parks, National and State monuments, wetlands, prairie potholes? *Remember, flood plains and wetlands are not always obvious; do not answer "no" without confirming information.*

No; the site is not listed on the National Wetland Inventory maps, and the site is outside of the 100- and 500-year flood zones shown in FEMA flood insurance map 13121C0358F.

Please provide the source(s) of information used to identify these sensitive areas, and indicate their general location on the site map.

10. What type of facility is located at the site?

☐ Chemical ☐ Manufacturing ☐ Mixing ☐ Waste disposal

☒ Other (specify) Metal fabricating (inactive)

11. What are the suspected contaminants of concern at the site? If known, what are the maximum concentration levels?

Lead in soil - max. concentration 28,600 mg/kg

12. Check any potential routes of off-site migration of contaminants observed at the site:

☐ Swales ☐ Depressions ☐ Drainage ditches

☐ Runoff ☐ Windblown particulates ☐ Vehicular traffic

☐ Other (specify)_____

13. If known, what is the approximate depth to the water table? 20 feet

14. Is the direction of surface runoff apparent from site observations? ☒ yes ☐ no If yes, to which of the following does the surface runoff discharge? Indicate all that apply.

☒ Surface water ☐ Groundwater ☐ Sewer ☐ Collection impoundment

15. Is there a navigable waterbody or tributary to a navigable waterbody? ☐ yes ☒ no

16. Is there a waterbody anywhere on or in the vicinity of the site? If yes, also complete Section III: Aquatic Habitat Checklist -- Non-Flowing Systems and/or Section IV: Aquatic Habitat Checklist -- Flowing Systems.

☒ yes (approx. distance on-site) ☐ no

17. Is there evidence of flooding? ☐ yes ☒ no *Wetlands and flood plains are not always obvious; do not answer "no" without confirming information.* If yes, complete Section V: Wetland Habitat Checklist.

18. If a field guide was used to aid any of the identifications, please provide a reference. Also, estimate the time spent identifying fauna. [Use a blank sheet if additional space is needed for text.]

19. Are any threatened and/or endangered species (plant or animal) known to inhabit the area of the site? ☐ yes ☒ no *If yes, you are required to verify this information with the U.S. Fish and Wildlife Service.* If species' identities are known, please list them next.

20. Record weather conditions at the time this checklist was prepared:

DATE: 2/19/2014

55 Temperature (°C/°F) 57° F Normal daily high temperature

Calm Wind (direction/speed) None Precipitation (rain, snow)

Cloudy Cloud cover

IA. SUMMARY OF OBSERVATIONS AND SITE SETTING

Most of the Site is occupied by a kudzu-dominated, successional open shrubland formed on the former industrial property.

The on-site stream has a variable substrate, including silt, cobbles, muck, and debris, and is generally two to three feet wide, and up to 12 inches deep. No vertebrate or invertebrate fauna were observed in the creek; the only flora observed in the stream was filamentous algae. Neither micro and macro invertebrates nor fish and wildlife species were observed at the Site.

The Site is located in an urban area of Atlanta. Residential and industrial areas associated with the City of Atlanta are located adjacent to the Site. The on-site stream does not support aquatic wildlife from the upstream property boundary to the point where it enters a subgrade pipe.

Completed by Steven W. Hart Affiliation Peachtree Environmental

Additional Preparers

Site Manager Joseph R. Rubin, Manager, Davidson-Kennedy Company

Date 2/19/2014

II. TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? ☒ yes ☐ no If no, go to Section IIB: Shrub/Scrub.

2. What percentage or area of the site is wooded? (__5__% __0.5__ acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.

3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.

   Dominant plant, if known:_____

4. What is the predominant size of the trees at the site? Use diameter at breast height.

   ☐ 0-6 in. ☒ 6-12 in. ☐ > 12 in.

5. Specify type of understory present, if known. Provide a photograph, if available.

IIB. SHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? ☒ yes ☐ no If no, go to Section IIC: Open Field.

2. What percentage of the site is covered by scrub/shrub vegetation? (__95__% __8.67__ acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.

   Nearly all of the Site is covered with kudzu and low shrub.

3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.

   Kudzu

4. What is the approximate average height of the scrub/shrub vegetation?

   ☒ 0-2 ft. ☐ 2-5 ft. ☐ > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

☒ Dense ☐ Patchy ☐ Sparse

IIC. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? ☐ yes ☒ no If yes, please indicate the type below:

☐ Prairie/plains ☐ Savannah ☐ Old field ☐ Other (specify)_____

2. What percentage of the site is open field? (_____% _____ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

4. What is the approximate average height of the dominant plant?_____

5. Describe the vegetation cover: ☐ Dense ☐ Sparse ☐ Patchy

IID. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? ☐ yes ☒ no If yes, identify and describe them below.

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?

4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

III. AQUATIC HABITAT CHECKLIST -- NON-FLOWING SYSTEMS (Not Applicable)

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type of open-water, non-flowing system is present at the site?

   ☐ Natural (pond, lake)
   ☐ Artificially created (lagoon, reservoir, canal, impoundment)

2. If known, what is the name(s) of the waterbody(ies) on or adjacent to the site?

   _____

3. If a waterbody is present, what are its known uses (e.g.: recreation, navigation, etc.)?

4. What is the approximate size of the waterbody(ies)? _____ acre(s).

5. Is any aquatic vegetation present? ☐ yes ☐ no If yes, please identify the type of vegetation present if known.

   ☐ Emergent ☐ Submergent ☐ Floating

6. If known, what is the depth of the water? _____

7. What is the general composition of the substrate? Check all that apply.

   ☐ Bedrock ☐ Sand (coarse) ☐ Muck (fine/black)
   ☐ Boulder (>10 in.) ☐ Silt (fine) ☐ Debris
   ☐ Cobble (2.5-10 in.) ☐ Marl (shells) ☐ Detritus
   ☐ Gravel (0.1-2.5 in.) ☐ Clay (slick) ☐ Concrete
   ☐ Other (specify)_____

8. What is the source of water in the waterbody?

   ☐ River/Stream/Creek ☐ Groundwater ☐ Other (specify)_____
   ☐ Industrial discharge ☐ Surface runoff

9. Is there a discharge from the site to the waterbody? ☐ yes ☐ no If yes, please describe this discharge and its path.

10. Is there a discharge from the waterbody? ☐ yes ☐ no If yes, and the information is available, identify from the list below the environment into which the waterbody discharges.

☐ River/Stream/Creek	☐ onsite	☐ offsite	Distance_____
☐ Groundwater	☐ onsite	☐ offsite	
☐ Wetland	☐ onsite	☐ offsite	Distance_____
☐ Impoundment	☐ onsite	☐ offsite	

11. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected provide the measurement and the units of measure below:

_____ Area

_____ Depth (average)

_____ Temperature (depth of the water at which the reading was taken) _____

_____ pH

_____ Dissolved oxygen

_____ Salinity

_____ Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)

_____ Other (specify)

12. Describe observed color and area of coloration.

13. Mark the open-water, non-flowing system on the site map attached to this checklist.

14. What observations, if any, were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

IV. AQUATIC HABITAT CHECKLIST -- FLOWING SYSTEMS

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type(s) of flowing water system(s) is (are) present at the site?

☐ River	☐ Stream	☐ Creek
☐ Dry wash	☐ Arroyo	☐ Brook
☐ Artificially created (ditch, etc.)	☒ Intermittent Stream	☐ Channeling
	☐ Other (specify)_____	

2. If known, what is the name of the waterbody? Unnamed

3. For natural systems, are there any indicators of physical alteration (e.g., channeling, debris, etc.)?
☒ yes ☐ no If yes, please describe indicators that were observed.

