Voluntary Remediation Plan Application Form and Checklist

		VRP A	VRP APPLICANT INFORMATION	RMATION		
COMPANY NAME	Davidson-Kennedy Comp	pany				
CONTACT PERSON/TITLE	Mr. Joseph R. Rubin, CEO	0				
ADDRESS	800 Industrial Park Drive,	, Marietta, GA 30062	30062			
PHONE	(770) 427-9467	FAX		E-MAIL		
GEORGIA CER	GEORGIA CERTIFIED PROFESSIOI	NAL GEOL	OGIST OR PRO	FESSIONAL	NAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP	UP
NAME	William H. Lucas, III			GA PE/PG NUMBER	UMBER 1255	
COMPANY	Peachtree Environmental	ıl, Inc.				
ADDRESS	5384 Chaversham Lane,	Norcross, GA 30092	30092			
PHONE	(770) 559-8050	FAX	(770) 559-8051	E-MAIL	wlucas@peachtreeenvironmental.com	
		APPL	APPLICANT'S CERTIFICATION	-ICATION		
In order to be considered a qualifying property for the VRP:	alifying property for the VR	à.				

- (1) The property must have a release of regulated substances into the environment; (2) The property shall not be:
- (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.
 - Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or (B)
 - A facility required to have a permit under Code Section 12-8-66.
- (3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation
 - or similar authorization from the United States Environmental Protection Agency.
 (4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.

In order to be considered a participant under the VRP:

- The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action. £8
- I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.

responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly

also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.

APPLICANT'S SIGNATURE	ment of tuling		
APPLICANT'S NAME/TITLE (PRINT)	Joseph H. Rubin, CEO	Sholzen	

	QUALIFYING PRO	QUALIFYING PROPERTY INFORMATION		
TAX PARCEL ID	14 -0121-0007-002-4	PROPERTY SIZE (ACRES)	9.17 Acres	
PROPERTY ADDRESS	1195 Victory Drive			
CITY	Atlanta, Georgia	COUNTY Fulton		
LATITUDE	33°42'27.41" North	LONGITUDE 84°25'35.39" West		
PROPERTY OWNER(S)	Davidson-Kennedy Company	PHONE #		
MAILING ADDRESS	800 Industrial Park Drive			
CITY	Marietta	STATE/ZIP GA, 30062		
The Thomas was not			Location in VRP	For EPD
ITEM#	DESCRIPTION OF REQUIREMENT	QUIREMENT	(i.e. pg., Table #, Figure #, etc.)	Comment Only (Leave Blank)
1.	\$5,000 APPLICATION FEE IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES.	A CHECK PAYABLE TO THE DURCES.	Included with May 2010 Original VRP Submission	
2.	WARRANTY DEED(S) FOR QUALIFYING PROPERTY.	ректу.	Refer to Appendix B	
_ن	TAX PLAT OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	UALIFYING PROPERTY D TAX PARCEL IDENTIFICATION	Refer to Appendix B	
4.	ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	CT DISC (CD) COPIES OF THE XCHABLE PORTABLE DOCUMENT	Attached to Amended Application Package	
ស់	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a PROJECTED MILESTONE SCHEDULE for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan during the preceding period. A Gantt chart format is preferred for the milestone schedule. The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant, that a longer time period is reasonably necessary:	It's initial plan and application must include , using all e current information to the extent known at the time of hic three-dimensional preliminary conceptual site model or preliminary remediation plan with a table of delineation preliminary remediation plan with a table of delineation preliminary remediation plan with a table of delineation profit that a surface and subsurface setting, the known or so of contamination, how contamination might move within e potential human health and ecological receptors, and the plate exposure pathways that may exist at the site; the upto-date CSM must be included in each semi-annual ted to the director by the participant; a PROJECTED EDULE for investigation and remediation of the site, and a participant, must update the schedule in each semi-to the director describing implementation of the plan genicle. 4) generic milestones are required in all initial plans with in the participant's next applicable semi-annual reports to ector may extend the time for or waive these or other articipant's plan where the director determines, based on a sicipant, that a longer time period is reasonably necessary:	Refer to Attached Amended VRP Application Report	

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Vitinin Vitinin 5.a. horizo on pro	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;	Refer to Appendix F	
Within the f horizontal d extending o extending o enrollment;	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;	Refer to Appendix F	
Within to inclinate the second to the second	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and	Refer to Appendix F	
5.d. complements complements complements complements contributions.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.	Refer to Appendix F	
SIGNED DOCUME "I certify un supervision professional pro	AND SEALED PE/PG CERTIFICATION AND SUPPORTING ENTATION: der penalty of law that this report and all attachments were prepared by me or under my direct in accordance with the Voluntary Remediation Program Act (D.C.G.A. Section 12-8-101, et.seg.). I am a engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Geologists and cand Surveyors/Georgia State Board of Registration for Professional Geologists and cand surveyors/Georgia State Board of Registration for Professional Geologists and cassary experience and am in charge of the investigation and remediation of this release of regulated cassary experience and am in charge of the investigation and remediation of this release of regulated cassary experience and am in charge of the investigation and remediation of this release of regulated caston, and long term monitoring. I have attached a monthly summary of hours invoiced and description of vided by me to the Voluntary Remediation Program participant since the previous submittal to the rironmental Protection Division. Lucas-III: PG #11255 Lucas-III: PG #11255 Lucas-III: PG #11255 Lucas-III: PG #11255 Date Date Date	Refer to Section 6.0 of the Attached when the Attached VRP whopication Report	

AMENDED VOLUNTARY REMEDIATION PROGRAM APPLICATION FOR THE DAVIDSON-KENNEDY COMPANY FACILITY 1195 VICTORY DRIVE ATLANTA, FULTON COUNTY, GEORGIA® HSI#10866

DOCUMENT PREPARED FOR:



DAVIDSON-KENNEDY CO.

SERVING INDUSTRY SINCE 1888

800 Industrial Park Drive Marietta, Georgia 30062

DOCUMENT PRESENTED TO:

GEORGIA DEPARTMENT OF NATURAL RESOURCES

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MAY 2011

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THE INFORMATION CONTAINED IN THIS REPORT TITLED "AMENDED VOLUNTARY REMEDIATION PROGRAM APPLICATION FOR THE DAVIDSON-KENNEDY COMPANY FACILITY

DAVIDSON-KENNEDY COMPANY FACILITY NORCROSS, 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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MAY 2011

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AMENDED VOLUNTARY REMEDIATION PROGRAM APPLICATION FOR THE

DAVIDSON-KENNEDY COMPANY FACILITY 1195 VICTORY DRIVE ATLANTA, FULTON COUNTY, GEORGIA®

HSI#10866

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ACRONYMS

AES Analytical Environmental Services, Inc.

APLS Aqueous Phase Liquids
Applicant Davidson-Kennedy Company

bgs Below Ground Surface
bls Below Land Surface
CAP Corrective Action Plan
cis-1,2-DCE cis-1,2-Dichloroethene
CSR Compliance Status Report
COCs Constituents of Concern

COPC Constituent of Potential Concern

CSM Conceptual Site Model
Davidson-Kennedy Davison-Kennedy Company

Georgia EPD Georgia Environmental Protection Division
GHWMA Georgia Hazardous Waste Management Act

HSI Hazardous Site Inventory
HSRA Hazardous Site Response Act
HSRP Hazardous Site Response Program
HWMA Hazardous Waste Management Act
IRIS Integrated Risk Information System
MCL Maximum Contaminant Levels

µg/LMicrograms per Liter (same as ppb)mg/KgMilligrams per Kilogram (same as ppm)mg/LMilligrams per Liter (same as ppm)NAPLSNon-Aqueous Phase Liquids

NC Notification Concentration
PAHs Polyaromatic Hydrocarbons
Peachtree Peachtree Environmental, Inc.

PCE Tetrachloroethene
POD Point of Demonstration

ppb Parts per Billion ppm Parts per Million

PRE Preliminary Risk Evaluation

RAGS Risk Assessment Guidance for Superfund

RBCA Risk Based Corrective Action

REC Recognized Environmental Conditions

RN Release Notification

RQSM Reportable Quantities Screening Method

RRS Risk Reduction Standard

PCE Tetrachloroethene

Site Davidson-Kennedy Company Facility
SVOCs Semi-Volatile Organic Compounds

TCLP Toxicity Characteristic Leaching Procedure

TCE Trichloroethene

USEPA United States Environmental Protection Agency

USGS United States Geological Survey VRP Voluntary Remediation Program VOCs Volatile Organic Compounds

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

PEACHTREE ENVIRONMENTAL, Inc. (Peachtree) is submitting this Amended Voluntary Remediation Program (VRP) Application on behalf of the applicant, Davidson-Kennedy Company (Davidson-Kennedy and or "Applicant") for the Davidson-Kennedy Facility, 1195 Victory Drive; HSI#10866 (the "Site"). The purpose of this Amended VRP application is to provide supporting documentation in response to the Georgia Environmental Protection Division's (Georgia EPD) comment letter dated October 12, 2010 (See Appendix A) regarding its review of the original VRP application submitted in May 2010. Part of the VRP Checklist is to detail a Conceptual Site Model for the property including a preliminary remediation plan, a table of delineation standards, supporting text, tables, charts and figures that illustrates the Site's surface and subsurface setting, sources of contamination, contaminant migration pathways, and potential human and environmental receptors, and both complete exposure and incomplete pathways as they currently exist at the Site.

1.2 SITE DESCRIPTION

The Site consists of 9.17 acres of land located at 1195 Victory Drive in Atlanta, Fulton County, Georgia. The Site has a latitude coordinate of 33°42'27.41" North and a longitude coordinate of 84°25'35.39" West. A Site Location Map is included as **Figure 1**.

The Site is bordered to the south by Victory Drive with industrial facilities beyond; Lanier Drive SW and residential developments to the east; industrial facilities to the north; and a Norfork Southern railway with Georgia Highway 29 beyond to the west. A stream enters the Site on the northeastern property boundary and flows approximately 200 feet south into a subgrade pipe which outfalls to the southeast off the property. An ephemeral ditch enters the property on its northeastern corner and traverses in a southerly direction.

There are currently no operations at the Site. All structures, except for an unoccupied office building, have been demolished and removed from the property with the exception of some former building slabs. Access to the Site is available via gated access along Victory Drive and Lanier Drive SW, as well as other non-fenced portions of the property. A Site Layout is provided as **Figure 2**. Topography of the surrounding area has been modified by urban development. Currently, the Davidson-Kennedy facility is situated on relatively flat land with topographic relief to the east-southeast. Surface drainage and groundwater flow on the property mirrors the topographic relief with gradients to the southeast. A USGS Topographic is included as **Figure 3**.

1.3 QUALIFICATIONS OF THE SITE AND VRP APPLICANT

The Participant is submitting this VRP Application under the Georgia Voluntary Remediation Act, (O.C.G.A. § 12-8-100, et seq. (the "Act") for the Davidson-Kennedy Site, Atlanta, Fulton County, Georgia. In order to be considered a "qualifying property", the

Property must be, according to O.C.G.A. § 12-8-105;

1) Listed on the Georgia Hazardous Site Inventory (HSI); or meet the criteria of the Georgia Hazardous Site Reuse and Redevelopment Act ("Brownfields Act") O.C.G.A. § 12-8-205; or have a release of regulated substances to the environment.

Under O.C.G.A. § 12-8-105 the property shall also not:

- 2) Be listed on the federal National Priorities List;
- 3) Be currently undergoing response activities required by an Order of the Regional Administration of the United States Environmental Protection Agency:
- 4) Be a facility required to have a permit under the Georgia Hazardous Waste Management Act ("HWMA"); O.C.G.A. § 12-8-66; and
- 5) Violate the terms and conditions under which the Environmental Protection Division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.

Finally, under O.C.G.A. § 12-8-105 the property shall:

Have any lien filed under subsection (e) of the HWM Act O.C.G.A. § 12-8-66 6) or subsection (b) of the Georgia Underground Storage Tank Management Act O.C.G.A. § 12-13-12 be satisfied or settled and released by the Georgia EPD Director pursuant to the HWM Act O.C.G.A. § 12-8-66.

The Property is listed as HSI #10866. None of the other criteria listed in items 2 - 6 apply. Therefore, the Property is a "qualifying property" under the Act.

In order for the Participant to meet the qualifications of the VRP according to O.C.G.A. § 12-8-106 the following criteria must be met:

- 1) The Applicant must be the property owner of the VRP property or have express permission to enter another's property to perform corrective action including, to the extent applicable, implementing controls for the Site pursuant to written lease, license, order or indenture;
- 2) Not be in violation of any order, judgement, statute, rule or regulation subject to the enforcement authority of the Director; and
- 3) Meet other such criteria as may be established by the DNR Board pursuant to O.C.G.A. § 12-8-103.

As the Participant meets all the criteria stated above, the Participant is "qualified" under the Act.

The contact for the Applicant, and the owner of the Davidson-Kennedy facility is as follows:

Davidson-Kennedy Company Mr. Joseph H. Rubin Chief Executive Officer 800 Industrial Park Drive Marietta, Georgia 30062 (770) 427-9467

Appendix B contains the Warranty Deed(s) and Tax Plat(s) for the Qualifying Property(s).

2.0 SITE INVESTIGATION HISTORY AND DEVELOPMENT OF RISK REDUCTION STANDARDS

2.1 SITE HISTORY AND SUMMARY OF PREVIOUS STUDIES AND CORRECTIVE ACTION CONDUCTED AT THE SITE

The extent of impact to soils and groundwater at the Site has been evaluated based on the collection of representative environmental media samples and the subsequent analytical testing of those samples for known constituents of concern.

Previously conducted investigations on the Site identified the presence of regulated substances, principally volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals in soil and/or groundwater samples. These findings were part of prior investigative activities conducted by others on the property from the time period of August 2005 to August of 2007. The following sections summarize the details and findings of these activities.

2.1.1 Phase II Environmental Site Assessment, Kemron Environmental Services, Inc., August 2005

Kemron Environmental Services, Inc. (Kemron) conducted a Site visit on July 8, 2005. During that visit, Kemron identified numerous areas of the property that were constituted as "Recognized Environmental Conditions" (RECs) requiring further investigation to evaluate whether these identified areas may have adversely impacted the environmental quality of the Site over applicable regulatory thresholds.

Historical research in the Kemron report incorporated a variety of data sources including Sanborn Fire Insurance (Sanborn) Maps, historic aerial photography, historic topographic maps, historic City Directory review, and review of state and federal databases. Reportedly, the Site had been utilized as a rail car repair facility since the late 1970's. The data gathered from historic research indicated that the Site had been developed and utilized for industrial applications since at least 1925 with the Site being listed as Hudson Brothers Structural Steel Bridge Company on a Sanborn map dated 1925. Historic City Directory reviews indicated the Site being listed as Calvert Iron Works from 1952 to 1957 and Tri-State Steel Products (a division of Florida Steel) from 1962 to 1967. Florida Steel was listed on the city directory from 1967 to 1977. Davidson-Kennedy was listed at the property address starting in 1981.

A metal fabricating facility was identified on a 1962 Sanborn map on the southeastern portion of the property. Bowers Sheet Metal Company (1952) and Calvert Iron Works (1957) were shown at 1155 Victory Drive and were presumed to be at the same location as the metal fabrication facility. The 1155 Victory Drive address was not listed after 1957 on City Directories and was presumed to be incorporated into the Site.

Kemron further assessed the RECs identified during the July 8, 2005 Site visit and historic research through the collection and analysis of soil samples from fifteen (15) hand auger borings, and groundwater samples from six (6) temporary monitoring wells. Field activities associated with these activities commenced between July 25 to July 29, 2005.

Analytical results obtained from the Phase II ESA revealed detectable concentrations of semi-volatile organic compounds (SVOCs) and Lead at levels exceeding their respective Notification Concentrations (NCs) as established by the Georgia EPD HSRA Program. Detectable concentrations of various SVOCs and one volatile organic constituent, 1,2-Dichloroethane, were detected in groundwater samples above NCs.

2.1.2 Expanded Site Assessment Report, Kemron, September 2005

The results of the August 2005 Phase II activities warranted additional Site characterization to define the nature and extent of environmental impact to the Site. As such, Kemron returned to the Site in August of 2005 and installed/sampled a total of ninety-nine (99) soil borings (88 shallow borings and 11 deep soil borings) and four additional temporary groundwater monitoring wells. Soil borings and temporary monitoring wells were installed in locations where previous detections of regulated substances required additional delineation or in areas where data gaps existed.

Analytical data gathered from the expanded investigation indicated that Lead was the only metal detected above the respective HSRA NC of 400 mg/kg. Numerous SVOC and polynuclear aromatic hydrocarbon (PAH) compounds were detected in soil samples collected at varying locations around the subject Site. Concentrations of chrysene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benzo(k)fluoranthene, naphthalene and benzo(a)anthracene were detected at concentrations exceeding their respective HSRA NCs. Concentrations of various VOCs were also detected in soil above the laboratory detection limits. Of the VOC detections, Benzene was reportedly the only VOC exceeding their respective HSRA NCs.

Several of the soil samples collected were also submitted for toxicity characteristic leaching procedure (TCLP) analysis for Lead in order to characterize soils for potential off-site disposal as waste materials. The soil sample collected from GP-13A contained a TCLP-lead concentration which classified the material (i.e., soil) as being hazardous. The remaining soil samples collected for TCLP-lead and metals analysis indicated that the material would be classified as non-hazardous. Such non-hazardous material also included the millscale pile which was identified during the Phase II ESA investigation.

Concentrations of Benzene and Tetrachloroethene (PCE) were detected in groundwater above the applicable maximum contaminant levels (MCLs) during the

expanded Phase II Investigation. Numerous SVOC constituents were also detected in excess of their respective MCL concentrations.

2.1.3 Soil Excavation and Disposal Summary Report, Kemron, February 6, 2007

Kemron mobilized to the Site on July 24, 2006 to begin the process of soil remediation via excavation and disposal. A total of thirteen (13) areas (i.e., excavation areas A to M) were identified as requiring corrective action to meet HSRA NCs. Remedial activities were delayed for approximately nine months while a Land Disturbance Permit was sought for approval from the City of Atlanta.

Four (4) of the proposed excavation areas contained soil with various SVOCs over their respective NCs ('J', 'K', 'L', and 'M'). Additionally, Benzene and Xylene concentrations above the applicable NCs were detected in soil at excavation 'K'. Isophorone was detected in the excavation area labeled 'L'. Excavation areas 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I' exhibited soil concentrations of Lead above the NC. Select areas in 'K' and 'M' were removed to the groundwater table. Excavation 'A' extended beyond the proposed area to the north, south and to the southeast. Based on confirmatory sampling results, additional excavation was required to remediate respective compounds to below the NC at excavations 'A', 'B', 'E', 'G', 'H', 'J', 'K' and 'M'.

Several areas within excavation area 'A' required stabilization to render the soils non-hazardous for Lead. Stabilization was achieved in-situ by mixing soil with granulated triple superphosphate. Five point composite soil samples were collected and submitted for TCLP analysis to ensure the soil was stabilized to within non-hazardous regulatory criteria for off-site disposal.

Following excavation activities, soil samples were collected utilizing a grid system, with soil samples collected every ten feet along excavation walls (two wall depths collected in areas with deeper excavations) and every twenty feet along the floor of the excavations. In the event a confirmatory soil sample exhibited a concentration above the respective NC, additional excavation was conducted and additional soil samples were collected.

A total of 28,106.62 tons of Lead, Benzene, Xylene, and SVOC impacted soil was removed from the Site and disposed of at the Eagle Point Landfill in Ball Ground, Georgia. The Kemron report indicated that, based on the results of the confirmatory sampling, that Lead, Benzene, Xylene, and SVOC impacted soil at the Site had successfully remediated soils to below the respective HSRA NCs. The report also recommended that the property owner file a Release Notification for groundwater to the Georgia HSRA Program.

2.1.4 HSRA Release Notification, February 13, 2007

A HSRA Release Notification for groundwater was submitted on behalf of Davidson-Kennedy by Kemron on February 13, 2007. The Notification included soil and groundwater data from the prior Kemron assessment activities as well as a Site Summary and a copy of the February 6, 2007 Soil Excavation and Disposal Summary Report.

2.1.5 May 14, 2007 Georgia EPD Meeting

The Georgia EPD and Davidson-Kennedy representatives held a meeting on May 14, 2007 to discuss Georgia EPD's technical comments regarding the data submitted as part of the Release Notification. Georgia EPD's primary focus was the adequacy of confirmatory samples to verify the removal of constituents of concern to below HSRA NCs.

2.1.6 May 18, 2007 Response to Georgia EPD Comments

Kemron, on behalf of Davidson-Kennedy, prepared a letter response to the technical issues raised by the Georgia EPD during the May 14, 2007 meeting. Kemron addressed five Georgia EPD comments with supporting documentation to address specific concerns regarding confirmatory soil testing, delineation to background in soils, and stained soils observed on the Site.

2.1.7 August 27, 2007 Georgia EPD Soil Sampling at Davidson-Kennedy Site

The Georgia EPD mobilized to the Site on August 27, 2007 to collect soil, sediment, and surface water samples. The locations sampled were previously provided by Georgia EPD to Davidson-Kennedy on a Site map. A total of eleven (11) soil samples, three (3) surface water, and three (3) sediment samples (DK-1 to DK-14) were collected by the Georgia EPD. Two of the samples (DK-4 and DK-5) were collected from surface water traversing the northeastern boundary of the facility and one (DK-3) was collected from the outfall on the south side of Victory Drive. The remainder of the samples (DK-1, DK-2, and DK-6 to DK-14) were collected from surface soils at a depth of 0 to 6 inches.

2.1.8 October 18, 2007 Georgia EPD Letter with August 27, 2007 Analytical Data Package

The Georgia EPD sample results were provided to Davidson-Kennedy in a letter dated October 18, 2007. The results reported detections of Metals (Lead and Arsenic) and various SVOCs in nine (9) of the thirteen (13) soil samples collected as part of assessment activities. Sample locations and a summary of the results are presented on **Figure 4** and **Tables 1** and **3**, respectively.

2.1.9 October 26, 2007 Georgia EPD Letter Listing the Site on the Hazardous Site Inventory

The Georgia EPD listed the Davidson-Kennedy Facility on the Georgia Hazardous Site Inventory in a letter dated October 26, 2007 as a Class II Site. The property was listed for the On-site Exposure pathway. The property did not list based upon groundwater scoring. The HSI number for the Davidson-Kennedy Site is 10866.

2.1.10 May 2010 Submission of Voluntary Remediation Plan to the Georgia EPD

Peachtree submitted a VRP Application to the Georgia EPD on behalf of Davidson-Kennedy on May 24, 2010. The VRP Application included a discussion of past assessment and corrective action activities, applicable clean-up standards, applicable delineation standards, and a Conceptual Site Model (CSM) describing Site conditions and potential exposure pathways.

2.1.11 September 14, 2010 Georgia EPD Proposed Consent Order

The Georgia EPD determined that Davidson-Kennedy was currently ineligible for VRP participation due to criteria under Section 12-8-106 of the Act. The letter forwarded a proposed Consent Order to address issues that precluded Davidson-Kennedy's participation in the VRP.

2.1.12 October 12, 2010 Georgia EPD VRP Application Comments

The Georgia EPD provided comments on the May 2010 VRP Application in a letter dated October 12, 2010. The technical comments requested additional details relating to the CSM, the Site Delineation Criteria, and the Preliminary Voluntary Investigation and Remediation Plan.

2.1.13 January 26, 2011 Georgia EPD Executed VRP Consent Order

A VRP Consent Order between the Georgia EPD and Davidson-Kennedy was executed on January 26, 2011. EPD specified a 45 day deadline to submit a revised VRP Application addressing the October 12, 2010 Georgia EPD VRP comments.

2.2 REGULATED SUBSTANCES RELEASED AND APPLICABLE STANDARDS

As a result of prior investigation activities, the following regulated substances have been identified in soil and/or groundwater:

Metals

- Arsenic (CAS No: 7440-38-2) Soil;
- Barium (CAS No: 7440-39-3) Soil;
- Cadmium (CAS No: 7440-43-9) Soil
- Chromium (CAS No: 7440-47-3) Soil
- Lead (CAS No: 7439-92-1) Soil;
- Mercury (CAS No. 7439-97-6) Soil;

Volatile Organic Compounds

- ▶ Benzene (CAS No. 71-43-2) Soil/Groundwater;
- ► Toluene (CAS No. 108-88-3) Groundwater;
- Ethylbenzene (CAS No. 100-41-4) Groundwater;
- Xylenes (CAS No. 1330-20-7) Soil/Groundwater;
- ► Tetrachloroethene (CAS No. 127-18-4); Groundwater;
- ► 1,2-Dichloroethane (CAS No: 107-06-2) Groundwater;

Semi-Volatile Organic Compounds

- Acenaphthene (CAS No. 83-32-9) Soil/Groundwater;
- Anthracene (CAS No. 120-12-7) Groundwater;
- Benzo(a)anthracene (CAS No. 56-55-3) Soil/Groundwater;
- Benzo(a)pyrene (CAS No. 50-32-8) Soil;
- Benzo(b)fluoranthene (CAS No. 205-99-2) Soil;
- Benzo(k)fluoranthene (CAS No. 207-08-9) Soil;
- ▶ Benzo(g,h,i)perylene (CAS No. 191-24-2) Soil;
- Chrysene (CAS No: 218-01-9) Soil/Groundwater;
- ► Fluoranthene (CAS No: 206-44-0) Soil/Groundwater;
- ► Fluorene (CAS No. 86-73-7) Groundwater;
- ► Indeno(1,2,3-cd)pyrene (CAS No. 193-39-5) Soil;
- 2-Methylnaphthalene (CAS No. 91-57-6) Groundwater; and
- ► 4-Methylphenol (CAS No. 106-44-5) Groundwater
- ► Naphthalene (CAS No. 91-20-3) Groundwater:
- Phenanthrene (CAS No. 127184) Soil/Groundwater;
- Pyrene (CAS No. 129-00-0) Soil/Groundwater;

2.3 SITE DELINEATION STANDARDS

The Georgia VRP outlines the standards for horizontal and vertical delineation of regulated substances in soil and groundwater utilizing the following criteria:

- (A) Concentrations from an appropriate number of samples that are representative of local ambient or anthropogenic background conditions not affected by the subject Site release;
- (B) Soil concentrations less than those concentrations that require notification under standards promulgated by the Board pursuant to Part 2 of this article;
- (C) Two times the laboratory lower detection limit concentration using an applicable analytical test method recognized by the United States Environmental Protection Agency, provided that such concentrations do not exceed all cleanup standards:
- (D) For metals in soils, the concentrations reported for Georgia undisturbed native soil samples as reported in the United States Geological Survey (USGS) Open File Report 8 1-197 (Boerngen and Shacklette, 1981), or such later version as may be adopted by rule or regulation of the board; or
- (E) Default, residential cleanup standards;

The VRP statute also provides that the provisions of subparagraphs (B) and (C) of the standards listed above shall not be used if the concentrations are higher than as provided in item (E), the default Type 1 residential cleanup criteria.

2.3.1 Soil Delineation Standards

Currently, the Type 1 residential RRS will serve as the delineation standards for compounds that are not naturally occurring (i.e., VOCs and SVOCs) the Davidson-Kennedy Site. For inorganic compounds, a combination of anthropogenic background or Type 1 criteria will be utilized. Details on the anthropogenic background study are provided in **Section 3.5.** The current delineation standards are as listed on the following page:

SOIL DELINEATION STANDARDS

REGULATED CONSTITUENT	HIGHEST DETECTED CONCENTRATION (MG/KG)	Anthropogenic Background Concentration (mg/kg)	TYPE 1 RRS (MG/KG)
METALS			
Lead	1,900 (DK-12)	357.4	-
Arsenic	83 (DK-12)	21.4	-
Barium	2,500 (DK-14)	-	1,000
Cadmium	3.79 (HA-13A*)	3.5	-
Chromium	145 (BH-3*)	-	100
Selenium	LDL**	10.4	-
Silver	LDL**	3.5	-
Mercury	3.68 (DK-10)	-	0.5
VOLATILE ORGANIC COMPO	DUNDS		•
Benzene	0.16 (TMW-7*)	NA	0.5
Xylene	44 (C-F5*)	NA	1,000
SEMI-VOLATILE ORGANIC C	OMPOUNDS		•
Fluoranthene	17 (DK-10)	NA	500
Phenanthrene	2.9 (DK-11)	NA	110
Pyrene	22 (DK-10)	NA	500
Acenaphthene	3.8 (DK-10)	NA	300
Benzo(a)anthracene	5.8 (DK-10)	NA	5
Benzo(a)pyrene	13 (DK-10)	NA	1.64
Benzo(b)fluoranthene	15 (DK-10)	NA	5
Benzo(k)flouranthene	4.8 (DK-10)	NA	5
Benzo(g,h,i)perylene	12 (DK-10)	NA	500
Chrysene	7.9 (DK-10)	NA	5
Indeno(1,2,3-cd)pyrene	13 (DK-10)	NA	5

Notes:

NA - Not Applicable.

^{* -} Sample point removed via Kemron soil excavation activities.

LDL - Laboratory Detection Limit.

^{** -} LDL was higher than Type 1 Criteria.

2.3.2 Groundwater Delineation Standards

Sixteen (16) HSRA-regulated substances have been historically detected in groundwater samples obtained during the various investigations at the Site. The resulting groundwater delineation standards are provided on the following table:

GROUNDWATER DELINEATION STANDARDS

REGULATED CONSTITUENT	Type 1 RRS (μg/L)
VOLATILE ORGANIC COMPOUNDS	
Benzene	5
Toluene	1,000
Ethylbenzene	700
Xylenes	10,000
1,2-Dichloroethane	5
Tetrachloroethene	5
SEMI-VOLATILE ORGANIC COMPOUNDS	
Acenaphthene	2,000
Anthracene	10
Benzo(a)anthracene	0.1
Chrysene	0.2
Fluoranthene	1,000
Fluorene	1,000
Naphthalene	20
4-Methylphenol	10
Phenanthrene	10
Pyrene	1,000

In the course of future assessment activities, it may be appropriate to employ one or more of the delineation criteria previously discussed in Section 2.3. If so, this plan will be amended in future submissions.

2.3.3 Point of Demonstration Monitoring for Groundwater

The Georgia Voluntary Remediation Program Act specifies in Section 12-8-108(4) that concentration of regulated constituents detected on a site shall be measured and evaluated at a "point of demonstration" (POD) well. The purpose of the POD

well is to demonstrate that groundwater concentration is protective of any established downgradient point of exposure.

The Davidson-Kennedy property was listed on the HSI on October 26, 2007 utilizing the Reportable Quantity Screening Method. The results of the scoring reported the "on-site exposure pathway" (soil) above HSI listing criteria and the "groundwater pathway" scoring below HSI listing criteria. As such, Davidson-Kennedy intends to pursue allowances enumerated under O.C.G.A. 12-8-107(g)(2) with regard to groundwater corrective action and certification of compliance.

3.0 CONCEPTUAL SITE MODEL

3.1 Prior Site Investigations

Soil and groundwater sampling, analytical testing, and corrective action activities have been conducted as part of prior assessment activities. The following sections detail the findings of these activities.

3.1.1 Phase II Environmental Site Assessment, Kemron Environmental Services, Inc., August 2005

Kemron collected and analyzed fifteen (15) hand auger borings and groundwater from six (6) temporary monitoring wells as part of Phase II assessment activities between July 25 to July 29, 2005.

3.1.1.1 Soil Analytical Testing Results

Shallow hand auger soil samples (HA-1 to HA-15) and soils from temporary monitoring well installations (TMW-1 to TMW-6) were collected by Kemron at a depth of 0.5 feet below ground surface to assess metals impact via EPA Method 6010B. Kemron compared their analytical results to HSRA NCs¹. Based upon analytical testing results, Lead and Barium were found above their respective HSRA NCs.

Deeper interval soil samples from hand auger and temporary monitoring well soil borings ranged from one (1) foot to twenty-one (21) feet below land surface. The deeper interval soil samples were analyzed for Volatile Organic Compounds (VOCs) via EPA Method 8260 and Semi-Volatile Organic Compounds (SVOCs) via EPA Method 8270. Based upon analytical testing results, the following SVOCs were detected above their respective HSRA NCs:

- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(a)pyrene
- Chrysene
- Indeno(1,2,3-cd)pyrene
- Isophorone
- Naphthalene

¹Kemron originally compared resulting analytical data to HSRA NCs as part of its reports so that a determination of applicability to HSRA's notification requirements could be determined. Subsequently, the areas which exceeded HSRA NCs were excavated and disposed of at an offsite Subtitle D landfill. See Section 3.1.3 for additional information.

3.1.1.2 Groundwater Analytical Testing Results

A total of six (6) temporary groundwater monitoring wells (TMW-1 to TMW-6) were sampled by Kemron as part of the 2005 Phase II investigation. Samples were submitted for analysis of VOCs via EPA Method 8260, SVOCs via Method 8270, and RCRA Metals via EPA Method 6010B. Based upon analytical testing results, the following constituents were reported² in groundwater:

- Barium;
- 1,2-Dichloroethane;
- Chrysene:
- Fluoranthene;
- Fluorene:
- Naphthalene;
- Phenanthrene:
- Pyrene;
- ► 1,1-Biphenyl;
- 2-Methylnaphthalene;
- Acenaphthalene;
- Benzo(a)anthracene; and
- Anthracene.

3.1.2 Expanded Environmental Site Assessment Report, Kemron Environmental Services, Inc., September 2005

Kemron returned to the Site in August of 2005 to delineate sample locations where detections above the NCs were reported in the Phase II sampling activities or where data gaps existed. A total of ninety-nine (99) soil borings (88 shallow borings and 11 deep soil borings) and four (4) additional temporary groundwater monitoring wells were completed as part of these activities.

3.1.2.1 Soil Analytical Testing Results

Shallow depth interval samples (0.5 foot interval) were collected from the four temporary monitoring well soil borings (TMW-7 to TMW-10), the eleven (11) deep soil borings (BH-1 to BH-11), and the eight-eight (88) shallow borings (GP-1 to GP-88). Shallow soil samples from the temporary monitoring well borings and the deep soil borings were analyzed for the full suite of RCRA Metals via EPA Method 6010B. Shallow soil borings GP-1 to GP-88 were analyzed for Lead only via EPA Method 6010B. Concentrations

² Many of the groundwater samples exhibited higher that average turbidity measurements and, therefore, results may not accurately reflect true groundwater characteristics. Future sampling will be conducted in accordance with approved methods to ensure characterization of groundwater.

of Lead and Barium were found to be above the HSRA NCs as a result of the sampling efforts.

Several of the soil samples collected were also submitted for toxicity characteristic leaching procedure (TCLP) analysis for Lead in order to characterize soils for potential off-site disposal. The soil sample collected from GP-13A contained a TCLP-lead concentration which classified the material (i.e., soil) as being hazardous. The remaining soil samples collected for TCLP-lead and metals analysis indicated that the material would be classified as non-hazardous. Such non-hazardous material also included the millscale pile which was identified during the Phase II ESA investigation.

Deeper interval soil samples were analyzed for VOCs via EPA Method 8260B from temporary monitoring wells TMW-7 to TMW-10, soil borings BH-1 to BH-11. Deeper interval soil samples were analyzed for SVOCs via EPA Method 8270C from temporary monitoring wells TMW-7 to TMW-10, deeper interval samples BH-1 to BH-11, and from twenty-two (22) shallow soil sample locations (GP-37B to GP-39B, GP-42B, GP-44 to GP-48, GP-50 to GP-54, GP-56B, GP-61B, GP-66C, GP-67B, GP-82B, GP-84B, and GP-85B). Sample depths ranged from one (1) foot to twenty-five (25) feet below land surface. Based upon analytical testing results, the following constituents were detected above their respective HSRA NCs:

- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(a)pyrene
- Benzene
- Chrysene
- ► Indeno(1,2,3-cd)pyrene
- Naphthalene

3.1.2.2 Groundwater Analytical Testing Results

A total of four (4) supplemental temporary groundwater monitoring wells (TMW-7 to TMW-10) were sampled by Kemron as part of the 2005 Expanded Environmental Site Assessment Report. Samples were submitted for analysis of VOCs via EPA Method 8260B and SVOCs via Method 8270C. Based upon analytical testing results, the following constituents were detected in groundwater³:

³ Many of the groundwater samples exhibited higher that average turbidity measurements and, therefore, results may not accurately reflect true groundwater characteristics. Future sampling will be conducted in accordance with approved methods to ensure characterization of this resource.

- Benzene
- Toluene;
- Ethylbenzene;
- Xylenes;
- Tetrachloroethene;
- Fluoranthene;
- Fluorene;
- Naphthalene;
- Phenanthrene;
- Pyrene:
- ► 1,1-Biphenyl;
- 2-Methylnaphthalene;
- 4-Methylphenol;
- Dibenzofuran:
- Acenaphthalene;
- Caprolactam; and
- Anthracene.

Concentrations of Benzene and Tetrachloroethene (PCE) were detected in groundwater above the applicable maximum contaminant levels (MCLs) during the expanded Phase II Investigation. Fluoranthene was also detected in excess of its respective MCL concentration.

3.1.3 Soil Excavation and Disposal Summary Report, Kemron, February 6, 2007

Kemron removed soils exceeding HSRA NCs identified during the Phase II ESA and Expanded ESA activities. The soil removal activities included thirteen (13) areas (**Excavation Areas A to M**) identified as requiring corrective action to meet HSRA NCs for Lead, and certain VOCs, and SVOCs.

A total of **28,106.62** tons of Lead, VOCs, and SVOC impacted soil was removed from the subject property and disposed of at the Eagle Point Landfill in Ball Ground, Georgia. The Kemron report indicated that, based on the results of over 1,000 confirmatory sample points, soils over HSRA NCs had been successfully remediated.

3.2 SOIL ANALYTICAL CONCENTRATIONS

Past corrective action activities have documented, through confirmatory soil testing results, the removal of Lead, VOCs and SVOCs to applicable NCs.

The Georgia EPD conducted a Site visit on August 27, 2007 to collect soil, sediment, and surface water samples in order to assess areas where it believed data gaps existed in the previously remediated areas of the property. A total of eleven shallow (0"-6") soil samples (DK-1, DK-2, DK-6 to DK-14) from various locations around the Site were collected by the Georgia EPD and split with Kemron.

Analytical testing results from this August 2007 sampling event reported detections of inorganic and SVOC over the laboratory method detection limit (MDL). Of the reported detections, the following constituents were detected above the Type 3 RRS:

- Lead (DK-1, DK-2,DK-8 to DK-10, DK-12 to DK-14);
- Barium (DK-14);
- Arsenic (DK-12, DK-13);
- Benzo(a)pyrene (DK-2, DK-10, DK-11); and
- Benzo(b)fluoranthene (DK-10);
- Chrysene (DK-10); and
- Indeno(123-cd)pyrene.

A summary of soil analytical testing results from the August 2007 spilt sampling event are presented in **Table 1** and on **Figure 4**. Cross sectional views of the Site depicting areas where soils exceeding the NCs have been removed and the relative locations of the EPD / Kemron sampling locations are presented on **Figures 5** to **5F**.

3.3 GROUNDWATER ANALYTICAL CONCENTRATIONS

Temporary monitoring wells installed in 2005 as part of initial and expanded assessment activities are no longer present at the Site. However, the data/information gained as part of these prior assessments will be used to help determine the location of future groundwater monitoring well locations as part of the on-going development of the CSM.

The groundwater sampled in the prior investigations contained VOCs and SVOCs above the Type 1/Type 3 RRS. Specifically, the following constituents exceeded applicable Type 1 / 3 RRS criteria:

- 1,2-Dichloroethane (TMW-3);
- Benzene (TMW-7);
- Chrysene (TMW-5);
- Benzo(a)anthracene (TMW-5); and
- Naphthalene (TMW-5 and TMW-7).

Other SVOC compounds were detected in groundwater which do not have a corresponding published Type 1 / 3 RRS. These compounds are as follows:

- Dibenzofuran (TMW-7);
- 4-Methylphenol (TMW-7);
- 2-Methylnaphthalene (TMW-5 and TMW-7); and
- Anthracene (TMW-5 and TMW-7).

Groundwater analytical data are presented on Table 2 and Figure 6.

3.3 GROUNDWATER FLOW DIRECTION

Kemron surveyed top of casing elevations to develop a potentiometric surface map for the shallow groundwater table beneath the Site in their Expanded ESA Report dated September 2005. The report incorporated the groundwater elevations for the original temporary monitoring wells installed in July 2005 and four new temporary monitoring wells installed in August 2005. Based upon their calculations, groundwater beneath the Site predominantly flows to the southeast. A depiction of Kemron's potentiometric surface map is presented on **Figure 7**.

3.4 EXPOSURE PATHWAY EVALUATION

An environmental exposure pathway consists of four elements:

- 1) chemical source and release mechanisms:
- 2) environmental transport media;
- 3) a receptor at the exposure point, and:
- 4) an exposure route at the exposure point.

The following sections describe each of the elements as they exist at the Site.

3.4.1 Chemical Source and Release Mechanisms

The precise mechanism for release of constituents from the source is not known; however, releases of at least some constituents likely occurred due to industrial operations dating back to the early 1900's. Soil boring logs indicate numerous "fill" areas with buried debris. Additional historic research will be conducted as part of the VRP process to better define possible on-site and potential off-site contributions to the presence of regulated substances on the property.

3.4.2 Environmental Transport Media

3.4.2.1 Persistence of Constituents of Concern

The constituents being evaluated in soil and groundwater at the Site are metals, semi-volatile organic, and volatile organic compounds. The physical and chemical characteristics of these compounds vary widely which cause variations/differences in the movement of each compound in the environment.

In general, organic constituents tend to have a high affinity for binding with the organic fraction of soils and relatively low solubilities in water. Therefore, in soils, these compounds tend to be transmitted through the soil via physical actions of surface water infiltration and diffusion. Volatilization of some higher vapor pressure semi-volatile organic compounds also occurs. The shorter chain/ringed hydrocarbon compounds are typically more water soluble than either longer chain hydrocarbons (diesel fuel, heavy oil, etc.) or chlorinated, carbon-based constituents (tetrachloroethene, trichloroethene, etc).

3.4.3 Potential Routes of Migration

3.4.3.1 Soils

Surface and subsurface soils at or near identified sources appear to be the first medium impacted by the release of COCs. Aqueous phase liquids (APLS) and non-aqueous phase liquid substances (NAPLS), if previously present at the Site, may have also migrated through the subsurface. The migration of the COCs occurs principally along preferential pathways where changes in permeability occur. These types of areas include: various soil types (sand, silts, clays, wetlands, weathered rock, et al.); utility lines; and/or backfilled areas. However, prior corrective action activities have removed over 28,000 tons of former impacted soils exceeding applicable HSRA NCs and have minimized these areas as potential migration routes. There are areas that may require additional corrective action as part of the long term remediation plans. Remaining locations can be affected via surface runoff, wind dispersion, or tracked off-site via anthropogenic influences.

3.4.3.2 Groundwater

Another principal mechanism of migration of constituents away from the former source area is groundwater. The groundwater across the Site is principally flowing in a easterly-southeasterly direction across the shallow aquifer (1 to 23 feet below land surface) beneath the Site. Kemron conducted a water well survey as part of the August 2005 Phase II Environmental Site Assessment Report to determine if drinking water points

of withdrawal were located within the applicable radii under HSRA. A total of twenty-five (25) wells were identified within a three-mile radius of the Site. Of these, eight are located at Ft. McPherson to the west of the subject Site. The closest well in proximity to the Site is located approximately 1,000 feet to the southwest of the Site on Ft. McPherson. All of these wells appear to be upgradient of the subject Site based on the measured groundwater flow direction to the southeast. Eleven (11) private wells were identified in the City of East Point, approximately 1.75 miles to the southwest. These wells are also upgradient of the Site.

Kemron's visual reconnaissance revealed the presence of three (3) additional wells. These wells are identified as the following:

- U.S. Plating Burn Site 78 Milton Avenue, Atlanta, Georgia (2.6 Miles Northeast of the Site); and
- ► Mrs. R. Lombard Rhinehall Street, Atlanta, Georgia (2.9 Miles Southeast of the Site).

No readily identifiable wells were discovered within a 2 mile radius downgradient of the Site. Details of the water well survey are included in the Kemron Phase II ESA report located in **Appendix C**.

As previously discussed in Section 2.3.3, the Davidson-Kennedy property was listed on the HSI on October 26, 2007 utilizing the Reportable Quantity Screening Method. The results of the scoring reported the "on-site exposure pathway" (soil) above HSI listing criteria and the "groundwater pathway" scoring below HSI listing criteria. As such, Davidson-Kennedy intends to pursue allowances enumerated under O.C.G.A. 12-8-107(g)(2) with regard to groundwater corrective action and certification of compliance.

3.4.4 Potential Receptors

Potential human receptors identified in and around the Site are:

- 1) On-site workers;
- 2) Local residents;
- 3) Visitors:
- 4) Trespassers; and
- 5) Utility/construction workers.

Long term exposures would be limited to onsite workers. All others would be short term receptors. On the Site, exposures would be consistent with non-residential scenario described in the HSRA rules for Type 3 or 4 Risk Reduction Standards (RRS). Currently, the Site is vacant with no on-site workers or staff. Thus, current exposures would be limited to local residents, visitors, trespassers and/or

utility/construction workers. Future exposure scenarios could include on-site workers for additional assessment activities, demolition contractors, construction workers, utility workers, etc.

3.4.5 Potential Exposure Points

Exposure points include any area where COCs in the soils, groundwater, and surface water may be accessible to human or ecological receptors. A brief summary of each exposure point is presented below.

3.4.5.1 Soils

Surface soils include those soils in the upper 0 to 2 feet of the ground. COCs above Type 1 and 3 RRS were detected in surface soils collected on the property as part of the August 2007 Georgia EPD sampling event. Access to these soils would be limited to construction/repair work typically associated with underground utilities and/or trespassers. Such contact would be limited to short duration commercial/industrial adult exposure scenarios and adult/child trespasser exposure scenarios.

Two (2) of the eleven (11) samples were collected off-site on residential properties (DK-6 and DK-7). Surface soils in these locations exceed the HSRA default residential standard for Lead. As such, the probability exists that an adult and/or child residential exposure scenario to surface soils would apply.

Deeper soils (2 to 4 feet) would constitute a construction depth for which future contractors could be exposed by activities such as additional environmental site assessment activities, construction of subsurface utility structures or conduits, construction of foundations, and grading

Soils situated above the uppermost groundwater zone also present a potential exposure via the migration of regulated constituents into groundwater. The groundwater, in turn, could potentially transport regulated substances to an exposure point (i.e., surface water discharge and/or groundwater withdrawal point).

3.4.5.2 Groundwater

No groundwater points of withdrawal are known to exist deriving water from the shallow water-bearing aquifer previously identified as being impacted by regulated substances. Moreover, the area is supplied with a municipal drinking water source. As such, exposure from ingestion of groundwater is unlikely.

As previously discussed in Section 2.3.3 and 3.4.3.2, the Davidson-Kennedy property was listed on the HSI on October 26, 2007 utilizing the Reportable

Quantity Screening Method. The results of the scoring reported the "on-site exposure pathway" (soil) above HSI listing criteria and the "groundwater pathway" scoring below HSI listing criteria. As such, Davidson-Kennedy intends to pursue allowances enumerated under O.C.G.A. 12-8-107(g)(2) with regard to groundwater corrective action and certification of compliance.

3.4.6 Survey of Potential Human Receptors & Potential Human Exposure Routes

Potential exposure routes include direct dermal contact with or incidental ingestion of COCs by potential receptors. Workers, visitors, and trespassers may potentially be exposed to COCs through contact with or incidental ingestion of COC-impacted surface soils from impacted area of the Site.

Potential indirect routes of exposure include ingestion by humans of plants or animals that have been exposed to the COCs via impacted soils. Indirect exposure at the Site is therefore possible, but not probable. It is also possible for terrestrial and aquatic wildlife to be exposed to COCs discharged through the stream. The potential for transfer of these COCs through the food web to humans or ecological receptors is low based on the relatively urbanized setting of the Site area.

3.4.7 Survey of Potential Receptors

The Site area is generally an urbanized area. However, a stream traverses the property in the vicinity of its northeastern boundary. Lead was reported in all three of the sediment samples collected by Georgia EPD in November of 2007. The highest detection of Lead was reported in sediment sample DK-3 at a concentration of 710 mg/kg. The U.S. Environmental Protection Agency sediment screening value for Lead is 30.2 mg/kg. The remaining downstream sediment samples (i.e., DK-4 and DK-5) all reported Lead values above the EPA sediment screening criteria as well. As such, further Risk-Based Corrective Action (RBCA) ecological evaluation of Lead in sediment may be considered as part of the ongoing VRP process. In addition, potential up-stream sources of Lead impact will be evaluated to determine if its presence originates from on or off-site sources, or both (e.g., Ft. McPherson).

3.4.7.1 Human Health Risk Evaluation

The August 2007 Georgia EPD/Kemron sampling data contains detectable levels of regulated substances in surface soils and sediments. As such, a preliminary risk evaluation will be conducted to evaluate whether constituents detected at the Site pose a risk to human receptors. The evaluation of risk to human receptors will generally involve the following four steps:

- Data evaluation and identification of constituent of potential concern (COPC);
- 2. Exposure Assessment;
- 3. Toxicity Assessment; and

4. Risk Characterization.

3.4.7.2 Ecological Risk Evaluation

A preliminary risk evaluation (PRE) will be conducted for potential ecological receptors that may be exposed to regulated substances detected in sediment/surface water at the Site. The intent of the PRE will be to evaluate whether ecological receptors may be adversely affected by exposure to Lead in sediment/surface water. The PRE assesses ecological effects, estimates exposure, and develops risk characterization information for identified receptors based upon constituents that exceed ecological screening values. The PRE will generally involve five steps:

- 1. Compare concentrations of regulated substance detected to published screening values;
- 2. Preliminary problem formulation;
- Preliminary ecological effects evaluation;
- 4. Preliminary exposure estimate; and
- 5. Preliminary risk calculation.

3.4.8 Preliminary Site Investigation Plan

Areas of the Site were investigated by Kemron in 2005 to determine if concentrations of regulated substances exceeded respective NCs under HSRA. Under the VRP, regulated substances can be delineated to Type 1 residential RRS criteria. While the intent of the 2005 Kemron investigation was to identify and remove soils exceeding NCs, the Type 1, in some cases, is less than the NC under HSRA. As such, sample results from prior investigations may not be sufficient to meet the VRP delineation criteria. Therefore, a preliminary investigation plan has been designed to define the extent of COC impacts on the property to the applicable residential Type 1 or other criteria as applicable.

3.4.8.1 Preliminary Soils Investigation

The soils delineation to Type 1 criteria will focus on three (3) potential data gaps: delineation of 2005 soil investigation areas, delineation of post-excavation confirmatory sample data, and delineation of samples collected by the Georgia EPD in 2007. Details of these data gaps are discussed below.

July and August 2005 Soil Data

The soil investigations in 2005 were designed to identify and define the extent of metals impact above applicable NCs. A total of thirty five (35) shallow soils (HA-2A to HA-15A, TMW-1A to TMW-10, and BH-1 to BH 11) were analyzed for the full suite of RCRA Metals Analysis (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver, and Mercury).

Under the VRP, regulated constituents are to be assessed to a "delineation criteria", which currently is the Type 1 non-residential RRS. In the case of Metals constituents detected at the Site, the delineation criteria are less than the NC. As such, areas that were assessed in 2005 to NC criteria may require additional assessment. Delineation of these locations will be addressed as part of the preliminary investigation activities. A delineation matrix for soil in these areas is provided on **Table 4**, while sample locations requiring additional delineation are presented on **Figure 8**.

Kemron 2006 Post-Excavation Confirmatory Sample Data

A total of 28,107 tons of metals, VOC, and SVOC impacted soils were removed from thirteen excavation areas (excavation areas A to M) by Kemron in 2006. The initial footprint of the excavation areas was determined via the soil sampling efforts conducted by Kemron in 2005. Over 1,000 confirmatory soil samples were collected to verify removal of Lead and select VOC and SVOC constituents to HSRA NCs.

In excavation areas A to I, the soil confirmatory samples were analyzed for Lead as an indicator of removal of metals-impacted soils above HSRA NCs. Excavation areas J, K, L, and M exhibited concentrations of SVOCs exceeding the HSRA NCs and, as such, post-excavation confirmatory samples in these locations were analyzed for SVOCs. Additionally, VOCs were detected above the NC in excavation K and, as such, confirmatory samples in excavation K included VOC analysis.

Some of the HSRA NC criteria for metals are higher than the Type 1 RRSs. Because the goal of the prior removal was to remove soils above NCs, rather than to achieve Type 1 RRS, additional assessment may be required in the areas where metals were detected and removed. However, there is some overlap in those areas with those areas assessed as part of the July and August Phase II assessments. As such, delineation of the excavated areas will be done in phases. Once the areas that are around the 2005 sample points, but outside the excavated areas are delineated, those data will be compared with the excavation confirmatory data to determine if additional delineation is necessary.

Kemron reported removal and confirmatory sample testing had successfully removed detected VOC and SVOC concentrations to NC criteria. In the case of VOCs and SVOCs, the NC is lower than the Type 1 delineation standard for VOC and is the delineation standard for SVOCs. As such, further delineation of excavation areas in terms of VOCs and SVOCs are not planned as part of preliminary Site Investigation Plan delineation activities.

Georgia Environmental Protection Division 2007 Soil Data

The Georgia EPD mobilized to the Site on August 27, 2007 to collect samples in areas where they determined additional sample data was needed to adequately characterize the Site. A total of eleven (11) soil samples (DK-1, DK-2, DK-6, DK-7, and DK-8 to DK-14) were collected by the EPD and split with Kemron. The samples were submitted for analysis of RCRA Metals and SVOCs. Metals and SVOCs were detected in surface soils exceeding the applicable Type 3 non-residential RRS as well as the Type 1 soil delineation criteria. **Table 2** provides a summary of the analytical data while **Table 5** provides a delineation matrix for the 2007 Georgia EPD data.

3.4.8.1 Preliminary Groundwater Investigation

A total of ten (10) temporary groundwater monitoring wells were installed as part of 2005 assessment activities by Kemron. Detections of VOCs and SVOCs were reported in recovered samples during Kemron's 2005 investigations. The temporary monitoring wells have since been removed. Regulated constituents detected⁴ in groundwater may require delineation per VRP requirements set forth under the VRP Act 12-8-108(1). As such, groundwater monitoring wells may have to be re-established to assess delineation requirements and to establish a groundwater POD monitoring well per the Section 12-8-108(4) of the Georgia Voluntary Remediation Program Act. A groundwater delineation matrix is included in **Table 6**.

3.4.9 Corrective Action Alternatives Currently Under Consideration

Davidson-Kennedy has voluntarily implemented assessment and corrective measures at the Site which were designed to remove highly impacted soils from the Site during the time period of August 2005 to August 2007. Over 28,000 tons of soils impacted with Lead, VOCs, and SVOCs have been removed from the property and disposed of in an off-site permitted Subtitle D landfill. Post-excavation confirmatory testing consisted of the collection and analysis of over 1,000 soil samples to verify meeting HSRA NCs in the areas where excavation activities were conducted.

The Georgia EPD performed a follow-up site visit in August 2007 to collect a total of eleven (11) shallow (0" to 6") soil samples(DK-1, DK-2, DK-6 to DK-14, three (3) sediment samples (DK-3 to DK-5), and three surface water samples(DK-3 to DK-5). Concentrations of various metals and SVOCs were reported above the HSRA Type 1 and 3 RRS. These samples collectively represent the current CSM for the Site.

⁴ Many of the groundwater samples exhibited higher that average turbidity measurements and, therefore, results may not accurately reflect true groundwater characteristics. Future sampling will be conducted in accordance with approved methods to ensure characterization of this resource.

Continued development of the CSM throughout the VRP process will include expanded characterization of source areas on the Site. Such characterization will include: mapping "fill" areas where buried debris has been identified in former soil boring locations, as well as future soil borings that may be installed as part of delineation activities; and expanded historic research to identify Site history prior to the 1925 Sanborn map which identified the Site as Hudson Brothers Structural Steel Bridge Company; and further research of both on and off-site potential sources for anthropogenic disposition of shallow soil concentrations of regulated substances (including Calvert Iron Works; Tri-State Steel Products (a division of Florida Steel operations); former Ft. McPherson Incinerator (located 0.4 miles west of the Site).

Corrective action alternatives to address the current surface soils exceeding applicable RRS will be evaluated under a risk-based corrective action allowable under the VRP Statute as part of the ongoing VRP process. Additional assessment to define the horizontal and vertical extent of impact from data points collected as part of the Georgia EPD/Kemron sampling effort in August of 2007 may be necessary to determine the potential scope of corrective action activities. Potential remedial-corrective action alternatives may include:

- Soil excavation and disposal of areas exceeding applicable RRS:
- Fencing of the Site to limit access and reduce the on-site exposure risk;
- Placement of an impermeable cover or cap to limit exposure pathways and contaminant migration;
- In-Situ stabilization; and
- Expanded Human and Ecological Risk assessment activities

The CSM will be updated in accordance with the schedule in Appendix F.

3.5 Anthropogenic Background Concentration Study

Ft. McPherson Army base is located west of the Davidson-Kennedy Facility. Peachtree personnel have first hand knowledge of a remediation project of incinerator ash at the Ft. McPherson facility conducted in the early 1990's. Historic information regarding the "Old Incinerator Dump Site" is included in **Appendix D**. The principal contamination driving the clean-up were heavy metals (principally Lead) associated with the base incinerator. The ash was derived from an incinerator located northwest of the Davidson-Kennedy property (See **Figure 9**).

The purpose of the anthropogenic background study was to determine/evaluate whether incinerator emissions may have contributed to elevated levels of background metals compounds. Wind dispersion would be the primary mechanism for deposition of metals in the vicinity of the Davidson-Kennedy Facility. The prevailing wind direction was determined from data derived from Georgia State Climatology Office annual wind statistics (http://climate.engr.uga.edu/wind/atlwindpage.html). The wind data indicated the

predominant wind direction for the vicinity from the west-northwest, upwind from the Davidson-Kennedy Facility.

A series of ten (10) background soil samples were collected from the right-of-way of Lee Street located between the Davidson-Kennedy property and the incinerator. Five (5) of the samples (BG-1 to BG-5) were collected from the eastern right-of-way of Lee Street and five (5) samples (BG-6 to BG-10) were collected form the western side right-of-way along Lee Street. Samples were collected from the surface (0 to 6 inches) interval utilizing a decontaminated stainless steel sampling spoon. Recovered samples were placed in laboratory-supplied containers and submitted to Analytical Environmental Services, Inc. for testing of RCRA Metals via EPA Method 6010.

The analytical testing results were utilized for statistical analysis of background anthropogenic impact via the use of the statistical mean plus two standard deviations. The following background concentrations were derived from the analysis of the data:

- Aresnic 20.59 mg/kg
- ► Barium 145.69 mg/kg
- Cadmium 3.51* mg/kg
- Chromium 75.16 mg/kg
- Lead 357.42 mg/kg
- Selenium* 10.35 mg/kg
- Silver* 3.51 mg/kg
- Mercury 0.143 mg/kg

In the event that the default Type 1 residential RRS was higher than the statistical background concentration, the higher of the two numbers was utilized as the VRP delineation standard. The selected delineation standards are summarized in **Section 2.3.1.** Analytical testing results and statistical calculations are summarized on **Table 7**. A figure detailing the location of the Ft. McPherson incinerator and background sample locations are presented on **Figure 10**. The laboratory analytical data report is provided in **Appendix E**.

^{* -} In instances where the reported concentration in individual samples was less than the laboratory detection limits, concentrations utilized for statistical analysis was the laboratory detection limit value.

4.0 SCHEDULE
Appendix F contains a schedule of implementation that includes dates for milestones, including semi-annual progress reports and submittal of a VRP Compliance Status Report (CSR).

5.0 PREPARATION OF COMPLIANCE STATUS REPORT

A Compliance Status Report (CSR) will be prepared on behalf of the applicant upon completion of groundwater monitoring activities and/or corrective action outlined in Section 3.0. The written report will consist of information in the format required for submission to the Georgia EPD and will include, at a minimum, the following:

- A description of each known source of release;
- A description of the applicant's properties which are part of the Site (i.e. legal description of the area affected by the release);
- A summary of previously collected field and laboratory data;
- Delineation of the horizontal and vertical extent of on-property and off-property groundwater contamination to default residential cleanup standards or other applicable delineation criteria;
- Description of geologic and hydrogeologic conditions at the Site;
- A description of Site-specific human or environmental receptors and exposure pathways;
- Documentation of characterization, transportation, and disposal of impacted materials (if any); and
- A summary statement of the findings of the report including the applicant's certification of compliance with the appropriate groundwater standards, within the VRP framework.

6.0 PROFESSIONAL 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 judgements 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.

William H. Lucas, III, P.G. Georgia Professional Geologist

Registration Number 1255

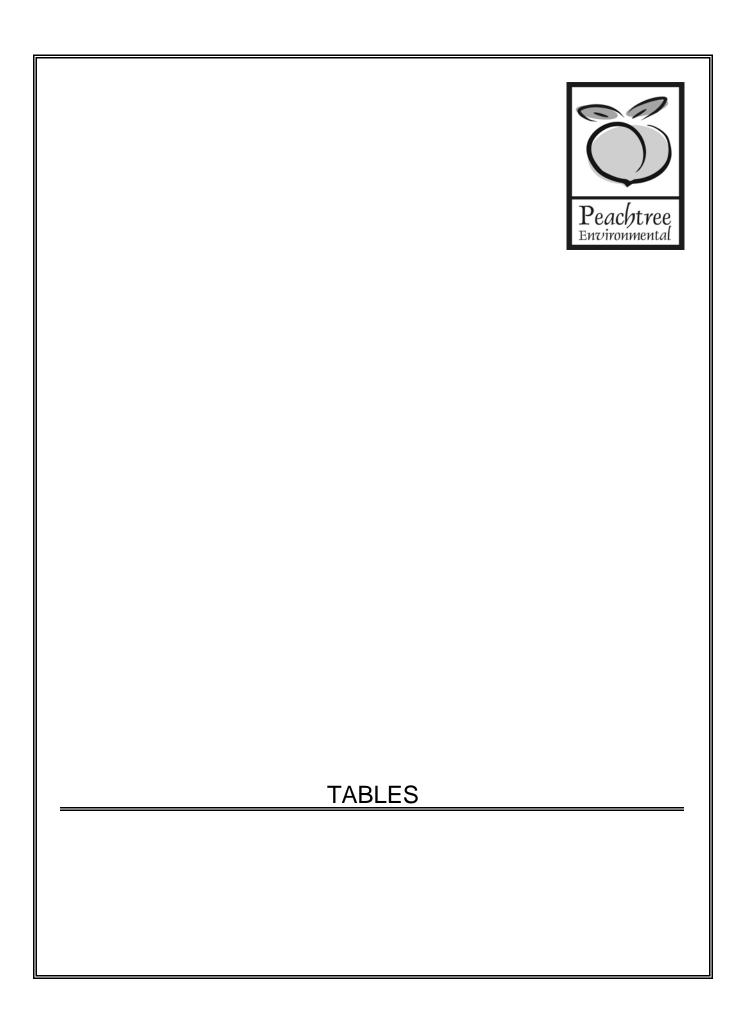


TABLE 1 SUMMARY OF SITE SOIL DATA

SAMPLE DESIGNATION	TYPE 3 RRS (<2 FT-BGS)	TYPE 1 RRS DELNEATION	DK	-1	DK	-2	DK	-6*	DK	-7*	Dk	(-8	DK-9	
SAMPLE DATE		CRITERIA	8/27/2	2007	8/27/2	2007	8/27/2	2007	8/27/2007		8/27/2007		8/27/	/2007
ANALYTES	М	G/KG						LABORATORY R	RESULTS (MG/KG)					
RCRA Metals			Kemron	EPD	Kemron	EPD	Kemron	EPD	Kemron	EPD	Kemron	EPD	Kemron	EPD
Arsenic	38	20	27.3	<80	27.4	<80	<8.06	11	<5.63	9.9	<4.31	10	13.2	<80
Barium	1,000	1,000	160	200	155.0	240	129	120	92.3	100	183	200	160	180
Cadmium	39	2	<1.94	<100	<2.68	<100	<4.03	<10	<2.82	<10	<2.15	<100	<2.99	<100
Chromium	1,200	100	64	74	38.8	48	56.5	<2	45.4	53	<42.1	49	89.6	100
Lead	400	75	543	1,200	434	750	468	330	244	260	419	420	1,060	1,300
Mercury	17	0.5	<0.136	NT	<0.153	NT	<0.185	NT	0.161	NT	<0.114	NT	<0.131	NT
TCL Semivolatile Organics	,													
2-Methylnaphthalene	44,880	44,800	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Acenaphthene	300	300	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Acenaphthylene	130	130	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Anthracene	500	500	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Benz(a)anthracene	5	5	<2.3	1.8	2	1.8	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	2.6
Benzo(a)pyrene	1.64	1.64	<2.3	1.4	2.3	1.6	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	2.2	1.5
Benzo(b)fluoranthene	5	5	<2.3	2	3	2.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	2.2	2.1
Benzo(g,h,i)perylene	500	500	<2.3	<1.1	2	1.3	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Benzo(k)fluoranthene	5	5	<2.3	1.7	<1.9	1.6	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	1.8
Bis(2-ethylhexyl)phthalate	50	50	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Carbazole	NR	NR	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Chrysene	5	5	<2.3	2	2.4	2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	2.6
Dibenz(a,h)anthracene	5	5	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Dibenzofuran	NR	NR	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Fluoranthene	500	500	<2.3	3.4	3.1	3.5	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	2.8	5.7
Fluorene	360	360	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Indeno(1,2,3-cd)pyrene	5	5	<2.3	1.2	2	1.4	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Naphthalene	100	100	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	<1.2
Phenanthrene	110	110	<2.3	<1.1	<1.9	<1.2	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	<2.2	2.8
Pyrene	500	500	2.7	3.4	4.3	4	<3.0	<2.0	<2.2	<1.3	<1.9	<1.2	2.8	4.7

NOTES:

Bolded numbers denote concetrations above Type 1 delineation criteria.

Bolded and bracketed numbers denote concentrations above Type 3 RRS.

NR - Not Regulated, Compound not regulated by HSRA.

*Residential Criteria Applies to DK-6 and DK-7 as samples collected off-site.

TABLE 1 SUMMARY OF SITE SOIL DATA

SAMPLE DESIGNATION	TYPE 3 RRS (<2 FT-BGS)	TYPE 1 RRS DELNEATION	DK	-10	DK-	-11	DK	-12	DK	-13	DK	-14
SAMPLE DATE	,	CRITERIA	8/27/	2007	8/27/2	2007	8/27/	2007	8/27/	2007	8/27/	2007
ANALYTES	МС	G/KG					LABORATORY R	ESULTS (MG/KG)				
RCRA Metals			Kemron	EPD	Kemron	EPD	Kemron	EPD	Kemron	EPD	Kemron	EPD
Arsenic	38	20	<6.82	<80	<4.42	<80	53.6	83	20	160	<3.62	<8
Barium	1,000	1,000	253.0	180	74.2	110	526	700	105	180	2310	2500
Cadmium	39	2	<3.41	<100	<2.21	<100	4.64	<100	5.78	<100	<1.81	<10
Chromium	1,200	100	80.6	96	32.4	45	74.9	140	44	120	96.9	160
Lead	400	75	306	1200	228	280	1070	1900	558	1500	291	420
Mercury	17	0.5	3.68	NT	0.126	NT	<0.120	NT	<0.138	NT	<0.119	NT
TCL Semivolatile Organics	<u>"</u>						11					
2-Methylnaphthalene	44,880	44,800	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Acenaphthene	300	300	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Acenaphthylene	130	130	3.8	<12	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Anthracene	500	500	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Benz(a)anthracene	5	5	5.8	<12.0	2.7	2.20	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Benzo(a)pyrene	1.64	1.64	11	13	2.5	1.7	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Benzo(b)fluoranthene	5	5	14	15	2.9	1.80	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Benzo(g,h,i)perylene	500	500	10	12	2.2	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Benzo(k)fluoranthene	5	5	4.8	<12.0	<2.1	1.50	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Bis(2-ethylhexyl)phthalate	50	50	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Carbazole	NR	NR	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Chrysene	5	5	7.9	<12.0	2.7	2.10	<2.0	<1.2	<1.9	1.3	<2.0	<1.1
Dibenz(a,h)anthracene	5	5	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Dibenzofuran	NR	NR	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Fluoranthene	500	500	7.7	17	5.7	5	<2.0	<1.2	<1.9	2.4	<2.0	<1.1
Fluorene	360	360	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Indeno(1,2,3-cd)pyrene	5	5	9	13	<2.1	1.3	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Naphthalene	100	100	<2.5	<12.0	<2.1	<1.2	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Phenanthrene	110	110	<2.5	<12.0	2.9	2.4	<2.0	<1.2	<1.9	<1.2	<2.0	<1.1
Pyrene	500	500	13	22	5.6	4.3	<2.0	<1.2	<1.9	2.0	<2.0	<1.1

NOTES:

Bolded numbers denote concetrations above Type 1 delineation criteria.

Bolded and bracketed numbers denote concentrations above Type 3 RRS.

NR - Not Regulated, Compound not regulated by HSRA.

TABLE 2 SUMMARY OF SITE GROUNDWATER DATA

SAMPLE DESIGNATION	TMW-1	TMW-2	TMW-3	TMW-4	TMW-5	TMW-6	TMW-7	TMW-8	TMW-9	TMW-10
SAMPLE DATE	7/29/2005	7/28/2005	7/28/2005	7/28/2005	7/28/2005	7/28/2005	8/24/2005	8/24/2005	8/24/2005	8/24/2005
ANALYTES					LABORATORY	RESULTS (ug/L)				
TCL Volatile Organics										
1,2-Dichloroethane	<5	<5	9	<5	<5	<5	<5	<5	<5	<5
Benzene	<5	<5	<5	<5	<5	<5	20	<5	<5	<5
Acetone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes	<5	<5	<5	<5	<5	<5	91	<5	<5	<5
Vinyl chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<5	<5	<5	<5	<5	<5	8.2	<5	<5	<5
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	7.5
Toluene	<5	<5	<5	<5	<5	<5	19	<5	<5	<5
Trichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
TCL Semivolatile Organics					0					
1,1'-Biphenyl	<10	<10	<10	<10	110	<10	41	<10	<10	<10
Caprolactam	<10	<10	<10	<10	<10	<10	<10	<10	26	13
Carbazole	<10	<10	<10	<10	140	<10	94	<10	<10	<10
Chrysene	<10	<10	<10	<10	12	<10	<10	<10	<10	<10
Dibenzofuran	<10	<10	<10	<10	<10	<10	98*	<10	<10	<10
Fluoranthene	<10	<10	<10	<10	81	<10	22	<10	<10	<10
Fluorene	<10	<10	<10	<10	320	<10	110	<10	<10	<10
4-Methylphenol	<10	<10	<10	<10	<10	<10	12*	<10	<10	<10
2-Methylnaphthalene	<10	<10	<10	<10	320*	<10	260*	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10	620	<10	130	<10	<10	<10
Anthracene	<10	<10	<10	<10	39*	<10	16*	<10	<10	<10
Benz(a)anthracene	<10	<10	<10	<10	13	<10	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10	55	<10	14	<10	<10	<10
Naphthalene	<10	<10	<10	<10	2,900	<10	3,600	<10	<10	<10
Phenanthrene	<10	<10	<10	<10	310	<10	200	<10	<10	<10

NOTES:

Bolded numbers denote concentrations above Maximum Contaminant Levels.

Bolded/bracketed numbers denote concentrations exceeding published Type 1/3 standards.

Sample data from Kemron Environmental Services, Inc. Expanded ESA Report Dated September 2005.

^{* -} No published Type 1/3 RRS.

TABLE 3 SUMMARY OF SEDIMENT AND SURFACEWATER DATA

SEDIMENT

SEDIMENI				1								
SAMPLE DESIGNATION	EPA Region 4 Sediment Screening Criteria	DF	(-3	DI	K-4	DK-5						
SAMPLE DATE		11/27	/2007	11/27/	/2007							
ANALYTES	MG/KG		LABORATORY RESULTS (MG/KG)									
RCRA Metals		Kemron	EPD	Kemron	EPD	Kemron	EPD					
Arsenic	7.24	<4.82	<8	<4.98	<8	<4.33	<8					
Barium	NL	35	84	36.2 80		35.1	62					
Cadmium	1	<2.41	<10	<2.49	<1	<2.17	<1					
Chromium	52	34	56	42.6	140	23.8	69					
Lead	30.2	61.3	710	63.2	140	37.9	74					
Mercury	0.13	<0.120	NT	<0.144	NT	<0.133	NT					
TCL Semivolatile Organics												
Listed SVOC Analytes	BDL	BDL	BDL	BDL	BDL	BDL	BDL					

NOTES:

Bolded numbers denote concetrations above applicable screening criteria.

NT - Not Tested.

SURFACE WATER

SAMPLE DESIGNATION	Georgia In- Stream Water Quality Standards	DI	(-3	DI	K-4	DK	(-5					
SAMPLE DATE		11/27	/2007	7/2007	11/27/2007							
ANALYTES	ug/L		LABORATORY RESULTS (UG/L)									
RCRA Metals		Kemron	EPD	Kemron	EPD	Kemron	EPD					
Arsenic	150	<50	<5	<50	<5	<50	<5					
Barium	NL	85	74	57.8	65	58.1	60					
Cadmium	0.15	<50	<0.7	<5	<0.7	<5	<0.7					
Chromium	42	<10	<5	<10	<5	<10	5.1					
Copper	5	NT	<5	NT	6.3	NT	7.3					
Lead	1.2	<10	2	<10	6.5	<10	21					
Zinc	65	NT	31	NT	71	NT	90					
Mercury	0.012	<0.2	NT	<0.2	<0.2	NT						
TCL Semivolatile Organics		-	-		-							
Listed SVOC Analytes	BDL	BDL	BDL	BDL	BDL	BDL	BDL					

NOTES:

Bolded numbers denote concetrations above Georgia In-Stream Water Quality Standards.

Bolded and bracketed numbers denote concentrations above Type 3 RRS.

NR - Not Regulated, Compound not regulated by HSRA.

TABLE 4
SOIL DELINEATION MATRIX - 2005 SOIL ASSESSMENT DATA

Sample Desingation	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury
Delineation Criteria	(mg/kg)	20	1,000	2	100	75	2	2	0.5
TMW-1A	7/25/2005	-					Х		-
TMW-3A	7/25/2005	-	-	-	-	-	Х	-	-
TMW-10	8/23/2005	-	-	-	-	-	Х	-	-
HA-2A	7/26/2005	-	-	Х	-	Х	Х	Х	-
HA-3A	7/26/2005	-	-	-	-	Х	Х	Х	-
HA-4A	7/27/2005	-	-	Х	-	Х	Х	Х	-
HA-5A	7/26/2005	-	-	-	-	-	-	Х	-
HA-6A	7/27/2005	-	-	Х	Х	Х	Х	Х	-
HA-14A	7/27/2005	-	-	Х	-	Х	Х	Х	-
HA-15A	7/27/2005	-	-	-	-	-	-	Х	-
BH-1	8/23/2005	-	-	-	-	Х	Х	-	-
BH-2	8/24/2005	-	-	Х	-	Х	Х	Х	-
BH-4	8/23/2005	Х	-	Х	-	х	Х	х	-
BH-5	8/24/2005	-	-	-	-	-	-	Х	-
BH-6	8/24/2006	-	-	-	-	-	-	Х	-
BH-7	8/24/2006	-	-	Х	-	Х	Х	Х	-
BH-8	8/24/2006	-	-	-	-	Х	Х	-	-
BH-9	8/24/2006	-	-	-	-	х	Х	-	-
BH-10	8/24/2006	-	-	Х	-	Х	Х	Х	-
GP-1	8/24/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-3	8/24/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-4	8/24/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-9	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-10	8/25/2005	NA	NA	NA	NA	х	NA	NA	NA
GP-15	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-17	8/25/2005	NA	NA	NA	NA	х	NA	NA	NA
GP-18	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-20	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-21	8/25/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-22	8/25/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-23	8/25/2005	NA	NA	NA NA	NA NA	X	NA NA	NA	NA
GP-28	8/25/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-29	8/25/2005	NA	NA	NA NA	NA	X	NA NA	NA NA	NA
GP-36	8/25/2005	NA	NA	NA NA	NA NA	X	NA NA	NA NA	NA
GP-39A	8/25/2005	NA NA	NA	NA NA	NA NA	X	NA NA	NA NA	NA
GP-41	8/25/2005	NA NA	NA	NA NA	NA NA	X	NA NA	NA NA	NA NA
GP-42B	8/25/2005	NA	NA	NA NA	NA NA	X	NA NA	NA	NA
GP-56A	8/25/2005	NA NA	NA	NA NA	NA NA	X	NA NA	NA NA	NA NA
GP-58	8/25/2005	NA NA	NA	NA NA	NA NA	X	NA NA	NA NA	NA NA
GP-60	8/25/2005	NA NA	NA NA	NA NA	NA NA	X	NA NA	NA NA	NA NA
J1 -00	8/25/2005	NA NA	NA NA	NA NA	NA NA	X	NA NA	NA NA	NA NA

TABLE 4 SOIL DELINEATION MATRIX - 2005 SOIL ASSESSMENT DATA

Sample Desingation	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury
Delineation Criteria	(mg/kg)	20	1,000	2	100	75	2	2	0.5
GP-62	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-63	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-67A	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-68	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-69	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-70	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-71	8/25/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-75	8/26/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-76	8/26/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-77	8/26/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-78	8/26/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-79	8/26/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-82A	8/26/2005	NA	NA	NA	NA	X	NA	NA	NA
GP-87	8/26/2005	NA	NA	NA	NA	Х	NA	NA	NA
GP-88	8/26/2005	NA	NA	NA	NA	Х	NA	NA	NA

NOTES:

NA - Not Analyzed.

[&]quot;X" - Constituent requires additional delineation for selected criteria.

[&]quot;-" Constutuent meets delineation criteria.

TABLE 5 SOIL DELINEATION MATRIX - 2007 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE DATA

RCRA Metals

Sample Desingation	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury
Delineation Criteria	(mg/kg)	20	1,000	2	100	75	0.5
DK-1	8/27/2007	-	-	Х	-	Х	Х
DK-2	8/27/2007	-	-	X	-	X	-
DK-6	8/27/2007	-	-	X	-	X	-
DK-7	8/27/2007	-	-	Х	-	Х	-
DK-8	8/27/2007	-	-	X	-	X	-
DK-9	8/27/2007	-	-	X	-	X	-
DK-10	8/27/2007	-	-	X	-	X	Х
DK-11	8/27/2007	-	-	X	-	X	-
DK-12	8/27/2007	X	-	X	X	X	-
DK-13	8/27/2007	X	-	X	X	X	-
DK-14	8/27/2007	-	-	Х	X	Х	-

NOTES:

Semi-Volatile Organic Compounds

Sample Desingation	Sample Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)flouranthene	Chrysene	Indeno(1,2,3-cd)pyrene)
Delineation Criteria	(mg/kg)	5	1.64	5	5	5
DK-1	8/27/2007	-	-	-	-	-
DK-2	8/27/2007	-	Х	-	-	-
DK-6	8/27/2007	-	-	-	-	-
DK-7	8/27/2007	-	-	-	-	-
DK-8	8/27/2007	-	-	-	-	-
DK-9	8/27/2007	-	-	-	-	-
DK-10	8/27/2007	Х	Х	-	Х	Х
DK-11	8/27/2007	Х	Х	-	-	-
DK-12	8/27/2007	-	-	-	-	-
DK-13	8/27/2007	-	-	-	-	-
DK-14	8/27/2007	-	-	-	-	-

NOTES:

[&]quot;X" - Constituent requires additional delineation for selected criteria.

[&]quot;X" - Constituent requires additional delineation for selected criteria.

[&]quot;-" Constutuent meets delineation criteria.

TABLE 6 GROUNDWATER DELINEATION MATRIX - 2005 KEMRON DATA

RCRA Metals

Sample Desingation	Sample Date	1,2-Dichloroethane	Benzene	Chrysene	Dibenzofuran	4-Methylphenol	2-Methylnaphthalene	Anthracene	Benzo(a)anthracene	Napthtalene
Delineation Criteria	(mg/kg)									
TMW-1A	7/29/2005	-	-	-	-	-	-	-	-	-
TMW-2A	7/28/2005	-	-	-	-	-	-	-	-	-
TMW-3A	7/28/2005	Х	-	-	-	-	-	-	-	-
TMW-4A	7/28/2005	-	-	-	-	-	-	-	-	-
TMW-5A	7/28/2005	-	-	Х	-	-	Х	Х	Х	Х
TMW-6A	7/28/2005	-	-	-	-	-		-	-	-
TMW-7	8/24/2005	-	Х	-	Х	Х	Х	-	Х	Х
TMW-8	8/24/2005	-	-	-	-	-	-	-	-	-
TMW-9	8/24/2005	-	-	-	-	-	-	-	-	-
TMW-10	8/24/2005	-	-	-	-	-	-	-	-	-

NOTES:

[&]quot;X" - Constituent requires additional delineation for selected criteria.

DAVIDSON KENNEDY COMPANY SITE ATLANTA, FULTON COUNTY, GEORGIA HSI# 10866

TABLE 7 SUMMARY OF ANTHROPOGENIC BACKGROUND CONCENTRATIONS AND STATISTICAL ANALYSIS

SAMPLE POINT SAMPLE DATE SAMPLE DEPTH	VRP DELINEATION CRITERIA (TYPE	BG-1 02/21/11 0.5 FT	BG-2 02/21/11 0.5 FT	BG-3 02/21/11 0.5 FT	BG-4 02/21/11 0.5 FT	BG-5 02/21/11 0.5 FT	BG-6 04/06/11 0.5 FT	BG-7 04/06/11 0.5 FT	BG-8 04/06/11 0.5 FT	BG-9 04/06/11 0.5 FT	BG-10 04/06/11 0.5 FT	Arithmetic Mean Background Concentration (mg/kg)		Background = Mean + 2 Standard Deviations (mg/kg)	Highest Detected (mg/kg)	Highest Detected to Mean + 2
ANALYTES	1 RRS)		3,5	1 210 1 1		ANALYTICAL R				<u> </u>		(gg/	, o o/	(99)		Standard Deviations
Arsenic	20	17.4	12.3	20.8	5.76	8.27	5.58	5.47	5.66	5.84	5.39	9.25	5.67	20.59	20.80	20.59 - 20.80
Barium	1,000	87.2	121.0	116.0	61.3	59.0	74.7	79.6	58.2	73.6	142.0	87.26	29.21	145.69	142.00	142.00 - 145.69
Cadmium	2	3.28	2.92	2.90	2.88	3.16	2.23	2.19	2.26	2.33	2.16	2.63	0.44	3.51	3.28	3.28 - 3.51
Chromium	100	31.7	38.1	54.9	36.0	57.4	30.9	31.8	60.9	55.7	68.7	46.61	14.27	75.16	68.70	68.70 - 75.16
Lead	75	109.0	43.9	95.8	32.9	36.1	210.0	187.0	89.8	64.3	406.0	127.48	114.97	357.42	406.00	357.42 - 406.00
Selenium	2	6.55	5.85	5.79	5.76	6.32	8.93	4.38	9.06	9.34	4.31	6.63	1.86	10.35	9.34	9.34 - 10.35
Silver	2	3.28	2.92	2.90	2.88	3.16	2.23	2.19	2.26	2.33	2.16	2.63	0.44	3.51	3.28	3.28 - 3.51
Mercury	0.5	0.145	0.124	0.121	0.115	0.133	0.110	0.108	0.120	0.122	0.116	0.121	0.011	0.143	0.145	0.143 - 0.145

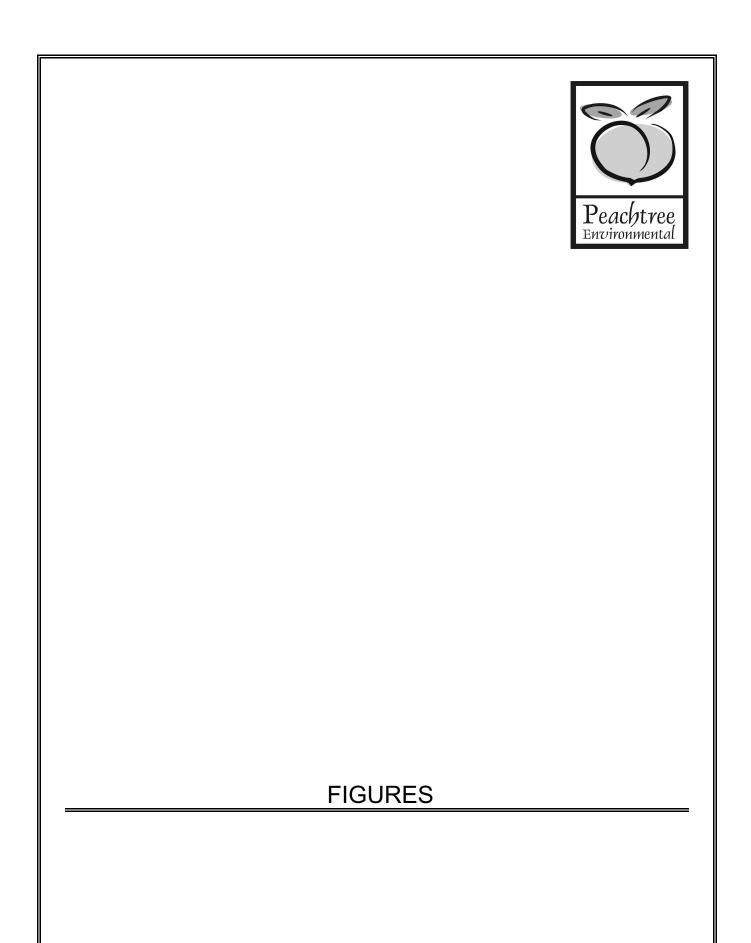
NOTES:

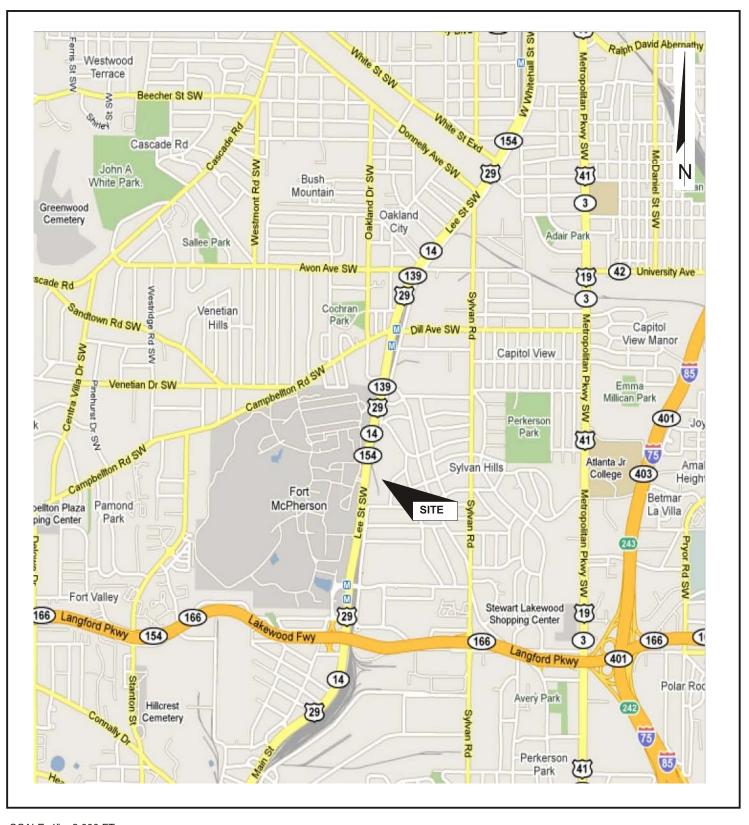
Bold numbers reported at values exceeding the laboratory detection limit.