200 feet south of the upstream property boundary, the stream enters an on-site culvert and is conveyed within the culvert to and beyond the downstream property boundary.

4. What is the general composition of the substrate? Check all that apply.

☐ Bedrock	☐ Sand (coarse)	☒ Muck (fine/black)
☐ Boulder (>10 in.)	☒ Silt (fine)	☒ Debris
☒ Cobble (2.5-10 in.)	☐ Marl (shells)	☐ Detritus
☐ Gravel (0.1-2.5 in.)	☐ Clay (slick)	☐ Concrete
☐ Other (specify)_____		

5. What is the condition of the bank (e.g., height, slope, extent of vegetative cover)?

Low (~1 foot) but steep banks with visible evidence of erosion.

6. Is the system influenced by tides? ☐ yes ☒ no What information was used to make this determination?

Small stream many miles removed from nearest tidally-influenced water body.

7. Is the flow intermittent? ☒ yes ☐ no If yes, please note the information that was used in making this determination.

The stream has been observed to be dry during the summer months.

8. Is there a discharge from the site to the waterbody? ☐ yes ☐ no If yes, please describe the discharge and its path.

Overland (sheet) flow

9. Is there a discharge from the waterbody? ☒ yes ☐ no If yes, and the information is available, please identify what the waterbody discharges to and whether the discharge is on site or off site.

After entering on-site culvert, the stream discharges to an unnamed tributary to the South River off site.

10. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected, provide the measurement and the units of measure in the appropriate space below:

2	Width (ft.)
1	Depth (ft.)
_____	Velocity (specify units):_____
_____	Temperature (depth of the water at which the reading was taken_____)
_____	pH
_____	Dissolved oxygen
_____	Salinity
_____	Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)
_____	Other (specify)_____

11. Describe observed color and area of coloration.

Water is creek appeared turbid and muddy along some stretches, clearer in others.

12. Is any aquatic vegetation present? ☒ yes ☐ no If yes, please identify the type of vegetation present, if known. **Filamentous algae**

☐ Emergent ☒ Submergent ☐ Floating

13. Mark the flowing water system on the attached site map.
See VRP Application (Peachtree Environmental, 2010)

14. What observations were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

No benthic invertebrates or fish were observed in the stream. No birds or mammals were observed at or near the stream.

V. WETLAND HABITAT CHECKLIST

1. Based on observations and/or available information, are designated or known wetlands definitely present at the site?
☐ yes ☒ no

   Please note the sources of observations and information used (e.g., USGS Topographic Maps, National Wetland Inventory, Federal or State Agency, etc.) to make this determination.

   National Wetland Inventory Maps

2. Based on the location of the site (e.g., along a waterbody, in a floodplain) and site conditions (e.g., standing water; dark, wet soils; mud cracks; debris line; water marks), are wetland habitats suspected?
☐ yes ☒ no If yes, proceed with the remainder of the wetland habitat identification checklist.

3. What type(s) of vegetation are present in the wetland?

   ☐ Submergent ☐ Emergent
   ☐ Scrub/Shrub ☐ Wooded

   ☐ Other (specify)_____

4. Provide a general description of the vegetation present in and around the wetland (height, color, etc.). Provide a photograph of the known or suspected wetlands, if available.

5. Is standing water present? ☐ yes ☒ no If yes, is this water: ☐ Fresh ☐ Brackish
   What is the approximate area of the water (sq. ft.)?_____
   Please complete questions 4, 11, 12 in Checklist III - Aquatic Habitat -- Non-Flowing Systems.

6. Is there evidence of flooding at the site? What observations were noted? No evidence of flooding was observed.

   ☐ Buttressing ☐ Water marks ☐ Mud cracks

   ☐ Debris line ☐ Other (describe below)

7. If known, what is the source of the water in the wetland?

☐ Stream/River/Creek/Lake/Pond ☐ Groundwater

☐ Flooding ☐ Surface Runoff

8. Is there a discharge from the site to a known or suspected wetland? ☐ yes ☒ no If yes, please describe.

9. Is there a discharge from the wetland? ☐ yes ☐ no. If yes, to what waterbody is discharge released?

☐ Surface Stream/River ☐ Groundwater ☐ Lake/Pond ☐ Marine

10. If a soil sample was collected, describe the appearance of the soil in the wetland area. Circle or write in the best response.

Color (blue/gray, brown, black, mottled) _____

Water content (dry, wet, saturated/unsaturated) _____

11. Mark the observed wetland area(s) on the attached site map.

APPENDIX B

PRESENTATION TO EPD RESULTS OF REKRIGING

Geostatistical Analysis - Updated Soil Lead Data

Davidson-Kennedy Site
Atlanta, Georgia

Peachtree Environmental

January 26, 2015

Chronology of Significant Events

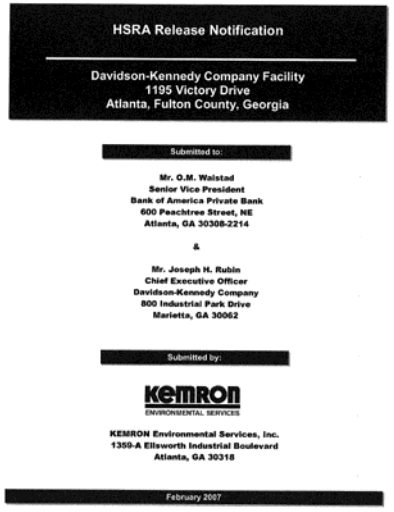
- Feb-2012: Original Kriging/Domain Averaging Submission with Financial Assurance Letter to EPD
- Jun-2013: EPD informally submitted questions to Peachtree re the Kriging analysis
- Dec-2013: Response to EPD questions re Kriging
- Apr-2014: EPD approval of Kriging/Domain Averaging approach
- Jun-2014: Presentation of VRP CAP as part of June S/A Progress Report

Chronology of Significant Events

- **Jul-2014: Discovery of additional data and CAD files**
- **Aug-2014: ReKriged with full data set**

Step 1: Data Compilation

- Compiled **ALL** available soil data (612 samples)
  - Previous analysis relied upon 134 samples
  - Unable to use Kemron collected data (illegible)
  - Obtained original CAD digital maps



HSRA Release Notification

Davidson-Kennedy Company Facility
1195 Victory Drive
Atlanta, Fulton County, Georgia

Submitted to:

Mr. O.M. Walstad
Senior Vice President
Bank of America Private Bank
600 Peachtree Street, NE
Atlanta, GA 30308-2214

&

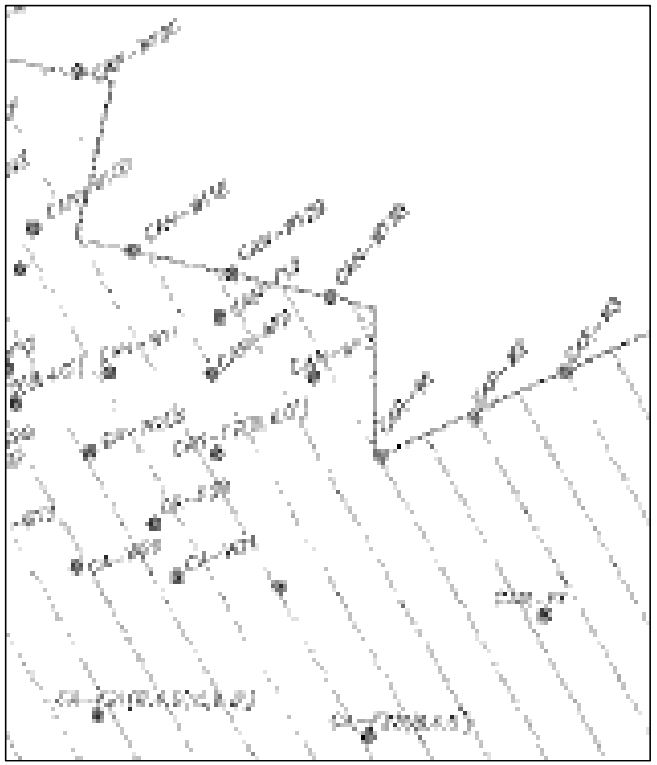
Mr. Joseph H. Rubin
Chief Executive Officer
Davidson-Kennedy Company
800 Industrial Park Drive
Marietta, GA 30062

Submitted by:

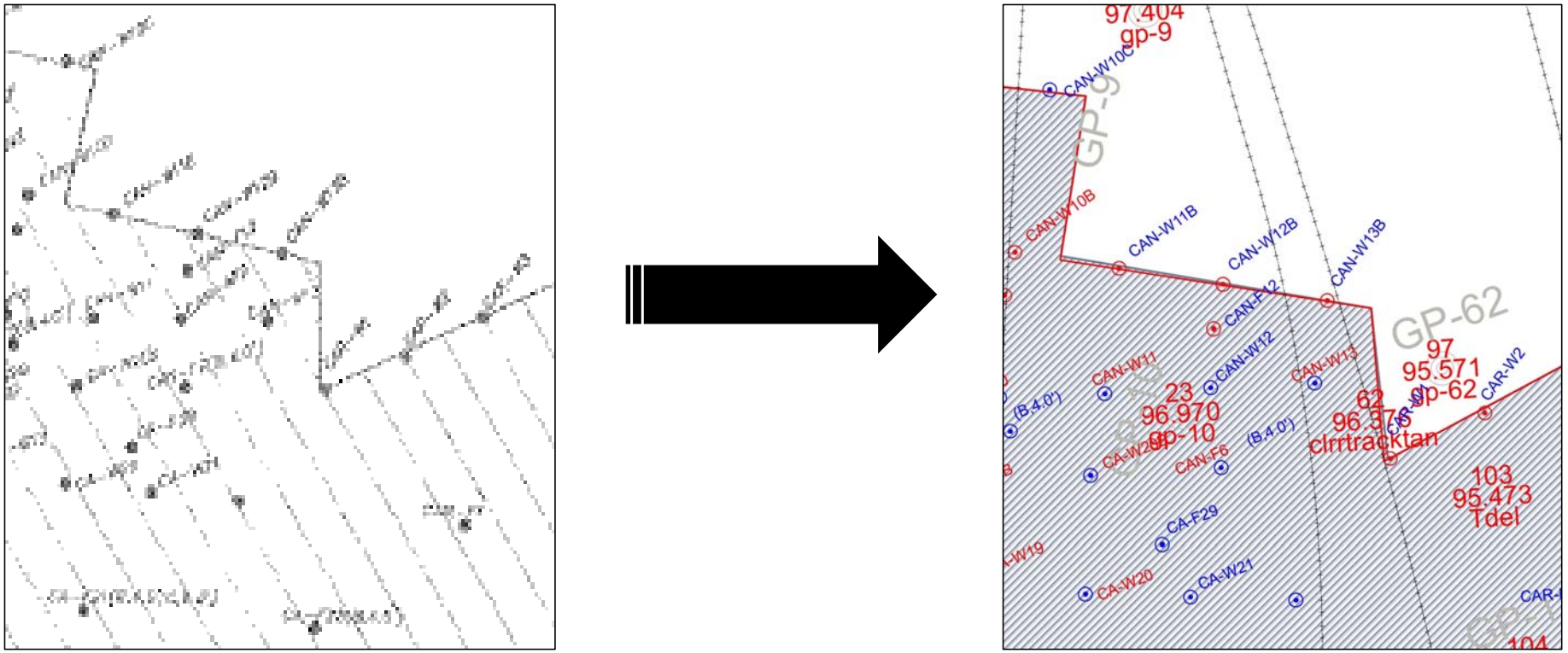
KEMRON ENVIRONMENTAL SERVICES

KEMRON Environmental Services, Inc.
1359-A Ellsworth Industrial Boulevard
Atlanta, GA 30318

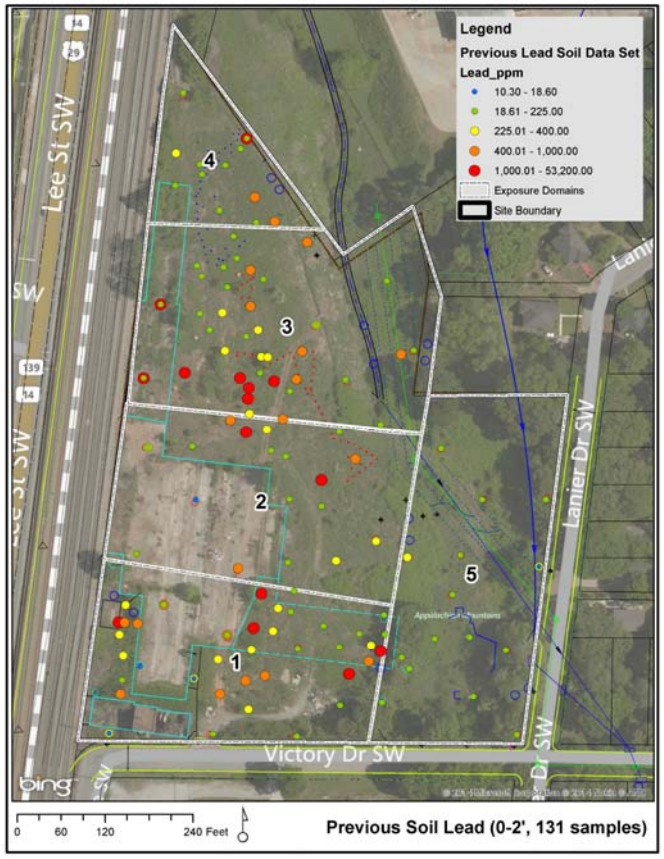
February 2007

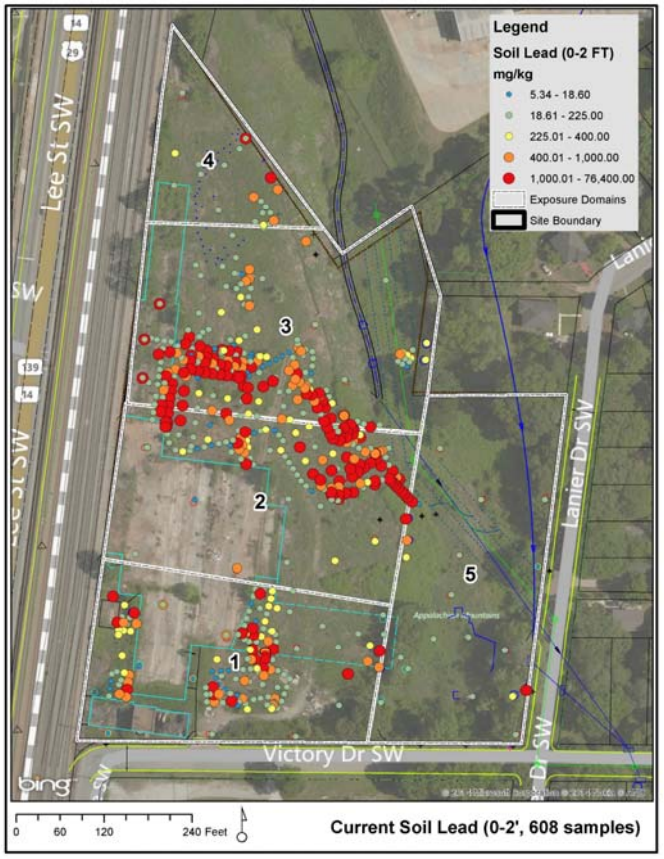


Step 1: Data Compilation (cont.)