Non-bold numbers reported at values less than the laboratory detection limit. Values used in background calculations are therefore expressed as the laboratory detection limit value.

Yellow highlighted calculated background values exceed VRP Type 1 RRS delineation criteria.

Prevailing wind direction derived from Georgia State Climatology Office annual wind statistics (http://climate.engr.uga.edu/wind/atlwindpage.html).





SCALE: 1" = 2,000 FT

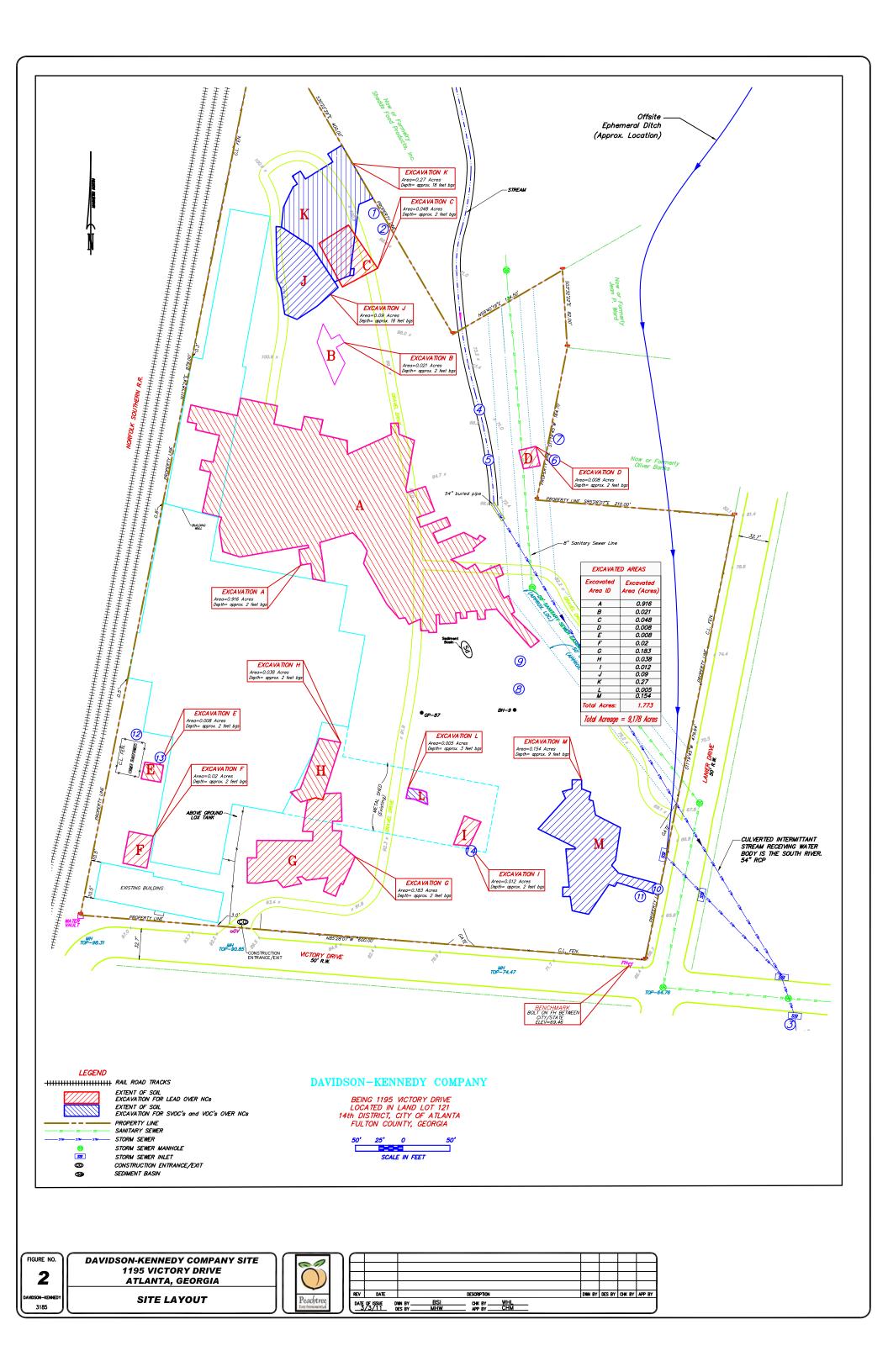


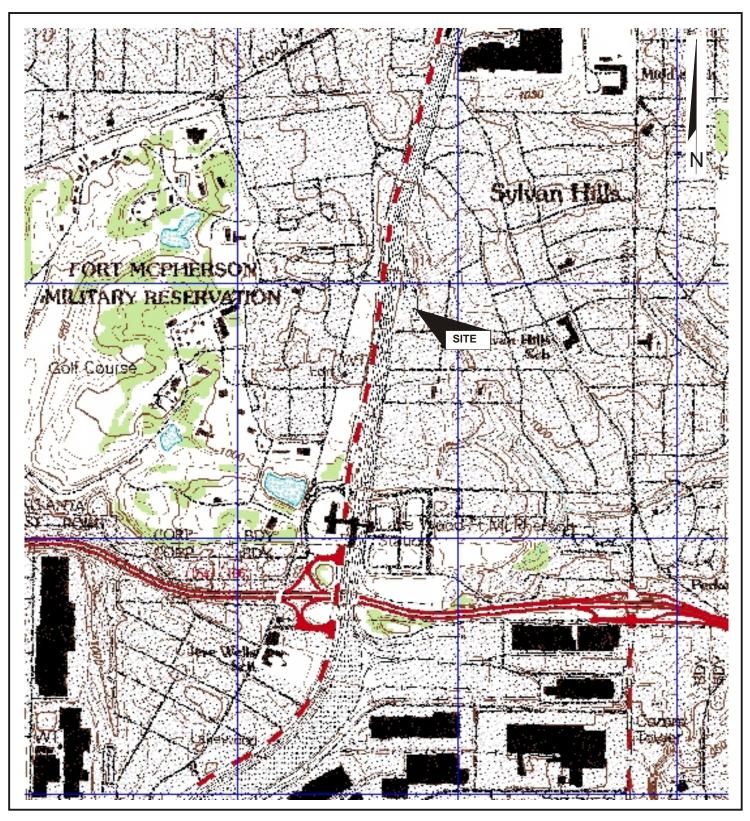
DAVIDSON-KENNEDY COMPANY FACILITY ATLANTA, FULTON COUNTY, GEORGIA HSI#10866

FIGURE 1 SITE LOCATION MAP

VOLUNTARY REMEDIATION PROGRAM APPLICATION







SCALE: 1" = 2,000 FT

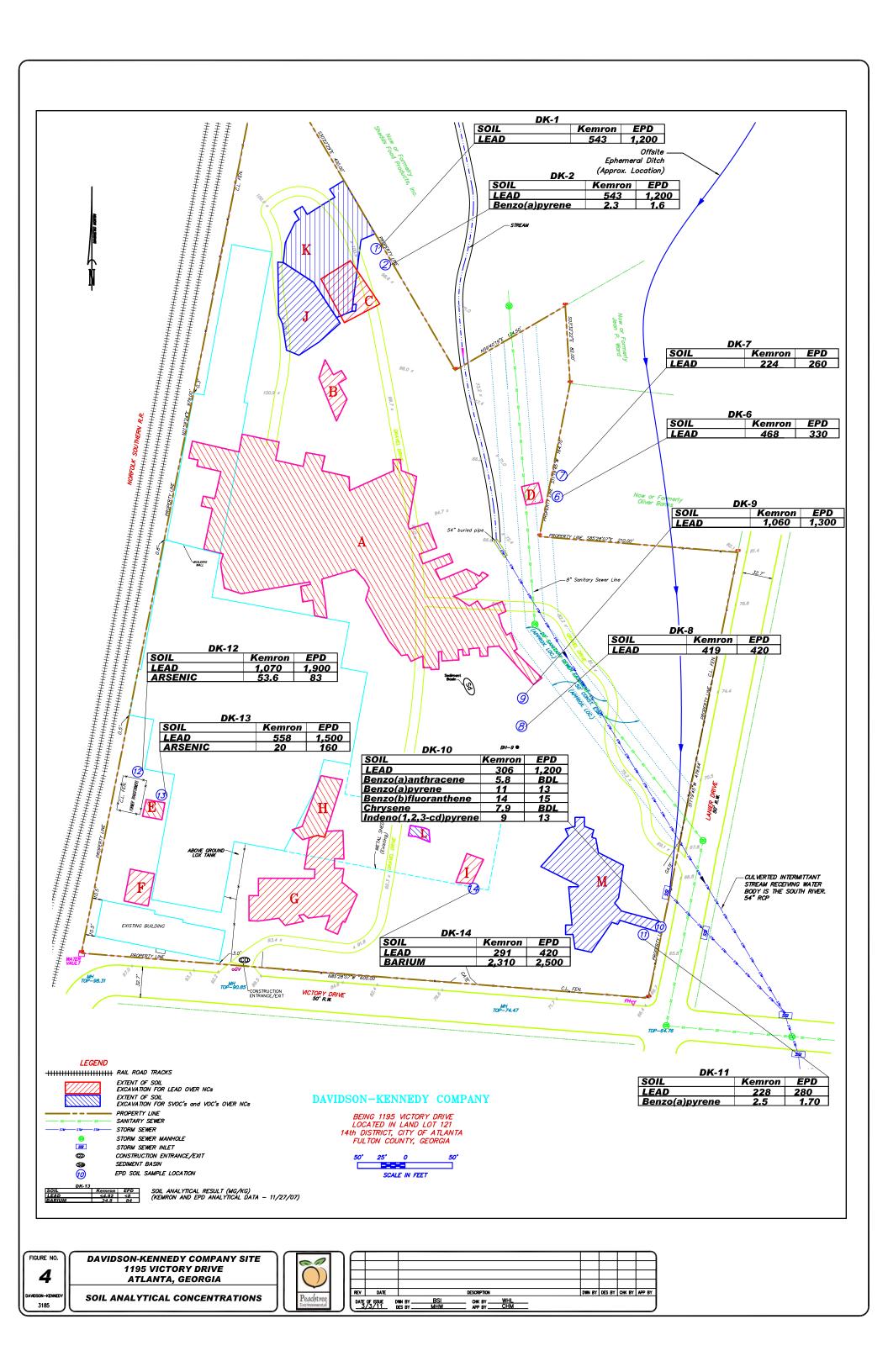


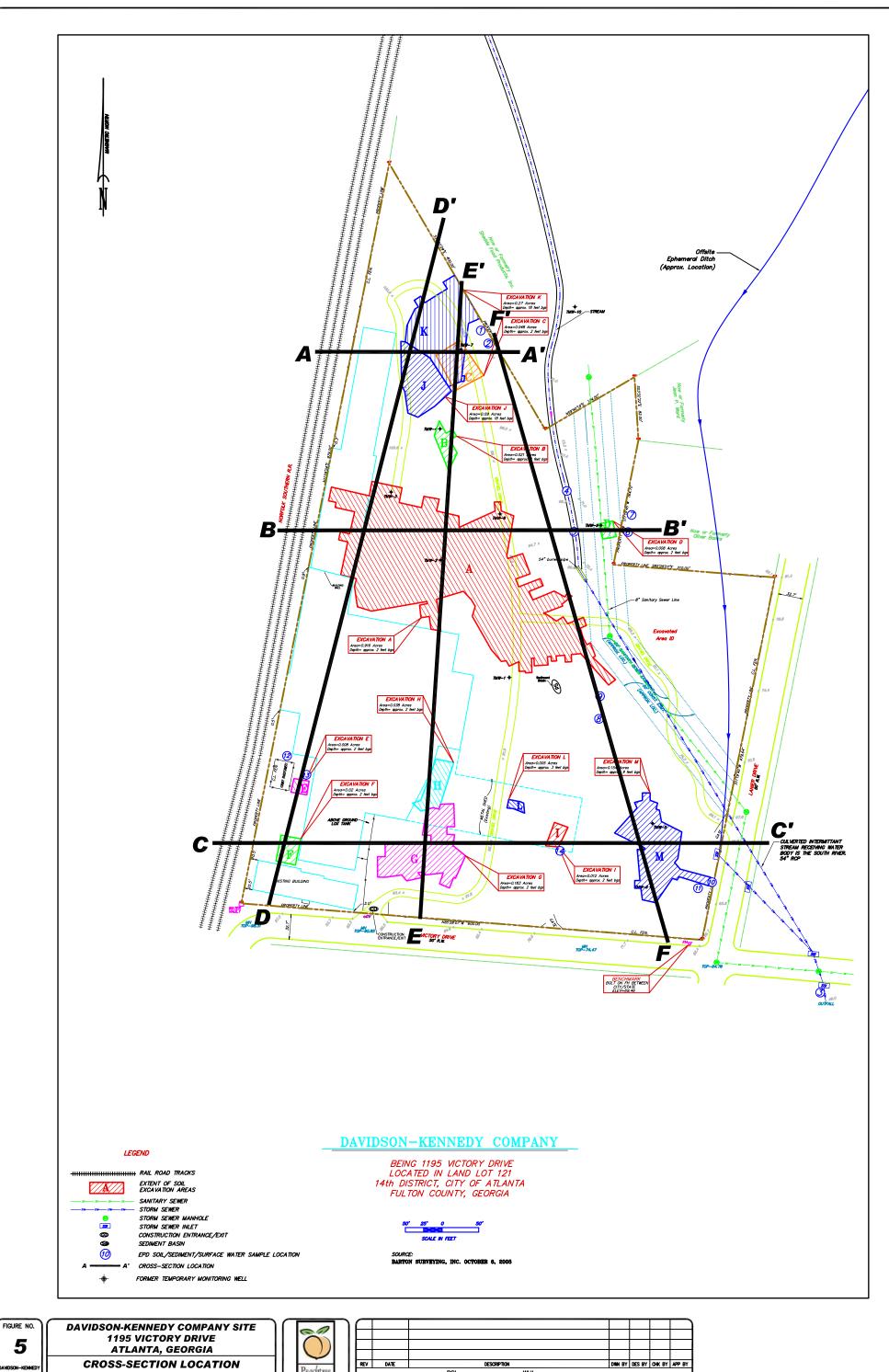
DAVIDSON-KENNEDY COMPANY FACILITYE ATLANTA, FULTON COUNTY, GEORGIA HSI#10866

FIGURE 3 USGS TOPOGRAPHIC / GROUNDWATER USAGE MAP

VOLUNTARY REMEDIATION PROGRAM APPLICATION





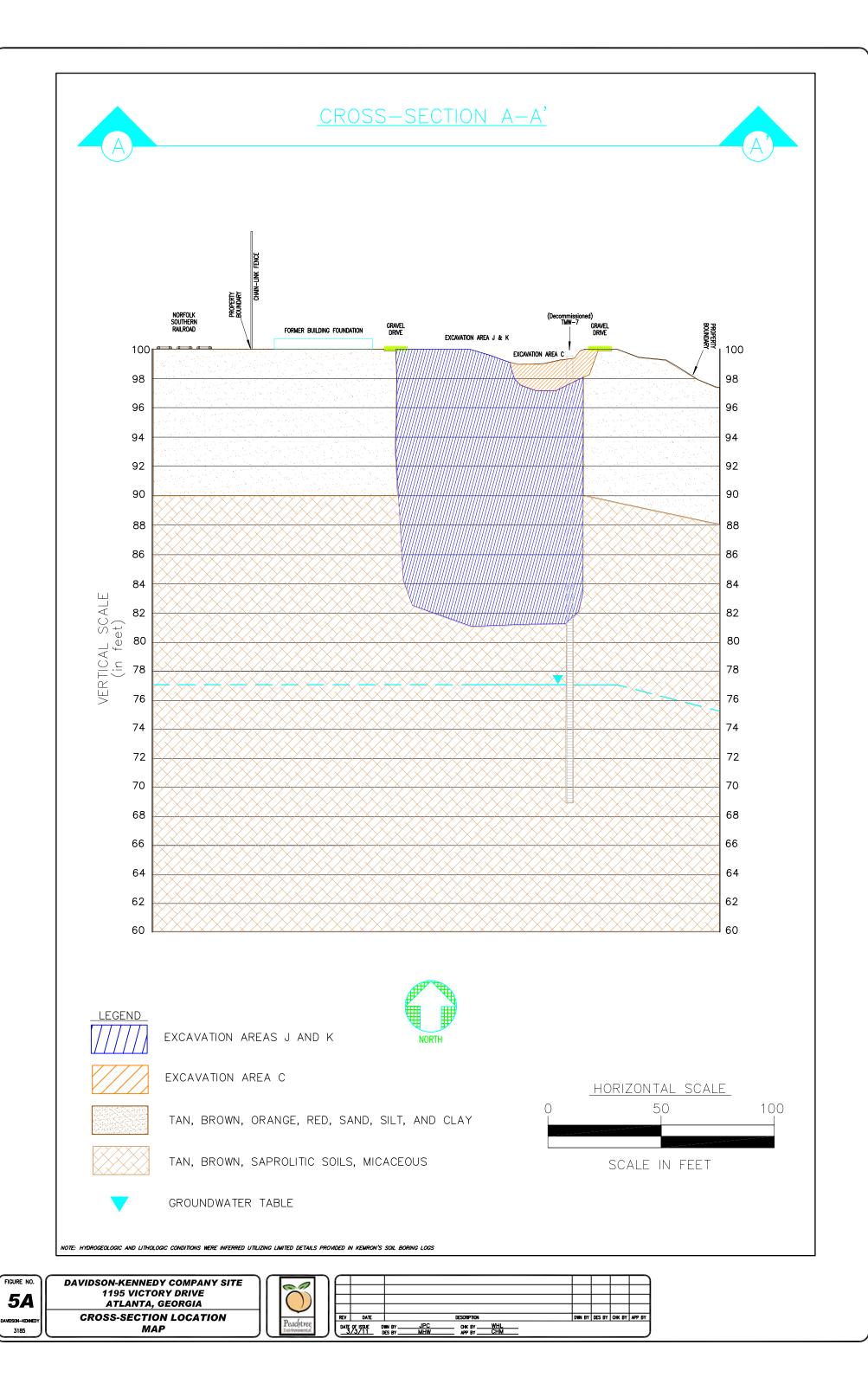


3185

MAP



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П							
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Т							
П	REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
J	DATE	0F ISSUE /3/11	DWN BY BSI CHK BY WHL DES BY JPC APP BY CHM				J



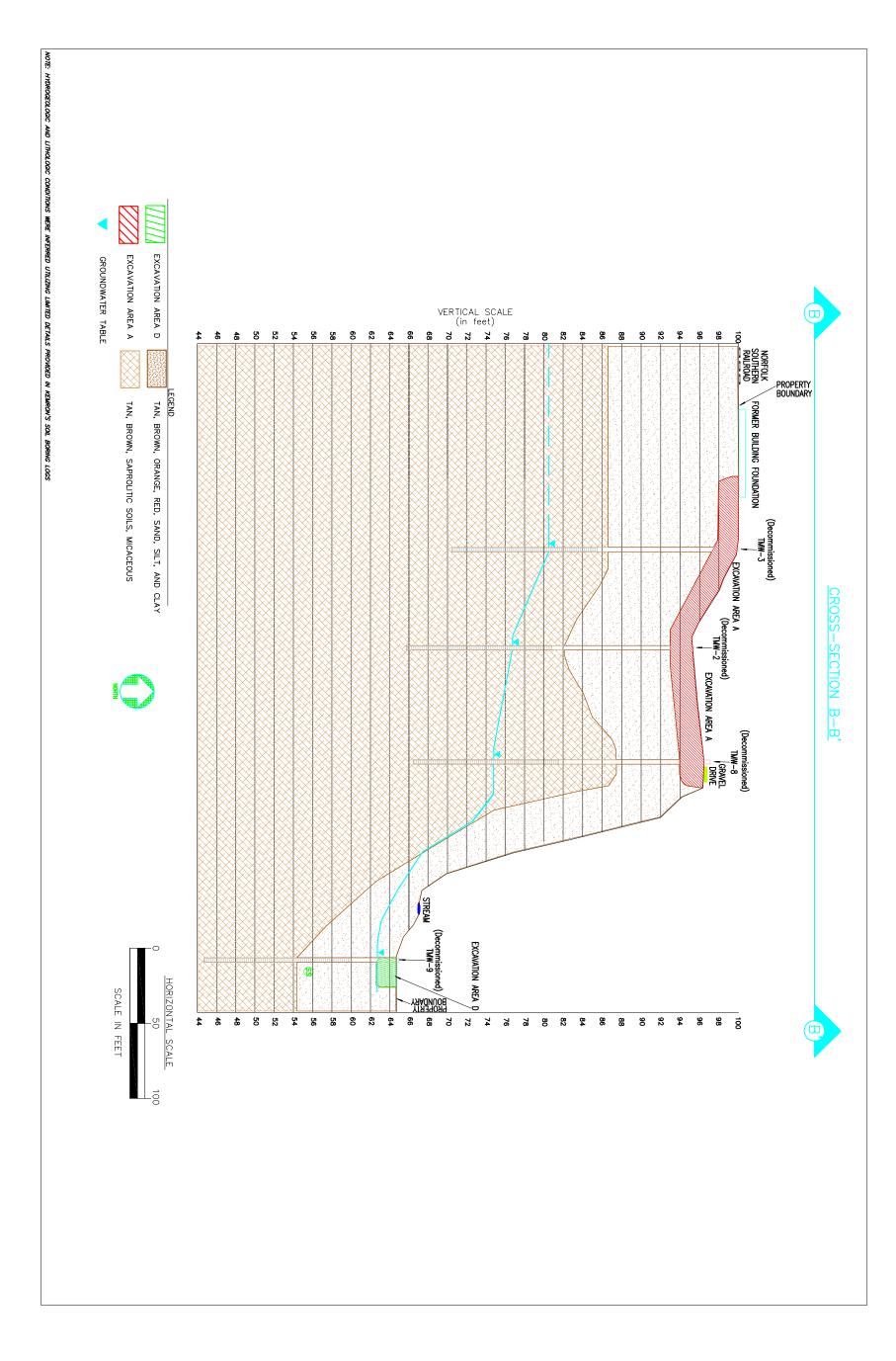


FIGURE NO.

5B

DAVIDSON-KENNED

3185

DAVIDSON-KENNEDY COMPANY SITE 1195 VICTORY DRIVE ATLANTA, GEORGIA

CROSS-SECTION B - B'



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ı	REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
		OF ISSUE	DWN BY JPC CHK BY WHL				

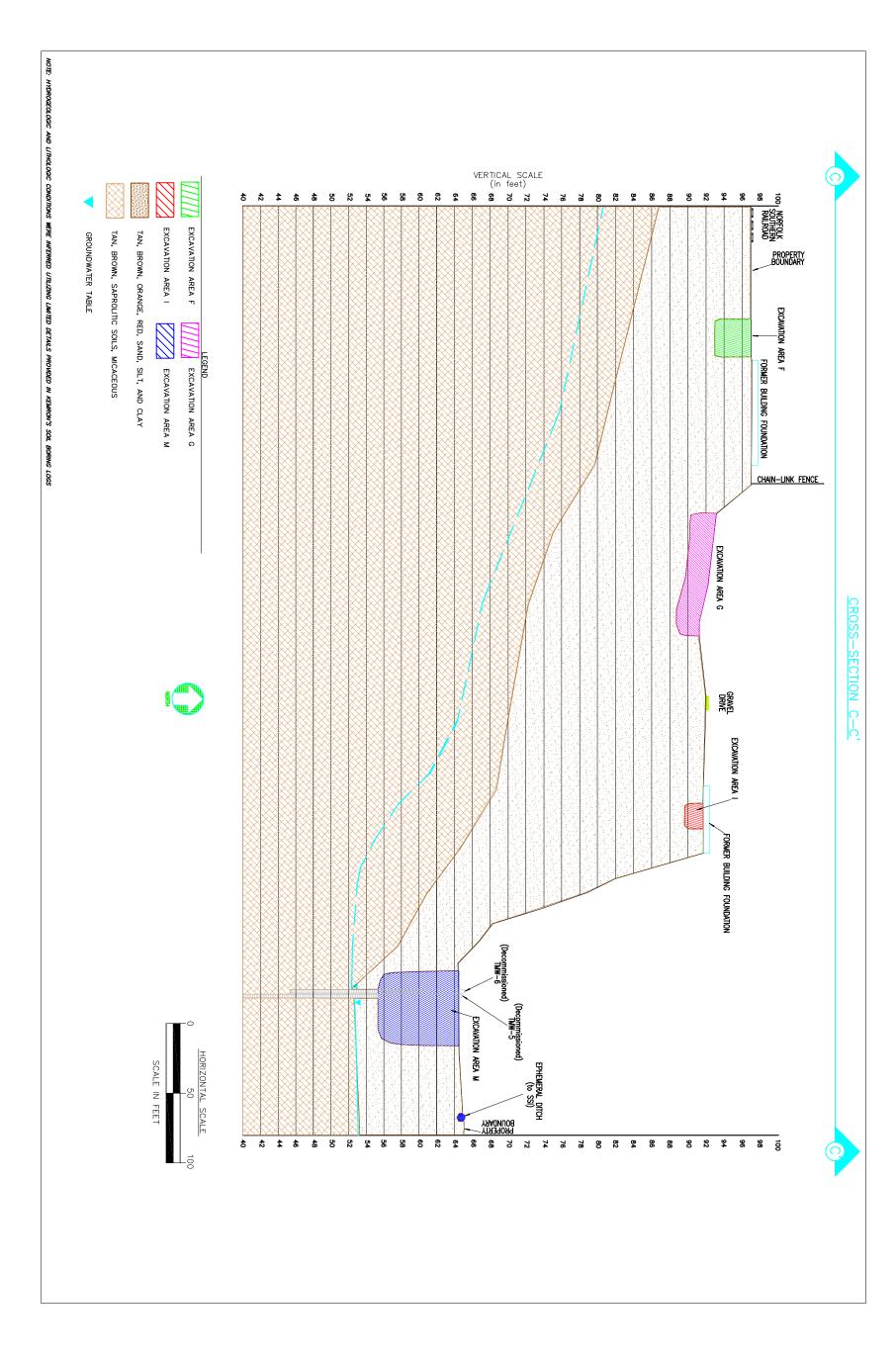


FIGURE NO.

5C

DAVIDSON-KENNEDY
3185

DAVIDSON-KENNEDY COMPANY SITE 1195 VICTORY DRIVE ATLANTA, GEORGIA

CROSS-SECTION C - C'



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ı							
ı							
ı	REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
	DATE		MIN BY JPC CHK BY WHL MES BY MHW APP BY CHM				J

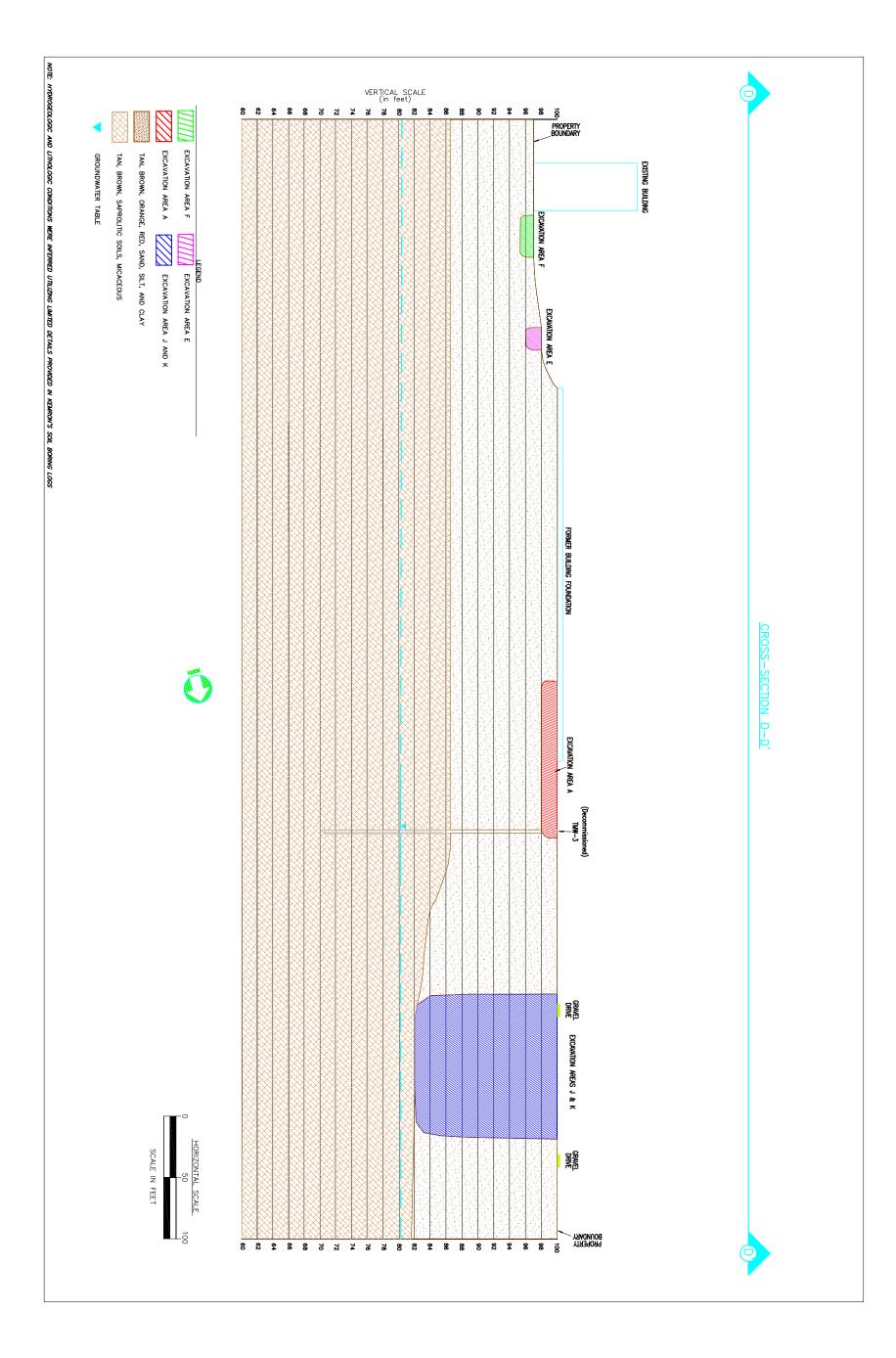


FIGURE NO.

5D

DAMDSON-KENNEDY
3185

DAVIDSON-KENNEDY COMPANY SITE 1195 VICTORY DRIVE ATLANTA, GEORGIA

CROSS-SECTION D - D'



l							
Ш	REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
J	DATE 3		INN BY JPC CHK BY WHL ES BY MHW APP BY CHM				

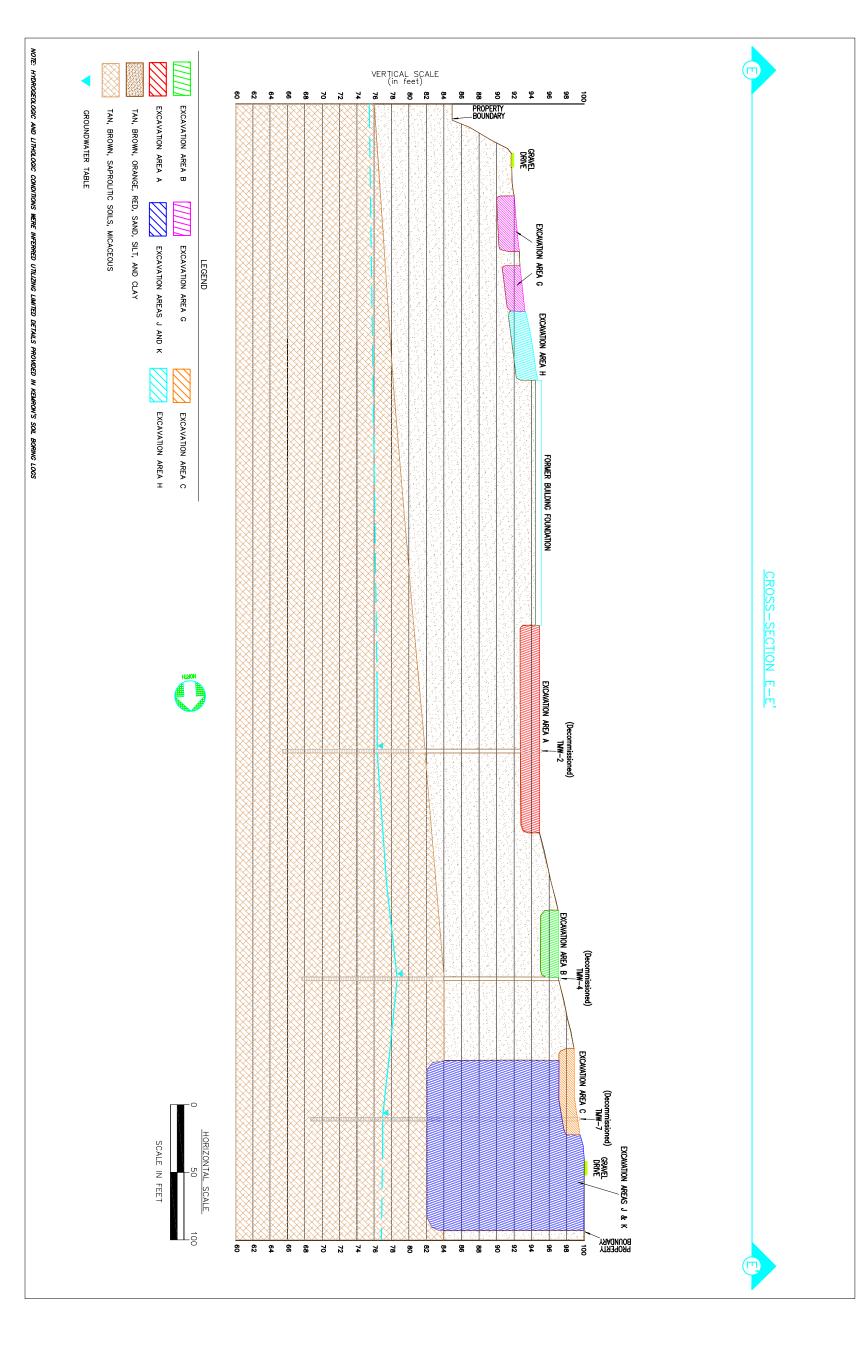


FIGURE NO.

5E

DAVIDSON-KENNED
3185

DAVIDSON-KENNEDY COMPANY SITE 1195 VICTORY DRIVE ATLANTA, GEORGIA

 ${\it CROSS-SECTION~E-E'}$



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П	REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
	DATE		OWN BY JPC OHK BY WHL DES BY MHW APP BY CHM				

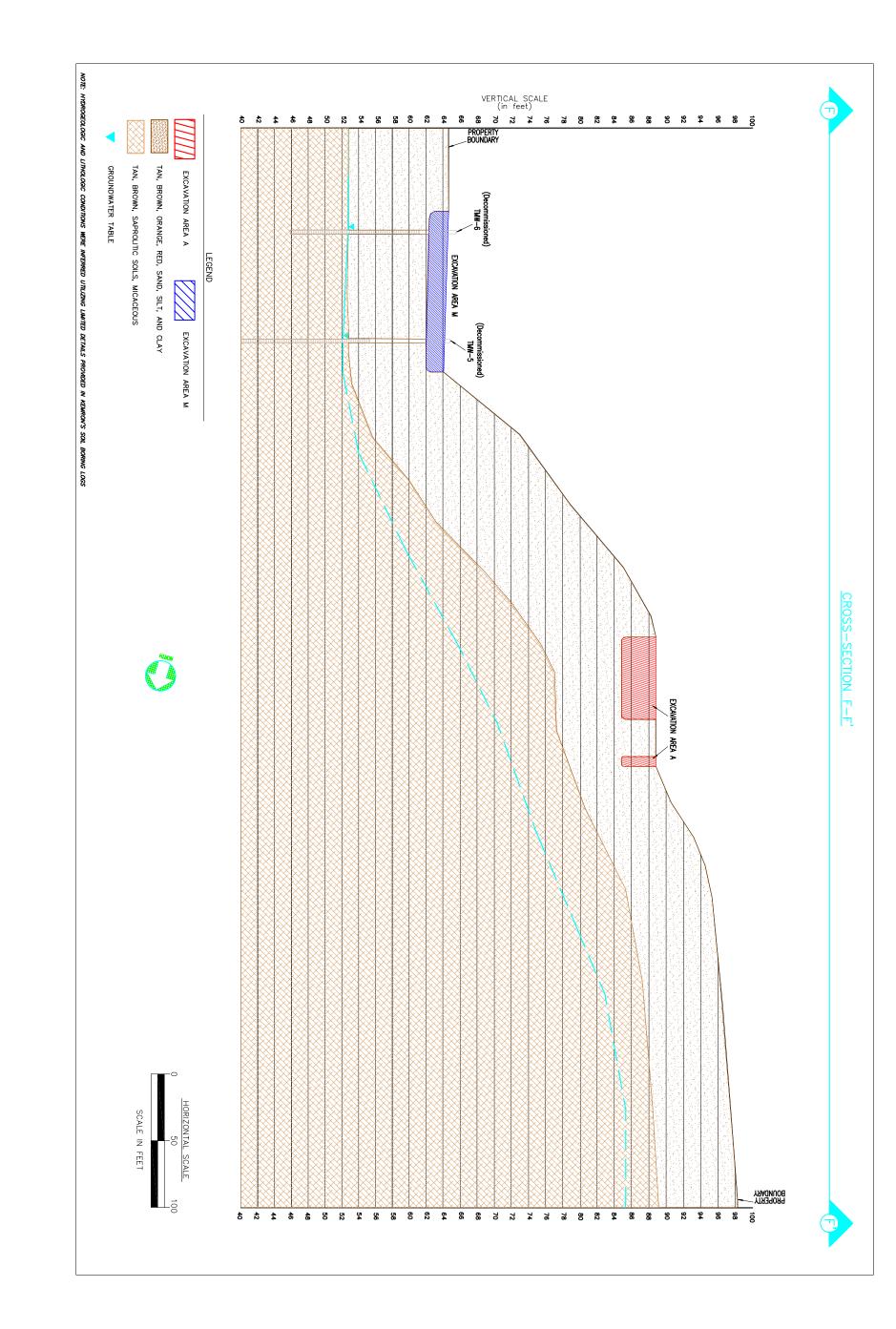


FIGURE NO.

5F

DAVIDSON-KENNED'
3185

DAVIDSON-KENNEDY COMPANY SITE 1195 VICTORY DRIVE ATLANTA, GEORGIA

CROSS-SECTION F - F'



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П	REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
J١	DATE	0E ISSUE /3/11	DWN BY				

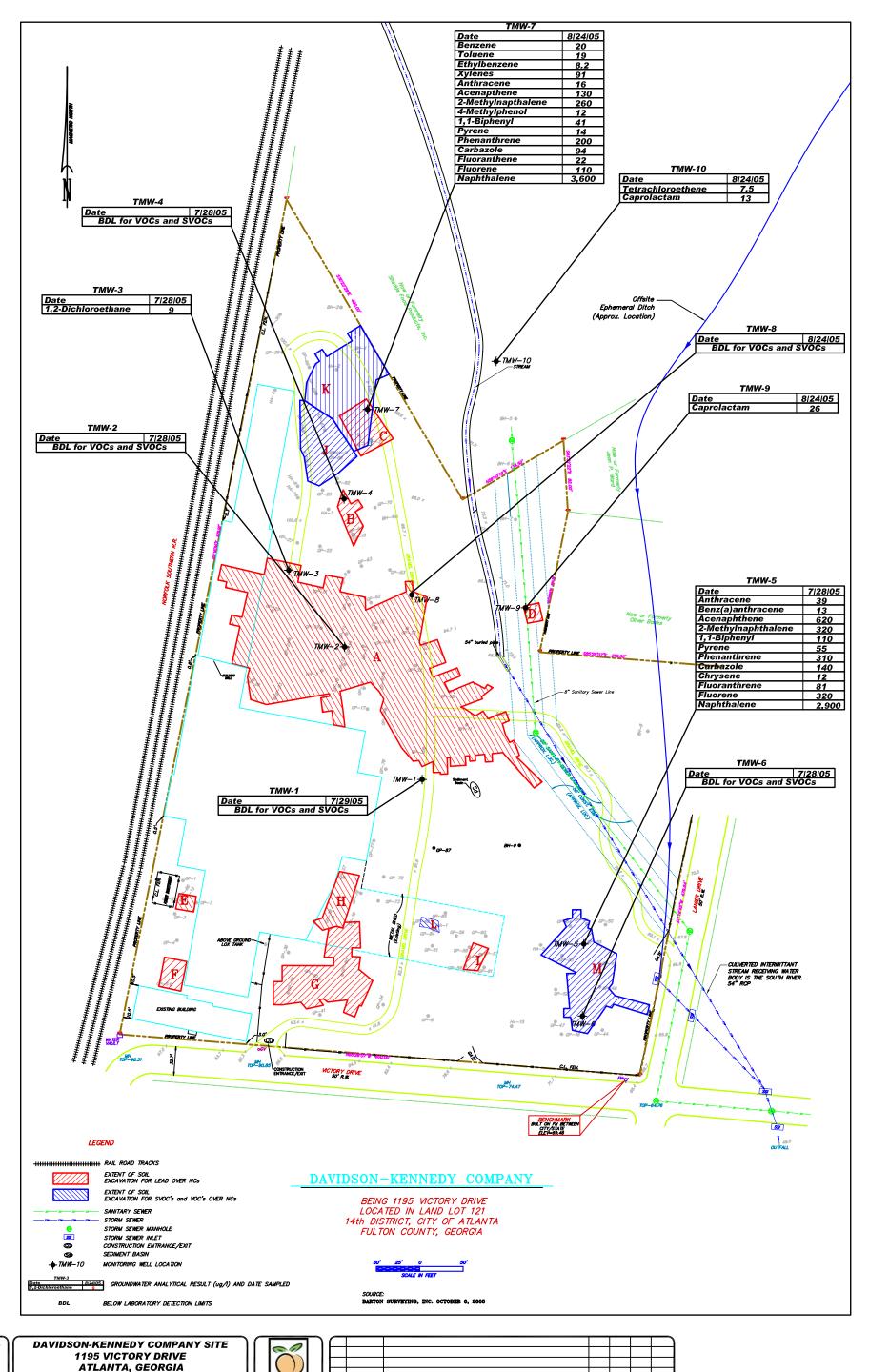


FIGURE NO. 6

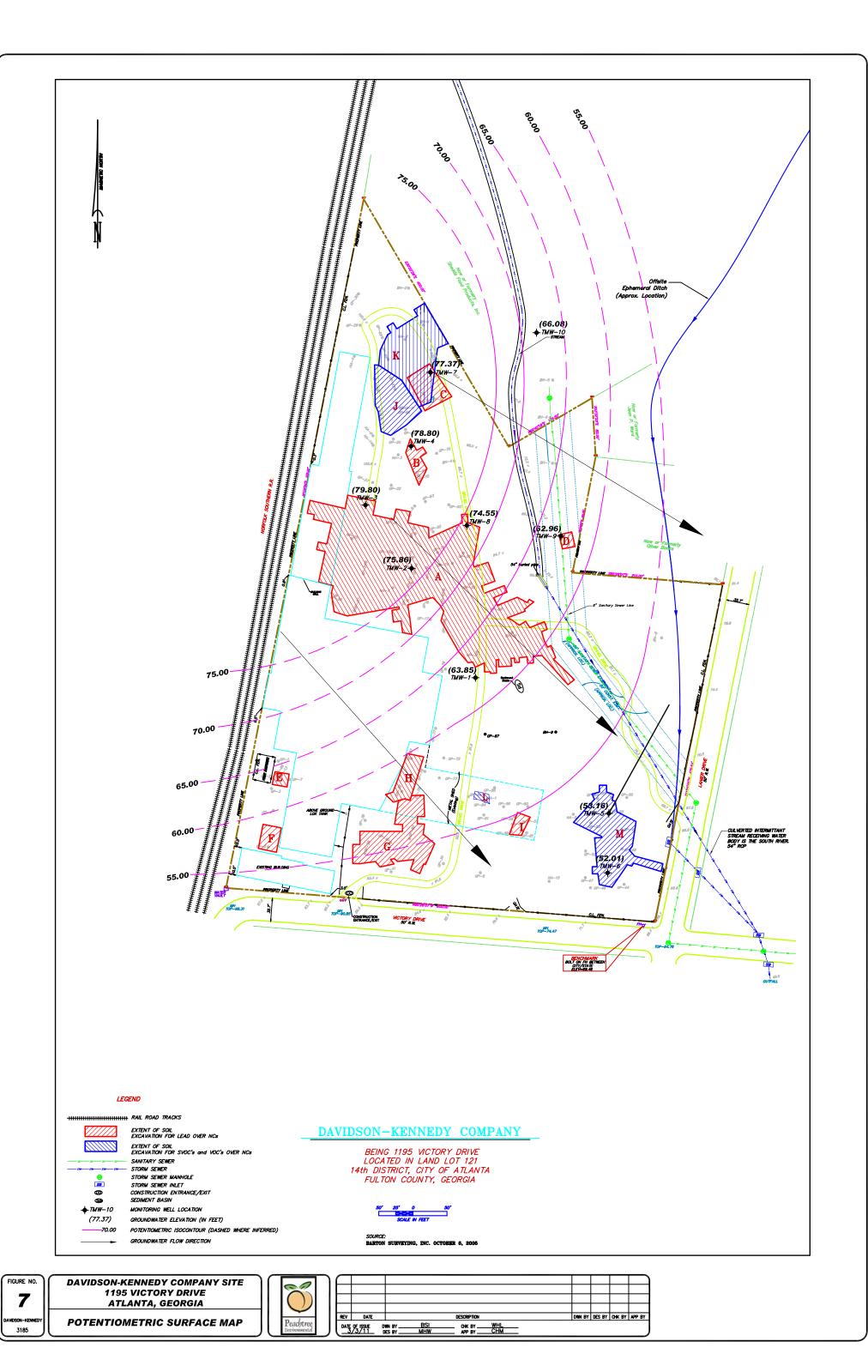
3185

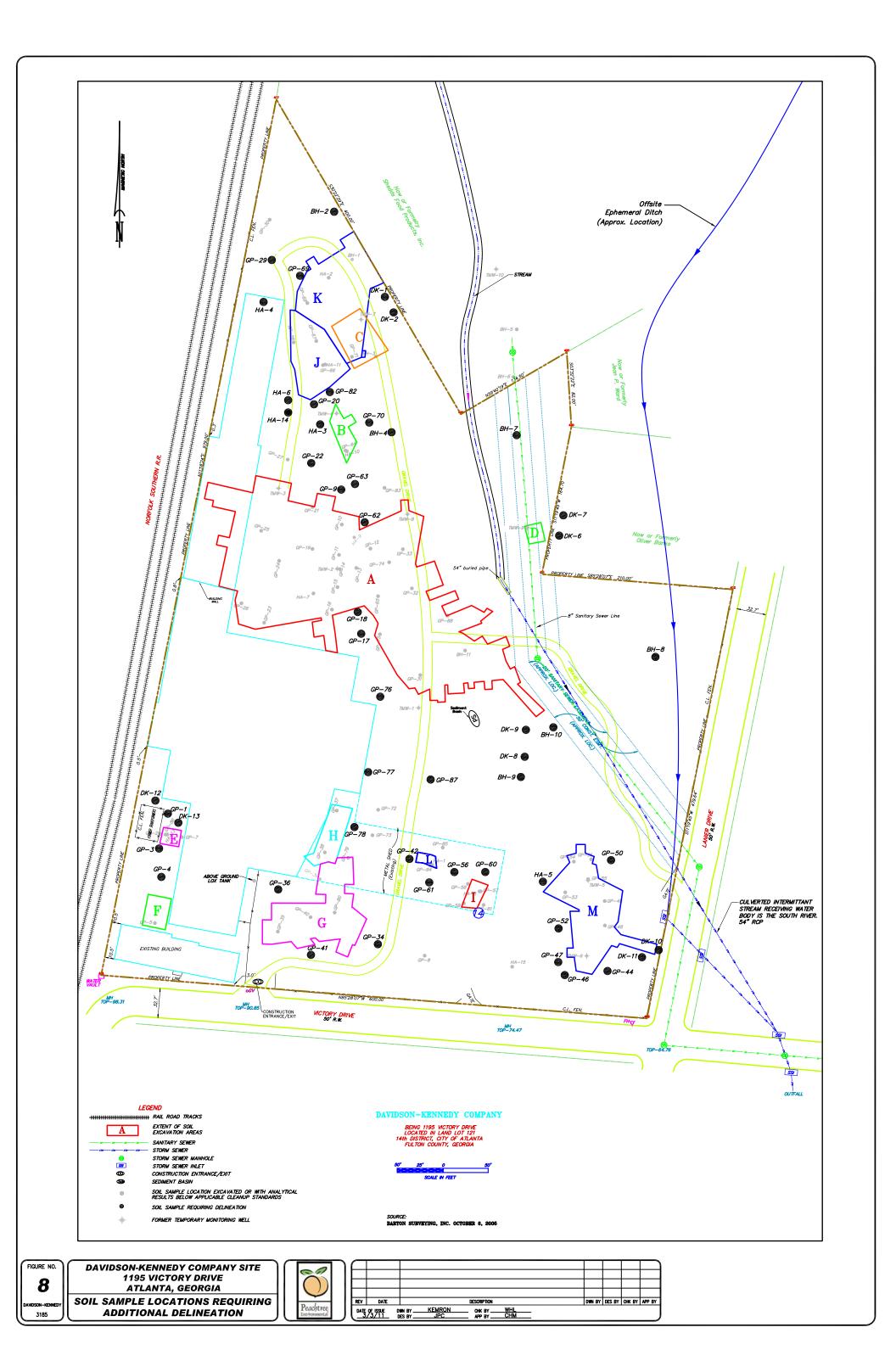
ATLANTA, GEORGIA **GROUNDWATER ANALYTICAL**

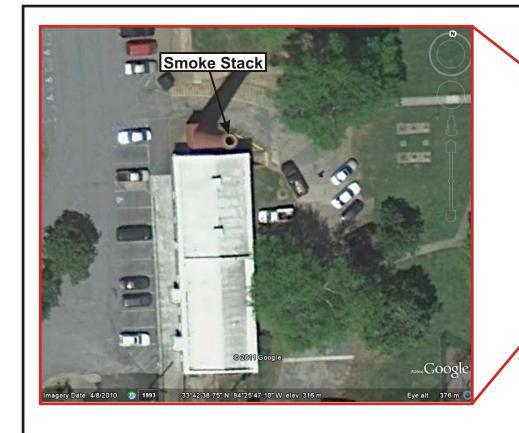
CONCENTRATIONS

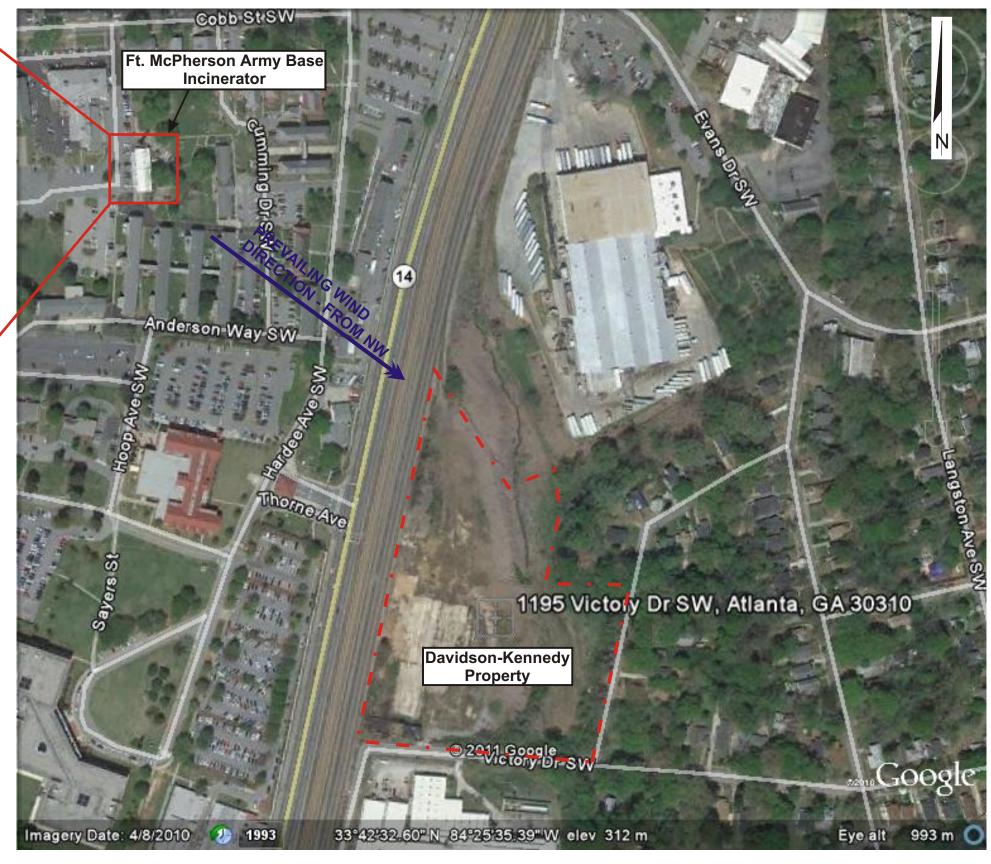
Peachtree

П							
П							
П							
Ш	REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
J١	DATE	0F ISSUE /3/11	DINN BY				









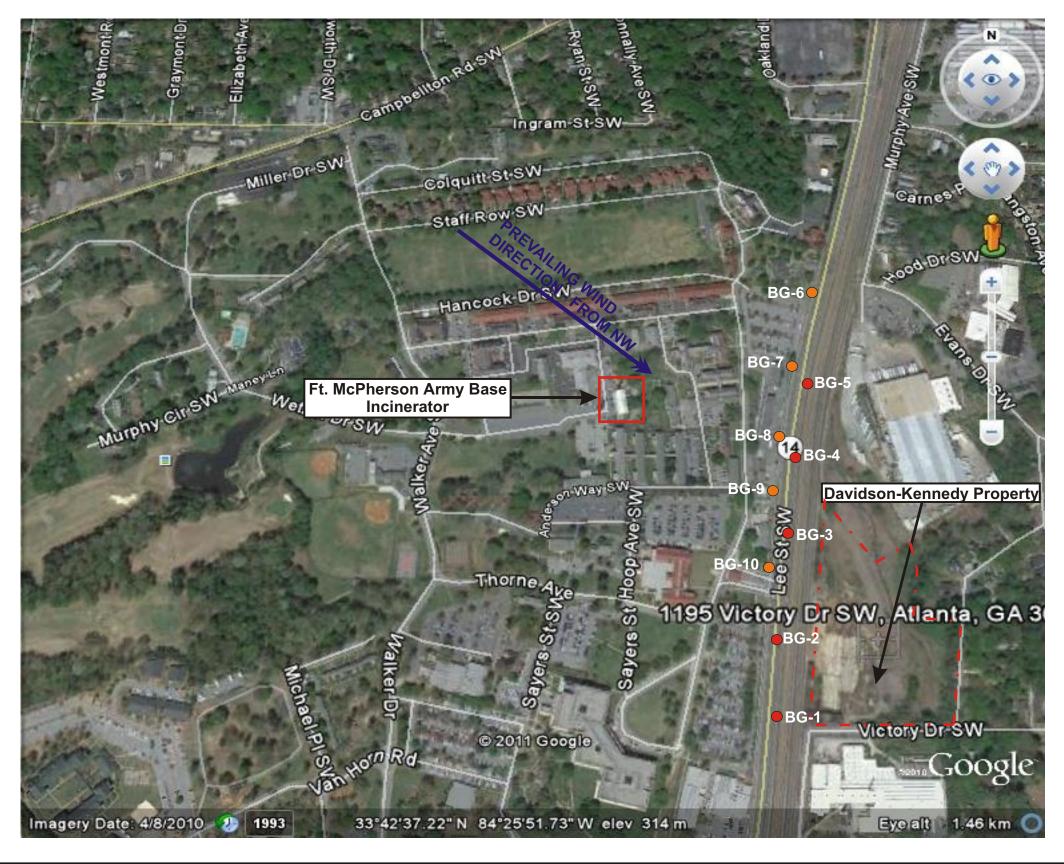
LEGEND

DAVIDSON-KENNEDY COMPANY PROPERTY 1195 VICTORY DRIVE, ATLANTA, FULTON COUNTY, GA HSI SITE NO. 10866

FIGURE 9 POTENTIAL ANTHROPOGENIC SOURCE LOCATION MAP

AMENDED VOLUNTARY REMEDIATION PLAN APPLICATION





LEGEND

- Background Sample Locations - 2/21/11 (East Side Lee St Right of Way)

- Background Sample Locations - 4/6/11 (West Side Lee St Right of Way)

DAVIDSON-KENNEDY COMPANY PROPERTY 1195 VICTORY DRIVE, ATLANTA, FULTON COUNTY, GA HSI SITE NO. 10866

FIGURE 10 ANTHROPOGENIC BACKGROUND SOIL SAMPLE LOCATION MAP

AMENDED VOLUNTARY REMEDIATION PLAN APPLICATION





APPENDIX A

OCTOBER 12, 2010 GEORGIA ENVIRONMENTAL PROTECTION DIVISION VOLUNTARY REMEDIATION PLAN APPLICATION COMMENT LETTER

Georgia Department of Natural Resources

2 Martin Luther King, Jr. Dr., S.E., Suite 1462 East, Atlanta, Georgia 30334 Chris Clark, Commissioner

> Environmental Protection Division F. Allen Barnes, Director Land Protection Branch Mark Smith, Branch Chief

Reply To:

Response and Remediation Program 2 Martin Luther King, Jr. Drive, S.E. Suite 1462, East Tower Atlanta, Georgia 30334-9000 Office 404/657-8600 Fax 404-657-0807

October 12, 2010

VIA E-MAIL AND REGULAR MAIL

Davidson-Kennedy Company c/o Mr. Joseph R. Ruben 800 Industrial Park Drive Marietta, Georgia 30062

Re: Voluntary Remediation Program Application, May 24, 2010 Davidson-Kennedy Company Property, HSI Site No. 10866 1195 Victory Drive, Atlanta, Fulton County, Georgia Tax Parcel 14-0121-0007-002-4

Dear Mr. Ruben:

On September 14, 2010, the Georgia Environmental Protection Division (EPD) sent Davidson-Kennedy Company a proposed consent order to resolve its violation of statutes, rules, and/or regulations subject to the enforcement authority of the Director so that EPD could consider Davidson-Kennedy Company as a participant in the voluntary remediation program. In a September 22, 2010 e-mail, Mr. John Spinrad, your attorney, expressed concern that prior to responding to the proposed consent order, Davidson-Kennedy Company wanted to schedule a meeting to discuss the proposed consent order and any outstanding items regarding the voluntary remediation program application. Please note that all correspondence should also be submitted in hard copy via the United States postal service or equivalent.

EPD has reviewed the May 24, 2010 application submitted pursuant to the Georgia Voluntary Remediation Program Act (the Act), for the above referenced site. EPD has determined the application is incomplete for the following reasons.

Conceptual Site Model (CSM)

- 1. The CSM must present a graphic, three-dimensional model that lists all complete and incomplete pathways, as well as all potential receptors:
 - a. Section 3.4.4 seems to state that because the site is currently vacant, potential exposure to on-site workers does not need to be considered. However, the CSM must account for pathways that may become complete at a likely future time. If the proposed risk based corrective action (RBCA) calculations assume that controls will be in place to prevent or reduce exposure, those controls must be documented in a uniform environmental covenant in accordance with O.C.C.A 44-16-1 et seq.

- b. Section 12-8-108(5) requires that soil cleanup standards must include direct exposure factors for surficial soils within two feet of the land surface; construction worker exposure factors for subsurface soils to a specified subsurface construction depth; and soil concentrations for protection of groundwater criteria (at an established point of exposure for groundwater) for soils situated above the uppermost groundwater zone. Section 3.4.5.1 only refers to surface soils.
- c. The CSM references residential property to the east of the proposed qualifying property; however, that residential property in not included as a proposed qualifying property in the application. Please specify whether the residential property is to be included in the application as a qualifying property or not. In the event the residential property is not included, EPD will require Davidson-Kennedy Company to address the residential property under the Hazardous Site Response Act.
- 2. The application specifies the CSM must use all reasonably available current information to the extent known at the time of application. Therefore, please revise the CSM to include the information obtained from the August 2005 Phase II Environmental Site Assessment, September 2005 Expanded Site Assessment Report, and February 6, 2007 Soil Excavation and Disposal Summary Report in addition to the results of EPD's August 27, 2007 sampling event.

Site Delineation Concentration Criteria

- 3. Section 5.0 states that the Compliance Status Report will include "on-property" delineation of groundwater contamination. Please note that groundwater must be delineated to the site delineation concentration criteria even if that requires sampling outside of the qualifying property.
- 4. An updated potentiometric map including point of demonstration (POD) wells must be submitted to EPD (see Comment 1b above).
- 5. It is unclear how the groundwater Type 1 risk reduction standards (RRS) for chrysene, phenanthrene, anthracene and 4-methylphenol were derived. The groundwater Type 1 RRS values for the aforementioned regulated substances should be based on their respective background concentrations or detection limits.

Preliminary Voluntary Investigation and Remediation Plan

6. Section 12-8-107 specifies the voluntary investigation and remediation plan shall enumerate and describe those actions planned to bring the qualifying property into compliance with the applicable cleanup standards. Therefore, EPD requires a more detailed plan that is supported by the conceptual site model. This plan should include the areas currently identified with impacted soil and the method by which Davidson-Kennedy Company will identify other areas of possible soil contamination on and off-property. Soil remaining within the previously

Davidson-Kennedy Company October 12, 2010 Page 3

remediated areas of the site that exceeds the selected clean-up standard should be included in the plan.

7. If a specific risk-based corrective action strategy will be used to select remedial alternatives, such as the ASTM RBCA guidelines, a reference for the specific RBCA framework/strategy must be provided. Please note that the approach used to develop cleanup standards under the Act should be consistent with the methodology described in Section 391-3-19-.07 of the Rules for Hazardous Site Response and comply with the provisions, purposes, standards, and policies of the voluntary remediation program.

Please note that EPD's review costs have exceeded the \$5,000 application fee. EPD is willing to meet with Davidson-Kennedy prior to October 29, 2010; however, EPD will not perform any additional reviews until the violations are resolved. EPD is extending the deadline to respond to the proposed consent order to November 5, 2010 to allow time to meet. Please contact Mr. John Maddox at (404) 657-8600 to schedule the requested meeting.

Sincerely,

Mark Smith, Chief Land Protection Branch

Mark Smith

c: William H. Lucas, Peachtree Environmental, Inc. John Spinrad, Arnall Golden Gregory LLP

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APPENDIX B

WARRANTY DEED(S) AND TAX PLAT(S) FOR THE QUALIFYING PROPERTY(S)

QUITCLAIM DEED

STATE OF GEORGIA

COUNTY OF FULTON

THIS INDENTURE, made the one thousand nine hundred and $\frac{1}{1}$ seventy-nine , between

in the year

-- FLORIDA STEEL CORPORATION, a Florida corporation --

-of-the County of--os parties of the first part, hereinafter called Grantor, and

, as party

-- DAVIDSON-KENNEDY COMPANY, a Georgia corporation --

of the County of , as party of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH that: Grantor, for and in consideration of the sum of one dollar (\$1.00) and other valuable considerations in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents does hereby remise, convey and forever QUITCLAIM unto the said grantee ALL THAT TRACT OR PARCEL OF LAND lying and being in Land Lot 121, 14th District, Fulton County, Georgia, and being more particularly described in Exhibit "A" attached hereto and by this reference made a part hereof.

Fallon County, Georgid
Excil Excise Transfer Tax
Paid S
Date
Outly 6 19 79
ERICE
Clerk, Supplier Court
By:
Deputy Clark
Deputy Clark

GEORGIA, Fulton County, Clerk's Office Superior Court
Filed & Recorded, JULY 6 1979 at 11:22 AM., Sharan J. Frica DERM

TO HAVE AND TO HOLD the said described premises to grantee, so that neither grantor nor any person or persons claiming under grantor shall at any time, by any means or ways, have, claim or demand any right or title to said premises or appurtenances, or any rights thereof.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered in the presence of:

FLORIDA STEEL CORPORATION 7292

By: Hugh A Dorrey
Title: Drice PRESIDENT

Title: Par. VICE PESSON

(CORPORATE SEAL)

(Notary Public)

(Unoshcial witness

SEAL

Riotary Public, Georgia, State at Lucia My Commission Expues Oct. 25, 1982 CORP

QUITCLAIM DEED

FROM

GEORGIA, Julton County
Clerk's Office, Superior Court.

Filed for Record 65 day,
of July 1929,
at: 22A M., and Recorded in Deed
Book 7292 Folio 28
July 6 , 1979
Sharbara J. Line CHERKClerk

Lawyers Title Insurance Corporation

ATLANTA BRANCH OFFICE
TITLE BUILDING
ATLANTA, GEORGIA

EXHIBIT "A"

ALL that tract or parcel of land lying and being in the City of Atlanta in Land Lot 121 of the 14th District of Fulton County, Georgia, and being more particularly described as follows:

BEGINNING at the corner formed by the intersection of the northerly side of Victory Drive (having a 50 foot right-ofway) formerly known as Mickleberry Street, with the westerly side of Lanier Drive; and running thence North 89 degrees 30 minutes 50 seconds West along the northerly side of Victory Drive a distance of 599.6 feet to the easterly line of the right-of-way of the Central of Georgia Railway Company; running thence North 07 degrees 12 minutes 00 seconds East along the east right-of-way of the Central of Georgia Railway Company a distance of 989 feet to an iron pin located at the corner of the property now or formerly owned by J. H. Filbert, Inc.; running thence South 33 degrees 59 minutes 00 seconds East along the boundary line of said Filbert property, a distance of 405.9 feet to an iron pin; running thence North 55 degrees 54 minutes 40 seconds East along the boundary line of said Filbert property, a distance of 132.2 feet to an iron pin located at the corner of the property now or formerly owned by Mrs. Daisy Reese Keith; running thence South 06 degrees 40 minutes 00 seconds East along the boundary line of said Keith property a distance of 83 feet to an iron pin; running thence South 41 degrees 16 minutes 10 seconds East a distance of 13.34 feet to an iron pin; running thence South 06 degrees 54 minutes 40 seconds West a distance of 154.7 feet to an iron pin; running thence South 89 degrees 27 minutes 00 seconds East a distance of 200 feet to an iron pin on the westerly side of Lanier Drive; running thence South 07 degrees 15 minutes 00 seconds West along the westerly side of Lanier Drive a distance 479.7 feet to the point of beginning, same being shown on Plat of Survey for "Davidson-Kennedy Company" by Delta Engineers & Surveyors, Inc., dated May 5, 1979, and containing 9.26 acres according to said survey.

TAXYR 2007

PIN 14 -0121-0007-002-4

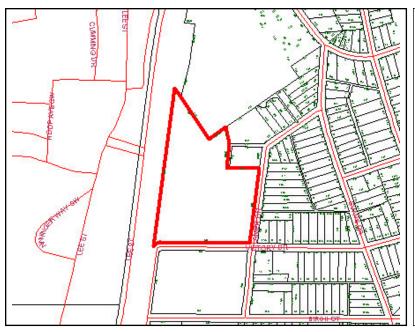
OWNER NAME DAVIDSON KENNEDY CO

PROPERTY LOCATION 1195 VICTORY DR

NEIGHBORHOOD C605
TOTAL ACREAGE 9.17
TOTAL LAND SQ. FEET 399445

LIVING AREA SQ. FOOT

LAND VALUE 425300
IMPROVEMENT VALUE 24700
TOTAL VALUE 450000



FULTON COUNTY BOARD OF ASSESSORS

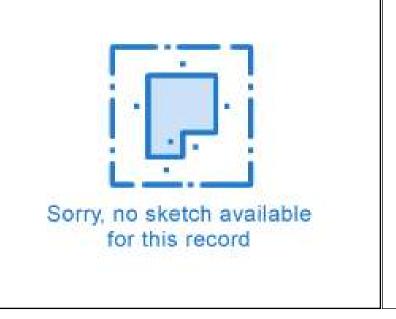


141 Pryor Street

Suite 1056 Atlanta, GA 30303

Phone: (404)730-6440 Fax: (404)224-0417







RELEASE NOTIFICATION FORM

HAZARDOUS SITES RESPONSE PROGRAM GEORGIA ENVIRONMENTAL PROTECTION DIVISION

(Please type or print legibly)

1. The information provided in this form is for:

[X] Initial Release Notification
[] Supplemental Notification

PART I --- PROPERTY INFORMATION

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3	Tax Map and Parcel ID Number:	14012100070024	**************************************								
4	Site or Facility Name	Davidson-Kennedy Company									
5	Site Street Address	1195 Victory Drive	1195 Victory Drive								
6	Site City	Atlanta	Zip	30310							
7	Property Owner	Davidson-Kennedy Company									
8	Property Owner Mailing Address	800 Industrial Park Drive									
9	Property Owner City	Marietta	State	GA	Zip	30062					
10	Property Owner Telephone No.	770-427-9467									
11	Site Contact Person	Joseph H. Rubin Title CEO				***************************************					
12	Company Name	Davidson-Kennedy Company									
13	Site Contact Mailing Address	800 Industrial Parl	c Drive	794m3 2-44 (2-77) 77 49 44 23 5 (2 5 2 6 2 7 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	***************************************						
14	Site Contact City	Marietta	State	G A	Zip	30062					
15	Site Contact Telephone No.	770-427-9467	70000000000000000000000000000000000000	Valency y Trusto n o control of the nation	3*****************************	**************************************					
16	Facility Operator	SAME	Title	**************************************	909099998098889000						
17	Company Name			(0277427 NJC02742 147347742424444145521475	1913A14887FALORSSTO	~~~					
18	Facility Operator Mailing Address	**************************************		any nao o ann dalla ann nao n-ean no ne n-èanair tao d'Affi	******						
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21. CERTIFICATION —I certify under penalty of law that I am the owner of the real property described in this Release Notification and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

JOSEPH H. RUBIN	CEO
NAME (Please type of print)	TITLE 1 29/07
SIGNATURE	DATE

PART II -- RELEASE INFORMATION

Page __2__ of _5__

lease provide the following information for EACH release at the site. If additional space is needed to answer any of the following questions, attach additional pages, as necessary.

1. Source of this release (i.e., drums, tanks, spills, wastepile etc.). Provide specific information on the suspected or known source of the release, including the source of this information:

The subject property has an industrial history dating back to at least the early 1900's. Former operations at the site include Florida Steel, Calvert Iron Works, Bowers Sheet Metal and possibly others. In addition Norfolk Southern has conducted railroad operations on and/or adjacent to the subject property. Much of the impact to soil is associated with fill material. It is unknown if the impact to the fill material occurred prior to placement at the site. The source of the impact detected in groundwater is unknown.

2. Release dates(s) and any known information about the history of the release, including the physical state of the material (solid, powder/ash, liquid/gas, sludge) and the quantity of material released (lbs, cubic yards, etc.):

The exact date of the release is unknown, however, it is assumed that the release occurred over the course of site operations beginning in the early 1900's. It is not known how the release occured or the quantity released.

3.Describe those actions that have been taken to investigate, clean up or otherwise remediate this release (e.g., removal of source of contamination; soil or water sampling performed; and monitoring wells installed and sampled).

Approximately 28,000 tons of lead, benzene, xylene and semi-volatile organic compounds (SVOCs) impacted soil above the Notification Concentration (NC) were disposed of at an off-site landfill between July and December of 2006. Confirmatory soil sampling following soil removal was performed and soil has been remediated below the applicable NCs on-site.

- 4. Access to the area affected by the release. Check the appropriate box:
 - [] Inaccessible: A 24-hour surveillance system, or a completely closed barrier or fence to prevent entry.
 - [] Limited Access: Less than 24-hour surveillance system, and/or a barrier or fence that is partially open.
 - [X] Unlimited Access: No surveillance, and no barrier or fence.

If the site is inaccessible or has limited access, then describe site surveillance systems, fences, security personnel or other barriers that would restrict access to the release.

- 5. For soil releases, indicate the type of material covering this release, by checking the appropriate box below.
 - [] A permanent or otherwise maintained, essentially impenetrable non-earthen material such as concrete or asphalt
 - [] An engineered and maintained earthen material or compacted fill or a high density synthetic material
 - [] Loose earthen fill or native soil
 - [] No cover
 - [] Other

Describe the type and thickness of the material covering the contaminated soil or wastes.

PART II -- RELEASE INFORMATION

(Continued)

Page 3	of	5
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			. ago oo_
	ne approximate distance from th d, day care, school or nursing ho		cted by the release to the nearest residence,
	[X] Less than 300 feet [] 301 to 1000 feet	[] 1001 to 3000 fe	et [] Greater than 1 mile et
Provide th	e name and address of the neare	st residence, playgrour	nd, day care, school or nursing home.
Name:	Now or Formerly Oliver Ban	ks	
Address:	1705 Lanier Drive Atlanta, G	Α	
		ted by the release and t	he nearest drinking water well (including wells
	[X] Less than 0.5 miles** [] 0.5 to 1 mile	[] 1 to 2 miles [] 2 to 3 miles	[] Greater than 3 miles
Provide the	name of the property owner and	address of the location	of the closest drinking water well.
Name:	Fort McPherson	The second secon	190611
Address:	1518 Stovall Lane Fort McPh	erson, GA	
	been identified downgrad Please see attached Phase survey.	ient within a two-r e II Environmental	mile radius of the subject site. Site Assessment Report for the well
	[]Yes [X]No		
lf yes, provide	details on the potentially affecte	d humans or sensitive o	environments.
Provide the name and address of the nearest residence, playground, day care, school or nursing home. Name:Now or Formerly Oliver Banks			
	A. Attach a s by the releas otherwise re and adjacent contamination	summary (no longer than one pag se both within and beyond the pro mediate the property. The summ t properties as well as a detailed o on. Describe any additional releva	operty boundaries, and ary shall include a desc description of the nature nt information concerni
the site. The	site map should include outline	s of buildings as well as	covered ground areas (e.g., parking lots or
. U.S.G.S. To	opographic Map		
Along with th of the site cle site is locate	early marked. See instructions fo	inal U.S.G.S. topograph or information on how to	cal map (1:24000) with the geographic center obtain an original of the map on which your

PART IV -- GROUNDWATER RELEASE INFORMATION

Page __4__ of __5__

Please provide the following information for EACH regulated substance released to the groundwater at the site and submit the laboratory analytical sheets for all samples analyzed from the site. Use additional sheets if necessary.

Regulated Substance	CAS Number	Highest Detected Concentration (Specify Units)	Sample Depth Below Ground Surface (Feet)
1,2 Dichloroethane	107-06-2	1/bn 6	19.83
Carbazole	86-74-8	140 ug/L	12.31
Chrysene	218-01-9	12 ug/L	12.31
Flouranthene	206-44-0	81 ug/L	12.31
Fluorene	86-73-7	320 ug/L	12.31
Naphthalene	91-20-3	3,600 ug/L	22.05
Phenanthrene	85-01-8	310 ug/L	12.31
Pyrene	129-00-0	55 ug/L	12.31
1,1 Biphenyl	92-52-4	110 ug/L	12.31
Dibenzofuran	132-64-9	1/6n 86	22.05
Acenaphthene	83-32-9	620 ug/L	12.31
Benz (a) anthracene	56-55-3	13 ug/L	12.31

Revision 5/4/00

PART IV -- GROUNDWATER RELEASE INFORMATION

Page_5_ of_5_

Please provide the following information for EACH regulated substance released to the groundwater at the site and submit the laboratory analytical sheets for all samples analyzed from the site. Use additional sheets if necessary.

Anthracene 120-12-7 39 Benzene 71-43-2 20 Toluene 108-88-3 15 Ethylbenzene 100-41-4 8 Xylenes 1330-20-7 91 4-Methylphenol 151677-97-3 12	Regulated Substance	CAS Number	Highest Detected Concentration (Specify Units)	Sample Depth Below Ground Surface (Feet)
71-43-2 108-88-3 100-41-4 1330-20-7 1phenol 151677-97-3	Anthracene	120-12-7	39 ug/L	12.31
108-88-3 100-41-4 1330-20-7 1phenol 151677-97-3	Benzene	71-43-2	20 ug/L	22.05
100-41-4 1330-20-7 ol 151677-97-3	Toluene	108-88-3	19 ug/L	22.05
1330-20-7 lphenol 151677-97-3	Ethylbenzene	100-41-4	8.2 ug/L	22.05
151677-97-3	Xylenes	1330-20-7	91 ug/L	22.05
	4-Methylphenol	151677-97-3	12 ug/L	22.05
	,			

Revision 5/4/00

Site Summary - HSRA Release Notification Davidson-Kennedy Company 1195 Victory Drive Atlanta, Fulton County, Georgia

A site assessment was conducted at the site by KEMRON Environmental Services, Inc. (KEMRON) in July of 2005. The purpose of this work was to assess potential impact to soil and groundwater conditions from former operations (currently vacant) at the subject property. Lead, benzene and SVOC concentrations exceeding the Notification Concentrations (NC) as established by the Georgia EPD HSRA Program were detected during the assessment in soil. SVOC and VOC constituents were detected in five of the groundwater samples collected from the temporary groundwater monitoring wells.

KEMRON conducted additional soil delineation activities at the site following the original assessment. The purpose of the additional sampling was to delineate the lead, benzene and SVOC impacted soil to the NC, as well as to rule out additional source areas at the subject site. The data generated from the two phases of assessment activities are contained in figures, tables and analytical reports, which are attached in digital format to the enclosed soil excavation report.

KEMRON initiated permitting activities with the Georgia Environmental Protection Division, Georgia Soil and Water Conservation District and subsequently the City of Atlanta in October 2005. KEMRON obtained a Land Disturbance Permit from the City of Atlanta in July of 2006 and subsequently excavated and disposed of 28,106.62 tons of lead, benzene, xylene and SVOC impacted soil from July to December of 2006. Based on the confirmatory sampling conducted during the excavation activities, the lead, benzene, xylene and SVOC impacted soil at the subject site was successfully removed to below their respective NCs. Additional details pertaining to the excavation and disposal of the Lead and SVOC impacted soil can be found in the attached Soil Excavation and Disposal Summary Report.

KEMRON conducted a water resources survey within a three mile radius of the subject site during the activities. KEMRON reviewed USGS well records, interviewed local officials and performed a visual reconnaissance of the area. The well identified in closest proximity to the subject site was at Ft. McPherson located approximately 1,000 feet southwest of the subject site. Additional wells were identified at Ft. McPherson as well as the City of East Point. Based on measured groundwater flow, these wells are located upgradient of the subject site. A Potentiometric Surface Map is included in the Expanded Environmental Assessment Report. Additional wells (US Plating Burn, 78-Milton Ave and Former State Nursery-Constitution Road) identified during the original assessment activities have since been confirmed to be no longer in service. No wells were confirmed downgradient within a two-mile radius of the subject site during the assessment.

Based on the measured groundwater flow direction to the southeast and the successful removal of the Lead, BTEX and SVOC impacted soil to below the NC at the subject property, this site should not be listed on the Hazardous Site Inventory.



.59-A Ellsworth Industrial Boulevard ■ Atlanta, Georgia 30318 ■ Telephone (404) 636-0928 ■ FAX (404) 636-7162 ■ http://www.kemron.com

February 6, 2007

Mr. Joseph H. Rubin Davidson-Kennedy Company 800 Industrial Park Drive Marietta, Georgia 30062

Re: Soil Excavation and Disposal Summary Report Davidson-Kennedy Company Facility 1195 Victory Drive

Atlanta, Fulton County, Georgia

Dear Mr. Rubin:

KEMRON Environmental Services, Inc. (KEMRON) is pleased to submit this Soil Excavation and Disposal Summary Report for the above referenced property.

KEMRON conducted an assessment to determine whether previous operations had had an impact on the soil and groundwater at the subject property. The earliest known development of the property was by Hudson Brothers Steel Bridge Erectors obtained from a Sanborn fire insurance map dated 1925. Florida Steel operated at the subject site between 1962 and 1977. Bowers Sheet Metal Company and Calvert Iron Works occupied the southeastern portion of the property during the 1950s based on Atlanta City Directory information obtained. The subject property was operating as a railcar repair facility at the time of the assessment. Six temporary groundwater wells and fifteen shallow soil borings were installed and sampled as part of the initial investigation. Lead and semi-volatile organic compound (SVOC) concentrations exceeding the respective Notification Concentrations (NCs) as established by the Georgia Environmental Protection Division (EPD) Hazardous Site Response Act (HSRA) Program were detected in the assessment. The data from the assessment is contained in the figures, tables and analytical reports, which have been included in digital format in **Attachment A**.

Thereafter, KEMRON conducted an expanded environmental assessment and delineation of the lead and SVOC impacted soil detected at the subject site. A total of ninety-nine borings and four additional groundwater monitoring wells were installed to assess additional areas of concern and delineate previously identified lead and SVOC contamination in soil. The dimensions of the initial excavations were determined by the soil delineation activities conducted by KEMRON. The samples were submitted to Analytical Environmental Services, Inc. (AES) in Atlanta, Georgia for Lead, SVOC, and volatile organic compounds (VOCs) analysis using EPA Methods 6010B, 8270, and 8260, respectively. In addition to detecting lead and SVOCs above the respective NCs during the expanded environmental site assessment, benzene was detected above the applicable NC at the northern portion of the property. Based on sampling results,





Mr. Joseph H. Rubin February 6, 2007 Page 2

thirteen areas were proposed for excavation (labeled as excavation areas, A through M) based on results indicating concentrations of various compounds exceeding a respective NC. These areas are illustrated on Figure 2. Based on soil boring data and observance during excavation activities, it is believed that the majority of the impacted soil was predominantly fill material consisting of soil, bricks, concrete, metal, and other building materials. The material other than soil is assumed to be demolition debris from former structures located at the facility which housed the aforementioned previous operations. It was concluded following the Expanded Site Assessment that all soil on-site that contained lead, SVOCs and benzene concentrations exceeding a respective NC be excavated and properly disposed of. The data from the expanded assessment is contained in the figures, tables and analytical reports which are included in digital format in **Attachment B**.

KEMRON worked with the City of Atlanta for approximately nine months to obtain a Land Disturbance and Building Permit for soil remediation activities at the subject site. The permit was required since the total disturbed acreage exceeded one-acre in size. KEMRON mobilized to the site on July 24, 2006 to initiate pre-excavation activities, including erosion and sedimentation control implementation measures as required by the Land Disturbance Permit. Once pre-excavation activities were completed, soil excavation began. All excavated soil was transported under non-hazardous waste manifest to Eagle Point Landfill in Ball Ground, Georgia for disposal. Copies of waste manifests are included as Appendix I. Four of the proposed excavation areas contained soil with various SVOCs over the respective NCs ('J', 'K', and 'M'). Additionally, benzene and xylene concentrations above the applicable NC were detected in soil at excavation 'K'. Isophorone was detected in the excavation area labeled 'L'. Excavations ('A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I') exhibited soil concentrations of lead above the NC. Following the initial excavation, soil samples were collected utilizing a grid system, with soil samples collected every ten feet along excavation walls (two wall depths collected in areas with deeper excavations) and every twenty feet along the floor of the excavations. In the event a confirmatory soil sample exhibited a concentration above the respective NC, additional excavation was conducted and additional soil samples were collected.

In excavation 'K' all soil containing lead, benzene, xylene and SVOCs above their respective NCs was removed on-site. Select areas in 'K' and 'M' were removed to the groundwater table. Sample collection depths and analytical results are summarized in the attached tables. Laboratory analytical reports and chain of custody documentation from excavation activities are included in digital format as **Appendix II**.

Excavation 'A' extended beyond the proposed area to the north, south and to the southeast. Additionally, several areas within 'A' required stabilization prior to transportation allowing the soils to be disposed of at a non-hazardous permitted solid waste disposal facility. Stabilization was achieved in-situ by mixing soil with granulated triple superphosphate. Five point composite soil samples were collected and submitted for TCLP analysis to ensure the soil was stabilized to within non-hazardous concentrations. Once stabilized, soil was transported under non-hazardous waste manifest to Eagle Point Landfill.





Mr. Joseph H. Rubin February 6, 2007 Page 3

Excavations 'C', 'D', 'F', 'I', 'L' did not extend beyond their originally proposed excavation areas as illustrated on the attached figures. Based on confirmatory sampling results, additional excavation was required to remediate respective compounds to below the NC at excavations 'A', 'B', 'E', 'G', 'H', 'J', 'K' and 'M'. Following excavation activities approximately 26,000 tons of clean soil was transported to the subject site to backfill the excavations. Final excavation areas are illustrated on the attached figures.

A total of 28,106.62 tons of lead, benzene, xylene and SVOC impacted soil was removed from the subject property and disposed of at the Eagle Point Landfill in Ball Ground, Georgia. Based on the results of the confirmatory sampling, the lead, benzene, xylene and SVOC impacted soil at the subject site has been successfully remediated to below the respective HSRA NCs. A notification of release to groundwater should be made to the Georgia HSRA Program for impact detected during the assessment.

If you have any questions, or require additional information, please feel free to contact the undersigned at (404) 636-0928.

Kevin W. McGowan

Senior Project Manager

Sincerely,

KEMRON Environmental Services, Inc.

Jeff Goodwin Project Scientist

forth Gime Co.
Robert M. York, P.G.