Step 1: Data Compilation (cont.)





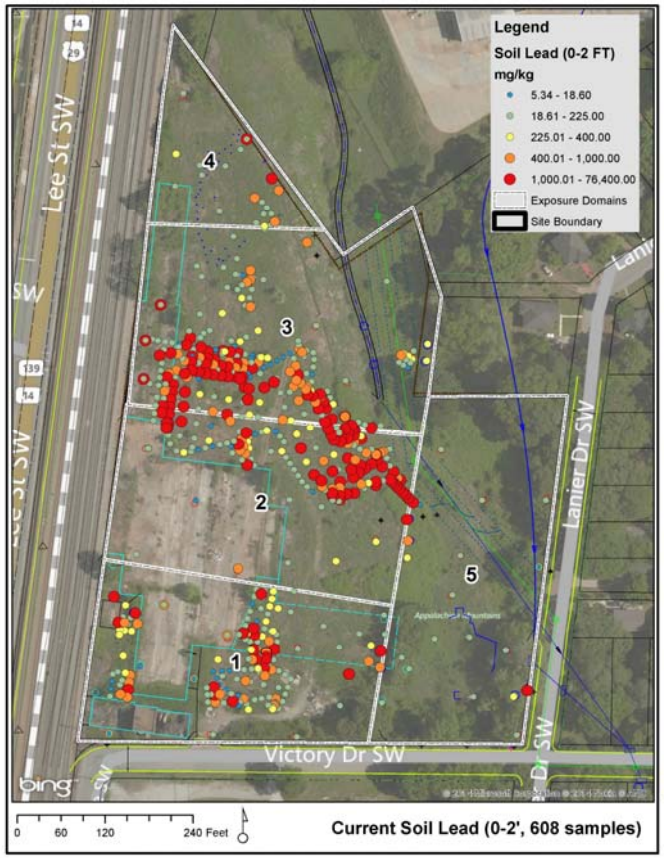
Chronology of Significant Events

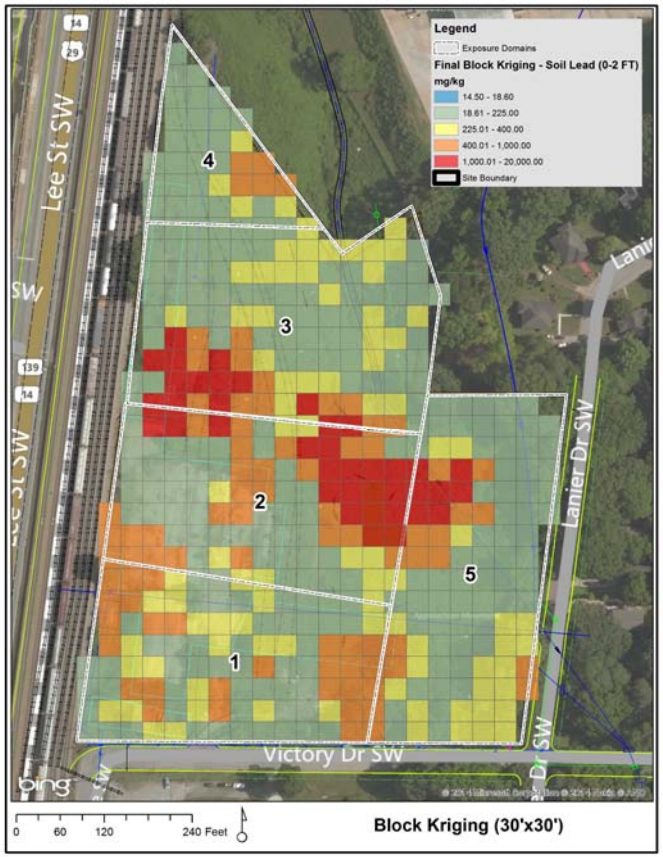
- Sep-2014: Sampling in specific area to supplement new data
- Oct-2014: ReKriging to identify excavation required and identify "hot spots“
- Oct-2014: Receipt of Comment Letter from EPD

D-K Geostatistical Analysis Steps

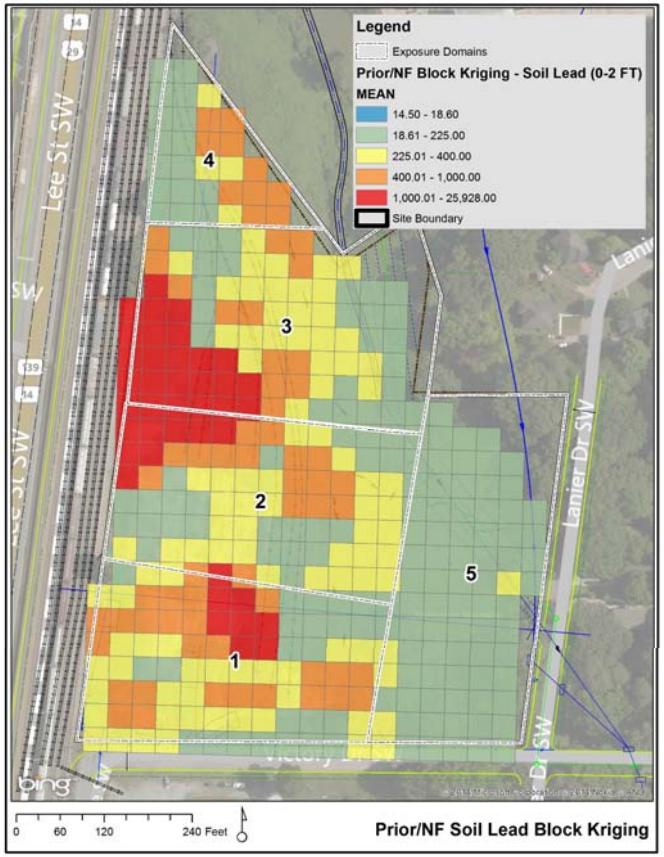
1. Compilation of all available point sampled data
2. Perform geostatistical analysis (block kriging) on full pre-removal point sample data (converts points to spatial 30'x30' blocks)
3. Replace kriged blocks that have been excavated with clean fill (i.e. 36 ppm block concentration)
4. Calculated 95% UCL of mean for each (5) exposure domain
5. Determine which domains have 95% UCL > 400 ppm
6. Identify blocks/areas of domains causing 95% UCL > 400 ppm, determine needs (excavation/sampling)

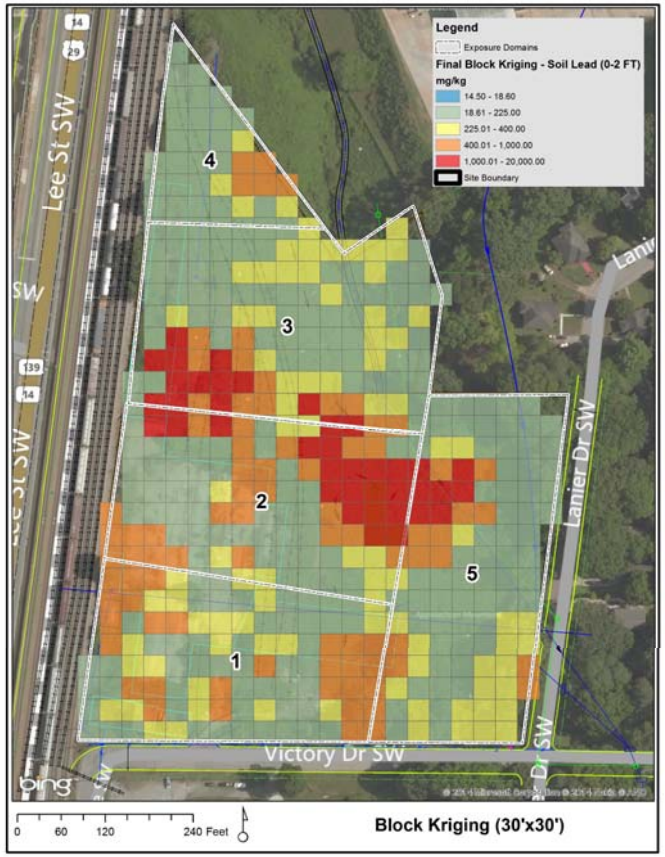
Step 2: Geostatistical Analysis (Block Kriging)