Senior Consultant

Attachments:

Figures

Tables

Appendix I-Waste Manifests

Appendix II-Laboratory Analytical Reports

cc: Mr. John Spinrad-Arnall Golden Gregory, LLP

Prince on the 24 fed Paper

12-06\

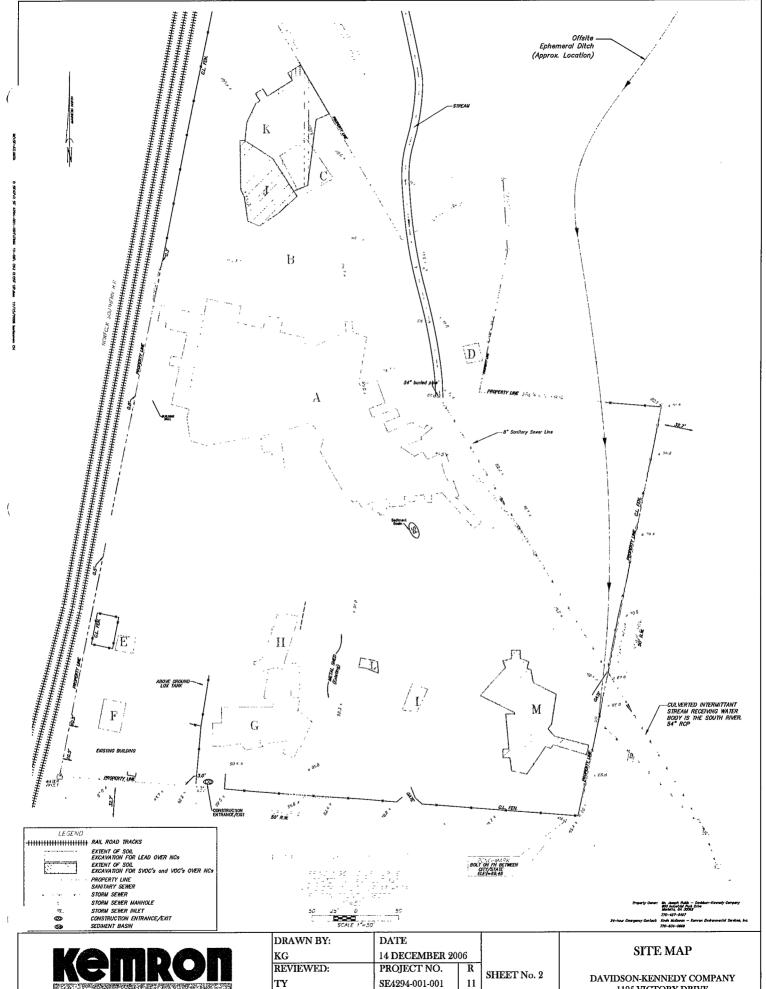
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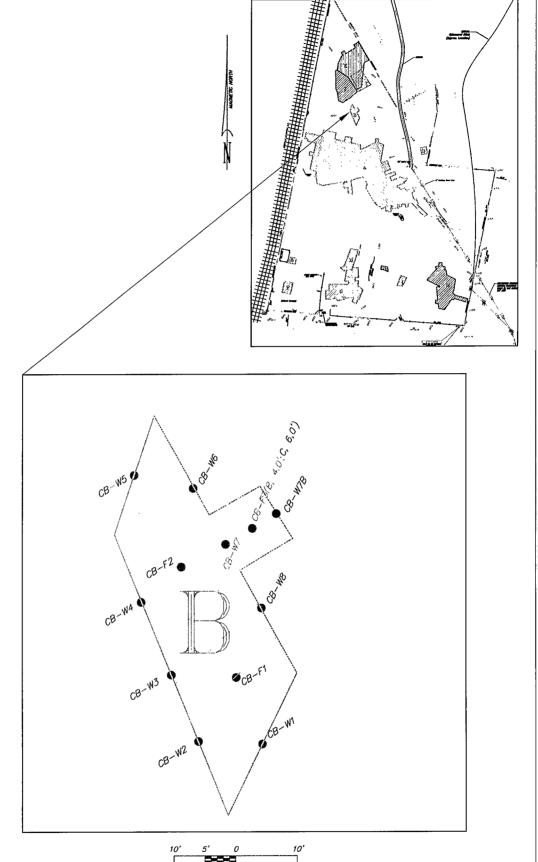
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ACT SE-ATLANTA



ENVIRONMENTAL SERVICES

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DRAWN BY:	DATE		
KG	14 DECEMBER 20	06	
REVIEWED:	PROJECT NO.	R	SI
TY	SE4294-001-001	11	
APPROVED:	DWG.		
KMcG	SITE MAP		



LEGEND

SOIL SAMPLE LOCATION
SAMPLES BELOW HSRA NC
SAMPLES AT OR ABOVE HSRV HG

B-W# DENOTES SAMPLE COLLECTED ON EXCAVATION WALL

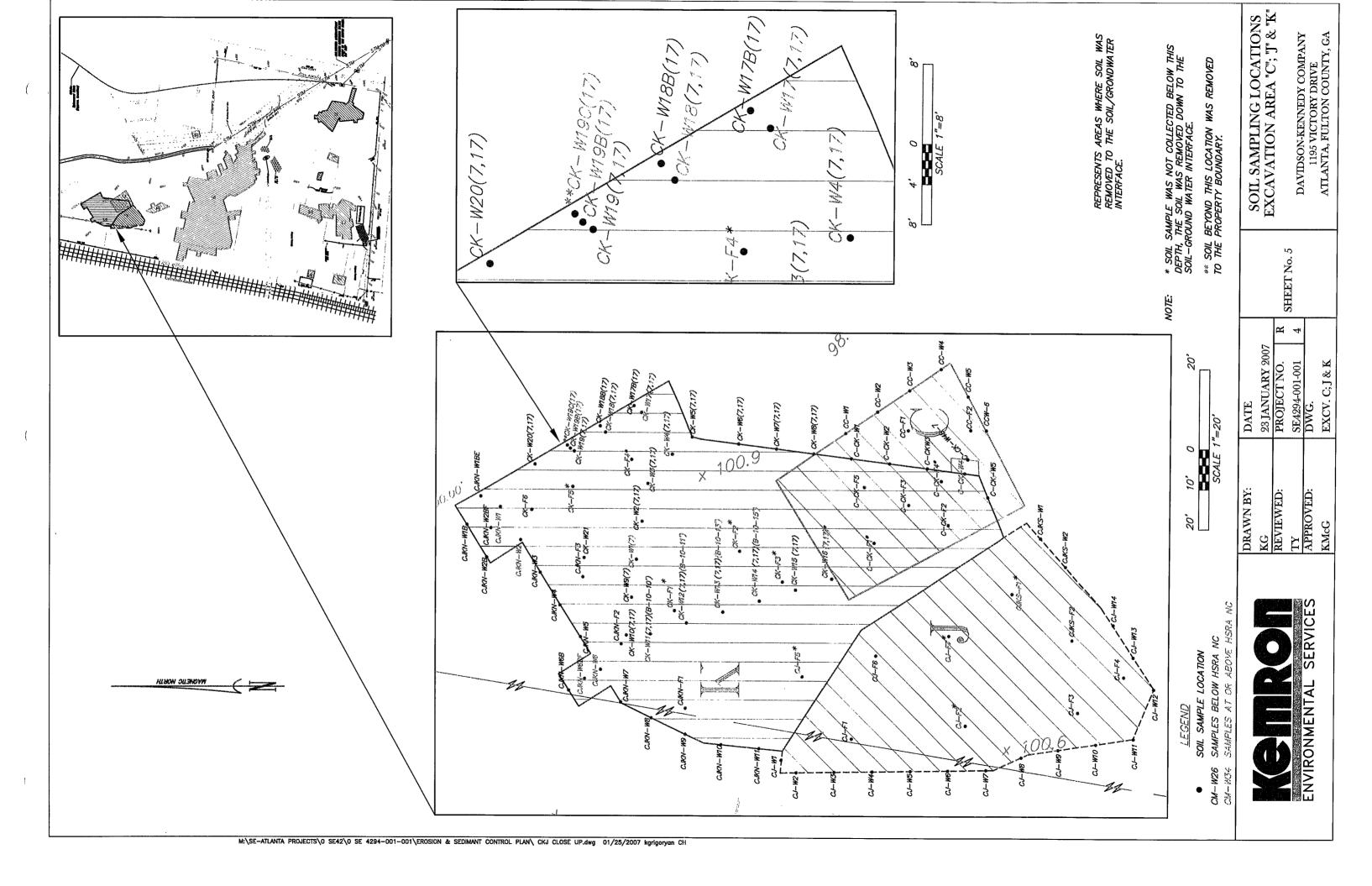
DENOTES SAMPLE COLLECTED ON EXCAVATION FLOOR

KETROT ENVIRONMENTAL SERVICES

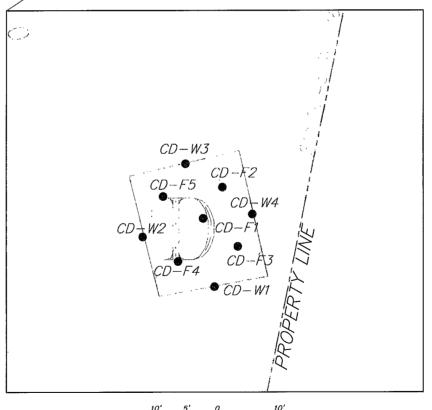
DRAWN BY:	DATE	
KG	12 DECEMBER 20	006
REVIEWED:	PROJECT NO.	R
TY	SE4294-001-001	3
APPROVED:	DWG.	
KMcG	EXCV, B	

SHEET No. 4

SOIL SAMPLING LOCATIONS EXCAVATION AREA "B"







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CD-# CD-W#

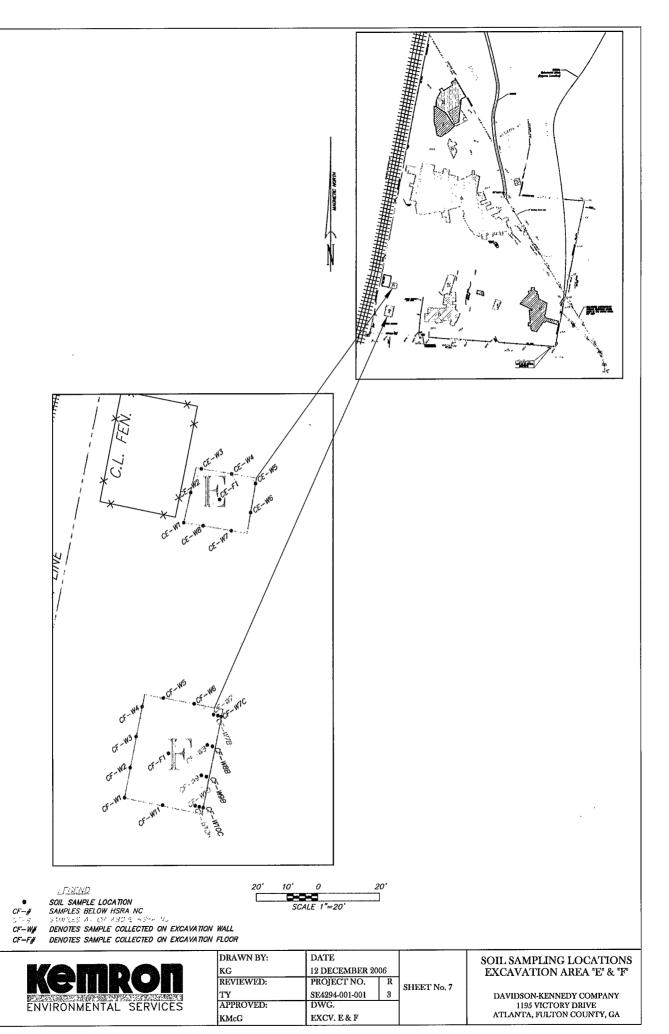
SOIL SAMPLE LOCATION SAMPLES BELOW HSRA NC DENOTES SAMPLE COLLECTED ON EXCAVATION WALL

DENOTES SAMPLE COLLECTED ON EXCAVATION FLOOR

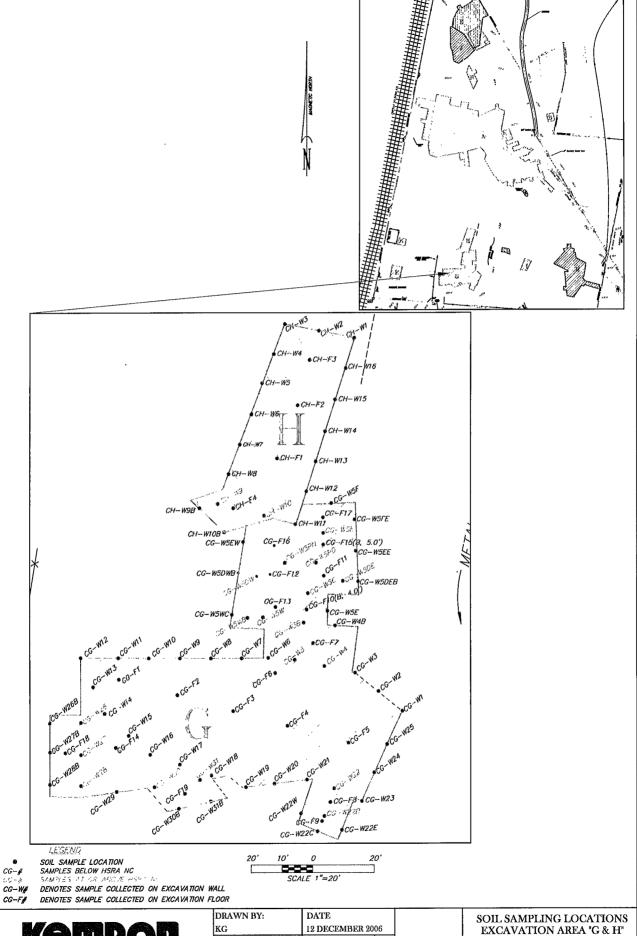
ENVIRONMENTAL SERVICES

DRAWN BY:	DATE				
KG	12 DECEMBER 2	12 DECEMBER 2006			
REVIEWED:	PROJECT NO.	R	SHEET No. 6		
TY	SE4294-001-001	3	STREET NO. U		
APPROVED:	DWG.				
KMcG	EXCV. D				

SOIL SAMPLING LOCATIONS EXCAVATION AREA "D"



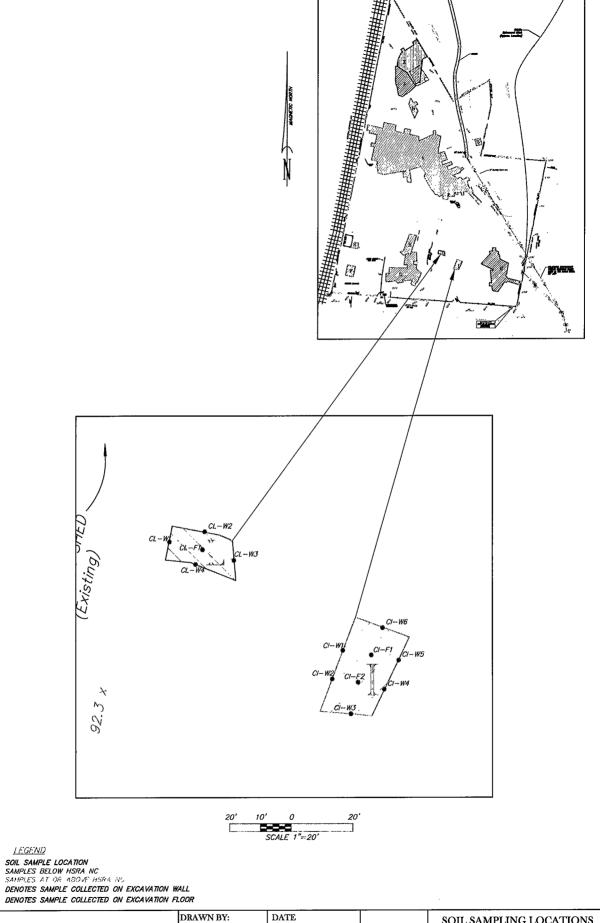
H-\SE-ATLANTA PROJECTS\0 SE42\0 SE 4284-001-001\PINAL 12-08\ CKJ CLOSE UP.dwg 12/15/2008



ENVIRONMENTAL SERVICES

REVIEWED: PROJECT NO. SHEET No. 8 TY APPROVED: SE4294-001-001 DWG. EXCV. G & H KMcG

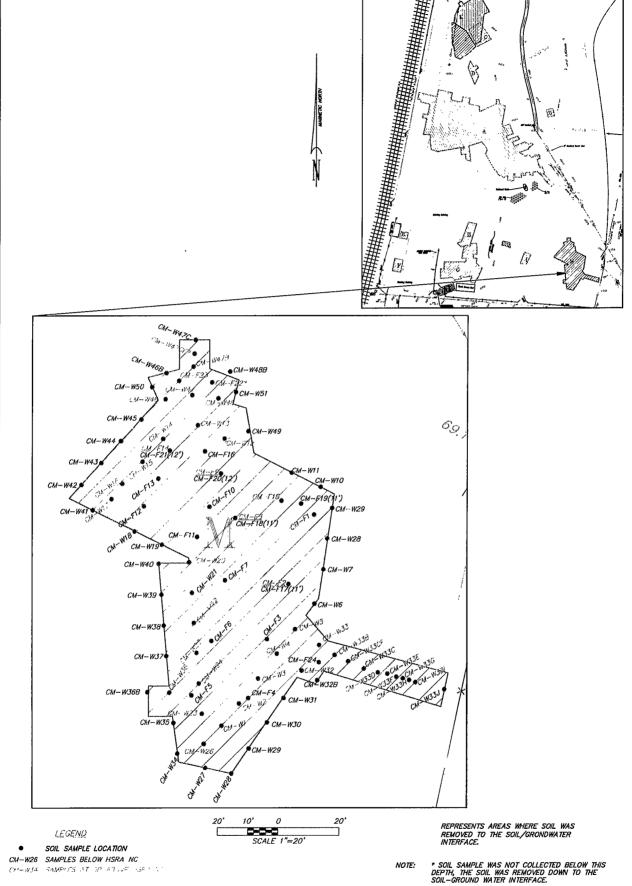
EXCAVATION AREA "G & H"



KETROT ENVIRONMENTAL SERVICES

CL-# CL-# CL-W# CL-F#

SOIL SAMPLING LOCATIONS EXCAVATION AREA "I" & "L"



KETROTE ENVIRONMENTAL SERVICES

SOIL-GROUND WATER INTERFACE.

SHEET No. 10

SOIL SAMPLING LOCATIONS EXCAVATION AREA "M"

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

				OUTOD (MIC	ours)					
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
GP-13L*	2'	2/24/2006	NA	NA	NA	NA	0.670	NA	NA	NA
GP-13LN*	1'	2/24/2006	NA	NA	NA	NA	0.128	NA	NA	NA
GP-13LS*	5'	2/24/2006	NA	NA	NA	NA	BRL	NA	NA	NA
GP-13LW*	1'	2/24/2006	NA	NA	NA	NA	BRL	NA	NA	NA
GP-13LE*	1'	2/24/2006	NA	NA	NA	NA	1.160	NA	NA	NA
GP-13TSP*	1'	8/1/2006	NA	NA	NA	NA	0.265	NA	NA	NA
GP-19L*	2'	2/24/2006	NA	NA	NA	NA	BRL	NA	NA	NA
GP-19TSP*	Comp	8/1/2006	NA	NA	NA	NA	2.5	NA	NA	NA
GP-19TSP-2*	Comp	8/11/2006	NA	NA	NA	NA	0.117	NA	NA	NA
GP-26TSP*	Comp	8/1/2006	NA	NA	NA	NA	0.33	NA	NA	NA
GP-26L*	2'	2/24/2006	NA	NA	NA	NA	0.836	NA	NA	NA
GP-38TSP*	Comp	8/1/2006	NA	NA	NA	NA	4.57	NA	NA	NA
GP-38TSP-2*	Comp	8/11/2006	NA	NA	NA	NA	<0.05	NA	NA	NA
A NORTH WALL	Comp	8/16/2006	NA	NA	NA	NA	187	NA	NA	NA
A WEST WALL	Comp	8/16/2006	NA	NA	NA	NA	311	NA	NA	NA
NORTH WALL A-T*	Comp	8/22/2006	NA	NA	NA	NA	0.176	NA	NA	NA
NORTH WALL A-T	Comp	8/22/2006	NA	NA	NA	NA	9,120	NA	NA	NA
WEST WALL A-T*	Comp	8/22/2006	NA	NA	NA	NA	1	NA	NA	NA
WEST WALL A-T	Comp	8/22/2006	NA	NA	NA	NA	8,810	NA	NA	NA
WEST WALL A-T-B*	Comp	8/30/2006	NA	NA	NA	NA		NA	NA	NA
CA-W1	1'	8/8/2006	NA	NA	NA	NA	53	NA	NA	NA
CA-W2	1'	8/8/2006	NA	NA	NA	NA	66	NA	NA	NA
CA-W2B	3'	9/7/2006	NA	NA	NA	NA	44	NA	NA	NA
CA-W3	1'	8/8/2006	NA	NA	NA	NA	7,700	NA	NA	NA
CA-W3B	1'	8/22/2006	NA	NA	NA	NA	17,600	NA	NA	NA
CA-W3C	3'	9/7/2006	NA	NA	NA	NA	76	NA	NA	NA
CA-W4	1'	8/8/2006	NA	NA	NA	NA	47,400	NA	NA	NA
CA-W4B	1'	8/22/2006	NA	NA	NA	NA	4,740	NA	NA	NA
CAW-W2-18	2'	9/7/2006	NA	NA	NA	NA	38	NA	NA	NA
CAW-W2-48	4'	9/7/2006	NA	NA	NA	NA	19	NA	NA	NA
CA-W5	1'	8/8/2006	NA	NA	NA	NA	36,900	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample	Depth	Date	Arsenic	Barium		Chromium	Lead	Selenium	Silver	Mercury
Location	(ft)	Sampled	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
CA-W5B	1'	8/22/2006	NA	NA	NA	NA	11,100	NA	NA	NA
CAW-W3-18	2'	9/7/2006	NA	NA	NA	NA	54	NA	NA	NA
CAW-W3-48	4'	9/7/2006	NA	NA	NA	NA	260	NA	NA	NA
CA-W6	1'	8/8/2006	NA	NA	NA	NA	19,700	NA	NA	NA
CA-W6B	1'	8/23/2006	NA	NA	NA	NA	5,320	NA	NA	NA
CAW-W4-18	2'	9/7/2006	NA	NA	NA	NA	129	NA	NA	NA
CAW-W4-48	4'	9/7/2006	NA	NA	NA	NA	139	NA	NA	NA
CA-W7	1'	8/8/2006	NA	NA	NA	NA	22,200	NA	NA	NA
CA-W7B	1'	8/23/2006	NA	NA	NA	NA	140	NA	NA	NA
CAW-W5-18	2'	9/7/2006	NA	NA	NA	NA	107	NA	NA	NA
CAW-W5-48	4'	9/7/2006	NA	NA	NA	NA	235	NA	NA	NA
CA-W8	1'	8/8/2006	NA	NA	NA	NA	14,400	NA	NA	NA
CA-W8B	1'	8/23/2006	NA	NA	NA	NA	759	NA	NA	NA
CAW-W6-18"	2'	9/8/2006	NA	NA	NA	NA	21	NA	NA	NA
CAW-W 6 B-18	2'	9/18/2006	NA	NA	NA	NA	34	NA	NA	NA
CAW-W6-48"	4'	9/8/2006	NA	NA	NA	NA	408	NA	NA	NA
CAW-W 6 B-48	4'	9/18/2006	NA	NA	NA	NA	80	NA	NA	NA
CAW-W 6 B-F	5.5'	9/18/2006	NA	NA	NA	NA	218	NA	NA	NA
CA-W9	1'	8/8/2006	NA	NA	NA	NA	19,300	NA	NA	NA
CA-W9B	1'	8/23/2006	NA	NA	NA	NA	48	NA	NA	NA
CAW-W7-18"	2'	9/8/2006	NA	NA	NA	NA	100	NA	NA	NA
CAW-W7-48"	4'	9/8/2006	NA	NA	NA	NA	23	NA	NA	NA
CA-W10	1'	8/8/2006	NA	NA	NA	NA	58	NA	NA	NA
CA-W10B	1'	8/23/2006	NA	NA	NA	NA	1,330	NA	NA	NA
CAW-W8-18"	2'	9/8/2006	NA	NA	NA	NA	59	NA	NA	NA
CAW-W8-48"	4'	9/8/2006	NA	NA	NA	NA	22	NA	NA	NA
CA-W11	1'	8/8/2006	NA	NA	NA	NA	671	NA	NA	NA
CAW-W9-18"	2'	9/8/2006	NA	NA	NA	NA	108	NA	NA	NA
CAW-W9-48"	4'	9/8/2006	NA	NA	NA	NA	34	NA	NA	NA
CA-W12	1'	8/8/2006	NA	NA	NA	NA	177	NA	NA	NA
CA-W12B	1'	8/22/2006	NA	NA	NA	NA	725	NA	NA	NA

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

TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CAN-W3-10	1'	9/12/2006	NA	NA	NA	NA	1,580	NA	NA	NA
CAN-W3B-10	1'	9/21/2006	NA	NA	NA	NA	55,100	NA	NA	NA
CAN-W3B-10-TCLP*	Comp	9/26/2006	NA	NA	NA	NA	39	. NA	NA	NA
CAN-W3B-TCLP-T*	Comp	9/29/2006	NA	NA	NA	NA	0.28	NA	NA	NA
CAN-W3C-10	1'	9/29/2006	NA	NA	NA	NA	180	NA	NA	NA
CAN-W3-36	3'	9/12/2006	NA	NA	NA	NA	198	NA	NA	NA
CAN-W36B-36	3'	9/21/2006	NA	NA	NA	NA	710	NA	NA	NA
CAN-W3C-36	3'	9/29/2006	NA	NA	NA	NA	45	NA	NA	NA
CAN-W3CF	5'	9/29/2006	NA	NA	NA	NA	538	NA	NA	NA
CAN-W3CFB	7'	10/9/2006	NA	NA	NA	NA	64	NA	NA	NA
CA-W13	1'	8/8/2006	NA	NA	NA	NA	2,060	NA	NA	NA
CA-W13B	1'	8/22/2006	NA	NA	NA	NA	2,960	NA	NA	NA
CAN-W4-10	1'	9/12/2006	NA	NA	NA	NA	5,810	NA	NA	NA
CAN-W4B-10	1'	9/21/2006	NA ·	NA	NA	NA	3,360	NA	NA	NA
CAN-W4C-10	1'	9/28/2006	NA	NA	NA	NA	5	NA	NA	NA
CAN-W4-36	3'	9/12/2006	NA	NA	NA	NA	242	NA	NA	NA
CA-W14	1'	8/8/2006	NA	NA	NA	NA	13,000	NA	NA	NA
CA-W14B	2'	8/22/2006	NA	NA	NA	NA	78	NA	NA	NA
CAN-W5	1'	9/12/2006	NA	NA	NA	NA	451	NA	NA	NA
CAN-W5B	1'	9/21/2006	NA	NA	NA	NA	1,820	NA	NA	NA
CAN-W5C	1'	9/28/2006	NA	NA	NA	NA	20	NA	NA	NA
CAN-W4-5CF	2'	9/28/2006	NA	NA	NA	NA	82	NA	NA	NA
CA-W15	2'	8/8/2006	NA	NA	NA	NA	29,800	NA	NA	NA
CA-W15B	2'	8/22/2006	NA	NA	NA	NA	1,260	NA	NA	NA
CAN-W6	1'	9/12/2006	NA	NA	NA	NA	8,320	NA	NA	NA
CAN-W6B	2'	9/22/2006	NA	NA	NA	NA	18	NA	NA	NA
CA-W16	2'	8/8/2006	NA	NA	NA	NA	8,200	NA	NA	NA
CA-W16B	1'	8/22/2006	NA	NA	NA	NA	987	NA	NA	NA
CAN-W7	1'	9/12/2006	NA	NA	NA	NA	10,100	NA	NA	NA
CAN-W7B	1'	9/2202006	NA	NA	NA	NA	16	NA	NA	NA
CA-W17	1'	8/8/2006	NA	NA	NA	NA	4,200	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS

SW6010B	(Metals)
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Dividized (Metallo)											
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)	
CA-W17B	2'	8/22/2006	NA	NA	NA	NA	22,400	NA	NA	NA	
CAN-W8	1'	9/12/2006	NA	NA	NA	NA	3,300	NA	NA	NA	
CAN-W8B	2'	9/22/2006	NA	NA	NA	NA	20	NA	NA	NA	
CA-W18	1'	8/8/2006	NA	NA	NA	NA	9,440	NA	NA	NA	
CA-W18B	1'	8/22/2006	NA	NA	NA	NA	39,100	NA	NA	NA	
CA-W17-W18 composite TCLP*	Comp	8/29/2006	NA	NA	NA	NA	11,100	NA	NA	NA	
CA-W17-W18 TCLP-T*	Comp	9/12/2006	NA	NA	NA	NA	0.0775	NA	NA	NA	
CAN-W9	1'	9/12/2006	NA	NA	NA	NA	864	NA	NA	NA	
CAN-W9B	1'	9/22/2006	NA	NA	NA	NA	1,280	NA	NA	NA	
CAN-W9C	1'	9/28/2006	NA	NA	NA	NA	62	NA	NA	NA	
CAN-W9-10 CF	2'	9/28/2006	NA	NA	NA	NA	15	NA	NA	NA	
CA-W19	2'	8/8/2006	NA	NA	NA	NA	3,350	NA	NA	NA	
CA-W19B	1'	8/22/2006	NA	NA	NA	NA	438	NA	NA	NA	
CAN-W10	1'	9/12/2006	NA	NA	NA	NA	1,500	NA	NA	NA	
CAN-W10B	2'	9/22/2006	NA	NA	NA	NA	2,340	NA	NA	NA	
CAN-W10C	1'	9/28/2006	NA	NA	NA	NA	252	NA	NA	NA	
CA-W20	1'	8/8/2006	NA	NA	NA	NA	1,880	NA	NA	NA	
CA-W20B	1'	8/22/2006	NA	NA	NA	NA	525	NA	NA	NA	
CAN-W11	1'	9/12/2006	NA	NA	NA	NA	586	NA	NA	NA	
CAN-W11B	2'	9/22/2006	NA	NA	NA	NA	25	NA	NA	NA	
CA-W21	2'	8/8/2006	NA	NA	NA	NA	15	NA	NA	NA	
CAN-W12	1'	9/12/2006	NA	NA	NA	NA	196	NA	NA	NA	
CAN-W12B	1'	9/22/2006	NA	NA	NA	NA	16	NA	NA	NA	
CAN-W13	1'	9/12/2006	NA	NA	NA	NA	631	NA	NA	NA	
CAN-W13B	1'	9/22/2006	NA	NA	NA	NA	19	NA	NA	NA	
CA-W22	1'	8/8/2006	NA	NA	NA	NA	467	NA	NA	NA	
CA-W22B	1'	9/7/2006	NA	NA	NA	NA	634	NA	NA	NA	
CA-W22C	1'	9/15/2006	NA	NA	NA	NA	591	NA	NA	NA	
CA-W22D	2'	9/28/2006	NA	NA	NA	NA	1,690	NA	NA	NA	
CA-W22E	1'	10/9/2006	NA	NA	NA	NA	40	NA	NA	NA	
CA-W22DF	2'	9/28/2006	NA	NA	NA	NA	2,020	NA	NA	NA	

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CA-W22DFB	4'	10/9/2006	NA	NA	NA	NA	148	NA	NA	NA
CA-W22-F1-15'	3.0'	9/15/2006	NA	NA	NA	NA	13	NA	NA	NA
CA-W22-F2-5'	3.0'	9/15/2006	NA	NA	NA	NA	327	NA	NA	NA
CA-W22W1	1'	9/15/2006	NA	NA	NA	NA	1,610	NA	NA	NA
CA-W22-W1B	1'	9/28/2006	NA	NA	NA	NA	15	NA	NA	NA
CA-W22W2	1'	9/15/2006	NA	NA	NA	NA	766	NA	NA	NA
CA-W22-W2B	1'	9/28/2006	NA	NA	NA	NA	87	NA ·	NA	NA
CA-W22-WBF	2'	9/28/2006	NA	NA	NA	NA	66	NA	NA	NA
CA-W22E1	1'	9/15/2006	NA	NA	NA	NA	284	NA	NA	NA
CA-W22E2	1'	9/15/2006	NA	NA	NA	NA	332	NA	NA	NA
CA-W22-DE	2'	9/28/2006	NA	NA	NA	NA	43	NA	NA	NA
CAW-22-DW	1'	9/28/2006	NA	NA	NA	NA	128	NA	NA	NA
CA-W23	2'	8/8/2006	NA	NA	NA	NA	66	NA	NA	NA
CA-W24	1'	8/8/2006	NA	NA	NA	NA	37	NA	NA	NA
CA-W25	1'	8/8/2006	NA	NA	NA	NA	30	NA	NA	NA
CA-W26	1'	8/8/2006	NA	NA	NA	NA	17	NA	NA	NA
CA-W27	2'	8/8/2006	NA	NA	NA	NA	41	NA	NA	NA
CA-W28	2'	8/8/2006	NA	NA	NA	NA	15	NA	NA	NA
CA-W29	1'	8/8/2006	NA	NA	NA	NA	47	NA	NA	NA
CA-W30	2'	8/8/2006	NA	NA	NA	NA	358	NA	NA	NA
CA-W31	1'	8/8/2006	NA	NA	NA	NA	43	NA	NA	NA
CA-W32	1'	8/28/2006	NA	NA	NA	NA	548	NA	NA	NA
CA-W32B	1'	9/21/2006	NA	NA	NA	NA	61	NA	NA	NA
CA-W32B-F	2'	9/21/2006	NA	NA	NA	NA	107	NA	NA	NA
CA-W33	1'	8/28/2006	NA	NA	NA	NA	73	NA	NA	NA
CA-W34	1'	8/28/2006	NA	NA	NA	NA	53	NA	NA	NA
CA-W35	1'	8/28/2006	NA	NA	NA	NA	28	NA	NA	NA
CA-W36	1'	8/28/2006	NA	NA	NA	NA	22	NA	NA	NA
CA-W37	1'	8/28/2006	NA	NA	NA	NA	16	NA	NA	NA
CA-W38	1'	8/28/2006	NA	NA	NA	NA	65	NA	NA	NA
CA-W39	1'	8/28/2006	NA	NA	NA	NA	106	NA	NA	NA

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS

SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CA-W40	1'	8/28/2006	NA	NA	NA	NA	2,940	NA	NA	NA
CAR-W11	1'	9/21/2006	NA	NA	NA	NA	334	NA	NA	NA
CA-F1	2'	8/9/2006	NA	NA	NA	NA	210	NA	NA	NA
CA-F2	2'	8/9/2006	NA	NA	NA	NA	3,750	NA	NA	NA
CA-F2B	4'	8/23/2006	NA	NA	NA	NA	23	NA	NA	NA
CA-F3	2'	8/9/2006	NA	NA	NA	NA	3,560	NA	NA	NA
CA-F3B	4'	8/23/2006	NA	NA	NA	NA	67	NA	NA	NA
CA-F4	2'	8/9/2006	NA	NA	NA	NA	22,500	NA	NA	NA
CA-F4B	4'	8/23/2006	NA	NA	NA	NA	147	NA	NA	NA
CA-F5	2'	8/9/2006	NA	NA	NA	NA	402	NA	NA	NA
CA-F5B	4'	8/23/2006	NA	NA	NA	NA	20	NA	NA	NA
CA-F6	2'	8/9/2006	NA	NA	NA	NA	15	NA	NA	NA
CA-F7	2'	8/9/2006	NA	NA	NA	NA	372	NA	NA	NA
CA-F8	2'	8/9/2006	NA	NA	NA	NA	30	NA	NA	NA
CA-F9	2'	8/9/2006	NA	NA	NA	NA	83	NA	NA	NA
CA-F10	2'	8/9/2006	NA	NA	NA	NA	72	NA	NA	NA
CA-F11	2'	8/9/2006	NA	NA	NA	NA	299	NA	NA	NA
CA-F12	2'	8/9/2006	NA	NA	NA	NA	9	NA	NA	NA
CA-F13	2'	8/9/2006	NA	NA	NA	NA	443	NA	NA	NA
CA-F13B	4'	8/25/2006	NA	NA	NA	NA	20	NA	NA	NA
CA-F14	2'	8/9/2006	NA	NA	NA	NA	189	NA	NA	NA
CA-F15	2'	8/9/2006	NA	NA	NA	NA	244	NA	NA	NA
CA-F16	2'	8/9/2006	NA	NA	NA	NA	8,340	NA	NA	NA
CA-F16B	4'	8/25/2006	NA	NA	NA	NA	162	NA	NA	NA
CA-F17	2'	8/9/2006	NA	NA	NA	NA	46	NA	NA	NA
CA-F18	2'	8/9/2006	NA	NA	NA	NA	116	NA	NA	NA
CA-F19	2'	8/9/2006	NA	NA	NA	NA	38	NA	NA	NA
CA-F20	2'	8/9/2006	NA	NA	NA	NA	27	NA	NA	NA
CA-F21	2'	8/9/2006	NA	NA	NA	NA	3,440	NA	NA	NA
CA-F21B	4'	8/25/2006	NA	NA	NA	NA	1,530	NA	NA	NA
CA-F21C	6'	9/18/2006	NA	NA	NA	NA	23	NA	NA	NA

Atlanta, Fulton County, Georgia

TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CA-F22	2'	8/9/2006	NA	NA	NA	NA	1,100	NA	NA	NA
CA-F22B	4'	8/25/2006	NA	NA	NA	NA	45	NA	NA	NA
CA-F23	2'	8/9/2006	NA	NA	NA	NA	252	NA	NA	NA
CA-F24	2'	8/9/2006	NA	NA	NA	NA	50	NA	NA	NA
CA-F25	4'	8/25/2006	NA	NA	NA	NA	29	NA	NA	NA
CA-F26	4'	8/25/2006	NA	NA	NA	NA	1,080	NA	NA	NA
CA-F26B	8'	9/8/2006	NA	NA	NA	NA	500	NA	NA	NA
CA-F26C	10'	9/18/2006	NA	NA	NA	NA	15	NA	NA	NA
CA-F27	2.0'	8/25/2006	NA	NA	NA	NA	19	NA	NA	NA
CA-F28	2.0'	8/25/2006	NA	NA	NA	NA	20	NA	NA	NA
CA-F29	2.0'	8/25/2006	NA	NA	NA	NA	11	NA	NA	NA
CA-F30	2.0'	8/28/2006	NA	NA	NA	NA	26	NA	NA	NA
CA-F31	2.0'	8/28/2006	NA	NA	NA	NA	159	NA	NA	NA
CA-F32	2.0'	8/28/2006	NA	NA	NA	NA	659	NA	NA	NA
CA-F32B	8'	9/8/2006	NA	NA	NA	NA	245	NA	NA	NA
CA-F33	2'	8/28/2006	NA	NA	NA	NA	788	NA	NA	NA
CA-F33B	4'	9/21/2006	NA .	NA	NA	NA	686	NA	NA	NA
CA-F33C	5'	10/5/2006	NA	NA	NA	NA	594	NA	NA	NA
CA-F33D	6'	10/11/2006	NA	NA	NA	NA	360	NA	NA	NA
CAW-W1	4'	9/7/2006	NA	NA	NA	NA	94	NA	NA	NA
CAW-W10-18"	2'	9/8/2006	NA	NA	NA	NA	64,600	NA	NA	NA
CAW-W10 TCLP composite *	Comp	9/14/2006	NA	NA	NA	NA	175	NA	NA	NA
CAW-W10 TCLP-T*	Comp	9/26/2006	NA	NA	NA	NA	0.093	NA	NA	NA
CAW-W10-18B	2'	9/22/2006	NA	NA	NA	NA	139	NA	NA	NA
CAW-W10-BF	3'	9/22/2006	NA	NA	NA	NA	7,820	NA	NA	NA
CAW-W10-BFB	5'	9/27/2006	NA	NA	NA	NA	160	NA	NA	NA
CAW-W10-48"	4'	9/8/2006	NA	NA	NA	NA	32	NA	NA	NA
CAW-W10-48C	4'	9/27/2006	NA	NA	NA	NA	27	NA	NA	NA
CAW-W11-18"	2'	9/8/2006	NA	NA	NA	NA	43	NA	NA	NA
CAW-W11-18C	2'	9/27/2006	NA	NA	NA	NA	63	NA	NA	NA
CAW-W11-18D	2'	10/6/2006	NA	NA	NA	NA	68	NA	NA	NA

Davidson-Kennedy Facility

1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS

SW6010B	(Metals)
CATABLE	(IVICtais)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)		Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CAW-W11-48"	4'	9/8/2006	NA	NA	NA	NA	6,690	NA	NA	NA
CAW-W11-48B	4'	9/22/2006	NA	NA	NA	NA	1,850	NA	NA	NA
CAW-W11-48C	4'	9/27/2006	NA	NA	NA	NA	494	NA	NA	NA
CAW-W11-48D	4'	10/6/2006	NA	NA	NA	NA	239	NA	NA	NA
CAW-W11-BF	5'	9/22/2006	NA	NA	NA	NA	112	NA	NA	NA
CAW-W11CF	5'	9/27/2006	NA	NA	NA	NA	198	NA	NA	NA
CAW-W12-18	2'	9/21/2006	NA	NA	NA	NA	1,060	NA	NA	NA
CAW-W12-18B	2'	9/27/2006	NA	NA	NA	NA	7,440	NA	NA	NA
CAW-W12-18C	2'	10/6/2006	NA	NA	NA	NA	128	NA	NA	NA
CAW-W12-48	4'	9/21/2006	NA	NA	NA	NA	3,110	NA	NA	NA
CAW-W12-48B	4'	9/27/2006	NA	NA	NA	NA	20	NA	NA	NA
CAW-W12-48C	4'	10/6/2006	NA	NA	NA	NA	50	NA	NA	NA
CAW-W12-BF	5'	9/27/2006	NA	NA	NA	NA	933	NA	NA	NA
CAW-W12-BFB	6'	10/6/2006	NA	NA	NA	NA	839	NA	NA	NA
CAW-W12-BFC	8'	10/11/2006	NA	NA	NA	NA	327	NA	NA	NA
CAW-WN1-18	2'	9/27/2006	NA	NA	NA	NA	133	NA	NA	NA
CAW-WN1-48	4'	9/27/2006	NA	NA	NA	NA	19	NA	NA	NA
CAW-WN2-18	2'	9/27/2006	NA	NA	NA	NA	116	NA	NA	NA
CAW-WN2-48	4'	9/27/2006	NA	NA	NA	NA	20	NA	NA	NA
CAW-WN3-18	2'	9/27/2006	NA	NA	NA	NA	24	NA	NA	NA
CAW-WN3-48	4'	9/27/2006	NA	NA	NA	NA	40	NA	NA	NA
CAW-F1	6'	9/8/2006	NA	NA	NA	NA	548	NA	NA	NA
CAW-FIB	7.5'	9/18/2006	NA	NA	NA	NA	15	NA	NA	NA
CAW-F2	6'	9/8/2006	NA	NA	NA	NA	691	NA	NA	NA
CAW-F2B	8'	9/18/2006	NA	NA	NA	NA	810	NA	NA	NA
CAW-F2C	10'	9/21/2006	NA	NA	NA	NA	46	NA	NA	NA
CAW-F3	6'	9/8/2006	NA	NA	NA	NA	266	NA	NA	NA
CAW-F4	6'	9/8/2006	NA	NA	NA	NA	61	NA	NA	NA
CAW-F5	6'	9/8/2006	NA	NA	NA	NA	18	NA	NA	NA
CAN-W1-10	1'	9/12/2006	NA	NA	NA	NA	12,700	NA	NA	NA
CAN-W1B-10	1'	9/21/2006	NA	NA	NA	NA	139	NA	NA	NA

Davidson-Kennedy Facility

1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

SW6010B (Metals)											
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)	
CAN-W1-36	3'	9/12/2006	NA	NA	NA	NA	2,190	NA	NA	NA	
CAN-W1B-36	3'	9/21/2006	NA	NA	NA	NA	152	NA	NA	NA	
CAN-W2-10	1'	9/12/2006	NA	NA	NA	NA	784	NA	NA	NA	
CAN-W2B-10	1'	9/21/2006	NA	NA	NA	NA	14	NA	NA	NA	
CAN-W2C-10	1'	9/28/2006	NA	NA	NA	NA	<4.96	NA	NA	NA	
CAN-W2-36	3'	9/12/2006	NA	NA	NA	NA	442	NA	NA	NA	
CAN-W2B-36	3'	9/21/2006	NA	NA	NA	NA	5,740	NA	NA	NA	
CAN-W2C-36	3'	9/28/2006	NA	NA	NA	NA	27	NA	NA	NA	
CAN-W2CF	5'	9/28/2006	NA	NA	NA	NA	40	NA	NA	NA	
CAN-F1	2'	9/14/2006	NA	NA	NA	NA	52	NA	NA	NA	
CAN-F2	4'	9/14/2006	NA	NA	NA	NA	414	NA	NA	NA	
CAN-F2B	8'	9/21/2006	NA	NA	NA	NA	360	NA	NA	NA	
CAN-F3	2'	9/14/2006	NA	NA	NA	NA	901	NA	NA	NA	
CAN-F3B	4'	9/21/2006	NA	NA	NA	NA	83	NA	NA	NA	
CAN-F4	2'	9/14/2006	NA	NA	NA	NA	65	NA	NA	NA	
CAN-F5	2'	9/14/2006	NA	NA	NA	NA	868	NA	NA	NA	
CAN-F5B	4'	9/21/2006	NA	NA	NA	NA	55	NA	NA	NA	
CAN-F6	2'	9/14/2006	NA	NA	NA	NA	1,290	NA	NA	NA	
CAN-F6B	4'	9/21/2006	NA	NA	NA	NA	18	NA	NA	NA	
CAN-F7	2'	9/22/2006	NA	NA	NA	NA	118	NA	NA	NA	
CAN-F8	2'	9/22/2006	NA	NA	NA	NA	214	NA	NA	NA	
CAN-F9	2'	9/22/2006	NA	NA	NA	NA	1,410	NA	NA	NA	
CAN-F9B	4'	9/28/2006	NA	NA	NA	NA	23	NA	NA	NA	
CAN-F10	2'	9/22/2006	NA	NA	NA	NA	73	NA	NA	NA	
CAN-F11	2'	9/22/2006	NA	NA	NA	NA	177	NA	NA	NA	
CAN-F12	2'	9/22/2006	NA	NA	NA	NA	16	NA	NA	NA	
CAR-W1	1'	9/14/2006	NA	NA	NA	NA	15	NA	NA	NA	
CAR-W2	1'	9/14/2006	NA	NA	NA	NA	13	NA	NA	NA	
CAR-W3	1'	9/14/2006	NA	NA	NA	NA	15	NA	NA	NA	
CAR-W4	1'	9/14/2006	NA	NA	NA	NA	15	NA	NA	NA	
CAR-W5	1'	9/14/2006	NA	NA	NA	NA	18	NA	NA	NA	

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS

SW6010B (Metals)

SWOOTOD (Metals)											
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)	
CAR-W6	1'	9/14/2006	NA	NA	NA	NA	222	NA	NA	NA	
CAR-W7	1'	9/14/2006	NA	NA	NA	NA	594	NA	NA	NA	
CAR-W8	1'	9/14/2006	NA	NA	NA	NA	2,690	NA	NA	NA	
CA-F35	2'	8/28/2006	NA	NA	NA	NA	41	NA	NA	NA	
CAR-W9	1'	9/14/2006	NA	NA	NA	NA	530	NA	NA	NA	
CAR-W10	1'	9/14/2006	NA	NA	NA	NA	653	NA	NA	NA	
CA-F34	2'	8/28/2006	NA	NA	NA	NA	175	NA	NA	NA	
CAR-W12	1'	9/21/2006	NA	NA	NA	NA	1,560	NA	NA	NA	
CAR-W12B	1'	9/26/2006	NA.	NA	NA	NA	1,190	NA	NA	NA	
CAR-W12C	1'	9/29/2006	NA	NA	NA	NA	179	NA	NA	NA	
CAR-W13	1'	9/21/2006	NA	NA	NA	NA	626	NA	NA	NA	
CAR-W13B	1'	9/26/2006	NA	NA	NA	NA	1,030	NA	NA	NA	
CAR-W13C	1'	9/29/2006	NA	NA	NA	NA	20	NA	NA	NA	
CAR-W13CF	2'	9/29/2006	NA	NA	NA	NA	697	NA	NA	NA	
CAR-W13CFB	4'	10/5/2006	NA	NA	NA	NA	633	NA	NA	NA	
CAR-W13CFC	7'	10/11/2006	NA	NA	NA	NA	444	NA	NA	NA	
CAR-W13CFD	9'	10/24/2006	NA	NA .	NA	NA	239	NA	NA	NA	
CAR-W14	1'	9/21/2006	NA	NA	NA	NA	2,990	NA	NA	NA	
CAR-W14B	1'	9/26/2006	NA	NA	NA	NA	1,220	NA	NA	NA	
CAR-W14C	1'	9/29/2006	NA	NA	NA	NA	249	NA	NA	NA	
CAR-W15	1'	9/21/2006	NA	NA	NA	NA	27	NA	NA	NA	
CAR-W16	1'	9/21/2006	NA	NA	NA	NA	1,160	NA	NA	NA	
CAR-W16B	1'	9/26/2006	NA	NA	NA	NA	1,390	NA	NA	NA	
CAR-W16C	1'	9/29/2006	NA	NA	NA	NA	1,520	NA	NA	NA	
CAR-W16D	1'	10/5/2006	NA	NA	NA	NA	25	NA	NA	NA	
CAR-W16CF	2'	9/29/2006	NA	NA	NA	NA	939	NA	NA	NA	
CAR-W16CFB	4'	10/5/2006	NA	NA	NA	NA	135	NA	NA	NA	
CAR-W17	1'	9/21/2006	NA	NA	NA	NA	2,260	NA	NA	NA	
CAR-W17B	1'	9/26/2006	NA	NA .	NA	NA	69	NA	NA	NA	
CAR-W18	1'	9/21/2006	NA	NA	NA	NA	4,710	NA	NA	NA	
CAR-W18B	1'	9/26/2006	NA	NA	NA	NA	7,060	NA	NA	NA	

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample	Depth	Date	Arsenic	Barium	Cadmium	Chromium		Selenium	Silver	Mercury
Location	(ft)	Sampled	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
CAR-W18C	1'	9/29/2006	NA	NA	NA	NA	3,320	NA	NA	NA NA
CAR-W18D	1'	10/5/2006	NA	NA	NA	NA	1,580	NA	NA	NA
CAR-W18E	1'	10/11/2006	NA	NA	NA	NA	101	NA	NA	NA
CAR-W18-19CF	2'	9/29/2006	NA	NA	NA	NA	1,760	NA	NA	NA
CAR-W18-19CFB	4'	10/5/2006	NA	NA	NA	NA	1,490	NA	NA	NA
CAR-W18-19CFC	5'	10/11/2006	NA	NA	NA	NA	1,340	NA	NA	NA
CAR-W18-19CFD	7'	10/24/2006	NA	NA	NA	NA	101	NA	NA	NA
CAR-W19	1'	9/21/2006	NA	NA	NA	NA	3,090	NA	NA	NA
CAR-W19B	1'	9/26/2006	NA	NA	NA	NA	4,000	NA	NA	NA
CAR-W19C	1'	9/29/2006	NA	NA	NA	NA	. 4,450	NA	NA	NA
CAR-W19D	1'	10/5/2006	NA	NA	NA	NA	2,150	NA	NA	NA
CAR-W19E	1'	10/11/2006	NA	NA	NA	NA	204	NA	NA	NA
CAR-W20	1'	9/21/2006	NA	NA	NA	NA	1,560	NA	NA	NA
CAR-W20B	1'	9/26/2006	NA	NA	NA	NA	1,640	NA	NA	NA
CAR-W20C	1'	9/29/2006	NA	NA	NA	NA	1,460	NA	NA	NA
CAR-W20D	1'	10/5/2006	NA	NA	NA	NA	730	NA	NA	NA
CAR-W20E	1'	10/11/2006	NA	NA	NA	NA	1,900	NA	NA	NA
CAR-W20F	1'	10/16/2006	NA	NA	NA	NA	17	NA	NA	NA
CAR-W20-21CF	2'	9/29/2006	NA	NA	NA	NA	238	NA	NA	NA
CAR-W21	1'	9/21/2006	NA	NA	NA	NA	408	NA	NA	NA
CAR-W21B	1'	9/26/2006	NA	NA	NA	NA	764	NA	NA	NA
CAR-W21C	1'	9/29/2006	NA	NA	NA	NA	3,160	NA	NA	NA
CAR-W21D	1'	10/5/2006	NA	NA	NA	NA	194	NA	NA	NA
CAR-W22	1'	9/21/2006	NA	NA	NA	NA	46	NA	NA	NA
CAR-W23	1'	9/21/2006	NA	NA	NA	NA	57	NA	NA	NA
CAR-W24	1'	9/21/2006	NA	NA	NA	NA	849	NA	NA	NA
CAR-W24B	1'	9/28/2006	NA	NA	NA	NA	21	NA	NA	NA
CAR-W25	1'	9/21/2006	NA	NA	NA	NA	3,880	NA	NA	NA
CAR-W25B	1'	9/28/2006	NA	NA	NA	NA	892	NA	NA	NA
CAR-W25C	1'	10/5/2006	NA	NA	NA	NA	694	NA	NA	NA
CAR-W25D	1'	10/10/2006	NA	NA	NA	NA	45	NA	NA	NA

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

SW0010D (Wetais)											
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)	
CAR-W25CF	2'	10/5/2006	NA	NA	NA	NA	423	NA	NA	NA	
CAR-W25CFB	6'	10/12/2006	NA	NA	NA	NA	490	NA	NA	NA	
CAR-W25CFC	8'	10/25/2006	NA	NA	NA	NA	35	NA	NA	NA	
CAR-W26	1'	9/21/2006	NA	NA	NA	NA	6,410	NA	NA	NA	
CAR-W26B	1'	9/26/2006	NA	NA	NA	NA	23	NA	NA	NA	
CAR-W27	1'	9/21/2006	NA	NA	NA	NA	5,900	NA	NA	NA	
CAR-W27B	1'	9/26/2006	NA	NA	NA	NA	4,460	NA	NA	NA	
CAR-W27C	1'	10/10/2006	NA	NA	NA	NA	118	NA	NA	NA	
CAR-W27-28	1'	10/10/2006	NA	NA	NA	NA	8,000	NA	NA	NA	
CAR-W27-28B	1'	10/24/2006	NA	NA	NA	NA	14	NA	NA	NA	
CAR-W28	1'	9/21/2006	NA	NA	NA	NA	1,760	NA	NA	NA	
CAR-W28B	1'	10/10/2006	NA	NA	NA	NA	910	NA	NA	NA	
CAR-W28C	1'	10/24/2006	NA	NA	NA	NA	1,900	NA	NA	NA	
CAR-W28D	1'	10/31/2006	NA	NA	NA	NA	32	NA	NA	NA	
CAR-W29	1'	9/21/2006	NA	NA	NA	NA	55,600	NA	NA	NA	
CAR-W29B	1'	10/10/2006	NA	NA	NA	NA	5,700	NA	NA	NA	
CAR-W29C	1'	10/24/2006	NA	NA	NA	NA	1,630	NA	NA	NA	
CAR-W29D	1'	10/31/2006	NA	NA	NA	NA	3,340	NA	NA	NA	
CAR-W29E	1'	11/2/2006	NA	NA	NA	NA	5,440	NA	NA	NA	
CAR-W29F	1'	11/9/2006	NA	NA	NA	NA	10,900	NA	NA	NA	
CAR-W29F TCLP*	Comp	11/14/2006	NA	NA	NA	NA	49	NA	NA	NA	
CAR-W29F TCLP-T*	Comp	11/16/2006	NA	NA	NA	NA	3	NA	NA	NA	
CAR-W29 TCLP-TB*	Comp	11/20/2006	NA	NA	NA	NA	1	NA	NA	NA	
CAR-W29 FTCLP-TC*	Comp	11/27/2006	NA	NA	NA	NA	BRL	NA	NA	NA	
CAR-W29G	1'	11/16/2006	NA	NA	NA	NA	1,610	NA	NA	NA	
CAR-W29H	1'	11/20/2006	NA	NA	NA	NA	1,010	NA	NA	NA	
CAR-W29I	1'	11/27/2006	NA	NA	NA	NA	3,170	NA	NA	NA	
CAR-W29J	1'	11/29/2006	NA	NA	NA	NA	2,790	NA	NA	NA	
CAR-W29K	1'	11/29/2006	NA	NA	NA	NA	16	NA	NA	NA	
CAR-W30	1'	9/21/2006	NA	NA	NA	NA	37,700	NA	NA	NA	
CAR-W30B	1'	10/10/2006	NA	NA	NA	NA	149	NA	NA	NA	

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

SWOUTUD (Metals)											
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)	
CAR-W31	1'	9/21/2006	NA	NA	NA	NA	28,900	NA	NA	NA	
CAR-W31B	1'	10/10/2006	NA	NA	NA	NA	3,470	NA	NA	NA	
CAR-W31C	1'	10/24/2006	NA	NA	NA	NA	1,630	NA	NA	NA	
CAR-W31D	1'	10/31/2006	NA	NA	NA	NA	107	NA	NA	NA	
CAR-W32	1'	10/10/2006	NA	NA	NA	NA	366	NA	NA	NA .	
CAR-W33	1'	10/10/2006	NA	NA	NA	NA	937	NA	NA	NA	
CAR-W33B	1'	10/24/2006	NA	NA	NA	NA	209	NA	NA	NA	
CAR-W34	1'	10/10/2006	NA	NA	NA	NA	35,100	NA	NA	NA	
CAR-W34B	1'	10/18/2006	NA	NA	NA	NA	3,630	NA	NA	NA	
CSB-7	6'	10/30/2006	NA	NA	NA	NA	407	NA	NA	NA	
CSB-7B	6'	11/1/2006	NA	NA	NA	NA	103	NA	NA	NA	
CAR-W35	1'	10/10/2006	NA	NA	NA	NA	76,400	NA	NA	NA	
CAR-W35B	1'	10/18/2006	NA	NA	NA	NA	3,170	NA	NA	NA	
CSB-6	6'	10/30/2006	NA	NA	NA	NA	3,480	NA	NA	NA	
CSB-6B	6'	11/1/2006	NA	NA	NA	NA	1,440	NA	NA	NA	
CSB-6C	6'	11/9/2006	NA	NA	NA	NA	982	NA	NA	NA	
CSB-6D	6'	11/15/2006	NA	NA	NA	NA	183	NA	NA	NA	
CAR-W36	1'	10/12/2006	NA .	NA	NA	NA	682	NA	NA	NA	
CAR-W36B	1'	10/24/2006	NA	NA	NA	NA	846	NA	NA	NA	
CAR-W36C	1'	11/2/2006	NA	NA	NA	NA	8,710	NA	NA	NA	
CAR-W36D	1'	11/9/2006	NA	NA	NA	NA	424	NA	NA	NA	
CAR-W36E	1'	11/14/2006	NA	NA	NA	NA	2,480	NA	NA	NA	
CAR-W36F	1'	11/16/2006	NA	NA	NA	NA	55	NA	NA	NA	
CAR-W37	1'	10/12/2006	NA	NA	NA	NA	607	NA	NA	NA	
CAR-W37B	1'	10/24/2006	NA	NA	NA	NA	10,600	NA	NA	NA	
CAR-W37B TCLP*	Comp	10/30/2006	NA	NA	NA .	NA	1	NA	NA	NA	
CAR-W37C	1'	11/2/2006	NA	NA	NA	NA	1,490	NA	NA	NA	
CAR-W37D	1'	11/9/2006	NA	NA	NA	NA	83	NA	NA	NA	
CAR-W38	1'	10/12/2006	NA	NA	NA	NA	20	NA	NA	NA	
CAR-W39	1'	10/12/2006	NA	NA	NA	NA	13	NA	NA	NA	
CAR-W40	1'	10/12/2006	NA	NA	NA	NA	162	NA	NA	NA	

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS

SW6010B ((Metals)
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SWOOTOD (Metals)											
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)	
CAR-W41	1'	10/12/2006	NA	NA	NA	NA	207	NA	NA	NA	
CAR-W42	1'	10/30/2006	NA	NA	NA	NA	81	NA	NA	NA	
CAR-W43	1'	10/30/2006	NA	NA	NA	NA	21	NA	NA	NA	
CAR-W44	1'	10/30/2006	NA	NA	NA	NA	26	NA	NA	NA	
CAR-W45	1'	10/30/2006	NA	NA	NA	NA	66	NA	NA	NA	
CAR-W46	1'	10/30/2006	NA	NA	NA	NA	290	NA	NA	NA	
CAR-W47	1'	10/30/2006	NA	NA	NA	NA	32	NA	NA	NA	
CAR-W48	1'	10/30/2006	NA	NA	NA	NA	157	NA	NA	NA	
CAR-W49	1'	10/30/2006	NA	NA	NA	NA	17	NA	NA	NA	
CAR-W50	1'	10/30/2006	NA	NA	NA	NA	18	NA	NA	NA	
CAR-W51	1'	10/30/2006	NA	NA	NA	NA	27	NA	NA	NA	
CAR-W52	1'	10/30/2006	NA	NA	NA	NA	16	NA	NA	NA	
CAR-W53	1'	10/30/2006	NA	NA	NA	NA	312	NA	NA	NA	
CAR-34-35 TCLP*	Comp	10/12/2006	NA	NA	NA	NA	236	NA	NA	NA	
CAR-W34-35 TCLP - T*	Comp	10/18/2006	NA	NA	NA	NA	1	NA	NA	NA	
CAR-W29-31 TCLP*	Comp	9/29/2006	NA	, NA	NA	NA	3	NA	NA	NA	
CAR-F1	2'	9/14/2006	NA	NA	NA	NA	43	NA	NA	NA	
CAR-F2	2'	9/14/2006	NA	NA	NA	NA	41	NA	NA	NA	
CAR-F3	2'	9/14/2006	NA	NA	NA	NA	24	NA	NA	NA	
CAR-F4	2'	9/14/2006	NA	NA	NA	NA	525	NA	NA	NA	
CAR-F4B	3'	10/12/2006	NA	NA	NA	NA	267	NA	NA	NA	
CAR-F5	2'	9/14/2006	NA	NA	NA	NA	645	NA	NA	NA	
CAR-F5B	3'	10/12/2006	NA	NA	NA	NA	317	NA	NA	NA	
CAR-F6	2'	9/14/2006	NA	NA	NA	NA	590	NA	NA	NA	
CAR-F6B	3'	10/12/2006	NA	NA	NA	NA	564	NA	NA	NA	
CAR-F6C	5'	10/24/2006	NA	NA	NA	NA	594	NA	NA	NA	
CAR-F6D	7'	10/31/2006	NA	NA	NA	NA	98	NA	NA	NA	
CAR-F7	2'	9/22/2006	NA	NA	NA	NA	1,450	NA	NA	NA	
CAR-F7B	4'	9/29/2006	NA	NA	NA	NA	164	NA	NA	NA	
CAR-F8	2'	9/22/2006	NA	NA	NA	NA	191	NA	NA	NA	
CAR-F9	2'	9/22/2006	NA	NA	NA	NA	1,490	NA	NA	NA	

Davidson-Kennedy Facility 1195 Victory Drive

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

			211	OUTOD (MIC	· · · ·					
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CAR-F9B	4'	9/29/2006	NA	NA	NA	NA	63	NA	NA	NA
CAR-F10	2'	9/22/2006	NA	NA	NA	NA	3,570	NA	NA	NA
CAR-F10B	4'	9/29/2006	NA	NA	NA	NA	700	NA	NA	NA
CAR-F10C	6'	10/10/2006	NA	NA	NA	NA	67	NA	NA	NA
CAR-F11	2'	9/22/2006	NA	NA	NA	ŇA	263	NA	NA	NA
CAR-F12	2'	9/22/2006	NA	NA	NA	NA	70	NA	NA	NA
CAR-F13	2'	9/22/2006	NA	NA	NA	NA	283	NA	NA	NA
CAR-F14	2'	9/22/2006	NA	NA	NA	NA	279	NA	NA	NA
CAR-F15	2'	9/22/2006	NA	NA	NA	NA	400	NA	NA	NA
CAR-F15B	4'	10/12/2006	NA	NA	NA .	NA	902	NA	NA	NA
CAR-F15C	6'	10/24/2006	NA	NA	NA	NA	57	NA	NA	NA
CAR-F16	2'	9/22/2006	NA	NA	NA	NA	3,390	NA	NA	NA
CAR-F16B	4'	10/12/2006	NA	NA	NA	NA	1,510	NA	NA	NA
CAR-F16C	6'	10/24/2006	NA	NA	· NA	NA	441	NA	NA	NA
CAR-F16D	8'	10/31/2006	NA	NA	NA	NA	86	NA	NA	NA
CAR-F17	2'	9/22/2006	NA	NA	NA	NA	249	NA	NA	NA
CAR-F18	3'	10/3/2006	NA	NA	NA	NA	1,060	NA	NA	NA
CAR-F18B	6'	10/10/2006	NA	NA	NA	NA	531	NA	NA	NA
CAR-F18C	8'	10/25/2006	NA	NA	NA	NA	96	NA	NA	NA
CAR-F19	4'	10/3/2006	NA	NA	NA	NA	710	NA	NA	NA
CAR-F19B	6'	10/10/2006	NA	NA	NA	NA	34	NA	NA	NA
CAR-F20	4'	10/3/2006	NA	NA	NA	NA	11,700	NA	NA	NA
CAR-F20B	6'	10/10/2006	NA	NA	NA	NA	1,860	NA	NA	NA
CAR-F20C	8'	10/25/2006	NA	NA	NA	NA	534	NA	NA	NA
CAR-F20D	10'	10/31/2006	NA	NA	NA	NA	671	NA	NA	NA
CAR-F20E	12'	11/2/2006	NA	NA	NA	NA	70	NA	NA	NA
CAR-F21	2'	10/12/2006	NA	NA	NA	NA	1,430	NA	NA	NA
CAR-F21B	4'	10/24/2006	NA	NA	NA	NA	1,710	NA	NA	NA
CAR-F21C	6'	10/31/2006	NA	NA	NA	NA	1,120	NA	NA	NA
CAR-F21D	8'	11/2/2006	NA	NA	NA	NA	55	NA	NA	NA
CAR-F22	2'	10/12/2006	NA	NA	NA	NA	794	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)		Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CAR-F22B	4'	10/24/2006	i	(mg/kg) NA	(IIIg/Ng) NA	(mg/kg) NA	(fig/Kg) 105	(mg/Ng) NA	(mg/Kg) NA	NA
CAR-F23	2'	10/12/2006	NA	NA	NA	NA	224	NA	NA	NA
CAR-F24	2'	10/12/2006	NA	NA	NA	NA	492	NA	NA	NA
CAR-F24B	4'	10/24/2006	NA	NA	NA .	NA	772	NA	NA	NA
CAR-F24C	6'	10/31216	NA	NA	NA.	NA	216	NA	NA	NA
CAR-F25	2'	10/12/2006	NA	NA	NA	NA	2,390	NA	NA	NA
CAR-F25B	4'	10/24/2006	NA	NA	NA	NA	281	NA	NA	NA
CAR-F26	2'	10/12/2006	NA	NA	NA	NA	27,700	NA	NA	NA
CAR -F26B	3'	10/18/2006	NA	NA	NA	NA	443	NA	NA	NA
CAR-F26C	5'	10/24/2006	NA	NA	NA	NA	63	NA	NA	NA
CB-W1	1'	9/22/2006	NA	NA	NA	NA	51	NA	NA	NA
CB-W2	1'	9/22/2006	NA	NA	NA	NA	68	NA	NA	NA
CB-W3	1'	9/22/2006	NA	NA	NA	NA	319	NA	NA	NA
CB-W4	1'	9/22/2006	NA	NA	NA	NA	168	NA	NA	NA
CB-W5	1'	9/22/2006	NA	NA	NA	NA	199	NA	NA	NA
CB-W6	1'	9/22/2006	NA	NA	NA	NA	18	NA	NA	NA
CB-W7	1'	9/22/2006	NA	NA	NA	NA	856	NA	NA	NA
CB-W7B	1'	9/28/2006	NA	NA	NA	NA	57	NA	NA	NA
CB-W8	1'	9/22/2006	NA	NA	NA	NA	23	NA	NA	NA
CB-F1	2'	9/22/2006	NA	NA	NA	NA	34	NA	NA	NA
CB-F2	2'	9/22/2006	NA	NA	NA	NA	25	NA	NA	NA
CB-F3	2'	9/28/2006	NA	NA	NA	NA	479	NA	NA	NA
CB-F3B	4'	10/18/2006	NA	NA	NA	NA	620	NA	NA	NA
CB-F3C	6'	10/31/2006	NA	NA	NA	NA	15	NA	NA	NA
CC-W1	1'	8/24/2006	NA	NA	NA	NA	32	NA	NA	NA
CC-W2	1'	8/24/2006	NA	NA	NA	NA	35	NA	NA	NA
CC-W3	1'	8/24/2006	NA	NA	NA	NA	52	NA	NA	NA
CC-W4	1'	8/24/2006	NA	NA	NA	NA	78	NA	NA	NA
CC-W5	1'	8/24/2006	NA	NA	NA	NA	50	NA	NA	NA
CC-W6	1'	8/24/2006	NA	NA	NA	NA	74	NA	NA	NA
CC-F1	2'	8/24/2006	NA	NA	NA	NA	61	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CC-F2	2'	8/24/2006		NA	NA	NA	297	NA	NA	NA
C-CK-W4B-7	7'	10/25/2006	NA	NA	NA	NA	16	NA	NA	NA
C-CK-F1	18'	8/29/2006	NA	NA	NA	NA	<0.05	NA	NA	NA
C-CK-F2	18'	8/29/2006	NA	NA	NA	NA	<0.05	NA	NA	·NA
C-CK-F3	18'	8/29/2006	NA	NA	NA	NA	<0.05	NA	NA	NA
C-CK-F4	18'	8/29/2006	NA	NA	NA	NA	36	NA	NA	NA
C-CK-F5	18'	8/29/2006	NA	NA	NA	NA	23	NA	NA	NA
CD-W1	1'	8/15/2006	NA	NA	NA	NA	19	NA	NA	NA
CD-W2	1'	8/15/2006	NA	NA	NA	NA	192	NA	NA	NA
CD-W3	1'	8/15/2006	NA	NA	NA	NA	264	NA	NA	NA
CD-W4	1'	8/15/2006	NA	NA	NA	NA	232	NA	NA	NA
CD-F1	2'	8/15/2006	NA	NA	NA	NA	53	NA	NA	NA
CD-F2	2'	8/15/2006	NA	NA	NA	NA	253	NA	NA	NA
CD-F3	2'	8/15/2006	NA	NA	NA	NA	47	NA	NA	NA
CD-F4	2'	8/15/2006	NA	NA	NA	NA	72	NA	NA	NA
CD-F5	2'	8/15/2006	NA	NA	NA	NA	232	NA	NA	NA
CE-W1	1'	11/14/2006	NA	NA	NA	NA	244	NA	NA	NA
CE-W2	1'	11/14/2006	NA	NA	NA	NA	228	NA	NA	NA
CE-W3	1'	11/14/2006	NA	NA	NA	NA	66	NA	NA	NA
CE-W4	1'	11/14/2006	NA	NA	NA	NA	35	NA	NA	NA
CE-W5	1'	11/14/2006	NA	NA	NA	NA	32	NA	NA	NA
CE-W6	1'	11/14/2006	NA	NA	NA	NA	19	NA	NA	NA
CE-W7	1'	11/14/2006	NA	NA	NA	NA	318	NA	NA	NA
CE-W8	1'	11/14/2006	NA	NA	NA	NA	395	NA	NA	NA
CE-F1	2'	11/14/2006	NA	NA	NA	NA	101	NA	NA	NA
CF-W1	1'	11/10/2006	NA	NA	NA	NA	174	NA	NA	NA
CF-W2	1'	11/10/2006	NA	NA	NA	NA	14	NA	NA	NA
CF-W3	1'	11/10/2006	NA	NA	NA	NA	16	NA	NA	NA
CF-W4	1'	11/10/2006	NA	NA	NA	NA	55	NA	NA	NA
CF-W5	1'	11/10/2006	NA	NA	NA	NA	23	NA	NA	NA
CF-W6	1'	11/10/2006	NA	NA	NA	NA	278	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS

SW6010B (Metals)

Sample	Depth	Date	Arsenic	Barium	Cadmium	Chromium		Selenium	Silver	Mercury
Location CF-W7	(ft) 1'	Sampled 11/10/2006	(mg/Kg) NA	(mg/Kg) NA	(mg/Kg) NA	(mg/Kg) NA	(mg/Kg) 800	(mg/Kg) NA	(mg/Kg) NA	(mg/Kg) NA
CF-W7B	1'	11/14/2006		NA	NA	NA	611	NA	NA	NA
CF-W7C	1'	11/16/2006	NA	NA	NA	NA	227	NA	NA	NA
CF-W8	1'	11/10/2006	NA	NA	NA	NA	535	NA	NA	NA
CF-W8B	1'	11/14/2006	NA	NA	NA	NA	171	NA	NA	NA
CF-W9	1'	11/10/2006	NA	NA	NA	NA	1,020	NA	NA	NA
CF-W9B	1'	11/14/2006	NA	NA	NA	NA	263	NA	NA	NA
CF-W10	1'	11/10/2006	NA	NA	NA	NA	421	NA	NA	NA
CF-W10B	1'	11/14/2006	NA NA	NA	NA	NA	680	NA	NA	NA
CF-W10C	1'	11/16/2006	NA	NA	NA	NA	148	NA	NA	NA
CF-W11	1'	11/10/2006	NA	NA	NA	NA	18	NA	NA	NA
CF-F1	2'	11/10/2006	NA	NA	NA	NA	35	NA	NA	NA
CG-W1	1'	8/25/2006	NA	NA	NA	NA	186	NA	NA	NA
CG-W2	1'	8/25/2006	NA	NA	NA	NA	81	NA	NA	NA
CG-W3	1'	8/25/2006	NA	NA	NA	NA	42	NA	NA	NA
CG-W4	1'	8/25/2006	NA	NA	NA	NA	540	NA	NA	NA
CG-W4B	2'	9/6/2006	NA	NA	NA	NA	82	NA	NA	NA
CG-W5	1'	8/25/2006	NA	NA	NA	NA	1,300	NA	NA	NA
CG-W 5 B	2'	9/6/2006	NA	NA	NA	NA	1,410	NA	NA	NA
CG-W5C	1'	9/8/2006	NA	NA	NA	NA	3,200	NA	NA	NA
CG-W 5 D	1'	9/18/2006	NA	NA	NA	NA	693	NA	NA	NA
CG-W5E	1'	9/22/2006	NA	NA	NA	NA	520	NA	NA	NA
CG-W5F	1'	9/27/2006	NA	NA	NA	NA	94	NA	NA	NA
CG-W5W	1'	9/8/2006	NA	NA	NA	NA	1,540	NA	NA	NA
CG-W 5 W B	1'	9/18/2006	NA	NA	NA	NA	662	NA	NA	NA
CG-W5WC	1'	9/22/2006	NA	NA	NA	NA	146	NA	NA	NA
CG-W5 D W	1'	9/18/2006	NA	NA	NA	NA	2,040	NA	NA	NA
CG-W5DWB	1'	9/22/2006	NA	NA	NA	NA	71	NA	NA	NA
CG-W 5 D N	1'	9/18/2006	NA	NA	NA	NA	6,240	NA	NA	NA
CG-W 5 D E	1'	9/18/2006	NA	NA	NA	NA	1,060	NA	NA	NA
CG-W5DEB	1'	9/22/2006	NA	NA	NA	NA	183	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS

SW6010B (Metals)

			511	outop (Me	tais)					
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CG-W5E (east)	1'	9/8/2006	NA	NA	NA	NA	141	NA	NA	NA
CG-W5EW	1'	9/22/2006	NA	NA	NA	NA	51	NA	NA	NA
CG-W5EE	1'	9/22/2006	NA	NA	NA	NA	203	NA	NA	NA
CG-W5FE	1'	9/27/2006	NA	NA	NA	NA	28	NA	NA	NA
CG-W6	1'	8/25/2006	NA	NA	NA	NA	331	NA	NA	NA
CG-W7	1'	8/23/2006	NA	NA	NA	NA	20	NA	NA	NA
CG-W8	1'	8/23/2006	NA	NA	NA	NA	27	NA	NA	NA
CG-W9	1'	8/23/2006	NA	NA	NA	NA	14	NA	NA	NA
CG-W10	1'	8/23/2006	NA	NA	NA	NA	10	NA	NA	NA
CG-W11	1'	8/23/2006	NA	NA	NA	NA	11	NA	NA	NA
CG-W12	1'	8/23/2006	NA	NA	NA	NA	17	NA	NA	NA
CG-W13	1'	8/23/2006	NA	NA	NA	NA	10	NA	NA	NA
CG-W14	1'	8/23/2006	NA	NA	NA	NA	16	NA	NA	NA
CG-W15	1'	8/23/2006	NA	NA	NA	NA	9	NA	NA	NA
CG-W16	1'	8/23/2006	NA	NA	NA	NA	32	NA	NA	NA
CG-W17	1'	8/23/2006	NA	NA	NA	NA	17	NA	NA	NA
CG-W18	1'	8/23/2006	NA	NA	NA	NA	105	NA	NA	NA
CG-W19	1'	8/23/2006	NA	NA	NA	NA	48	NA	NA	NA
CG-W20	1'	8/25/2006	NA	NA	NA	NA	220	NA	NA	NA
CG-W21	1'	8/25/2006	NA	NA	NA	NA	82	NA	NA	NA
CG-W22	1'	8/25/2006	NA	NA	NA	NA	613	NA	NA	NA
CG-W22B	1'	9/6/2006	NA	NA	NA	NA	472	NA	NA	NA
CG-W22C	1'	9/8/2006	NA	NA	NA	NA	307	NA	NA	NA
CG-W22E	1'	9/8/2006	NA	NA	NA	NA	23	NA	NA	NA
CG-W22W	1'	9/8/2006	NA	NA	NA	NA	134	NA	NA	NA
CG-W23	1'	8/25/2006	NA	NA	NA	NA	24	NA	NA	NA
CG-W24	1'	8/25/2006	NA	NA	NA	NA	29	NA	NA	NA
CG-W25	1'	8/25/2006	NA	NA	NA	NA	114	NA	NA	NA
CG-W26	1'	9/20/2006	NA	NA	NA	NA	1,510	NA	NA	NA
CG-W26B	1'	9/28/2006	NA	NA	NA	NA	45	NA	NA	NA
CG-W27	1'	9/20/2006	NA	NA	NA	NA	1,030	NA	NA	NA

Davidson-Kennedy Facility

1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample	Depth	Date	Arsenic	Barium		Chromium	Lead	Selenium	Silver	Mercury
Location	(ft)	Sampled	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
CG-W27B	1'	9/28/2006	NA	NA	NA	NA	183	NA	NA	NA
CG-W28	1'	9/20/2006	NA	NA	NA	NA	685	NA	NA	NA
CG-W28B	1'	9/28/2006	NA	NA	NA	NA	35	NA	NA	NA
CG-W29	1'	9/20/2006	NA	NA	NA	NA	95	NA	NA	NA
CG-W30	1'	9/20/2006	NA	NA	NA	NA	1,400	NA	NA	NA
CG-W30B	1'	9/28/2006	NA	NA	NA	NA	9	NA	NA	NA
CG-W31	1'	9/20/2006	NA	NA	NA	NA	429	NA	NA	NA
CG-W31B	1'	9/28/2006	NA	NA	NA	NA	21	NA	NA	NA
CG-F1	2'	8/23/2006	NA	NA	NA	NA -	52	NA	NA	NA
CG-F2	2'	8/23/2006	NA	NA	NA	NA	83	NA	NA	NA
CG-F3	2'	8/23/2006	NA	NA	NA	NA	125	NA	NA	NA
CG-F4	2'	8/25/2006	NA	NA	NA	NA	40	NA	NA	NA
CG-F5	2'	8/25/2006	NA	NA	NA	NA	72	NA	NA	NA
CG-F6	2'	8/25/2006	NA	NA	NA	NA	208	NA	NA	NA
CG-F7	2'	9/6/2006	NA	NA	NA	NA	60	NA	NA	NA
CG-F8	2'	9/6/2006	NA	NA	NA	NA	12	NA	NA	NA
CG-F9	2'	9/8/2006	NA	NA	NA	NA	165	NA	NA	NA
CG-F10	2'	9/8/2006	NA	NA	NA	NA	3,760	NA	NA	NA
CG-F10B	4'	9/18/2006	NA	NA	NA	NA	24	NA	NA	NA
CG-F11	4'	9/18/2006	NA	NA	NA	NA	20	NA	NA	NA
CG-F12	2'	9/18/2006	NA	NA	NA	NA	356	NA	NA	NA
CG-F13	2'	9/18/2006	NA.	NA	NA	NA	32	NA	NA	NA
CG-F14	2'	9/20/2006	NA	NA	NA	NA	21	NA	NA	NA
CG-F15	2'	9/22/2006	NA	NA	. NA	NA	534	NA	NA	NA
CG-F15B	5'	9/27/2006	NA	NA	NA	NA	22	NA	NA	NA
CG-F16	2'	9/22/2006	NA	NA	NA	NA	25	NA	NA	NA
CG-F17	5'	9/27/2006	NA	NA	NA	NA	75	NA	NA	NA
CG-F18	2'	9/28/2006	NA	NA	NA	NA	146	NA	NA	NA
CG-F19	2'	9/28/2006	NA	NA	NA	NA	69	NA	NA	NA
CH-W1	1'	8/21/2006	NA	NA	NA	NA	263	NA	NA	NA
CH-W2	1'	8/21/2006	NA	NA	NA	NA	38	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CH-W3	1'	8/21/2006	NA	NA	NA	NA ·	39	NA	NA	NA
CH-W4	1'	8/21/2006	NA	NA	NA	NA	195	NA	NA	NA
CH-W5	1'	8/21/2006	NA	NA	NA	NA	14	NA	NA	NA
CH-W6	1'	8/21/2006	NA	NA	NA	NA	35	NA	NA	NA
CH-W7	1'	8/21/2006	NA	NA	NA	NA	24	NA	NA	NA
CH-W8	1'	8/21/2006	NA	NA	NA	NA	25	NA	NA	NA
CH-W9	1'	8/21/2006	NA	NA	NA	NA	1,430	NA	NA	NA
CH-W9B	1'	8/30/2006	NA	NA	NA	NA	62	NA	NA	NA
CH-W10	1'	8/21/2006	NA	NA	NA	NA	1,260	NA	NA	NA
CH-W10B	1'	8/30/2006	NA	NA	NA	NA	20	NA	NA	NA
CH-W11	1'	8/21/2006	NA	NA	NA	NA	285	NA	NA	NA
CH-W12	1'	8/21/2006	NA	NA	NA	NA	35	NA	NA	NA
CH-W13	1'	8/21/2006	NA	NA	NA	NA	301	NA	NA	NA
CH-W14	1'	8/21/2006	NA	NA	NA	NA	75	NA	NA	NA
CH-W15	1'	8/21/2006	NA	NA	NA	NA	317	NA	NA	NA
CH-W16	1'	8/21/2006	NA	NA	NA	NA	239	NA	NA	NA
CH-F1	2'	8/21/2006	NA	NA	NA	NA	16	NA	NA	NA
CH-F2	2'	8/21/2006	NA	NA	NA	NA	188	NA	NA	NA
CH-F3	2'	8/21/2006	NA	NA	NA	NA	67	NA	NA	NA
CH-F4	2'	8/30/2006	NA	NA	NA	NA	357	NA	NA	NA
CI-W1	6'	8/28/2006	NA	NA	NA	NA	60	NA	NA	NA
CI-W2	6'	8/28/2006	NA	NA	NA	NA	113	NA	NA	NA
CI-W3	6'	8/28/2006	NA	NA	NA	NA	369	NA	NA	NA
CI-W4	6'	8/28/2006	NA	NA	NA	NA	244	NA	NA	NA
CI-W5	6'	8/28/2006	NA	NA	NA	NA	198	NA	NA	NA
CI-W6	6'	8/28/2006	NA	NA	NA	NA	54	NA	NA	NA
CI-F1	12'	8/28/2006	NA	NA	NA	NA	167	NA	NA	NA
CI-F2	12'	8/28/2006	NA	NA	NA	NA	156	NA	NA	NA
CSB-1	6'	10/30/2006	NA	NA	NA	NA	9,890	NA	NA	NA
CSB-1B	6'	11/9/2006	NA	NA	NA	NA	240	NA	NA	NA
CSB-2	6'	10/30/2006	NA	NA	NA	NA	57	NA	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive

Atlanta, Fulton County, Georgia TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

			511	OTOD (NIC	turs)					
Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
CSB-3	6'	10/30/2006	NA	NA	NA	NA	16	NA	NA	NA
CSB-4	6'	10/30/2006	NA	NA	NA	NA	1,810	NA	NA	NA
CSB-4B	6'	11/1/2006	NA	NA	NA	NA	64	NA	NA	NA
CSB-5	6'	10/30/2006	NA	NA	NA	NA	1,030	NA	NA	NA
CSB-5B	6'	11/1/2006	NA	NA	NA	NA	1,010	NA	NA	NA
CSB-5C	6'	11/9/2006	NA	NA	NA	NA	144	NA	NA	NA
CSB-8	6'	10/30/2006	NA	NA	NA	NA	602	NA	NA	NA
CSB-8B	6'	11/1/2006	NA	NA	NA	NA	266	NA	NA	NA
CSB-9	6'	10/30/2006	NA	NA	NA	NA	608	NA	NA	NA
CSB-9B	6'	11/1/2006	NA	NA	NA	NA	112	NA	NA	NA
CSB-10	6'	10/30/2006	NA	NA	NA	NA	300	NA	NA	NA
CSB-11	6'	10/30/2006	NA	NA	NA	NA	346	NA	NA	NA
CSB-12	6'	10/30/2006	NA	NA	NA	NA	375	NA	NA	NA
CSB-13	6'	10/30/2006	NA	NA	NA	NA	692	NA	NA	NA
CSB-13B	6'	11/1/2006	NA	NA	NA	NA	151	NA	NA	NA
CSB-14	6'	10/30/2006	NA	NA	NA	NA	295	NA	NA	NA
CSB-15	6'	10/30/2006	NA	NA	NA	NA	261	NA	NA	NA
CSB-16	6'	10/30/2006	NA	NA	NA	NA	76,200	NA	NA	NA
CSB-16 TCLP* (TSP)	Comp	11/2/2006	NA	NA	NA	NA	<0.05	NA	NA	NA
CSB-16B	4'	111/9	NA	NA	NA	NA	760	NA	NA	NA
CSB-16C	6'	11/15/2006	NA	NA	NA	NA	70.4	NA	NA	NA
CSB-F	8'	11/15/2006	NA	NA	NA	NA	881	NA	NA	NA
CSB-FB	10'	11/17/2006	NA	NA	NA	NA	12.5	NA	NA	NA
EF-TCLP*	Comp	11/2/2006	NA	NA	NA	NA	0.37	NA	NA	NA
HSRA NC			41	500/BG	39	1,200	400	36	10/BG	17

BRL = Below Reporting Limits

NA = Not Applicable

Comp=Composite Sample

^{*=} Sample analyzed via TCLP method and results are presented in mg/l.

Sample	Denth	Date	1,1-	2.4	26-	2-Methylpaphthalene	Accomplished	Acenaphthene	Anthracene	Benz(a)anthracene	Benzo(g.h,i)perylene	Report Museum than	Benzo(k)fluoranthene		MIVOLATILE OF		I Dit of Dail	I 123	1 & 1	1.67.77	n w/ . The	· · · · · · · · · · · · · · · · · · ·	[1		
Sample Location	Depth (ft)	Date Collected	Biphenyl	2,4• Dimethylphenol	2,6- Dinitrotoluene	2-Methylnaphthalene (mg/kg)	Acenaphthylene (mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/kg)	(me/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	Carbazole (mg/kg)	Chrysene (mg/Kg)	Dibenz(a.h)anthracene (mg/Kg)	Dibenzofuran (mg/kg)	Di-n-butyl phthalate (mg/kg)	Di-n-octyl phthalate (mg/kg)	Fluoranthene (mg/Kg)	Huorene (mg/Kg)	Indeno(1,2,3-cd)pyrene (mg/Kg)	Isophorone (mg/Kg)	Naphthalene (mg/Kg)	Phenanthrene (mg/Kg)	Pyrene (mg/Kg)
AWALL-I	1	8/9/2006	<0.33	<0.33	<0.33	0.11	0.26	0.93	2.2	6.5	3.8	7.8	1.5	5.8	1.5	6.6	1.3	0.42	<0.33	<0.33	15	0,89	4.6	<0.33	0.15	11	12
AWALL-2	1	8/21/2006	<0.33	<0.33	<0.33	<0.33	0,35	<0.33	0.43	1.4	0.97	2,2	1.3	1.6	<0.33	1.6	0.33	<0.33	<0.33	<0.33	2.4	<0.33	0.85	<0.33	<0.33	0.96	2.5
AWALL-3	1	8/21/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
AWALL-4	1	8/21/2006	<0.33	<0.33	<0.33	0.79	2.3	3.7	7.8	20	10	22	12	18	4.1	18	4	2.5	<0.33	<0.33	37	4	9	<0.33	1,1	30	36
AWALL-5F	2	8/21/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.94	0.66	1,5	0.95	1.1	<0.33	1.1	<0.33	<0.33	<0.33	<0.33	1,6	<0.33	0.55	<0.33	<0.33	0.73	1.7
AWALL-6	I	8/21/2006	<0.33	<0.33	<0.33	<0.33	2.1	<0.33	1.9	8.3	5.2	11	7.6	7.9	<0.33	9.1	0.51	<0.33	<0.33	<0.33	15	<0.33	5	<0.33	<0.33	3.7	16
AWALL-6B	8"	10/12/2006	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
		-													-				 		11.0	4.10		4110	1.10	1.10	
CM-W1	74"	8/14/2006	<0.33	<0.33	<0.33	<0.33	1.1	1.3	3	12	9	14	4.6	12	1.7	12	1.1	0.58	<0.33	<0.33	24	1.3	6.9	<0.33	0.36	15	24
CM-W2	72"	8/14/2006	0.36	<0.33	<0.33	1.2	2.6	3.7	7.7	20	14	24	9.8	20	3.4	21	0.92	1.6	<0.33	<0.33		_					46
CM-W3	71"	8/14/2006	<0.33	<0.33	<0.33	0.34	0.93	2	3.8	10	7.3	12	3,9	 	 						42	3.7	11	<0.33	13	36	
CM-W4	75*	8/14/2006	<0.33	<0.33	<0.33	<0.033	1.2	1.3	3.1					10	2.4	11	0.99	0.91	<0.33	<0.33	24	1.9	4.3	<0.33	0.54	18	23
CM-W5	76"	-					 			12	8.5	15	4.4	13	1.7	13	1.9	0.52	<0.33	<0.33	27	1.2	6.8	<0.33	<0.033	16	27
-	 	8/14/2006	0.85	<0.33	<0.33	1.9	4.9	11	25	77	39	74	35	71	10	82	6.2	4.8	<0.33	<0.33	160	13	31	<0.33	2.9	140	180
CM-W6.	73"	8/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.98	0.7	1.3	0.91	1.1	<0.33	1.2	<0.33	<0.33	5,9	<0.33	1.8	<0.33	0.54	<0.33	<0.33	1.1	2.2
CM-W7	70"	8/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.033	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W8	64"	8/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.55	<0.33	<0.33	<0.33	<0.33	<0.33	0.6
CM-W9	61"	8/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	< 0.33	<0.33	<0.33	<0.33
CM-W10	64"	8/14/2006	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33
CM-W11	69"	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33
CM-W12	73"	8/15/2006	<0.33	<0.33	<0.33	<0.33	3	1.9	5.7	22	12	25	3.7	21	2.3	22	3.7	0.76	<0.33	<0.33	<0.33	2	12	<0.33	0.44	23	44
CM-W13	61"	8/15/2006	<0.33	<0.33	<0.33	<0.33	0.87	0.77	2.1	5.7	4.7	6.8	2.3	5.4	1.3	5.7	1.4	<0.33	<0.33	<0,33	14	0.9	5	<0.33	<0.33	8.8	12
CM-W14	73"	8/15/2006	<0.33	<0.33	<0.33	<0.33	0.34	0.43	0.96	2.7	2.2	3	0.94	2.5	0.68	2.6	0.6	<0.33	<0.33	<0.33	6.7	0.44	2.1	<0.33	<0.33	4.6	5.5
CM-W15	75"	8/15/2006	<0.33	<0.33	<0.33	0.9	3.9	5.8	16	56	30	63	14	48	4.8	51	2.8	2.2	<0.33	<0.33	150	6.3	33	<0.33	0.82	83	120
CM-W16	74"	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.64	2.2	1.5	2,6	1.6	2.1	0.35	2.2	<0.33	<0.33	<0.33	<0.33	4.4	<0,33	1.2	<0.33	<0.33	2.9	4.6
CM-W17	74"	8/15/2006	<0.33	<0.33	<0.33	<0.33	0.79	0.84	1.8	5.2	5	6.5	1.8	5.3	1.7	5,6	1.5	0.53					-		+		
CM-W18	75"	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	0.71	0.55								<0.33	<0.33	16	0.89	5.3	<0.33	0.48	11	12
CM-W19	73*	8/15/2006	<0,33	<0.33	<0.33	<0.33	 		 			0.71	<0.33	0.62	<0.33	0,69	<0.33	<0.33	<0.33	<0.33	1.7	<0.33	0.44	<0.33	<0.33	1.4	1.6
-							<0.33	<0.33	<0.33	0.45	0.34	0.57	0.4	0.47	<0.33	0.51	<0.33	<0.33	<0.33	<0.33	1.1	<0.33	<0.33	<0.33	<0.33	0.67	1
CM-W20	76"	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.6	1.8	1.4	2.2	0.64	1.8	0,42	1.9	<0.33	<0.33	<0.33	<0.33	4.3	<0.33	1.3	<0.33	<0.33	2.8	3.9
CM-W21	73°	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0,41	1.2	0.9	1.4	0.93	1.2	<0,33	1.4	<0.33	<0.33	<0,33	<0.33	2.7	<0.33	0,68	<0.33	<0.33	2	2.8
CM-W22	72"	8/15/2006	<0.33	<0.33	<0.33	1.1	1.5	3.8	5.7	12	6.3	13	3.1	11	3,2	12	3.7	1.8	<0.33	<0.33	29	3.3	6.2	<0.33	1.3	23	25
CM-W23	76"	8/15/2006	<0.33	<0.33	<0.33	<0.33	0,43	0.47	1.1	3.2	2	4	0.88	3.1	0.78	3.2	0.5	<0.33	<0.33	<0.33	7.2	0.46	2	<0.33	<0.33	5.1	6.2
CM-W24	71"	8/15/2006	<0.33	<0.33	<0.33	0.41	2	1.9	4.8	14	12	16	2.1	13	2.8	15	3.9	0.75	<0.33	<0.33	35	1,9	9.6	<0.33	0.53	21	34
CM-W25	74"	8/15/2006	<0.33	<0.33	<0.33	<0.33	0.87	0.34	1.3	4.9	2.7	5.4	1.5	4.9	0.64	5.2	0.81	<0.33	<0.33	<0.33	8.4	0.35	2.9	<0.33	<0.33	5	7.8
CM-W26	73"	8/15/2006	<0.33	<0.33	<0.33	<0.33	1.9	2.6	6.8	23	13	. 28	13	22	3.3	24	3.8	1.1	<0.33	<0.33	48	2.5	11	<0.33	0.51	31	49
CM-W27	6	8/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	< 0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33*
CM-W28	6	8/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W29	6	8/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W30	6	8/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W31	6	8/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		<0.33	 	<0.33	<0.33
CM-W32	- 6	8/25/2006	<0.33	<0.33	<0.33	<0.33	0.58	<0.33	0.49	2.1	1.8	3.3	1.9	2.5	<0.33								<0.33		<0.33		
CM-W32B	6	9/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33		<0.33							2.2	<0.33	<0.33	<0.33	<0.33	3.6	<0.33	1,4	<0.33	<0.33	1,9	3.5
CM-W32B		8/25/2006	0.99	<0.33	<0.33			<0.33		<0.33	<0.33	0.45	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.74	<0.33	<0.33	<0.33	<0.33	0.43	0.55
-	-					2.8	7.5	16	31	100	66	120	52	100	16	100	12	7.2	<0.33	<0.33	250	16	44	<0.33	7.9	180	220
CM-W33B		9/14/2006	<0.33	<0.33	<0.33	0.47	0.66	1.3	2.8	6.5	4.4	7.8	2.3	6.9	1.8	6,6	1.1	0.79	<0.33	<0.33	17	1.3	5.1	<0.33	0.97	12	13
CM-W-33C		9/22/2006	<1.6	<1.6	<1.6	<1.6	2.2	<1.6	4.9	18	13	24	6.8	17	1.9	17	<1.6	<1.6	<1.6	<1.6	48	<1.6	13	<1.6	<1.6	18	41
CM-W-33D		10/10/2006	<0.33	<0.33	<0.33	0.39	2	1.5	3.6	11	8.8	15	4.3	<0.33	1.8	11	2.5	0.61	<0.33	<0.33	27	1.5	6.7	<0.33	0.56	17	26
CM-W33E		10/16/2006	<0.33	<0.33	<0.33	<0.33	0.41	0.84	1.6	3.4	2.1	5.2	1.4	3,5	1.2	3.3	0.67	0.46	<0.33	<0.33	11	0.97	1.6	<0.33	0.46	8.8	8
CM-W-33F	_	10/16/2006	<0.33	<0.33	<0.33	<0.33	<0.33	0,6	1.1	2.8	2.9	3.6	1.2	2.8	0.87	2.7	0.82	<0.33	<0.33	<0.33	7	0.6	2.5	<0.33	<0.33	5.3	5.3
CM-W33G	6	10/26/2006	<0.33	<0.33	<0.33	<0.33	17	8.3	39	110	74	130	44	120	<0.33	110	23	<0.33	<0.33	<0.33	310	11	62	<0.33	<0.33	160	270
CM-W33II	6	10/26/2006	<0.33	<0.33	<0.33	1.3	0.96	4.6	7.1	15	14	20	2.6	15	5	14	4.5	2.2	<0.33	<0.33	<0.33	4.1	10	<0.33	2.4	35	32
CM-W33I	6	10/26/2006	<0.33	<0.33	<0.33	0.4	1.6	1.3	3.3	7.7	6	13	2.4	7.7	1.9	8.1	3	0.57	<0.33	<0.33	21	1.5	4.7	<0.33	0.68	13	19
CM-W33J	6	11/15/2006	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	2	<1.6	<1.6	<1.6	<1.6	<1.6	1.8
CM-W33CF	9	9/22/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.41	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.72	<0.33	<0.33	<0.33	<0.33	0.4	0.58
CM-W 34		8/29/2006	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.36	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.6	<0.33	<0.33	<0.33	 	<0.33	0.64
CM-W 35		8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.63	0.47	0.74	0.34	0.64	<0.33	0.71	<0.33	<0.33							<0.33		
CM-W 36		8/29/2006	<0.33	<0.33	<0.33	<0.33	1.3	0.66	2.4	9.3	5		1.8						<0.33	<0.33	1.2	<0.33	0.39	<0.33	<0.33	0.63	1.2
CM-W36B		9/14/2006	<0.33	<0.33	<0.33	<0.33			<0.33			11		8.8	1.1	8.9	1.9	<0.33	<0.33	<0.33	19	0.73	5,5	<0.33	<0.33	9.5	19
		——					<0.33	<0.33		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0,33	<0,33	<0.33
CM-W37		8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0,88	0.47	1	<0.33	0.81	<0.33	0.82	<0.33	<0.33	<0.33	<0.33	1.9	<0.33	0.48	<0.33	<0.33	0.92	1.8
CM-W 38		8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.47	<0.33	<0.33	<0.33	<0.33	<0.33	0.44
CM-W 39	6	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.35	1.3	0.92	1.6	0.46	1,2	<0.33	1.3	<0.33	<0.33	<0.33	<0.33	2.9	<0.33	0.86	<0.33	<0.33	1.6	2.7
CM-W 40	6	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.81	0.52	0.94	<0.33	0.76	<0.33 .	0.77	<0.33	<0.33	<0.33	<0.33	1.8	<0.33	0.48	<0.33	<0.33	1,1	1.7
	HSRA NC		NE	1,51	0.76	NE	130	300	500	5	500	5	5	1.64	NE	5	5	NE	NE	50	500	360	5	0.19	100	110	500

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Sample Location	Depth (ft)	Date Collected	1,1- Biphenyl	2,4- Dimethylphenol	2,6- I Dinitrotoluene	2-Methylnaphthalene (mg/kg)	Acenaphthylene (mg/Kg)	Acenaphthene (mg/Kg)	Anthracene (mg/Kg)	Benz(a)anthracene (mg/kg)	Benzy(g.h.i)perylene (mg/Kg)	Benzo(b)fluoranthene (mg/Kg)	Benzo(k)fluoranthene (mg/Kg)	Benzo(a)pyrene (mg/Kg)	Carbazole (mg/kg)	('hrysene (mg/Kg)	Dibenz(a,h)anthracene (mg/Kg)	Dibenzofuran (mg/kg)	Di-n-butyl phthalate (mg/kg)	Di-n-octyl phthalate (mg/kg)	Fluoranthene (mg/Kg)	Huoreno (mg/Kg)	Indeno(1,2,3-cd)pyrene (mg/Kg)	Isophorone (mg/Kg)	Naphthalene (mg/Kg)	Phenanthrene (mg/Kg)	Pyrene (mg/Kg)
CM-W 41	6.	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33
CM-W 42	6	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.46	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W 43	6	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33
CM-W44	6	8/30/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.56	1.3	0.99	1.4	0.49	1.1	0.5	1.3	<0.33	<0.33	<0.33	<0.33	3.3	0.34	0.8	<0.33	<0.33	3.1	3.1
CM-W45	6	8/30/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	0.48	0.42	0.59	<0.33	0.51	<0.33	0.48	<0.33	<0.33	<0.33	<0.33	1.2	<0.33	<0.33	<0.33	<0.33	0.57	1.1
CM-W46	6	8/30/2006	<0.33	<0.33	<0.33	<0.33	1.2	0.84	2.1	8.9	5	11	1.8	9.3	0.88	8.8	1.7	<0.33	<0.33	<0.33			+	<0.33	 	10	18
CM-W46B	6	9/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33			18	0.76	3.7		<0.33		
CM-W47	6	8/30/2006	<0.33	<0.33	<0.33	<0,33	1.9	0.92	2.8	8.1	5.1	10	2.1	8.8	0,73				<0.33	<0.33	0.39	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W47B	6	9/14/2006	<0.33	<0.33	<0.33	<0.33	0.98	1.4	2.9	6	5.3	7.7				7.7	0.85	0.39	<0.33	<0.33	18	1	5.1	<0.33	0.36	11	17
CM-W47C	6	9/22/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33			1.8	6.4	1.6	6.3	1.1	0.56	<0.33	<0.33	18	1.7	3.8	<0.33	<0.33	14	14
CM-W-47CF	0	9/22/2006	<1.6	<1.6	<1.6	<1.6	<1.6	+	_		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W48	,	8/30/2006	<0.33		<0.33	<0.33	 	<1.6	2.4	3.5	2.1	4	<1.6	3,5	<1.6	3.4	<1.6	<1.6	<1.6	<1.6	10	<1.6	2	<1.6	<1.6	10	8.2
CM-W48B	-			<0.33	 		0.92	0.51	1.5	4.2	2	5.5	1.3	4.4	0,63	4.3	<0.33	<0.33	<0.33	<0.33	9.4	0.56	1.9	<0.33	<0.33	5.7	8.6
	- 6	9/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W49		8/30/2006	<0.33	<0.33	<0.33	<0.33	0.35	<0.33	0.53	1.7	0.75	2.2	0.67	1.6	<0.33	1.7	<0.33	<0.33	<0.33	<0.33	3.6	<0.33	0.7	<0.33	<0.33	2.1	3,3
CM-W50	6	9/14/2006	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-W51	- 6	9/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-F1	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.76	2.4	1.5	3	1.5	2.5	<0.33	2.5	0.5	<0.33	<0.33	<0.33	4.9	<0.33	1.2	<0.33	<0.33	3.1	5.2
CM-F2	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	0.36	<0.33	0.81	4.1	2.9	5.1	2.3	4	0.38	3.8	<0.33	<0.33	<0.33	<0.33	8.6	<0.33	2.3	<0,33	<0.33	3.4	8.5
CM-F3	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33
CM-F4	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-F5	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.33	0.91	0,63	0.99	0.67	0.83	<0.33	0.92	<0.33	<0.33	<0.33	<0.33	2.2	<0.33	0.48	<0.33	<0.33	1.7	2
CM-F6	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.67	0.39	0.76	<0.33	0.63	<0.33	0.69	<0.33	<0.33	<0,33	<0.33	1.6	<0.33	<0.33	<0,33	<0.33	1.4	1.4
CM-F7	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.72	0.45	0.81	0.39	0.72	<0.33	0.73	<0.33	<0.33	<0.33	<0.33	1.6	<0.33	0.35	<0.33	<0.33	0.89	1.7
CM-F8	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	0.37	0.42	1.4	3.6	1.9	4	1.9	3.3	0.45	4.2	<0.33	<0.33	<0.33	<0.33	9.3	0.55	1.7	<0.33	<0.33	6.6	9.1
CM-F9	9 .	8/15/2006	0.35	<0.33	<0.33	1.1	3.6	3.5	13	38	21	47	21	36	3.9	35	1.1	2	<0.33	<0.33	93	4.5	18	<0.33	1.4	66	91
CM-F10	9 .	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.3	0.85	1.6	0.83	1.3	<0.33	1.3	<0.33	<0.33	<0.33	<0.33	2.5	<0.33	0.66	<0.33	<0.33	1.3	2.6
CM-F11	9	8/15/2006	<0.33	<0,33	<0.33	<0,33	<0.33	<0.33	<0.33	0.46	<0.33	0.55	0.41	0.44	<0.33	0.5	<0.33	<0.33	<0.33	<0.33	1.1	<0.33	<0.33	<0.33	<0.33	0.48	1
CM-F12	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-F13	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	0.46	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.78	<0,33	<0.33	<0,33	<0.33	0,44	0.69
CM-F14	9 .5	8/15/2006	<0.33	<0.33	<0.33	0.47	1	1.7	3.3	12	4.5	14	3.9	11	2	12	0.61	0.85	<0.33	<0.33	27	1.7	4.2	<0.33	0.66	21	27
CM-F15	9 ,	8/15/2006	<0.33	<0.33	<0.33	0,6	0.95	2.5	5.2	17	4.5	18	4.6	16	3.7	18	0.66	1.5	<0.33	<0.33	35	2.8	4.2	<0.33	0,00	35	37
CM-F16	9	8/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.81	0.45	1	0.52	0.87	<0.33	0.95	<0.33	<0.33					 		,	1	
CM-F17	11	8/25/2006	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	0.42	0.43	0.39	<0.33	0.36			<0.33	<0.33	1.6	<0.33	<0.33	<0.33	<0.33		1.8
CM-F18	11	8/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		≪0.33	<0.33		<0.33	0.45	<0.33	<0.33	<0.33	<0.33	<0.33	0.49
CM-F19	11	8/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.35	0.97	0.69					<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-F20	12	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33					1.4	0.91	1,1	<0.33	1.2	<0.33	<0.33	<0.33	<0.33	2.4	<0.33	0.49	<0.33	<0.33	1.8	2.4
CM-F21	12	8/29/2006	<0.33	<0.33				<0.33	<0.33	0.62	0.37	0.71	<0.33	0.59	<0.33	0.61	<0.33	<0,33	<0.33	<0.33	1.4	<0.33	0.36	<0.33	<0.33	0.77	1.3
CM-F22	10	9/14/2006	<0.33		<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CM-F23	10	9/14/2006	<0.33	<0.33	<0.33	<0.33	0.39	0.39	1.2	3.5	2,7	3.8	1.4	3.4	0.46	3.4	0.83	<0.33	<0.33	<0.33	8.7	0.47	2,7	<0.33	<0.33	4.9	7.3
	-			<0.33		<0.33	<0.33	<0.33	0.46	1.4	1.1	1.8	0.5	1.5	<0.33	1.4	<0.33	<0.33	<0.33	<0.33	2.8	<0.33	1.1	<0.33	<0.33	1,8	2.4
CM-F24	10	9/14/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
01/ 11/1 -		DATE OF S							<u> </u>														<u> </u>		ļ		
CK-W1-7		8/17/2006	<0.33	<0.33	<0.33	<0.33	0.59	0.44	0.54	1.5	1.3	2.2	0.67	1.8	<0.33	1.5	<0.33	<0.33	<0.33	<0,33	2.7	0.39	1.3	<0.33	<0.33	1.4	2.5
CK-W2-7		8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W2-17		8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W3-7	-	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W3-17		8/17/2006	<0.33	<0.33	<0.33	0.34	1,6	I	1.4	4.4	2.7	5.3	1.7	4.1	0.49	4.3	0.95	0.76	<0.33	<0.33	11	1.2	3.4	<0.33	0,64	3.6	9.5
CK-W4-7		8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W4-17		8/17/2006	120	<0.33	<0.33	450	28	380	230	140	38	110	21	76	120	120	3.2	310	<0.33	<0.33	790	340	50	<0.33	2500	1600	380
CK-W5-7		8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W5-17	17	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33
CK-W6-7	7	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W6-17	17	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W7-7	7	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W7-17	17	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0,33	<0.33
CK-W8-7	7	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33
CK-W8-17	17	8/17/2006	0.39	<0.33	<0.33	1.2	<0.33	1.9	0.93	1	0.33	0.77	0.58	0.68	0.62	1	<0.33	1,4	<0,33	<0.33	3.4	1.8	<0.33	<0.33	3.5	5.3	2.7
CK-W9-7	7	8/17/2006	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	0.71	0.57	1.2	0.82	0.85	<0.33	0.83	<0.33	<0.33	<0.33	<0.33	1.1	<0.33	0.44	<0.33	<0.33	0.36	1.3
CK-W10-7	7	8/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	0.43	1.9	0.78	0.44	0.94	0.74	0.78	0.69	0.83	<0.33	0.44	<0.33	<0.33	2	0.64	0.34	<0.33	<0.33	2.3	1.7
CK-W10-17		8/18/2006	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W11-7		8/17/2006	<0.33	<0.33	<0.33	<0.33	3.2	<0.33	2.6	16	7.6	22	4.4	17	0.77	15	1.1	<0.33	<0.33					····	 		
	SRA NC		NE	1.51	0.76	NE	130	300°	500	5	500	5	5	1.64	NE	5				<0.33	21	<0.33	6.8	<0.33	<0.33	0.81	25
						<u></u>		500	200	<u> </u>	300		2	1.04	INE	5	5	NE	NE	50	500	360	5	0.19	100	110	500

													SW8	270C (TCL-SEN	IIVOLATILE OF	(GANICS)											
Sample Location	Depth	Date	1,1- Biphenyl	2,4-	2,6-	2-Methylnaphthalene (mg/kg)	Acenaphthylen	Acenaphthene (mg/Kg)	Anthracene (mg/Kg)		Benzo(g,h,i)perylene	Benzo(h)fluoranthene	Benas(k)fluoranthene		Carbazole	Chrysene	Dibenz(a,h)anthracene		Di-n-butyl phthalate			Fluorene	Indeno(1,2,3-ed)pyrene	Isophorone		Phenanthrene	Pyrene (mg/Kg)
CK-W11B-10	10	9/20/2006	5.3	<0.33	<0.33	17	3.4	23	(mg/Kg)	(mg/kg)	(mg/Kg) 2.4	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/kg) 7.2	(mg/Kg) 6	(mg/Kg) 0.7	(mg/kg)	(mg/kg) <0.33	(ing/kg) <0.33	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	
CK-W11-17	17	8/18/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33			<0,33	 			 	34	21	2.5	<0.33	51	64	24
CK-W12-7	7	8/17/2006	<0.33	<0.33	<0.33	<0.33	2.7	<0.33	1.9	16	7.3	20		<0.33	<0.33		<0.33	<0.33	<0.33	<0.33	0.56	<0.33	<0.33	<0.33	<0.33	<0.33	0.46
CK-W12B-10	11	9/20/2006	0.7	<0.33	<0.33	2.8	0.9	5.2	4.6	2.9			13	15	<0.33	15	1.1	<0.33	<0.33	<0.33	<0.33	<0.33	6.7	<0.33	<0.33	0.67	27
CK-W12-17	17	8/18/2006	<0.33	<0.33		-		+			1	2.4	0.79	1.9	1.9	2.4	<0.33	3.3	<0:33	<0.33	16	7.6	1.1	<0.33	5.3	26	12
CK-W13-7	- ''	8/17/2006	<0.33	 	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
	/ 			<0.33	<0.33	1.6	7.9	19	15	27	16	34	11	28	4.4	26	4.5	10	<0.33	<0.33	50	20	17	<0.33	4.1	74	51
CK-W13B-10	13	9/20/2006	26	0.63	<0.33	110	13	97	66	30	10	23	3.7	18	30	27	3.6	<0.33	<0.33	<0.33	140	89	9.8	<0.33	510	300	97
CK-W13-17	17	8/18/2006	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W14-7	7	8/17/2006	<0.33	<0.33	<0.33	<0.33	5,8	0.74	3,9	15	12	22	8.2	18	0.44	16	5	0.41	<0.33	<0.33	22	0.73	12	<0.33	0.59	5	27
CK-W14B-10	15	9/20/2006	32	0.81	<0.33	130	14	140	79	42	12	31	9.2	20	37	37	1.7	110	<0,33	<0.33	230	100	11	<0.33	670	460	160
CK-W14-17	17	8/18/2006	<0.33	<0.33	<0.33	<0.33	<0.33	0,43	2.2	1.3	0.58	1.3	0.95	1.1	0.81	1.5	<0.33	0.38	<0.33	<0.33	3.6	0,92	0.58	<0.33	<0.33	3,7	3,3
CK-W15-7	7	8/17/2006	<0.33	<0.33	<0.33	<0.33	11	0.61	4.9	21	20	34	13	29	0.74	22	5.6	0.37	<0.33	<0.33	26	0.72	21	<0.33	0.83	2.1	33
CK-W15-17	17	8/18/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.61	1.1	0.49	1.2	0.73	0.91	<0.33	1.1	<0.33	<0.33	<0.33	<0.33	3.1	<0.33	0.44	<0.33	<0.33	1.1	2.7
CK-W16-7	7	8/17/2006	<0.33	<0.33	<0.33	0.86	2.5	2.8	7.9	6.2	3.8	9	3.5	<0.33	2.8	6.7	1.3	1.7	<0.33	<0.33	12	2.9	4.6	<0.33	0.63	6.6	13
CK-W16-17	17	8/18/2006	12	<0.33	<0.33	29	5.3	47	43	21	5.7	15	8.8	12	25	18	0.77	38	<0.33	<0.33	110	48	5.2	<0.33	110	220	82
CK-W17-7	7	9/7/2006	<0.33	<0.33	<0.33	<0.33	0.47	<0.33	<0.33	<0.33	0.42	0.56	<0.33	0.41	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.36	<0.33	<0.33	<0.33	<0.33	<0.33	0.33
CK-W17-17	17	9/7/2006	<0.33	<0.33	<0.33	0,66	14	1.4	7.5	36	27	46	14	36	0.95	33	2.7	0.77	<0.33	<0.33	83	, 1.8	27	<0.33	1.4	11	72
CK-W17B-17	17	10/11/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.53	0.9	<0.33	0.96	0.35	0.79	<0.33	0.9	<0.33	<0.33	<0.33	<0.33	2.2	<0.33	<0.33	<0.33	<0,33	2.1	1.9
CK-W18-7	7	9/7/2006	<0.33	<0.33	<0.33	<0.33	0.56	<0.33	<0.33	1.1	1.1	1.6	0.59	1.2	<0.33	1.1	<0.33	<0.33	<0.33	<0.33	1.9	<0.33	0.84	<0.33	<0.33	0.35	1.8
CK-W18-17	17	9/12/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.5	1	2.1	0.91	1.7	<0.33	1.7	<0.33	<0.33	<0.33	<0.33	2,8	<0.33	0.8	<0.33	<0.33	0.43	2.8
CK-W18B-17	17	10/11/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W19-7	7	9/7/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-W19-17	17	9/12/2006	1.2	<0.33	<0.33	3.4	2.1	4.7	3.3	7.6	3.7	9.1	3.7	7.1	1.5	7.7	0.43	3.6	<0.33	<0.33	17	4.8	3.1	<0.33	8.1	17	16
CK-W19B-17	17	10/11/2006	<0.33	<0.33	<0.33	<0.33	3	<0.33	2.2	8.1	3.8	13	<0.33	8	0.75	9.8	1.5	<0.33	<0.33	<0.33	22	0.5	4.2	<0.33	<0.33	10	20
CK-W19C-17	17 .	10/11/2006	<0.33	<0.33	<0.33	<0.33	3.3	<0.33	2.7	14	12	20	5	13	<1.6	13	3.6	<1.6	<1.6	<1.6	19	<1.6	10		 		20
	_							<u> </u>									3.0	VI.0	C1.0	V1.0	19	<1.0	10	<1.6	<1.6	4.2	20
CK-W20-7	7	9/7/2006	<0.33	<0.33	<0.33	<0.33	0.4	<0.33	<0.33	0.85	0.78	1.6	0,43	0.97	<0.33	1.1	<0.33		-0.22				2.0				
CK-W20-17	17	9/12/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					<0.33	<0.33	<0.33	1,3	<0.33	0,68	<0.33	<0.33	<0.33	1.3
CK-W21-17	17	9/12/2006	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
OK WEI IV		371272000	40.55	40.55	V0.55	(0.35	40,33	Q0.33	Q0.33	QU.33	<u.33< td=""><td><0.33</td><td><0.33</td><td><0,33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td><td><0.33</td></u.33<>	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-F1	18	8/18/2006	8.8	<0.33	<0.33	36	9.7	24	30	10																	
CK-F2	18 .	8/28/2006	7.7	<0.33		34		+	 	30	12	30	15	22	12	24	<0.33	24	<0.33	<0.33	98	27	10	<0.33	200	120	73
CK-F3	18	8/28/2006	<0.33		<0.33		8.2	37	27	23	8.3	20	2.2	16	8.1	20	2.4	29	<0.33	<0.33	92	39	8.3		53	140	52
-	18			<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CK-F4		9/7/2006	<0.33	<0.33	<0.33	2.8	42	1.7	14	84	82	130	29	110	2,6	78	17	0.91	<0.33	<0.33	150	2.4	66	<0.33	2.6	4.9	160
CK-F5	18	9/12/2006	130	<0.33	<0.33	610	37	380	190	85	19	59	12	41	97	84	<0.33	280	<0.33	<0.33	390	300	18	<0.33	3300	1000	280
CK-F6	18	9/12/2006	<0.33	<0.33	<0.33	0.36	<0.33	0.61	0.39	0.38	<0.33	0.43	0.38	0.34	<0.33	0.43	<0.33	0.48	<0.33	<0,33	1.3	0.67	<0.33	<0.33	0.61	2.1	1,1
CL-W1		8/9/2006	-0.12	-0.22	-0.22			ļ	<u> </u>																		
I			<0.33	<0.33	<0.33	NA	NA	NA	NA	NA	NA NA	NA	NA NA	NA NA	NA NA	NA	NA NA	NΛ	<0.33	NA	NA	NA	NA	<0.054	NA	NA	NA
CL-W2	1	8/9/2006	<0.33	<0.33	<0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	<0.33	NA	NA	NA	NA NA	<0.054	NΛ	NA	NA
CL-W3	<u>'</u>	8/9/2006	<0.33	<0.33	<0.33	NA	NA	NA	NA .	NA	NA NA	NA	NA	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA NA	<0.054	NA	NΛ	NA
CL-W4	1	8/9/2006	<0.33	<0.33	<0.33	NA	NA	NA .	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA NA	<0.054	NA	NA	NA .
CL-F1	1	8/9/2006	<0.33	<0.33	<0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	<0.054	NA	NA	NA
CL-F2	1	8/9/2006	<0.33	<0.33	<0.33	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA NA	NΛ	NA	<0.33	NA	NA	NA	NA NA	<0.054	NA	NA	NA
C-CK-W1-7'	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	0.95	0.71	1.3	0.47	0.99	<0.33	1.1	<0.33	<0.33	<0.33	<0.33	1,7	<0.33	0.72	<0.33	<0.33	0.46	1.9
C-CK-W1-17'	17	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	0.49	0.37	0.54	0,45	0.82	0.34	0.71	<0.33	0.57	<0.33	<0.33	<0.33	<0.33	1.7	0 53	0.39	<0.33	<0.33	1.9	1.6
C-CK-W2-7'	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	0.37	<0.33	0.35	1.2	0.79	1.5	0.61	1.2	<0.33	1.2	<0.33	<0.33	<0.33	<0.33	2	<0.33	0.77	<0.33	<0.33	0.78	2.2
C-CK-W2-17*	17	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.36
C-CK-W3-7'	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.55	<0.33	<0.33	<0.33	<0.33	<0.33	0.48
C-CK-W3-17'	17	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.63	0.39	0.84	<0.33	0.58	<0.33	0.66	<0.33	<0.33	<0.33	<0.33	1.3	<0.33	0.37	<0.33	<0.33	<0.33	1.4
C-CK-W4-7'	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	0.59	<0.33	0.45	1.9	1.3	2.5	0.74	1.9	<0.33	1.9	<0.33	<0.33	<0.33	<0.33	2.8	<0.33	1.3	<0.33	<0.33	0.59	3.1
C-CK-W4B-7'	7	10/25/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.68	0.63	1.2	<0.33	0.73	<0.33	0.71	<0.33	<0.33	<0.33	<0.33	1.3	<0.33	0.49	<0.33	<0.33	0.56	1.3
C-CK-W4-17'	17	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
C-CK-W5-7'	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	0.4	<0.33	<0.33	0.96	0.87	1.6	0.45	1.1	<0.33	0.99	<0.33	<0.33	<0.33	<0.33	1.4	<0.33	0.83	<0.33	<0.33	<0.33	1.8
C-CK-W5-17'	17	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.36
· ·											-						10.00	3000	70100	10.55	10.55	70.55	70.03	~0.53	70.33	-0.33	0.50
C-CK-P1	18	8/29/2006	<0.33	<0.33	<0.33	0.37	0.57	2.8	6.9	3.2	0.87	2.5	0.98	1.9	2	3	<0,33	I.I	<0.33	<0.33	13	20	204	.0.22	0.47	12	
C-CK-F2	18	8/29/2006	<0.33	<0.33	<0.33	0.92	<0.33	1.1	0.63	0.39	<0.33	<0.33	<0.33	<0.33	1.1	0.33	<0.33					2.9	0.94	<0.33	0.47	13	10
C-CK-P3	18	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33			1.6	<0.33	<0.33	1.9	1.1	<0.33	<0.33	0.52	3.6	1.3
C-CK-F4	18	8/29/2006	0.82	<0.33	<0.33	2.6	1	4.4	3.9	3.8	1.6					<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
	ISRA NC		NE NE	1.51	0.76	NE I						4.3	1.4	3.2	1.5	3.7	<0.33	3.1	<0.33	<0.33	11	4.4	1.8	<0.33	7.1	16	12
L	IONA NC	L	NE	1:01	0.76	NE	130	300	500	5	500	5	5	1.64	NE .	5	5	NE	NE	50	500	360	5	0.19	100	110	500

													31102	ACC (ICE-SE	MIVOLATILE OR	(GANICS)											
Sample Location	Depth	Date	1,1-	2,4-		2-Methylnaphthalene							Benzo(k)ffuoranthene			Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-butyl phthalate	Di-n-octyl phthalate		Fluorene	Indeno(1,2,3-ed)pyrene	Isophorone	Naphthalene	Phenanthrene	Ругепе
C-CK-F5	(fb) 18	8/29/2006	Biphenyl	Dimethylpheno	<0.33	(mg/kg) <0.33	(mg/Kg) <0.33	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/Kg) 0.39	0.95	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/Kg)	(mg/Kg)	(ing/kg)	(mg/kg)	(mg/kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg) 7.6	(mg/Kg)
C-CK-P5	18	8/29/2006	<0.33	<0.33	<0.33	<0.33	<0.33	1.8	3	1.2	0.39	0.95	0.4	0.7	0.96	1.1	<0.33	1.2	<0.33	<0.33	5	2.2	0.36	<0.33	<0.33	7.6	3.9
	ļ																										
CJ-WI	7	9/6/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJ-W2	7	9/6/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.36	0.38	<0.33	<0.33	0.34	<0.33	<0.33	<0.33	<0.33	0.66	<0.33	<0.33	<0.33	<0.33	<0.33	0.61
CJ-W3	7	9/6/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.61	0.67	2	1.4	1.5	<0.33	1.3	<0.33	<0.33	<0.33	<0.33	1.4	<0.33	0.55	<0.33	<0,33	<0.33	3.7
CJ-W4	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJ-W5	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJ-W6	7	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJ-W7	<u> </u>	8/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					 					 		 			<0.33	<0.33
I	<u> </u>						 					<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		
CJ-W8	7	10/24/2006	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33
CJ-W9	7	8/30/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJ-W10	7	8/30/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33
CJ-W11	7	8/30/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJ-W12	7	8/30/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJ-W13	7	8/30/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33
CJ-W 14	.7	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.34	<0.33	0,57	0.35	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.55	<0.33	<0.33	<0.33	<0.33	<0.33	0.62
								-	 																		
CJ-F1	10	9/8/2006	0.33	<0.33	<0.33	<0.33	A 22	0.25	<0.33	0.62	0.37	074	A) 22	054	40.22	0.62	022	-0.22		-0.12	1.5	0.20	-0.22	-0.13	-022	15	1.5
	10						<0.33	0.35		0,62		0.74	<0.33	0.54	<0.33	0.62	<0.33	<0.33	<0.33	<0.33	1.5	0.39	<0.33	<0.33	<0.33	1.5	
CJ-F2	10	9/8/2006	81	2	<0.33	280	29	390	250	120	23	80	15	51	120	100	2.4	270	<0.33	<0.33	530	330	27	<0.33	1100	1900	380
CJ-F3	10	9/8/2006	1.1	<0.33	<0.33	3	0.71	5.1	2.2	1.8	0.63	1.4	0.4	0.99	1.3	1.6	<0.33	3.9	<0.33	<0.33	7.9	4.7	0.56	<0.33	6.3	16	5.5
CJ-F4	10	9/8/2006	<0.33	<0,33	<0.33	<0.33	<0.33	0.49	0.41	0.66	0.34	0.65	<0.33	0.47	<0.33	0.62	<0.33	0.4	<0.33	<0.33	2.6	0.58	<0.33	<0.33	<0.33	3.1	2
CJ-F5	12	9/8/2006	0.82	0.47	<0.33	2.6	1.1	2.9	2.1	3	1.8	3.2	1.2	2.4	1	3	<0.33	2.7	<0.33	<0.33	8	2.2	1.8	<0.33	11	9,9	6.7
CJ-F6	12	9/8/2006	<0.33	<0.33	<0.33	0.89	<0.33	0.82	0.58	0.36	<0.33	<0.33	<0.33	<0.33	0.84	0.39	<0.33	1	<0.33	<0,33	1.4	0.66	<0.33	<0.33	5.6	3.2	1.1
CJ-F7	12	9/8/2006	3	<0.33	<0.33	11	1,6	12	7.3	3,8	1.2	3	1.1	2.4	4.1	3.3	<0.33	9.3	<0.33	<0.33	17	11	1.2	<0.33	48	35	12
									1					-													
CJKN-W1-7	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	1.1	<0.33	0.62	2.9	2	4.5	1.7	3.4	<0.33	2.7	0.69	<0.33	<0.33	<0.33	3.8	<0.33	2.4	<0.33	<0.33	0.55	4
CJKN-WIB-7		9/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33				<0.33		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
									 								<0.33	<0.33	<0.33		<0.33						
CJKN-WIBE		9/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.41	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.4	<0.33	<0.33	<0.33	<0.33	<0.33	0.45
CJKN-W2BF		10/10/2006	<0.33	<0.33	<0.33	<0.33	0.46	<0.33	<0.33	1.3	0.95	1.7	0.63	1.3	<0.33	1.3	<0.33	<0.33	<0.33	<0.33	2.2	<0.33	1	<0.33	<0.33	0.35	2.5
CJKN-W1-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W2-7	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	1.8	<0.33	3.9	5.2	2.9	6.9	1.8	4.9	1.3	5	0.9	<0.33	<0.33	<0,33	9.3	0.5	3.9	<0.33	0.4	2	10
CJKN-W2B-7	7	9/28/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.37	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W2-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W3-7	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W3-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33
CJKN-W4-7	7	9/15/2006	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W4-17	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W5-7		9/15/2006		<0.33	<0.33	<0.33	<0.33			<0.33											ļ				 		<0.33
			<0.33					<0.33	<0,33		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	
CJKN-W5-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0,33	<0,33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W6-7	7	9/15/2006	0.37	<0.33	<0.33	1.2	0.88	2,4	2.8	2.9	1.6	3.7	1.1	2.7	0.97	2.9	<0.33	1.7	<0.33	<0.33	8.6	2.2	1.3	<0.33	1.1	9.9	7.7
CJKN-W6B	7	9/22/2006	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W6BF	8	9/22/2006	<0.33	<0.33	<0.33	<0.33	1.6	<0.33	1.1	3.4	2.4	4.8	1.4	3.5	<0.33	3.1	0.71	<0.33	<0.33	<0.33	5.3	<0.33	2.6	<0.33	<0.33	1.7	5
CJKN-W6BFB	T	10/10/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.41	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.36
CJKN-W6-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.79	<0.33	<0.33	<0,33	<0.33	0.85	0.64
CJKN-W7-7'	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W7-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W8-7	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W8-17*		9/15/2006	<0.33		<0.33	<0.33	<0.33		<0.33	<0.33													 		<0.33	<0.33	<0.33
_	17			<0.33				<0.33	 		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.34	<0.33	<0.33	<0.33			
CJKN-W9-7'	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W9-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W10-7	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W10-17 ¹	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W11-7'	7	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CJKN-W11-17'	17	9/15/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33
CJKN -W2BF		10/10/2006	<0.33	<0.33	<0.33	<0.33	0.46	<0.33	<0.33	1.3	0.95	1.7	0.63	1.3	<0.33	1.3	<0.33	<0.33	<0.33	<0.33	2.2	<0.33	1	<0.33	<0.33	0.35	2.5
CJKN-FI	7	9/20/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.0	0.7	1.3	0.5	1.0	<0.33	1.1	<0.33	<0.33	<0,33	<0,33	1.7	<0.33	0.72	<0.33	<0.33	0.45	1.9
CJKN-F2	7	9/20/2006	<0.33			<0.33			<0.33												 		 		<0.33		0.56
				<0.33	<0.33		<0.33	<0.33	_	<0.33	<0.33	0.45	<0.33	<0.33	<0.33	0.34	<0.33	<0.33	<0.33	<0.33	0.52	<0.33	<0.33	<0.33	_	<0.33	
CJKN-F3	7	9/20/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
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CJKS-W1-7	7	9/20/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33 -
	ISRA NC		NE	1.51	0.76	NE	130	300	500	5	500	5	5	1.64	NE	5	5	NE	NE	50	500	360	5	0.19	100	110	500

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Sample Location	Depth (ft)	Date Collected	1,1- Biphenyl	2,4- Dimethylphenol	2,6- Dinitrotoluene		Acenaphthylene (mg/Kg)	Acenaphthene (mg/Kg)	Anthracene (mg/Kg)	Benz(a)anthracene (mg/kg)	Benzu(g,h,i)perylene (mg/Kg)	Benzo(b)fluoranthene (mg/Kg)	Benzo(k)fluoranthene (mg/Kg)	Benzo(a)pyrene (mg/Kg)	Carbazole (mg/kg)	Chrysene (mg/Kg)	Dibenz(a.h)anthracene (mg/Kg)	Dibenzofuran (mg/kg)	Di-n-butyl phthalate (mg/kg)	Di-n-octyl phthalate (mg/kg)	Fluoranthene (mg/Kg)	Fluorene (mg/Kg)	Indeno(1,2,3-ed)pyrene (mg/Kg)	Isophorone (mg/Kg)	Naphthalene (mg/Kg)	Phenanthrene (mg/Kg)	Pyrene (mg/Kg)
CJKS-W2-7	7	9/20/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33
CJKS-F1	8	9/20/2006	2.9	<0.33	<0.33	9.3	1.5	12	8	5.4	1.9	4.9	1.7	3.7	3.6	4.7	0.53	8.9	<0.33	<0.33	24	11	2	<0.33	37	43	17
CJKS-F2	5	9/20/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CAR-F21	2	10/12/2006	<1.6	<1.6	<1.6	<1.6	<1.6	. <1.6	25	8.6	7	10	3.8	8.5	<1.6	8.3	1.7	<1.6	<1.6	<1.6	19	<1.6	5.8	<1.6	<1.6	13	18
CAR-F21B	4	10/24/2006	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	3	4.9	4,6	8.3	2.8	5.5	<1.6	4.9	<1.6	<1.6	<1.6	<1.6	9.7	<1.6	3.6	<1.6	<1.6	4.2	9.1
CAR-F21D	8	11/2/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33 .	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CSB-FB	10'	11/17/2006	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
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T-1		9/27/2006	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	0.88	1.2	1.7	0.9	1.2	NA	1.1	0.4	NA	NA	NA	1.2	<0.33	1	NA	<0.33	<0.33	1.7
T-2		9/27/2006	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	0.35	0,055	<0.33	0.41	NA	0.36	<0.33	NA	NA	NA	<0.33	<0.33	<0.33	NA	<0.33	<0.33	<0.33
	HSRA NC		NE	1.51	0.76	NE	130	300	500	5	500	5	5	1.64	NE	5	5	NE	NE	50	500	360	5	0.19	100	110	500

Note: Other SVOC concentrations were BRL except for those noted above.

NA = Not Applicable

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 3: SOIL ANALYTICAL RESULTS SW8260B (TCL-VOLATILE ORGANICS)/SW8015 (DIESEL RANGE ORGANICS)/SW8082 PCB

			I / / / / / / / / / / / / / / / / / / /			,			.,			B)/B WOOLS (DIESEA	7 14 11 10 11 0110 111	200)/01/000210					
Sample Location	Depth (ft)	Date Sampled	1,3-Dichlorobenzene (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)		Xylene (mg/kg)	4-Methyl-2-pentatone (mg/kg)	2-Butanone (mg/kg)	Acetone (mg/kg)	Cyclohexane (mg/kg)	Methylcyclohexane (mg/kg)	Isopropylbenzene (mg/kg)	Carbon disulfide (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	Tetrachloroethene (mg/kg)	Trichloroethene (mg/kg)	TPH (Gasoline Range Organics) (mg/kg)	TPH (Diesel Range Organics (mg/kg)
AWALL-1	1'	8/9/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.1	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	NA	NA
CK-W1-7	7'	8/17/2006	NA	<0.0018	<0.0018	<0.0018	<0.0036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W2-7	7'	8/17/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W2-17	17'	8/17/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W3-7	7'	8/17/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W3-17	17'	8/17/2006	NA	<0.0015	<0.0015	<0.0015	<0.0030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W4-7	7'	8/17/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W4-17	17'	8/17/2006	NA	0.065	5.5	6.7	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W5-7	7'	8/17/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W5-17	17'	8/17/2006	NA	<0.0015	<0.0015	<0.0015	<0.0030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W6-7	7'	8/17/2006	NA	<0.0013	<0.0013	<0.0013	<0.0026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W6-17	17'	8/17/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W7-7	7'	8/17/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W7-17	17'	8/17/2006	NA	<0.0013	<0.0013	<0.0013	<0.0026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W8-7	7'	8/17/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W8-17	17'	8/17/2006	NA	<0.0015	<0.0015	<0.0015	0.0081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W9-7	7'	8/17/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W10-7	7'	8/17/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W10-17	17'	8/18/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W11-7	7'	8/17/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CKW11B-10'	10'	9/20/2006	NA	<0.0015	0.13	0.27	8.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W11-17	17'	8/18/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W12-7	7'	8/17/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W12B-10	11'	9/20/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W12-17	17'	8/18/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W13-7	7'	8/17/2006	NA ·	<0.0016	<0.0016	0.017	0.038	NA	NA	NA .	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W13B-10	13'	9/20/2006	NA	<0.0017	0.15	0.23	2.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W13-17	17'	8/18/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W14-7	7'	8/17/2006	NA	<0.0019	<0.0019	<0.0019	<0.0038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CKW14B-10	15'	9/20/2006	NA	0.0021	0.1	0.24	1.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W14-17	17'	8/18/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA	NA
CK-W15-7	7'	8/17/2006	NA	0.0012	0.0012	0.0012	0.0024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W15-17	17'	8/18/2006	NA 	<0.0018	<0.0018	<0.0018	<0.0036	NA	NA	NA	NA	NA	NA	NA	NA	NA ·	NA	NA	NA
CK-W16-7	7'	8/17/2006	NA NA	<0.0017	0.0018	<0.0017	0.032	NA	NA	NA	NA	NA NA	NA	NA	NA	NA .	NA	NA	NA
CK-W16-17	17'	8/18/2006	NA 	<0.0017	0.0017	<0.0017	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-W17-7	7'	9/7/2006	NA NA		<0.0015	<0.0015	<.0015	NA NA	NA NA	NA NA	NA	NA NA	NA	NA	NA	NA	NA	NA	NA
CK-W17-17	17'	9/7/2006	NA NA	<0.0014	<0.0014	<0.0014	<0.0028	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
CK-W17B-17	17'	10/11/2006	NA NA	<0.0016	<0.0016	<0.0016	<0.0032	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA NA	NA	NA
CK-W18-7 CK-W18-17	17'	9/7/2006	NA NA		<0.0012	<0.0012	<0.0024	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA .	NA NA	NA NA	NA NA
	ISRA NC	3/12/2000	NA 5	<0.0014 0.20	<0.0014	<0.0014	<0.0028	NA 3	NA 0.70	NA NA	NA 20.00	NA NA	NA 21.89	NA NA	NA NA	NA 0.10	NA 0.12	NA NA	NA NA
н	BRA NU		5	0.20	14.40	20.00	20.00	3	0.79	2.74	20.00	NA	21.88	DL (P)	NA.	0.18	0.13	NA NA	NA NA

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 3: SOIL ANALYTICAL RESULTS SW8260B (TCL-VOLATILE ORGANICS)/SW8015 (DIESEL RANGE ORGANICS)/SW8082 PCB

Sample Location	Depth (ft)	Date Sampled	1,3-Dichlorobenzene (mg/kg)	Benzene (mg/kg)		Ethylbenzene (mg/kg)	Xylene (mg/kg)	4-Methyl-2-pentatone (mg/kg)	2-Butanone (mg/kg)	Acetone	Cyclohexane	Methylcyclohexane	Isopropylhenzene	Carbon disulfide	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	TPH (Gasoline Range Organics)	TPH (Diesel Range Organics
CK-W18B-17	17'	10/11/2006	NA NA	<0.0014	<0.0014	<0.0014	<0.0028	NA NA	NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA	(mg/kg) NA
CK-W19-7	7'	9/7/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
CK-W19-17	17'	9/12/2006	NA	<0.0017	0.0028	<0.0017	0.0104	NA	NA	NA	NA	NA	NA	NA NA	NA NA	NA	NA	NA	NA NA
CK-W19B-17	17'	10/12/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA NA	NA	NA NA
CK-W20-7	7'	9/7/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA NA	NA	NA NA	NA	NA	NA	NA NA
CK-W20-17	17'	9/12/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA ·	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA NA
CK-W21-17	17'	9/12/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	· NA	NA	NA	NA	NA
7																			
CK-F1	18'	8/18/2006	NA	<0.0015	0.0018	<0.0015	0.0153	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-F2	18'	8/28/2006	NA	<0.0015	<0.0015	0.0017	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA
CK-F3	18'	8/28/2006	NA	<0.0011	<0.0011	<0.0011	<0.0022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-F4	18'	9/7/2006	NA	0.015	0.011	0.01	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-F5	18'	9/12/2006	NA	0.064	8.6	7.5	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CK-F6	18'	9/12/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
																			_
C-CK-W1	7'	8/28/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W1	17'	8/28/2006	NA	<0.00072	<0.00072	<0.00072	<0.00144	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W2	7'	8/28/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W2	17'	8/28/2006	NA	<0.00071	<0.00071	<0.00071	<0.00142	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W3	7'	8/28/2006	NA	<0.00077	<0.00077	<0.00077	<0.00154	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W3	17'	8/28/2006	NA	<0.0008	<0.0008	<0.0008	<0.0016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W4	7'	8/28/2006	NA	<0.00069	<0.00069	<0.00069	<0.00138	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W4	17'	8/28/2006	NA	<0.00075	<0.00075	<0.00075	<0.0015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA .
C-CK-W5	7'	8/28/2006	NA	<0.00074	<0.00074	<0.00074	<0.00148	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-W5	17'	8/28/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-F1	18'	8/29/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-F2	18'	8/29/2006	NA	<0.0015	0.0022	<0.0015	0.0115	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-F3	18'	8/29/2006	NA	<0.0013	<0.0013	<0.0013	<0.0026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-F4	18'	8/29/2006	NA	0.0011	0.036	0.081	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C-CK-F5	18'	8/29/2006	NA	<0.0078	<0.0078	<0.0078	<0.0156	NA	NA	NA	NA	NA	· NA	NA	NA	NA	NA	NA	NA
CJKS-W1-7	7'	9/20/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKS-W2-7	7'	9/20/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA
CJKS-F1	8'	9/20/2006	NA	<0.0013	<0.0013	<0.0013	<0.0026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKS-F2	5'	9/20/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-W1-7	7'	9/15/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA .	NA
CJKN-W1B-7	7'	9/28/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-W1BE	7'	9/15/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-W2BF	7'	10/10/2006	NA	<0.0018	<0.0018	<0.0018	<0.0036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-W1-17	17'	9/15/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Н	SRA NC		5	0.20	14.40	20.00	20.00	3	0.79	2.74	20.00	NA	21.88	DL (P)	NA.	0.18	0.13	NA	NA

Davidson-Kennedy Facility 1195 Victory Drive Atlanta, Fulton County, Georgia TABLE 3: SOIL ANALYTICAL RESULTS SW8260B (TCL-VOLATILE ORGANICS)/SW8015 (DIESEL RANGE ORGANICS)/SW8082 PCB

Sample Location	Depth (ft)	Date Sampled	1,3-Dichlorobenzene (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	4-Methyl-2-pentatone (mg/kg)	2-Butanone (mg/kg)	Acetone (mg/kg)	Cyclohexane (mg/kg)	Methylcyclohexane (mg/kg)	Isopropylbenzene (mg/kg)	Carbon disulfide (mg/kg)	cis-1,2-Dichtoroethene (mg/kg)	Tetrachloroethene (mg/kg)	Trichloroethene (mg/kg)	TPH (Gasoline Range Organics) (mg/kg)	TPH (Diesel Range Organics (mg/kg)
CJKN-W2-7	7'	9/15/2006	NA NA	<0.0015	<0.0015	<0.0015	<0.003	NA NA	NA	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA
CJKN-W2B-7	7'	9/15/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA NA	NA	NA
CJKN-W2-17	17'	9/15/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-W3-7	7'	9/15/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-W3-17	17'	9/15/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA
CJKN-F1	8'	9/20/2006	NA	<0.0012	<0.0012	<0.0012	<0.0024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-F2	8'	9/20/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJKN-F3	8'	9/20/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W1	7'	9/6/2006	NA	<0.0018	<0.0018	<0.0018	<0.0036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W2	7'	9/6/2006	NA	<0.0018	<0.0018	<0.0018	<0.0036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W3	7'	9/6/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	. NA
CJ-W4	7'	8/28/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W5	7'	8/28/2006	NA	<0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W6	7'	8/28/2006	NA	<0.0015	<0.0015	<0.0015	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA
CJ-W7	7'	8/28/2006	NA	<0.00074	<0.00074	<0.00074	<0.00148	NA	NA ·	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W8	7'	10/24/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W9	7'	8/30/2006	NA	< 0.0014	<0.0014	<0.0014	<0.0028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W10	7'	8/30/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W11	7'	8/30/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W12	7'	8/30/2006	NA	<0.0018	<0.0018	<0.0018	<0.0036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-W13	7'	8/30/2006	NA	<0.0011	<0.0011	<0.0011	<0.0022	NA	NA	NA	NA	NA	NA	NA	NA	. NA	NA	NA	NA
CJ-W14	7'	9/15/2006	NA	<0.0010	<0.0010	<0.0010	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-F1	10'	9/8/2006	NA	<0.0019	<0.0019	<0.0019	<0.0038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-F2	10'	9/8/2006	NA	<0.002	0.0075	0.057	0.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA _	NA
CJ-F3	10'	9/8/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-F4	10'	9/8/2006	NA	<0.0025	<0.0025	<0.0025	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-F5	12'	9/8/2006	NA	<0.0017	0.012	0,011	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-F6	12'	9/8/2006	NA	0.0041	0.012	0.0068	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CJ-F7	12'	9/8/2006	NA	<0.002	0.0049	0.0052	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
T-1	8'	9/27/2006	NA	<0.0016	<0.0016	<0.0016	<0.0032	NA	NA	NA	NA	· NA	NA	NA	NA	NA	NA	<0.81	<6.7
T-2	8'	9/27/2006	NA	<0.0017	<0.0017	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.87	<6.7
HS	RA NC		5	0.20	14.40	20.00	20.00	3	0.79	2.74	20.00	NA	21.88	DL (P)	NA	0.18	0.13	NA	NA

NA = Not Applicable

NC = Notification Concentration

Note: Other VOC concentrations were BRL except for those noted above.

Project SE4294-001-001

PHASE II ENVIRONMENTAL SITE ASSESSMENT

DAVIDSON-KENNEDY COMPANY FACILITY 1195 VICTORY DRIVE ATLANTA, FULTON COUNTY, GEORGIA

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1.0 EXECUTIVE SUMMARY

In July 2005, KEMRON Environmental Services (KEMRON) completed a Phase II Environmental Site Assessment (ESA) at the Davidson-Kennedy Company Facility (the site), located at 1195 Victory Drive in Atlanta, Fulton County, Georgia. The subject property consists of approximately 10 acres and has been utilized as a rail car repair facility since the 1960's. Railcars are brought into the facility via a series of rail spurs for repair. Prior to this, the property was the headquarters for Florida Steel and Calvert Iron Works Company. The earliest known development of the property was by Hudson Brothers Steel Bridge Erectors. This information was obtained from a Sanborn Fire Insurance Map dated 1925.

KEMRON conducted a site inspection on July 8, 2005 in conjunction with site personnel. Numerous potential recognized environmental conditions (RECs) were identified at the subject property during the brief site visit. The RECs included the following:

- A former underground storage tank (UST) area. The USTs were reportedly closed by removal in the late 1980's. It is likely that no closure sampling data is available.
- A current above ground storage tank (AST) is used to store diesel fuel. The AST is properly housed in secondary containment and no obvious evidence of significant spillage was observed. A second AST at the same location was reportedly formerly used to store gasoline.
- Sandblasting debris has reportedly been disposed of beneath the large storage shed located
 immediately east of the main building. The sandblasting material was reportedly used to remove mill
 scale from steel and other metal products. There is the possibility that heavy metals may have leached
 from the mill scale. An area of stained soil was also visible under this shed.
- Areas of coal are located along the rail spur that enters the property from the main line. There is a possibility that lead and other heavy metals may have leached from coal in this area.
- Tanker cars and other rail cars were reportedly washed in this same area for some period of time
 ending approximately 15 years ago. There is a possibility that materials washed from the tankers and
 other cars may have impacted soil and groundwater conditions.
- An old transformer/substation is located to the West of the main building. Given the age of the substation, it is possible that PCB oils may have been used in the transformers.
- A paint storage area is located in a storage shed.
- A former loading dock area is located in the dilapidated shed located on the northwestern section the property.



 Given the age of the facility, it is possible that asbestos containing materials (ACM) and lead based paint were present in building materials at the property.

Subsequent to the site visit, KEMRON prepared a proposal to address potential impact to soil and groundwater at the site relating to the RECs outlined above. In addition, the proposal provided for the review of historical documentation to determine if additional RECs were present at the property and for an asbestos/lead based paint survey.

KEMRON installed six temporary groundwater monitoring wells and fifteen hand auger soil borings at the site from July 25 to July 28, 2005. Groundwater samples were collected on July 29, 2005 using low flow/low stress sampling techniques. Analytical results will be discussed in further detail later in this report.

Based on the results of the Phase II ESA, the concentrations of lead and various semi-volatile organic compounds (SVOCs) soil, and SVOCs in groundwater, requires the submittal of a Notification of Release to the Georgia Environmental Protection (EPD) Hazardous Site Response Act (HSRA) Program by the property owner within 30 days.



2.0 INTRODUCTION

The site is currently developed by the Davidson Kennedy Company railcar repair facility. The property consists of approximately 10 acres and is located along the Norfolk Southern railway near the intersection of Murphy Avenue and Victory Drive in Atlanta, Fulton County, Georgia. The facility is improved by one main metal framed building which houses the repair facility and office space. A storage building is located to the North of the main building, along with a dilapidated structure further to the North. A large pole type storage shed is located to the East of the main building. An abandoned brick building which formerly housed the offices of Florida Steel is located along Victory Drive. Two railroad spurs enter the property from the North and terminate in the main building. The eastern half of the property is partially wooded with heavy undergrowth or covered by kudzu. The property is bounded to the east by Lanier Drive. Figure 1 is a Site Location Map of the area with the subject site noted. A Site Map illustrating the subject property and pertinent site features is included as Figure 2.

2.1 PURPOSE

KEMRON was contracted by Bank of America/Davidson Kennedy Company to perform a Phase II ESA of the subject property located at 1195 Victory Drive. The purpose of the ESA was to investigate the potential environmental impact to the subject property from RECs identified during a site visit conducted by KEMRON on July 8, 2005. The RECs included the following:

- A former underground storage tank (UST) area. The USTs were reportedly closed by removal in the late 1980's. It is likely that no closure sampling data is available.
- A current above ground storage tank (AST) is used to store diesel fuel. The AST is properly housed in secondary containment and no obvious evidence of significant spillage was observed. A second AST at the same location was reportedly formerly used to store gasoline.
- Sandblasting debris has reportedly been disposed of beneath the large storage shed located immediately east of the main building. The sandblasting material was reportedly used to remove mill scale from steel and other metal products. There is the possibility that heavy metals may have leached from the mill scale. An area of stained soil was also visible under this shed.
- Areas of coal are located along the rail spur that enters the property from the main line. There is a possibility that lead and other heavy metals may have leached from coal in this area.



- Tanker cars and other rail cars were reportedly washed in this same area for some period of time
 ending approximately 15 years ago. There is a possibility that materials washed from the tankers and
 other cars may have impacted soil and groundwater conditions.
- An old transformer/substation is located to the West of the main building. Given the age of the substation, it is possible that PCB oils may have been used in the transformers.
- A paint storage area is located in a storage shed.
- A former loading dock area is located in the dilapidated shed located on the northwestern section the property.
- Given the age of the facility, it was possible that asbestos containing materials (ACM) and lead based paint were present in building materials at the property.

The Phase II ESA included the review of available historical information to determine if additional RECs may be present at the subject property. The information reviewed included Sanborn Fire Insurance Maps, aerial photographs, historical topographical maps, City Directory information and pertinent state and federal environmental databases.

This report was prepared on behalf of and for the exclusive use of Bank of America/Davidson Kennedy Company solely for use and reliance in the environmental assessment of this site. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior consent of Bank of America/Davidson Kennedy Company and KEMRON. Not withstanding anything to the contrary herein, any third party reliance is limited to the agreed upon scope of work by and between KEMRON and Bank of America/Davidson Kennedy Company.

2.2 SCOPE OF WORK / METHODOLOGY

KEMRON initially divided the Scope of Work into two tasks. Task One consisted of historical research to determine if additional RECs other than those noted during the July 8, 2005 site visit were present. Task Two consisted of the Phase II ESA to investigate the potential for impact to soil and groundwater conditions from the RECs previously identified and those initially identified during Task Two.



2.2.1 Historical Research

2.2.1.1 Sanborn Fire Insurance Maps

Three Sanborn Maps dated 1925, 1962 and 1978 were provided to KEMRON by Environmental Data Resources, Inc. (EDR). The 1925 Map shows the subject property as being developed by the Hudson Brothers Structural Steel Bridge Company with a residence on the Southeastern portion of the property. There is a railroad spur approximately in the same location as the present day spur. Structures are present along the spur in the 1925 Map.

The 1962 Map shows the site development being consistent with the current layout. A structure is shown on the Southeastern portion of the property as being a metal fabricating facility. The concrete driveway that is still visible along Victory Drive is believed to be the entrance to this former facility. Given the age and use of this former facility, it is considered a REC.

The 1978 Map depicts the site in its current configuration. No additional concerns were noted on the 1978 Map. Copies of the Sanborn Maps have been included as Appendix A.

2.2.1.2 Aerial Photographs

Aerial photographs dated 1940, 1968, 1972, 1986, and 1989 were provided to KEMRON by EDR. The 1940 photograph shows a building located in the Southeastern corner of the subject property. The 1968 photograph indicates that the building is no longer at this location, but either railcars or small sheds are shown in this area. Due to scale of the photograph, the exact nature of these objects is unknown. Similar objects are also visible to the North of this area. The remainder of the subject site appears much like as it does today. The 1972 photograph shows the current structures at the site and also some type of activity on the eastern half of the site. It is uncertain due to the scale, but the objects observed may be railcars. In the 1986 and 1989 photographs, the eastern half of the subject site is beginning to be overtaken by kudzu and other vegetation. Given the uncertainty of the nature of the objects observed on the Eastern half of the site, this area should also be considered an additional REC. Copies of the aerial photographs have been included as Appendix B.



2.2.1.3 Historical Topographic Maps

USGS Topographic Quadrangles Southwest Atlanta and East Point, dated 1954, 1968, 1973, 1993 and 1997 were reviewed as part of the assessment. Each of the maps shows the subject property being developed as industrial property. No additional RECs were identified upon the review of the historical topographic maps. Copies of the maps are included as Appendix C.

2.2.1.4 City Directory Information

City Directory information shows the target address as being listed as Calvert Iron Works from 1952 to 1957. From 1962 to 1967 the subject site is listed as Tri-State Steel Products (division of Florida Steel). The subject site is listed as Florida Steel from 1967 to 1977. The subject site is listed as Davidson-Kennedy starting in 1981. The Calvert Iron Works and Florida Steel operations should also be considered historical RECs due to the nature of the operations.

Bowers Sheet Metal Company, Inc. is listed at 1155 Victory Drive beginning in 1952. The Calvert Iron Works Shop is listed at 1155 Victory Drive in 1957. The listing for 1155 Victory Drive is not identified after 1957. It is believed that this address location is the former building shown on the aerial photographs. The driveway visible near the corner of the Victory Drive and Lanier Drive is most likely the former entrance to this facility. The former uses of 1155 Victory should also be considered a REC based on the former use of the property. A copy of the City Directory has been included as Appendix D.

2.2.1.4 State and Federal Databases

Federal and state regulatory agency databases were searched according to ASTM standards to identify registered facilities in the vicinity of the site and facilities that have the potential to affect the site. Environmental Database Resources, Inc. (EDR) performed the database searches and provided a database search report. The database search report lists facilities within a one-mile radius of the site that contain underground storage tanks (USTs), store or dispose of hazardous materials, or are the subject of environmental investigations or remediation under the direction of federal or state agencies. Maps showing the location of the identified facilities are also provided in the EDR Report.



ASTM requires the review of nine (9) federal databases. These databases are National Priority List (NPL), Proposed NPL, CERCLIS, CERC-NFRAP, CORRACTS, RCRIS-TSD, Resource Conservation and Recovery System Large Quantity Generator (RCRIS LQG), RCRIS Small Quantity Generator (RCRIS SQG), and Emergency Response Notification System (ERNS). ASTM requires the review of four (4) state environmental databases. These databases are State Hazardous Waste (SHW), State Landfill, Leaking Underground Storage Tank (LUST), and Underground Storage Tank (UST). EDR performed searches of supplemental federal and state databases as well. The supplemental databases are listed below if facilities registered in the databases are located within the search distance.

A total of three UST sites were listed in the information provided by EDR. These included the subject site, Ft. McPherson Building 164 and Central Food Management. Based on distance and topography, it was determined that the Ft. McPherson and Central Food Management sites were not likely to affect the environmental quality of the subject site. The former UST burial at the subject site was assessed as part of the Phase II ESA activities. One RCRIS SQG, Central Food Management, was identified within a ¼ mile radius of the site. As previously discussed, based on distance and topography, it is unlikely that this facility has effected the subject site. Three GA Non-HSI sites were also identified as 3232 Lakewood Avenue, McGean-Rohco, Inc. and a warehouse facility at 2181 Sylvan Road. Each of these sites is located between ½ mile and 1 mile of the site. Based on distance and/or topography, these sites are unlikely to affect the subject site.

A total of thirteen sites were identified by EDR as being unmappable based on inadequate information. Six of these sites are reportedly located at Ft. McPherson. Based on either distance and/or topography, it is unlikely that these facilities will affect the subject site. The remaining unmappable sites were determined to be either outside a one mile radius of the site or downgradient.

No new RECs were identified as part of the review of the state and federal databases. A copy of the EDR database report has been included as Appendix E.

2.2.2 Historical Research - Conclusions

The former metal fabricating facility shown on the 1962 Sanborn Map is considered a REC. It is assumed that this is the same facility listed as the Bowers Sheet Metal Company and Calvert Iron Works Shop as 1155 Victory Drive. Based on this development, a Change Order #1 was prepared to include additional soil and groundwater sampling in this area as part of the Phase II ESA.



The area in the Eastern and Northeastern section of the property shown on the 1940, 1968 and 1972 aerial photographs should also be considered a REC. Additional assessment should be conducted in this area to determine if impact to soil and groundwater has occurred due to past activities.

2.3 Phase II ESA

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2.3.1 Soil Sampling

The Phase II ESA Scope of Work included the installation of six temporary groundwater monitoring wells, the advancement of fifteen shallow hand auger soil borings, and an asbestos/lead based paint survey. Four temporary monitoring wells were originally proposed. One temporary well (TMW-3) was installed through or immediately adjacent to the former UST burial, two temporary wells (TMW-2 and TMW-4) were installed along the railroad spurs in the vicinity of where the washing of tanker cars reportedly was conducted, and the fourth (TMW-1) was installed hydraulically downgradient of the main building and railroad spurs. Subsequent to the review of the Sanborn Map described above, two additional temporary monitoring wells (TMW-5 and TMW-6) were installed in the vicinity of the former metal fabricating facility located on the Southeastern portion of the site (1155 Victory Drive). Six of the hand auger borings were installed along the railroad spurs in areas of visible staining, depressed areas or areas with relatively more visible coal. One hand auger boring (HA-4) was installed at the location of the former loading dock in the dilapidated building located on the Northeastern portion of the property. One boring (HA-13) was installed adjacent to the transformer pad located to the West of the main building. One boring (HA-1) was installed under the pole storage shed in the area of stained soil. Two borings (HA-8 and HA-12) were installed adjacent to the pile of mill scale located under the shed. Two borings (HA-5 and HA-15) were installed in the vicinity of the former metal fabricating facility located on the Southeastern portion of the property. Two of the borings (HA-6 and HA-14) were advanced adjacent to the AST.

A shallow soil sample (0-0.5 ft) was collected at each boring and temporary monitoring well location for RCRA Metals analysis. The hand auger borings were then advanced to a total of 2 ft bls, or refusal, whichever was the lesser depth. Soil samples were collected at 1 ft and 2 ft bls and field screened with a photo-ionization detector (PID). The sample that indicated the highest PID reading was submitted for laboratory analysis. The soil samples collected at the hand auger boring locations were submitted for various analyses based on the location of the boring. This information is summarized in the following table.



Boring Number	Boring Location	RCRA Metals	VOCs 8260	SVOCs 8270	DRO 8015	BTEX 8021B	PAHs 8270	PCBs
HA-1	Beneath Shed	X	X	X	X			
HA-2	Spur	X	X	X				
HA-3	Spur	X	X	X				
HA-4	Loading Dock Area	X	X	X				
HA-5	SE Portion Of Site	X	X	X				
HA-6	AST	X			X	X	X	
HA-7	Spur	X	X	X				
HA-8	Shed/ Millscale	X	X	X				
HA-9	Spur	X	X	X				
HA-10	Spur	X	X	X				
HA-11	Spur	X	X	X				
HA-12	Millscale	X						
HA-13	Transformer	X						X
HA-14	AST	X			X	X	X	
HA-15	SE Portion Of Site	X	X	X				

Soil samples were screened at 5 ft intervals during the installation of the temporary monitoring wells using a stainless steel split spoon sampler. The samples were field screened with a photoionization detector (PID) to determine the possible presence of volatile organic vapors. The sample exhibiting the highest PID reading was submitted for laboratory analysis for VOCs (8260) and SVOCs (8270). In the event PID readings exceeding background were not detected, the deepest sample collected from above the water table was submitted for analysis. The samples were obtained using a clean syringe and placed in pre-weighed and/or pre-preserved laboratory jars. Samples were placed in coolers and maintained at 4°C. Sample data were recorded on chain-of-custody forms. The samples and quality-assurance documentation were delivered via courier to Analytical Environmental Services in Chamblee, Georgia, for analysis. Sampling was conducted in accordance with EPA Region IV *Environmental Investigations Standard Operating Procedures and Quality Assurance Manual* (1997).

2.3.2 Groundwater Sampling

Groundwater was encountered at approximately 19 to 20 feet below land surface (bls) at the temporary well locations located on the upper portion of the property (TMW-1 through TMW-4). Groundwater was



encountered at approximately 12 ft bls at the TMW-5 and TMW-6 well locations. The temporary monitoring well were drilled approximately 6 to 10 ft into the groundwater table using 4.25" hollow stem augers and standard drilling methods. The temporary monitoring wells were completed with 10 to 20 ft lengths of slotted PVC screen. Clean filter sand was packed around the screen and riser to a depth of 2 ft above the screen, followed with a two foot bentonite seal. Immediately following installation, the temporary monitoring well was developed by manual bailing of approximately three well volumes of formation water. Groundwater samples were collected using low flow/low stress sampling procedures to minimize the turbidity in the groundwater samples. Soil boring logs are included in Appendix F. The locations of temporary monitoring wells and soil borings are shown on Figure 2.

Groundwater samples were collected using the low-flow/low-stress method in order to minimize the amount of turbidity in the sample. Groundwater quality measurements, turbidity readings and flow rates are summarized on the Groundwater Sampling Logs included as Appendix I.

Individuals performing this assessment are Environmental Professionals as defined by ASTM Standard E 1903-97, *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process.* Field procedures were conducted in accordance with a site-specific health and safety plan.



3.0 ASBESTOS AND LEAD BASED PAINT SURVEY

3.1 Asbestos Survey

KEMRON mobilized to the site on July 25, 2005 to collect samples of suspect asbestos containing materials. The materials identified as suspect to contain asbestos included, wallboard materials, vinyl floor tiles and mastic, ceiling tile, and pipe wrap insulation. No sprayed on fireproofing was identified. All roofing materials consisted of asphalt shingles and corrugated tin. No roofing material samples were obtained due to the current occupancy of the facility.

KEMRON began the inspection by conducting a walk through of the facility which is comprised of several interconnected steel framed buildings on the north / central portion of the site, and a separated brick two story building on the southwest portion of the site. To aid in identification of samples, the facility was divided into four sections (see Site Plan). In conjunction with our Phase II ESA, KEMRON conducted an inspection of the subject buildings for suspect asbestos containing materials. Building (2) was constructed around the turn of the century and consists of wood framed / brick exterior construction with a pitched asphalt shingled roof. The building is in disrepair and has been locked and secured for many years. KEMRON was able to safely inspect only approximately 70 percent of the facility due to collapsed flooring and roof systems.

Nine samples of suspect asbestos containing materials were collected in a statistically random manner, and transported under chain of custody to Analytical Environmental Services, Inc. (AES). The samples were analyzed for asbestos fibers using polarized light microscopy. Laboratory analysis data sheets are included in Appendix G. Asbestos was detected in all samples of 9" x 9" floor tiles and the mastic used to secure the tiles. The asbestos containing floor tiles are located throughout the first and second floor of the facility. The tiles were in poor condition and have been subject to rain and weather for many years. In their current condition they would not be considered friable. However, these materials could easily become friable if disturbed. Asbestos was also identified in the two samples of pipe wrap. The pipe wrap contained 20 percent Chrysotile asbestos and was located in the basement around an approximate four inch furnace pipe. The pipe wrap was in very poor condition with little remaining outer protective jacket. The pipe wrap would be considered friable (easily reduced to powder with finger pressure).

The materials identified as containing asbestos were in very poor condition. We recommend that the ACMs be properly abated by a licensed asbestos abatement contractor prior to any disturbance. All efforts should be

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made to secure the building to avoid incidental exposure to these materials. The asbestos inspection of the subject building was not intended to quantify the asbestos containing materials present in the building for demolition purposes. Destructive type sampling was not used as part of our inspection. Some obscured ACMs may be present beneath collapsed flooring, roofing systems etc. An additional basement area was also identified on the eastern portion of the building which could not be safely inspected. Additional pipe wrap, TSI (Thermal System Insulation) may be present. Further inspection of the building would be necessary before any demolition activities are conducted.

3.2 Lead Based Paint Survey

Concurrent to our asbestos inspection, KEMRON inspected the buildings for suspect lead based paint. The objective of our inspection was to provide a preliminary screening through laboratory analysis of subject painted surfaces. Our investigation was not designed to delineate, or perform a risk assessment of on-site conditions. As previously mentioned, the facility consists of several interconnected buildings to the north and a separated two story building to the south. The facility was divided into four zones or building areas to aid in sample location/description (see Site Plan). The northern interconnected buildings were steel framed with corrugated tin walls and roof systems. Many of these metallic surfaces were painted with numerous layers dating back to the turn of the century. Much of the paint on the steel framing was heavily oxidized and the beams were rusting. KEMRON utilized a mechanical lift truck to gain access to elevated interior beams / painted surfaces. Paint conditions ranged from very poor (loose, flaking) to completely intact.

A total of ten paint samples were randomly collected throughout the four zones of the facility. Laboratory results were obtained on August 2, 2005. All paint samples contained some percentage of lead by weight. Six of the ten samples were above 0.5 percent lead by weight and would be considered lead based. Lead percentages in these six samples ranged from 9 to 33 percent, and were distributed in all four zones of the facility. Due to the age of the subject facility, and the numerous paint layers and colors present, KEMRON suggests all painted surfaces be considered lead based. Prior to disturbance, renovation, or demolition, a risk assessment and thorough delineation should be conducted by an EPD certified lead-based paint firm.

4.0 FINDINGS AND CONCLUSIONS

KEMRON has performed a Phase II ESA at the Davidson-Kennedy Facility, located at 1195 Victory Drive in Atlanta, Georgia in conformance with the suggested practices of ASTM Practice E1903-97. Any exceptions to or deletions from this practice are described in Section 2 of this report.

4.1 Local Geology/Hydrogeology

The lithology of the soils underlying the site were determined to be primarily silty clays based on Phase II ESA drilling activities. Saprolitic zones were noted at depths ranging from 10 to 25 ft bls. Rock was not encountered at the site during drilling activities. Depths to water ranged from approximately 12 ft below grade on the lower eastern portion of the property to approximately 20 ft below grade in the vicinity of the main building and the railroad spur area. Varying amounts of fill and debris were encountered during the installation of TMW-5 and TMW-6. Soil Boring Logs are included as Appendix F.

4.2 Soil Analytical Results

Detectable concentrations of arsenic, barium, cadmium, chromium, lead and mercury were detected in various soil samples collected from the hand auger boring and temporary monitoring well locations. Metals are naturally occurring, however, background concentrations were not established as part of this Phase II ESA. Concentrations of several metals were detected in concentrations anticipated to exceed naturally occurring background concentrations. Lead was the only metal detected above the respective Notification Concentration (NC) as established by the Georgia EPD Hazardous Site Response Act (HSRA) Program. The NC for lead of 400 mg/kg was exceeded at the TMW-2, TMW-4, HA-7, HA-8, HA-10 and HA-13 sampling locations. Of the lead concentrations exceeding the NC, the concentrations ranged from 509 mg/kg at TMW-4 to 3,320 mg/kg at TMW-2. Table 1 is a summary of metals results in soil. Lead concentrations in soil are shown on Figure 3. Laboratory analytical reports and chain of custody documentation are included as Appendix H. The source of the lead impact is likely associated with the former Hudson Brothers, Calvert Iron Works and Florida Steel operations. The millscale pile located under the pole shed at the site is also believed to be a source of lead based on the concentrations detected at the HA-8 sampling location.

Numerous SVOC compounds were detected in soil samples collected at TMW-5, TMW-6, HA-1, HA-2, HA-3 and HA-11. The class of compounds commonly referred to as polynuclear aromatic hydrocarbons (PAHs)



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constitute vast majority of the detectable SVOCs at these sampling locations. Concentrations of chrysene, benzo(a) pyrene, indeno (1,2,3-cd) pyrene, benzo(k) fluoranthene, and benzo (a) anthracene were detected at levels exceeding the respective NC as established by the Georgia EPD HSRA Program at the TMW-5, TMW-6, and HA-11 sampling locations. A concentration of 0.56 mg/kg isophorone was also detected at the HA-1 location. This concentration exceeds the HSRA NC for isophorone of 0.19 mg/kg. Isophorone is a solvent primarily used in the printing industry. It is also used in dissolving resins, coil coatings and metal decorative coatings. Table 2 is a summary of SVOC results in soil. Figure 4 is a Soil Quality Map. Laboratory analytical reports and chain of custody documentation are included as Appendix H. The source of the SVOC concentrations at the HA-1 and HA-11 sampling locations is most likely associated with railroad operations. It is uncertain if the SVOC impact to soil and groundwater in the vicinity of TMW-5 and TMW-6 originated from the activities at the former metal fabricating facility located at 1155 Victory Drive. The soils encountered during the installation of TMW-5 and TMW-6 produced odors similar to creosote. Based on the available date, it is not possible to determine the source of the isophorone.

Minor concentrations of toluene were detected at the HA-2, HA-6 and HA-14 locations. A trace concentration of xylene was also detected at the HA-2 location. It is believed these compounds are petroleum related. The concentrations of toluene and xylenes are significantly less than the respective HSRA NC. Soil VOC concentrations are summarized in Table 3 and shown on Figure 4. Copies of the laboratory analytical reports and chain of custody documentation are included as Appendix H.

DRO concentrations of 93 mg/kg and 270 mg/kg were detected at sampling locations HA-6 and HA-1, respectively. The DRO concentrations detected at the HA-6 location are believed to be associated with the operation of the AST. The DRO concentrations detected at the HA-1 location are believed to be associated with the stained area observed beneath the pole shed. DRO concentrations in soil are summarized in Table 3 and shown on Figure 4. Copies of the laboratory analytical reports and chain of custody documentation are included as Appendix H.

PCB concentrations were below detection limits (BDL) in the soil sample collected at the HA-13 location adjacent to the transformer pad. Soil PCB concentrations are summarized in Table 3. Copies of the laboratory analytical reports and chain of custody documentation are included as Appendix H.

4.3 Groundwater Analytical Results

Barium was the only metal detected in groundwater samples collected from TMW-1 through TMW-6. The concentrations ranged from 0.292 mg/L at TMW-5 to 0.029 mg/L at TMW-6. These concentrations are believed to represent naturally occurring background concentrations and do not constitute a reportable HSRA event. Laboratory analytical reports and chain of custody documentation are included as Appendix H.

VOC concentrations were BDL in each of the groundwater samples collected with the exception of a 1,2-dichloroethene (DCA) concentration of 9 ug/L at TMW-3. The Maximum Contaminant Level (MCL) for DCA is 5 ug/L. DCA is typically related to solvents, or is encountered as a breakdown product of other solvents such as trichloroethene (TCE) or tetrachloroethane (PCE). However, TCE and PCE were not detected in any soil or groundwater samples collected at the site. DCA was utilized as an additive in gasoline for a short period of time in the 1980's. TMW-3 is located at the former gasoline/diesel UST burial. Concentrations of typical petroleum constituents (i.e. BTEX) were not reported in the soil or groundwater sample collected at this location. Based on the available data, the exact source of the DCA cannot be determined. VOC analytical results for groundwater are summarized in Table 5 and shown on Figure 5. Laboratory analytical reports and chain of custody documentation are included as Appendix H.

SVOC concentrations were BDL in the groundwater samples collected from temporary monitoring well locations TMW-1 through TMW-4 and TMW-6. Detectable concentrations of several SVOC compounds were detected at the TMW-5 location. These compounds included chrysene, naphthalene, anthracene and pyrene among others. The most elevated concentrations were 2,900 ug/L naphthalene, 620 ug/L acenaphthene, 320 ug/L fluorene, and 310 ug/L phenanthrene. MCLs have not been established for these compounds. These compounds are typically associated with diesel fuel, heavy petroleum products, and as a combustion byproduct. SVOC analytical results for groundwater are summarized in Table 6 and shown on Figure 5. Laboratory analytical reports and chain of custody documentation are included as Appendix H.

4.4 Groundwater Flow Direction

The top of casing (TOC) elevation of each temporary monitoring well was surveyed to the nearest 0.01 ft using a laser level and survey rod. Depth to groundwater measurements were collected on July 29, 2005 using an electronic slope indicator. Depths to groundwater ranged from 22.06 ft at TMW-1 to 12.12 ft at TMW-6.



Groundwater elevation data is summarized in Table 7. The TOC elevations and depths to water were used to devise a Potentiometric Surface Map for the site which has been included as Figure 6. Groundwater flow at the site is to the southeast, which correlates well with surface topography.

4.5 Water Well Survey

KEMRON conducted a water well survey to determine if drinking water points of withdrawal were located within the applicable radius as determined by the Georgia EPD HSRA Program. Given the nature of the compounds detected, the purpose of the survey was to determine if readily identifiable drinking water supply wells were located within a three mile radius of the site. KEMRON reviewed available USGS well records, interviewed local officials and conducted a visual reconnaissance of the area. A total of twenty-five wells were identified within a three-mile radius of the site. Of these, eight are located at Ft. McPherson to the west of the subject site. All of these wells were to determined to be upgradient of the subject site based on the measured groundwater flow direction to the Southeast. Eleven private wells were identified in the City of East Point, approximately 1.75 miles to the Southwest. These wells are also upgradient of the site. The locations of these wells are shown on Figure 1.

The visual reconnaissance revealed the presence of three additional wells. These wells are identified as the following:

- U.S. Plating Burn Site 78 Milton Avenue, Atlanta, Georgia
- Former State Nursery/Brown Transport Constitution Road, Atlanta, Georgia
- Mrs. R. Lombard Rhinehall Street, Atlanta, Georgia

The closest well in proximity to the site is located approximately 1,000 feet to the Southwest of the site on Ft. McPherson. This well is upgradient of the site as well. No readily identifiable wells were discovered within a 2 mile radius downgradient of the site. Water well documentation has been included as Appendix J.

4.6 Shadow Scoring

The Georgia EPD HSRA Program utilizes the Reportable Quantities Screening Method (RQSM) to determine if a release of reportable quantity has occurred at a site. A score for on-site exposure pathway (soil) and groundwater pathway are calculated. If the threshold for either pathway is exceeded, the GA EPD can place



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the site on the Hazardous Site Inventory (HSI).

The on-site exposure pathway determines the risk associated with exposure to compounds detected in soil. Variables in this equation include the toxicity of the compound detected, the depth of the impact, the cover in the area of the impact and the distance to the nearest resident individual. KEMRON conducted shadow scoring for lead in soil since it has the highest toxicity value of the compounds detected at the site. KEMRON assumed that the distance to the nearest resident individual was less than 300 ft given the proximity of the TMW-5 and TMW-6 areas to the houses located along Lanier Drive. The RQSM calculation for lead exceeds the On-Site Exposure Threshold Value of 20. Copies of the RQMS calculations are included as Appendix I.

The groundwater exposure pathway determines the risk associated with impact to drinking water supplies from the compounds detected in the groundwater at the site. The determining factors associated with this score are the toxicity of the compound and the distance to drinking water supplies. KEMRON conducted shadow scoring for benz(a) anthracene since it represented the highest toxicity value for the compounds detected in groundwater and 1,2-dichloroethane since it was detected in a concentration exceeding the MCL. Toxicity values have not been assigned to many of the compounds detected. Under this scenario, a default value of 4 is utilized in the calculation. The value of 8 for benz(a)anthracene represents a more conservative approach. Based on the results of the well survey described above, the closest drinking water wells identified were located approximately ½ mile from the site at Ft. McPherson. However, these wells are upgradient of the site based on the measured groundwater flow direction to the Southeast. The closest identified drinking water well located downgradient of the site is between 2 and 3 miles. Utilizing this well location, the RQSM scores for both benz(a) anthracene and 1,2-dichloroethane are below the threshold of 10 for the Groundwater Pathway. Copies of the RQSM calculations are included as Appendix I.