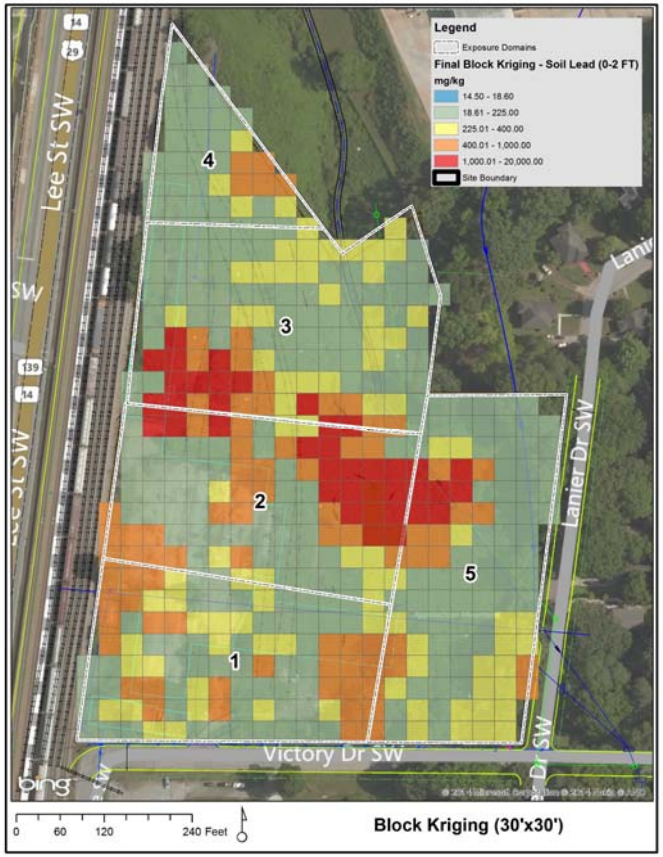


Previous Block Kriging vs. Current

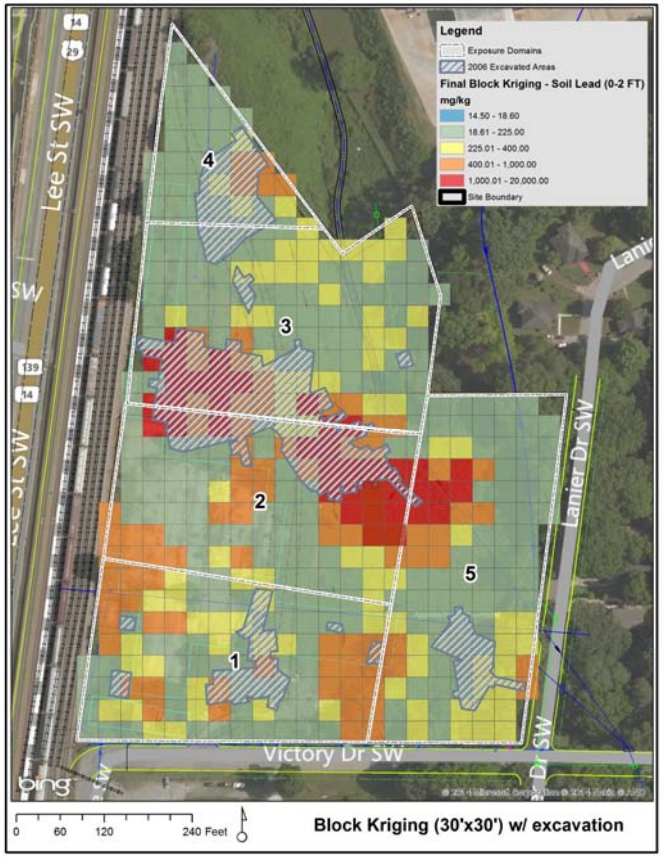




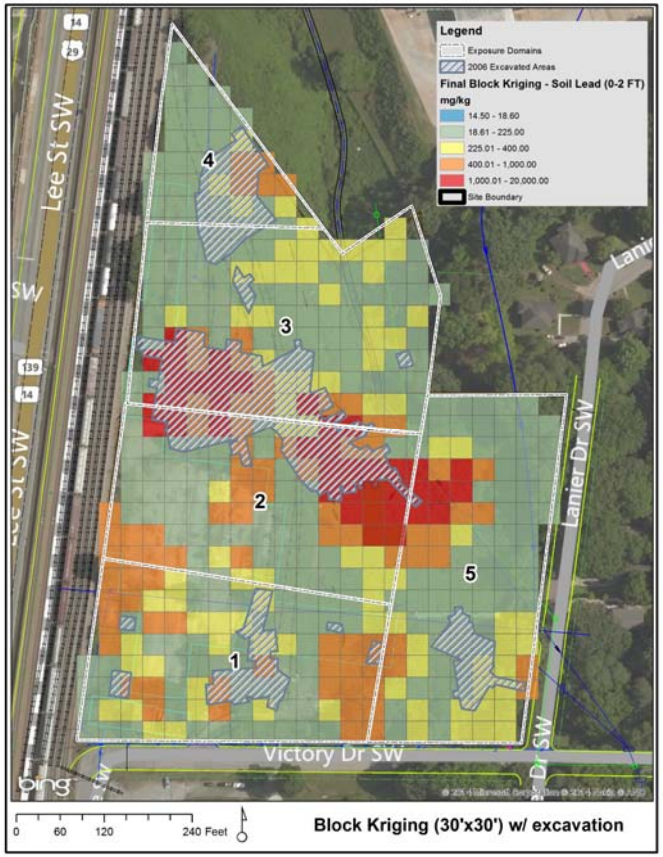
Step 3: Removal of Past Excavated Areas



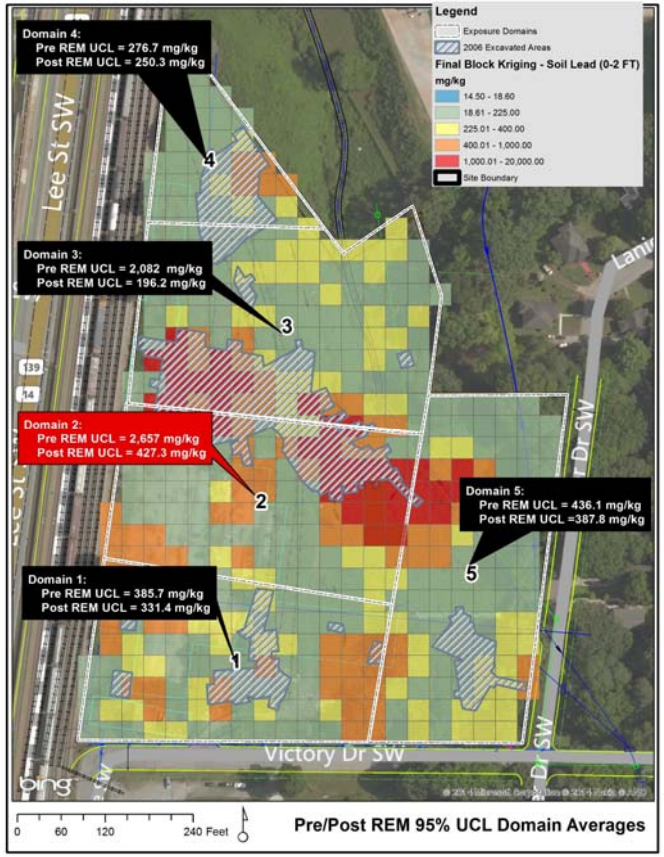
Replace excavated blocks with a value of 36 ppm, which corresponds to backfill lead concentration



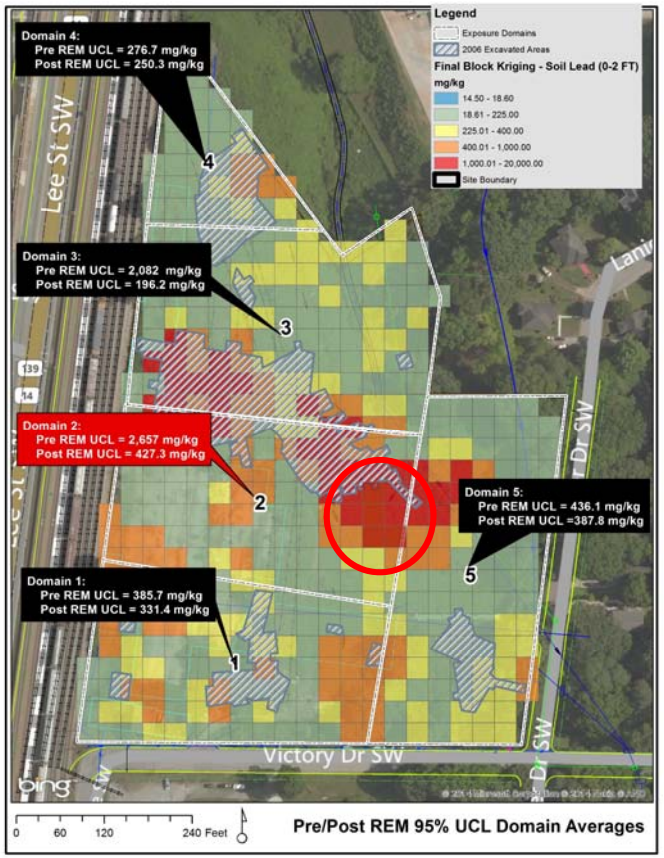
Step 4: Calculate Pre/Post Removal Domain Averages



Calculated 95% UCL of mean for each domain using kriged block values for pre-excavation and post excavation (36 ppm)

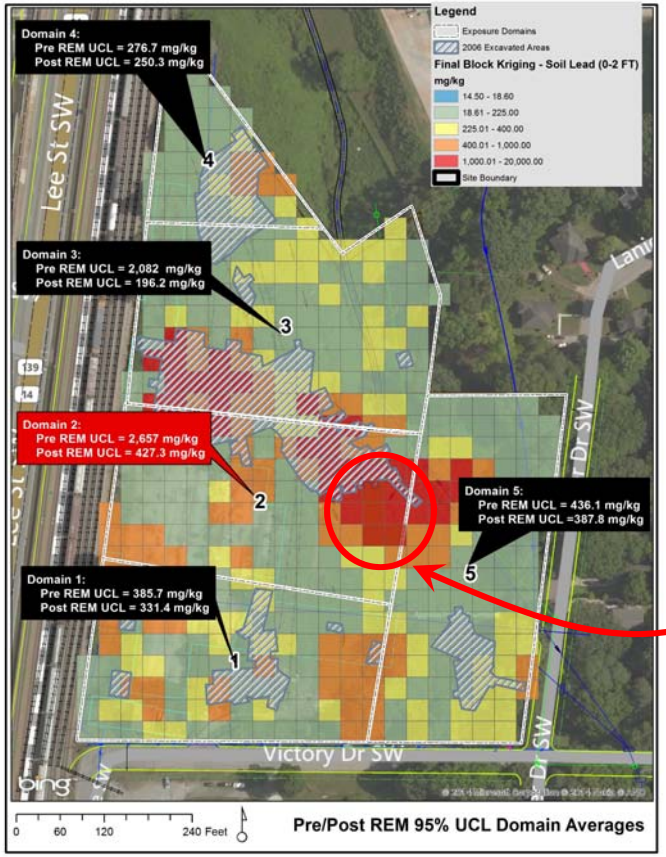


Step 5: Identify Exceedance Domains



Exposure Domain	Pre-Remedy Lead - ppm	Post-Remedy Lead - ppm
1	385.7	331.4
2	2,657	**427.3**
3	2,082	196.2
4	276.7	250.3
5	436.1	387.8

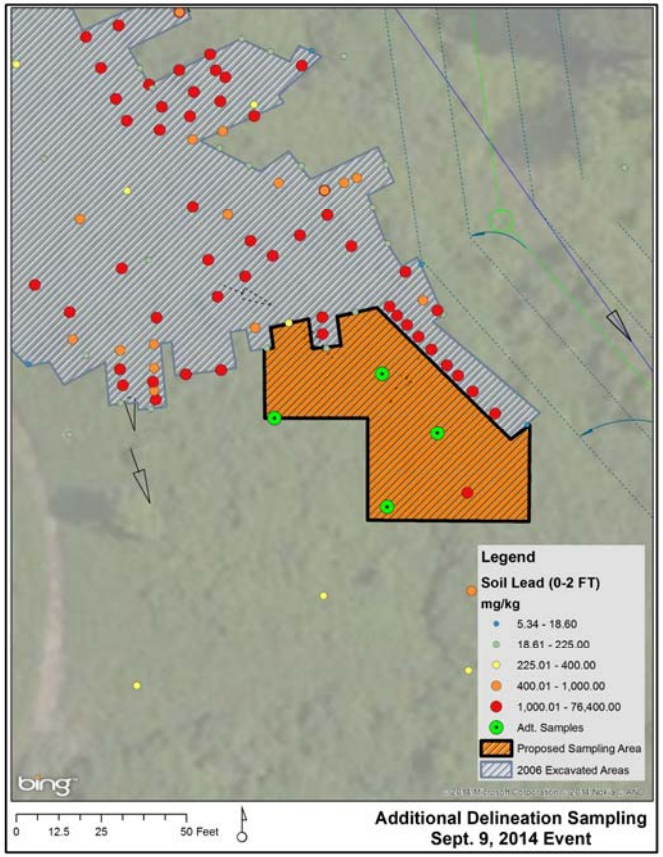
Step 6: Identify Blocks causing Domain Exceedances