4.7 Recommendations

Based on the concentrations of lead and SVOC compounds detected in soil exceeding the respective HSRA NC, and the detectable concentrations of SVOC compounds and 1,2-dichloroethane in groundwater, a Release Notification must be submitted to the Georgia EPD HSRA Program by the property owner within 30 days of knowledge of the release.

The Georgia EPD HSRA rules provide for the remediation of soils to below the respective NC in lieu of the submittal of a Release Notification. This would require the excavation and disposal of soil containing



concentrations exceeding an NC to below the NC value. Given the sporadic lead concentrations, additional delineation would be required to determine the approximate tonnages of soil required for disposal. Based on the groundwater pathway score being less than the applicable threshold, this option, if successfully completed, may prevent the site from being listed on the HSI.

Due to the impact encountered at the TMW-5 and TMW-6 locations coupled with the information obtained from the aerial photographs, it is recommended that additional assessment be conducted to the North of this area where past site activities were noted in the aerial photographs.

It is recommended that the millscale pile be excavated and properly disposed of. It is believed that the millscale is one source of the lead detected during the Phase II ESA. Additional sampling and analysis of the millscale would be required in order to determine if the material is a hazardous waste.

The DRO concentrations detected at the HA-6 sampling location (AST) are reportable to the Georgia Geologic Survey (GGS). However, given the minor DRO concentrations detected and that the only trace concentrations of BTEX constituents were detected, it is likely that no additional investigation will be required by the GGS. It is recommended that documentation pertaining to the well survey and a copy of this Phase II Report be submitted with the Notification of Release.

The DRO concentrations detected at the HA-1 location are believed to be associated with the stained area observed during the July 27, 2005 site visit. Based on the area of the stain, it is not recommended that this release be reported to a regulatory body. It is recommended that the DRO concentrations exceeding 10 mg/kg be excavated and properly disposed of. The Georgia EPD Spills Response Group typically recommends that DRO be remediated to less than 10 mg/kg in response to surface spills. This same area also contains isophorone at concentrations greater than the respective HSRA NC, so any excavation of DRO containing soils would also remediate isophorone.

Due to the age of the subject facility, and the numerous paint layers and colors present, KEMRON suggests all painted surfaces be considered lead based. Prior to disturbance, renovation, or demolition, a risk assessment and thorough delineation should be conducted by an EPD certified lead-based paint firm.

The materials identified as containing asbestos were in very poor condition. We recommend that the ACMs be properly abated by a licensed asbestos abatement contractor prior to any disturbance. All efforts should be



made to secure the building to avoid incidental exposure to these materials. The asbestos inspection of the subject building was not intended to quantify the asbestos containing materials present in the building for demolition purposes. Destructive type sampling was not used as part of our inspection. Some obscured ACMs may be present beneath collapsed flooring, roofing systems etc. An additional basement area was also identified on the eastern portion of the building which could not be safely inspected. Additional pipe wrap, TSI (Thermal System Insulation) may be present. Further inspection of the building would be necessary before any demolition activities are conducted.

Due to the uncertainty of whether impacts to soil and groundwater would be encountered during the Phase II ESA, drill cuttings were placed on plastic and stockpiled adjacent to the temporary monitoring well location. Purge water from the wells was placed in 55 gallon drums. Based on the analytical results, the stockpiled drill cuttings and purge water should be characterized and properly disposed of.

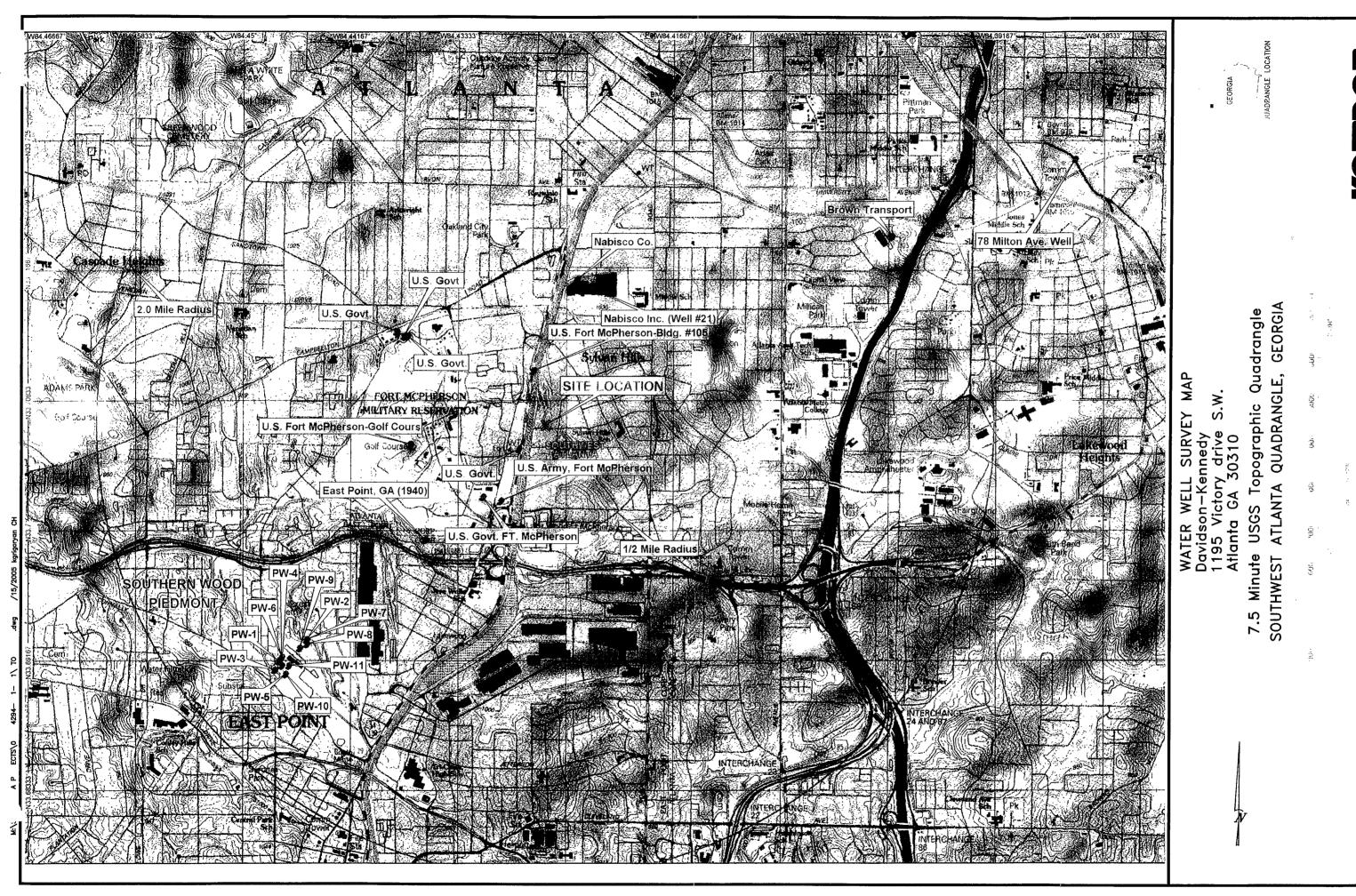


5.0 LIMITATIONS

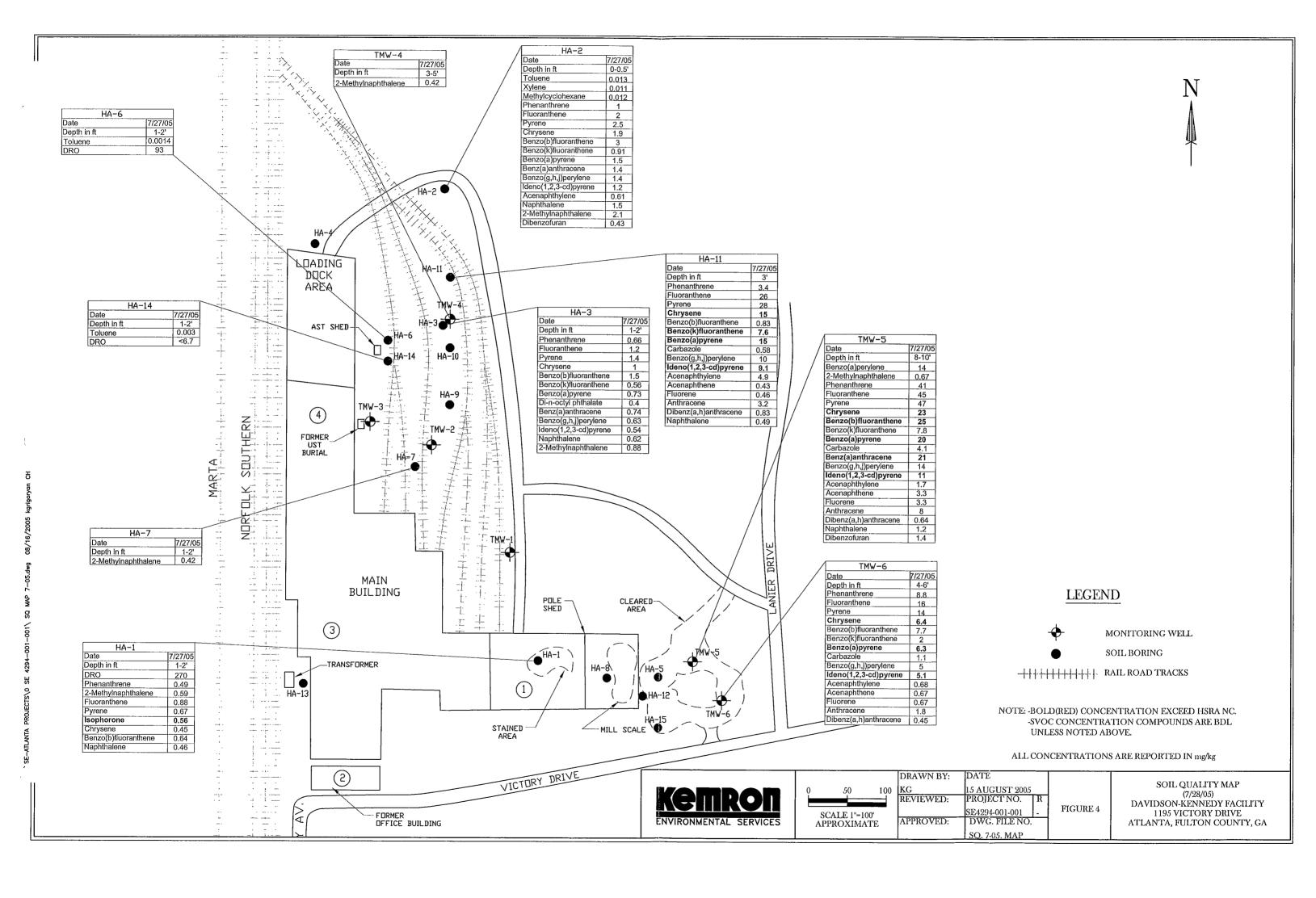
This Phase II ESA is consistent with the scope and limitations of ASTM Practice E 1903-97. KEMRON's assessment is solely based the scope of work described herein. No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions that may affect a site. This Phase II was performed with a reasonable and customary standard of care; however, under no circumstances will any condition that failed to surface during the course of the assessment be a liability of KEMRON or result in cost.

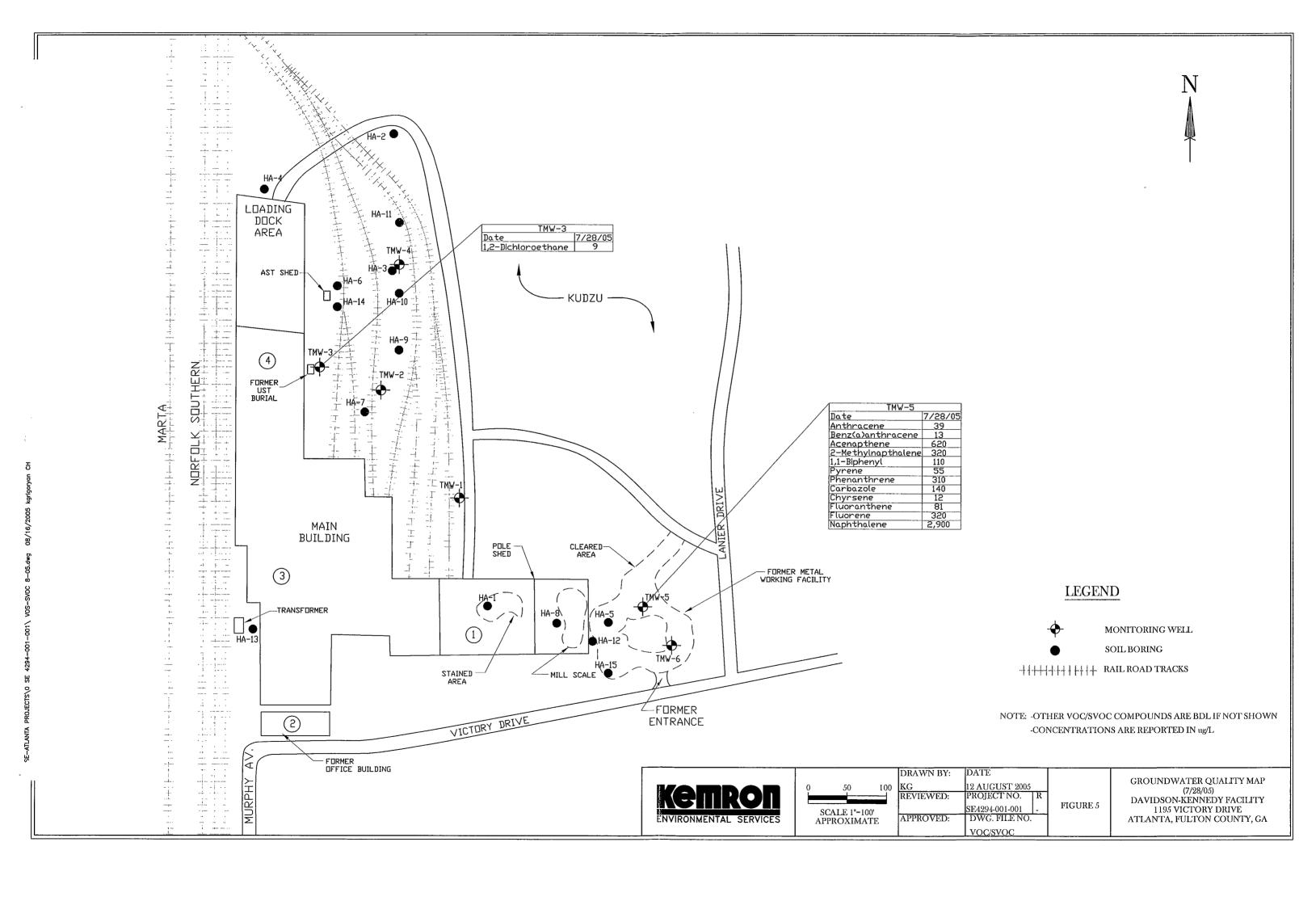
No other warranty or guarantee is expressed or implied. This report must be considered in its entirety.





ENVIRONMENTAL SERVICES





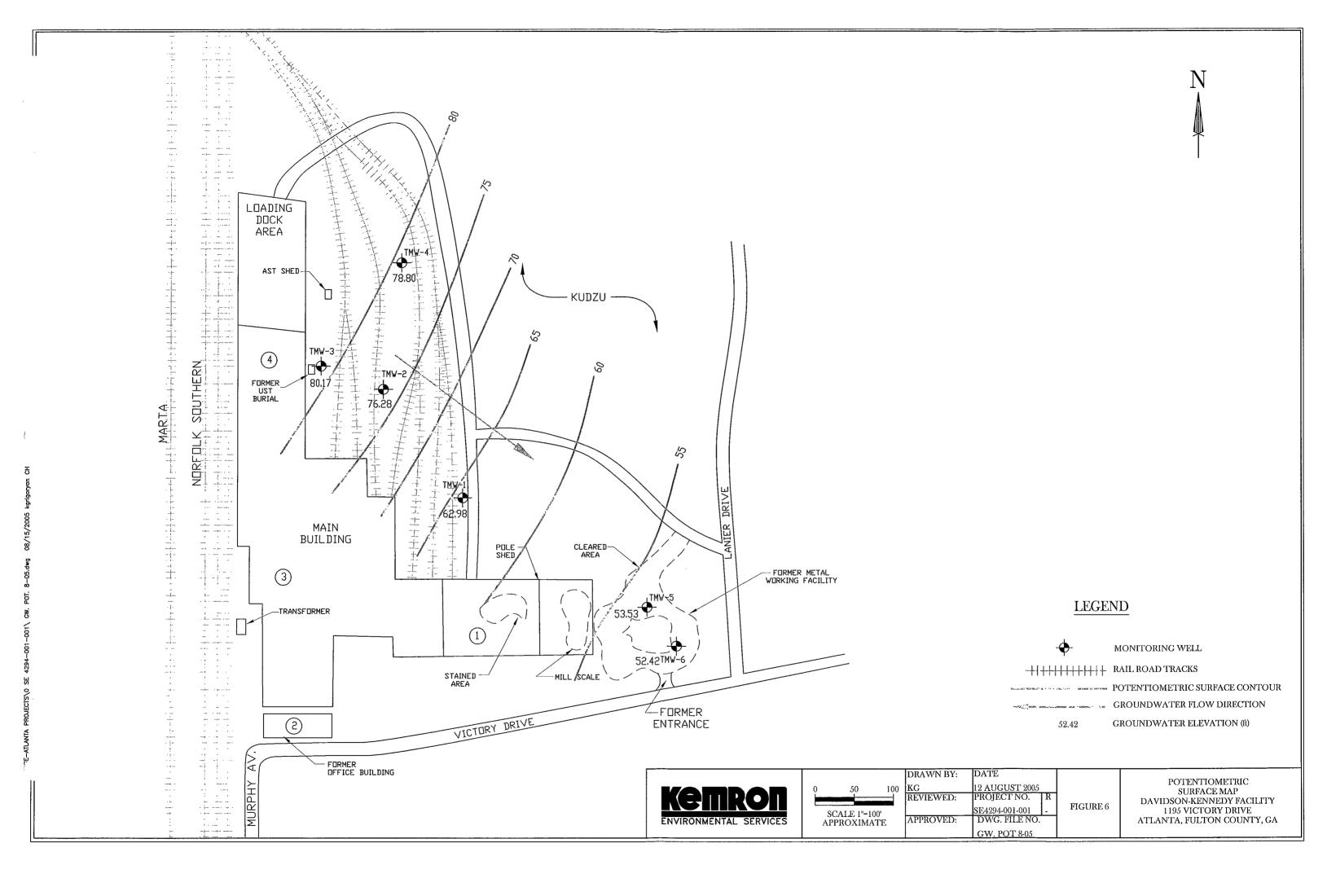


TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample	Depth	Date	Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury
Location	(ft)	Sampled	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
TMW-!A	0.5	7/25/2005	<3.34	136.0	<1.67	84.0	39.0	<3.34	<1.67	<0.0998
TMW-2A	0.5	7/26/2005	4.95	1,710.0	<2.29	101.0	3,320	<4.58	<2.29	<0.0992
TMW-3A	0.5	7/26/2005	<3.7	48.0	<1.85	57.3	34.3	<3.7	<1.85	<0.0988
TMW-4A	0.5	7/26/2005	7.63	149.0	<2.24	79.6	509	<4.48	<2.24	0.17
TMW-5A	0.5	7/26/2005	<4.20	68.4	<2.10	34.8	161.0	<4.2	<2.10	<0.099
TMW-6A	0.5	7/27/2005	<4.79	102.0	<2.40	17.1	217.0	<4.79	<2.40	0.18
HA-1A	0.5	7/25/2005	6.85	470.0	<1.64	66.6	325.0	<3.28	<1.64	<0,0982
HA-2A	0.5	7/26/2005	8.55	95.2	<2.19	39.9	204.0	<4.39	<2.19	0.17
HA-3A	0.5	7/26/2005	4.58	115.0	<1.71	74.9	202.0	<3.42	<1.71	<0.0988
HA-4A	0.5	7/27/2005	<4.85	107.0	<2.42	25.7	180.0	<4.85	<2.42	<0.0996
HA-5A	0.5	7/26/2005	<2.97	72.8	<1.48	10.3	50.8	<2.97	<1.48	<0.098
HA-6A	0.5	7/27/2005	<4.36	139.0	<2.18	141.0	106.0	<4.36	<2.18	<0.0992
HA-7A	0.5	7/29/2005	<4.14	103.0	<2.07	60.1	527	<4.14	<2.07	<0.0994
HA-8A	0.5	7/27/2005	7.80	120.0	2.41	93.6	1,410	<4.54	<2.27	<0.0984
HA-9A	0.5	7/27/2005	<4.69	81.5	<2.34	51.3	149.0	<4.69	<2.34	<0.0986
HA-10A	0.5	7/27/2005	6.98	77.4	<2.17	83.6	704	<4.35	<2.17	<0.0994
HA-11A	0.5	7/27/2005	9.45	99.3	<2.32	41.5	166.0	<4.64	<2.32	<0.0996
HA-12A	0.5	7/28/2005	<2.87	1,930.0	<1.43	77.6	197.0	<2.87	<1.43	<0.0996
HA-13A	0.5	7/28/2005	38.80	168.0	3.79	54.0	549	<3.99	<2.00	<0.10
HA-14A	0.5	7/27/2005	7.28	124.0	<2.37	65.4	161.0	<4.73	<2.37	<0.0988
HA-15A	0-5	7/27/2005	<3.83	65.6	<1.91	35.9	50.4	<3.83	<1.91	<0.0994
HSF	RA NC		41	500/BG	39	1,200	400	36	10/BG	17

BRL = Below Reporting Limits

NA = Not Applicable

Davidson-Kennedy Facility

1195 Victory Drive Atlanta, Fulton County, Georgia

TABLE 3: SOIL ANALYTICAL RESULTS SW8260B (TCL-VOLATILE ORGANICS)/SW8015 (DIESEL RANGE ORGANICS)/SW8082 PCB

Sample	Depth	Date	1,3-Dichlorobenzene	Benzene	Toluene	Ethylbenzene	Xylene	4-Methyl-2-pentatone	2-Butanone	Acetone	Cyclohexane	Methylcyclohexane	Isopropylbenzene	Carbon disulfide	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	PCB	DRO
Location	(ft)	Sampled	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mġ/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg.kg)	(mg/kg)
TMW-1	19-21	7/25/2005	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.015	<0.015	<0.15	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	NA	NA
TMW-2	14-16	7/26/2005	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.015	<0.015	<0.15	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	NA	NA
TMW-3	19-21	7/26/2005	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.016	<0.016	<0.16	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	NA	NA
TMW-4	19-21	7/26/2005	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.016	<0.016	<0.160	<0.0078	<0.0078	<0.0078	<0.0078	<0,0078	<0.0078	<0.0078	NA	NA
TMW-5	8-10	7/26/2005	<0.007	<0.007	<0.007	<0.007	<0.007	<0.014	<0.014	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	NA	NA
TMW-6	4-6	7/27/2005	<0.0081	<0.0081	<0.0081	<0.0081	<0.016	<0.016	<0.081	<0.16	<0.0081	<0.0081	<0.0081	<0.016	<0.0081	<0.0081	<0.0081	NA	NA
HA-1	1	7/27/2005	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.014	<0.014	<0.14	<0,0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	NA	270
HA-2	1	7/26/2005	<0.010	<0.010	0.013	<0.010	0.011	<0.020	<0.020	<0.20	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	NA	NA
HA-3	1	7/26/2005	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.019	<0.019	<0.19	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	NA	NA
HA-4	, 3	7/27/2005	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.15	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	NA	NA
HA-5	0.5	7/26/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NÄ	NA	NA	NA	NA
HA-6	1	7/27/2005	NA	<0.0013	0.0014	<0.0013	<0.0013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93
HA-7	1	7/27/2005	<0.0072	<0.0072	<0.0072	<0.0072	0.008	<0.014	<0.014	<0.14	<0.0072	0.012	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	NA	NA
HA-8	3	7/27/2005	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.017	<0.017	<0.17	<0.0086	<0.017	<0.0086	<0.0086	<0.0086	<0,0086	<0.0086	NA	NA
HA-9	3	7/27/2005	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.015	<0.15	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	NA	NA
HA-10	3	7/27/2005	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.013	<0.013	<0.13	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	NA	NA
HA-11	3	7/27/2005	<0.007	<0.007	<0.007	<0.007	<0.007	<0.014	<0.014	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0,007	<0.007	NA	NA
HA-12	0.5	7/27/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-13	0.5	7/28/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.033	NA
HA-14	3	7/27/2005	NA	<0.0017	0.003	<0.0017	<0.0017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<6.7
HA-15	1	7/27/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	HSRA NC		5	0.20	14.40	20.00	20.00	3	0.79	2.74	20,00	NA	21.88	DL (P)	NA	0.18	0.13	NA	NA

NA = Not Applicable

NC = Notification Concentration

Note: Other VOC concentrations were BRL except for those noted above.

TABLE 2: SOIL ANALYTICAL RESULTS SW8270C (TCL-SEMIVOLATILE ORGANICS)

Sample	Depth	Date	Phenanthrene	Fluoranthene	Pyrene	Isophorone		Benzo(b)fluoranthene	, ,	Benzo(a)pyrene	Carbazole	, ,	1 ''		Indeno(1,2,3-cd)pyrene							Dibenzofuran	2-Methylnaphthalene	Benzo(g,h,i)perylene (mg/kg)
Location	(ft)	Sampled	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)	
TMW-1	19-21	7/25/2005	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
TMW-2	14-16	7/26/2005	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33
TMW-3	19-21	7/26/2005	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
TMW-4	19-21	7/26/2005	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0,420	<0.33
TMW-5	8-10	7/26/2005	41.000	45.000	47.000	<0.33	23.00	25.00	7.800	20.00	4.100	<0.33	21.00	14.0	11.0	1.70	3.30	3.30	8.0	0.64	1.20	1.40	0,670	14.000
TMW-6	4-6	7/27/2005	8.800	16.000	14.000	<0.33	6.40	7.70	2.000	6.30	1.100	<0.33	<0.33	5.00	5.1	0.68	0.67	0.67	1.8	0.45	<0.330	<0.33	<0.33	<0.33
HA-1	1	7/27/2005	0.490	0.880	0,670	0.56	0.45	0.64	<0.33	0.39	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.46	<0.33	0.590	<0.33
HA-2	1	7/26/2005	1.000	2.000	2.500	<0.33	1.90	3.00	0.910	1.50	<0.33	<0.33	1.400	1.40	1.20	0.61	<0,33	<0.33	<0,33	<0.33	1.50	0.43	2.100	<0.33
HA-3	1	7/26/2005	0.660	1.200	1.400	<0.33	1.00	1.50	0.560	0,73	<.330	0,400	0.740	0.63	0.54	<0.33	<0.33	<0.33	<0.33	<0.33	0.62	<0.33	0.880	<0.33
HA-4	3	7/27/2005	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	. <0,33 .	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
HA-5	0.5	7/27/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NΑ	NA	NA	NA
HA-6	1	7/27/2005	<0.33	<0.33	<0.33	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
HA-7	1	7/27/2005	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.420	<0.33
HA-8	3	7/27/2005	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
HA-9	3	7/27/2005	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
HA-10	3	7/27/2005	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
HA-11	3	7/27/2005	3,400	26.000	28.000	<0.33	15.00	0.830	7,60	15.00	0.580	<0.33	<0.33	10.00	9.10	4.90	0.43	0.46	3,20	0.83	0.49	<0.33	<0.44	<0.33
HA-12	0.5	7/28/2005	Ν̈́Α	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-13	Ö.5	7/27/2005	NA	NA	NA	NA	NA	NA	NA	NN	NA	NA	NA.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-14	3	7/27/2005	<0.33	<0.33	<0.33	NA	<0.33	<0.33	<0,33	<0,33	NA.	NA	<0,33	NA	<0,33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	NA	<0.33	NA
HA-15	1	7/27/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	HSRA NC		110.00	500,00	500.00	0.19	5,00	5.00	5.00	1.64	NE	50,00	5.00	500.00	5.00	130.00	300.00	360.00	500,00	5.00	100.00	NE	NE	500.00

1195 Victory Drive Atlanta, Fulton County, Georgia Davidson mennedy Facility Phase II ESA

TABLE 4: GROUNDWATER ANALYTICAL RESULTS
(VOC. Method 8260B)

). 	VOC IMELLIOU 62001B)	JB)			
Sample	Date	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-Dichloroethane	Trichloroethene	Vinyl Chloride	Acetone	Tetrachloroethene
Location	Sampled	ug/L	ug/L	ng/L	ug/L	ng/L	ng/L	ng/L	ng/L	ng/L
TMW-1	7/29/2005	<5.0	<5.0	<5.0	<5.0	<5.0	0:5>	<5.0	<5.0	€5.0
TMW-2	7/28/2005	<5.0	<5.0	<5.0	<5.0	<5.0	0:5>	0:≎>	<5.0	<5.0
TMW-3	7/28/2005	<5.0	<5.0	<5.0	€5.0	6	<5.0	<5.0	€.0	<5.0
TMW-4	7/28/2005	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
TMW-5	7/28/2005	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
TMW-6	7/28/2005	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	≪.0	<5.0
Applicable Standards	MCL	5	1,000	700	10,000	5	5	2	NE	ۍ.

Note: All other VOC analytical results were below reportable limits

NE = Not Established

TABLE 5: GROUNDWATER ANALYTICAL RESULTS SW8270C (TCL-SEMIYOLATILE ORGANICS)

Sample	Date	Carbazole	Chrysene	Flouranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	1,1-Biphenyl	2-Methynaphthalene	Acenaphthene	Венг(а)витнаселе	Anthracence
Location	Sampled	(ug/L)	(ug/L)	(J/gn)	(ng/L)	(ug/L)	(ng/L)	(ug/L)	(ng/L)	(ng/L)	(ug/L)	(ug/L)	(ug/L)
TMW-I	7/29/2005	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TMW-2	7/28/2005	01>	<10	<10	<10	<10	<10	<10	<10	<10	<10	01×	<10
TMW-3	7/28/2005	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0₽>
TMW-4	7/28/2005	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	01>	<10
TMW-5	7/28/2005	140	12	81	320	2,900	310	55	110	320	620	13	39
TMW-6	7/28/2005	<10	<10	<10	<10	<10	<10	<10	<10	01>	<10	0T>	<10
	MCLs	NA	NA	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
BRL = Be	BRL = Below Reporting Limits	imits		NA = Not Applicable									

Note: Other RCRA SVOC concentrations were BRL except for those noted above.

TABLE 6: POTENTIOMETRIC ELEVATIONS

Well	Date	TOC	Depth to	Depth to	Product	Potentiometric
Location	Measured	Elevation	Water	Product	Thickness	Elevation
		. (ft)	(ft)	(ft)	(ft)	(ft)
TMW-1	7/28/2005	85.04	22.06	ND	ND	62.98
TMW-2	7/28/2005	95.70	19.42	ND	ND	76.28
TMW-3	7/28/2005	100.00	19.83	ND	ND	80.17
TMW-4	7/28/2005	97.61	18.81	ND	ND	78.80
TMW-5	7/28/2005	65.84	12.31	ND	ND	53.53
TMW-6	7/28/2005	64.54	12.12	ND	ND	52.52

Notes: ND= Not Detected

Project SE4294-002-001

EXPANDED ENVIRONMENTAL ASSESSMENT REPORT

DAVIDSON-KENNEDY COMPANY FACILITY 1195 VICTORY DRIVE ATLANTA, FULTON COUNTY, GEORGIA

Prepared for:

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&

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4	C . T

Appendix C Cost Estimate



1.0 EXECUTIVE SUMMARY

The subject property consists of approximately 10 acres and has been utilized as a rail car repair facility since the 1960's. Railcars are brought into the facility via a series of rail spurs for repair. Prior to this, the property was the headquarters for Florida Steel and Calvert Iron Works Company. The earliest known development of the property was by Hudson Brothers Steel Bridge Erectors.

In July 2005, KEMRON Environmental Services (KEMRON) completed a Phase II Environmental Site Assessment (ESA) at the Davidson-Kennedy Company Facility (the site), located at 1195 Victory Drive in Atlanta, Fulton County, Georgia based on the past uses of the subject property. Analytical results obtained from the Phase II ESA revealed detectable concentrations of semi-volatile organic compounds (SVOCs) and lead concentrations above naturally occurring background levels in soil. Lead and numerous SVOC constituents were detected at levels exceeding the respective Notification Concentration (NC) as determined by the Georgia Environmental Protection Division (EDP) Hazardous Site Response Act (HSRA) Program. Detectable concentrations of SVOCs and dichloroethane were also detected in groundwater samples collected during the Phase II ESA. Historical research determined that areas of the site not assessed during the Phase II ESA were also potential areas of concern. Based on these findings, KEMRON conducted additional contaminant assessment and delineation activities in August 2005.

Four additional temporary monitoring wells were installed at the subject facility on August 24, 2005 to investigate previously un-assessed areas. Additionally, ninety-nine borings were installed on August 24-26, 2005 to assess additional areas of concern and delineate previously identified lead and SVOC contamination in soil. Analytical results will be discussed in further detail later in this report.

Based on the results of the Phase II ESA and Expanded Environmental Assessment Activities, the concentrations of lead and various semi-volatile organic compounds (SVOCs) in soil, and SVOCs in groundwater, requires the submittal of a Notification of Release to the Georgia Environmental Protection (EPD) Hazardous Site Response Act (HSRA) Program by the property owner within 30 days. However, soil remediation via excavation and proper disposal can be performed prior to submitting a Notification of Release for identified soil and groundwater impact. The soil excavation and disposal option will be discussed in further detail later in this report.



2.0 INTRODUCTION

The site is currently developed by the Davidson Kennedy Company railcar repair facility. The property consists of approximately 10 acres and is located along the Norfolk Southern railway near the intersection of Murphy Avenue and Victory Drive in Atlanta, Fulton County, Georgia. The facility is improved by one main metal framed building which houses the repair facility and office space. A storage building is located to the North of the main building, along with a dilapidated structure further to the North. A large pole type storage shed is located to the East of the main building. An abandoned brick building which formerly housed the offices of Florida Steel is located along Victory Drive. Two railroad spurs enter the property from the North and terminate in the main building. The eastern half of the property is partially wooded with heavy undergrowth or covered by kudzu. The property is bounded to the east by Lanier Drive. Figure 1 is a Site Location Map of the area with the subject site noted. A Site Map illustrating the subject property and pertinent site features is included as Figure 2.

2.1 PURPOSE

KEMRON was contracted by Bank of America/Davidson Kennedy Company to perform a Phase II ESA of the subject property located at 1195 Victory Drive. The purpose of the ESA was to investigate the potential environmental impact to the subject property from RECs identified during a site visit conducted by KEMRON on July 8, 2005. Based on the results of the Phase II ESA, additional environmental investigation of soil and groundwater at the subject site was warranted. KEMRON returned to the site in August 2005 to begin soil boring and temporary monitoring well installation. The temporary monitoring wells were installed in previously unassessed areas of the site, as were numerous borings including BH-1 through BH-11. Temporary monitoring well and boring placement was guided based on the information obtained from the Sanborn Fire Insurance Maps and aerial photographs reviewed as part of the Phase II ESA. Copies of the maps and photographs can be found in the Phase II ESA Report.

This report was prepared on behalf of and for the exclusive use of Bank of America/Davidson Kennedy Company solely for use and reliance in the environmental assessment of this site. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior consent of Bank of America/Davidson Kennedy Company and KEMRON. Not withstanding anything to the contrary herein, any third party reliance is limited to the agreed upon scope of work by and between KEMRON and Bank of America/Davidson Kennedy Company.



2.2 Expanded Environmental Investigation Activities

2.2.1 Soil Sampling

The additional activities Scope of Work included the installation of four temporary groundwater monitoring wells, the advancement of eleven deep soil borings just above the groundwater table and the advancement of eighty-eight shallow soil borings. One temporary well (TMW-7) was installed at the northern edge of the property near the eastern most rail spur. A large structure was noted in this general area on a Sanborn Fire Insurance Map. Two temporary wells (TMW-9 and TMW-10) were installed in a previously un-assessed area overgrown with kudzu vegetation. Unknown structures, objects and/or debris were noted in this area upon review of aerial photographs as part of the Phase II ESA. TMW-8 was installed approximately 300 feet south of TMW-7, also adjacent to the eastern most rail spur. Seven of the deep soil borings were installed in previously un-assessed areas throughout the property also overgrown with kudzu vegetation. Four deep soil borings were also advanced along the northern portion of the property in the general vicinity of the large structure noted in the TMW-7 discussion. Soil samples collected from the temporary monitoring well and deep soil borings were analyzed for volatile organic compounds (VOCs), SVOCs and RCRA Metals by EPA Methods 8260, 8270 and 6010B, respectively. Twenty-two shallow soil borings were advanced in the previously un-assessed areas of the site and the sixty-six remaining shallow soil borings were installed in areas of previously identified contamination. The borings were installed at varying depths and locations surrounding previously installed borings as to provide vertical and horizontal contaminant delineation of lead and SVOCs. At select borings, multiple soil samples were collected from each boring for waste characterization analysis.

Soil samples analyzed for lead analysis for horizontal delineation were collected at 0.5 feet below ground surface (bgs). Soil samples were collected at 2 to3 feet bgs for vertical delineation of lead in soil. Soil samples collected for SVOC analysis were collected at varying depths and were field screened with a photo-ionization detector (PID). Soil samples were screened at 5 ft intervals during the installation of the temporary monitoring wells and the deep soil borings using a stainless steel split spoon sampler. The samples were field screened with a PID to determine the possible presence of volatile organic vapors. The sample exhibiting the highest PID reading was submitted for laboratory analysis for volatile organic compounds (VOCs) and SVOCs by EPA Methods 8260 and 8270, respectively. In the event PID readings exceeding background were not detected, the deepest sample collected from above the water table was submitted for analysis. The samples were obtained using a clean syringe and placed in pre-weighed and/or pre-preserved laboratory jars. Samples were placed in



coolers and maintained at 4° C. Sample data were recorded on chain-of-custody forms. The samples and quality-assurance documentation were delivered via courier to Analytical Environmental Services in Chamblee, Georgia, for analysis. Sampling was conducted in accordance with EPA Region IV *Environmental Investigations Standard Operating Procedures and Quality Assurance Manual* (1997).

2.2.2 Groundwater Sampling

Groundwater was encountered at approximately 22 to 23 feet bgs at the temporary well locations located on the upper portion of the property (TMW-7 through TMW-8). Groundwater was encountered at approximately 1 to 2 ft bgs at the TMW-9 and TMW-10 well locations. The temporary monitoring well were drilled up to 10 ft into the groundwater table using 4.25" hollow stem augers and standard drilling methods. The temporary monitoring wells were completed with 10 to 15 ft lengths of slotted PVC screen. Clean filter sand was packed around the screen and riser to a depth of 2 ft above the screen, followed with a two foot bentonite seal. Immediately following installation, the temporary monitoring well was developed by manual bailing of approximately three well volumes of formation water. Groundwater samples were collected by using a clean polyethylene bailer. The groundwater samples were laboratory analyzed for VOCs and SVOCs by EPA Methods 8260 and 8270, respectively. The groundwater samples were not analyzed for RCRA Metals since metals impact to groundwater was not encountered in wells TMW-1 through TMW-4 in areas of significant lead impact to soil. Soil boring logs are included in Appendix A. The locations of temporary monitoring wells and soil borings are shown on Figure 2.

Individuals performing this assessment are Environmental Professionals as defined by ASTM Standard E 1903-97, *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process.* Field procedures were conducted in accordance with a site-specific health and safety plan.



3.0 FINDINGS AND CONCLUSIONS

KEMRON has performed the aforementioned activities at the Davidson-Kennedy Facility, located at 1195 Victory Drive in Atlanta, Georgia in conformance with the suggested practices of ASTM Practice E1903-97. Any exceptions to or deletions from this practice are described in Section 2 of this report.

3.1 Soil Analytical Results

Lead was the only metal detected above the respective Notification Concentration (NC) as established by the Georgia EPD Hazardous Site Response Act (HSRA) Program at the temporary well and deep soil boring locations. The NC for lead of 400 mg/kg was exceeded at the TMW-7, BH-3 and BH-11 locations. Of the lead concentrations exceeding the NC at the shallow soil boring locations, the concentrations ranged from 431 mg/kg at GP-34 to 53,200 mg/kg at GP-19. Table 1 is a summary of metals results in soil. Laboratory analytical reports and chain of custody documentation are included as Appendix B. A map depicting the horizontal extent of lead contamination above the NC is included as Figure 3.

Numerous SVOC and polynuclear aromatic hydrocarbon (PAH) compounds were detected in soil samples collected at varying locations around the subject site. Concentrations of chrysene, benzo(a) pyrene, indeno (1,2,3-cd) pyrene, benzo(k) fluoranthene, naphthalene and benzo (a) anthracene were detected at levels exceeding the respective NC as established by the Georgia EPD HSRA Program. Those identified areas with concentrations exceeding the NC are located at the TMW-5 and TMW-6 area; the upper portion of the property surrounding the TMW-7 and GP-66/GP-67 area and a localized area surrounding HA-1. Table 2 is a summary of SVOC results in soil. A map depicting the horizontal extent of SVOC and PAH contamination above the NC is included as Figure 3. Laboratory analytical reports and chain of custody documentation are included as Appendix B.

The soil sample collected from TMW-7 revealed detectable concentrations of VOC constituents. Benzene, toluene, ethylbenzene and total xylenes (BTEX) and isopropylbenzene were detected above the laboratory reporting limits. BTEX is most commonly associated with a release of petroleum. The concentrations detected were below applicable HSRA NCs with the exception of benzene.

Soil samples were collected from borings GP-13VA, GP-57A, GP-81A and GP-86 and analyzed for toxicity characteristic leaching procedure (TCLP) for lead and metals for waste characterization purposes. The soil



sample collected from GP-13A contained a TCLP-lead concentration which classifies waste derived from that area as hazardous. The remaining soil samples collected for TCLP-lead and metals analysis were deemed to be from a non-hazardous origin, including the millscale pile which was identified during the Phase II ESA investigation.

3.2 Groundwater Analytical Results

VOC concentrations were BDL in each of the groundwater samples collected with the exception of BTEX concentrations detected in TMW-7 and a concentration of tetrachloroethene (PCE) detected in TMW-10. The concentration of benzene and PCE are above the applicable maximum contaminant levels (MCLs). As previously mentioned, the BTEX concentrations detected in groundwater are most likely attributable to a release of petroleum and the PCE is most likely derived from the release of solvents. VOC analytical results for groundwater are summarized in Table 4 and shown on Figure 4. Laboratory analytical reports and chain of custody documentation are included as Appendix B.

Numerous SVOC concentrations were detected in TMW-7 and caprolactum was the only SVOC constituent detected in TMW-9 and TMW-10. Flouranthene is the only compound detected in TMW-7 above the MCL. SVOC analytical results for groundwater are summarized in Table 5. Laboratory analytical reports and chain of custody documentation are included as Appendix B.

The top of casing elevations of the newly installed temporary monitoring wells were surveyed to the nearest 0.01 ft relative to an existing well location. Updated groundwater elevation data has been included as Table 6. Figure 5 is an updated Potentiometric Surface Map. The groundwater flow direction is to the Southeast consistent with that obtained during the Phase II ESA.

3.3 Recommendations

Based on the concentrations of lead and SVOC compounds detected in soil exceeding the respective HSRA NC, and the detectable concentrations of VOC and SVOC compounds in groundwater, a Release Notification must be submitted to the Georgia EPD HSRA Program by the property owner within 30 days of knowledge of the release.



The Georgia EPD HSRA rules provide for the remediation of soils to below the respective NC in lieu of the submittal of a Release Notification. This would require the excavation and disposal of soil containing concentrations exceeding an NC to below the NC value. Based on the groundwater pathway score being less than the applicable threshold, this option, if successfully completed, may prevent the site from being listed on the HSI. Shadow scoring using the Reportable Quantities Screening Method (RQSM) was conducted as part of the Phase II ESA for both the On-Site Exposure Pathway (soil) and the Groundwater Exposure Pathway. It is unlikely that the additional impact to groundwater detected as part of the Expanded Assessment will result in the site exceeding the Groundwater Pathway Threshold.

Based on the sample collection data assimilated as part of this investigation, approximate areas have been defined to include the horizontal and vertical extent of lead and SVOC contamination in soil above the applicable NCs. The removal of these estimated areas would be an alternate to regulatory reporting of soil contamination. An estimated 8,700 tons of lead impacted soil and 14,200 tons of SVOC impacted soil will require removal and proper disposal to address the remediation of contaminated soil above the NC. The approximate areas and limits of soil excavation are illustrated on Figure 3. A cost estimate of lead and SVOC impacted soil excavation and disposal, to include all necessary regulatory reporting has been included in Appendix C.

Based on the presence of identified hazardous soils on-site that will require excavation and treatment, it is recommended that a bench-scale treatability study be performed to evaluate lead stabilization feasibility. This process involves the application of a reagent to the lead impacted soil which is deemed to be hazardous. Once the reagent is properly mixed with the soil, the leachability of lead from soil is greatly diminished. Once this process is completed, the treated soil will be tested again for TCLP analysis and provided a favorable result, the soil can then be processed for disposal. Based on the on-site treatment of the soil, a substantial cost savings will be realized versus disposal as a hazardous waste. An estimated 600 tons of soil will require treatment, however, additional TCLP analysis will need to be performed to delineate the extent of soil classified as hazardous waste. Costs associated with hazardous waste treatment and disposal have been included in Appendix C.



4.0 LIMITATIONS

The subject investigation is consistent with the scope and limitations of ASTM Practice E 1903-97. KEMRON's assessment is solely based the scope of work described herein. No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions that may affect a site. This environmental investigation was performed with a reasonable and customary standard of care; however, under no circumstances will any condition that failed to surface during the course of the assessment be a liability of KEMRON or result in cost.

No other warranty or guarantee is expressed or implied. This report must be considered in its entirety.





WATER WELL SURVEY MAP Davidson—Kennedy 1195 Victory drive S.W. Atlanta GA 30310

7.5 Minute USGS Topographic Quadrangle SOUTHWEST ATLANTA QUADRANGLE, GEORGIA

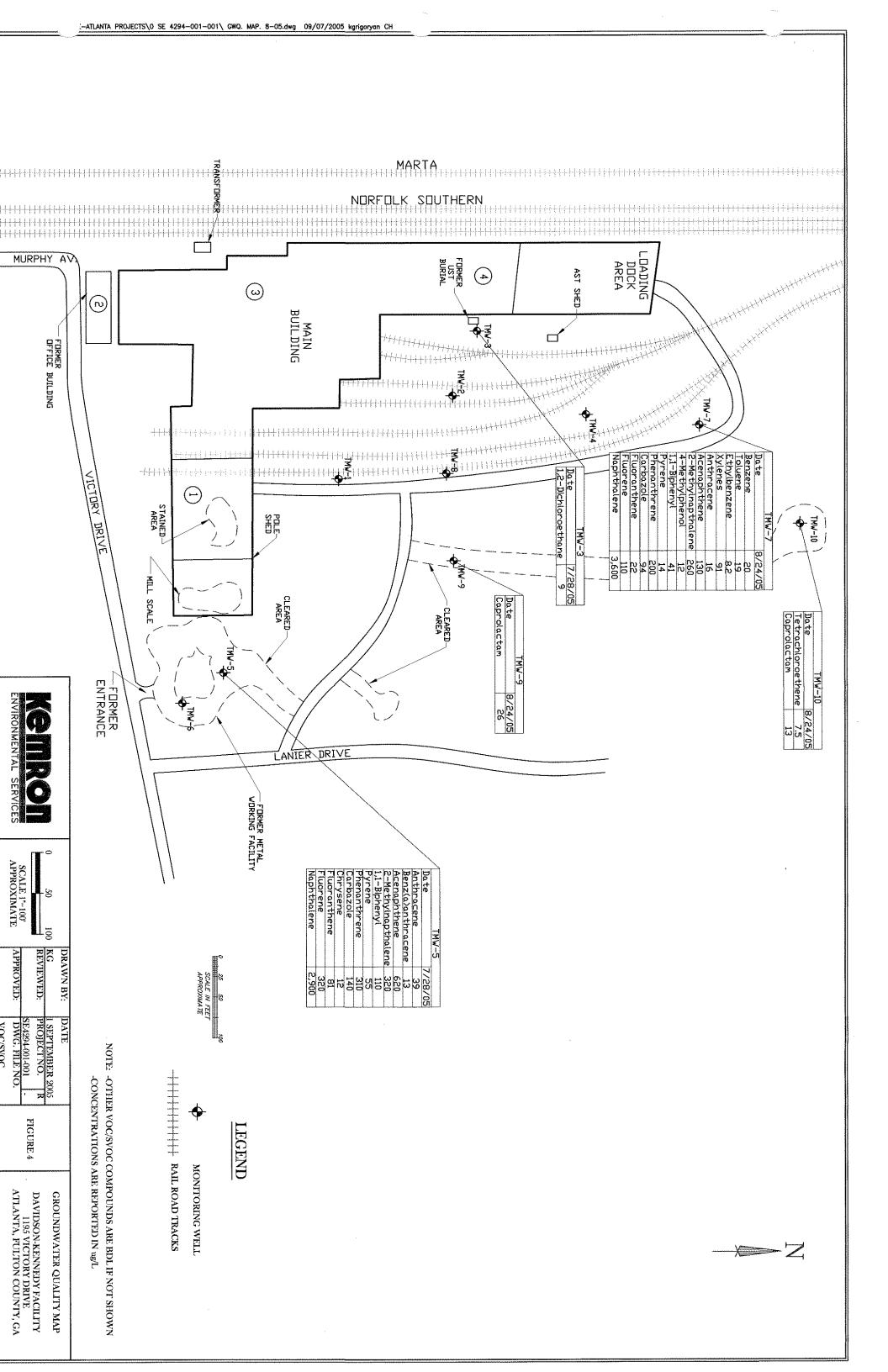
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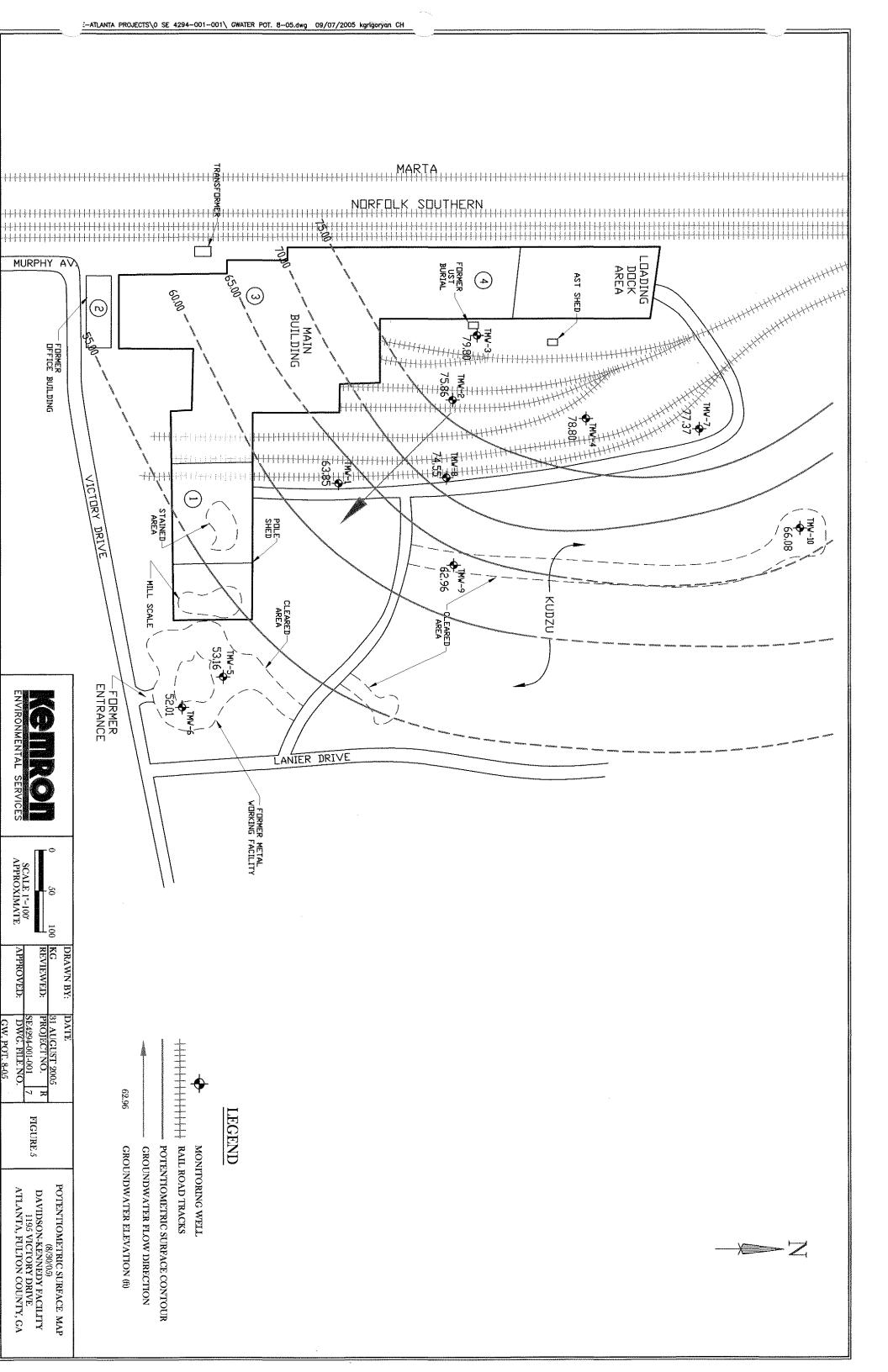


TABLE 1: SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample	Depth	Date	Arsenic	Barium	Cadmium		Lead	Selenium	Silver	Mercury
Location	(ft)	Sampled	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg
TMW-1A	0.5	7/25/2005	<3.34	136.0	<1.67	84.0	39.0	<3.34	<1.67	<0.0998
→ TMW-2A	0.5	7/26/2005	4.95	1,710.0	<2.29	101.0-	3,320	<4.58	<2.29	<0.0992
TMW-3A	0.5	7/26/2005	<3.7	48.0	<1.85	57,3	34.3	<3.7	<1.85	<0.0988
TMW-4A	0.5	7/26/2005	7.63	149.0	<2.24	79.6	509	<4.48	<2.24	0.17
TMW-5A	0.5	7/26/2005	<4.20	68.4	<2.10	34.8	161.0	<4.2	<2.10	<0.099
TMW-6A	0.5	7/27/2005	<4.79	102.0	<2.40	17.1	217.0	<4.79	<2.40	0.18
TMW-7	0.5	8/23/2005	17.2	110	<1.96	56.7	710	4.37	<1.96	<0.198
TMW-8	0.5	8/23/2005	35.9	153	<2.03	61.9	420	<4.06	<2.03	<0.2
TMW-9	0.5	8/23/2005	16.9	88.6	<2.3	47	489	<4.61	<2.3	<0.496
TMW-10	0.5	8/23/2005	<3.87	51.5	<1.93	39.4	28.4	<3.87	<1.93	<0.199
HA-2A	0.5	7/26/2005	8.55	95.2	<2.19	39.9	204.0	<4.39	<2.19	0.17
HA-3A	0.5	7/26/2005	4.58	115.0	<1.71	74.9	202.0	<3.42	<1.71	<0.0988
HA-4A	0.5	7/27/2005	<4.85	107.0	<2.42	25.7	180.0	<4.85	<2.42	<0.0996
HA-5A	0.5	7/26/2005	<2.97	72.8	<1.48	10.3	50.8	<2.97	<1.48	<0.098
НА-6А	0.5	7/27/2005	<4.36	139.0	<2.18	141.0	106.0	<4.36	<2.18	<0.0992
HA-7A	0.5	7/29/2005	<4.14	103.0	<2.07	60.1	527	<4.14	<2.07	<0.0994
HA-8A	0.5	7/27/2005	7.80	120.0	2.41	93.6	1,410	<4.54	<2.27	<0.0984
HA-9A	0.5	7/27/2005	<4.69	81.5	<2.34	51.3	149.0	<4.69	<2.34	<0.0986
HA-10A	0.5	7/27/2005	6.98	77.4	<2.17	83.6	704	<4.35	<2.17	<0.0994
HA-11A	0.5	7/27/2005	9.45	99.3	<2.32	41.5	166.0	<4.64	<2.32	<0.0996
HA-12A	0.5	7/28/2005	<2.87	1,930.0	<1.43	77.6	197.0	<2.87	<1.43	<0.0996
HA-13A	0.5	7/28/2005	38.80	168.0	3.79	54.0	549	<3.99	<2.00	<0.10
HA-14A	0.5	7/27/2005	7.28	124.0	<2.37	65.4	161.0	<4.73	<2.37	<0.0988
HA-15A	0-5	7/27/2005	<3.83	65.6	<1.91	35.9	50.4	<3.83	<1.91	<0.0994
BH-1	0.5	8/23/2005	5.66	94.6	<1.63	21.6	221.0	<3.27	<1.63	<0.49
BH-2	0-5	8/24/2005	15.1	95.2	<2.04	28.4	219.0	<4.07	<2.04	<0.0984
BH-3	0.5	8/24/2005	<4.38	1,620.0	<2.19	145.0	449.0	<4.38	<2.19	<0.099
BH-4	0-5	8/23/2005	40.9	108	<2.07	36.3	163.0	<4.14	<2.07	<0.199
BH-5	0.5	8/24/2005	2.86	34.2	<1.42	22.5	18.5	<2.84	<1.42	<0.0986
BH-6	0-5	8/24/2005	<3.34	75	<1.67	37.3	50.3	<3.34	<1.67	0.107
BH-7	0.5	8/24/2005	<4.31	88.7	<2.15	28.7	87.3	<4.31	<2.15	0.127
ВН-8	0-5	8/24/2005	17	111	<1.94	51.8	151	<3.87	<1.94	0.142
BH-9	0.5	8/24/2005	3.76	174	<1.48	51.9	303	<2.96	<1.48	<0.0998
BH-10	0-5	8/24/2005	<4.15	199	<2.07	52.1	350	<4.15	<2.07	<0.0975
BH-11	0.5	8/24/2005	8.04	65.4	<1.75	59	405	<3.49	<1.75	<0.0965
T.T.	SRA NC		41	500/BG	39	1,200	400	36	10/BG	17

BRL = Below Reporting Limits

NA = Not Applicable

* = TCLP Analysis Reported in mg/L

TABLE 1 (cont'd): SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (ma/Ka
GP-1	0.5	8/24/2005	(IIIg/Kg) NA	NA NA	(Ing/Kg) NA	NA NA	307	NA NA	(mg/Kg) NA	(mg/Kg NA
GP-2	0.5	8/24/2005	NA NA	NA NA	NA NA	NA NA		NA NA	NA NA	NA NA
GP-3	0.5	8/24/2005	NA NA	NA NA	NA NA	NA.	1,050 342	NA NA	NA NA	NA NA
GP-4			 	1						
	0.5	8/24/2005	NA NA	NA	NA	NA	278	NA	NA	NA
GP-5	0.5	8/24/2005	NA NA	NA	NA	NA	793	NA	NA	NA
GP-6V	2.0	8/24/2005	NA NA	NA	NA	NA	45.4	NA	NA	NA
GP-7	0.5	8/24/2005	NA NA	NA	NA	NA	622	NA	NA	NA
GP-8	0.5	8/24/2005	NA	NA	NA	NA	74.9	NA	ÑΑ	NA
GP-9	0.5	8/25/2005	NA NA	NA	NA	NA	126	NA	NA	NA
GP-10	0.5	8/25/2005	NA	NA	NA	NA	242	· NA	· NA	NA
GP-11	0.5	8/25/2005	. NA	NA	NA	NA	1,330	NA	NA	NA
GP-12	0.5	8/25/2005	NA	NA	NA	NA	1,200	NA	NA	NA
GP-13VA*	0.5	8/25/2005	NA NA	NA	NA	ŇĀ	6.24*	NA	NA	NA
_ GP-13VB	3.0	8/25/2005	NA	NA	NA	NA	472	NA	NA	NA
• GP-14	0.5	8/25/2005	NA	NA	NA	NA	754	NA	NA	NA
GP-15	0.5	8/25/2005	NA	NA	NA	NA	310	NA	NA	NA
GP-16	0.5	8/25/2005	NA	NA	NA	NA	1,270	NA	NA	NA
GP-17	0.5	8/25/2005	NA	NA	NA	NA	140	NA	NA	NA
GP-18	0.5	8/25/2005	NA	NA	NA	NA	325	NA	NA	NA
GP-19	0.5	8/25/2005	NA	NA	NA	NΑ	53,200	NA	NA	NA
GP-20	0.5	8/25/2005	NA NA	NA	NA	NA	166	ÑΑ	NA	NA
GP-21	0.5	8/25/2005	NA	NA	NA	ÑΑ	353	NA	NA	NA
GP-22	0.5	8/25/2005	NA	NA	NA	NA	305	NA	NA	NA
GP-23	0.5	8/25/2005	NA	NA	NA	NA	174	ΝA	NA	NA
GP-24	0-5	8/25/2005	NA	NA	NA	NA	445	NA	NA	NA
GP-25	0.5	8/25/2005	NA	NA	NA	NA	1,370	NA.	NA	NA
GP-26	0-5	8/25/2005	NA	NA	NA	NA	10,100	NA	NA	NA
GP-27	0.5	8/25/2005	NA	NA	ΝA	NA	19	NA	NA	NA
GP-28	0-5	8/25/2005	NA	NA	NA	NA	234	NA	NA	NA
GP-29	0.5	8/25/2005	NA	NA	NA	NA	254	NA	NA	NA
GP-30A	0-5	8/25/2005	NA	NA	NA	NA	70.7	NA	ÑΑ	ŇA
GP-31	0.5	8/25/2005	NA	NA	NA	NA	1,480	NA	NA	NA
GP-32	0-5	8/25/2005	NA	NA	NA	NA	577	NA	NA	NA
	0.5	8/25/2005	NA	NA:	NA	NA	752	NA	NA	NA
GP-34	0-5	8/25/2005	NA	NA	NA	NA	431	NA	NA	NA
GP-35	0.5	8/25/2005	NA NA	NA	NA	NA	607	NA	NA	NA
	RA NC		- '' -				541		- 14 1	

BRL = Below Reporting Limits

NA = Not Applicable

* = TCLP Analysis Reported in mg/L

TABLE 1 (cont'd): SOIL ANALYTICAL RESULTS SW6010B (Metals)

Sample Location	Depth (ft)	Date Sampled	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)
GP-36	0.5	8/25/2005	NA	NA	NA	NA	309	NA	NA	NA
GP-37A	0.5	8/25/2005	NA.	NA	NA	NA	1,280	NA	NA	NA
GP-38A	0.5	8/25/2005	NA	NA	NA	NA	10,200	NA	NA	NA
GP-39A	0.5	8/25/2005	NA	NA	NA	NA	271	NA	NA	NA
GP-40	0.5	8/25/2005	NA	NA	NA	NA	444	NA	NA	NA
GP-41	0.5	8/25/2005	NA	NA	NA	NA	253	NA	NA	ŇA
GP-42B	0.5	8/25/2005	NA NA	NA	NA	NA	100	NA	NA	NA
GP-56A	0.5	8/25/2005	NA	NA	NA	NA	222	NA	NA	NA
GP-57A*	0.5	8/25/2005	NA	NA	NA	NA	0.749*	NA	NA	NA
GP-57B	3.0	8/25/2005	NA	NA	NA	NA	107	NA.	NA	NA
GP-58	0.5	8/25/2005	NA NA	NA	NA	NA	278	ΝA	NA	NA
GP-59	0.5	8/25/2005	NA	NA	NA	NA	458	NA	NA	NA
GP-60	0.5	8/25/2005	NA	ŇA	NA	NA	208	NA	NA	NA
GP-61A	0.5	8/25/2005	NA	NA	NA	NA	189	NA	NA	NA
GP-62	0.5	8/25/2005	NA	NA	NA	NA	356	NA	NA	NA
GP-63	0.5	8/25/2005	NA	NA	NA	NA	292	NA	NA	NA
GP-64A	3.0	8/25/2005	NA	NA	NA	NA	19.5	NA	NA	NA
GP-65	0.5	8/25/2005	NA	NA	ŅĀ	NA	601	NA	NA	NA
GP-67A	0.5	8/25/2005	NA	NA	NA	NA	129	NA	NA	NA
GP-68	0.5	8/25/2005	NA	NA	NA	NA	113	NA	NA	NA
GP-69	0.5	8/25/2005	NA	NA	NA	NA	187	NA	NA	NA
GP-70 .	0.5	8/25/2005	NA	NA	NA	NA	84.3	NA	NA	ŇA
GP-71	0.5	8/25/2005	NA	NA	NA	NA	135	NA.	NA	NA
GP-72A	0.5	8/25/2005	NA	NA	NA	NA	20.6	NA	NA	NA
GP-73A	0.5	8/25/2005	NA	NA	NA	NA	36	NA	NA	NA
GP-74	0.5	8/26/2005	NA	NA	NA	NA	19.7	NA	NA	NA
GP-75	0.5	8/26/2005	NA	NA	NA	NA	93.3	NA.	NA	NA
GP-76	0.5	8/26/2005	NA	NA	NA	NA	189	NA	NA	NA
GP-77	0.5	8/26/2005	NA	NA	NA	NA	102	NA	NA	NA
GP-78	0,5	8/26/2005	NA	NA	NA	NA	275	NA.	NA	NA
GP-79	0.5	8/26/2005	NA	NA	NA	NA	311	NA	NA	NA
GP-80	0.5	8/26/2005	NA	NA	NA	· NA	634	NA	NA	NA
GP-81*	NA	8/26/2005	<0.25*	0.67*	<0.025*	0.0521*	0.272*	<0.1*	<0.02*	<0.004*
GP-82A	0.5	8/26/2005	NA .	NA	NA	NA	129	NA	NA	NA
GP-83	0.5	8/26/2005	NA	NA	NA	NA	<4.63	NA	NA	NA
GP-86*	0,5	8/26/2005	NA	NA	NA	NA	0.196*	NA	NA	NA
GP-87	0.5	8/26/2005	NA	NA	NA	NA	360	NA	NA	NA
GP-88	0,5	8/26/2005	NA	NA	NA	NA	204	NA.	NA	NA
I-	ISRA NC		41	500/BG	39	1,200	400	36	10/BG	17

BRL = Below Reporting Limits

NA = Not Applicable

* = TCLP Analysis Reported in mg/L

H	BH5/SS3	BH4/SS3	BH3/SS3	BH2/SS3	BH1/SS3	HA-15	HA-14	HA-13	HA-12	7	101-4-10	HA-9	HA-8	HA-7	HA-6	HA-5	HA-4	HA-3	HA-2	HA-1	TMW-10	1MW-9	TMW-8	TMW-7	TMW-6	TMW-5	TMW-4	TMW-3	TMW-2	TMW-1	Location	Sample
HSRA NC	8-10 8/2	8-10 8/2	8-10 8/2	8-10 8/2	8-10 8/	1 7/	3 7/3	0.5	0.5 7/5	3 7//	3 7/	3 7/	3 7/2	1 7/	1 7/	0.5 7/	3 7/	1 7/	1 7/	1 7/	8-10 8/	8-10 8/	23-25 8/	18-20 8/	4-6 7/	8-10 7/	19-21 7/	19-21 7/	14-16 7/26/2005	19-21 7,	(ft)	Depth
74112865	8/24/2005	8/23/2005	8/23/2005	8/23/2005	8/23/2005	7/27/2005	7/27/2005	7/27/2005	7/28/2005	7/27/2005	7/27/2005	7/27/2005	7/27/2005	7/27/2005	7/27/2005	7/27/2005	7/27/2005	7/26/2005	7/26/2005	7/27/2005	8/23/2005	8/23/2005	8/23/2005	8/23/2005	7/27/2005	7/26/2005	7/26/2005	7/26/2005	/26/2005	7/25/2005	Sampled	Date
110.00	<0.33	0.72	<0.33	<0.33	0.89	NA	<0.33	NA	NA	3.400	<0.33	<0.33	<0,33	<0.33	<0.33	NA	<0.33	0.660	1,000	0.490	<0.33	<0.33	<0.33	680	8.800	41.000	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Phenanthrene Fluoranthene
500.00	<0.33	1.6	0.330	1,4	1,6	NA	<0.33	NA	NA	26.000	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	1.200	2.000	0.880	<0.33	<0.33	<0.33	330	16,000	45.000	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Fluoranthen
500.00	<0.33	1.5	<0.33	1.5	Ľ,	Z _A	<0.33	NA	NA	28.000	<0.33	<0.33	<0.33	<0.33	40.33	N'A	<0.33	1.400	2.500	0.670	<0.33	<0.33	<0.33	240	14.000	47.000	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	
0.19	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA.	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	<0.33	<0.33	<0.33	0.56	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Pyrene Isophorone Chrysene
5.00	<0.33	0.81	<0.33	0.76	0.81	NA	<0.33	AN	NA	15.00	<0.33	<0.33	40.33	<0.33	<0.33	NA	<0.33	1.00	1.90	0.45	<0.33	<0.33	<0.33	73	6,40	23.00	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Chrysene
5,00	<0.33		<0.33	0,96	1.2	NA.	<0.33	NA	NA	0.830	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0,33	1.50	3,00	0.64	<0.33	<0.33	<0.33	67	7.70	25.00	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Benzo(b)fluoranthene
5.00	<0.33	0.35	<0.33	<0.33	<0.33	NA	<0.33	NA	NA	7.60	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	0.560	0.910	<0.33	<0.33	<0.33	<0.33	19	2.000	7.800	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Benzo(k)fluoranthene Benzo(a)pyrene Carbazole
1,64	<0.33	0.69	<0.33	0.7	0.8	NA	<0.33	N.	NA	15.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	0.73	1.50	0.39	<0.33	<0.33	<0.33	50	6.30	20.00	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Benzo(a)pyro
H	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	0.580	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	<,330	<0.33	<0.33	<0.33	<0.33	<0.33	99	1.100	4.100	<0.33	<0.33	<0.33	<0.33	(mg/kg)	ne Carbazole
50.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	0,400	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	Di-n-octyl phthalate
5.00	<0.33	0.77	<0.33	0.75	0.82	NA	<0.33	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	0.740	1,400	<0.33	<0.33	<0.33	<0.33	80	<0.33	21.00	<0.33	<0.33	<0.33	<0.33	(mg/kg)	Benz(a)anthracene
500.00	<0.33	0.53	<0.33	0.50	0.53	NA	NA	AN	NA	10.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	0.63	1.40	<0.33	<0.33	<0.33	<0.33	28	5.00	14.0	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Benzo(g,h,i)perylene
5.00	<0.33	15.0	<0.33	87'0	0.52	ΝA	<0.33	NA	NA	9.10	<0.33	<0.33	<0.33	<0.33	55.0>	٧N	< 0.33	0.54	1.20	<0.33	<0.33	<0.33	<0.33	27	5.1	11.0	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	indeno(1,2,3-cd)ругепе
130.00	<0.33	<0.33	<0.33	0.34	0.39	ŇA	<0.33	NA	NA	4.90	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	<0.33	0.61	<0.33	<0.33	<0.33	<0.33	23	0.68	1.70	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Acenaphthylene
300.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	ŅĄ	NA	0.43	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	210	0.67	3.30	<0.33	<0.33	<0.33	<0.33	(mg/K,g)	Acenaphthene Fluorene Anthracene
360.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	NA	NA	0.46	<0.33	<0.33	<0.33	<0.33	<0.33	NA NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	200	0.67	3.30	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	e Fluorene
500.00	<0.33	<0.33	<0.33	<0.33	0.38	NA	<0.33	NA	NA	3.20	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	160	1.8	8.0	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Anthracene
5.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	NA	NA	0.83	<0.33	<0.33	<0.33	<0.33	<0.33	AN	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	4.3	0.45	0.64	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Dibenz(a,h)anthracene
100.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	NA	NA	0.49	<0.33	<0.33	<0.33	<0.33	<0.33	AN	<0.33	0.62	1.50	0.46	<0.33	<0.33	<0.33	910	<0.330	1.20	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Naphthaler
NE	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	<0.33	0.43	<0.33	<0.33	<0.33	<0.33	140	<0.33	1.40	<0.33	<0.33	<0.33	<0.33	(mg/kg)	Naphthalene Dibenzofuran
NE	<0.33	©.33	<0.33	<0.33	<0.33	NA	<0.33	NA	NA	<0.44	<0.33	<0.33	<0.33	0.420	< 0.33	NA	<0.33	ő.880	2.100	0.590	<0.33	<0.33	<0.33	190	<0.33	0.670	0.420	<0.33	<0.33	<0.33	(mg/kg)	n 2-Methylnaphthaiene
50.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	, NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	. <0.33	<0.33	<0.33	<0.33	<0.33	<0,33	(mg/kg)	Butyl benzyl phthalate
25.00	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	ŅĄ	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	4.1	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	late 1,11-Bipho
3.80	<0.33	<0.33	<0.33	<0.33	. <0.33	NA	NN	ΑN	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	N'A	<0.33	<0.33	<0.33	<0.33	< 0.33	<0.33	<0.33	0.81	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	1,1'-Biphenyl 2-Methylphenol
3.80	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	2.00	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	nol 4-Methylphenol
Ä	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	۸۸	NA	NA	NA	AN	NA	NA.	NA	NA	NA	AN	(mg/kg)	ol 1-Methylnapthalene



q	GР-85B	GP-84B	GP-82B	GP-67B	GP-66C	GP-61B	GP-56B	54	.53-ac	GP-52	GP-51	GP-50	GP-48	GP-47	GP-46	GP-45	GP-44	GP-42B	GP-39B	GP-38B	GP-37B	GP-30B	BH11/SS2	BH10/SS3	BH9/SS3	BH8/SS3	BH7/SS2	BH6/SS2	Location	Sample
HSRA NO	1 8/	2 8/	1-2 &	1-2 8	3-4	1-2 8,	1-2 8	6-8 8-9	6-8	6-8 8.	6-8 8	6-8 8.	6-8	2.4 8.	6-8 8	6-8	2-4 8	2 8	2 8	1.5 8	1.5	1-2 8	3-5	8-10	8-10 8	8-10-8	3-5 8	3-5 8	(f)	Depth
	8/26/2005	8/26/2005	8/26/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/25/2005	8/24/2005	8/24/2005	8/24/2005	8/24/2005	8/24/2005	8/24/2005	Sampled	Date
1 10.00	<0.33	0.41	<0.33	3.2	<0.33	1.2	0.76	<0.33	22	<0.33	<0.33	<0.33	17	7.5	3.3	48	7.8	<0.33	<0.33	0.6	0.84	<0.33	0.51	<0.33	<0.33	1.1	<0.33	<0.33	(mg/Kg)	Phenanthrene
500,00	<0.33	0.42	<0.33	120	6.4	1.4	0.77	0.37	25	<0.33	<0.33	<0.33	39	10.0	5.1	71	<0.33	<0.33	< 0.33	1.2	2.8	0.44	0.72	<0.33	<0.33	2.6	<0.33	<0.33	(mg/Kg)	Fluoranthene
500.00	<0.33	0,36	<0.33	130	21	1.5	0.75	<0.33	22	<0.33	<0.33	<0.33	33	8.6	3.9	61	10	<0.33	<0.33	1.5	2.7	<0.33	0.79	0.34	<0.33	3.3	<0.33	0.34	(mg/Kg)	Pyrene
0.19	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Isophorone
5.00	<0.33	<0.33	<0.33	68	7.3	1.2	0.71	<0.33	10	<0.33	<0.33	<0.33	16	4.1	2.0	29	4.5	<0.33	<0.33	8.0	1.6	<0.33	0.4	<0.33	<0.33	1.8	<0.33	<0.33	(mg/Kg)	Chrysene
5.00	<0.33	<0.33	<0.33	87	13	1.2	0.68	<0.33	9.5	<0.33	<0.33	<0.33	17	3.7	2.6	30	4,4	<0.33	<0.33	0.9	1.6	<0.33	0.48	<0,33	<0.33	2.7	<0.33	<0.33	(mg/Kg)	Benzo(b)fluorznfhene
5,00	<0.33	<0.33	<0.33	23	3.1	0,44	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	6.2	1.2	<0.33	13	<0.33	<0.33	<0.33	<0.33	0.73	<0.33	<0.33	<0.33	<0.33	0.93	<0.33	<0,33	(mg/Kg)	Benzo(k)fluoranthene
1.64	<0.33	<0.33	<0.33	66	8.6	0.61	0.4	<0.33	8,8	<0.33	<0.33	<0.33	14	3.7	1.8	26	4.0	<0.33	<0.33	0,78	1.2	<0.33	0.36	<0.33	<0.33	1.7	<0.33	<0.33	(mg/Kg)	Benzo(a)pyrene
NE	<0.33	<0.33	<0.33	1.3	<0.33	<0.33	<0.33	NA	NA	NA	NA	NA	NA	NA	ŅĀ	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	ene Carbazole
50.00	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	AN	NA	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0,33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	Di-n-octyl phthalate
5.00	<0.33	<0.33	<0.33	67	5.9	0.81	0.56	<0.33	10	<0.33	<0.33	<0.33	: 15	4.1	2.0	29	4,6	<0.33	<0.33	0.69	1.4	<0.33	0.36	<0.33	<0.33	1.6	<0.33	<0.33	(mg/kg)	Benz(a)anthracene
500.00	<0.33	<0.33	<0.33	40	5.2	0.51	0.35	<0.33	<0.33	<0.33	<0.33	<0.33	1.4	<0.33	89.0	19	2.0	<0.33	<0.33	8.0	0.89	<0.33	<0.33	<0.33	<0.33	1.2	<0.33	<0.33	(mg/Kg)	Benzo(g,h,i)perylene
5.00	<0.33	<0.33	<0.33	43	4.2	0.51	0.33	<0.33	2,9	<0.33	<0.33	<0.33	9.5	1.4	0.67	16	1.9	<0.33	<0.33	0.63	0.89	<0.33	<0.33	<0.33	<0.33	0.94	<0.33	<0.33	(mg/Kg)	Indeno(1,2,3-cd)pyrene
130.00	<0.33	<0.33	<0.33	16	1.2	<0.33	<0.33	<0.33	1.1	<0.33	<0.33	<0.33	2.0	0.34	<0.33	2.2	0.53	<0.33	<0.33	0.57	0.36	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	е Асепаріп'нуіспе
300,00	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.6	<0.33	<0.33	<0.33	1.2	0.73	0.33	3.4	0.61	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	< 0.33	<0.33	(mg/Kg)	Accuaphthene
360.00	<0.33	<0.33	<0.33	1.0	<0.33	<0.33	<0.33	<0.33	2.1	<0.33	<0.33	<0.33	1.2	0.71	0.33	3.6	0.63	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Fluorene
500.00	<0.33	<0.33	<0.33	7.7	1.2	<0.33	<0.33	<0.33	4	<0.33	<0.33	<0.33	4.0	1.5	0.8	7.5	1.4	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.39	<0.33	<0.33	(mg/Kg)	Anthracene
5.00	<0.33	<0.33	<0.33		0.54	<0.33	<0.33	<0.33	0.58	<0.33	<0.33	<0.33	1.0	0.5	<0.33	<0.33	0.38	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Dibenz(a,h)anthracene
100.00	<0.33	0.48	<0.33	2.3	<0.33	0.75	0.8	<0.33	0.67	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	8.1	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/Kg)	Naphthalene
NE	<0.33	<0.33	< 0.33	<0.33	<0.33	0.4	<0.33	NA	NA	NA	NA	N.A.	NA	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	e Dibenzofuran
NE	0,45	0.73	<0.33	0.64	<0.33	1.4	<0.33	<0.33	0.63	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	₹0.33	<0.33	<0.33	<0.33	<0.33	<0.33	(mg/kg)	an 2-Methylnaphthalene
00.00	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1,4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.86	(mg/kg)	ie Butyl benzyl phthalate
25.00	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	NA	NA	NA	NA NA	AN	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.86	(mg/kg)	
3.80	33 <0.33	3 <0.33	3 <0.33	3 <0.33	3 <0.33	3 <0.33	3 <0.33	NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	3 <0.33	3 <0.33	3 <0.33	3 <0.33	3 <0.33	3 <0.33	3 <0.33		3 <0.33	3 <0.33	0.86	g) (mg/kg)	1,1'-Biphenyl 2-Methylphenol
3.80	< 0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	NA	NA	NA	NA	N N	NA.	NA NA	N'A	NA	NA	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.86	(mg/kg)	4-Methylphenol
ZE	NA	NA	AN	ΝA	NA	NA	AN	<0.33	0.61	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.0	<0.33	NA	NA	NA	NA	NA	NA	ŇA	NA	NA	NA	NA	(mg/kg)	1-Methylnapthalene

Note: Other SVOC concentrations were BRL except for those noted above.

NA = Not Applicable

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

TABLE 3: SOIL ANALYTICAL RESULTS SW8260B (TCL-VOLATILE ORGANICS)/SW8015 (DIESEL RANGE ORGANICS)/SW8082 PCB

NA = Not Applicable

NC = Notification Concentration

Note: Other VOC concentrations were BRL except for those noted above.

TABLE 4: GROUNDWATER ANALYTICAL RESULTS (VOC. Method 8260B)

§													· ·
	Tetrachloroethene	ng/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7.5	5
***************************************	Acetone	T/gn	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE
	Vinyl Chloride	T/8n	<5.0	0'\$>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	2
/D)	Trichloroethene	ng/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
VOC INTERNIOR 0200D	1,2-Dichloroethane	ng/L	<5.0	<5.0	6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
	Xylenes	ng/L	<5.0	0:\$>	<5.0	<5.0	<5.0	<5.0	16	<5.0	<5.0	<5.0	10,000
	Ethylbenzene	ug/L	<5.0	6:\$>	<5.0	0:5>	<5.0	<5.0	8.2	<5.0	<5.0	<5.0	700
	Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	19	<5.0	<5.0	<5.0	1,000
	Benzene	ng/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	20	<5.0	<5.0	<5.0	5
	Date	Sampled	7/29/2005	7/28/2005	7/28/2005	7/28/2005	7/28/2005	7/28/2005	8/24/2005	8/24/2005	8/24/2005	8/24/2005	MCL
	Sample	Location	TMW-1	TMW-2	TMW-3	TMW-4	TMW-5	TMW-6	TMW-7	TMW-8	TMW-9	TMW-10	Applicable Standards

Note: All other VOC analytical results were below reportable limits

NE = Not Established

Davidson Kennedy Facility Phase II ESA 1195 Victory Drive Atlanta, Fulton County, Georgia

TABLE 5: GROUNDWATER ANALYTICAL RESULTS SW8270C (TCL-SEMIYOLATILE ORGANICS)

Sample	Date	Carbazole	Chrysene	Flouranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	1,1-Biphenyl	2-Methynaphthalene Acenaphthene Benz(a)anthracene Caprolactam 4-Methylphenol Dibenzofuran	Acenaphthene	Benz(a)anthracene	Caprolactam	4-Methylphenol	Dibenzofuran	Anthracence
Location	Sampled	. (ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ng/L)	(ug/L)	(ug/L)	(ug/L)	(ng/L)	(ng/L)	(ng/L)	(ug/L)	(ug/L)
TMW-1	7/29/2005	<10	ol>	<10	<10	<10	<10	0∮>	<10	<10	<10	<10	01>	01>	01>	01>
TMW-2	7/28/2005	<10	<10	<10	<10	<10	01>	<10	01>	<10	<10	<10	<10	<10	<10	<10
TMW-3	7/28/2005	<10	<10	<10	<10	e19	<10	<10	<10	<10	0{>	<10	<10	. 0f>	<10	<10
TMW-4	7/28/2005	<10	<10	<10	<10	<10	<10	ot>	<10	<10	<10	<10	<10	<10	<10	<10
TMW-5	7/28/2005	140	12	18	320	2,900	310	55	110	320	620	13	<10	<10	<10	39
TMW-6	7/28/2005	<10	01>	01>	<10	<10	<10	<10	<10	>10	<10	<10	<10	<10	01>	0l>
TMW-7	8/24/2005	94	<10	22	110	3,600	200	41	41	260	130	<10	<10	12	86	16
TMW-8	8/24/2005	04>	<10	<10	<10	<10	<10	<10	<10	<10	0!>	<10	<10	<10	01>	01>
TMW-9	8/24/2005	01>	<10	· <10	<10	<10	<10	<10	<10	<10	<10	<10	26	<10	<10	01⊳
TMW-10	8/24/2005	<10	<10	01>	0I>	<10	>10	<10	01>	<10	<10	<10	13	OI>	<10	01>
2	MCLs	NA	NA	9	NA	NA	NA.	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1				25.00			The second secon								

BRL = Below Reporting Limits

NA = Not Applicable

Note: Other RCRA SVOC concentrations were BRL except for those noted above.

Davidson-Kennedy Facility Phase II ESA 1195 Victory Drive Atlanta, Fulton County, Georgia

TABLE 6: POTENTIOMETRIC ELEVATIONS

Well Location	Date Measured	TOC Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Potentiometric Elevation (ft)
TMW-1	7/28/2005	85.04	22.06	ND	ND	62.98
	8/30/2005	85.04	21.19	ND	ND	63.85
TMW-2	7/28/2005	95.70	19.42	ND	ND	76.28
	8/30/2005	95.70	19.84	ND	ND	75.86
TMW-3	7/28/2005	100.00	19.83	ND	ND	80.17
	8/30/2005	100.00	20.20	ND	ND	79.80
TMW-4	7/28/2005	97.61	18.81	ND	ND	78.80
	8/30/2005	97.61	19.23	ND	ND	78.38
TMW-5	7/28/2005	65.84	12.31	ND	ND	53.53
	8/30/2005	65.84	12.68	ND	ND	53.16
TMW-6	7/28/2005	64.54	12.12	ND	ND	52.52
	8/30/2005	64.54	12.53	ND	ND	52.01
TMW-7	8/30/2005	99.42	22.05	ND	ND	77.37
TMW-8	8/30/2005	97.33	22.78	ND	ND	74.55
TMW-9	8/30/2005	65.92	2.96	ND	ND	62.96
TMW-10	8/30/2005	67.16	1.08	ND	ND	66.08

Notes: ND= Not Detected



APPENDIX D

HISTORIC INFORMATION FOR ANTHROPOGENIC BACKGROUND

List of Sites on HSI by Site Number

HSI ID	Site Name	Site County
10090	Bon L Manufacturing Company	Coweta
10091	Travis Field/Savannah International Airport	Chatham
10092	Cedartown Municipal Landfill - Former NPL Site	Polk
10093	U.S. Naval Submarine Base, Kings Bay	Camden
10094	U.S. Marine Corps Logistics Base - NPL Site	Dougherty
10095	Central of GA RR/Bernuth-Lembcke Site	Chatham
10096	M&J Solvents Company	Fulton
10097	Atlanta Gas Light Company - Waycross MGP Site	Ware
10098	Colonial Terminals, Plant #2	Chatham
10099	Alco Controls	Jeff Davis
10101	CSX Transportation - Powell Duffryn	Chatham
10106	Cedartown Battery Site	Polk
10109	Rome Coal Tar Pit	Floyd
10111	Scripto Plant & Office Complex	Fulton
10112	U.S. Army - Fort Benning	Muscogee
10113	Atlanta Gas Light Company - Valdosta MGP Site	Lowndes
10114	Union Camp Corp - Former Amoco Property	Chatham
10115	Phibro-Tech (fka C P Chemicals)	Cobb
10116	Georgia Metals	Cobb
10120	Westinghouse Warehouse	Fulton
10121	North Decatur Road/Burlington Road Site	Dekalb
10122	Amoco Fabrics & Fibers - Hazlehurst Mills	Jeff Davis
10123	Arivec Chemicals	Douglas
10124	Perma-Fix of South Georgia (fka Chemical Conservation of Georgia)	Lowndes
10126	U.S. Army Corps of Engineers Airstrip (current)	Decatur
10127	Dickies Industrial Services Site (Former)	Fulton
10128	Atlanta Gas Light Company - Savannah MGP Site	Chatham
10132	Atlanta Gas Light Company - Augusta MGP Site	Richmond
10133	Chemical Specialties, Inc (CSI)	Lowndes
10135	Monroe Auto Equipment Company	Hart
10136	Monsanto Chemical Company - (former NPL Site)	Richmond
10137	York Casket Hardware (fka Piedmont Metals)	Gwinnett
10138	Seitzinger	Fulton
10139	304 N Dudley Street Site	Sumter
10140	Union Timber	Clinch
10141	Southern States	Henry
10142	So Green Waste Pile	Tift
10143	Parramore Fertilizer	Tift
10144	LCP Chemicals - NPL Site	Glynn
10145	Olin Corporation	Richmond
10146	Air Force Plant 6	Cobb
10147	Ashland Chemical Company	Dekalb
10150	U.S. Army - Fort McPherson - Incinerator Ash Disposal	Fulton
10151	Signal Energy Holdings (Former Young Refining)	Douglas
10152	Peach Metal Industries	Peach
10153	Atlanta Gas Light Company - Athens MGP Site	Clarke
10154	Douglas & Lomason Company	Coweta
10156	Federal Law Enforcement Training Center	Glynn
10157	Manor Timber Company	Clinch
10158	Johnson Controls	Fulton
10162	Ashland Chemical Company	Chatham
10165	Conyers Battery Exchange	Rockdale
10166	Ideal City Site	Macon
10167	Macon Naval Ordnance Landfill (Former)	Bibb
10168	Moultrie WWTP	Colquitt
10170	A&D Barrel & Drum Company	Fulton
10170	AGD Barror & Drum Company	Fulloff

Fort McPherson RAB Meeting Minutes BRAC Environmental Division January 15,2008 The Commons, Fort McPherson, Georgia

Garrison Headquarters:

Present: Colonel Marguerite Garrison

Base Realignment and Closure Office:

Present: Glynn Ryan, BRAC Officer

BRAC Environmental Division:

Present: Victor Bonilla, Amelia Guill, Ernest White

Georgia Environmental Protection Division:

Present: Amy Potter, William Logan

Local Redevelopment Authority of Fort McPherson:

Not Represented.

RAB Members in Attendance:

Present: Mary Frances Allen, Paul Brightbill, Tanika Crowther, Collette Denmark, Larry Jones, Edith Ladipo, Stuart John Mann, Albert Rich, Debra Robinson, Kirk Surgeon.

Agenda:

- -Welcome and Opening Remarks
- -Introduction of Meeting Attendees
- -Purpose of the Meeting
- -Elect Community Co-Chair
- -RAB Mission Statement
- -RAB By-Laws
- -Status of the Cleanup
- -Schedule Next Meeting
- -Meeting Concludes

Call to Order: Victor Bonilla

- -Welcomed everyone to Restoration Advisory Board meeting.
- -Introduced Colonel Garrison.

Colonel Garrison:

- -Welcome remarks.
- -Emphasized the importance of RAB committee.
- -RAB is to provide advice on environmental issues to the decision makers.
- -RAB is not a decision making body.

-Reuse plan is responsibility of the Fort McPherson Planning Local Reuse Authority (LRA). All discussions or interest regarding property reuse and redevelopment should be addressed to the LRA outside this forum.

Quorum: Established. 12 of 15 RAB members present.

Previous Meeting Minutes: Approved. Members were concerned that questions were not included in the minutes. We agreed to reconcile the minutes to include questions and responses.

Nomination of Community Co-Chair- Responsibilities of Community Co-Chair. Co-Chair will need to dedicate 5-7 hours per month to responsibilities. The Community Co-Chair will help the DOD (Department of Defense) Co-Chair advise the board regarding environmental cleanup issues and activities for Fort McPherson. The Co-Chair will assist with the meeting agendas, the meeting minutes, and reporting to the Garrison Commander any concerns the community might have regarding the cleanup process. This person will be the "go-to" person representing the community RAB members. They will coordinate any concerns or questions the community or RAB members might have and contact Victor with those concerns. This prevents too many people contacting Victor with concerns. The RAB community members nominated Mr. Paul Brightbill who recently was secretary of his neighborhood Homeowners Association for the community cochair position. Everyone agreed that he would be the Co-Chair to serve one year.

Mission Statement: Accepted as written. Ms. Ladipo moved for adoption of the Mission Statement, Mr. Jones seconded, everyone concurred.

By-Laws: After reviewing the By-Laws, it was determined that there needed to be 3 changes to them.

- 1. Page 2, Paragraph 4. The membership should be no larger than 15 and no smaller than 10.
- 2. Page 4, Paragraph A. The Community Co-Chair is limited to 1 year term. The Co-Chair may be re-elected after their first term.
- 3. Page 5, Paragraph 8. If a special focus meeting is not scheduled during the prior RAB meeting, it will not counted within limits as an absenteeism for any members who are not able to attend.

The By-Laws are approved with the above changes.

Status of Cleanup: We are conducting ground water site investigation currently, soil sampling, trace investigations to determine if we have burial sites we are not aware of. The large gray area on your map is the area we

investigated last week. It is located at the second tree line on the golf course near the balcony of the Commons where we had the National Guard Rifle Range and the Skeet and Trap Range which have the possibility of having lead in the soil. We conducted soil sampling at these locations. We also conducted soil sampling for lead at the Pistol Range. There was a finding on the surface soil, which is 10-12 inches, of 15-20 parts per million with the background being 20-50 parts per million occurring naturally on the soil. We are within background levels on the Rifle Range. The Skeet and Trap Range was higher than background levels. We conducted a subsurface investigation, 13-24 inches, and had a finding within normal background levels. This indicates to us that we do have lead on the Skeet and Trap Range but it is on the surface soil. Lead is a heavy metal that does not move unless it is disturbed. This is a good finding for us. The lead was actually found in the 9-10 inch surface soil area. We are currently reviewing this area further to confirm our findings.

The greater concentrations of lead are found in the areas that the trees were planted on 50 years ago. This soil has not been moved around. This is an area that we will have to determine what we have to do before we turn the land over. The area of the golf course that was moved around had findings of only trace lead.

The current areas of sampling are about 2-3 acres. Many parts of these areas are being sampled. There would be concern if when we sampled in the 13-24 inch subsurface level the ranges were not within the background level.

We have an issue in the area of the Skeet and Trap Range. This area is reduced further. We are taking all the soil samples to lab for further confirmation of our findings.

We are currently cleaning up two underground storage tanks (UST). We are consulting with Buddy Logan to assure compliance with the state agencies. We have found free product on the ground water table. We are pumping out the ground water with the free product.

Question/Answer Session:

Q: What happens if our membership falls below 10? How will we be able to make decisions?

A: There is always the option of adjusting the By Laws to reflect the new count in the future. If this is not the way the committee decides to go, then we will have to wait until we get replacements for the members who are no longer on the board. We will use the list of individuals who applied previously for the position.

Q: What happens if the person leaving the board is the Co-Chair?

A: Then the board will have to elect a new Co-Chair. The committee has the option to remove the Co-Chair if they miss three meetings.

Q: Would it be valuable to have alternates-maybe someone who is on the list to attend the meetings so they can be present and help us meet our quorum?

A: Because of our quorum, there really never should be a time when we do not have representation at a meeting. It would have to be a catastrophic event to cause us to fall below our quorum. Further, we have guidelines set up in the By Laws that will help us in case a situation arises that would cause our membership to fall below the minimum.

Q: If our membership falls below the minimum of 10, how will we be able to proceed with decisions?

A: We have the list of individuals who were interested in participating on this board and were not chosen. We will contact those individuals and determine if they still have an interest and, if so, the Garrison Commander will start the selection process over.

Q: Is there an example of a special focus meeting?

A: An example of a special focus meeting would be a meeting that is scheduled to review the findings of a site investigation report.

Q: The same business rules apply to those meetings as to scheduled meetings? A: Yes. We still have to meet our quorum to conduct official business. All RAB members will be notified of a date and time to meet.

Q: Do we want to penalize people for not showing up at a special focus meeting?

A: Currently, the By Laws are written to show that a RAB member will not be penalized for not being available to attend a special focus meeting. It is up to you to determine if you want this changed in the By Laws.

Q: Can we coordinate using a conference call if someone cannot make it to a meeting?

A: We can do that provided it is a local call but it will be a last resort. Remember that the person who is not present cannot participate in the voting process even though they are on a conference call. A conference call does not count toward the quorum. Because of the process to set up a conference call, the meeting will either have to be changed to another date/time or moved to Building 65.

Q: What if RAB wanted a website?

A: We could add a link to the Fort McPherson website. However, we cannot have a chat room link. The site would be more informational or for referencing. We are limited as to the type of information we can post on the web.

Q: How are cleanup activities established?

A: We work with the Georgia EPD to determine requirements. We test the ground water, subsurface water, and soil sampling. These areas have to meet the standards provided by the Georgia EPD.

Q: What does subsurface mean?

A: 13-24 inches below ground.

Q: Where does it go after the 13-24 inches?

A: It is then in the groundwater area.

Q: What was the actual percentage of lead found in the Skeet and Trap Range area?

A: We found 500 parts per million. In some places, we found 3000 parts per million.

Q: What is unsafe?

A: Per the EPA. Residential numbers are okay up to 400 parts per million. Industrial numbers are okay up to 700 parts per million. These are screening numbers.

Q: What if the property is zoned residential in the future?

A: The guidelines are that all federal facilities will clean up for the current use of the property. If the property is zoned differently after we meet our guidelines, the Local Redevelopment Authority is required to clean up.

Q: Currently the areas you are testing are in the open space area but on the map of future use this property is going to be residential. Is it your responsibility to clean up to the background levels for residential?

A: No. It is the Local Redevelopment Authorities responsibility to clean up to the residential background levels. Our liability is to clean up for open space. It is what we are funded to complete. Any changes in the zoning would require the purchaser to clean up to the level of zoning.

Q: Is Atlanta, East Point, and the surrounding area going to have to spend more money to get it to the normal background level for residential because you are only going to clean it for open space?

A: The community should not have to spend the money. Whoever is purchasing the property is responsible for that expense. The developer will have to fund the clean up.

Q: All of the cleanup involved at Fort McPherson will be to the current use level? A: Yes. We are required by the Department of Defense to provide clean up for current use which is our range of consideration. We will be in a fiscal violation if we clean up for a different use which is subject to Federal prosecution.

Q: The area where there was open-pit burning will have areas that will get filled in right?

A: No. This site is where the barracks are located. It is identified as the FTMP-06 or Old Incinerator Ash Dumpsite. They found ashes when they began digging in the area for the construction of the barracks. There was over 2 million dollars spent excavating the soil in that area. We did find lead that we will have to do some hotspot cleanup. Amy Potter and Eddie Williams with the EPA are assisting us in this area.

Q: What are the requirements regarding water?

A: Ground water contaminates have to be remediated and meet drinking water standards as determined by the Georgia EPD.

Q: What about lakes?

A: That is a possibility of ground water discharging to surface water. They will have to meet separate standards and we will make sure that they are at safe levels.

Q: What is OVA?

A: Organic Vapor Analyzer-a device that records the vapors that contain hyper carbons.

Q: What are action levels for site activity?

A: The sites have a set of standards that have to be met. If these areas have positive findings for contaminates, we have to determine the level of cleanup.

Q: Who maintains the investigation information?

A: The consultant. The BRAC Environmental Office and the EPD also has a copy of these reports available to you.

Q: Is this information available to the public?

A: We are required to record the results of everything we monitor. We then develop a report with this information. The Environmental Office and EPD will have a copy of these results. There is not a repository available at this time.

Q: Is the Scope of Work that is on the CD is information prepared for current investigations?

A: The CD's contain information that has been digitized. Not all of the documents are there at this time because we are working through a second contract now. We still have to digitize the lead base documents. The information on these CDs was work that was done in the past during Phase I.

Q: What was discovered with the hospital garbage?

A: Mostly lead contamination, and it was excavated and disposed. Our hazardous waste is transported to Alabama because Georgia does not have a hazardous waste disposal landfill.

Q: Is the surface water standard different than the drinking water standards?

A: The surface water standards will be stricter but most of the time they exceed the drinking water standards.

Q: Is there a possibility that the surface water could be contaminated by the cleanup of the groundwater and are we treating to the surface water standards? A: We have four mandated lakes which are replenished with surface water and we have no indication of recharge from surface water to lakes. In addition, we have Utoy Creek which enters and leaves the installation. We have no indication that these bodies of water are being recharged by the groundwater. The contaminates found in the two groundwater areas we are cleaning are not charging the surface water at all.

Q: Because the banks of Utoy Creek are raw, we are concerned that this may be a result of contamination—are you saying that because the elevation of the water, there is no recharging of these waters?

A: Most of this area is clay which is trapping any contaminates and impeding them from moving or entering water areas. Any release is very slow.

Q: Regarding the area around the golf course that has high concentrations of lead contamination, are the trees going to be moved for the cleanup?A: We will clean around the trees. They will try to save all the trees.

Q: Why haven't the roots of the trees absorbed the contaminates?

A: Although vegetation does help with absorption of the contaminates, the roots are lower than the contaminates at this time.

Q: Can the EPD provide the members with the booklet that contains information regarding acceptable chemical levels for water?

A: We can provide information regarding the maximum contaminate levels for water and soil.

Q: Is the DOD responsible for the cleanup of the water areas to a level of drinking water?

A: We purchase our water from Atlanta and East Point. We have no groundwater wells that are used for drinking purposes.

Schedule Meeting: The Commons, April 22, 2008, 7 p.m.

Meeting adjourned at approximately 9:20 p.m.

In attendance were 10 RAB community members, 1 RAB member from GA EPD, 1 Army RAB member (BEC), 1 RAB LRA representative was absent, and 2 RAB

members were absent for a total of 15 RAB members. Therefore, the quorum is 8. The following RAB members were absent: Rodrecus L. Donnings, and Jake Knapp. The LRA Representative absent was Mr. Jack Sprott.

Minutes submitted by BRAC Environmental Assistant, Amelia Guill.

-END-

ADDENDUM TO September 25, 2007 MINUTES QUESTION/ANSWER

Q: Are any or all of the site investigation documents available online by chance? A: We have a repository for Fort McPherson located at the East Point library. We have copies of most of documents that we have completed. Current reports are not available at the library. I have hard copies of those available in my office.

-There is brief overview of the reuse plan that will kind of get you up to speed but, again, it does not have the current information.

-It is available in my office for you to review as well. We have coordinated this with Amy Potter and William Logan. They have provided comments on the work plan.

Q: Are you working on getting this information online for the RAB members? A: Yes, we are.

Q: So, is it safe to say in Phase 1 there was no sampling done, is that what I am hearing? That Phase 2 is where you actually go out to the field and conduct the sampling?

A: Yes. Phase 2 is called the site investigation. In Phase 1, based on the information we have, we may have storage, release or disposal then, in Phase 2, we develop a work plan like this (show the work plan document) and then we go out into the field and sample the medias which may have been impacted. Then we sample those medias specifically and we with an additional laundry list of all sorts of chemicals that we have to look for following an specific protocol that has been approved by the GA EPD.

Q: Who is doing that work for you?

A: Shaw Environmental is doing that work as we speak. We are not done yet.

Q: How many acres are we working with?

A: There are 7 categories of this property so that is where it gets confusing. Category 1 is the totally clean 389 acres. Now, category 2 is 33 acres so there is your 34 and category 7 is your 64.

-Page 17 of the Reuse Plan and Development defines this.

-And then there is one acre on Environmental Condition of Property 4 and that adds to the 487 acres that we have. So, you can see from the numbers that we have most of the property here is clean. This is practically a clean post.

Q: When you say the property is clean is that based on what the land was previously used for or building that was previously there? And how far did you go back to make that decision?

A: We go as far as the records we have available. The records that we have available go back to the beginning of the 20th century to 1908, 1910, 1914, First World War, Second World War-we have records that go back that far. Like the pistol range that we have across from Hedekin Field, that pistol range was used as a pistol range back in the 40's. So, we have that information as well. We follow through to do a Phase 2 site investigation process based on Phase 1. If we have no indication of having either storage, release, or disposal and/or migration, then we do not investigate any further. And, of course, the results of those findings have to be coordinated with the GA Environmental Protection Agency so we coordinated the contamination, we coordinated the findings, we have their recommendations and we move along in the process.

Q: You do not investigate areas you have no records on?

A: No, what I said is if we have no indication that we store, pour, release, dispose and/or migration of the current problem or hazardous substance on a given parcel we do not go any further. That is the purpose of Phase 1. Phase 1 just tells you baseline data. You say okay how many sites do I have to investigate then you move to Phase 2 where you actually go into the field and sample to find out if you have an issue or not. If you have an issue, a release or disposal, then you move to the next phase into the cleanup process which is to do a remedial investigation process. When that investigation is done, you determine the nature of the contamination. We are required to follow, DoD facilities, the CERCLA process to do the investigation process and the cleanup. What is known as the RI/FS process, the Remedial Investigation/Feasibility Study process, which is the process that we follow usually from beginning to end. I have been doing this type of work for over 15 years and it usually takes 10 years but you can shorten it and that is what we are trying to do here.

Q: Who completed Phase 1 and are they on board to complete Phase 2?
A: Yes, they are here as we speak. Well they are not here right now, they are at a hotel of course but they have not completed Phase 2 work yet.

Q: If I may, I might ask because I am a dollar and sense man, they came on a bid to procure this contract? Shaw? And they were the minimum dollar amount bidders on this I assume?

A: Yes. No, it was selected based on performance and we were not involved in the selection process; let me put it that way, let me back up. This work is being centrally funded by the Department of the Army. So, this was a contract that is being done through the Corp of Engineers.

Q: What you did was you took the whole 487 acres and you looked at the existing records to find out in fact what had been on that property, the footprint of that property 10 or 15 years?

A: For over 100 years.

Q: And then, once you did that, you looked at those areas that had some potential contamination?

A: Yes.

Q: And then you looked at, from Phase 1, you decided you needed to go explore those areas to find out if they were contaminated?

A: On Phase 2 to see if we have a release, disposal, storage, and/or migration of a contaminate that is impacting any media, soil, subsurface soil, ground water, surface water, and sediments.

Q: Now could you use any of the, I know the Department of the Army does not have to use the same procedures that maybe some other sources would, documentation that might be available through the EPA or some other sources? I know you may not report to them.

A: We partner with GA EPD which is the state environmental protection agency. We are not required to work with the Environmental Protection Agency (EPA) at the Federal level because the lead environmental agency for this installation is the State. Under Georgia Department of Natural Resources, we have the GA EPD as the watchdog for environmental cleanup activities within the state of Georgia.

Q: So that information is available through the state even before you?

A: It is available to us too. We have that information available and most likely what we will have to do is burn CD's. We will get those files electronically and burn CD's to include the work plan and the Phase 1 and make that available to you all. It is available in my office. You can call me or Ernest and we can give you the information.

Q: Do you have specific names of solvents that you found?
A: TCE was found on what we call FTMP-11 which is the commissary parking lot which is building 363. This is one of the areas of evaluation that we are investigating on Phase 2.

-Glynn Ryan: One of the reasons that we investigated that area, while that is now an office building and commons area and a grocery store, that was a maintenance area and paint shop. So, we knew there was a possibility of solvents and other petroleum products so that is the reason further investigation was done.

-Victor Bonilla: Owen actually did some soil samples out there years ago that came out with TCE. Not a large amount of TCE. I mean TCE has a very small

mcl, 5 parts per billion, but it was not a large amount of TCE. So, we are now investigating the ground water. The ground water here, as I mentioned before, is very shallow. We have clay here so there is not too much conductivity on clay.

Q: I am sorry was that TCE?

A: Yes, it is called trichloroethylene. It is a solvent that is used quite frequently by the military.

-It is used for maintenance activities, to clean parts and stuff like that.

Q: Could you give us a list of what you have found so far?

A: It is in the reports and you have a copy of the reports that includes all the findings of Phase 1. You have exactly what we are sampling for and where we are going to be sampling and how deep. Phase 2, you saw the different areas that are requiring additional investigation. I showed you the administrative records. The administrative records/information that we have is available at the East Point Library. I took a copy of this and hand delivered it to the East Point Library. Now, this is a work in progress. The next fiscal year we, hopefully, will have a contract in place to finish up the administrative records. So, one thing we can do is make this information available to you, we can burn CD's pretty easy and you will have your very own copy of the index and of all the documents. They are very extensive. In addition to that part of the environmental work, we are required to do NEPA (National Environmental Policy Act) process for the closure, disposal and reuse of the facility. We have to evaluate the reuse of the facility as well. So that process is going parallel to the environmental cleanup.

Originally, we were talking about doing an environmental assessment (EA) for Fort McPherson but due to the intensity of the reuse, thanks to Jack, plan and the intensity of the reuse which increased by three-fold. Due to the high intensity, the EA is no longer an EA; it is an EIS (Environmental Impact Statement). The impact to us is that we were scheduled originally to finish up the environmental assessment by this December 2007 and the EIS increased the schedule for completion by about 10 more months. So, now we are looking at having EIS record signed by September or October of next year (2008).

Q: Was the extension because they found more problems than you expected? A: No, because of the intensity of the reuse from the Local Redevelopment Authority, the intensity triples.

- I think, to better answer your question, the document that we have to prepare to document all of the impact is a lot larger document and a lot more intensive work and so is the workload we go into for us to prepare it. This document really goes into the economic impact, what the road network, what all the population increase will do. That is what the real issue is here. It is not the environmental.

- It is more of the impact of the redevelopment. What kind of impact that is going to have on the environment and the other resources in the area.
- And also assess, as Mr. Ryan said, the economic impact on the surrounding communities. Now, to give you an example, an EA, environmental assessment, would look like this (shows thin manuscript), an EIS would look like this or more (shows large book).

Concurrent with the NEPA process, we are also required to do a Programmatic Agreement (PA) to address the cultural resources that we have on the installation and the archaeological resources. We have done a survey for wetlands, we have done a survey for archaeological; we have archaeological resources, we have wetlands resources, we do have a lot of cultural resources. So, we do have to follow another process that goes parallel to the NEPA process. That is how we end up with the Programmatic Agreement document. That process has to be coordinated with the SHPO (State Historical Preservation Office) which is under the Georgia Department of Natural Resources. The EPD works for the Georgia Department of Natural Resources and the SHPO works for the Georgia Department of Natural Resources. So, we have to coordinate with another group from Georgia to finalize the Programmatic Agreement. So, we are in the process of pursuing that process as we speak. Also, talking about the NEPA, we are trying schedule a scoping meeting for the EIS at Fort McPherson. Toward the end of November and beginning of December, we are going to have a public meeting for the NEPA scoping meeting. At that public scoping meeting, we will have stations to discuss the historical resources that we have at the installation because we do have a historical district here. We will be discussing all those issues and accepting public comments on the EIS and seeking public comments on the cultural resources as well.

Q: Will that scoping meeting include a tour or a formal presentation of the natural resources in the area?

A: That will include an overview of the NEPA process, the EIS process, and the cultural resources, and the Programmatic Agreement process. Then we will have work stations where we will have somebody to answer questions about NEPA, somebody to answer questions about the cultural resources and natural resources that we have also. We will have a station for people to write their comments. If they do not want to write it, they can email us with a comment. Those comments will be addressed as part of the NEPA process. We do not know when that meeting will be scheduled. We are working on it.

That is the status of the cleanup program and the NEPA and the cultural resources.

Anybody have any questions regarding what we have just discussed?

Q: Mine is a little aside from the cleanup. I was thinking since Fort McPherson is such a historical site will we have a museum or some replica of important landmarks of like pictures or replicas to remind me of what was here? So, if we have students coming to visit to see what was here.

A: We had the Museum of Atlanta which has already moved to Fort Benning.

- -That area will be a cultural area so you may see something like that.
- As part of the Programmatic Agreement we have been talking about, the idea is to memorialize the resources that we have, the documents and it includes the Historical District which is Hedekin Field and all those beautiful mansions we have and the office buildings on the other side.
- Q: Which brings another question to mind, the buildings are probably very old and will be lived in or worked in. Have the buildings themselves been tested? Is that part of Phase 1? Have they been checked for asbestos?
 -Yes they have been tested. All of that is identified in Phase 1, asbestos, lead base paint, Radon. All of those agents are in compliance. We have people who live and work there so we have to assure them that these agents do not present a health hazard to those people.
- Do not misunderstand that the lead base paint and asbestos are managed which means they are contained. If a developer were to come in and do major renovations, it would be the developers responsibility to manage the lead base paint that is present.
- Q: Are we in a gray area, can you show us on the map where we are?
 A: Yes. The gray area does not represent a health hazard. The issue we have with the gray area is that the rifle range and the target range there is lead in the soil because it was used as a small arms range. When you have a small arms range, you have lead. Heavy metal is the issue. We are investigating that issue.
- Q: As far as Shaw doing the testing of the sites, is there any air testing?
 A: We do not have any issues with air. We have no indications that we have an issue with any contaminants. So, we are not doing anything regarding that media.
- Q: I have one question. I will have to take you all the way back to Phase 1 because it is still lingering in my mind. I realize that you documented what went on at the base by the records since 1889 but was there any way to document how they disposed of anything because they may not have disposed at the point of a building throughout history? They could just be disposing waste of any type any where.
- A: If the Phase 1 investigations show where something happened, we do not know what it is so we have to go into Phase 2. The Phase 1 site investigations cover a lot of details not just written records. There are a lot of looks at historical

photographs of what happened here. We really do a lot of research and work with the state regulatory agents to make sure they do not have records or some other records exist that may not be the army records.

- We take historical aerial photos to review and we have copies of those at my office. They are analyzed for a scar on the ground. In the DPW compound, we are identifying sites in the building 363 area as a result of the photos. We can identify some disturbances on the soil.

Q: So aerial photos start in what year?

A: The earlier one is during the WWI. I have the set in my office and will be happy to share it with you. Let's say we identify a specific chemical that we store or release or dispose of in a given area we not only analyze for that specific chemical but a whole list of other chemicals as well. Many times we find something that we did not know was there.

Q: But there are no random samplings on areas that you did not identify as possibly something happening there?

A: The answer is no. If we do not have a history of storage, disposal, release, and/or migration, we do not sample. Let me clarify this information for you. When the property is disposed, outside Federal control, we are required under, CERCLA 120 h (3), to have covenants. The covenants will basically say that we dispose this property to you. If you find any contaminations, due to army activities at the site, we will come back and clean it up. If the developer contaminated the land during the development process they will be responsible. This is a guarantee that when the property is turned over out of our control the Army is liable for the release and disposal of such substances.

Q: Which areas are really bad?

A: Well, in reality, none of them are really bad.

- We do not know enough right now to say which areas need to be addressed first.
- That is the reason we are in Phase 2.
- They are doing the sampling right now.
- As a matter of fact, we are addressing them all.

Q: In the sampling, given your location, there is an issue in East Point right now with Penta, in the sampling that you are doing in Phase 2, is that one of the ones you are testing for?

A: We are going to have to look into that. I do believe it is one of the chemicals tested with pesticides. He is talking about creosote. Pentachlorophenol.

Comments: We have a manufacturing plant literally within a mile of this facility that uses that so that is why he asked that.

Q: Is it up gradient or down gradient from us?

- It is on a different drainage. I believe it is all the way down Main Street and they are behind the high school. It is on the other side of the railroad tracks.
- In the Phase 1 site investigation, we included assessments around the installation. We checked for gas stations around the area to see how far away they are. We checked to see if they were up gradient or down gradient. We checked for hazardous waste storage areas and found out where they are, up gradient or down gradient. We searched for all potential sources of contamination coming into the installation from outside because in many cases we have been impacted by pollutants coming from outside the facility. Fort Gillem is an example of this. We are impacted by outside contamination migrating on post. Here we do not have any indication of an issue like that.
- Q: Those maps of up gradient or down gradient are listed here in this information?

A: They are a part of Phase 1 site investigation.

Q: I know that the museum and its resources have been moved to Fort Benning but I was wondering if these cultural artifacts will be returned to East Point?

A: No, the artifacts we are talking about are uniforms, weapons, and other things that are army artifacts. They belong to the Center for Military History of the Army and they are moving all of that to the Infantry Museum and the Army Museum which is a new museum being built at Fort Benning. We even have some Civil War cannons and Georgia cannons. They will not leave the state but they will go to Fort Benning. That is part of the things we always do. Anything that is military or military value we take with us when we close the base.

Q: Edith Ladipo: Could we get the information about what authority that is done? Or can you tell us what authority that is done?

A: Yes, I can get that information. I cannot recite it for you.

Q: Are there any other cultural resources online to be transferred out of this area?

A: Most of the cultural resources that we identify as cultural resources will be buildings. All of that will be identified in the Programmatic Agreement with the State Historic Preservation.

Q: The reason I ask this is because we were under the impression there was some memorabilia that was located at Fort McPherson and that was a part of our efforts to try and get for the preservation committee.

A: I do not know if there is anything there but I will ask the question.

Q: I guess my clients always ask me what is the bottom line? Dollar amount? What are we allocating to this cleanup?

A: We developed a cost to complete based on the current information. I do not have those numbers with me. We have no way of knowing how much we will have to do based on the completion of Phase 2 investigation.

Q: So it is whatever it takes, basically?

A: We are cleaning up for the reuse of the property. Whatever it takes for us to cleanup for the current reuse of the property is what we will do. That is what we are required by DoD to do.

- The cost to complete is actually a figure that is available to the public but it changes every year as we learn more. Sometimes it goes up drastically or sometimes it goes down drastically. It depends on how good our estimation of what the problems are but at the next meeting, we can give you the cost based on what we know today. The Army is dedicated to the cleanup. Our job is to do the cleanup to a level that we are using today or even safer to the environment. The cost is not a factor that we look at. It has to be done.
- Q: During the redevelopment, if we do not go back and cleanup something, that is going to be infinitely higher?
- A: We work with the LRA and tell them what to expect up front. What we would expect is that they would work with that same principle. For example, if we have an area that we do not believe a daycare center should be on, we let them know. If they decide to build one there anyway, they will incur the cost.
- I think we have managed that pretty well. Obviously, an area that could have lead may also have some residential units in our plan so we will be concerned and see what is out there and hope they can remediate the lead from any residential areas.
- The army will only clean up this property to what it is currently zoned. If Jack client has a client that wants to put a residential area in that same piece of property and it is only cleaned up to industrial, the developer will have to take it to residential.
- We have some indications that we have lead in this area but we do not know how much we have. Phase 2 of the investigation process will let us know what the concentration is there and how lead is scattered in those areas.
- I would add that we error on the size of too much rather than not enough. We do not expect any greater expansion of areas.
- If you look at the whole map, you have firing points. We fire down range. The areas that are the firing point should not have lead. The lead concentration in all

the range areas is less than what we have outlined because we outlined the firing point.

Comment: Kirk Surgeon: If you look at page 30 in the report, you will notice that most of that gray area will be used as green space.

- You have the waterway underneath that. It will be pulled up and reimplemented. You have some residential that will be on it but that will be green space and event space for the most part.
- It is going to be a park.
- -Jack Sprott: So the army should not mind cleaning up that small space that is going to be residential?
- If we find some lead contamination, we will clean up that space.
- Q: You mentioned that you are also looking at contamination from outside?

 A: Phase 1 explains we do this to see if there is any migration. Part of this process is to see if there is potential migration off post.

-End Addendum to September 25, 2007 Minutes-



FINAL COMMUNITY INVOLVEMENT PLAN FORT MCPHERSON INSTALLATION RESTORATION PROGRAM

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- 1 Site Location Map
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ACRONYMS

amsl above mean sea level

BEC BRAC Environmental Coordinator
BRAC Base Realignment and Closure

CAP Corrective Action Plan

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CIP Community Involvement Plan

ECP Environmental Condition of Property

FORSCOM U.S. Army Forces Command FUDS Formerly Used Defense Sites

GA EPD Georgia Environmental Protection Division

HAS Historical Site Assessment

HQ Headquarters

IRA Interim Remedial Action

IRP Installation Restoration Program

km² square kilometers

m meter

mi² square miles

MMRP Military Munitions Response Program

NCP National Contingency Plan

NFA No Further Action NG National Guard

PA Preliminary Assessment
POL Petroleum, Oil & Lubricants

PX Post Exchange RA Remedial Action

RAB Restoration Advisory Board

RD Remedial Design

RI/FS Remedial Investigation/Feasibility Study

SI Site Investigation SVE Soil Vapor Extraction

USATHAMA U.S. Army Toxic and Hazardous Materials Agency US EPA United States Environmental Protection Agency

UST Underground Storage Tank

SECTION 1: OVERVIEW OF COMMUNITY INVOLVEMENT PLAN

The U.S. Army developed this Community Involvement Plan (CIP) to facilitate two-way communication between the Army and the communities that surround Fort McPherson regarding its environmental cleanup program. Fort McPherson will utilize the community relations activities outlined in this plan to keep residents informed of environmental conditions on site and to provide the public opportunities to be involved.

Appropriate and effective communication, as well as the timely exchange of information, is imperative for maintaining community understanding and support for Fort McPherson and to ensure the success of any CIP. Therefore, it is the continuing goal of this CIP to keep the residents of the Fort McPherson area communities informed of ongoing and planned environmental cleanup activities at the installation. This CIP also outlines how the Army will provide the public with information necessary to aid in addressing local concerns.

This section presents an overview of the CIP. Section 2, Capsule Site Description, provides site history, description, and an overview of cleanup activities that have occurred at the installation. Section 3, Community Background, provides a community profile, history of community relations, community interview methodology and overviews, and priority issue identification. Section 4, Strategy, presents the projected activities intended to respond to community concerns and communication needs. Section 5, Conclusion, provides a summary of the plan.

Section 2: Capsule Site Description

The following subsections present an overview and general chronology of site activities at Fort McPherson and cleanup operations to date:

Section 2.1, Site History	Presents an overview of installation operations.
Section 2.2, Site	Discusses the geographic location of Fort McPherson.
Location/Description	
Section 2.3, Cleanup Activities	Reviews the history of the cleanup operations of Fort
	McPherson.

2.1 SITE HISTORY

2.1.1 History of Operations at Fort McPherson

Fort McPherson is an active U.S. Army facility which houses many headquarters (HQ) and tenant organizations. The installation is the home of the U.S. Army Forces Command (FORSCOM), the U.S. Army Reserve Command (USARC), the Installation Management Command (IMCOM) Southeast Region, Army Contracting Agency, Southern Region, and the Third U.S. Army. FORSCOM is responsible for the training and readiness of nearly one million active, Army National Guard (NG) and Army Reserve soldiers, providing effective, strategic forces capable of responding rapidly in support of national security.

Congress designated McPherson Barracks as a permanent post in 1884 and named it Fort McPherson. Many of the permanent structures at Fort McPherson were constructed during the period of 1884-1889. This older section of the post, which includes Hedekin Field and adjacent residential and administrative areas, was placed on the National Register of Historic Places in 1975.

Fort McPherson has been most active in the past during periods of conflict. During the Spanish/American War, the post served as a training base for the 29th U.S. Volunteers and during World War I became noted for its officer training school, hospital, and internment camp for 1,400 German prisoners of war.

During the periods 1920-1924 and 1927-1934, Fort McPherson was HQ for the 4th Corps, which had formerly been known as the "Southeastern Department" of military responsibility. Following a major expansion of the post hospital in 1931, Fort McPherson became known primarily as a rehabilitation center. At the outbreak of World War II, the facilities at Fort McPherson were used primarily as an induction, reception, and separation center for U.S. military servicemen. The major command at Fort McPherson was Third U. S. Army which was part of the Continental Army Command. Since the end of World War II, Fort McPherson's major function has been to provide administrative support for Third U.S. Army. On July 31, 1973, HQ FORSCOM was established at Fort McPherson which replaced Third U. S. Army as the major command. On December 3, 1982, a special ceremony was held at Fort McPherson to mark the return to active Army status HQ, Third U.S. Army. Fort McPherson presently houses HQ FORSCOM, Third U.S. Army, HQ USARC, and several smaller tenant activities, ranging from the regional dental service to a special security detachment.

2.1.2 Installation Mission

Fort McPherson's community is made up of approximately 3,495 civilians, 1,817 active-duty personnel, and 970 Army Reserve personnel. Fort McPherson's mission is to support organizational, Soldier, civilian, and family readiness, while implementing Base Realignment and Closure (BRAC) 2005 requirements and mitigating impacts on the installation and local communities. Fort McPherson's vision is to be an installation that provides continued quality support and service to our military family through transformation leadership, management, innovation, and technology during the BRAC transition process.

2.2 SITE LOCATION/DESCRIPTION

2.2.1 Physical Location

Fort McPherson is located on approximately 487 acres of land in the city limits of Atlanta, Fulton County, Georgia. The installation is roughly rectangular in shape and is situated due north of Highway 166 (Langford Parkway), west of Highway 29 (Lee Street), and southeast of Campbellton Road. Land use within 1/4 mile is residential with zones of light industry interspersed. The property is bounded by residential areas to the north (Oakland City), south, and west. It is centrally located in the Atlanta metropolitan area, approximately 4 miles southwest of downtown and 10 miles north of Hartsfield-Jackson Atlanta International Airport. Figure 1 shows the location of Fort McPherson.

Fort McPherson is used in much the same way as the surrounding suburban communities of Atlanta. The installation is broken down into administrative areas, recreation areas, family housing areas, and a small industrial area. Troop training is limited to a small pistol range near the southwest corner of the property and is limited to small arms ammunition. The Fort McPherson range is the only operational range on the property to have activities associated with munitions use. There are approximately 253 buildings and structures at Fort McPherson scattered over 487 acres.

2.2.2 Topography and Geologic Features

Fort McPherson is located in the Appalachian Piedmont, a hilly upland region with elevations generally ranging from 230 to 385 meters (m) above mean sea level (amsl). The region is characterized by gently rolling topography broken by areas of rugged hills bordering the major drainage and by residual monad nocks, such as Stone Mountain. Elevations on the Property range from 327 to 280 m amsl.

The property is underlain by highly metamorphosed rocks of the Appalachian Piedmont. The underlying rocks have been assigned to the Clarkston Formation of the Atlanta Group. The Atlanta Group rocks occur in a regional structure known as the Newnan-Tucker synform. The Clarkston Formation consists of inter-layered silimanite-garnet schist and hornblende-plagioclase amphibolites. The age of these rocks is unknown but is expected to be Paleozoic. The Clarkston Formation is estimated to be 800 to 2,500 m thick and is overlain by soil and saprolite which vary from about 3 to 20 m in thickness.

The rocks of the Clarkston Formation yield moderate quantities of water to wells. The rocks themselves are relatively impermeable but are highly fractured, providing conduits for the

movement of groundwater. Due to the complexity of both the local and regional structure, the direction of regional groundwater movement is unknown. The shallow groundwater flow is probably controlled by topography and is subparallel to the surface water flow. Depth to groundwater varies over the property, but is probably less than 5 m.

2.3 CLEANUP ACTIVITIES

2.3.1 Installation Restoration Program (IRP)

The Fort McPherson cleanup is being conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) with the exception of the sites containing leaking underground storage tanks (LUSTs) which are regulated under the Resource Conservation and Recovery Act (RCRA). The Army's program to meet CERCLA requirements is the Installation Restoration Program (IRP). The primary components of this program are:

- Preliminary Assessment (PA)
- Site Investigation (SI)
- Remedial Investigation/Feasibility Study (RI/FS)
- Baseline Risk Assessment (BLRA)
- Remedial Design (RD)
- Interim Remedial Action (IRA)
- Remedial Action (Correction) (RA(C))
- Remedial Action (Operation) (RA(O))
- Long-Term Management (LTM)

Fort McPherson has an ongoing IRP which was initiated in 1980. Specific areas within the installation boundaries were used for disposal of ash or slag from 1943 to 1948, and subsequently for open-pit burning of combustible solid wastes. The primary constituents of concern at Fort McPherson are heavy metals, solvents, and petroleum, oil & lubricants (POL) which have been deposited as a result of various activities.

The IRP identified 11 sites, designated FTMP-01 through FTMP-11. Even though eight of these sites have been closed out, listed as Response Complete or No Further Action (NFA), they are currently being investigated under the Phase II Environmental Condition of Property (ECP) or SI. If the SI Report concludes that no releases have occurred, then an NFA will be requested from the Georgia Environmental Protection Division (GA EPD). CERCLA 120 h(4)(A) and 120 h(4)(B) required the identification of uncontaminated property by the agency (Army) and the concurrence, for sites not on the National Priorities List, from the appropriate State official (GA EPD). This identification and concurrence is required whenever any department, agency, or instrumentality of the United States enters into any contract for the sale or other transfer of real property which is owned by the United States and on which any hazardous substances was stored for one year or more, know to have been released, or disposed of. Any LUST sites identified during the SI phase will be handled under RCRA; therefore, a Corrective Action Plan (CAP) will be prepared and coordinated with GA EPD. The eight sites closed in the IRP include the following:

FTMP-01, Building 363 Paint Shop

FTMP-02, Building 41 - Underground Storage Tank (UST) (SJA Office)

FTMP-03, Building 346 - Waste Oil Tank (Motor Pool Gas Station)

FTMP-04, Building 346 - Oil/Water Separator (Motor Pool Gas Station)

FTMP-05, Building 370 - Oil/Water Separator (Auto Craft Shop) FTMP-07, Building 357 DEH Maintenance (Oil/Water Separator) FTMP-08, Building 370 Waste Oil Tank (Auto Craft Shop) FTMP-11, Commissary Parking Lot (Building 360/363)

Fort McPherson conducted extraction of free product and vapor recovery at FTMP-09 and FTMP-10. During FY08 a CAP – Part B will be initiated to comply with RCRA as requested by the GA EPD for the following sites:

FTMP-09, Building 143 Post Exchange (PX) Gas Station (Misc. USTs) FTMP-10, Veterinary Clinic/Old PX Gas Station (Building 105)

2.3.2 IRP Site Descriptions and Cleanup Strategies

2.3.2.1 FTMP-06, Old Incinerator Ash Dumpsite (New Barracks Site)

The Old Incinerator Ash Dump Site is located near the center of Fort McPherson. The area was used for burning trash in open pits and for disposal of solid waste incineration ash. Until the late 1960s, combustible solid wastes were burned daily in open, unlined pits excavated in the area. Burn residue was left in the pits; when a pit became full, it was covered with dirt. Waste materials burned in these pits reportedly included domestic garbage, hospital waste, minor industrial waste, and construction and demolition debris.

In 1991, the site was chosen for the construction of a new barracks location. Remedial investigations at the site revealed trace volatile organic compounds (VOCs), semivolatile organic compounds, and elevated metal concentrations in subsurface soils at the site. Investigations also indicated that lead may be leaching from the waste material into the groundwater. The Army was instructed by the GA EPD to remove and control the waste. After a focused feasibility study was completed in 1993, an agreement was reached that groundwater characterization could be conducted during the remediation and barracks construction and that groundwater remediation, if required, could be achieved after construction of the barracks. A total of 112,392 tons of soil was excavated with 45,286 tons of that total deemed to be affected material. Long term monitoring was conducted at the site for three years. The Army submitted an NFA request and has received comments back from GA EPD.

Cleanup Strategy: As a result of the comments from the GA EPD, additional investigation and/or remediation is required before an NFA is issued.

2.3.2.2 FTMP-09, Building 143 PX Gas Station (Misc. USTs)

The former Army Air Force Exchange Service (AAFES) PX Gas Station (Buildings 143 & 187) operated from 1959 through March 1996. It was demolished in April 1996. The PX Gas Station has soil and groundwater contamination which originated from leaks in pipes that occurred in the mid-1970s.

A CAP under the old GA EPD Rules was submitted to the state in March of 1994. The GA EPD UST Management Program provided Fort McPherson with technical review comments in FY04.

Fort McPherson has proceeded with investigating the site by performing a soil vapor extraction (SVE) pilot test and SVE system conceptual design (IRA). Groundwater monitoring wells installed around the site are sampled semiannually to monitor benzene, toluene, ethylbenzene and xylene (BTEX) contaminant migration in the groundwater. Free product was detected in a monitoring well at the site. A free product recovery system was installed in FY98. However, it was only partially effective.

A passive fuel recovery system was installed in 1999 (RD/RA). This system was not able to recover the fuel fast enough, so the free product skimmer system was removed and a pneumatic skimmer system was installed.

Cleanup Strategy: Prepare and submit a CAP – Part B to the GA EPD. Remove skimmer, continue free product removal and performance monitoring. Free product and vapor extraction is planned to be performed until free product is less than 1/8 inch. NFA is expected once the free product is removed and plume is demonstrated to be stable.

2.3.2.3 FTMP-10, Veterinary Clinic/Old PX Gas Station (Building 105)

The Veterinary Clinic, Building 105, was formerly a retail gasoline station operated by Fort McPherson. The facility was known as the Post Exchange Filling Station and operated from the early 1930s until 1958. In February 1990, a 10,000-gallon UST was excavated and removed from the facility. During excavation, evidence of a release was encountered consisting of hydrocarbon stained soil.

Several phases of investigation have been performed at this site. Soil and groundwater contamination was identified. Free product was detected in two of the wells, and a free product recovery system was implemented. A geophysical investigation was performed to determine the extent of off-site contaminant migration. Contamination appears to be migrating northeast (off-post), and the GA Department of Transportation (DOT) would not allow installation of a well in U.S. Highway 29. The GA EPD concurred that all investigation/remedial activities will occur on-post. Results of the investigation are presented in the CAP – Part A, dated November 1996. A Passive Fuel Recovery System and 3 additional wells were installed in 1999 and three aggressive vapor events were conducted in 2003.

Cleanup Strategy: Prepare and submit a CAP – Part B to the GA EPD. Remove skimmer, continue free product removal and performance monitoring. Free product and vapor extraction is planned to be performed until free product is less than 1/8 inch. The Army is confident that this corrective action on post will mitigate the plume migration off-post. Futhermore, before NFA can be achieved, the Army must prove that the off-site plume has been mitigated. NFA is expected once the free product is removed and plume is demonstrated to be stable.

2.3.3 Military Munitions Response Program (MMRP)

MMRP eligible sites include ranges where Munitions and Explosives of Concern (MEC), discarded military munitions, and/or munitions constituents are known or suspected and the release occurred prior to September 30, 2002. Operational ranges are not eligible for the MMRP.

A Phase 3 Range Inventory was completed at Fort McPherson in May 2003. The Phase 3 Range Inventory serves as a PA under CERCLA. The inventory identified three sites, designated FTMP-001-R-01 through FTMP-003-R-01. Sites FTMP-001-R-01 (Atlanta NG Rifle Range) and

FTMP-002-R-01 (Atlanta NG Target Range) are located at the golf course and both ranges were used for small arms firing. Therefore, lead is the only contaminant. FTMP-0030-R-01 has been determined to be a Formerly Used Defense Sites (FUDS) site and has been closed in the Army Environmental Database – Restoration (AEDB-R). FTMP-003-R-01, Waco Target Range is a noncontiguous parcel of land located approximately 52 miles west of Fort McPherson near Bremen, Georgia. It was used year round for small arms firing practice. According to historical documents, this target range occupied an area of 1,265.3 acres. The range was officially purchased in 1896 and was in continuous operation until the early 1940s when it was declared surplus by the Secretary of War and actions were initiated for its final disposition. Approximately 10 acres are used for target practice by the local police department.

2.3.4 MMRP Site Descriptions and Cleanup Strategies

2.3.4.1 FTMP-001-R-01, Atlanta NG Rifle Range

A rifle range was established within the footprint of the Atlanta NG Target Range, discussed in Section 2.3.4.2, and is located on what is now the golf course. The rifle range was approximately 150 feet wide and 3,000 feet long (approximately 10 acres). It ran in a southerly direction from near the seventeenth hole to about where the small pistol range is located today. The hilly terrain at the southern end of the range provided a safety buffer. The rifle range was decommissioned as a range around the time of the Korean War and turned first into a 9-hole golf course for use by Army personnel in 1954, then later expanded into the current 18-hole golf course.

According to historical information, rifles and other small arms were used over the years on the Atlanta NG Rifle Range.

A Draft Historical Records Review was prepared in December 2005. Initial results confirm that this was used as a small arms range.

Cleanup Strategy: Evaluation of lead in soils down range as part of the Phase II ECP effort (funded in FY05).

2.3.4.2 FTMP-002-R-01, Atlanta NG Target Range

The Atlanta NG Target Range is located on what is now the golf course in the lower southwest corner of Fort McPherson. Its size has been estimated at 26 acres. The boundaries of the range were approximated based on topographic features, and the known use, including parts of the 10th and 17th fairways. The Army took control of the property in 1910, but granted use of the area to the state of Georgia so they could use it as a National Guard facility. The NG property included some barracks and the Atlanta NG Rifle Range mentioned above. The property came back under Army control in 1941 when it was decided more land was needed to sustain the activities at Fort McPherson.

Two World War I artillery shells were uncovered near the 17th fairway during the installation of a drainage system and during maintenance operations on the golf course (one in 1985 and one in 1989). Historical Records Review was initiated in 2005 and results indicated that this was not used as an artillery range. Installation personnel suspect that contaminated fill used during the construction of the 17th fairway may be the source of the munitions. The source of this fill is

unknown. No official investigations were conducted to determine the presence or extent of munitions in this area.

Cleanup Strategy: Evaluate soils for lead down range as part of the Phase II ECP effort (funded in FY05). Ensure future construction projects are aware of the potential for Unexploded Ordinance (UXO) in this area.

2.3.5 Phase II ECP or SI Work

The Army's mission under BRAC 2005 is to close or realign installations and expeditiously transfer excess properties as directed by BRAC law. As part of this process, it is necessary for the Army to identify and document the environmental liabilities associated with installations where the BRAC action will involve the disposal of property. The ECP process is the mechanism to conduct a comprehensive environmental characterization.

The ECP process was designed to reduce or eliminate the occurrence of incomplete site characterizations and to save time and funding by reducing the need for extended or duplicative investigation, thereby aiding the Army in expediting the disposal of BRAC 2005 real property. The ECP evaluates and documents the potential for environmental contamination and liability in two distinct stages: Phase I ECP Assessment and Phase II ECP Confirmation Sampling.

For Fort McPherson, the Phase I ECP assessment was completed by Shaw in 2006 and 2007. The final Phase I ECP report for Fort McPherson was completed on January 25, 2007. Using the results of the Phase I ECP Reports, Shaw completed Phase II sampling recommendations for Fort McPherson. The Phase II sampling recommendations were developed for specific areas of concern where no existing data or insufficient data were present to fully evaluate the environmental condition of the property. These sampling approaches were discussed with the Army at a project meeting held on March 28 and 29, 2007 at Fort Gillem.

Historical Site Assessments (HSAs) for Fort McPherson were completed in 2007 by Cabrera Services. Recommendations for Phase II activity related to radioactive material were prepared by Cabrera Services based on the HSA results.

2.3.5.1 Project Objectives

The purpose of the Phase II ECP is to move forward with the recommendations made as part of the Phase I ECP and HSA to determine whether hazardous substances, petroleum products, or radiological substances have been disposed or released on the property and to obtain defensible evidence that confirms or denies that releases have occurred.

In addition, the goal of the Phase II ECP is to further assess the level of environmental liability of each area of concern. If, during the Phase II ECP, contamination is identified above the appropriate screening levels (US EPA Region 9 Preliminary Remediation Goals (PRGs) for soil, groundwater and sediment), the data will be evaluated. If the low level detection has the potential for being on the leading edge of an area of greater contamination, additional delineation will be performed. However, if the low-level detection is at the likely release point and data from adjacent sampling points does not indicate any spread of contamination, there may be instances where additional sampling will not be warranted.

The Phase II effort should provide sufficient data to either render a professional opinion that there is no reasonable basis to suspect the presence of environmental contamination or to indicate that contaminants have been released or disposed at the locations identified as concerns in the Phase I effort and are present at concentrations that require additional characterization and/or remediation. The Phase II investigation provides information to obtain order of magnitude estimates of the general nature and extent of contamination and is not designed to fully satisfy the requirements of CERCLA or the level of inquiry necessary to select remedial measures.

As part of the ECP, radiological issues are examined through a graded approach that begins with the HSA. The Phase II objectives for radiological characterization include the planning and implementation of scoping surveys.

2.3.5.2 Scope of Work Plan

The SI Work Plan contains a discussion of the field sampling procedures applicable to the Phase II BRAC activities to be conducted at Fort McPherson. The Work Plan document includes a discussion of the field sampling procedures and the site-specific sampling approach to be conducted for Phase II sites identified in the Phase I ECP. Site health and safety requirements will be performed in accordance with procedures described in the site-specific Health and Safety Plan.

2.3.6 History of Previous Environmental Investigations

Fort McPherson's earliest environmental investigation involved a special entomological study for the investigation of a fish kill at the golf course Lake No. 1 in 1974. During 1975, the U.S. Army Environmental Hygiene Agency (USAEHA) conducted a survey of the property to evaluate the distribution of various pesticides in soil, sediments, fish, and birds. Pesticide concentrations exceeding the threshold levels were found at two property entrances, two lakes, a residential area, and a main post area. As a result, pesticide handling and storage procedures were reviewed and modified to decrease contamination in these areas.

In 1976, an analytical/environmental assessment was conducted for future development at the base, along with an environmental impact assessment, an analysis of existing facilities, and an environmental assessment. In 1979, a cultural reconnaissance of select areas was conducted at Fort McPherson.

The first extensive installation-wide environmental investigation completed at Fort McPherson was the installation assessment by the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) in 1983. The installation assessment was the first systematic evaluation of toxic materials and hazardous waste handling and disposal at Fort McPherson and the potential for these substances to migrate off the property. The assessment report discussed the environmental setting, land-use patterns, past and present operations at each building, training operations across the property, handling and storage of industrial chemicals, chemical agents, biological agents, narcotics, radiological and pesticide/herbicide/fertilizer usage, disposal operations, demolition and burning grounds, and existing water quality data. The assessment identified several potential contaminant sources; however, available geologic evidence, contaminant source information, and limited water quality data did not indicate the off-property migration of contaminants via surface or subsurface waters. Therefore, a follow-up survey by the USATHAMA was not recommended. However, modifications involving pesticide storage,

transformers, POL storage tanks, and vehicle wash racks were recommended and implemented. In 1985, the master plan was prepared for Fort McPherson.

In 1988, a PA was completed for all sites at Fort McPherson. A PA was also completed for IRP Site FTMP-01, Building 363 Paint Shop, which involved removing soil contaminated with solvents and oil-based paint. The site was designated NFA and closed out of the IRP in April 1988.

An environmental assessment for construction of barracks was completed for the base in 1993. In the same year, an interim removal action tank removal was completed at FTMP-08, Building 370 (Auto Craft Shop); an SVE pilot test was initiated at FTMP-09; and a Phase I-II RI was completed at FTMP-06, along with a feasibility study. In 1994, a CAP was performed at FTMP-09.

After the environmental assessment, soil was excavated from site FTMP-06 in 1996. In the same year, an Expanded Site Investigation (ESI) was conducted at FTMP-10 in August, followed by additional studies relating to a CAP – Parts A and B at the same site in November. In 1997, these studies continued at FTMP-10 during the performance of the CAP – Parts A and B, along with a geophysical investigation at the same site.

In 1998, a free product recovery system was installed at site FTMP-09, followed by the installation and operation of passive fuel recovery systems at sites FTMP-09 and FTMP-10 in 1999.

Areas Requiring Environmental Evaluation (AREEs) which are being evaluated as part of the Phase II ECP or SI can be found in Figure 2. This figure summarizes all current and past AREEs.

SECTION 3: COMMUNITY BACKGROUND

The subsections that follow present an overview of the community and a general chronology of community relations and communication to date, as follows:

Section 3.1, Community	Presents an overview of the population and character of the
Profile	area.
Section 3.2, History of	Discusses the Army's previous community relations activities.
Community Relations	
Section 3.3, Community	Analyzes the major concerns and communication preferences
Feedback	revealed in the public's responses to surveys in October 2007.

3.1 COMMUNITY PROFILE

Fort McPherson is located at the southwest edge of Atlanta, Georgia, just north of East Point, Georgia, in Fulton County. It is approximately 4 miles southwest of downtown and 3 miles north of Hartsfield-Jackson Atlanta International Airport.

3.1.1 Atlanta, Georgia (Fulton County)

Atlanta is the capital and the most populous city of the state of Georgia and the core city of the ninth most populous metropolitan area in the United States. It is the county seat of Fulton County, although portions of the city extend into DeKalb County. As of July 2006, the city of Atlanta had a population of 486,411 and a metropolitan population of 5,138,223. Between 2000 and 2006, the Atlanta metropolitan area grew 20.5%, the highest percentage among the top-ten metro areas.

According to the 2000 census, there are 416,474 people, 168,147 households, and 83,232 families residing in the city. The population density is 1,221/km² (3,161/mi²). There are 186,925 housing units at an average density of 548/km² (1,419/mi²). The racial makeup of the city is 59.39% African American, 33.22% Caucasian, 2.93% Asian, 0.18% Native American, 0.04% Pacific Islander, 1.99% from other races, and 1.24% from two or more races. According to the census, 6.49% of the population is Hispanic or Latino of any race.

There are 168,147 households of which 22.4% have children under the age of 18, 24.5% are married couples living together, 20.7% have a female householder with no husband present, and 50.5% are non-families. 38.5% of all households are made up of individuals, and 8.3% have someone living alone who is 65 years of age or older. The average household size is 2.30 and the average family size is 3.16.

In the city, the population is spread out with 22.3% under the age of 18, 13.3% from 18 to 24, 35.2% from 25 to 44, 19.4% from 45 to 64, and 9.7% who are 65 years of age or older. The median age is 32 years. For every 100 females, there are 98.6 males. For every 100 females age 18 and over, there are 97.6 males.

The median income for a household in the city is \$51,482, and the median income for a family is \$55,939. Males have a median income of \$36,162 compared to \$30,178 for females. The per capita income for the city is \$29,772, and 24.4% of the population and 21.3% of families are below the poverty line. An estimated 38.8% of those under the age of 18 and 20.7% of those 65 and older are living below the poverty line.

According to a 2000 daytime population estimate by the Census Bureau, over 250,000 more people commute to Atlanta on any given workday, boosting the city's estimated daytime population to 676,431. This is an increase of 62.4% over Atlanta's resident population, making it the largest gain in daytime population in the country among cities with fewer than 500,000 residents.

Atlanta ranks third in the U.S. in the number of Fortune 500 companies headquartered within city boundaries. Several major national and international companies are headquartered in Atlanta or its nearby suburbs, including several Fortune 100 companies, such as The Coca-Cola Company, The Home Depot, and United Parcel Service (UPS). Other headquarters for some major companies in Atlanta and around the metro area include Arby's, AT&T Mobility, Chick-Fil-A, EarthLink, Equifax, Georgia-Pacific, Southern Company, SunTrust Banks, and Waffle House. Over 75% of the Fortune 1000 companies have a presence in the Atlanta area, and the region hosts offices of about 1,250 multinational corporations.

Delta Air Lines is the city's largest employer and the metro area's third largest. Delta operates the world's largest airline hub at Hartsfield-Jackson Atlanta International Airport and, together with the hub of competing carrier AirTran Airways, has helped make Hartsfield-Jackson the world's busiest airport, both in terms of passenger traffic and aircraft operations.

3.1.2 East Point, Georgia (Fulton County)

East Point is located in south Fulton County, 12 miles southwest of Atlanta, and has a population of approximately 40,000 people. Most are attracted to East Point because of its convenient accessibility to metro Atlanta.

As of the census of 2000, there are 39,595 people, 14,553 households, and 9,430 families residing in the city. The population density is 1,111.8/km² (2,878.9/mi²). There are 15,637 housing units at an average density of 439.1/km² (1,137.0/mi²). The racial makeup of the city is 78.16% African American, 16.10% Caucasian, 0.62% Asian, 0.20% Native American, 0.09% Pacific Islander, 3.40% from other races, and 1.42% from two or more races. Hispanic or Latino of any race is 7.57% of the population.

There are 14,553 households of which 34.5% have children under the age of 18 living with them, 28.7% are married couples living together, 28.9% have a female householder with no husband present, and 35.2% are non-families. Approximately 27.4% of all households are made up of individuals and 5.5% have someone living alone who is 65 years of age or older. The average household size is 2.69 and the average family size is 3.27.

In the city of East Point, the population is spread out with 29.3% under the age of 18, 11.9% from 18 to 24, 31.3% from 25 to 44, 19.5% from 45 to 64, and 7.9% who are 65 years of age or older. The median age is 30 years. For every 100 females there are 89.5 males. For every 100 females age 18 and over, there are 84.8 males.

The median income for a household in the city is \$31,874, and the median income for a family is \$36,099. Males have a median income of \$27,114 versus \$25,839 for females. The per capita income for the city is \$15,175. About 17.2% of families and 20.7% of the population are below the poverty line, including 30.0% of those under age 18 and 13.6% of those age 65 or over.

3.1.3 Hapeville, Georgia (Fulton County)

Hapeville is a city in Fulton County located directly adjacent to the City of Atlanta. The population is 6,180 according to the 2000 census.

Once regarded as a somewhat depressed industrial area, Hapeville has, in recent years, seen significant gentrification. It has been discovered by young professionals seeking historic neighborhoods close to Downtown Atlanta, and home prices have risen significantly. Since 1947, Hapeville has been home to a Ford assembly plant. The plant closed recently, taking with it a large part of the city's revenue. However, there are plans for redevelopment.

According to the 2000 census, there are 6,180 people, 2,375 households, and 1,394 families residing in the city. The population density is 1,006.8/km² (2,608.3/mi²). There are 2,538 housing units at an average density of 413.5/km² (1,071.2/mi²). The racial makeup of the city is 51.72% Caucasian, 26.55% African American, 8.80% Asian, 0.61% Native American, 0.16% Pacific Islander, 9.89% from other races, and 2.27% from two or more races. Hispanic or Latino of any race makes up 21.81% of the population.

There are 2,375 households of which 26.4% had children under the age of 18 living with them, 35.2% are married couples living together, 15.1% have a female householder with no husband present, and 41.3% are non-families. About 32.1% of all households are made up of individuals and 9.3% have someone living alone who was 65 years of age or older. The average household size is 2.60 and the average family size is 3.29.

In Hapeville, the population is spread out with 24.4% under the age of 18, 11.2% from 18 to 24, 33.4% from 25 to 44, 20.1% from 45 to 64, and 10.8% who are 65 years of age or older. The median age is 33 years. For every 100 females there are 108.3 males. For every 100 females age 18 and over, there are 111.4 males.

The median income for a household in the city is \$34,158, and the median income for a family is \$37,647. Males have a median income of \$25,127 versus \$23,766 for females. The per capita income for the city is \$15,793. About 13.7% of families and 17.9% of the population are below the poverty line, including 20.1% of those under age 18 and 11.7% of those age 65 or over.

3.2 HISTORY OF COMMUNITY RELATIONS

Restoration Advisory Board (RAB). To keep the public informed and involved in its restoration activities, and to provide opportunities for public involvement in its environmental restoration program, Fort McPherson explored public interest in establishing a RAB by mailing out surveys to the surrounding communities and holding public interest meetings. The most recent public interest meeting was held in June 2007. As a result of these inquiries, a RAB was formed for Fort McPherson. The first RAB meeting was held in September 2007.

The RAB enables the local community and representatives of government agencies to meet and exchange information about Fort McPherson's environmental restoration program. It also provides an opportunity for the community to review progress and participate in discussions with the decision-makers. The Army Co-Chair for the Fort McPherson RAB is the BRAC Environmental Coordinator (BEC) for Fort McPherson.

The RAB is intended to supplement Fort McPherson's current public involvement activities. The RAB will be an additional community involvement forum for interested people to learn more about the ongoing and future environmental studies and restoration actions at Fort McPherson. The RAB includes members of the local community, Army personnel, state representatives, and employees from the GA EPD. The RAB will meet on a regular basis, and meetings are open to the public.

Administrative Record/Information Repository. Technical documents pertaining to the IRP, MMRP, and Compliance Cleanup (CC) programs at Fort McPherson are made available to the public at the East Point Public Library, located at 2757 Main Street, East Point, Georgia (404-762-4842). These documents are available in electronic format only (DVD) and are available in the office of the Library administrator. A two inch binder containing the document index accompanies the DVD.

Publications. Fort McPherson distributed fact sheets/papers to RAB and community members on subjects ranging from base closure, remedial activities, and public participation requirements. General BRAC information is also maintained on the installation's internet site, www.mcpherson.army.mil.

3.3 COMMUNITY FEEDBACK

This section describes the methodology that Fort McPherson utilized to collect community input to develop this CIP. It also summarizes the communication preferences and concerns expressed by the participants.

3.3.1 Methodology

Regulatory Compliance:

The Department of Defense, and thus the Army, follows the National Contingency Plan (NCP), Title 40 CFR Subpart E, Part 300 Section 415 (n) 3 (iii), requirements for developing CIPs. The NCP requires input from a minimum of 10 to 15 community members. The purpose of the interviews is to obtain qualitative information about community members' level of familiarity with the cleanup, their concerns, and their preferences for receiving cleanup information. These interviews are not intended to extract quantitative information (i.e., information that can be used for statistical analysis).

Survey/Interview Participants:

To update this CIP, members of the communities surrounding Fort McPherson were surveyed/interviewed in October 2007. Ten community members responded to the survey. Participants included general community members who live and work in areas adjacent to Fort McPherson, RAB members, officials from surrounding communities (including elected and government departments), businesspersons, educators, regulators, and Fort McPherson workers. It is important to note that many of these participants live and work in all the surrounding communities of Fort McPherson.

To protect confidentiality, Fort McPherson will not disclose the names of the participants.

3.3.2 Issue Identification Approach

The primary purpose of collecting input from the community is to identify issues and concerns so that the Army can address them via its community outreach and involvement efforts. To obtain this information, participants were asked the following questions:

- 1. What do you know about the environmental cleanup program currently underway at Fort McPherson? Do you have a high, moderate, or low understanding? How and when did you learn about it? What was your primary source of information?
- 2. When was the last time you heard anything about the environmental cleanup program at Fort McPherson? Where or from whom did you hear it? Was it positive or negative?
- 3. Do you have any concerns about how the environmental cleanup program has been going at Fort McPherson? If so, what are they?
- 4. Have you ever contacted Fort McPherson or been involved in any of its activities related to the environmental cleanup program? Are you aware or have you participated in the Restoration Advisory Board (RAB)? If so, to what extent?
- 5. Are you aware that the federal and state environmental regulatory agencies are involved with the cleanup program at Fort McPherson? How did you learn about their oversight and have you had any interaction with these officials?
- 6. How do you learn about news and events in your community?
- 7. How do you get information about the Fort McPherson cleanup program?
- 8. If you wanted information about the cleanup, how would you go about finding it?
- 9. Would you like to receive information about the cleanup? If so, what kind of information would you like to receive (status reports, technical documents, fact sheets, etc.)?
- 10. How do you prefer to receive that information (e.g., television, newspapers, mailings, other)? If so, how frequently would you like to receive information (monthly, quarterly, semiannually, annually)?
- 11. Are you aware of Fort McPherson Administrative Record/Information Repository locations?
- 12. Do you have any other issues or concerns about Fort McPherson you would like to discuss?
- 13. Is there anyone else you think we should be talking to?

Responses to these questions and the discussions arising from them identified the primary concerns, priorities, preferences, and perceptions of the participants.

3.3.3 Overview of Findings

The participants' comments and insights provided valuable information that helped Fort McPherson to identify the most effective methods of conducting community relations efforts for its environmental cleanup program. These findings are representative only of the individuals who participated in the community surveys/interviews.

3.3.4 Preferred Communication Methods

Participants offered advice for improving communication with the public within the following categories as detailed below. Primarily, the participants are looking for any and all information about cleanup activities and how it may affect them. They want to be assured that the cleanup is being handled properly. They want to receive information regularly, and they want to know where

to get the answers they seek. The RAB members are fairly knowledgeable about base cleanup activities. However, community members not on the RAB are not as familiar with the cleanup program and would like to learn more.

<u>Types:</u> The participants seemed hungry for general information about the base, plans for closure, and cleanup activities. Information in which they expressed interest includes the following:

- 1. General overview information about the cleanup.
- 2. How cleanup activities may affect the health of the community.
- 3. Evidence to reassure the community that the cleanup is being handled properly.
- 4. Where to get additional information, as needed.

<u>Sources:</u> Most participants indicated that their primary sources for community information and news are local newspapers and websites. However, they all use a variety sources to get their news, including the following information sources:

- 1. RAB
- 2. Personal contacts
- 3. Internet (Fort McPherson website, East Point Community websites, local news sites)

<u>Methods:</u> The vast majority of participants indicated a preference for environmental cleanup updates via e-mail or website updates. Preferred communication methods include the following:

- 1. E-mail updates
- 2. Website updates/articles
- 3. RAB meetings and notices

<u>Frequency:</u> Most interviewees preferred to receive this information on a monthly to quarterly basis, or as important milestone events occur.

3.3.5 Community Concerns

The primary concerns frequently expressed by the participants are as follows:

- Transparency of communication.
- Cleanup standards/levels.
- How cleanup activities may affect the community.

Participants want to ensure that they are aware of cleanup activities and that they are regularly informed. The RAB has been a valuable source of information, but it is very new. Continued, consistent communication to the community should help to ease the minds of the participants with concerns.

Many participants were comfortable with the level of information they have been receiving and had no concerns.

SECTION 4: STRATEGY

This section is organized as follows:

Section 4.1, Highlights of Plan	Discusses overall goals and approaches to achieve them.
Section 4.2, Key Messages	Reviews Army communication program missions as they relate to Fort McPherson.
Section 4.3, Community	Discusses the activities Fort McPherson will use to address
Relations Activities	community concerns and preferences.

4.1 HIGHLIGHTS OF PLAN

The Army is committed to being open and transparent in its decision-making process. This means Fort McPherson will involve and solicit input from the community. Fort McPherson will also proactively make contact with the community and share information in a variety of ways, such as through RAB meetings or other public meetings and through the distribution of informational materials. The ultimate objective is to provide useful information in a form that is understandable and accessible to the community.

To achieve these goals, some broadly applicable approaches will be employed as standard practices in all specific activities:

- Proactively make contact with the community and its members.
- Take information directly to the community by using a combination of tools and tactics.
- Simplify information to make it understandable and relevant.
- Incorporate feedback mechanisms into communication efforts to help evaluate the usefulness of our efforts.

4.2 KEY MESSAGES

To best communicate with the community, the convictions which underlie all Army environmental cleanup programs will be incorporated in all public involvement efforts. Information on issues such as environmental contamination and cleanup will be disseminated to a variety of audiences to facilitate these communications regarding environmental cleanup. The following messages will be incorporated into future Fort McPherson informational materials:

- Safety. The Army is committed to safely and effectively cleaning up the installation in a manner that provides the highest level of safety to the public, workers and the environment.
- Stewardship. The Army is a good steward of the environment. It is an extension of our professionalism. It implements effective policies and practices that safeguard the environment and public well being in a manner that our nation expects of us.
- Sustainability. The Army will not squander its precious environmental resources. It will use sound business and innovative environmental practices to connect our needs of today with foresight toward the future.
- Oversight. The Army will conduct its activities at Fort McPherson in compliance with federal, state, and local environmental laws.

- Partnership. The IRP process at Fort McPherson is conducted through a partnering effort among the Army, GA EPD, local officials and residents.
- *Public involvement*. The Army encourages the public to learn more about and become involved in its cleanup efforts at Fort McPherson.

Future communications with each target audience will include these messages but also will be tailored to meet specific information needs and interests. Additional specific messages will be developed based on specific projects and/or milestones.

4.3 COMMUNITY RELATIONS ACTIVITIES

The following section outlines the activities that will be initiated/continued to communicate information to the public and to promote community involvement in the Fort McPherson environmental cleanup program. The table at the end of this section outlines key milestones in the environmental restoration program at Fort McPherson and the community relations activities that will be completed in conjunction with these milestones.

Activity 1: Restoration Advisory Board/RAB Facilitator

Objective: To provide citizens with a meaningful way to become actively involved, and to provide Fort McPherson with a viable means of learning citizen concerns and perceptions firsthand.

Method: The RAB will continue to be conducted per Army RAB guidance. Community and Government Co-Chairs will continue to host meetings to promote information exchange and discuss topics related to the environmental cleanup. RAB members include the Army, regulators, and community members. The point of contact for this activity is the Environmental IRP Program Manager for Fort McPherson.

Timing: The RAB will meet quarterly.

Activity 2: E-mail List

Objective: To increase awareness regarding the Fort McPherson environmental cleanup program.

Method: Fort McPherson will maintain an e-mail list of interested community members (including those who participated in the interview process) and public and government officials. It will be used to distribute consistent information to interested stakeholders and to also share significant milestone information. The point of contact for this activity is the Environmental IRP Program Manager for Fort McPherson.

Timing: E-mail list updates will be ongoing. Mailing list members will be surveyed every two years through informal means to determine further interest in receiving materials.

Activity 3: Develop and Distribute Informational Materials

Objective: To proactively educate the community about the cleanup and keep stakeholders updated on status and progress through accurate, understandable and regular information about the Fort McPherson cleanup.

Method: Fort McPherson will create a template for distributing information to the public, update the template and distribute it on a regular basis. These materials will be written in the form of a fact sheet or program update and will be no more than one page. They will be written in layman's terms and will be distributed to the e-mail list members and other key stakeholders via e-mail. These materials will also be maintained on the Fort McPherson website.

Timing: Development and distribution of materials will be quarterly, and will occur more frequently as necessary. Other events requiring information materials may include, but are not limited to the following: regulatory requirements, additional cleanup milestones, new projects, or meetings.

Activity 4: Public Meetings

Objective: To update the community on cleanup progress and address community questions, concerns, ideas, and comments.

Method: During these sessions, residents will be able to speak with Army staff on a oneon-one basis. Fort McPherson will use visual aids, such as fact sheets and posters, to explain the cleanup and encourage discussion.

Timing: As required under CERCLA and as needed per program milestones.

Activity 5: Public Comment Periods

Objectives: To give community members an opportunity to review and comment on cleanup decisions and plans and to give Fort McPherson valuable feedback to use in the decision-making process.

Method: Public comment periods run for 30 days and allow residents the opportunity to comment on issues regarding selected cleanup methods and Proposed Plans (PPs) and Draft Decision Documents (DDs).

Timing: As required under CERCLA and as needed per program milestones.

Activity 6: Responsiveness Summaries

Objectives: To summarize comments received during comment periods; to document how the Army has considered those comments during the decision-making process; and to provide responses to comments.

Method: The Army will prepare responsiveness summaries to address community input received during public comment periods.

Timing: As required under CERCLA and as needed per program milestones.

Activity 7: Administrative Record/Information Repository

Objective: To provide residents with access to the documents and resources used by the Army to reach decisions about environmental cleanup and property transfer.

Method: The Administrative Record is located in the Information Repository at the East Point Public Library, located at 2757 Main Street, East Point, Georgia (404-762-4842).

Timing: The Administrative Record/Information Repository is updated as final documents become available.

Activity 8: Revise Community Involvement Plans

Objective: To identify and address community concerns and preferences regarding the environmental cleanup and property transfer programs.

Method: Fort McPherson will review and revise the CIP. CIP updates will include community interviews and involve an assessment of past community involvement activities, community concerns, and communications activities and methodologies.

Timing: The Army will revise the CIP as events or significant program milestones warrant, preferably every three to five years until the cleanup is complete.

4.3.1 Milestone Table

Milestone	Activity	Timeframe
Completion of Phase II ECP/SI	Develop informational materials related to milestone. Distribute to RAB Members and email distribution list. Update Administrative Records.	Within 60 day after completion.
Achievement of NFA for FTMP-06	Develop informational materials related to milestone. Distribute to RAB Members and email distribution list. Update Administrative Records.	Within 60 day after completion.
Completion of CAB – Part B for FTMP-09	Develop informational materials related to milestone. Distribute to RAB Members and email distribution list. Update Administrative Records.	Within 60 day after completion.
Completion of CAB – Part B for FTMP-10	Develop informational materials related to milestone. Distribute to RAB Members and email distribution list. Update Administrative Records.	Within 60 day after completion.
Achievement of NFA for FTMP-09	Develop informational materials related to milestone. Distribute to RAB Members and email distribution list. Update Administrative Records.	Within 60 day after completion.
Achievement of NFA for FTMP-10	Develop informational materials related to milestone. Distribute to RAB Members and email distribution list. Update Administrative Records.	Within 60 day after completion.

SECTION 5: CONCLUSION

The Fort McPherson CIP is the comprehensive strategy for current and future Army community relations activities regarding environmental cleanup at the site. This strategy allows for the identification of issues, problems, and actions that require public involvement. Feedback from residents indicated that there is a need for consistent information to be disseminated to the community. The information needs identified were primarily related to regular, overarching status updates. The communication strategy takes these needs into account by identifying how the Army can effectively communicate the information.

Final

U.S. Army Base Realignment and Closure 2005 Environmental Condition of Property Report Fort McPherson, Fulton County, Georgia



25 January 2007

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ECP Qualified Parcels

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List of Acronyms and Abbreviations

The following lists of acronyms, abbreviations, and definitions are intended to be comprehensive and are contained in this ECP Report.

ACM Asbestos-Containing Material

AMSL above mean sea level AR Army Regulations

AST aboveground storage tank

ASTM American Society for Testing and Materials

BRAC Base Realignment and Closure

CAP Corrective Action Plan

CCC Civilian Conservation Corps

CECOM U.S. Army Communications Electronics Command

CERCLA Comprehensive Environmental Response, Compensation, and Liability

Act

CERCLIS Comprehensive Environmental Response, Compensation, and Liability

Information System

CFR Code of Federal Regulations
CORRACTS Corrective Action Reports

DEH Directorate of Engineering and Housing

DENTAC Dental Activity

DIO Directorate of Industrial Operations
DIS Directorate of Installation Support

DoD U.S. Department of Defense

DOL Department of Labor

DPCA Directorate of Personnel and Community Activities

DPDO Defense Property Disposal Office

DPW Directorate of Public Works

DRMO Defense Reutilization and Marketing Office

EBS Environmental Baseline Survey

ECAS Environmental Compliance Assessment System

ECP Environmental Condition of Property
EDR Environmental Data Resources, Inc.
EPA U.S. Environmental Protection Agency

EPCRA Emergency Planning and Community Right to Know Act

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List of Acronyms and Abbreviations (Continued)

EPIC Environmental Photographic Interpretation Center

ERNS Emergency Response Notification System

ESI Expanded Site Investigation FORSCOM U.S. Army Forces Command

FTG Fort Gillem
FTMP Fort McPherson

GA EPD Georgia Department of Natural Resources, Environmental Protection

Division

HMMS Hazardous Material Management System

HWMP Hazardous Waste Management Plan
IRP Installation Restoration Program
LUST Leaking Underground Storage Tank

m meter

MARSSIM Multi-Agency Radiation Survey and Site Investigation Manual

MEC Munitions and Explosives of Concern

MEDDAC Medical Activity

MMRP Military Munitions Response Program

MS4 Small Municipal Separate Storm Sewer System NARA National Archives and Records Administration

NFRAP No Further Response Action Planned

NG National Guard

NPL National Priorities List
OWS Oil/Water Separator

PA Preliminary Assessment PCB Polychlorinated Biphenyl

pCi/L picoCuries per liter
PMAPS Photomaps USA
PX Post Exchange

RAATS RCRA Administrative Action Tracking System

RAM Radioactive Materials
RC Response Complete

RCRA Resource Conservation and Recovery Act
REC Recognized Environmental Condition

RQ Reportable Quantity

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List of Acronyms and Abbreviations (Continued)_____

SAP Satellite Accumulation Points
SHWS State Hazardous Waste Site

SI Site Investigation

SQG Small Quantity Generator

SSTS Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act

SWPPMP Stormwater Pollution Prevention and Management Plan

TCE Trichloroethene

TMP Transportation Motor Pool

TRIS Toxic Chemical Release Inventory System

TSD Treatment, Storage, and Disposal USACE U.S. Army Corps of Engineers

USACHPPM U.S. Army Center for Health Promotion and Preventive Medicine

USAEHA U.S. Army Environmental Hygiene Agency

USARC U.S. Army Reserve Command

USATHAMA U.S. Army Toxic and Hazardous Materials Agency

USGS U.S. Geological Survey

UST Underground Storage Tank

UW Universal Waste

UXO Unexploded Ordnance

VOC Volatile Organic Compound

VSI Visual Site Inspection

WWI World War I
WWII World War II

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Definitions_____

Term	Definition
Base Closure Law	The provisions of Title II of the Defense Authorization Amendments and Base Closure and Realignment Act (Pub. L. 100-526, 102 Stat. 2623, 10 U.S.C. § 2687 note), or the Defense Base Closure and Realignment Act of 1990 (Pub. L. 101-510, Part A of Title XXIX of 104 Stat. 1808, 10 U.S.C § 2687 note).
BRAC Environmental Coordinator (BEC)	An employee assigned to provide work as the lead BRAC environmental coordinator for a wide variety of technical situations and activity operational requirements, directing actions with regard to schedules, priorities, methods, materials, and equipment. The role of the BEC is to provide principal oversight for the Activity Base Commander, Lead Organization, and BRACD regarding all BRAC related environmental programs for the installation.
Closure	All missions of the installation have ceased or have been relocated. All personnel positions (military, civilian and contractor) have either been eliminated or relocated, except for personnel required for caretaking, conducting any on-going environmental cleanup, and disposal of the base, or personnel remaining in authorized enclaves. In the context of this document, this may be referred to as "full closure."
Chemical Warfare Materials	Items generally configured as a munition containing a chemical compound that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. Chemical Warfare Materials (CWM) includes V- and G-series nerve agents or H-series (mustard) and L-series (lewisite) blister agents in other-than-munition configurations; and certain industrial chemicals (e.g., hydrogen cyanide (AC), cyanogen chloride (CK), or carbonyl dichloride (called phosgene or CG)) configured as a military munition. Due to their hazards, prevalence, and military-unique application, chemical agent identification sets (CAIS) are also considered CWM. CWM does not include: riot control devices; chemical defoliants and herbicides; industrial chemicals (e.g., AC, CK, or CG) not configured as a munition; smoke and other obscuration producing items; flame and incendiary producing items; or soil, water, debris or other media contaminated with low concentrations of chemical agents where no CA hazards exist.
Discarded Military Munitions	Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of, consistent with applicable environmental laws and regulations. (10 U.S.C. 2710(e)(2))
Disposal	Per <u>AR 405-45</u> , any authorized method of permanently divesting the Army of control of and responsibility for real estate and real property.
Environmental Baseline Survey (EBS)	A process by which a characterization of the environmental condition of a facility or property is conducted. An EBS is required by the Army for the transfer or acquisition of real property and identifies potential cleanup requirements and liabilities. See definition for Environmental Condition of Property (ECP).

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Definitions (Continued)____

Term	Definition
Environmental Condition of Property (ECP)	A management approach for providing efficient and effective development of a comprehensive environmental condition / liability characterization for a facility or property. The ECP process applies industry best practices and standards; provides effective oversight and quality assurance, and unifies the EBS and the (MEC) Archives Search Report steps taken in prior BRAC rounds into a unified effort. The ECP is based on the Initial Site Investigation (ISI) project approved by the Business Initiative Council (BIC). The Army's ECP Report meets DoD's ECP Report requirement.
Excess Real Property	Per AR 405-45, any real property under the control of any Federal agency that the head of the agency determines is not required for agency needs and discharge of the responsibilities of the agency or the installation where the property is located. The excess status is assigned to the real property once a formal report of excess has been processed. Real property that has been determined excess to the Department of the Army must be screened with other Department of Defense elements before it is excess to Department of Defense.
Garrison Commander	Per General Order 4, 22 August 2002, Garrison commanders, on behalf of the regions and the IMA, will have a responsibility to provide a standard level of base support to installation customers listed on the Army Stationing and Installation Plan. The Garrison commander is responsible to ensure that training support and training enabler functions and activities are responsive to the needs of the senior mission commander on the installation in the execution of the senior mission commander's duties.
Installation	Per AR 405-45, an aggregation of contiguous or near contiguous, common mission-supporting real property holdings under the jurisdiction of or possession controlled by the Department of the Army or by a State, commonwealth, territory, or the District of Columbia, and at which an Army unit or activity (Active, Army Reserve, or Army National Guard) is assigned. An installation is a single site or a grouping of two or more sites for the purposes of real property inventory control. The real property accountability officer is at the installation level.
Installation Commander	Per AR 600-20, the installation commander is normally the senior commander on the installation. In addition to mission functions, the installation commander has overall responsibility for all real estate, facilities, base support operations, and activities on the installation.
Lead Organization	Per the BRAC 2005 Implementation Plan Guidance, the Army organization which will have the lead responsibility for preparation of an installation Implementation Plan. This will generally be the Army organization which has operational control of the installation identified in the BRAC recommendations.
Local Redevelopment Authority (LRA)	Any authority or instrumentality established by State or local government and recognized by the Secretary of Defense, through the Office of Economic Adjustment, as the entity responsible for developing the redevelopment plan with respect to the installation, or for directing implementation of the plan.

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Definitions (Continued)

Term	Definition
Material Potentially Presenting an Explosive Hazard (MPPEH)	Material potentially containing explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris); or material potentially containing a high enough concentration of explosives such that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization or disposal operations). Excluded from MPPEH are munitions within DoD's established munitions management system and other hazardous items that may present explosion hazards (e.g., gasoline cans, compressed gas cylinders) that are not munitions and are not intended for use as munitions.
Military Installation	Per Section 2910 of Title XXIX, Defense Base Closure and Realignment Act of 1990, as amended, the term "military installation" means a base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the Department of Defense, including any leased facility. This term does not include any facility used primarily for civil works, rivers and harbors projects, flood control, or other projects not under the primary jurisdiction or control of the Department of Defense.
Munitions Constituents	Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710(e)(3)).MEC includes Unexploded Ordnance (UXO), as defined in 10 U.S.C. 2710(e)(9); Discarded Military Munitions (DMM), as defined in 10 U.S.C. 2710(e)(2); and munitions constituents (e.g., TNT, RDX) present in high enough concentration to pose an explosive hazard.
Munitions and Explosives of Concern	This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means: (A) Unexploded Ordnance (UXO), as defined in 10 U.S.C. 2710(e)(9); (B) Discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e)(2); or Munitions constituents (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.

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Definitions (Continued)_____

Term	Definition
Military Munitions	Military munitions means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives, and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges; and devices and components thereof.
	The term does not include wholly inert items; improvised explosive devices; and nuclear weapons, nuclear devices, and nuclear components, other than non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 101(e)(3))
Personal Property	According to 41 CFR 102-36.40, personal property is defined as: "Any property except real property. The term excludes records of the Federal Government, and naval vessels of the following categories: battleships, cruisers, aircraft carriers, destroyers, and submarines." "Related personal property" means any personal property that is an integral part of real property. It is:
	 Related to, designated for, or specifically adapted to the functional capacity of the real property and removal of this personal property would significantly diminish the economic value of the real property, or
	 Determined by the Administrator of General Services to be related to the real property
Real Property	AR 405-90: Real property consists of lands and improvements to land, buildings, and structures, including improvements and additions, and utilities. It includes equipment affixed and built into the facility as an integral part of the facility (such as heating systems), but not movable equipment (such as plant equipment). In many instances, this term is synonymous with 'real estate.'
Realignment	Any action that both reduces and relocates functions and DoD civilian personnel positions, but does not include a reduction in force resulting from workload adjustments, reduced personnel or funding levels, skill imbalances, or other similar cause. A realignment may terminate the DoD requirement for the land and facilities on part of an installation. That part of the installation shall be treated as "closed," and in the context of this document referred to as a "partial closure."