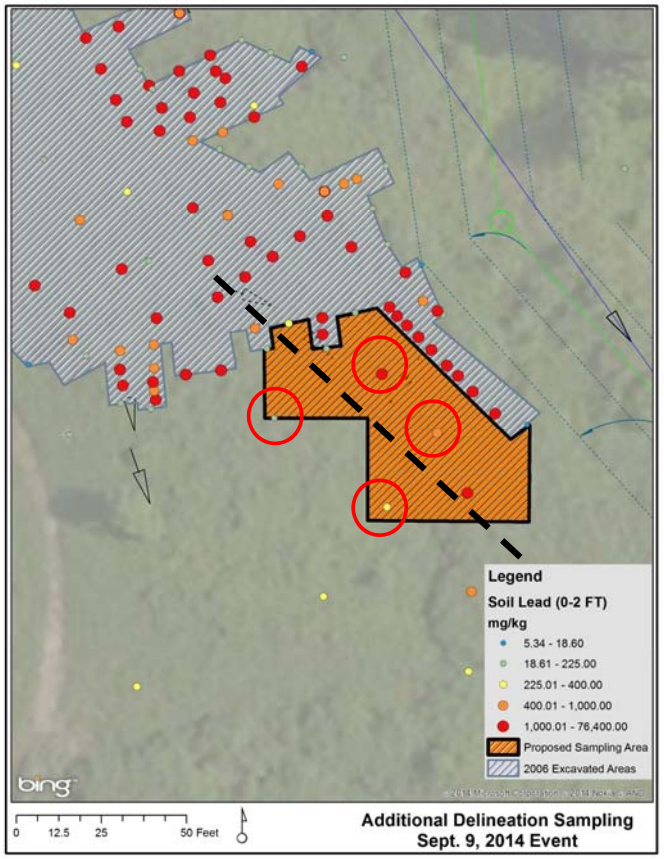


Exposure Domain	Pre-Remedy 1 Lead - ppm	Post-Remedy 1 Lead - ppm	Post-Remedy 2 Lead - ppm
1	385.7	331.4	NA/Same
2	2,657	**427.3**	**299.6**
3	2,985	231.2	NA/Same
4	976.5	375.4	NA/Same
5	480.2	365.2	NA/Same

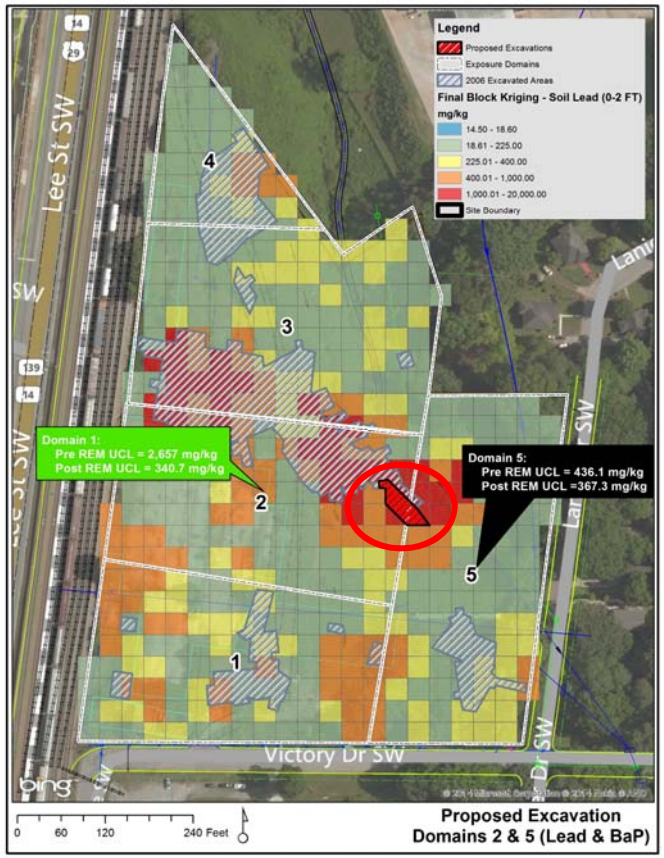
- If these blocks are removed:
  - UCL average passes 400 ppm criteria

Area 5 – Further Sampling/Delineation



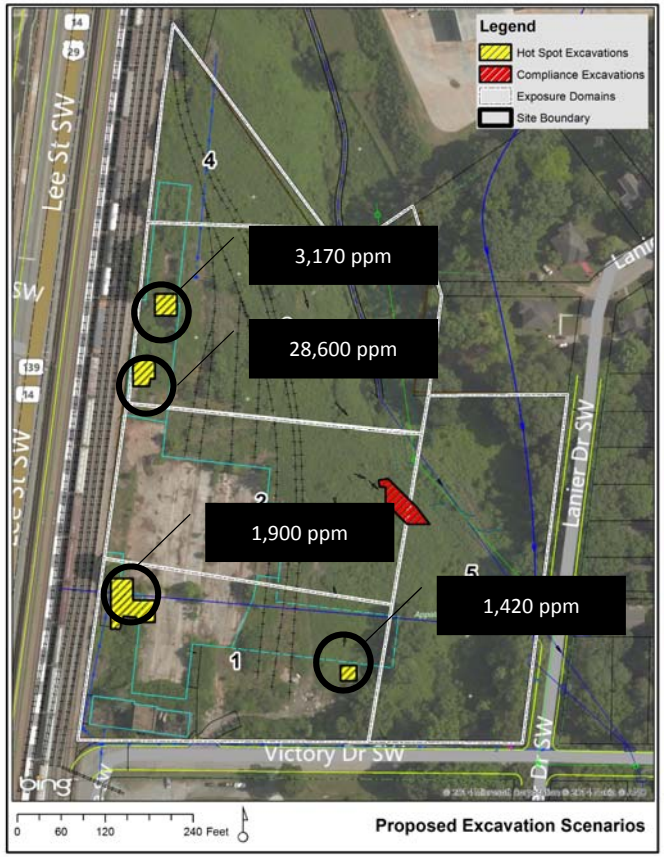


Domain 2 Removal Analysis (Lead & BaP)



Exposure Domain	Current Lead - ppm	Post-Remedy 1 Lead - ppm
1	331.4	NA/Same
2	485.4	**340.7**
3	196.2	NA/Same
4	250.3	NA/Same
5	387.8	367.3

Hot Spots Removal Options



Exposure Domain	Current Lead - ppm	Post-Remedy 1 Lead - ppm	Post-Remedy 2 Lead - ppm
1	331.4	331.4	**249.6**
2	485.4	**340.7**	**NA/Same**
3	196.2	196.2	**192.6**
4	250.3	250.3	**NA/Same**
5	387.8	367.3	**NA/Same**

Subsequent Activities

- Meeting with EPD, January 26, 2015
- Preparation/Submission of Revised Corrective Action Plan (CAP)
- EPD Approval of Revised CAP
- Preparation of detailed site excavation plan (internal)
- City of Atlanta Permit (initiate ASAP)
- Field Activities/Excavation
- Final CSR Preparation/Submittal

APPENDIX C

ANALYTICAL REPORT

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 11, 2015

John Martiniere
Peachtree Environmental
3000 Northwoods Parkway, Suite 105
Norcross GA 30071

TEL: (770) 449-6100
FAX: (770) 513-9848

RE: Davidson Kennedy Site

Dear John Martiniere: Order No: 1501N02

Analytical Environmental Services, Inc. received 1 samples on 1/29/2015 1:12:00 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' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