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Definitions (Continued)____

Term	Definition
Senior Mission Commander	The Senior Mission Commander is a General Officer (G.O.) with command oversight of one or more non-G.O. Installation Commanders. The Senior Mission Commander conveys MACOM mission priorities to the Installation Commander, and provides executive oversight and communicates installation management priorities not established by HQDA or IMA to the Installation Commander and Garrison Commander. Senior Mission Commanders' orders from the General Officer Management Office (GOMO) will specify the installations for which they will serve as SMC.
Special Installation	An Army installation which is under administrative control of ACSIM Installation Management Agency (IMA), yet operated and funded by a MACOM (e.g., Army Ammo Plant, Hospital, etc.) where there is a single Mission/Garrison Commander.
Unexploded Ordnance	Military munitions that (A) have been primed, fused, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (C) remain unexploded whether by malfunction, design, or any other cause. (10 U.S.C. 101(e)(9))

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1.0 Executive Summary

This Environmental Condition of Property (ECP) Report has been prepared for Fort McPherson, Georgia, which is hereafter referred to as the "Property." The purpose of this ECP is to determine the environmental condition of the Property in preparation for a Real Property Disposal as a result of the Base Realignment and Closure (BRAC) 2005 Commission recommendation to close the Property. This ECP was developed in accordance with the Department of Defense (DoD) 4165.66-M, Base Redevelopment and Realignment Manual dated 1 March 2006.

This Executive Summary provides a brief description of the current and former uses of the Property and areas of potential environmental concern that were evaluated during the ECP process. Detailed information associated with the summary presented below is provided in the remaining portion of this document.

Site Description and Historical Use. Fort McPherson is centrally located in the Atlanta metropolitan area approximately 4 miles southwest of downtown and 3 miles north of Atlanta's Hartsfield International Airport. The Property is roughly rectangular in shape and encompasses approximately 487 acres. It is currently occupied and includes approximately 253 buildings and structures. In addition, the Property includes the Network Enterprise Technology Command. The Network Enterprise Technology Command is leased property measuring approximately 8.4 acres located in Peachtree City, Georgia.

Fort McPherson is an active U.S. Army facility which houses many headquarters and tenant organizations. The Property is the home of the U.S. Army Forces Command (FORSCOM). FORSCOM is responsible for the training and readiness of nearly one million active, Army National Guard and Army Reserve soldiers, providing effective, strategic forces capable of responding rapidly in support of national security. FORSCOM commands the Third U.S. Army and the U.S. Army Reserve Command (USARC), both of which are headquartered at Fort McPherson.

Chronology of events in the facility's development, administration, and mission is presented below:

• 1885 Congress appropriated funds to establish a permanent military reservation in Atlanta. A site was approved for acquisition and construction.

•	1889	The post was officially designated Fort McPherson (FTMP), in honor of Major General James Birdseye McPherson.
•	1896	Waco Target Range was purchased for FTMP training purposes.
•	1898	FTMP included a recruit training center, a General Hospital, and a prison camp for Spanish prisoners of war.
•	1910	Atlanta National Guard (NG) Target Range was purchased to provide a target range for the National Guard of GA.
•	1917	During World War I (WWI), FTMP was selected as U.S. Army General Hospital No.6.
•	1918	FTMP acquired 136 acres on the south side of the post, which became Camp Jesup and was used for major motor vehicle overhaul operations.
•	1920	FTMP became headquarters for the entire Fourth Corps Area.
•	1933-1942	Civilian Conservation Corps (CCC) major activities occurred at FTMP.
•	1938	Installation acquired the use of the 136-acre Atlanta NG Target Range.
•	1940	Several barracks were converted to a hospital. A 1,000-man recruit reception center was constructed. Plans for a general supply depot were approved. The Quartermaster Motor Transport School was opened.
•	1940	The Waco Target Range was declared surplus.
•	1941	Atlanta NG Target Range was permanently transferred to FTMP.
•	1944-1946	FTMP functioned as a separation center for military personnel discharged from service.
•	1947-1973	FTMP played vital roles throughout the Korean and Vietnam conflicts as a command control center and Headquarters for Third U.S. Army.
•	1974	Atlanta Army Depot was renamed Fort Gillem (FTG) and designated a subinstallation of FTMP.
•	Present	FTMP provides administrative and logistical contingency support to the major land fighting Army Command headquarters, FORSCOM, Third U.S. Army/U.S. Army Forces Central Command, the U.S. Army Reserve Command, and First U.S. Army

Prior to the construction of Fort McPherson, the Property was mostly pasture land.

The surrounding properties are predominantly residential to the south and west, a mixture of commercial/industrial to the east and a mixture of commercial and residential to the north.

Based on a review of property reports and documentation, a visual site inspection (VSI), research of available historical information, interviews with knowledgeable parties, and an environmental database search, all performed as part of this ECP, the following environmental information has been compiled.

Range Operations. There are six operational ranges at Fort McPherson. With the exception of the Fort McPherson Range, most of the identified training areas had no history of munitions use. Munitions are currently used at the Fort McPherson Range. In 1997 the Fort McPherson Range's impact area was redesigned to maintain environmental compliance. A structure was installed at the Range that directs drainage away from the impact area. Specially designed bricks are positioned in front of the structure to capture and retain bullets and bullet fragments. The bricks are replaced periodically as part of routine range maintenance. A potential lead contamination exists due to range activities prior to the reconstruction of the impact area. The Fort McPherson Range is considered a recognized environmental condition (REC).

Installation Restoration Program. Fort McPherson has an ongoing Installation Restoration Program (IRP) which was initiated in 1980. The IRP has identified 11 sites, designated FTMP-01 through FTMP-11. Eight sites have been closed out of the IRP program and include the following:

- FTMP-01, Bldg 363 Paint Shop
- FTMP-02, Bldg 41 underground storage tank (UST)
- FTMP-03, Bldg 346 Waste Oil Tank
- FTMP-04, Bldg 346 Oil/Water Separator (OWS)
- FTMP-05, Bldg 370 OWS
- FTMP-07, Bldg 357 Directorate of Engineering and Housing (DEH) Maintenance
- FTMP-08, Bldg 370 Waste Oil Tank
- FTMP-11, Army Parking Lot.

Not all of the site closeouts from the IRP program are reflective of all required actions being taken. In the case of sites FTMP-2, FTMP-3, FTMP-4, FTMP-5, FTMP-7 and FTMP-8, the sites were designated response complete (RC) in the Army database because as petroleum sites, they were not eligible for IRP funding.

Fort McPherson has an ongoing IRP for two sites including:

- FTMP-09, Building 143 Post Exchange (PX) Station
- FTMP-10, Veterinary Clinic/Old PX Gas Station.

Army records indicate that cleanup activities are completed for the Old Incinerator Ash Dumpsite (FTMP-06) and the Army is awaiting a response to the NFA request submitted to the Georgia Department of Natural Resources; Environmental Protection Division (GA EPD).

Four sites: Building 363 (FTMP-01), Building 143 PX Station (FTMP-09), the Veterinary Clinic (FTMP-10) and the Army Parking Lot (FTMP-11) are considered a REC.

Military Munitions Response Program. Four Military Munitions Response Program (MMRP) Sites were identified at Fort McPherson; Atlanta NG Rifle Range, Atlanta NG Target Range (including the former Skeet Range), the Pistol Range and the 300-Yard Target Range. Munitions have historically been used at the former ranges. Two WWI artillery shells were uncovered in the Atlanta NG Target Range. The Atlanta NG Target Range is located on what is now the golf course in the lower southwest corner of Fort McPherson. Historical evidence suggests that the Atlanta NG Target Range was not used as an artillery range. Installation personnel suspected that contaminated fill was used during the construction of the golf course. Potential lead contamination exist for the former Atlanta NG Rifle Range, the former Atlanta NG Target Range that includes the former Skeet Range, and the former Pistol Range. The three ranges are considered a REC.

The area where the former 300-Yard Target Range existed has been extensively redeveloped into a recreation area with pavement covering a portion of the range. The former 300-Yard Target Range is not considered a REC.

Hazardous Substances and Hazardous Waste. Several hazardous substances associated with base operations at Fort McPherson include used solvents, paints, acids and bases, toxins, aerosols, heavy metals, mercury-containing items, and other materials associated with laboratory operations, building and vehicle maintenance. Identified hazardous substances include arsenic, asbestos, chlorine, lead, nickel hydroxide, mercury, urea, and xylene. Fort McPherson tracks and maintains their hazardous materials and chemical inventory data through the Hazardous Material Management System (HMMS). This data is collected on hazardous materials and hazardous waste from all agencies that handle these substances at Fort McPherson for input to the HMMS. Currently hazardous material disposal is reported by various departments and tenants for input into the HMMS system as materials are received and disposed. This information is used to facilitate centralized hazardous material control and management and to assist with environmental reporting.

Fort McPherson operates as a small quantity generator with a Resource Conservation and Recovery Act (RCRA) generator ID number of GA1210020565. Hazardous waste is stored at Fort McPherson in a 90-day yard and various satellite accumulation points (SAP). Under the State of Georgia regulations, SAP cannot accumulate more than 55-gallons at a time and once the amount is exceeded, the excess waste must be moved within 3 days to a 90-day area. After 90 days, the waste must be transported off-Property by licensed hazardous waste transporters. The hazardous substances and hazardous waste storage areas are not considered to be a REC.

Petroleum Substances-USTs/ASTs. Fort McPherson currently has nine active USTs and five active aboveground storage tanks (ASTs), the remaining tanks have either been removed or closed in place. The tanks were primarily used for the storage of fuel oil, gasoline, diesel, and waste oil.

Tanks used for storing heating oil or petroleum products were not regulated prior to 1988. Tanks used for storing heating oil for consumptive use of the premises where stored are excluded from Federal and GA EPD rules regardless of when the tank was installed or removed, including existing heating oil tanks. Although heating oil tanks are not regulated, releases of contaminants into the environment by these tanks are regulated. The following discussion applies to all tanks regulated and non-regulated.

A summary of the available documentation for historic and current tanks at Fort McPherson is as follows:

- During tank removal activities, the tank associated with Building 183 had no evidence of soil contamination.
- During tank removal activities, soil contamination was detected at Building 205 (one [1] tank) and during removal of only one of the tanks at each of Buildings 346 (346-W01) and 370 (370-W01). Contaminated soil was over-excavated. These former UST locations do not constitute a REC.
- During tank removal at Buildings 160 (six [6] tanks) and 164 (one [1] tank), not all contaminated soil could be removed due to the presence of utility lines. Because of residual soil contamination, one monitoring well was installed at each of the two UST sites to confirm or deny the presence of groundwater contamination. Groundwater analytical results were not available for review during the generation of the ECP. The two sites are considered a REC.

- Although one tank at each of Buildings 208 and 302 were reported to have been closed, there was no additional information regarding site conditions during closure activities. The two sites are considered a REC.
- There was no available information regarding the status of the tanks at nine of the UST locations. Buildings 40 (one [1] tank), 104 (one [1] tank), 106 (one [1] tank), 207 (one [1] tank), 214 (two [2] tanks), 302 (two [2] tanks), 326 (one [1] tank), 345/346 (four [4] tanks), and 650 (one [1] tank). These nine UST locations currently constitute a REC.
- Three of the UST sites are managed under the IRP program. These locations include Buildings 105 (two [2] tanks), 143 (five [5] tanks), and 370 (one [1] tank). The UST at Building 370 was removed and contaminated soil was over-excavated. Remedial activities are currently on-going for the USTs at Buildings 105 and 143. Buildings 105 and 143 are currently considered a REC.
- There are currently 9 active USTs at five of the sites. These sites include Building 160 (two [2] tanks), Building 200 (one [1] tank), Building 350 (two [2] tanks), Building 368 (three [3] tanks), and Building 651 (one [1] tank). Except for the tank at Building 200, all the tanks were installed in the 1990s and have shown no evidence of release of petroleum products.
- There were no documented releases for any of the ASTs at Fort McPherson.
 Visual site inspections of the current ASTs did not reveal any evidence of leaks or spills.
- Documentation of No Further Action concurrence by the GA EPD exists for five of the UST sites. These sites include Buildings 41 (one [1] tank), 200 (one [1] tank), 350 (three [3] tanks), 454 (one [1] tank), and 651 (one [1] tank) and one location where there was a misidentified presence of a UST (Building 101).

Cleanup was conducted at seven of the UST sites (Buildings 105, 143, 200, 302, 350, 454, and 651) at Fort McPherson that are listed in the GA EPD Leaking Underground Storage Tank (LUST) database. The USTs at Buildings 200, 350, 454 and 651 have been granted by the State a 'no further action' status. Buildings 105 and 143 are listed as in remediation. The UST at Building 302 was closed and no further information was available regarding site conditions during closure activities.

Oil/Water Separators. Four OWS currently exist on the Fort McPherson property. They are associated with Buildings 336, 350, 353, and 370. Oil/water separators are periodically inspected and cleaned under an oil/water cleaning and maintenance contract. Two former OWS were reportedly removed in 1997. No releases were documented at these former OWS

(Buildings 187 and 345). Visual site inspections of the current OWS did not reveal any evidence of leaks or spills. None of the OWS are considered to be a REC.

PCBs. All transformers with polychlorinated biphenyls (PCBs) concentrations greater than 50 parts per million were replaced and removed from the Property as of January 5, 1987. An additional survey was performed in 2001, and none of the sampled transformers were found to contain PCBs at concentrations above 50 parts per million. In-service transformers with residual PCBs are replaced when they fail. No RECs associated with PCBs were identified as part of this ECP.

Asbestos Containing Materials. Current records indicate there have been several asbestoscontaining materials (ACM) surveys conducted for the buildings at Fort McPherson. The surveys have been conducted to identify ACM in place.

- Records indicate that asbestos surveys were conducted for 27 structures.
- Of the 27 structures surveyed, 26 have ACM survey results documentation; 18 were found to have both friable and non-friable asbestos; and 8 were found to have only non-friable asbestos. All structures with reported asbestos (with the exception of Buildings 46, 184 and 352) have an asbestos operation and maintenance plan in place.
- There are 226 buildings on the Fort McPherson property that have no documentation of asbestos surveys performed.

Lead-Based Paint According to the *Lead-Based Paint Guidelines for Disposal of Department of Defense Residential Real Property – A Field Guide* (DoD/EPA, 1999) all residential structures constructed prior to 1979 must be evaluated for lead-based paint. Many of the facilities and buildings at Fort McPherson were constructed before the DoD ban on the use of lead-based paint in 1978 and are likely to contain one or more coats of such paint. Surface dust sampling surveys have been conducted for 102 residential units at Fort McPherson. Of the 102 units tested, 34 had at least one sample that exceeded the Environmental Protection Agency (EPA) limits for a lead-dust hazard. It appears that there were no follow up surveys by the facility. No documentation of lead dust sampling was found for nine family housing buildings (Buildings 20, 22, 27, 28, 168, 475, 476, 512, and 525) constructed prior to 1978. Currently, there is not a comprehensive or programmatic report for the residential housing units on the Property.

Radiological Materials. As reported in the 2007 Historical Site Assessment (Cabrera Services, 2007), three (3) buildings at Fort McPherson were found to be potentially impacted from historical use of radioactive materials (RAM). The buildings and survey areas that were found to be potentially impacted included building Nos. 179, 180, and 363.

Historical Landfills/Dumps. Several disposal pits and burial activities were identified in the reviewed aerial photographs. In a 1944 aerial photograph mounded material was visible in the northwest portion of the Property. The debris was not viewed in later aerial photographs and the area has been redeveloped into a golf course. Debris and mounded material were visible in the southeast portion of the Property in the 1968 and 1978 aerial photographs reviewed. The VSI did not indicate any debris or mounded material in the area. No further information was available regarding the burial activities and disposal pits. These disposal pits are not considered a REC.

The Old Incinerator Ash Dump Site (FTMP-06) is located near the center of Fort McPherson. The area was used for burning trash in open pits and for disposal of solid waste incineration ash. Until the late 1960s, combustible solid wastes were burned daily in open, unlined pits excavated in the area. Burn residue was left in the pits; when a pit became full, it was covered with dirt. Waste materials burned in these pits reportedly included domestic garbage, hospital waste, minor industrial waste, (i.e. waste paints, solvents, oils, etc.) and construction and demolition debris. The Army completed investigation of the Old Incinerator Ash Dump Site and recommended that no further action be taken for the site, therefore, FTMP-06 is not considered a REC.

Explosive Contaminated Structures. Four former magazines were constructed in 1938 for the storage of small arms, chemical munitions, pyrotechnics, trinitrotoluene, and dynamite. The magazines were visible in a general site map dated 1993 but do not appear on the 2000 or 2004 general site map (Malcolm Pirnie, Inc., 2006). One operational magazine is located west of Hedekin Field. The magazine is first shown on a 1904 map of the Property. Currently, blanks for use during Hedekin Field ceremonial events are stored in the magazine. The magazines are not considered a REC.

Radon. According to the EPA's categorization of radon zones, Fulton County, Georgia, is qualified as a radon Zone 1, meaning that it has a predicted average indoor radon screening level greater than 4 picoCuries per liter (pCi/L). The EPA's action level for radon is 4 pCi/L. Radon surveys were conducted for priority buildings at Fort McPherson in 1990 and 1999. All detections for radon were below the 4 pCi/L action level.

Pesticides. Building 341 is currently the location of the pesticide storage and mixing facility; however, pesticide storage and mixing has occurred at a number of other locations including Building 343, 356, 363, and 456. U.S. Army Environmental Hygiene Agency (USAEHA) pest management reviews and Army environmental compliance assessments that have been conducted starting in the 1970s have indicated that pesticide storage and mixing operations were inadequate at Buildings 341, 356, and 456. A VSI conducted at Buildings 341 and 343 did not reveal any environmental concerns. Interviews with installation personnel indicated no recognized environmental conditions. Buildings 356 and 456 are demolished. Buildings 356, 363, and 456 are currently considered a REC.

Adjacent Properties. The surrounding properties are predominantly residential to the south and west, a mixture of commercial/industrial to the east and a mixture of commercial and residential to the north. The adjacent properties are not considered a REC.

Other Issues. Fort McPherson is listed in the Resource Conservation and Recovery Act – Small Quantity Generator (RCRA-SQG) database. There are 19 records of violations reported for Fort McPherson but all have achieved compliance.

Dry cleaning activities involving chlorinated solvents were conducted in Buildings 208/209 and 302. The buildings were demolished between 1988 and 1990. The previous dry cleaning sites are considered a REC.

ECP Parcels. Based on the information gathered during the development of the ECP, areas at the property were grouped into standardized parcel categories using DoD guidance: All areas with positive findings received a unique parcel number and designation of one of the seven ECP categories or qualification as appropriate.

Most of the areas on the Property were identified as "uncontaminated" property (Category 1) comprising approximately 389 acres. These were areas in which no release or disposal of hazardous substances or petroleum products had occurred, and to which there had been no migration of such substances from adjacent areas. Historical records reviewed and the VSI found no indication that the release or disposal of hazardous substances or their derivatives has occurred, including no migration of these substances from adjacent areas at the following properties:

• USTs that had no evidence of contamination (Buildings 183 and 368)

- Former and current oil/water separators
- All AST areas
- Hazardous waste collection areas
- The Lakes (Lakes 1, 2, 3, and 4)
- Most of the buildings on the Property except five buildings; Buildings 208/209 and 302, 356, 363 and 456
- All active training areas except Fort McPherson Range
- The majority of the areas on the Property, Parcel 24(1).

Parcel numbering was assigned to each existing IRP site, non-IRP sites, petroleum release areas and any other identified area of concern as follows:

- Category 2 Areas in which only release or disposal of petroleum products has occurred. Areas measuring approximately 33 acres were classified as category 2 property. Category 2 parcels included UST tank areas where there was evidence of contamination or no information was available regarding the status of the tanks.
- Category 3 Areas in which release, disposal or migration of hazardous substances has occurred, but in concentrations that do not require a removal or other remedial response. There are no Category 3 parcels identified on the Fort McPherson property.
- Category 4 Areas in which release, disposal, or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and environment have been taken.
 One IRP site, Old Incinerator Ash Dumpsite, measuring approximately 1 acre was identified as Category 4 property.
- Category 5 Areas in which release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the

environment have not yet been taken. There are no Category 5 parcels identified on the Fort McPherson property.

- Category 6 Areas in which release, disposal, or migration of hazardous substances has occurred, but required remedial actions have not yet been implemented. There are no Category 6 parcels identified on the Fort McPherson property.
- Category 7 Areas that have not been evaluated or require additional evaluation. Areas measuring approximately 64 acres were classified as category 7 property. Category 7 property included Building 363, Paint Shop (FTMP-01), Army Parking Lot (FTMP-11), the former laundry/dry cleaning areas Buildings 208/209 and 302, the pesticide storage areas (Buildings 356, 363, and 456), the Fort McPherson Range, the former Atlanta NG Rifle Range, the former Atlanta NG Target Range (including the former Skeet range), and the former Pistol Range.

2.0 Purpose

2.1 General

The environmental condition of property (ECP) report has been prepared to meet the requirements of Department of Defense (DoD) 4165.66-M, *Base Redevelopment and Realignment Manual*. The Army prepares an ECP for the following purposes:

- Provide the public with information relative to the environmental condition of the property.
- Assist in community planning for the reuse of BRAC property.
- Assist Federal agencies during the property screening process.
- Provide information for prospective buyers.
- Provide information about completed remedial and corrective actions at the property.
- Assist in determining appropriate responsibilities, asset valuation, and liabilities with other parties to a transaction.

The ECP report contains the information required to comply with the provisions of 40 Code of Federal Regulations (CFR), Part 373 that require a notice accompanying contracts for the sale of, and deeds entered into for the transfer of, federal property on which hazardous substances may have been stored, released, or disposed of. A notice is required if certain quantities of designated hazardous substances have been stored on the property for one year or more—specifically, quantities exceeding (1) 1,000 kilograms or the reportable quantity (RQ), whichever is greater, of the substances specified in 40 CFR 302.4, or (2) 1 kilogram of acutely hazardous waste as defined in 40 CFR 261.30. A notice is also required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the RQ. AR 200-1 requires that an ECP address asbestos, lead-based paint, radon, and other substances potentially hazardous to health.

The ECP report is not prepared to satisfy a real property purchaser's duty to conduct an "appropriate inquiry" to establish an "innocent purchaser defense" to Comprehensive

Environmental Response, Compensation, and Liability Act (CERCLA) 107 liability. Any such use of the ECP by any party is outside the control of the Army and beyond the scope of the ECP. The Army, its officers, employees, or contractors make no warranties or representations that any ECP report satisfies any such requirements for any party.

2.2 Scope

The ECP covers the 487-acre Fort McPherson located in Atlanta, Georgia and the 8.4-acre Network Enterprise Technology Command located in Peachtree City, Georgia. In this ECP report they are referred to as the "Property". This ECP does not cover subinstallations to Fort McPherson, such as Fort Gillem and Lake Allatoona Recreation Center. The Property encompasses the area that is generally north of Georgia State Highway 166, south of Campbelton Road, west of U.S. Highway 29, and east of Stanton Road. The tract is roughly rectangular in shape and encompasses approximately 487 acres. A site location map is provided as Figure 1, and a current site map is provided as Figure 2.

2.3 Limitations

This ECP report presents a summary of readily available information on the environmental conditions of, and concerns relative to, the land, facilities, and real property assets of the Property. The findings included in the report are based on a record search of documents, and the site reconnaissance conducted between July 6 through 13, 2006. Historical environmental investigation reports and site historical documents were reviewed in support of this ECP.

A representative number of buildings were visually inspected during the site reconnaissance. The VSI included a driving tour of the entire facility and the facility perimeter. Additionally, a systematic survey of the facility on foot was also conducted. Therefore, although not all of the buildings were inspected with the same level of detail, all of the facilities were visualized. All buildings likely to have operations resulting in a recognized environmental condition were thoroughly inspected. Additionally, representative buildings with operational histories that were not expected to result in an environmental condition (i.e. administrative and residential structures) were given a thorough inspection. No sampling or analysis was conducted during this survey.

2.4 Report Organization

The remainder of this report provides details about the ECP setting, method, and findings. The report is organized as follows:

- Chapter 3.0 describes the methods used to conduct the ECP
- Chapter 4.0 provides a description of the Fort McPherson environment, an overview of facility operations and history, and a summary of previous environmental investigations
- Chapter 5.0 elaborates on the findings of the ECP organized by relevant environmental "issues" (e.g., contaminant, contamination matrix, facility or operation)
- Chapter 6.0 presents the conclusions of the ECP
- **Chapter 7.0** lists the references used in the report.

The appendices are arranged to allow the reader to examine further details concerning environmental issues relating to the Property.

- **Appendix A** provides a listing of the ECP parcels and the 2006 visual site inspection approach summary
- Appendix B provides historical information and site background information
- **Appendix C** was reserved for the Sanborn Maps which were not available for the Property
- **Appendix D** provides the Historical Topographic Maps
- **Appendix E** provides the regulatory database report for the Property
- **Appendix F** provides the Jurisdiction Summary
- **Appendix G** provides information from the site interviews
- **Appendix H** provides the Asbestos Survey Database.
- Addendum 1 provides a copy of the Historical Site Assessment and Addendum to Environmental Condition of Property (Cabrera Services, 2007).

3.0 Survey Methodology

3.1 Development of Study Sections

The information gathered during the development of the ECP was used to group areas at the Property into standardized parcel categories using DoD guidance: All areas with positive findings received a unique parcel number and designation of one of the seven ECP categories or a qualification as appropriate.

The ECP Category definitions (U.S. Department of Army, 1996) are summarized on Table 1.

Table 1
ECP Categories

ECP Category	Definition
1	Areas in which no release or disposal of hazardous substances or petroleum products has occurred, and to which there has been no migration of such substances from adjacent areas.
2	Areas in which only release or disposal of petroleum products has occurred.
3	Areas in which release, disposal or migration of hazardous substances has occurred, but in concentrations that do not require a removal or other remedial response.
4	Areas in which release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have been taken.
5	Areas in which release, disposal, or migration of hazardous substances has occurred, and removal of other remedial actions are under way, but all required actions have not yet been taken.
6	Areas in which release, disposal, or migration of hazardous substances has occurred, but required remedial actions have not yet been implemented.
7	Areas that have not been evaluated or require additional evaluation.

Generally, the numbering was assigned as follows:

- Existing IRP sites (Parcels 1-11)
- Underground storage tanks (USTs) (Parcels 12-19)
- Sites at which former base activities would most likely be a source of potential contamination (Parcel 20)
- The Pistol Range (Parcel 21)

- Pesticide Storage Areas (Parcels 22 and 23)
- The remaining uncontaminated areas (Parcel 24)
- The former Atlanta NG Rifle Range (Parcel 25)
- The former Atlanta NG Target Range including the former Skeet Range (Parcel 26)
- The Fort McPherson Range (Parcel 27)

Qualified Parcels are those parcels that were identified as containing other environmental or safety concerns such as asbestos, lead-based paint, and radionuclides.

The designations for each ECP parcel are presented in Table A-1 (Appendix A).

3.2 Visual Site Inspection

A VSI involving a driving tour of the Property and its perimeter, as well as a systematic survey by vehicle and on foot through each section of the Property, was conducted between July 6, 2006 through July 13, 2006. The primary purpose of the VSI was to verify information obtained from the document review and to identify potential environmental concerns. All accessible roads on the Property were driven during the VSI. All buildings at Fort McPherson were visualized. A VSI was performed for 24 buildings selected as a representative sample from groups of similar buildings. A summary of the buildings visited is included in Table A-2 (Appendix A).

A reconnaissance of the Property perimeter was conducted to evaluate adjacent property uses that could contribute environmental contamination to the site. Typical properties that could pose a contamination risk are dry cleaners, gas stations, and industrial facilities. The findings of the perimeter survey are presented in Section 5.16.

3.3 Aerial Photography Analysis

A comprehensive aerial photographic analysis was conducted as part of this ECP. A complete copy of the 2006 Aerial Photographic Site Analysis (Environmental Research, Inc., 2006), including the photos, is included in Appendix B. Photographs covering the entire Property were obtained and interpreted for the period from 1938 to 1988. Photographs from five separate years were examined under a stereoscope to potentially identify any significant areas of disturbance for the following purposes:

- Potentially identify any anomalies (e.g., large spills/stains, ground scars, debris
 piles, pits, possible disposal areas, etc.) that were not identified in previous
 investigations
- Assist in tracking the history of Fort McPherson operations
- Assist in verifying the history, location, and extent of previously identified sites of known or suspected contamination.

While informative, aerial photographs alone are rarely conclusive. Anomalies may be attributable to a number of causes unrelated to environmental concerns. Therefore, the results of the aerial photographic analyses were evaluated and cross-referenced with the following:

- Results of the records review
- Results of previous/ongoing investigations
- Results of the physical site inspections
- Results of interviews with current and former Fort McPherson employees.

Through a combination of the photographic interpretation and the above-listed factors, areas of concern were identified as ECP sites and are discussed in further detail in Chapter 5.0.

Table 2 lists the historical aerial photographs reviewed.

Table 2

Reviewed Aerial Photographs

Date	Agency	Mission, Roll, and Frame Number	Scale
April 1938	NARA	ATJ, 5: 63-65	1:20,000
January 1944	NARA	N/A, 71, 72	1:20,000
December 1949	EPIC		1:7,200
April 1955	EPIC		1:6,000
May 1960	EPIC		1:6,900
December 1968	USGS	VCAX, 2: 247, 248	1:24,800
February 1972	EPIC		1:10,200
April 1978	PMAPS	N/A, 25: 9, 10	1:28,800
January 1988	USGS	NAAP, 717: 144, 145	1:40,000

NARA - National Archives and Records Administration.

EPIC - Environmental Photographic Interpretation Center, Warrenton, VA.

USGS - US Geological Survey.

PMAPS - Photomaps USA, Pinson, Alabama.

The earliest aerial photo (1938) indicated a rifle range was in the southwestern portion of the Property which coincides with the former Atlanta NG Rifle Range. Features such as ground scarring and disturbed ground were visible at a few other locations on the Property.

In the next aerial photo (1944), the rifle range remained in the southwestern portion of the Property, and pits, ground scarring, and mounded material (suggestive of disposal activity) were visible in the northwestern portion. A probable munitions storage facility, probable storage tanks, and most other potentially significant features were identified in the southern half of the Property.

In the subsequent 1968 photo, the rifle range, seen previously in the southwestern portion of the Property, had been replaced by part of a golf course. The Fort McPherson Range had been constructed in the southwestern corner. Containers, debris, and a trench with debris were adjacent to a vehicle and equipment storage area in the southeastern portion of the Property. Fuel pumps and staining were also visible in the vicinity of the vehicle and equipment storage area.

In the next photo dated 1978, the pistol range remained in the southwestern corner of the Property. Probable containers, crates or containers, and multi-toned debris were visible in the area where containers and debris were stored in the open in 1968. Mounded material, probably consisting of rubble or debris, was in the southeastern corner of the Property.

In the subsequent 1988 photographic analysis, a pistol range remained in the southwestern corner of the Property. Containers were in open storage in the same area where they were seen in 1978. A fill area, not present in 1978, was immediately southwest of the central point of the Property.

A previous historical aerial photos analysis was conducted in August 1982 by Environmental Photographic Interpretation Center (EPIC) of Warrenton, Virginia, as part of the initial installation assessment. Aerial photos from 1949, 1955, 1960, and 1972 were analyzed. All analyses were performed with imagery flown at scales between 1:20,000 and 1:24,000. EPIC noted that no munitions testing facilities or industrial activities were observed at the Property throughout the study period. Only two areas of debris and/or open storage were noted and EPIC labeled these areas as "Site 1" and "Site 2." Solid waste disposal or containment was noted at Site 1 (1949-1960) and Site 2 (1949-1972), in the form of small debris piles. Both of these sites

were noted as being the most disorderly in the 1949 photo. By 1972, Site 1 was completely filled and revegetated and Site 2 was a fenced disposal area.

"Site 1" is in the vicinity of the southern end of the Motor Pool which slopes down to the golf green and "Site 2" is in the vicinity of the new barracks near the center of the site. Both aerial analyses indicated disturbances and possible disposal in these two areas. The "Site 2" area was investigated prior to the barracks construction and the results were documented in the Phase I Remedial Investigation Chemical Data Acquisition Plan (Black & Veatch Waste Science and Technology Corp., 1991). Some organic compounds and metals were identified in the subsurface soil above background concentrations, but did not appear to represent an immediate threat to human health or environment. It was recommended that if the soil was disturbed, adequate precautions should be taken. The investigation was followed up with a focused feasibility study in April 1993. Please reference **Section 5.2.1** of this report for more details.

3.4 Sanborn Map Review

Sanborn maps were not available for Fort McPherson (Appendix C).

3.5 Historical Topographic Map Review

Copies of the historical topographic maps were obtained and reviewed for the Property. Topographic maps were reviewed for five years (1954, 1968, 1973, 1993, and 1997). Copies of the maps are included in Appendix D. The topographic maps provide a general indication of the chronology of building and road construction over the years of coverage.

The topographic maps indicate that the elevation ranges from less than 950 feet above mean sea level (amsl) near the southwestern boundary to greater than 1,050 feet amsl near the northeastern corner. From the highest point in the northeastern corner, the topographic grade primarily slopes downward toward the south and west, in the vicinity of the golf course.

In the earliest topographic map (1954) Fort McPherson was already extensively developed with many buildings and roadways, with the roadways being very similar to the current configuration. Only the larger buildings that were known to be present at that time are depicted on the map. Many of the larger community and administrative buildings in the historic district near the northeastern corner of the site are depicted on the map. Building use is not differentiated on the map; however, historic maps from Fort McPherson provide more details on building construction and use. Perimeter areas to the south and west and along the drainage channel were indicated as

wooded. Some areas within the wooded areas in the west were indicated as being cleared. These cleared areas correlate with areas of use identified in the aerial photography analyses (Section 3.3) as being used as a range.

Off site, the topographic map indicates that the Property is surrounded by urbanized areas in all directions. Just to the southwest is an extensive railroad switching yard with large warehouse-sized buildings. Immediately to the south of the Property is an installation identified as "General Services Administration Warehouses." Sylvan Hills High School is located near the northeastern corner of the Property.

In the subsequent 1968 topographic map (photorevised from 1954), a few more buildings were indicated in red in the northeastern portion of the site. As far as can be determined, these buildings were primarily refinements to the previous topographic map, since the buildings indicated in red are known to be older historic buildings, many with construction dating to the late 1880s. Therefore, the inclusion of these buildings in 1968 did not necessarily indicate new building construction. Another noted change was that the southwestern third of the Property was a golf course.

No significant changes were noted in the surrounding properties.

In the subsequent topographic map (1973, also photorevised from 1954), no discernable changes can be seen within the Property or the surrounding properties from the 1968 topographic map.

On the 1993 topographic map, details in the northeastern portion of the map have been reduced and the area is shaded gray, denoting dense development. Therefore, no further details can be determined in these areas. The three lakes on the Property are clearly indicated on this map, although they were noted to have been present as early as 1968 from the aerial interpretation (Section 3.3). No notable changes were observed on the surrounding properties from the 1968 and 1973 topographic maps.

No obvious environmental conditions can be determined from the historical topographic map review on either the Property or the immediately surrounding properties.

3.6 Records Review

3.6.1 Standard Environmental Record Sources

A search of state and federal environmental databases was undertaken for the Fort McPherson property and any listed sites within standard search distances. A review of the August 23, 2006, Environmental Data Resources, Inc. (EDR), database report was conducted. The findings of the search are summarized below in Table 3 and the complete search results are provided as Appendix E.

Table 3
Environmental Record Review Summary

Record(s) Source	Number of Sites	Search Distance (miles)
Federal NPL Sites	0	1.0
Federal CERCLIS List	4	0.5
Federal CERCLIS NFRAP List	6	Property and adjoining properties
Federal RCRA CORRACTS Facilities list	3	1.0
Federal RCRA non-CORRACTS TSD Facilities List	3	0.5
Federal RCRA Generators List	19	Property and adjoining properties
Federal RAATS List	1	
Federal TRIS List	2	
Federal SSTS (Section 7)	1	
Federal ERNS list	0	Property only
Georgia State NPL Equivalent	0	1.0
Georgia State CERCLIS Equivalent	3	0.5
Georgia State Landfill and/or solid waste disposal site lists	0	0.5
Georgia State leaking UST lists	18	0.5
Georgia State registered UST lists	30	0.5

NPL - National Priorities List.

CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System.

RCRA - Resource Conservation and Recovery Act.

NFRAP - No further response action planned.

CORRACTS - Corrective Action Report.

TSD – Treatment, storage, and disposal.

RAATS - RCRA Administrative Action Tracking System

TRIS - Toxic Chemical Release Inventory System

SSTS – Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act

ERNS - Emergency Response Notification System.

Fort McPherson was identified in the DoD, Facility Index System, Resource Conservation and Recovery Act Small Quantity Generator (RCRA-SQG), LUST, UST, and State Hazardous Waste Site (SHWS) databases searched by EDR.

A total of 44 other facilities were identified within the search radius of the Property that appeared on the public databases provided by EDR.

3.6.1.1 National Priorities List

The National Priorities List (NPL) is the EPA's list of the most serious, uncontrolled or abandoned, hazardous waste sites identified for possible long-term remedial action under the Superfund program.

No NPL sites were identified within a 1-mile radius of Fort McPherson.

3.6.1.2 Comprehensive Environmental Response, Compensation, and Liability Information System

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is an EPA database of known or suspected, uncontrolled or abandoned hazardous waste sites that the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to CERCLA.

Four sites within a ½-mile radius of Fort McPherson are currently listed in the CERCLIS database. These sites include the Murphy Avenue Drum Site (1230 Murphy Avenue), Brenntag Mid-South, Inc. (2225 Lawrence Drive), Southern Wood Piedmont Company (1745 Connally), and PPG Industries Incorporated (1377 Oakleigh Drive). According to the assessment history for the Murphy Avenue Drum Site, a discovery was reported on 3 June 1994 leading to an immediate emergency removal. This action, completed 9 April 1998, effectively removed potential contamination sources from the site. The assessment history for Brenntag Mid-South, Inc. indicated an emergency removal action on 16 December 2004. According to the records search, the Southern Wood Piedmont Company and PPG Industries both have discoveries reported 1 August 1980. The preliminary assessment for the Southern Wood Piedmont Company was completed 1 September 1982, with a site inspection as of 28 August 1989. The preliminary assessment for PPG Industries was completed 17 September 1985, with a site inspection as of 1 January 1990. Both of these sites were ultimately deferred to RCRA Subtitle C. None of the four sites listed by CERCLIS are located upgradient of Fort McPherson.

The CERCLIS database identifies five additional sites designated as No Further Response Action Planned within a ½-mile radius of Fort McPherson. These sites include 3M Dynacolor East Point (2043 Lawrence Avenue), Champion Building Products (2135 Lawrence Avenue), Sun Chemical Corporation (2247 Lawrence Road), International Paper (2323 N. Sylvan Road), and the William C. Meredith Company, Inc. (2335 Lawrence Street). The discovery for 3M Dynacolor East Point was filed 1 August 1980 with a preliminary assessment on 23 September 1986. The site inspection was completed and site archived on 9 March 1990. A discovery was made on 1 June 1981 at Champion Building Products, and site assessments were conducted on 1 September 1982 and 17 June 1985. The site was inspected and archived on 18 January 1990. For Sun Chemical, the discovery was completed 1 July 1980 with a preliminary assessment filed 27 August 1985. The site inspection was finished and site archived on 19 September 1989. The assessment history for International Paper indicates a discovery on 1 October 1980 and archival after a preliminary assessment on 20 May 1986. For the William C. Meredith Company, a discovery was completed 1 November 1979 and a preliminary assessment was completed 1 December 1979. The site inspection was completed 2 June 1989, and the site was archived on 1 January 1997.

3.6.1.3 RCRA Corrective Action

RCRA Corrective Action Sites (CORRACTS) is a list of handlers with RCRA corrective action activity.

Three facilities within one mile of Fort McPherson are listed in CORRACTS, none of which are located upgradient of Fort McPherson. These include the Southern Wood Piedmont Company, PPG Industries Incorporated, and the William C. Meredith Company. After an RFI Imposition on 8 November 1988, migration of contaminated groundwater from the Southern Wood Piedmont Company was verified as under control as of 30 September 1999. According to the summary of corrective actions discovered in the records search, PPG Industries had an RFI imposed on 27 August 1989. Since that date, migration of contaminated groundwater from the site was verified as under control as of 8 October 1998 and a corrective measures design was approved as of 19 July 2000. According to the summary of corrective actions discovered in the records search, an RFI workplan was approved for the William C. Meredith Company facility on 14 August 1991. Migration of contaminated groundwater from this site has not yet been confirmed as corrected, although 11 February 1993 was set as a date for remedy selection.

3.6.1.4 RCRA Treatment, Storage, and Disposal Facilities

The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. RCRA notifiers are sites that have filed notification forms with the EPA, in accordance with RCRA requirements, regarding their generation, storage, transportation, treatment, or disposal of hazardous waste.

Three RCRA treatment, storage, and disposal facilities were identified within ½-mile of Fort McPherson, including the Southern Wood Piedmont Company, PPG Industries, and the William C. Meredith Company. None of these sites are located upgradient of the Property, and therefore do not constitute concerns.

3.6.1.5 RCRA Generators

The RCRA program identifies large quantity generators (LQG) and tracks hazardous waste from the point of generation to the point of disposal. LQG generate 1,000 kilograms or more per month of hazardous waste. RCRA notifiers are sites that have filed notification forms with the EPA, in accordance with RCRA requirements, regarding their generation, storage, transportation, treatment, or disposal of hazardous waste.

Five RCRA LQG facilities adjoining Fort McPherson were identified in the records review, including Brenntag Mid-South, Inc., the Southern Wood Piedmont Company, PPG Industries, the William C. Meredith Company, and the Kraft Foods Global, Inc. Atlanta Bakery (1400 Murphy Avenue SW). None are located upgradient of the Property, and all are currently in compliance. The Southern Wood Piedmont Company has records of 17 reported violations, PPG Industries has had 56 reported violations, and the William C. Meredith Company has had 45 reported violations. No violations have been reported at either Brenntag Mid-South or the Kraft Atlanta Bakery.

The RCRA program identifies SQG and tracks hazardous waste from the point of generation to the point of disposal. SQG generate more than 100 kilograms but less than 1,000 kilograms per month of hazardous waste. RCRA notifiers are sites that have filed notification forms with the EPA, in accordance with RCRA requirements, regarding their generation, storage, transportation, treatment, or disposal of hazardous waste.

The RCRA-SQG database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the RCRA. A total of 13 RCRA

SQG facilities listed in the database were identified within a ¼-mile radius of the Property, as follows:

Facility	Address
USA Fort McPherson	Lee St.
3M Dynacolor East Point	2043 Lawrence Avenue
Champion Building Products, Champion Int'l	2135 Lawrence Avenue
Sun Chemical Corporation	2247 Lawrence Street
International Paper	2323 N. Sylvan Road
Champion International Corporation	840 Woodrow Street
Ellison Pioneer Heddle and Ree	1374 Murphy Avenue
Van Den Bergh Foods Company	1591 Murphy Avenue
Southern Saw Service, Inc.	1594 Evans Drive
Central Food Management	1870 Murphy Avenue
Southeast Atlantic Corporation	1910 Murphy Avenue SW
Arrow Shirt Company, Atlanta Plant	2022 Murphy Avenue
Courier Dispatch	1340 Milledge Street

Fort McPherson is listed in the RCRA-SQG database. There are 19 records of violations reported for Fort McPherson but all have achieved compliance. A list detailing the violations can be found in Appendix E. Additionally, one violation has been reported at Ellison Pioneer Heddle and Ree, but it is crossgradient and currently in compliance. Due to the small quantity of hazardous materials located at the above listed facilities and the facilities' regulatory status, none are currently considered recognized environmental conditions.

3.6.1.6 RCRA Administration Action Tracking System

The RCRA Administration Action Tracking System (RAATS) contains records based on enforcement actions issued under RCRA and pertaining to major violators. It includes administrative and civil actions brought by the United States Environmental Protection Agency. The source of this database is the U.S. EPA.

One facility, the Southern Wood Piedmont Company, was listed in the RAATS database. The facility is located downgradient of the Property and is not currently considered an environmental concern.

3.6.1.7 Department of Defense Sites

Department of Defense (DoD) sites consist of federally owned or administered lands, administered by the DoD, than have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

USA Fort McPherson (Lee St.) is identified as a DoD site.

3.6.1.8 Toxic Chemical Release Inventory System

The Toxic Chemical Release Inventory System (TRIS) identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. The source of this database is the U.S. EPA.

Two TRIS sites were identified within the search radius, PPG Industries and the Kraft Atlanta Bakery. None of the facilities are located upgradient of the Property and are therefore not currently considered recognized environmental conditions

3.6.1.9 Section 7 Tracking System

Section 7 of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, requires all registered pesticide-producing establishments to submit a report to the EPA by 1 March each year. Each establishment must report the types and amounts of pesticides, active ingredients, and devices being produced, and those having been produced and sold or distributed in the past year.

One Section 7 Tracking System site was identified within a ½-mile radius of Fort McPherson. It is listed as Burris Chemical, Inc. (2225 Lawrence Avenue). No records of violations were found in association with this facility. Due to the facility's regulatory status, the facility is not considered a recognized environmental condition.

3.6.1.10 Other Federal ASTM Supplemental Records

No properties were identified by EDR within the Federal search radius for the following supplemental federal records: CONSENT, ROD, MLTS, MINES, FUDS, INDIAN RESERV, UMTRA, US ENG CONTROLS, UST INST CONTROL, US BROWNFIELDS, ODI, TSCA, ICIS, ERNS, HMIRS, PADS, and FTTS.

3.6.1.11 Underground Storage Tanks

The State of Georgia UST database contains an inventory of registered USTs. A total of 30 UST facilities were identified within a ¼-mile radius of Fort McPherson. Sites listed in the UST database are as follows:

Facility	Address
Fort McPherson Bldg. 105	105 Hardee Avenue
Fort McPherson Bldg. 143	143 Walker Drive
Fort McPherson Bldg. 302 / Dry Clean	302 Patton Plaza
Fort McPherson Bldg. 41	Building 41
Fort McPherson Bldg. 164	164 Cumming Drive
Fort McPherson Bldg. 160 / Boiler	160 Bate Circle
Fort McPherson Bldg. 302	302 Lee Street
Fort McPherson Bldg. 350	350 Walker Drive
Fort McPherson Bldg. 454	454 Miller Drive
Fort McPherson Bldg. 207	207 Hardee Avenue
Fort McPherson Bldg. 326	326 Wilson Avenue
Fort McPherson Bldg. 200	200 Sayers Street
Fort McPherson Bldg. 368	368 McGee Street
Fort McPherson Bldg. 214	214 N. Second Street
Fort McPherson Bldg. 101	101 Lewis Circle
Champion International Corporation	840 Woodrow Street
Central Food Management	1870 Murphy Avenue
Southeast Atlantic Corporation	1910 Murphy Avenue SW
Courier Dispatch	1340 Milledge Street
Chevron Food Mart #4	1722-A Campbellton Road
Atlanta Fire Station #14	1203 Lee Street SW
Latter Day Saints Site	1185 Van Buren Street SW
Sawyer Alternator & Starter	1397 Campbell Road
Fire Station #28	2040 Main Street
Packaging Corporation of America	3200 Lakewood Avenue
US Plywood Corporation	2135 Lawrence Avenue
Samson Tours	1295-1320 Milledge Road
Davidson-Kennedy Company	7195 Victory Drive SW
Expand-O Distribution Warehouse	2110 Lawrence Street
Colonial Hills Christian School	2134 Newnan Street

Of the 30 listed USTs, 17 were documented as having a recorded release by the State regulatory agency and are discussed in the section below.

3.6.1.12 Leaking Underground Storage Tanks

LUST records contain an inventory of reported incidents involving LUSTs. Seventeen of the sites are listed on the LUST database and are as follows:

Facility	Address
Fort McPherson Bldg. 101	101 Lewis Circle
Fort McPherson Bldg. 105	105 Hardee Avenue
Fort McPherson Bldg. 143	143 Walker Drive
Fort McPherson Bldg. 200	200 Sayers Street
Fort McPherson Bldg. 302 / Dry Clean	302 Patton Plaza
Fort McPherson Bldg. 350	350 Walker Drive
Champion International Corporation	840 Woodrow Street
Courier Dispatch	1340 Milledge Street
Stanton Road Citgo	2048 Stanton Road
Otter Shop #001	2139 Main Street
Atlanta Fire Station #14	1203 Lee Street SW
Latter Day Saints Site	1185 Van Buren Street SW
Sawyer Alternator & Starter	1397 Campbell Road
Facility	Address
Fire Station #28	2040 Main Street Packaging
Corporation of America	3200 Lakewood Avenue
US Plywood Corporation	2135 Lawrence Avenue
Samson Tours	1295-1320 Milledge Road

Three of the off-site LUST sites have been granted a "no further action" status by the State. Eight of the off-site LUST sites do not have a "No Further Action" status and are located either downgradient or crossgradient to Fort McPherson. The eight sites are as follows:

Facility	Address
Champion International Corporation	840 Woodrow Street
Courier Dispatch	1340 Milledge Street
Stanton Road Citgo	2048 Stanton Road
Otter Shop #001	2139 Main Street
Fire Station #28	2040 Main Street
Packaging Corporation of America	3200 Lakewood Avenue
US Plywood Corporation	2135 Lawrence Avenue
Samson Tours	1295-1320 Milledge Road

Six of the LUST sites are located on the Property (Buildings 101, 105, 143, 200, 302, and 350) and are described in detail in Section 5.2.3.

3.6.1.13 Hazardous Site Inventory

The SHWS database contains records that are the state equivalent to CERCLIS. SHWS sites are priority sites planned for cleanup using state funds and are identified along with sites where potentially responsible parties will pay for cleanup.

The Army Fort McPherson Incinerator was listed on the SHWS database. Additionally, the Southern Wood Piedmont Company and ESB Incorporated (1246 Allene Avenue SW) are SHWS sites located within 1 mile of Fort McPherson.

3.6.1.14 Solid Waste Facilities/Landfill Sites

Solid Waste Facilities/Landfill Site records typically contain an inventory of solid waste disposal facilities or landfills in the state. Depending on the state, these might be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D, Section 4004 criteria for solid waste landfills or disposal sites. The state database maintains an inventory of the solid waste facilities in the state.

There are no Solid Waste Facilities/Landfill Sites within a ½-mile radius of Fort McPherson.

3.6.1.15 Other State ASTM Supplemental Records

Georgia Non-Hazardous Site Inventory. The Non-Hazardous Site Inventory database contains property listing that have reported contamination of soil or groundwater under the Georgia Hazardous Site Response Act. These sites were not placed on the Georgia Priority List because their hazard evaluation scores did not exceed the threshold levels established for sites posing an imminent threat to health or the environment.

There are 16 Georgia Non-Hazardous Site Inventory Sites located within a 1-mile radius of Fort McPherson. They are listed as follows:

Facility

Brenntag Mid-South, Inc.
3M Dynacolor East Point
International Paper
Champion International Corporation
Burris Chemical Inc.
Bernstein Scrap Metal (Former)
Superior Associates

Address

2225 Lawrence Avenue 2043 Lawrence Avenue 2323 N. Sylvan Road 840 Woodrow Street 2225 Lawrence Avenue 1006 Murphy Avenue 1135 Sylvan Road

Recycling Industries of Atlanta 972 Avon Avenue

McGean-Rohco, Inc. 1314 Murphy Avenue SW

Campbellton Plaza Dry Cleaners 2076 Campbellton Road SW

Shamrock Garden Apartments 1988 Plaza Lane

3232 Lakewood Avenue 3232 Lakewood Avenue Burris Chemical / US Plywood Site 2135 Lawrence Street

2165 Lawrence Street 2165 Lawrence Street

Warehouse 2181 Sylvan Road

Converters Ink Company 2247 Lawrence Road

A release of tetrachloroethene was reported at Shamrock Garden Apartments on 1 July 1998. Lead contamination was reported at 3232 Lakewood Avenue on 1 August 2000, and at Bernstein Scrap Metal on 1 October 2001. A release of sulfuric acid and ammonia at 2165 Lawrence Street was reported on 1 September 2000. A release of benzene and xylenes was reported at McGean-Rohco, Inc. on 1 March 2001. A release of vinyl chloride and arsenic at the Burris Chemical / US Plywood Site and a release of vinyl chloride and acetone at Brenntag Mid-South were reported on 3 July 2003.

A date of 1 September 1998 was reported for Champion International Corporation; however, the contaminants were not reported. A date of 1 February 1999 was reported for Recycling Industries of Atlanta, but the contaminants involved were not reported. One entry for Superior Associates, one entry for Burris Chemical, one entry for the 2181 Sylvan Road warehouse, two entries for Converters Ink Company, two entries for Campbellton Plaza Dry Cleaners, two entries for International Paper, and two entries for 3M Dynacolor East Point were found in the records search, but all lacked date and contaminant information.

Georgia Spills Database. The Spills Database comes from the Georgia Department of Natural Resources and is an Emergency Response Incident Reporting System for oil and hazardous material spills and releases.

There are three Georgia Spills Database sites located within a 1-mile radius of Fort McPherson, including the Southern Wood Piedmont Company, the Kraft Atlanta Bakery, and the Burris Chemical / US Plywood Site (2135 Lawrence Street). These facilities currently pose no concern to Fort McPherson due to their distance or topographic position.

Permitted Air Facilities. The Aerometric Information Retrieval System Database lists one facility within the search area, the William C. Meredith Company. However, no further information is provided.

Tier 2. The Tier 2 database lists facilities which store or manufacture hazardous materials and submit a chemical inventory report. One Tier 2 site, the Packaging Corporation of America at 3200 Lakewood Avenue, was identified within a ½-mile radius of Fort McPherson.

A search of state and federal environmental databases was also conducted for the leased property (Network Enterprise Technology Command) located at 700 Westpark Drive, Peachtree City, Georgia. The subject property was reported on the RCRA-SQG database and was listed under the facility name of Siemens Electromechanical Components, Inc. No violations were reported for the facility. The ECP team contacted the ACE contractor regarding the facility. He stated that the Siemens Electromechanical Components, Inc. was a former tenant of the building. The database indicates that there are two underground storage sites located within the search distance. Based on the regulatory status as UST sites with no confirmed releases, the two sites do not appear to be of significant environmental concern to the subject property. The complete search results are provided as Appendix E.

3.6.2 Additional Record Sources

Reasonably accessible Army environmental documents, county and city records, and aerial photographs of the property were reviewed to investigate land uses at the site. Local authorities were contacted to learn about historic uses of buildings and lands on the site. Available information on past land uses and their potential impacts was assessed. Other documents and resources of historical import that were used include the following:

- Readily available records and files documenting where hazardous materials are stored and used on site (a summarized list is included in Chapter 5.0)
- Proof of ownership documentation, via acquisition deeds and property maps were
 obtained though the Fort McPherson Real Property Division and were reviewed to
 ascertain the historic use of the property. This inquiry included a search for
 recorded deeds, leases, mortgages, easements, and other appropriate documents. A
 copy of the proof of ownership documentation is presented in Appendix F
- Files at the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) were reviewed for documents addressing human health matters

- Environmental documents and files at the U.S. Army Environmental Center
- Historical documents and maps at the National Archives and Records Administration (NARA) (College Park, Maryland) which were obtained in January 2006 by another consultant (Malcolm Pirnie, Inc., 2006)
- Historical documents and maps at the 12 Regional Research Centers, which was researched in January 2006 by another consultant (Malcolm Pirnie, Inc., 2006)
- Copies of permit applications and any notices of violations concerning the site.

3.7 Interviews

Individuals with historic or current knowledge of the Property were interviewed to provide information concerning environmental conditions at the Property. Personnel from the following offices were interviewed:

- Directorate of Public Works (DPW) Air Quality
- DPW Environmental Division UST/Asbestos
- DPW Natural Resources
- DPW Engineering
- Fort McPherson Museum
- DPW Historic Architect
- DPW Engineering Real Property.

The interviews included topics of general environmental interest and specific areas of interest identified during the records review and visual site inspection. Copies of the interview reports are included in Appendix G. Pertinent information regarding environmental impact is included in Chapter 5.0 of this report.

3.8 Data Management

From records and interviews as described, environmental conditions at the Property were evaluated facility-wide, and findings were compiled in hard copy and electronic format.

The majority of information used in the evaluation of the environmental condition is included in the appendices of this report. Other information is included in an electronic database provided in CD format. This includes electronic versions of reports reviewed for the ECP, digital photographs taken during the VSIs, and VSI checklists compiled after the inspections. All electronic data items are listed in a Microsoft Excel® spreadsheet containing the descriptive name of the item as well as electronic filename.

4.0 Property Description

The following sections provide summary information on past and present land use and the nature of major processes and operations.

4.1 Installation Location and Description

Fort McPherson is located on approximately 487 acres of land in the city limits of Atlanta, Fulton County, Georgia. The Property is roughly rectangular in shape and is situated due north of Highway 166 (Langford Freeway), west of Highway 29 (Lee Street), and southeast of Campbellton Road. Land use within 1/4 mile is residential with zones of light industry interspersed. The Property is bounded by residential areas to the north (Oakland City), east (Lakewood), and west. Mixed residential and industrial areas lie immediately south of the Property. It is centrally located in the Atlanta metropolitan area, approximately 4 miles southwest of downtown and 3 miles north of Atlanta's Hartsfield International Airport. Figure 1 shows the location of Fort McPherson.

Fort McPherson is an active U.S. Army facility which houses many headquarters and tenant organizations. The Property is the home of the FORSCOM. FORSCOM is responsible for the training and readiness of nearly one million active, Army NG and Army Reserve soldiers, providing effective, strategic forces capable of responding rapidly in support of national security. FORSCOM commands the Third U.S. Army which is headquartered at Fort McPherson. Fort McPherson also houses the USARC.

The Fort McPherson community is made up of approximately 4,000 civilians, 2,300 active-duty personnel, and 1,300 Army Reserve personnel. Fort McPherson's mission is to support and execute soldier readiness and well-being by providing efficient installation management programs, a quality community, and value-added services to active, reserve, NG and joint service forces, retired military, civilians, and family members (U.S. Army Corps of Engineers [USACE], 2005).

Fort McPherson is used in much the same way as the surrounding suburban communities of Atlanta. The cantonment is broken down into administrative areas, recreation areas, family housing areas (94 units in 51 buildings), and a small industrial area. Troop training is limited to a small pistol range near the southwest corner of Property and is limited to small arms ammunition. The Fort McPherson range is the only operational range on the Property to have

activities associated with munitions use. There are approximately 253 buildings and structures at Fort McPherson scattered over 487 acres. The Network Enterprise Technology Command is approximately 8.4 acres and is located in Peachtree City, Georgia.

4.2 Historic Land Use

Prior to the establishment of Fort McPherson, the land in the vicinity was mostly pasture land. There has been an Army presence in the area since the early 1800s and the land at Fort McPherson was used as a drill field and meeting place for the state militia.

Just prior to the beginning of the Civil War, the Georgia militia was mobilized and the land was used as a training center for the troops. When the Civil War began, the Confederate government took control of the old parade ground, erected barracks, and built a cartridge factory. When Union troops approached Atlanta in 1865, the Confederate troops destroyed the barracks and cartridge factory so that they would not fall into the Union troops' hands.

Aware of Atlanta's popularity as a summer encampment for troops stationed in subtropical Florida, Congress in 1885 established a permanent military post at Fort McPherson.

4.3 Facility History

The initial land acquisition for "the post near Atlanta" was in 1885, with a second parcel purchased in 1886. Construction for the 10-company post began shortly thereafter. The first troops were garrisoned there in 1889, the same year the post was designated Fort McPherson. By 1893, numerous troop barracks, officer and noncommissioned officer housing, a headquarters and hospital, a large mess hall, a guard house, and other support facilities had been completed.

The end of the 19th century found a flurry of activity at Fort McPherson, much of it was centered on medical activities, particularly during the Spanish-American War. In May 1898, Fort McPherson was designated a general hospital to serve the medical needs of the wartime emergency. By the early part of the 20th century, an expansion of the post was approved to include four additional companies of infantry soldiers. Permanent new construction to meet this increased strength were added.

The advent of World War I saw an explosion of construction at Fort McPherson. Temporary wooden buildings were constructed for an officer's training camp south of the main post where the FORSCOM headquarters sits today. Additional temporary wooden and semipermanent

masonry buildings were constructed around the hospital as Fort McPherson was designated first a base hospital (June 1917) and then a general hospital (General Hospital No. 6, December 1917) (Figure 3). These buildings served as wards, treatment facilities, operating rooms, and quarters for doctors, nurses, and other hospital personnel. In August 1917, the command of Fort McPherson was transferred to the medical department and the regular troops withdrew to Camp Meade, Maryland. Only Building 22, which today is used for billeting, remains from this construction. It was originally constructed as quarters for the nurses working and training at the hospital.

With the regular troops gone, the barracks were converted to hospital wards, and a second floor was added to the wards of the post hospital. Several permanent support facilities were also constructed at this time, including a small boiler house for the new hospital facilities (to which an addition was made just over a year later), another larger boiler house, and a fire station. The small boiler house remains and continues to function as a boiler house. The larger boiler house was demolished in 2000, having lost all integrity through decades of additions and renovations. The fire station is still used, although it has been converted to a printing plant.

During WWI, an additional 136 acres were purchased adjacent to the south boundary of Fort McPherson for Camp Jesup, Mechanical Repair Shop No. 305 (Figure 4). Several dozen temporary wooden structures were built on the hillside where the USARC headquarters now sits, overlooking two large motor vehicle repair shops.

After the war, the camp was designated the Motor Transport School and later a Motor Transport General Depot. In 1922 the 305th Motor Repair unit left Camp Jesup and the buildings were turned over to the Quartermaster General for use as a regional depot. At this time, several steel aircraft hangars were constructed to serve as warehouses. In 1927 the depot was closed and the land incorporated into Fort McPherson. By the end of 1928, half of the wooden buildings had been demolished. (The remainder were demolished prior to World War II (WWII), when the hillside was again littered with temporary wooden buildings.) Building 363, now headquarters for the Third U.S. Army, is the only building remaining from this time. It was originally the larger of the two motor repair shops. Building 360, which served as the Fort McPherson commissary and stood until 1998, was one of the aircraft hangars constructed in 1922 to serve as a warehouse for the Quartermaster Depot.

Several National service organizations, such as the American Red Cross, the Young Men's Christian Association, and the Knights of Columbus, were also constructing buildings on military installations during WWI, including at Fort McPherson and Camp Jesup. Building 46, which was constructed in 1918 by the American Red Cross as a convalescent house, is the only one of these buildings remaining.

The final construction associated with Fort McPherson during WWI was a prisoner of war camp, which was located off the northwest corner of the post, across Campellton Road. It housed German sailors whose ships were caught in United States' ports when war was declared in Europe. The temporary wooden buildings that made up the camp were constructed on leased land. Shortly after the war, all of these buildings were demolished and the land turned back over to the owner.

Command of Fort McPherson was returned to line officers in December 1919. During the 1920s and 1930s, much of the construction activity centered around converting many of the permanent brick buildings to new uses and demolishing many of the temporary wooden buildings constructed for the wartime activities. For example, it was at this time that Building 184 (a 1904 barracks) was converted to administrative space, Building 65 (another 1904 barracks) was converted to apartments, Building 522 (a 1905 boiler house) was converted to visiting officers' quarters, and Building 500 (a 1918 boiler house) was converted to the Officers' Club. Much of this activity was prompted by the establishment of the IV Corps Area in 1920 and location of its headquarters at Fort McPherson from 1920 to 1923 and again from 1927 to 1934.

The 1930s again saw an expansion of the hospital facilities plus the construction of several permanent support facilities. In 1930, a hospital mess hall was constructed to the west of the original hospital (the west wing of Building 171), and a clinic and ward building was constructed to the south (Building 170). A contagious disease ward was constructed to the south of the 1930 clinic, and south of that, a nurses' quarters was constructed. Support facilities constructed for the Property during the 1930s included a theater, film storage vault, and a radio transmitter building. At this time, land that had been purchased in 1910 for an NG target range was transferred to the Army and incorporated into Fort McPherson. The transfer was initiated in April 1938 and completed in June 1941. This area includes more than 134 acres on the west side of Fort McPherson, most of which is currently occupied by the golf course.

As during WWI, the opening days of WWII saw a flurry of construction activity. The hospital was again expanded, with dozens of temporary wood and semipermanent mobilization buildings constructed just to the south and west of the hospital complex. A number of laboratory and clinic facilities were built where the Medical/Dental Clinic now stands. Buildings 128-131 were constructed as wards. Temporary wood buildings made up a Quartermaster Motor Transport School and general supply depot, which was constructed on the site of Camp Jesup, and a 1,000-man recruit reception center (later used as a separation center) where FORSCOM Headquarters and the post library now stand. Several other mobilization structures were scattered around post. Only a handful of these buildings remain.

After the war, another major reorganization of the Army saw the establishment of the headquarters of the Third U.S. Army at Fort McPherson in March 1947. The relocation was completed by December. To accommodate this new use, the temporary wood buildings constructed during WWII for the reception/separation center were converted to use as offices and other support facilities. Building 210, which had been constructed during WWI for Camp Jesup, was also converted for use as offices. The 400-, 500-, and 600-family housing areas were constructed at this time to alleviate the housing shortage brought on by this growth. The 500- and 600-family areas were the first to be completed, in 1947. Each building originally had four 2-bedroom apartments, two per floor. These buildings were converted to duplex apartments beginning in the mid-1950s. Buildings 409 and 410 were constructed in 1948. For the next 20+ years, a few new support facilities were constructed, but for the most part, most of the construction activity centered on adaptively reusing existing buildings.

Important events in the facility's development, administration, and mission are summarized in Table 4.

Table 4

Timeline of Significant Events at Fort McPherson*

Year	Description
1885	Congress appropriated funds to establish a permanent military reservation in Atlanta. A site was approved for acquisition and construction.
1889	The post was officially designated Fort McPherson, in honor of Major General James Birdseye McPherson.
1896	Waco Target Range was purchased for FTMP training purposes.
1898	FTMP included a recruit training center, a General Hospital, and a prison camp for Spanish prisoners of war.
1910	Atlanta NG Target Range was purchased to provide a target range for the National Guard of GA.
1917	During WWI, FTMP was selected as U.S. Army General Hospital No.6.
1918	FTMP acquired 136 acres on the south side of the post, which became Camp Jesup and was used for major motor vehicle overhaul operations.
1920	FTMP became headquarters for the entire Fourth Corps Area.
1933-1942	CCC major activities occurred at FTMP.
1938	Installation acquired the use of the 136-acre Atlanta NG Target Range.
1940	Several barracks were converted to a hospital. A 1,000-man recruit reception center was constructed. Plans for a general supply depot were approved. The Quartermaster Motor Transport School was opened.
1940	The Waco Target Range was declared surplus.
1941	Atlanta NG Target Range was permanently transferred to FTMP.
1944-1946	FTMP functioned as a separation center for military personnel discharged from service.
1947-1973	FTMP played vital roles throughout the Korean and Vietnam conflicts as a command control center and Headquarters for Third U.S. Army.
1974	Atlanta Army Depot was renamed FTG and designated a subinstallation of FTMP.
Present	FTMP provides administrative and logistical contingency support to the major land fighting Army Command headquarters, FORSCOM, Third U.S. Army/U.S. Army Forces Central Command, the U.S. Army Reserve Command, and First U.S. Army

^{*}Source: Historical Records Review Fort McPherson, January 2006, Malcolm Pirnie, Inc.

4.3.1 Operational History

From the Spanish-American War until the end of WWII, Fort McPherson's primary missions were the provision of medical services, the processing and training of soldiers, and the conduct of supply and equipment maintenance operations. Since WWII, the base's primary function has shifted strongly towards command and control activities.

In conjunction with the Spanish-American War, a recruit training center for 20,000 was established at Fort McPherson, along with a prison for Spanish prisoners of war. In May 1898, shortly after the war's beginning, the post hospital was designated a General Hospital to serve the medical needs of the wartime emergency. Following the war, the level of activity declined significantly.

Mobilization for WWI in 1917 followed a similar pattern. An officers' training camp was established, as well as POW barracks for captured German sailors. The hospital became US Army General Hospital #6, and the ranking medical officer assumed command of Fort McPherson until 1919.

In 1918, an adjacent parcel of land was purchased for the establishment of Camp Jesup. Until 1922, this facility's chief operation was the repair, storage, and issue of Army motor vehicles. At that time, the buildings were transferred to the Quartermaster Corps for use as an intermediate regional depot for storage of surplus supplies turned in at the war's end. Camp Jesup was permanently transferred to Fort McPherson in 1927 (U.S. Army Toxic and Hazardous Materials Agency [USATHAMA], 1983).

4.3.2 Process Descriptions (Industrial Facilities Only)

Industrial operations are associated with maintenance and repair of passenger and utility wheeled vehicles, tracked utility vehicles, buildings, roads, and utilities. In addition, photographic and printed material are produced on Property for training aids and information services. Past activities were more extensive and included major automotive repair shops, electronics and communications repair shops, and furniture repair shops, which were moved to Fort Gillem in the mid-1970s.

Most of the industrial activities at Fort McPherson occurred within the original Camp Jesup Area. Camp Jesup was established in 1918 as the site of a major motor vehicle overhaul operation, handling from 50 to 60 railroad carloads of motor equipment per week. In 1922 Camp Jesup became a quartermaster intermediate depot for storage of war supplies turned in from various camps, and motor repair operations ceased. In 1927, Camp Jesup Quartermaster Depot was discontinued and its facilities and activities were consolidated with the post of Fort McPherson (USATHAMA, 1983; Earth Tech, 2003b). Many of the buildings that were involved in industrial activities have either been demolished, no longer appear in the current building asset listing and/or have been re-purposed.

Each industrial operation is described in this section under the shop with which it was associated. There were six vehicle maintenance shops and six vehicle wash racks. In addition, the Property had a field printing plant as well as laundry and dry cleaning, photography, graphics, sheet metal, paint, carpentry, packing and crating, masonry, refrigeration, electrical, and plumbing shops.

Vehicle Maintenance Shops. The vehicle maintenance shops were listed as follows:

Former Vehicle Maintenance Shops:

- 1. Directorate of Industrial Operations (DIO) transportation motor pool (TMP) (Building 348)
- 2. DIO Maintenance Division (Building 363)
- 3. DEH equipment maintenance shop (Building 357-demolished)
- 4. 29th Engineer Detachment (Building 426 demolished)
- 5. Auto craft shop (Building 312 demolished)
- 6. Fueling Station– PX service station (Building 187/143-demolished), commercial fueling (Building 368), Government Fueling (Building 350)
- 7. Vehicle Maintenance Building 280

Current Vehicle Maintenance Shops:

- 8. Auto Crafts Center (Building 370 replacement for activities at former Building 312)
- 9. Golf Equipment Maintenance (Building 340)
- 10. Roads and Grounds (Building 346).

At the DIO TMP (Building 348), activities were limited to checking oil, water, electrolyte levels, and tire pressure on passenger and light utility vehicles. Vehicle washing was also performed. There were environmental conditions associated with Building 348 identified as part of this ECP.

The DIO Maintenance Division vehicle repair shop (Building 363) serviced passenger and utility vehicles. Maintenance activities include oil servicing, solvent degreasing of parts, brake repair, engine tune-up, hydraulic fluid replacement, minor electrical system repairs, and minor spot

painting. More extensive engine, body, and brake work, and painting were performed at Fort Gillem DIO. This site is designated FTMP-01 under the IRP and is considered a REC. More information regarding this site is included in Section 5.2.1.

The DEH equipment maintenance shop (Building 357) performed minor tune-ups, oil servicing, and repairs on wheeled light utility vehicles, tracked construction vehicles, lawn mowers, edgers, and assorted small maintenance equipment. Vehicle and equipment washing was also performed. During the 2006 VSI, a grassy area was observed in the location of former Building 357. There are no known environmental releases associated with this former operation.

The 29th Engineer Detachment (Building 426) performed operator- and organizational-level maintenance only. Activities included checking of oil, water, and electrolyte levels and tire pressure, as well as oil servicing, minor tune-up work, and vehicle washing. There were no environmental conditions associated with Building 426 identified as part of this ECP.

Prior to 1982, auto craft shop activities were conducted within Building 312. Building 312 was demolished in 1981 for Metropolitan Atlanta Rapid Transit Authority terminal construction. Information obtained during the ECP indicated that there were no known environmental conditions associated with Building 312.

According to the 1983 Installation Assessment, beginning in 1982, an auto craft shop was located in Building 371. Activities at Building 371 were reportedly similar to those at the former Building 312. The auto craft shop provided facilities for self-servicing privately owned vehicles. Minor engine repair, tune-ups, oil servicing, brake work, and vehicle washing were performed at the shop. One 500-gallon waste oil tank was reported to have been located at Building 371. There was no available information regarding the status of the tank, however, information obtained during the ECP indicated that Building 371 did not exist at the Property. Instead, the auto craft shop was and is currently located in Building 370, which was built in 1982. A 500-gallon waste oil tank at Building 370 was removed on June 9, 1993. Building 370 is designated FTMP-08 under the IRP and no further action is required for the site.

The PX service station (Building 143) serviced privately owned vehicles. Maintenance activities were similar to those described for Building 370. The site is designated FTMP-09 under the IRP and is considered a REC. More information regarding this site is included in Section 5.2.1.

According to historical documents, another area where vehicle maintenance was performed was at Building 280 (U.S. Army Garrison, 2001). Information obtained during the ECP indicated that there was no known environmental conditions associated with Building 280.

All buildings listed above have been demolished with the exception of Buildings 348, 350, 363, 368 and 370. VSI results and interviews with installation personnel indicated that with the exception of Buildings 143, 346, and 363, the other vehicle maintenance buildings are currently not considered recognized environmental conditions.

Vehicle Wash Racks. There were five locations where vehicles were routinely washed:

- 1. DIO TMP Building 345: indoor and outdoor operations, with an oil/water separator and waste water discharging to the storm sewer. No hazards or environmental conditions were observed during the 2006 VSI. No environmental conditions associated with Building 345 were identified as part of this ECP.
- 2. Near DIO TMP Building 347 (currently the golf facilities bathroom): outdoor operations, with no treatment, with waste water discharging to a culvert to Lake No. 1. No environmental conditions associated with Building 347 were identified as part of this ECP.
- 3. DEH Equipment Maintenance Building 357: outdoor operations, with no treatment, with wastewater discharging overland toward Lake No. 1. Building 357 is demolished. The site is currently designated as FTMP-07 under the IRP. The site is not considered a REC. More information regarding FTMP-07 is included in Section 5.2.1.
- 4. 29th Engineer Detachment Building 426: outdoor operations, with no treatment, with wastewater discharging overland to a drainage ditch. Building 426 was demolished in 1991. No environmental conditions associated with Building 426 were identified as part of this ECP.
- 5. 525th Military Police Building 101 (currently the Provost Marshall Office (Police Station): outdoor operations, with no treatment, with wastewater discharging overland to a storm sewer. No environmental conditions associated with Building 101 were identified as part of this ECP.

Buildings 357 and 426 are demolished. Based on VSI results and interviews with installation personnel, the existing buildings are not considered to be recognized environmental conditions.

Laundry and Dry Cleaning. The 1983 Installation Assessment stated that DIO operated a laundry and dry cleaning shop listed at Building 208; however, current research indicates that

this may have been meant as Building 209, which was listed as a laundry and dry cleaner in another document (USAEHA, 1961). According to other historical documents, dry cleaning was also conducted in Building 302 and the solvents were kept in the USTs (Atlanta Testing and Engineering, 1990). One 300-gallon and one 500-gallon naptha USTs were reported to be located at Building 302. There was no available information regarding the status of the tanks. Buildings 208 and 209 have since been demolished. The dry cleaning process was stated to have used perchloroethylene and caustic spot removers. Buildings 208, 209, and 302 constitute a REC.

Media Support Activities. The Directorate of Plans, Training, and Security operated a photographic laboratory in Building 205 (currently the Post Communications Center). Both color and black and white processing was performed. Historical documents also list Building 232 as operating an Ozalid machine for print reproduction (USAEHA, 1961). Building 264 was listed as the Projectionist and Transparency School that used film developing (USAEHA, 1968). Visual site inspections of the buildings and interviews with installation personnel revealed no recognized environmental conditions.

The Directorate of Plans, Training, and Security also operated a graphics shop in Building 363 (currently the administration building for the Third Army headquarters). Large format posters were the principal product of this shop. DPCA operated the field printing plant at Building 363, providing offset printing, photocopying, and automatic film processing. Principal products were training manuals, forms, and handbills. Building 363 is designated FTMP-01 under the IRP and is considered a REC. More information regarding this site is included in Section 5.2.1.

Equipment Maintenance Shops. DIO maintenance activity was limited to vehicle maintenance at Building 363, previously described in this section. Prior to the mid-1970s, DIO operated several other shops in Building 363, including furniture repair, small arms gunsmithing, electronics and communications equipment repair, and more extensive vehicle repair. Historical documents also indicate that equipment repairs were also conducted in Buildings 114 and 135 (USAEHA, 1962; U.S. Army Medical Laboratory, Environmental Health Engineering Division, 1968; and U.S Department of Army, 1976). Interviews with installation personnel revealed no recognized environmental conditions associated with Buildings 114 and 135.

Facilities Maintenance Shops. DEH operated the following shops on Fort McPherson for maintenance of real property:

The sheet metal shop (Building 353, currently the 90-Day Hazardous Waste Site) activities included cutting and welding sheet metal.

The paint shop (Building 363) conducted painting both in the shop and at the job site using latex, enamel, lacquer, wood stains, and varnishes.

The carpentry shop (Building 363) activities included sawing, planing, and sanding of wood, primarily in the shop. Historical documents also indicate that a woodworking shop also operated in Building 118 (USAEHA, 1962).

The masonry shop (Building 363) functioned primarily as a storage area for mortar and tools. Masonry and bricklaying were performed at the job site.

The refrigeration shop (Building 354, currently listed as the WK Animal Building) personnel performed air conditioning and refrigeration repairs, primarily at the job site.

The electrical shop (Building 205) personnel performed electrical rewiring at the job site. The shop served primarily as a storage area for tools and equipment.

The plumbing shop (Building 363) personnel serviced heat system piping. Work included removal of asbestos insulation.

No recognized environmental conditions associated with Buildings 205, 353 and 354 were identified as part of this ECP. Building 363 is designated FTMP-01 under the IRP and is considered a REC. More information regarding this site is included in Section 5.2.1.

Laboratory Operations. The principal laboratory operations were associated with clinical laboratories operated by the medical activity (MEDDAC), the dental activity (DENTAC), and the USAEHA Regional Division-South Laboratory. A summary of laboratories and responsible activities were as follows:

- 1. Building 170, Clinical Laboratory (e.g., Hematology, Microbiology), MEDDAC
- 2. Building 170, X-Ray Clinic, MEDDAC
- 3. Building 100, Dental Clinic, DENTAC
- 4. Building 100, X-Ray Clinic, DENTAC
- 5. Building 180, Region-South, USAEHA.

The U.S. Army Health Clinic (Building 170, currently listed as the General Purpose Administrative Building) provided outpatient care to approximately 500 patients per day. The clinic began operation in 1977. Prior to 1977, the hospital (Building 171) occupied this location and conducted similar types of laboratory activities. Historical documents also indicate that a medical laboratory also operated in Building 102 (USAEHA, 1962). The clinical chemistry laboratory, located in Building 170, discharged dilute quantities of waste solvents and reagents to the sanitary sewer. No pathological wastes were generated by the clinic. Microbiological wastes (e.g., plates, stains, and cultures) were collected separately, autoclaved, and then disposed of with the regular trash. Radioisotopes have never been used at the U.S. Army Health Clinic.

Silver was recovered by the Medical Supply Branch from x-ray and photographic fixative solutions generated by the U.S. Army Health Clinic and subsequently sent to the Defense Property Disposal Office (DPDO) at Fort Gillem. Fixative solution from which silver was recovered was then discharged to the sanitary sewer.

DENTAC maintained clinics in Building 100 (currently listed at the Army Criminal Investigation Building). Historical documents indicate that the Central Dental Lab was also operated in Building 47 (USAEHA, 1960). All X-ray fixative solutions generated by those activities were processed for silver recovery by the Medical Supply Branch in Building 170 (described above) and turned over to DPDO at Fort Gillem. Amalgams were stored under glycerin and turned over to the Medical Supply Branch.

The USAEHA Regional Division-South Laboratory (Building 180, currently listed as the Army Lab Building) had provided routine inorganic, trace metal, and trihalomethane analyses to USAEHA from 1974 to at least 1983. Prior to 1974, the Third Army Medical Laboratory, a public health laboratory, occupied this location. Wastes from the USAEHA operation were discharged into the sanitary sewer, which included waste nitric acid, chromium, phenol, and sodium hydroxide. The laboratory did not have the capability to analyze for PCBs, pesticides, radiation, or explosives; thus, no wastes of this nature were generated.

Historically, other laboratories were listed in Buildings 163 and 179 (entomology lab).

No environmental conditions associated with Buildings 100, 163, 170, 179, and 180 were identified as part of this ECP, therefore, these buildings are not considered a REC.

Heating and Cooling. A boiler plant is operated at Building 160 and an old boiler plant was listed for Building 208. The former boiler plant in Building 208 was a duel fuel boiler house using both diesel and natural gas and operated between the years 1942 and 1988.

4.3.3 Occupancy, Lease and Easement History

A listing of all current leaseholders on the Property is included in Table 5. The leasehold/outgrant locations and general property use classifications are depicted on Figure 5.

Table 5

Current Leaseholders at Fort McPherson

Name of Leaseholder
American Red Cross
Bell South
Cable East Point
City of Atlanta
Defense Security Office
Associated Credit Union/Former Federal Employees Credit Union
Fort McPherson Credit
Georgia Power Company
MARTA
Southern Bell and Telegraph
System Engineering and Management Corporation
Defense Contract Administrative Services
DLS- Printing Plant
Air Force Nat'l Sec Emer
Lake Allatoona
Blind Vendor
AT&T Teleport
Department of Agriculture
ATM at Fort Mac M-200
ATM at Fort Mac M-238
ATM at Fort Mac M-315
ATM at Fort Mac M-363
Fort McPherson Credit Union at Fort Gillem

DLS Printing, a Navy operated activity, is currently a leaseholder at Fort McPherson. The facility has not been listed in any environmental databases reviewed and is not considered an environmental concern.

The proposed Veterans Administration's occupancy area at Fort McPherson is included as Figure 6.

In addition to the lease holders at the Main Post, Network Enterprise Technology Command leases the property at 700 Westpark Drive, Peachtree City, Georgia.

4.3.4 Range Operations

There are six operational ranges at Fort McPherson. Table 6 provides a list of the operational ranges. There are also four closed ranges (Malcolm Pirnie, Inc., 2006) at Fort McPherson which are discussed in Section 5.2.2 of this report.

Table 6
Fort McPherson Operational Ranges

Range	Status	Acreage	Current use	Historic Use
Fort McPherson Range	Active	1.96	Combat Pistol/MP Firearms/Qualification Course	Combat Pistol/MP Firearms/Qualification Course
Hedekin Field	Active	10.42	Parade/Drill Field	
LZ Max	Active	1.42	Rotary Wing Landing Pad Surfaced (Black Top)	Parking Lot
PT Track	Active	3.23	Maneuver/Training Area, Light Forces	None recorded
Training Area 1	Active	3.21	Maneuver/Training Area, Light Forces	None recorded
Training Area 2	Active	0.77	Maneuver/Training Area, Light Forces)	None recorded

A detailed historical records review was conducted of the operational ranges in January 2006. A review of this document confirms the use of munitions at Fort McPherson. The Fort McPherson Range was found to be the only operational range on the Property to have activities associated with munitions use. The range covers 1.96 acres in the southwest corner of the Property and is limited to small arms ammunition. The potential munitions used at the Fort McPherson Range include the following:

• .22 caliber 4-15

- .32 caliber
- .38 caliber
- .45 caliber
- 9 millimeter.

In 1997, the U.S Army Environmental Command selected the Fort McPherson Range as a test site for implementation of small arms range stabilization technologies. As part of this program, the impact area was redesigned to maintain environmental compliance and to reduce operational costs. An 800,000-pound rock-filled gabion basket structure, 24 feet in height and extending the length of the target line, was installed to support the weight of the natural embankment behind the impact area. Upper slope channel and polyvinyl chloride pipes were constructed behind the gabion wall to direct drainage away from the impact area. Currently, specially designed bricks are positioned in front of the gabion baskets to capture and retain bullets and bullet fragments (Malcolm Pirnie, Inc. 2006).

There does not appear to have been any lead investigations at the range to date. A potential lead contamination exists due to range activities prior to the reconstruction of the impact area. The Fort McPherson Range is considered a REC.

4.4 Installation Utilities (Historic and Current)

4.4.1 Water Systems

Half of Fort McPherson's water supply is derived from the City of Atlanta and half from the City of East Point. The current water supply system was installed in 1992-1993. Figure 7 depicts the current water supply systems at Fort McPherson.

Water enters Fort McPherson mainly at Walker Gate through a 10-inch cast iron pipe. There is also a 12-inch cast iron pipe connection near Gordon Plaza (Lee Street). The water flows into a 200,000-gallon concrete ground storage reservoir, through a pump house containing two 275 gallons per minute and one 550 gallons per minute pumps. An elevated 200,000-gallon steel storage tank is located near Patton Gate. The elevated tank has cathodic protection for corrosion control. Most of the distribution system consists of 4-, 6-, 8-, and 10-inch cast iron pipe, but galvanized steel and ductile iron are present in some areas. Low-diameter galvanized steel pipes are used to supply water to "remote" low-volume users. The distribution system is fully pressurized, with pressures ranging from 40 to 70 psi within Fort McPherson. The sprinkler systems on the golf course and parade fields are transite pipe of various sizes from 1 to 6 inches.

The current sprinkler system was replaced in 1994 for the golf course and in 1999 for the parade fields. Existing wells are not used for potable water but are used as part of the irrigation system.

A water quality survey (No. 31-62-0149-89) dated June 19-23, 1989 for Fort McPherson and Fort Gillem was conducted to evaluate the potable and recreational water systems and to assess whether the installations were in compliance with applicable regulations, guidelines, and accepted environmental practices. No further information was provided regarding the survey.

4.4.2 Industrial and Sanitary Sewers and Treatment Plants

Fort McPherson's wastewater, which is primarily domestic sewage, is discharged to the city of Atlanta sanitary sewer system and treated in a city-owned treatment plant. Fort McPherson is served by separate sanitary and storm sewer systems. Fort McPherson does not operate under an industrial wastewater permit but does operate under a National Pollutant Discharge Elimination System (NPDES) permit. Figure 8 depicts the current sanitary sewer systems at Fort McPherson.

The wastewater collection system consists mostly of 6- and 8-inch polybutylene pipes. With the exception of Building 200, which is provided with two lift stations, all wastewater streams flow by gravity to the city-owned sanitary sewer lines at five locations.

The industrial wastewater which is being discharged with the domestic sewage consists of boiler and cooling tower blowdowns, wash rack discharges, swimming pool backwashes and wastewater from the printing plant (USAEHA, 1990).

4.4.3 Stormwater System

Fort McPherson is served by separate sanitary and storm sewer systems (Figure 9). Storm drains discharge untreated stormwater runoff to Utoy Creek and to the off-Property storm sewer system. Fort McPherson is the major watershed for Big Utoy and Little Utoy Creeks, which converge at the southwestern Property boundary to form South Utoy Creek, which flows to the Chattahoochee River seven miles west of the Property. With the exception of an isolated portion of the eastern boundary, which flows to the city of Atlanta storm system, Fort McPherson surface water runoff is captured and controlled by a stormwater drainage system that ultimately discharges to the South Utoy Creek. The Property has four major lakes numbered 1-4. A piping system carries much of the lower portion of Little Utoy Creek throughout the Property. The largest of the Big Utoy Creek headwaters enters the Property at the mouth of Lake No. 1. Along the southern boundary, a secondary source of headwaters enters Property as a small open channel

from a local recreation area maintained by the city of East Point, which converges with the headwaters of Lake #2, where it becomes Big Utoy Creek (Earth Tech, 2002).