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

Dorothy deBruyn
Project Manager

Revision 2/11/2015

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501N02

Date: 1/29/15 Page 1 of 1

COMPANY:	ADDRESS:
Peachtree Environmental	3000 Northwoods Pkwy, Ste 105 Norcross, GA 30075
PHONE: 770-449-6100	FAX: 770-449-6119
SAMPLED BY: Brad White	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) I	REMARKS	No. # of Containers
1	DK-34-A	1/29/15	10:25	✓		SO	✓		1
2	DK-34-B		10:31	✓		SO	✓	HOLD SAMPLE	1
3	DK-34-C		10:35	✓		SO	✓	HOLD SAMPLE	1
4	DK-34-D		10:38	✓		SO	✓	HOLD SAMPLE	1
5	DK-34-E		10:44	✓		SO	✓	HOLD SAMPLE	1
6	DK-34-F		10:51	✓		SO	✓	HOLD SAMPLE	1
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: total lead

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Brad White	1/29/15 13:12	1: Cataya Reeves	1/29/15 1:12p
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Davidson-Kennedy
PROJECT #: 3185
SITE ADDRESS: 1195 Victory Drive Atlanta, Georgia
SEND REPORT TO: Peachtree Environmental
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 6

Turnaround Time Request
- ○ Standard 5 Business Days
- ◉ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush **(auth req.)**
- ○ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:
email results to Brad White and John Martinez
Do not analyze HOLD SAMPLES

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 11-Feb-15

Client: Peachtree Environmental
Project: Davidson Kennedy Site
Lab ID: 1501N02

Case Narrative

Per Brad White via email on 2/11/15, Sample id's to be changed to DK-24 from DK-34.

Analytical Environmental Services, Inc **Date:** 11-Feb-15

Client:	Peachtree Environmental	**Client Sample ID:**	DK-24-A
Project Name:	Davidson Kennedy Site	**Collection Date:**	1/29/2015 10:25:00 AM
Lab ID:	1501N02-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C (SW3050B)								
Lead	36.3	5.86		mg/Kg-dry	202372	1	01/30/2015 13:00	JL
PERCENT MOISTURE D2216								
Percent Moisture	17.0	0		wt%	R284931	1	02/02/2015 10:00	SG

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	NC	Not confirmed
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.

Sample/Cooler Receipt Checklist

Client Peachtree Env Work Order Number 1501N02

Checklist completed by Signature Aaron B Date 1/29/15

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.1° Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: Peachtree Environmental
Project Name: Davidson Kennedy Site
Workorder: 1501N02

ANALYTICAL QC SUMMARY REPORT

BatchID: 202372

Sample ID: **MB-202372**	Client ID:			Units: **mg/Kg**	Prep Date: **01/29/2015**	Run No: **284779**
SampleType: **MBLK**	TestCode: **METALS, TOTAL** **SW6010C**			BatchID: **202372**	Analysis Date: **01/29/2015**	Seq No: **6038647**

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-202372**	Client ID:			Units: **mg/Kg**	Prep Date: **01/29/2015**	Run No: **284779**
SampleType: **LCS**	TestCode: **METALS, TOTAL** **SW6010C**			BatchID: **202372**	Analysis Date: **01/29/2015**	Seq No: **6038648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	47.66	5.00	50.00		95.3	80	120				

Sample ID: **1501J89-001CMS**	Client ID:			Units: **mg/Kg-dry**	Prep Date: **01/29/2015**	Run No: **284779**
SampleType: **MS**	TestCode: **METALS, TOTAL** **SW6010C**			BatchID: **202372**	Analysis Date: **01/29/2015**	Seq No: **6038650**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	64.50	6.02	60.18	9.441	91.5	75	125				

Sample ID: **1501J89-001CMSD**	Client ID:			Units: **mg/Kg-dry**	Prep Date: **01/29/2015**	Run No: **284779**
SampleType: **MSD**	TestCode: **METALS, TOTAL** **SW6010C**			BatchID: **202372**	Analysis Date: **01/29/2015**	Seq No: **6038651**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	63.95	6.02	60.18	9.441	90.6	75	125	64.50	0.855	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		

APPENDIX D

ACCESS AGREEMENT

Michelle R. Hollister

From: Tracy Dummett <tracydummett@comcast.net>
Sent: Tuesday, November 18, 2014 10:52 AM
To: John P. Martiniere, Jr.
Subject: Re: Lanier Drive Property

Sure, do what you need to do.

On Nov 18, 2014, at 10:00 AM, "John P. Martiniere, Jr." <jmartiniere@peachtreeenvironmental.com> wrote:

> Good morning, Ms. Dummett.
>
> On behalf of the Davidson-Kennedy company, which owns the property next to your Lanier Drive property, I am requesting permission to conduct a cleanup that is required by the Georgia Environmental Protection Division. You may recall that someone from Peachtree Environmental contacted you several years ago (May 2012) about taking some soil samples on your property to see if there were any environmental impacts, for which you granted your permission. We determined that there is a small area of soil on your property near the property line that could have an impact, possibly from airborne contaminants from Ft. MacPherson. Davidson-Kennedy has agreed to remove this soil on your property at no cost to you while it is taking care of similar areas on its own property.
>
> Based on the sampling results, we expect that the entire field project will take less than a week and probably not more than parts of a day or two on your property. Any soil that is removed will be replaced with clean soil and the area will be re-seeded. To do this work, we need permission to come onto your property with a small backhoe and a truck, most likely from the Lanier Drive side. Mr. Carlton Gordon, your tenant on the property, has given his permission to do this work, but as the property owner, we need your permission as well.
>
> We still have a few steps to take to obtain EPD approval of our plans and similar sign offs, so our schedule is still somewhat uncertain. However, we expect to do the work either by the end of this year or in the first quarter of 2015. We will let you know when a more definite schedule is set.
>
> Please reply to this e-mail giving your permission to do the work described above. If you have any questions, please call me.
>
> Thank you for your consideration and cooperation.
>
> Best regards,
>
> **John P. Martiniere, Jr. P.E.**
> ***Peachtree Environmental***
> **3000 Northwoods Parkway, Suite 105**
> **Norcross, GA 30071**
> **Office 770.449.6100 ext. 225**
> **Cell 404.234.3063**

APPENDIX E

COST ESTIMATE

TABLE 1
ESTIMATED PROJECT COSTS

Project Name: **Davidson-Kennedy**
Engineers Estimate of Remediation Cost
File No: 3185-509
Date: 03/03/15

Prepared By: JPB
Checked By: JPM

Quantity	Units	Description	Cost		Subtotal
Task 1		**Oversight of Field Activities, Field XRF Screening, & Confirmation Sampling Analytical Costs - 1 week**			
		LABOR		$	29,553.00
		EQUIPMENT/EXPENSES/MATERIALS		$	4,185.00
		SUBCONTRACTORS			
		Analytical Environmental Services, Inc. (AES) - Lab Testing		$	2,100.00
			Subtotal Task 1 =>	**$**	**35,838.00**
Task 2		**Mobilization & Site Preparation (including Erosion & Sedimentation Controls)**			
		LABOR		$	1,750.00
		EQUIPMENT/EXPENSES/MATERIALS		$	6,489.44
		SUBCONTRACTORS		$	680.00
			Subtotal Task 2 =>	**$**	**8,919.44**
Task 3		**Pb Area Soil Excavation (On Site & Off Site), PAH Area Soil Excavation, Hauling and Disposal, Site Restoration**			
		LABOR		$	7,875.00
		EQUIPMENT/EXPENSES/MATERIALS		$	6,777.78
		SUBCONTRACTORS		$	23,474.00
			Subtotal Task 3 =>	**$**	**38,126.78**
			SUBTOTAL ESTIMATED PROJECT COST =>	**$**	**82,884.22**
			Contingency on Tasks 2 & 3 10%	**$**	**14,113.87**
			TOTAL ESTIMATED PROJECT COST INCLUDING CONTINGENCY=>	**$**	**96,998.09**