4.4.4 Electrical and Natural Gas Systems

Electrical supply is provided by Georgia Power Company from off-Property. One electrical substation is located east of Lee Street adjacent to Building 363.

Heating is provided by central boiler plant (Building 160) via steam. Building 160 houses three natural gas boilers which provide steam to several surrounding buildings. Individual buildings also have their own heating units (natural gas/fuel oil boilers). An air propane mixing system is used at Fort McPherson as a secondary fuel source. Figure 10 depicts the electrical systems and Figure 11 depicts the natural gas systems for Fort McPherson.

4.5 Environmental Setting – Natural and Physical Environment

4.5.1 Climate

The Atlanta area has a humid continental climate characterized by long hot summers and mild winters. The average annual temperature is 16.4 degrees Celsius. Average annual precipitation is 123.6 centimeters and is well distributed throughout the year. Winds are predominantly from the northwest and light to moderate in intensity.

4.5.2 Topography

Fort McPherson is located in the Appalachian Piedmont, a hilly upland region with elevations generally ranging from 230 to 385 meters (m) above mean sea level (amsl). The region is characterized by gently rolling topography broken by areas of rugged hills bordering the major drainage and by residual monadnocks, such as Stone Mountain. Elevations on the Property range from 327 to 280 m amsl.

4.5.3 Surface Water Hydrology

The Property is drained by the headwaters of South Utoy Creek, which flows into the Chattahoochee River, ultimately discharging into the Gulf of Mexico. The two branches of this drainage way are known as Big Utoy Creek and Little Utoy Creek. Both streams are perennial, deriving most of their flow in the dry season from groundwater inflow. Three impoundments have been constructed: Lake No. 1 and Lake No. 2 on Big Utoy Creek and Lake 3 on Little Utoy Creek. These lakes serve as stormwater holding ponds and as reservoirs of irrigation water for

the golf course. All stormwater runoff is routed to the Utoy Creek system through a system of culverts and ditches.

4.5.4 Geology

The Property is underlain by highly metamorphosed rocks of the Appalachian Piedmont. The underlying rocks have been assigned to the Clarkston Formation of the Atlanta Group (Georgia Geologic Survey, 1982). The Atlanta Group rocks occur in a regional structure known as the Newnan-Tucker synform (Georgia Department of Natural Resources, 1981). The Clarkston Formation consists of inter-layered sillimanite-garnet schist and hornblende-plagioclase amphibolites. The age of these rocks is unknown, but is suspected to be early Paleozoic. The Clarkston Formation is estimated to be 800 to 2,500 m thick and is overlain by soil and saprolite which vary from about 3 to 20 m in thickness.

The rocks of the Clarkston Formation yield moderate quantities of water to wells. The rocks themselves are relatively impermeable but are highly fractured, providing conduits for the movement of groundwater. Due to the complexity of both the local and regional structure, the direction of regional groundwater movement is unknown. The shallow ground water flow is probably controlled by topography and is subparallel to the surface water flow. Depth to ground water varies over the Property, but is probably less than 5 m.

4.5.5 Demography and Land Use

Figure 5 depicts the areas of general land use at Fort McPherson.

The Fort McPherson community is made up of approximately 4,000 civilians, 2,300 active duty personnel, and 1,300 Army Reserve personnel. The land use differs little from the patterns of land use found in the nearby community of East Point. The cantonment is broken down into administrative areas, recreation areas, family housing areas (94 units in 51 buildings), and a small industrial area. Troop training is limited to a small pistol range near the southwest corner of the Property. There are approximately 253 buildings and structures at Fort McPherson scattered over 487 acres (U.S. Department of Army, 2002).

Per the Fort McPherson Integrated Natural Resources Management Plan (Directorate of Installation Support, Environmental Division, 2000) the existing land use, categorized per TM 5-803-1, is as follows (Table 7):

Table 7
Existing Land Use Allocations

Category	Approximate Acreage	Percent of Total
Administration	71	15
Community Facilities	51	10
Family Housing	58	12
Utilities	N/A	0
Medical	38	8
Recreation	205	42
Research and Development	61	12
Unaccompanied Housing	Not Provided	0
Training	3	1
Operations	Not Provided	0
Buffer Zone	Not Provided	0
Total	487	100.00

The approximate acreages that are not provided in the categories shown above may have been grouped with others when the survey was conducted.

4.6 Biological and Cultural Resources Summary

4.6.1 Biological Resources

Since the Property lies within the Atlanta urban area and is largely maintained in a lawn or parklike setting, wildlife habitat is minimal. A listing of the most common and prevalent terrestrial biota are as follows:

Terrestrial Biota. The most common tree species on the Property include:

- Loblolly pine (Pinus taeda)
- Short-leaf pine (P. echinata)
- White oak (Querus alba)
- Southern red oak (Q. falcata)
- Black oak (Q. velutina)
- Sweet gum (Liquidambar styraciflua)
- Tulip tree (Liriodendron tulipifera).

Black cherry (*Prunus serotina*), flowering dogwood (*cornus florida*), sassafras (*sassafras albidum*), and sourwood (*Oxydendron arboreum*) are common understory species. In areas that are not regularly maintained, a number of vine species are common including kudzu (*Pueria lobata*), trumpet creeper (*Campsis radicans*), poison ivy (*Rhus toxicodendron*), greenbriers (*Smilax spp.*), and wild grapes (*Vitis spp.*).

A variety of grasses and weedy species occur in recently disturbed soils. Along waterways and in moist soils, willows (*Salix spp.*), alders (*Alnus spp.*), smartweed (*Polygonum spp.*), rushes (*Juncus spp.*), sedges (*Carex spp.*), and a variety of grasses are common. The cantonment area is surrounded by a number of ornamental or cultivated shrub and tree species, including dogwoods (*inornus spp.*), cedars (*Juniperus spp.*), myrtle (*lagerstroemia spp.*), magnolia (*magnolia spp.*), privet (*ligutsrum spp.*), elms (*Ulmus spp.*), and pecan (*Carya illinoensis*).

The availability and diversity of habitats on-Property are limiting factors which control the variety and abundance of birds, mammals, and herpetofauna present. Species most common are those typically associated with semi-urban populated areas. Common mammals include gray squirrel (*Sciurus carolinensis*), eastern fox squirrel (*Sciurus niger*), eastern chipmunk (*Tamias striatus*), eastern mole (*Scalopus aquaticus*), eastern cottontail (*Sylvilagus floridanus*), opossum (*Didelphis virginiana*), house mouse (*Mus musculus*), and Norway rat (*Rattus norvegicus*).

A large number of bird species could potentially occur on the Property as migrants or accidentals. However, several species are identified as common residents: starling (Sturnus vulgaris), house sparrow (Passer domesticus), common grackle (Quiscalus quiscula), American robin (Turdus migratorius), mockingbird (Mimus polyglottus), mourning dove (Zenaida macroura), rock dove (Columba livia), bluejay (Cyanocitta cristata), cardinal (Cardinalis cardinalis), common flicker (CoLaptes auratus), and chimney swift (Chaetura pelagica). These are all common and widely distributed species. The herpetofauna are limited due to the restricted amount of aquatic and wetland habitat. Common herpetofauna include: garter snakes (Thamnophis spp.), black rat snake (Elaphe obsoleta obsoleta), northern black racer (Coluber constrictor constrictor), American toad (Bufo americanus), bullfrog (Rana catesbeiana), and eastern box turtle (Terrapene carolina carolina). These species are closely associated with timbered areas or along streams or ponds, although garter snakes and the American toad are widely distributed on the Property (DEH, 1980).

Aquatic Biota. Two streams (Little Utoy and Big Utoy Creeks) and four ponds (Lakes 1, 2, 3, and 4) provide the only significant aquatic habitats. The three ponds are located on or near the golf course and total approximately 12.4 acres. Although total aquatic habitat is small, the streams are perennial, and pond levels are generally stable. The streams pass through some timbered areas, providing riparian habitat for herpetofauna. The ponds support a fishery, although fishing demand is low. Common fish species include largemouth bass (Micropterus salmoides), channel catfish (Ictalurus punctatus), bullheads (Ictalurus spp.), carp (Cyprinuscarpio), shad (Dorosoma spp.), crappie (Pomoxis spp.), and sunfishes (epomis spp.) (DEH, 1980). Only two noteworthy fish kills are recorded. One occurred in 1975 in Lake No. 2 and resulted in mortality of about 1,000 fish. Contamination by the insecticide methoxychlor was attributed as the cause, but the origin of the methoxychlor was not determined. The other kill occurred in 1974 in Lake No. 1, but no cause was determined (USATHAMA, 1983).

Threatened and Endangered Species. No threatened or endangered species have been sighted or are known to be residents on the Property.

4.6.2 Cultural Resources

The following is a summary of currently identified historic buildings and structures found at the Property (U.S. Department of Army, 2002).

- One listed National Register district 41 buildings
- One building listed individually Building 532
- Twenty-six (26) determined eligible by Georgia State Historic Preservation Office Building 22 is currently under dispute.

The following is a list of currently identified archeological resources found at the Property:

- One site, lithic scatter and historic ceramic scatter not eligible
- One isolated find not eligible.

A map depicting the areas of historical significance is included as Figure 12.

4.7 Site Maps

The following site maps are used in this ECP to provide both a current and historical overview of the Property. These maps have been obtained from prior reports and have been updated as needed:

- Area Map
- Site Map
- Map depicting facilities and parking requested by the Veterans Administration
- Historic Site Maps, including:
- 1917 Maps
- Land Use Map with listings of outparcels and leaseholds
- Utility Maps, including:
 - Water Systems
 - Sanitary Sewer System
 - Electrical Systems
 - Natural Gas Systems
- Historical Resources
- Storage Tank Locations
- IRP Sites
- ECP Parcels
- Qualified Parcels.

5.0 Environmental Conditions

5.1 Environmental Permits and Licenses

5.1.1 Resource Conservation and Recovery Act Status

Fort McPherson is listed as a SQG with the EPA; it has an assigned RCRA generator ID number of GA1210020565. Fort McPherson is allowed to generate between 220 and 2,200 lbs (100 and 1,000 kg) of hazardous waste per month. Fort McPherson manages one 90-day hazardous waste accumulation site which is located at Building 353. All hazardous waste management is performed in accordance with the 2003 Hazardous Waste Management Plan (U.S. Department of the Army, 2003).

Fort McPherson is listed as a small quantity handler of universal waste and is allowed to accumulate less than 11,000 pounds (5,000 kilograms) of Universal Waste (UW) at any one time. Currently, Fort McPherson handles only batteries and mercury-containing lamps as UW. The installation has procedures in place for storing UW until these items can be picked up by an outside contractor for recycling. UW are stored at the 90-day accumulation site.

5.1.2 Solid Waste Permits

There are no solid waste permits at Fort McPherson. Currently, all solid wastes are disposed of off site. Until the late 1960s, combustible solid wastes were burned in open pits located near Building 440. This site has been investigated and remediated under the IRP. See Section 5.2.1 for information on FTMP-06, the former Incinerator Ash Dumpsite.

5.1.3 Underground/Aboveground Storage Tank Permits

All active storage tanks at the Property are registered. A list of all registered tanks is presented in Section 5.4. All storage tanks in the state of Georgia, with the exception of heating oil, are permitted by facility. The primary usage of all current tanks is storage of gasoline fuel, diesel fuel, heating oil for boilers and emergency generators, and waste oil staged for energy recycling.

5.1.4 National Pollution Discharge Elimination System Permits

Fort McPherson currently operates under the state of Georgia's NPDES General Permit GAR000000. This permit authorizes the discharge of stormwater from industrial activities to the waters of the state of Georgia; however, it is not applicable to process wastewater discharges or mixtures of process wastewater and storm water. This latest version of the permit became

effective August 1, 2006. The installation has a stormwater pollution prevention and management plan (SWPPMP) which is used to meet the requirements of Part IV of the General Permit (Earth Tech, 2003a). Additionally, to maintain compliance with the permit, the current SWPPMP is being reviewed and updated.

Fort McPherson is currently waiting on the GA EPD's Watershed Protection Branch to designate the base as a small municipal separate storm sewer system (MS4). This designation refers to small cities and military bases in Georgia that maintain their storm sewer systems separate from their larger host municipalities. Until such designation, the Army will not apply for a Phase II National Pollutant Discharge Elimination System permit (General NPDES Permit No GAG610000 for MS4).

A 1997 Environmental Compliance Assessment System (ECAS) indicated that two locations on the Property (Buildings 454 and 651) had discharges that were not covered by the NPDES permit. Building 454 was a golf equipment storage building (lawn mowers, etc.) and Building 651 was the golf cart barn. Both buildings had gas vehicles, oil, and hydraulic fluids within. These building were demolished circa 1993, in conjunction with the golf course improvements.

Both a 1997 ECAS and 2000 ECAS indicated that Fort McPherson needed to apply for a pretreatment permit for discharges into the sanitary sewer. There is no information regarding the existence of a pretreatment permit. There was no information found on any follow-up or corrective action that followed the 1997 and 2000 ECAS findings (USACHPPM, 2000).

5.1.5 Drinking Water Permits

There are no drinking water permits for Fort McPherson. Half of Fort McPherson's water supply is derived from the City of Atlanta and half from the City of East Point. The current water supply system was installed in 1992-1993.

5.1.6 Air Permits

Fort McPherson is considered to be a synthetic minor source under Title V of the Clean Air Act and has a general Air Quality Permit # 9711-121-0045-S-02-0, effective Nov 17, 2004. Sources include boilers, diesel emergency generators, fueling operations, gasoline and diesel storage tanks, and a degreasing operation. Table 8 provides a summary of emission sources at Fort McPherson.

Table 8

Sources of Emissions Included in the Fort McPherson Air Permit

Source	Location
Individual boilers	Building 160
Liquid petroleum gas air mixing plant	
Individual diesel engines for emergency standby/generator	Buildings 47, 65, 110, 160, 200, 315, 326, 331 (2 engines), 360, 363
Gasoline storage tanks (10,000 gallon capacity)	Building 350 and Building 368
Gasoline storage tank (<10,000 gallon capacity)	Various buildings
Diesel storage tanks	Various buildings
Degreaser group	Various buildings
Fueling operation F001	Building 368
Fueling operation F101	Building 350
Fueling operation F102	Building 350
Fueling operation F103	Building 340
Fueling operation F104	Building 340
Fueling operation F105	Building 650
Ordinance Detonation Emission Group	
General Chemical Usage Emission Group	

Fort McPherson is located in an area of non-attainment status for ozone.

5.1.7 Nuclear Regulatory Commission Licenses

Fort McPherson does not hold any Nuclear Regulatory Commission (NRC) Licenses. However, several Army-held NRC Commodity Licenses and Army Radiation Authorizations are applicable to Fort McPherson as follows:

- An NRC License is held by Explosive Ordnance Disposal as BML 29-01022-14. This license is for calibrators containing radioactive materials.
- An NRC License is held by the U.S. Army Tank-Automotive & Armaments Command at Rock Island, Illinois, for use by all DoD installations and job sites as

BML 12-0072-06. This license is for radioactive materials use in armaments and artillery systems.

- An NRC License is held by the U.S. Army Armament & Chemical Acquisition and Logistics Activity at Rock Island, Illinois for use by all DoD installations and job sites as BML 12-0072-13. This license is for radioactive materials used in chemical agent detectors.
- An NRC License is held by the U.S. Army Armament & Chemical Acquisition and Logistics Activity at Rock Island, Illinois for use by all DoD installations and job sites as BML 12-0072-14. This license is for radioactive materials use in chemical agent monitors.
- An NRC License is held by the U.S. Army Soldier & Biological Chemical Command at Aberdeen Proving Ground, Maryland, for use by all DoD installations and job sites as BML 19-30563-01. This license is for radioactive materials use in chemical agent detectors and monitors.
- An NRC License was held by the U.S. Army Communications Electronics Command (CECOM) Safety Office at Fort Monmouth, New Jersey for use at Fort Monmouth or other temporary job sites as BML 29-01022. This license was for the use of by-product radioactive materials in research and development and instrument calibrations. This license expired 28 February 2005.
- An NRC License was held by the U.S. Army CECOM Safety Office at Fort Monmouth, New Jersey, for use at DoD installations and job sites as BML 29-01022-14. This license was for the use of radiological materials in instrument calibrations. This license expired 31 October 2003.
- An Army Radiation Authorization was held by the U.S. Army CECOM Safety
 Office at Fort Monmouth, New Jersey, for use at DoD installations and job sites as
 ARA 24-12-07. This authorization was for the use of radiological materials in
 lensatic compasses. The authorization expired 31 January 2005.
- An Army Radiation Authorization was held by the U.S. Army CECOM Safety Office at Fort Monmouth, New Jersey, for use at DoD installations and job sites as ARA 29-10-06. This authorization was for the use of radiological materials as radioluminous paint. The authorization expired 31 January 2005.
- An Army Radiation Authorization was held by the U.S. Army CECOM Safety
 Office at Fort Monmouth, New Jersey, for use at DoD installations and job sites as
 ARA 29-10-10. This authorization was for the use of radiological materials in
 electronic equipment. The authorization expired 31 January 2005.
- An Army Radiation Authorization was held by the U.S. Army CECOM Safety
 Office at Fort Monmouth, New Jersey, for use at DoD installations and job sites as

ARA 29-10-12. This authorization was for the use of radiological materials in night vision devices. The authorization expired 31 January 2005.

Areas at Fort McPherson found to be potentially impacted from historical use of radioactive material are included in Section 5.8.

5.1.8 Other Permits/Licenses

There are no other permits or licenses held at Fort McPherson.

5.2 Environmental Cleanup

5.2.1 Installation Restoration Program

Fort McPherson has an ongoing IRP which was initiated in 1980. The IRP has identified 11 sites, designated FTMP-01 through FTMP-11 (Figure 13). Eight sites have been closed out (listed as response complete) of the IRP. It should be noted that designating a site as response complete does not necessarily indicate that no further action is required at the site. The response complete designation may have been made for administrative reasons. Some of the response complete designations at Fort McPherson were made because the only site contamination was petroleum. Petroleum contaminated sites are not eligible for funding under the IRP. The eight sites closed out of the IRP include the following:

- FTMP-01, Bldg 363 Paint Shop
- FTMP-02, Bldg 41 UST
- FTMP-03, Bldg 346 Waste Oil Tank
- FTMP-04, Bldg 346 OWS Separator
- FTMP-05, Bldg 370 OWS Separator
- FTMP-07, Bldg 357 DEH Maintenance
- FTMP-08, Bldg 370 Waste Oil Tank
- FTMP-11, Army Parking Lot.

Fort McPherson has an ongoing IRP for two sites including:

- FTMP-09, Building 143 PX Station
- FTMP-10, Vet Clinic/Old PX Gas Station.

Army records indicate that clean-up activities were completed at the Old Incinerator Ash Dumpsite (FTMP-06) and the Army is awaiting a response to the NFA request submitted to the GA EPD.

Four sites: Building 363 (FTMP-01), Building 143 PX Station (FTMP-09, the Veterinary Clinic (FTMP-10) and the Army Parking Lot (FTMP-11) are considered a REC. The rationale for this determination is discussed below.

FTMP-01 – Building 363 Paint Shop. The paint shop at Building 363 is currently used as a paint storage area. The installation assessment (USATHAMA, 1983) indicated that several activities were conducted in the building including being utilized as a paint shop, furniture repair shop, sheet metal shop, electrical shop, plumbing shop, refrigeration repair shop, field printing plant, pesticide storage/mixing, small arms refinishing, heavy equipment repair, and a vehicle maintenance. The Installation Action Plan (USACE, 2005) documented that a preliminary assessment (PA) was completed in 1988 for the site. The Directorate of Installation Support (DIS), Environmental Division, removed oil sludge from the OWS at the site, filled it with gravel and closed the OWS. The PA report was not available for review during the ECP report generation.

In 1996, an investigation was conducted in the parking lot in the immediate vicinity of Building 363 (FTMP-11) to support construction of the commissary. Elevated levels of trichloroethene (TCE) were detected in the soil. No information was available regarding remedial activities.

Although the site was closed out of the IRP in April 1988, this site is considered a REC.

FTMP-02 – Building 41, UST (Staff Judge Advocate Office). Building 41, the Staff Judge Advocate office, utilized a fuel fired boiler for heating. A steel, 5,000 gallon heating oil UST located south of the building provided heating oil to the boiler system. Tank and pipe integrity testing indicated that both the UST and piping were leaking, therefore the UST system was removed from Building 41 in November 1991. During tank removal activities, soil contamination was detected and GA EPD was notified. Soil was excavated (157 cubic yards). However, some contaminated soil above regulatory levels was left in place due to the existing surrounding structures. Excavated soil was disposed of at an off-site landfill.

A UST Closure Assessment report was submitted to the GA EPD Underground Storage Tank Management Program in January 1992. The Closure Assessment report provided the field work and analytical data for the removal of the UST (Ground Water Services, 1992).

This site was closed out of the IRP program in January 1992 (USACE, 2005). In 2002, a no further action concurrence was received from the GA EPD.

FTMP-03 – Building 346, Waste Oil Tank (Motor Pool Gas Station). One 2,000-gallon waste oil tank at Bldg. 350 (346) operated at the site. The tank was removed in December 1991 with soil over-excavation based on hydrocarbon odors and field screening data. A tank closure report was submitted in January 1992 detailing the findings of samples collected from the area around this site (USACE, 2005). The closure report was not available for review during the ECP report generation.

The site was closed out of the IRP in June 1993. No records were available for no further action concurrence from the GA EPD.

FTMP-04 – Building 346, Oil/Water Separator (Motor Pool Gas Station). One 2,000-gallon OWS is in operation at Building 350 (346). The OWS is a single-wall underground flow-through separator that services the fuel dispenser island at the Department of Labor (DOL) Motor Pool and the automatic car wash. The tank is active and periodically inspected and cleaned under the oil/water cleaning and maintenance contract. There are no known environmental concerns associated with this site. No evidence of contamination was observed during visual site inspections.

No further action is required under the IRP at this site (USACE, 2005).

FTMP-05 – Building 370, Oil/Water Separator (Auto Craft Shop). The oil/water separator is in operation at Building 370 and currently receives petroleum products from the floor drains inside the Auto Craft Shop and wash water from the steam cleaning wash rack. Construction activities in the area resulted in a broken junction box where effluent piping conducts wash water from the Auto Craft shop to the OWS. Activities in the vicinity of the OWS led storm water runoff to enter the OWS and the broken junction box resulting in the system back-up (USACE, 2005).

The tank is active and periodically inspected and cleaned under the Oil/Water Cleaning and Maintenance Contract. A new Oil/Water Separator was installed in 1999. No evidence of contamination was observed during visual site inspections.

This site was closed out of the IRP program in April 1988 (USACE, 2005).

Ash Dump Site is located near the center of Fort McPherson. The area was used for burning trash in open pits and for disposal of solid waste incineration ash. Until the late 1960s, combustible solid wastes were burned daily in open, unlined pits excavated in the area. Burn residue was left in the pits; when a pit became full, it was covered with dirt. Waste materials burned in these pits reportedly included domestic garbage, hospital waste, minor industrial waste, (i.e., waste paints, solvents, oils, etc.) and construction and demolition debris.

Prior to the use of earthen burning pits, a solid waste incinerator was used to burn waste material. The incinerator was located on the edge of the burn pit/landfill area in Building 440. The facility was constructed in 1943 and was used less than five years before being abandoned. Ash from the incinerator was spread on the ground in this area from 1943 to 1948 (USACE, Savannah District, 1991).

In 1991, despite the known environmental concerns, it was decided that this area was the prime choice for construction of a new barracks complex. By February 18, 1993, a Phase I and II remedial investigation had been performed at this site. The investigations revealed trace volatile organic compounds (VOC), semivolatile organic compounds and elevated metal concentrations in subsurface soils at the site. The Phase I and Phase II investigations indicated that lead may be leaching from the waste material into the groundwater (USACE, Savannah District, 1994).

Based on this belief, comments provided by GA EPD informed the Army that "a plan to remove or control the waste must be submitted." To achieve this, a focused feasibility study was conducted during March and April 1993. During the design process, GA EPD indicated it would require cleanup of the groundwater as well as soils and debris. An agreement was reached between the two parties that groundwater characterization could be conducted during the remediation and barracks construction and that groundwater remediation, if required, could be achieved after construction of the barracks complex is completed.

Approximately 47,037 tons of affected material were excavated from the barracks construction site. During the initial remediation project, it was determined that contaminated ash and debris extended under the 12th fairway of the Fort McPherson golf course. Another 65,355 tons of affected material was excavated from the 12th fairway for a total of 112,392 tons. Of this total, 45,286 tons were determined to be hazardous based on the results of toxicity characteristic leaching procedure analysis; thus, this material was stabilized with portland type cement and fly

ash and reanalyzed to assure it would pass the toxicity characteristic leaching procedure analysis prior to off-site disposal.

Long-term monitoring was conducted for three years. Army records indicate that clean-up activities were completed at the Old Incinerator Ash Dumpsite (FTMP-06) and the Army is awaiting a response to the NFA request submitted to the GA EPD.

FTMP-07 – Building 357, DEH Maintenance (Oil/Water Separator). The IAP documented that the OWS at Building 357 received petroleum products from the floor drains of the wash rack. The tank was periodically inspected and cleaned under the Oil/Water Cleaning and Maintenance Contract. No further action is required under the IRP at this site (USACE, 2005).

During visual site inspection, a grassy area was observed to occupy the location of the former OWS. Army personnel confirmed that the OWS was removed. There are no known environmental concerns associated with this site. No evidence of contamination was observed during visual site inspections.

FTMP-08 – Building 370, Waste Oil Tank (Auto Craft Shop). The waste oil tank at Building 370 was removed and overexcavated based on petroleum odors and photoionization detector readings on June 8, 1993 (Anderson Columbia, 1993). Fort McPherson installed a new AST with containment system in 1994. Currently, the waste oil AST receives petroleum, oil, and lubricants products from the engine maintenance operations inside the Auto Craft Shop. The AST is active and is periodically cleaned by a waste oil recycling company.

No further action is required under the IRP at this site (USACE, 2005).

FTMP-09 – Building 143 PX Station. The former Army Air Force Exchange Service PX gas station operated from 1959 through 1996. Three 10,000-gallon gasoline tanks and one 500-gallon waste oil tank were reported to have operated at the site since 1961. Tank tightness testing conducted in 1987 indicated that the tanks tested tight, however, the dispensing lines failed. The product lines were replaced in 1988 and a large volume of contaminated soil was excavated. Clean backfill was placed in the excavation.

In 1990, tank removal activities were conducted for the waste oil tank. In June 1991, a previously unknown 10,000-gallon gasoline tank was discovered at the site. The tank was removed the same year. During tank removal soil contamination was detected. However, there was no soil removal conducted (Ground Water Services, 1991).

Site investigation was performed. Soil contamination around the UST system exceeded regulatory limits. Groundwater contamination was detected in two monitoring wells. A Corrective Action Plan (CAP) was submitted to the GA EPD in March 1994. The GA EPD UST Management program provided Fort McPherson with technical review comments in fiscal year 2004.

Army records documented that three gasoline tanks (MG1 through MG3) were removed in 1996 and the gas station was demolished. During tank removal a release of petroleum hydrocarbons was documented. Fort McPherson has proceeded with investigating the site by performing a soil vapor extraction pilot test and conceptual design. Groundwater monitor wells installed around the site are sampled semiannually to monitor benzene, toluene, ethylbenzene, and xylene contaminant migration in the groundwater. Free product has recently been detected in a monitoring well at the site. A free product recovery system was installed in 1988. However, it was only partially effective.

A passive fuel recovery system was installed in 1999. This system was not able to recover the fuel fast enough, so the free product skimmer system was re-installed. Fort McPherson is continuing the free product removal and performance monitoring. The plan of action is to perform a fate and transport evaluation to determine future action once free product is removed. This site is considered a REC.

FTMP-10 – Veterinary Clinic/Old PX Gas Station. The Veterinary Clinic, Building 105, was formerly a retail gasoline station. The facility operated from the early 1930s until 1958. Two USTs; one 10,000-gallon gasoline (105-MG1) and one 550-gallon waste oil (105-WO1) operated at the site. A 10,000-gallon UST, located adjacent to Building 105, was excavated and removed in February 2000. During excavation, soil contamination was encountered and the release was reported to GA EPD. The waste oil tank is reported to have been closed in place due to its location beneath the floor of Building 105.

Several phases of investigation were performed at the site. Soil and ground water contamination was identified. Free product was detected in two of the wells, and a free product recovery system was implemented. A geophysical investigation was performed to determine the extent of off-site contaminant migration. Contamination appears to be migrating northeast (off-Property). The Georgia Department of Transportation would not allow installation of well in US Highway 29. GA EPD concurred that all investigation/remedial activities will occur on-Property. Results of the investigation are presented in the CAP - Part A, dated November 1996. A CAP - Part B was submitted to GA EPD in March of 1997. Technical recommendations were provided. A passive fuel recovery system and three additional wells were installed in 1999. Free product removal and performance monitoring are currently on-going. This site is considered a REC.

FTMP-11 – Army Parking Lot (Building 360/363). This site was previously a vehicle maintenance storage yard in the early 1900s and is currently used as the commissary parking lot. Fort McPherson considered two locations, both proximal to the current commissary location, for the construction site of a new commissary facility. A site investigation (SI) was performed at one of the proposed locations. The DIS personnel, along with USACE, South Atlantic Division personnel, collected environmental samples from the first proposed site during the week of June 10, 1996. The samples were collected in order to determine if any adverse environmental conditions exist in this area that would preclude this site from consideration. Three soil samples were collected from beneath the current commissary asphalt parking lot. Of the three samples that were collected, two were found to contain TCE at concentrations that exceed the GA EPD Hazardous Site Response Act notification concentration.

DIS initiated an expanded site investigation (ESI) beginning August 9, 1996, encompassing the original location as well as an alternate location. The ESI was a combined effort involving the USACE, Savannah and South Atlantic Divisions, and DIS Environmental Division. Twelve locations were sampled to delineate the soil and groundwater chemistry both horizontally and vertically. The samples were analyzed for the constituents of concern (VOCs) identified in the SI. None of the soil samples that were collected during the ESI contained VOCs that exceed the Hazardous Site Response Act notification concentration.

DIS notified GA EPD of its intent to construct the new facility and of the findings of both the SI and ESI in a letter dated August 29, 1996. GA EPD responded with a letter dated September 19, 1996, which stated that soils containing TCE at the site must be removed prior to the initiation of construction at this site. The September 19, 1996 letter stated that corrective action or further

investigation of the groundwater at the site was not warranted, since the construction of the new facility had moved to another location (USACE, 2005).

Although this site was closed out of the IRP program in Sept 1996 (USACE, 2005), the site is considered a REC.

5.2.2 Military Munitions Response Program

MMRP eligible sites include ranges where Munitions and Explosives of Concern (MEC), discarded military munitions, and/or munitions constituents are known or suspected and the release occurred prior to September 30, 2002. Operational ranges are not eligible for the MMRP program. An Army Range Inventory was completed at Fort McPherson in January 2006 by Malcom Pirnie, Inc. Four MMRP Sites were identified; Atlanta NG Rifle Range, Atlanta NG Target Range, Pistol Range, and 300-Yard Target Range.

FTMP-001-R-01 – Atlanta NG Rifle Range. The former Atlanta NG Rifle Range was located in what is now the golf course. The rifle range was approximately 150 feet wide and 3,000 feet long (approximately 10 acres). It ran in a southerly direction from near the seventeenth hole to about where the small pistol range is located today. The hilly terrain at the southern end of the range provided a safety buffer. The rifle range was decommissioned as a range around the time of the Korean War and turned first into a 9-hole golf course for use by Army personnel in 1954, then later expanded into the current 18-hole golf course.

According to historical information, rifles and other small arms were used over the years on the Atlanta NG Rifle Range. A potential lead contamination exists, therefore, this site is considered a REC.

FTMP-002-R-01 – Atlanta NG Target Range. The former Atlanta NG Target Range is located on what is now the golf course in the lower southwest corner of Fort McPherson. The target range occupied approximately 26 acres. The Army took control of the property in 1910, but granted use of the area to the state of Georgia so they could use it as a National Guard facility. The NG property included some barracks and the Atlanta NG Rifle Range mentioned above. The property came back under Army control in 1941 when it was decided more land was needed to sustain the activities at Fort McPherson.

Two WWI artillery shells were uncovered near the 17th fairway during the installation of a drainage system and during maintenance operations on the golf course (one in 1985 and one in 1989). These artillery shells are the only MEC that have been found at the target range. The potential for the presence of additional MEC is currently unknown. No evidence exists that suggests the area was ever used as an artillery range. Installation personnel suspected that contaminated fill used during the construction of the 17th fairway may be the source of the munitions. The source of this fill is unknown. Historical evidence suggests that this area was not used as an artillery range.

A former Skeet Range was located within the Atlanta NG Target Range. The former range appears on 1949 and 1958 maps of the Property. The former range was constructed for recreational use and installation personnel believe that munitions use was limited to small arms ammunition. A potential lead contamination exists for the former Atlanta NG Target Range including the former Skeet Range, therefore, this site is considered a REC.

Pistol Range. The former Pistol Range covered 0.04 acre and was located in the northeast central portion of FTMP, west of Hedekin Field. The former Pistol Range was identified on 1900s and 1910s site maps. Munitions used were limited to small arms ammunition. The former Pistol Range is located in the approximate area as Building 508 and 509. The berm used as the impact area for the small arms fire has not been reworked since the Pistol Range was operational. A potential lead contamination exists, therefore, this site is considered a REC.

300-Yard Target Range. The former range covered 0.4 acres and was located in the central section of FTMP. The 300-Yard Target Range was identified on 1900s and 1910s site maps. According to historical information, munitions use was limited to small arms ammunition, with the direction of fire from east to west into a berm. The area where the former 300-Yard Target Range existed has been extensively redeveloped into a recreational area with pavement covering a portion of the range. The VSI results and an interview with the Range Officer with the Fort Gillem Range Control indicated that the former training activities have not impacted the environment. The 300-Yard Target Range is not considered a REC.

5.2.3 Previous Environmental Investigations

Fort McPherson's earliest environmental investigation involved a special entomological study for the investigation of a fish kill at the golf course Lake No. 1 in 1974. During 1975, USAEHA conducted a survey of the Property to evaluate the distribution of various pesticides in soil,

sediments, fish, and birds. Pesticide concentrations exceeding the threshold levels were found at two Property entrances, two lakes, a residential area, and a cantonment area. As a result, pesticide handling and storage procedures were reviewed and modified to decrease contamination in these areas (USAEHA, 1974).

In 1976 an analytical/environmental assessment was conducted for future development at the base, along with an environmental impact assessment; an analysis of existing facilities, and an environmental assessment. In 1979, a cultural reconnaissance of select areas was conducted at Fort McPherson.

The first extensive installation-wide environmental investigation completed at Fort McPherson was the installation assessment (USATHAMA, 1983). The installation assessment was the first systematic evaluation of toxic materials and hazardous waste handling and disposal at Fort McPherson and the potential for these substances to migrate off the Property. The assessment report discussed the environmental setting; land-use patterns; past and present operations at each building; training operations across the Property; handling and storage of industrial chemicals; chemical agents; biological agents; narcotics, radiological and pesticide/herbicide/fertilizer usage; disposal operations (liquid and solid waste treatment); demolition and burning grounds; and existing water quality data. The assessment identified several potential contaminant sources; however, available geologic evidence, contaminant source information, and limited water quality data did not indicate the off-Property migration of contaminants via surface or subsurface waters. Therefore, a follow-up survey by the USATHAMA was not recommended. However, modifications involving pesticide storage, transformers, petroleum, oil, and lubricants storage tanks, and vehicle wash racks were recommended and implemented. In 1985, the master plan was prepared for Fort McPherson.

In 1988 a PA was completed for all sites at Fort McPherson. A PA was also completed for IRP Site FTMP-01, Building 363 Paint Shop, which involved removing soil contaminated with solvents and oil-based paint. A copy of the PA was not available for review during the ECP generation. The site was designated RC and closed out of the IRP in April 1988.

An environmental assessment for construction of barracks was completed for the base in 1993 (FTM Planning Division, 1993). In the same year, an interim removal action tank removal was completed at FTMP-08, Building 370 (Auto Craft Shop); a soil vapor extraction pilot test was

initiated at FTMP-09; and a Phase I-II RI was completed at FTMP-06, along with a feasibility study. In 1994 a CAP was performed at FTMP-09.

After the environmental assessment, soil was excavated from site FTMP-06 in 1996. In the same year, an ESI was conducted at FTMP-10 in August, followed by additional studies relating to a CAP A and B at the same site in November. In 1997 these studies continued at FTMP-10 during the performance of the CAP A and B, along with a geophysical investigation at the same site.

In 1998, a free product recovery system was installed at site FTMP-09, followed by the installation and operation of passive fuel recovery systems at sites FTMP-09 and FTMP-10 in 1999.

The phase completion date for FTMP-09 and FTMP-10 and the completion date of the IRP are projected this year. The description and current status of each of these IRP sites discussed above is addressed in detail in Section 5.2.1 (USACE, 2005).

5.3 Hazardous Substances

Several hazardous substances associated with base operations at Fort McPherson include used solvents, paints, acids and bases, toxins, aerosols, heavy metals, mercury-containing items, and other materials associated with laboratory operations, building and vehicle maintenance.

Identified hazardous substances include arsenic, asbestos, chlorine, lead, nickel hydroxide, mercury, urea, and xylenes. Table 9 summarizes the hazardous substances at Fort McPherson.



Fort McPherson tracks and maintains their hazardous materials and chemical inventory data through the HMMS. This data is collected on hazardous materials and hazardous waste from all agencies that handle these substances at Fort McPherson for input to the HMMS.

Currently hazardous material disposition is reported by various departments and tenants for input into the HMMS system as materials are received and disposed. This information is used to facilitate centralized hazardous material control and management and to assist with environmental reporting.

Emergency Planning and Community Right to Know Act (EPCRA) Tier Two reports were reviewed for calendar years 2004 and 2005. Urea was reported as being stored in quantities greater than the storage threshold. Section 312 of EPCRA allows for an exemption of "any substance to the extent that it is used as a research laboratory, a hospital, or other medical facility under the direct supervision of a technically qualified individual." Therefore, the storage of these chemicals was not examined.

Hazardous Waste. Under the State of Georgia regulations, Fort McPherson, which includes all of its tenants and other entities, is the sole "generator" for regulatory purposes and is listed as a SQG. Although Fort McPherson operates as a SQG, the hazardous waste yard is run as a 90-

day site, a more stringent requirement of large quantity generator status. Fort McPherson can accumulate hazardous waste for up to 90 days. The Fort McPherson 90-day accumulation point is located in Building 353, which is in the vicinity of Roads and Grounds operations. There is a regulatory exception to the 90-day accumulation rule: a generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in §261.33(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste. Once the amount of waste exceeds 55 gallons, the excess waste must be moved within three days to a 90-day storage area. As listed in the Hazardous Waste Management Plan (HWMP), there are four satellite accumulation points for the collection of materials that would be classified as hazardous:

- Building 125 Lawrence Joel Army Health Clinic
- Building 340 Golf Course Equipment Maintenance
- Building 346 Roads and Grounds
- Building 370 Auto Pride Center

Visual site inspections conducted at Buildings 346 and 370 did not reveal any evidence of leaks or spills. Fort McPherson does not have a permit to treat or dispose of hazardous substances on base; therefore, any hazardous waste accumulated is transported off the Property for treatment, storage, or disposal through a Defense Reutilization and Marketing Office (DRMO) contractor. All hazardous substances at Fort McPherson are managed under the July 2003 HWMP. The HWMP outlines the regulations, training, documentation, tracking, waste recycling/minimization and emergency procedures necessary to comply with the applicable federal, state and Army requirements for managing hazardous substances.

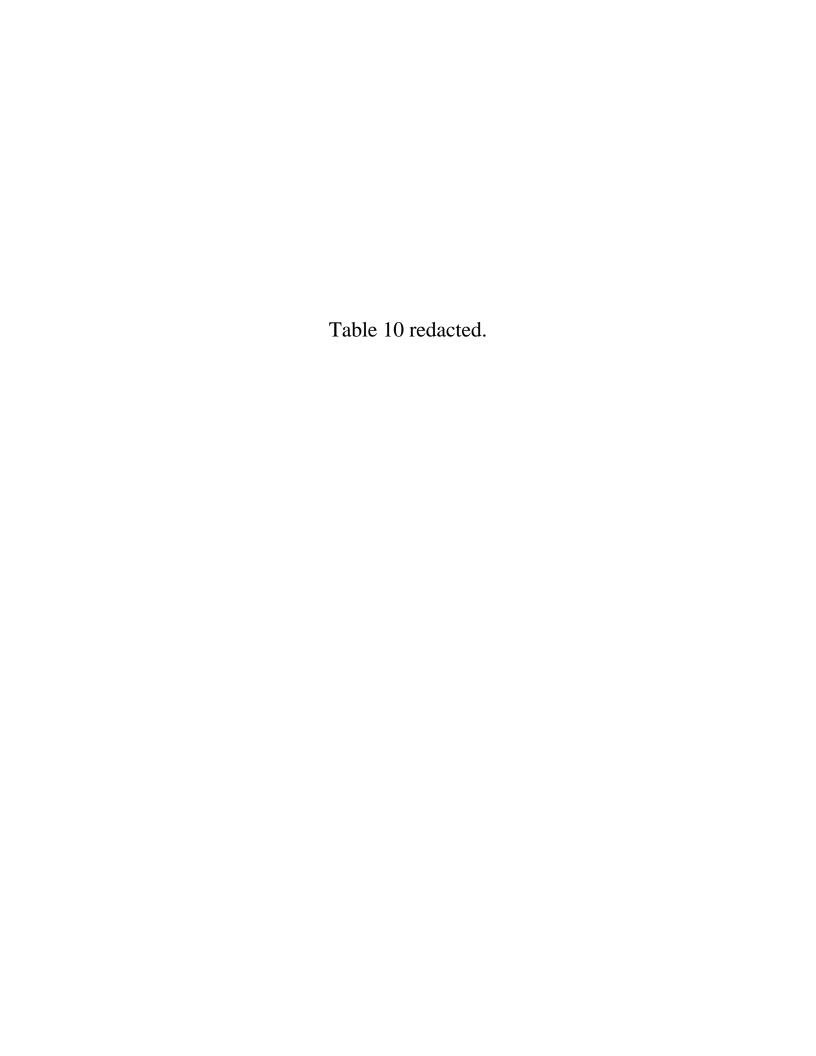
A DD Form 1348-1, completed by the environmental office waste contractors for submittal to the DRMO, must accompany all hazardous wastes turned in to 90-day accumulation points. The submittal of these documents initiates the process for off-site transportation and disposal of the waste generated on site. Hazardous wastes can be transported off Property only by licensed hazardous waste transporters in possession of completed Uniform Hazardous Waste Manifests.

Four former magazines were constructed in 1938 for the storage of small arms, chemical munitions, pyrotechnics, trinitrotoluene, and dynamite. The magazines were visible in a general site map dated 1993 but do not appear on the 2000 or 2004 general site map. One operational magazine is located west of Hedekin Field. The magazine is first shown on a 1904 map of the Property. Currently blanks for use during Hedekin Field ceremonial events are stored in the

magazine (Malcolm Pirnie, Inc., 2006). Interviews with installation personnel led to the conclusion that the magazines are not considered a REC.

5.4 Petroleum and Petroleum Products

Fort McPherson developed a listing of all known historic USTs and ASTs and their disposition. Table 10 includes a complete listing of all known tanks at the Property. Tanks in **bold letters** are those tanks that are still active per the VSIs and current inventory maintained by the installation staff.



Fort McPherson currently has nine active USTs and five active ASTs, the remaining tanks have either been removed or closed in place. The tanks were primarily used for the storage of fuel oil, gasoline, diesel, and waste oil.

A summary of the available documentation for historic and current tanks at Fort McPherson is as follows:

- During tank removal activities, the tank associated with Building 183 (183-FO1) had no evidence of soil contamination.
- During tank removal activities, soil contamination was detected at Buildings 205 (one tank, 205-MG1), 346 (one tank, 346-W01) and 370 (one tank, 370-W01). Contaminated soil was over-excavated.
- During tank removal at Buildings 160 (six tanks, 160-FO1, 160-FO2, 160-FO3, 160-FO4, 160-FO5, and 160-FO6) and 164 (one tank, 164-MG1), not all contaminated soil could be removed due to the presence of utility lines. Because of residential soil contamination one monitoring well was installed at each of the two UST sites to deny or confirm the presence of groundwater contamination. Groundwater analytical results were not available for review during the generation of the ECP.

- Although tanks at Buildings 208 (two tanks, 208-FO2 and 208-FO3) and 302 (one tank, 302-SOL1) were reported to have been closed, there was no additional information regarding site conditions during closure activities.
- There was no available information regarding the status of the tanks at nine of the UST locations. Buildings 40 (one tank, no label), 104 (one tank, no label), 106 (one tank, no label), 207 (one tank, 207-DF1), 214 (two tanks, 214-DF1 and 214-DF2), 302 (two tanks, 302-N1 and 302-N2), 326 (one tank, 326-DF1), 345/346 (two tanks, 346-MG1 and 346-MG2), and 650 (one tank, no label).
- Three of the UST sites are managed under the IRP program: Buildings 105 (two tanks, 105-MG1 and 105-WO1), 143 (four tanks, 143-WO1, 143-MG1, 143-MG2, and 143-MG3), and 370 (one tank, 370-WO1).
- There are currently active USTs at five of the buildings: Buildings 160 (two tanks, 160-FO7 and 160-FO8), 200 (one tank, 200-DF1), 350 (two tanks, 350-MG3 and 350-DF2), 368 (three tanks, 368-MG1, 368-MG2, and 368-DF1), and 651 (one tank, 651-MG1). Except for the tank at Building 200, all the tanks were installed in the 1990s and have shown no evidence of release of petroleum products.
- There were no documented releases for any of the ASTs at Fort McPherson.
 Visual site inspections of the current ASTs did not reveal any evidence of leaks or spills.
- Documentation of No Further Action concurrence by the GA EPD exists for five of the removed USTs and one location where there was a misidentified presence of a UST (Building 101). The locations include Buildings 41 (one tank, 041-FO1), 200 (one tank, 200-DF1), 350 (3 tanks, 350-DF1, 350-MG1, and 350-MG2), 454 (one tank, 454-MG1), and 651 (one tank, 651-MG1).
- Tanks used for storing heating oil or petroleum products were not regulated prior to 1988. Tanks used for storing heating oil for consumptive use of the premises where stored are excluded from Federal and GA EPD rules regardless of when the tank was installed or removed, including existing heating oil tanks. Although heating oil tanks are not regulated, releases of contaminants into the environment by these tanks are regulated.

Cleanup was conducted at seven of the UST sites (Buildings 105, 143, 200, 302, 350, 454, and 651) at Fort McPherson that are listed in the GA EPD LUST database. The USTs at Buildings 200, 350, 454 and 651 have been granted by the State a 'no further action' status. Buildings 105 and 143 are listed as in remediation. The UST at Building 302 was closed and no further information was available regarding site conditions during closure activities.

Building 105. In February 1990, a 10,000-gallon UST was excavated and removed from Building 105. During excavation, stained soil was encountered. Several phases of investigation have been performed at this site. Soil and groundwater contamination existed at the site. Free product was detected in two of the wells, and a free product recovery system was installed. A geophysical investigation was performed to determine the extent of off-site contaminant migration. Contamination appears to be migrating northeast (off-property). GA DOT would not allow installation of well in US Highway 29. GA EPD concurred that all investigation/remedial activities will occur on-Property. Results of the investigation are presented in the CAP - Part A, dated November 1996. A CAP - Part B was submitted to GA EPD in March of 1997. Technical recommendations were provided. A passive fuel recovery system and 3 additional wells were installed in 1999. The original schedule predicted RC in FY2006.

Building 143. Free product was detected in a monitoring well at the Building 143 site in 1998 and a free product recovery system was installed. A passive fuel recovery system and three additional wells were installed in 1999. Free product removal and performance monitoring are currently ongoing.

Building 200. Army records indicate that one 10,000-gallon diesel tank was installed in 1986 and is currently active at the site. Army records documented that in 2000, the Environmental Compliance Assessment System identified that there was a confirmed release with a corrective action performed at the site. A no further action concurrence was obtained from the GA EPD in 2004. The GA EPD confirmed that a no further action concurrence was granted in 2004.

Building 302. One UST was closed and no further information was available regarding site conditions during closure activities.

Building 350. Three tanks were removed in December 1991. Two tanks were installed in 1992 and are currently active. A no further action concurrence was obtained from the GA EPD in 1999.

Building 454. In 1993, one 500-gallon UST was removed with over excavation of contaminated soil. Follow-on investigations identified soil and groundwater was contaminated with benzene, toluene, ethylbenzene, and xylenes. Significant natural attenuation occurred between 1993 and 1996 such that the soil and groundwater contaminant levels were below threshold criteria. No further investigation and no Part B CAP were required (Anderson

Columbia, 1993). Records indicate that a no further action concurrence was obtained from the GA EPD in 1996.

Building 651. One 1,000-gallon gasoline tank currently exists at the site. Army records indicate that a no further action concurrence was obtained from the GA EPD in 1999. Historical and current storage tanks located at Fort McPherson are presented on Figure 14.

Oil/Water Separators. Four OWS currently exist on the Fort McPherson property. Oil/water separators are periodically inspected and cleaned under an oil/water cleaning and maintenance contract. Four OWS are active: Building 350 (Capacity 2,000 gallons); Building 353 (Capacity 1,000 gallons); Building 370 (Capacity 2,000 gallons); And Building 336 (Capacity not provided). A new oil/water separator was installed at Building 370 in 1999 (IRP site FTMP-05). Visual site inspections of the current OWS did not reveal any evidence of leaks or spills. An oil/water separator at Building 187 (capacity 1,000 gallons) and an oil/water separator at Building 345 (capacity 4,500 gallons) were reportedly removed in 1997. No releases were documented at these former OWS.

5.5 Polychlorinated Biphenyls

All transformers with PCB concentrations greater than 50 parts per million were replaced and removed from the Property as of January 5, 1987. An additional survey was performed in 2001, and none of the sampled transformers were found to contain PCBs at concentrations above 50 parts per million. In-service transformers with residual PCBs are replaced when they fail. There are no documented PCB leaks or spills at Fort McPherson, however, in 1997, according to the installation Environmental Division Chief, a transformer fell from its utility pole near Building 401 and leaked non-PCB oil. The spill was cleaned up, and the affected soil and the transformer was properly removed and disposed. A report documenting the spill information was not available for review during the ECP report generation.

PCB concentrations in approximately 16 of the transformers listed could not be verified due to field conditions. According to DPW, this was due to the surveyor's inability to obtain the required information resulting from bucket height restrictions and/or insufficient labeling on the transformers. During the VSI, no evidence of leaks or spills was observed at transformer locations.

On July 29, 1981, a transformer in the area of the tennis courts leaked fluid which contaminated an area 6 meters in diameter. O&H Materials, Inc., was contracted to clean up the spill. The spill material and contaminated soil was excavated (USATHAMA, 1983).

Due to the age of many of the buildings on the property, PCBs may also be contained in the ballasts of older light fixtures. The presence of PCBs in the ballasts has not been confirmed; however, based on the construction date of the buildings, it is possible that some of these ballasts could potentially contain PCBs. Any light ballast not marked with "No PCBs" should be assumed to contain PCBs and management and disposal of these light ballasts must be in accordance with local, state, and federal requirements.

5.6 Asbestos-Containing Materials

Fort McPherson has an Asbestos Management Program Plan, dated October 2001, which provides specific guidance for addressing asbestos related issues. Table 11 presents the known surveys for ACM at Fort McPherson.

Table 11
Fort McPherson Asbestos-Containing Material Surveys

Building Number Date		Asbestos		
		Friable	Nonfriable	O&M Plan
22	1994	Υ	Y	Y
27	1994	Υ	Y	Y
28	1994	Υ	Y	Y
40	1997	Υ	Y	Y
41	Not Provided	U	U	N/A
46	1995	Ν	Y	U
56	1994, 1999	Υ	Y	Y
58	1994	Υ	Y	Y
59	1994	Υ	Y	Y
60	1994	Υ	Y	Y
61	1994	N	Y	Y
62	1994	Υ	Y	Y
63	1994	N	Y	Y
100	1995, 1997	Υ	Y	Y
101	1994, 1996	Υ	Y	Y

Building		Asbestos		
Number	Date	Friable	Nonfriable	O&M Plan
105	1996	N	Y	Y
132	2001	Y	Y	Y
167	1997	Y	Y	Y
170	1994	Y	Y	Y
171	1994	Y	Y	Y
184	1994	N	Y	N
205	2002	N	Y	Y
352	1999	N	Y	N
356	Not provided	Y	Y	Y
358	Not provided	Y	Y	Y
422	1994	Y	Y	Y
532	1994	N	Y	Υ

Source - PEM, Asbestos Surveys, 1995.

Source - CESAS, Asbestos Surveys, 2001-2002.

N/A - Not available.

O&M - Operation and Maintenance.

U - Unknown.

Initial and subsequent inspection surveys have been conducted over the years to assess the environmental status of a number of facilities; however, not every facility was surveyed nor was every survey comprehensive.

Buildings having the highest priority for an ACM survey were those scheduled for near-term renovation/demolition, those suspected of having ACM in poor condition, and buildings occupied by children, medical facilities, or public areas. There are 226 facilities on the Fort McPherson property that have no documentation of asbestos surveys performed. Some of these facilities are recently constructed, renovated, scheduled for demolition, and/or used for equipment storage.

From 1994 to 2002, ACM surveys were conducted in 27 buildings. Of the 27 structures surveyed, 26 have ACM survey results documentation; 18 were found to have both friable and non-friable asbestos; and 8 were found to have only non-friable asbestos. All structures with reported asbestos (with the exception of Buildings 46, 184 and 352) have an asbestos operation and maintenance plan in place. Building 41 lacks documentation of an asbestos survey.

Current records indicate there have been several asbestos remediation of abatement projects at the Property. The surveys have been conducted to identify asbestos containing materials in place and evaluation of friability. Most site-specific abatement projects have occurred on an as-needed

basis. Based on the condition, amount, and location of the asbestos, buildings were assigned a hazard category number from 1 to 4, with the number "1" meaning a current exposure hazard and the number "4" meaning no exposure hazard. The majority of the surveys assessed structures with low to moderate disturbance potential. Only the structures that had a high disturbance potential or an imminent health hazard were abated. Records show that in 1998 ACM such as roofing, shingles, and insulation were removed from five buildings; Buildings 41, 56, 60, 62, and 167.

According to installation personnel, asbestos has not been encountered during the repair of steam lines on the Property.

5.7 Lead and Lead-Based Paint

According to the *Lead-Based Paint Guidelines for Disposal of Department of Defense Residential Real Property – A Field Guide* (DoD/EPA, 1999) all residential structures constructed prior to 1979 must be evaluated for lead-based paint. An evaluation consists of an inspection (sampling) and a risk assessment. Additionally, composite soil samples should be collected from the drip line of the roof and bare-soil areas of the yard of these structures. This guidance also requires that structures completed prior to 1960 receive an evaluation and abatement if necessary.

In 2003, a lead hazard management program plan was approved for implementation at Fort McPherson (DPW, 2003). In that plan, buildings have been prioritized for lead hazard assessments by date of construction. Buildings assessments to date, however, have not included soil sampling for potential contamination.

Surface dust sampling was conducted in family housing to assess lead concentration in dust. Sampling surveys have been conducted for 102 residential units at Fort McPherson. Of the 102 units tested, 34 had at least one sample that exceeded the EPA limits for a lead-dust hazard. No records were located which documented follow up surveys conducted by the facility. No documentation of surface dust sampling was found for nine family housing buildings (Buildings 20, 22, 27, 28, 168, 475, 476, 512, and 525) constructed prior to 1978.

Table 12 summarizes the results from the 1994, 1997, and 2002 lead surveys at Fort McPherson.

Table 12
Lead Survey Results

Building Number	Date	Result/Lead Concentration (µg/ft²)*	Sample Location
Housing Unit #2E	Aug 1994	Positive	throughout, except cabinet
Housing Unit #3E	Aug 1994	Positive	throughout
Housing Unit #3W	Aug 1994	Positive	throughout
Housing Unit #4E	Aug 1994	Positive	throughout, except walls and ceilings
Housing Unit #4W	Aug 1994	Positive	throughout, except ceilings and cabinet
Housing Unit #6W	Aug 1994	Positive	throughout, except screen enclosure, ceiling, and cabinet
Housing Unit #7E	Aug 1994	Positive	throughout
Housing Unit #7W	Aug 1994	Positive	throughout, except cabinet
Housing Unit #8E	Aug 1994	Positive	throughout, except ceilings and cabinet
Housing Unit #8W	Aug 1994	Positive	throughout, except cabinet
Housing Unit #11E	Aug 1994	Positive	throughout, except porch floor
Housing Unit #11W	Aug 1994	Positive	throughout
Housing Unit #12W	Aug 1994	Positive	throughout, except porch floor and cabinet
Housing Unit #13E	Aug 1994	Positive	throughout
Housing Unit #13W	Aug 1994	Positive	throughout, except hand rail
Housing Unit #14E	Aug 1994	Positive	throughout, except cabinet
Housing Unit #15E	Aug 1994	Positive	throughout, except walls, hand rail, and rail post
Housing Unit #19E	Aug 1994	Positive	throughout
Housing Unit #19W	Aug 1994	Positive	throughout
Housing Unit #522	Aug 1994	Positive	throughout, except porch rail, walls, and shelf
Building 40 (BOQ)	Apr 1997	Positive	throughout, except floors and sheetrock/concrete walls
Housing Unit 1E	Dec 2002	300	dining room floor, NW corner
Housing Unit 1W	Dec 2002	BRL	N/A
Housing Unit 2E	Dec 2002	72	living room floor, at pocket doors
Housing Unit 2W	Dec 2002	300	living room floor, by fireplace mantel
Housing Unit 3E	Dec 2002	BRL	N/A
Housing Unit 3W	Dec 2002	BRL	N/A
Housing Unit 4E	Dec 2002	BRL	N/A
Housing Unit 4W	Dec 2002	62	dining room floor, under E window, S end
Housing Unit 5	Dec 2002	BRL	N/A
Housing Unit 6F	Dec 2002	47	kitchen floor, at exit door
Housing Unit 6E	Dec 2002	64	bedroom 1 floor, at entry door

Building Number	Date	Result/Lead Concentration (µg/ft²)*	Sample Location	
Housing Unit 6W	Dec 2002	BRL	N/A	
Housing Unit 7E	Dec 2002	BRL	N/A	
Housing Unit 7W	Dec 2002	BRL	N/A	
Housing Unit 8E	Dec 2002	BRL	N/A	
Housing Unit 8W	Dec 2002	BRL	N/A	
Housing Unit 9E	Dec 2002	BRL	N/A	
Housing Unit 9W	Dec 2002	BRL	N/A	
Housing Unit 10	Dec 2002	BRL	N/A	
Housing Unit 11E	Dec 2002	2000	dining room, right window sill	
Housing Unit 11W	Dec 2002	BRL	N/A	
Housing Unit 12E	Dec 2002	120	dining room floor, below SW window	
Housing Offic 12E	Dec 2002	52	living room floor, below NW window	
Housing Unit 19\/	Dec 2002	2100	dining room floor, below SE window	
Housing Unit 12W	Dec 2002	59	foyer floor, under window	
Housing Unit 13W	Dec 2002	BRL	N/A	
Housing Unit 14E	Dec 2002	42	dining room floor, below fireplace	
Housing Unit 14W	Dec 2002	BRL	N/A	
Housing Unit 15E	Dec 2002	BRL	N/A	
Housing Unit 15W	Dec 2002	BRL	N/A	
Housing Unit 17E	Dec 2002	72	kitchen floor, at back door	
Housing Unit 17W	Dec 2002	110	kitchen floor, vat exit door	
Housing Unit 18	Dec 2002	490	bedroom 2, window #2 sill	
Housing Unit 136	Dec 2002	BRL	N/A	
Housing Unit 137	Dec 2002	BRL	N/A	
Housing Unit 138	Dec 2002	BRL	N/A	
Housing Unit 139	Dec 2002	BRL	N/A	
Housing Unit 140	Dec 2002	BRL	N/A	
Housing Unit 141	Dec 2002	BRL	N/A	
Housing Unit 142	Dec 2002	BRL	N/A	
Housing Unit 409A	Dec 2002	BRL	N/A	
Housing Unit 409B	Dec 2002	160	living room/dining room floor, by rear door	
Housing Unit 409C	Dec 2002	BRL	N/A	
Housing Unit 409D	Dec 2002	BRL	N/A	
Housing Unit 409E	Dec 2002	BRL	N/A	
Housing Unit 409F	Dec 2002	BRL	N/A	
Housing Unit 409G	Dec 2002	BRL	N/A	
Housing Unit 409H	Dec 2002	BRL	N/A	
Housing Unit 410A	Dec 2002	BRL	N/A	
Housing Unit 410B	Dec 2002	BRL	N/A	

Building Number	Date	Result/Lead Concentration (µg/ft²)*	Sample Location
Housing Unit 410C	Dec 2002	BRL	N/A
Housing Unit 410D	Dec 2002	BRL	N/A
Housing Unit 410E	Dec 2002	BRL	N/A
Housing Unit 410F	Dec 2002	BRL	N/A
Housing Unit 410G	Dec 2002	BRL	N/A
Housing Unit 506A	Dec 2002	BRL	N/A
Housing Unit 506B	Dec 2002	BRL	N/A
Housing Unit 507A	Dec 2002	BRL	N/A
Housing Unit 507B	Dec 2002	BRL	N/A
Housing Unit 508A	Dec 2002	BRL	N/A
Housing Unit 508B	Dec 2002	BRL	N/A
Housing Unit 509A	Dec 2002	BRL	N/A
Housing Unit 509B	Dec 2002	BRL	N/A
Housing Unit 510A	Dec 2002	BRL	N/A
Housing Unit 510B	Dec 2002	BRL	N/A
Housing Unit 515A	Dec 2002	BRL	N/A
Housing Unit 515B	Dec 2002	BRL	N/A
Housing Unit 523A	Dec 2002	BRL	N/A
Housing Unit 523B	Dec 2002	BRL	N/A
Housing Unit 524A	Dec 2002	BRL	N/A
Housing Unit 524B	Dec 2002	BRL	N/A
Housing Unit 526A	Dec 2002	BRL	N/A
Housing Unit 526B	Dec 2002	BRL	N/A
Housing Unit 527A	Dec 2002	BRL	N/A
Housing Unit 527B	Dec 2002	BRL	N/A
Housing Unit 528A	Dec 2002	BRL	N/A
Housing Unit 528B	Dec 2002	BRL	N/A
Housing Unit 532	Dec 2002	BRL	N/A
Housing Unit 533A	Dec 2002	BRL	N/A
Housing Unit 533B	Dec 2002	BRL	N/A
Housing Unit 534A	Dec 2002	BRL	N/A
Housing Unit 534B	Dec 2002	BRL	N/A
Housing Unit 535A	Dec 2002	BRL	N/A
Housing Unit 535B	Dec 2002	BRL	N/A
Housing Unit 536A	Dec 2002	BRL	N/A
Housing Unit 536B	Dec 2002	BRL	N/A
Housing Unit 537A	Dec 2002	BRL	N/A
Housing Unit 537B	Dec 2002	BRL	N/A
Housing Unit 538A	Dec 2002	BRL	N/A

Building Number	Date	Result/Lead Concentration (µg/ft²)*	Sample Location
Housing Unit 538B	Dec 2002	BRL	N/A
Housing Unit 601A	Dec 2002	BRL	N/A
Housing Unit 601B	Dec 2002	BRL	N/A
Housing Unit 602A	Dec 2002	BRL	N/A
Housing Unit 602B	Dec 2002	BRL	N/A
Housing Unit 603A	Dec 2002	BRL	N/A
Housing Unit 603B	Dec 2002	BRL	N/A
Housing Unit 604A	Dec 2002	BRL	N/A
Housing Unit 604B	Dec 2002	BRL	N/A
Housing Unit 605A	Dec 2002	BRL	N/A
Housing Unit 605B	Dec 2002	BRL	N/A

^{*} Results concentration listed for the 2002 survey results.

Source - Diversified Environmental Management, Inc., 1994.

Source - Undocumented, 1997.

Source - Compass Environmental, Inc., 2002.

BRL - Below Regulatory Limit.

N/A - Not Applicable.

There are 203 facilities on the Fort McPherson property that have no documentation of lead surveys performed. Some of these facilities are new construction, renovated, scheduled for demolition, and/or equipment storage.

Most facilities and buildings at Fort McPherson were constructed before the DoD ban on the use of lead-based paint in 1978 and are likely to contain one or more coats of such paint. In addition, some facilities constructed immediately after the ban may also contain lead-based paint, because inventories of such paints that were in the supply network were likely to have been used at these facilities.

5.8 Radioactive Material

Eighteen buildings, building complexes or open areas at Fort McPherson have been identified as areas where radioactive material was used, stored, or potentially disposed (Cabrera Services, 2007). Historical information was reviewed to determine if there was sufficient data to declare buildings as "Impacted" or "Non-Impacted" in accordance with Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) methodology. According to MARSSIM, areas are divided into risk categories defined as follows:

 $[\]mu g/ft^2$ – micrograms per square foot.

Impacted (MARSSIM Class 1 and 2) – Areas with moderate to high probabilities of potential contamination.

Impacted (MARSSIM Class 3) – Areas with very low potential for contamination but with insufficient information to justify a non-impacted classification.

Non-Impacted (No Survey Needed) – Areas with no potential for residual contamination.

A summary of the buildings or areas where radioactive material was used, stored, or potentially disposed is provided in Table 13.

Table 13

Fort McPherson Buildings/Areas with Radioactive Material Use/Storage History

Building Number	Classification	Building/Area Name & Use	Current Tenant and Conditions
105	Non-Impacted	Old gas station and PX	Existing, Renovated in 1981 and became Veterinary Clinic
128-131	Non-Impacted	Hospital Additions	Existing, Old wards renovated into administrative space
161, 163	Non-Impacted	Toxicology Lab (161), Old Veterinary Clinic (163)	Demolished
170, 171	Non-Impacted	Old Hospital	Existing, Administration space for Installation Management Agency-Southeast Regional Office (IMA-SERO).
179	Impacted, MARSSIM Class 3	Old Laboratory, Education Center	Existing, Inspector General's Office
180	Impacted, MARSSIM Class 2	3 rd US Army Medical Lab, and CHPPM South	Existing, CHPPM
205, 206	Non-Impacted	Training Support Center (Photography Labs, Television Studios, administrative space)	Existing, Renovated in 1991, when photography lab moved to 206 and 205 was renovated into administrative space
346	Non-Impacted	Consolidated Maintenance	Existing, Consolidated Maintenance
356	Non-Impacted	Electronic Communications Workshop	Demolished
363	Impacted, MARSSIM Class 1	DOL Work Area, Electronic Communications Workshop (Annex 4), Vehicle Maintenance (Annex 6 and 7)	Existing, 3 rd Army Headquarters, since 1984
N/A	Non-Impacted	Burn Pit	Paved over as parking lot

Building Number	Classification		Current Tenant and Conditions	
N/A	Non-Impacted	Army in Atlanta Museum	Demolished	

A copy of the Cabrera Services radiological Historical Site Assessment is included as Addendum 1.

5.9 Historical Landfills/Dumps

See Section 5.2.1 for information on FTMP-06, the former Incinerator Ash Dumpsite.

Several disposal pits and burial activities were identified in the reviewed aerial photographs. In a 1944 aerial photograph mounded material was visible in the northwest portion of the Property. The debris was not viewed in later aerial photographs and the area has been redeveloped into a golf course. Debris and mounded material were visible in the southeast portion of the Property in the 1968 and 1978 aerial photographs reviewed. The VSI did not indicate any debris or mounded material in the area. No further information was available regarding the burial activities and disposal pits. These disposal pits are not considered a REC.

5.10 Explosives-Contaminated Structures

Four former magazines were constructed in 1938 for the storage of small arms, chemical munitions, pyrotechnics, Trinitrotoluene, and dynamite. The magazines were visible in a general site map dated 1993 but do not appear on the 2000 or 2004 general site map (Malcolm Pirnie, Inc., 2006). One operational magazine is located west of Hedekin Field. The magazine is first shown on a 1904 map of the Property. Currently blanks for use during Hedekin Field ceremonial events are stored in the magazine. Interviews with installation personnel revealed that the magazines are not considered a REC.

5.11 Radon

According to the EPA's categorization of radon zones, Fulton County, Georgia, is qualified as a radon Zone 1, meaning that it has a predicted average indoor radon screening level greater than 4 pCi/L. The EPA's action level for radon is 4 pCi/L.

A radon survey was conducted by Tech/Ops Landauer, Inc., for priority buildings at Fort McPherson during 1990. This survey included the Child Development Center and Health Clinic (U.S. Department of Army, 1990). In January 1999, a radon survey was conducted by Radon Georgia for Building 200 basement (U.S. Department of Army, 1999). All detections for radon

were below the EPA action level of 4 pCi/L. No other information regarding building surveys for radon at Fort McPherson was available.

5.12 Pesticides

Fort McPherson has an Integrated Pest Management Plan which covers both Fort McPherson and Fort Gillem. The pest management plan for Forts McPherson and Gillem describes the pest management requirements and outlines the resources necessary for surveillance and control of pests. It also describes the administrative, safety, and environmental requirements of the program. The program involves DoD and Georgia-certified pesticide applicators; staffs of the DIS environmental office, the Preventive Medicine Services and the Veterinary Activity; building occupants; and facility managers to monitor and control pests. Pests included in the plan are weeds and other unwanted vegetation; termites; ticks, mosquitoes and other biting insects; vertebrate pests, such as birds, rodents, and snakes; flying and crawling insects; and spiders. Building 341 is currently the location of the pesticide storage and mixing facility; however, pesticide storage and mixing has occurred at a number of locations on Fort McPherson. From review of USAEHA pest management reviews (various dates), records indicate that historic pesticide storage and mixing occurred at the following sites:

- Building 343
- Building 363, Doors 16 and 18
- Building 356
- Building 456.

USAEHA pest management reviews and army environmental compliance assessments that were conducted starting in the 1970s have indicated that pesticide storage and mixing operations were inadequate at Buildings 341, 356, and 456.

Building 341 was constructed in 1997 as the new combined golf course and pest control storage facility. The 2000 Environmental Compliance Assessment System identified deficiencies in the pesticide storage and mixing operation. The facility had no berms and the storage and mixing room floors were badly cracked. The building is also 100 feet upgradient from a stream and personnel were mixing pesticides in the parking lot, directly adjacent to a storm drain. The building was upgraded in 2002 to bring the facility into compliance. The concrete floor was sealed, curbing and exhaust installed, and the floor drains were separated from the mixing areas. VSI was conducted at Building 341 during ECP generation and it was observed that the

deficiencies noted above had been rectified. VSI results and interviews with installation personnel reveals that Building 341 is currently not considered a REC.

Building 343 was demolished in 1984, but was reported as a pesticide storage location in the 1983 installation assessment. The report indicated that the facility lacked continuous curbing to contain spillage. It was reported that the herbicides in Building 343 were moved to Building 356 for mixing. No mixing of pesticides took place in Building 343. Building 343 was reportedly utilized as a tool storage area. Interviews with installation personnel revealed no environmental condition associated with the site. Building 343 is not considered REC.

Building 356 was demolished in 2000, but acted as the pest control facility since at least 1979. Prior to its use as a pest control facility, it was identified in a 1958 survey as a field maintenance shop where gun soldering, spray painting, woodworking, and machining and grinding occurred (USAEHA, 1958). Both the 1990 USAEHA environmental program review and the 1996 Environmental Compliance Assessment System identified inadequacies in the facility construction and ventilation. There was no continuous curbing and the floor was not sealed. Filling of spray containers was conducted in the vehicle bay outside Building 356. This area was reported as being adequate for the filling function. Building 356 is currently considered a REC.

Building 363 currently operates as Headquarters for the 3rd US Army. Historically, a portion of it was used as the DEH pesticide storage area for 10 years (approximately 1970-1979). Pesticides were also mixed outside of Building 363 prior to the use of Building 356. Building 363 is considered a REC.

Building 456, which also has been demolished, acted as the golf course pesticide storage and mixing location until the construction of Building 341. Several previous environmental reviews identified inadequacies in the facility construction and operations. Part of the building had a dirt floor and the remainder of the building had a concrete floor that was not sealed. The 1983 installation assessment reported that the building did not have continuous curbing, although that deficiency was reportedly corrected by 1990, as reported in the 1990 USAEHA program review. The outside mixing area was also reported as inadequate. The mixing pad was not curbed, it had a drain that could not be closed, and it was directly upgradient of Utoy Creek. Interviews with Installation personnel indicated that prior to demolition, broken containers of chlordane were present in the building. Building 456 is considered a REC.

5.13 Other Identified Concerns

The primary laboratory operations on the Property were associated with Building 170 (U.S. Army Health Clinic); Building 100 (DENTAC Lab); and Building 180 (USACHPPM). Prior to 1977, a clinical laboratory in Building 170 was reported to discharge waste solvents and reagents to the sanitary sewer. Records show that silver flakes were recovered from Building 100 in 1982. It was reported that in 1979 hazardous chemicals (dyes, azides, cyanides, phenols, acids, pyridine, chromium waste) were removed from Building 180 and sent to Fort Gillem. The laboratory was closed in 1999 and all chemicals were removed from the building. Based on interviews with installation personnel and record reviews, there is no evidence of a release to the environment. Buildings 100, 170, and 180 are not considered a REC.

Two fish kills were recorded in the lakes. One occurred in October 1974 in Lake No. 1. Analysis of soil/sediment samples yielded high levels of arsenic and lead. However, arsenic residues were undetectable in the water and fish samples, indicating that contaminants had not migrated into Lake No. 1. The exact cause of the fish kill was never determined. A second fish kill involving approximately 1,000 fish and various other aquatic species occurred in Lake No. 2 in May 1975. USAEHA analyzed the water and the animals for a variety of heavy metals and pesticides. It was concluded that the deaths were caused by methoxychlor contamination. The source of the pesticide implicated in the incident was not known, and the situation has not occurred again. The kill took place when the water level in the lake was unusually low, and this lower volume of water may have compounded the pesticide problem. Lakes 1 and 2 were dredged and reconfigured with aerators installed within the last five years. Any potential contaminants related to the old fish kill of the 1970s are no longer present. Recent sampling indicated that there are no contaminants present in the lakes.

Dry cleaning activities involving chlorinated solvents were conducted in Buildings 208/209 and 302. The buildings were demolished between 1988 and 1990. The previous dry cleaning sites are considered a REC.

5.14 Identification of Uncontaminated Property

The U.S. Army's ECP process characterizes the existing environmental conditions at a given site. Properties were classified according to their environmental condition based on DoD guidance into the following categorization:

Most of the areas on the Property were identified as "uncontaminated" property (Category 1) comprising approximately 389 acres. Category 1 - areas in which no release or disposal of hazardous substances or petroleum products had occurred, and to which there had been no migration of such substances from adjacent areas. Historical records reviewed and the VSI found no indication that the release or disposal of hazardous substances or their derivatives has occurred, including no migration of these substances from adjacent areas at the following properties:

- Building 346 Oil/Water Separator (FTMP-04), Building 357 DEH Maintenance OWS (FTMP-07)
- USTs that had no evidence of contamination (Building 368)
- Former and current OWS
- All AST areas
- Hazardous waste collection areas
- The Lakes (Lakes 1, 2, 3 and 4)
- Most of the buildings on the Property except five buildings; Buildings 208/209, 302, 356, 363, and 456
- All active training areas except the Fort McPherson Range
- The majority of the areas on the Property, Parcel 24(1).

5.15 Description of Remaining Property

Parcel numbering was assigned to each existing Installation Restoration Program (IRP) site, non-IRP site, petroleum release areas and any identified area of concern as follows:

- Category 2 Areas in which only release or disposal of petroleum products has occurred. Areas measuring approximately 33 acres were classified as category 2 property. Category 2 parcels included UST tank areas where there was evidence of contamination or no information was available regarding the status of the tanks.
- Category 3 Areas in which release, disposal or migration of hazardous substances has occurred, but in concentrations that do not require a removal or other remedial response. There are no Category 3 parcels identified on the Fort McPherson property.

- Category 4 Areas in which release, disposal, or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken. One IRP Site, Old Incinerator Ash Dumpsite, measuring approximately 1 acre was identified as Category 4 property.
- Category 5 Areas in which release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have not yet been taken. There are no Category 5 parcels identified on the Fort McPherson property.
- Category 6 Areas in which release, disposal, or migration of hazardous substances has occurred, but required remedial actions have not yet been implemented. There are no Category 6 parcels identified on the Fort McPherson property.
- Category 7 Areas that have not been evaluated or require additional evaluation. Areas measuring approximately 64 acres were classified as category 7 property. Category 7 property included the Building 363 Paint Shop (FTMP-01), Army Parking Lot (FTMP-11), former laundry/dry cleaning (Building 208/209) Dry Cleaning (Building 302), the pesticide storage areas (Buildings 356, 363, and 456), the Fort McPherson Range, the former Atlanta NG Rifle Range, the former Atlanta NG Target Range (including the former Skeet range), and the former Pistol Range.

Areas of the Property that contained other environmental or safety issues, including asbestos, lead-based paint, PCBs, radon, and radionuclides have also been identified in separate ECP Category 1 qualified parcels. Parcels with qualifying issues overlap ECP Category 1 through 7 parcels.

A summary of the parcels located at Fort McPherson is attached as Table A-1 (Appendix A). ECP Parcels and Qualified Parcels are shown on Figures 15 and 16, respectively.

5.16 Adjacent Properties

Property use and environmental conditions adjacent to Fort McPherson were evaluated by a VSI conducted on July 13, 2006.

Campbellton Road bounds Fort McPherson to the north and mainly consists of commercial and residential properties. Sawyer Alternator and Starter was located north of the property at 1397 Campbellton Road. The facility was listed on the LUST database and has received a No Further Action Letter. The properties located along Campbellton Road are assumed to be downgradient of Fort McPherson based on an evaluation of topography on the 1999 USGS Atlanta quadrangle topographic map, and none are considered to be of an environmental concern.

Single-family residential property bounds Fort McPherson to the south. Based on the Fulton County Tax Assessor online data this area was established in the 1940s. No environmental hazards were observed.

Lee Street bounds Fort McPherson to the east and largely consists of mixed commercial/industrial uses. Across Lee Street is the Metropolitan Atlanta Rapid Transit authority (MARTA) rail line. The properties to the east of Fort McPherson could pose an environmental hazard although no records of release have been documented. The properties do not appear to be of significant environmental concern to the subject property at this time.

Single-family residential property bounds Fort McPherson to the west. Based on the Fulton County Tax Assessor online data this area was established in the 1940s. No environmental hazards were observed.

6.0 Conclusions

In addition to all of the Ft. McPherson property, the ECP covers the Network Enterprise Technology Command located in Peachtree City, Georgia. No areas of environmental concerns associated with the Network Enterprise Technology Command were noted during the ECP process.

Installation Restoration Program. Fort McPherson has an ongoing IRP which was initiated in 1980. The IRP has identified 11 sites, designated FTMP-01 through FTMP-11. Seven sites have been closed out of the IRP program and include the following:

- FTMP-01, Bldg 363 Paint Shop
- FTMP-02, Bldg 41 UST
- FTMP-03, Bldg 346 Waste Oil Tank
- FTMP-04, Bldg 346 OWS Separator
- FTMP-05, Bldg 370 OWS Separator
- FTMP-07, Bldg 357 DEH Maintenance
- FTMP-08, Bldg 370 Waste Oil Tank
- FTMP-11, Army Parking Lot.

Fort McPherson has an ongoing IRP for three sites including:

- FTMP- 06, Old Incinerator Ash Dumpsite
- FTMP-09, Building 143 PX Station
- FTMP-10, Vet Clinic/Old PX Gas Station.

The four IRP sites: Building 363 (FTMP-01), Building 143 PX Station (FTMP-09, the Vet Clinic (FTMP-10) and the Army Parking Lot (FTMP-11) are considered a REC.

Range Operations. There are six operational ranges at Fort McPherson. With the exception of the Fort McPherson Range, most of the identified training areas had no history of munitions use. Munitions are currently used at the Fort McPherson Range. In 1997 the Fort McPherson Range's impact area was redesigned to maintain environmental compliance. A structure was installed at the Range that directs drainage away from the impact area. Specially designed bricks are positioned in front of the structure to capture and retain bullets and bullet fragments. The bricks are replaced periodically as part of routine range maintenance. A potential lead contamination exists due to range activities prior to the reconstruction of the impact area. The Fort McPherson Range is considered a recognized environmental condition (REC).

Military Munitions Response Program. Four MMRP Sites were identified at Fort McPherson; Atlanta NG Rifle Range, Atlanta NG Target Range (including the former Skeet

Range), the Pistol Range and the 300-Yard Target Range. Munitions have historically been used at the former ranges. Two WWI artillery shells were uncovered in the Atlanta NG Target Range. The Atlanta NG Target Range is located on what is now the golf course in the lower southwest corner of Fort McPherson. Historical evidence suggests that the Atlanta NG Target Range was not used as an artillery range. Installation personnel suspected that contaminated fill was used during the construction of the golf course. A potential lead contamination exist for the former Atlanta NG Rifle Range, the former Atlanta NG Target Range that includes the former Skeet Range, and the former Pistol Range. The three ranges are considered a REC.

The area where the former 300-Yard Target Range existed has been extensively redeveloped into a recreation area with pavement covering a portion of the range. The former 300-Yard Target Range is not considered a REC.

Hazardous Substances and Hazardous Waste. Several hazardous substances associated with base operations at Fort McPherson include used solvents, paints, acids and bases, toxins, aerosols, heavy metals, mercury-containing items, and other materials associated with laboratory operations, building and vehicle maintenance. Identified hazardous substances include arsenic, asbestos, chlorine, lead, nickel hydroxide, mercury, urea, and xylene. Fort McPherson tracks and maintains its hazardous materials and chemical inventory data through the HMMS. This data is collected on hazardous materials and hazardous waste from all agencies that handle these substances at Fort McPherson for input to the HMMS.

Currently, hazardous material disposal is reported by various departments and tenants for input into the HMMS system as materials are received and disposed. This information is used to facilitate centralized hazardous material control and management and to assist with environmental reporting. Hazardous chemicals store in quantities greater than the storage quantity threshold include urea.

Hazardous waste is stored at Fort McPherson in a 90-day yard and various SAP. Under the State of Georgia regulations, SAP cannot accumulate more than 55-gallons at a time and once the amount is exceeded, the excess waste must be moved within 3 days to a 90-day area. After 90 days, the waste must be transported off Property by licensed hazardous waste transporters. The hazardous substances and hazardous waste storage areas are not considered to be a REC.

Petroleum Substances-USTs/ASTs. Fort McPherson currently has nine active USTs and five active ASTs, the remaining tanks have either been removed or closed in place. The tanks were primarily used for the storage of fuel oil, gasoline, diesel, and waste oil.

A summary of the available documentation for historic and current tanks at Fort McPherson is as follows:

- During tank removal activities, the tank associated with Building 183 had no evidence of soil contamination.
- During tank removal activities, soil contamination was detected at Building 205 (one [1] tank) and during removal of only one of the tanks at each of Buildings 346 (346-W01) and 370 (370-W01). Contaminated soil was over-excavated. These former UST locations do not constitute a REC.
- During tank removal at Buildings 160 (six [6] tanks) and 164 (one [1] tank), not all contaminated soil could be removed due to the presence of utility lines. Because of residual soil contamination, one monitoring well was installed at each of the two UST sites to confirm or deny the presence of groundwater contamination. Groundwater analytical results were not available for review during the generation of the ECP. The two sites are considered a REC.
- Although one tank at each of Buildings 208 and 302 were reported to have been closed, there was no additional information regarding site conditions during closure activities. The two sites are considered a REC.
- There was no available information regarding the status of the tanks at nine of the UST locations. Buildings 40 (one [1] tank), 104 (one [1] tank), 106 (one [1] tank), 207 (one [1] tank), 214 (two [2] tanks), 302 (two [2] tanks), 326 (one [1] tank), 345/346 (four [4] tanks), and 650 (one [1] tank). These ten UST locations currently constitute a REC.
- Three of the UST sites are managed under the IRP program. These locations include Buildings 105 (two [2] tanks), 143 (five [5] tanks), and 370 (one [1] tank). The UST at Building 370 was removed and contaminated soil was over-excavated. Remedial activities are currently on-going for the USTs at Buildings 105 and 143. Buildings 105 and 143 are currently considered a REC.
- There are currently 9 active USTs at five of the sites. These sites include Buildings 160 (two [2] tanks), 200 (one [1] tank), 350 (two [2] tanks), 368 (three [3] tanks), and 651 (one [1] tank). Except for the tank at Building 200, all the tanks were installed in the 1990s and have shown no evidence of release of petroleum products.

- There were no documented releases for any of the ASTs at Fort McPherson. Visual site inspections of the current ASTs did not reveal any evidence of leaks or spills.
- Documentation of No Further Action concurrence by the GA EPD exists for five of the UST sites. These sites include Buildings 41 (one [1] tank), 200 (one [1] tank), 350 (three [3] tanks), 454 (one [1] tank), and 651 (one [1] tank) and one location where there was a misidentified presence of a UST (Building 101).
- Tanks used for storing heating oil or petroleum products were not regulated prior to 1988. Tanks used for storing heating oil for consumptive use of the premises where stored are excluded from Federal and GA EPD rules regardless of when the tank was installed or removed, including existing heating oil tanks. Although heating oil tanks are not regulated, releases of contaminants into the environment by these tanks are regulated.

Cleanup was conducted at seven of the UST sites (Buildings 105, 143, 200, 302, 350, 454, and 651) at Fort McPherson that are listed in the GA EPD LUST database. The USTs at Buildings 200, 350, 454 and 651 have been granted by the State a 'no further action' status. Buildings 105 and 143 are listed as in remediation. The UST at Building 302 was closed and no further information was available regarding site conditions during closure activities.

Asbestos Containing Materials. From 1994 to 2002, ACM surveys were conducted in 27 structures. Of the 27 structures surveyed, 26 have ACM survey results documentation; 18 were found to have both friable and non-friable asbestos; and 8 were found to have only non-friable asbestos. All structures with reported asbestos (with the exception of Buildings 46, 184 and 352) have an asbestos operation and maintenance plan in place. There are 226 buildings on the Fort McPherson property that have no documentation of asbestos surveys performed.

Lead-Based Paint. Surface dust sampling surveys have been conducted for 102 residential units at Fort McPherson. Of the 102 units tested, 34 had at least one sample that exceeded the EPA limits for a lead-dust hazard. It appears that there were no follow up surveys by the facility. No documentation of lead dust sampling was found for nine family housing buildings (Buildings 20, 22, 27, 28, 168, 475, 476, 512, and 525) constructed prior to 1978.

Most facilities and buildings at Fort McPherson were constructed before the DoD ban on the use of lead-based paint in 1978 and are likely to contain one or more coats of such paint. In addition, some facilities constructed immediately after the ban may also contain lead-based paint, because inventories of such paints that were in the supply network were likely to have been used up at these facilities.

Radiological Materials. As reported by in the 2007 Historical Site Assessment, three (3) buildings at the Property were found to be potentially impacted from historical use of RAM. The buildings and survey areas that were found to be potentially impacted included building Nos. 179, 180, and 363.

Historical Landfills/Dumps. Several disposal pits and burial activities were identified in the aerial photographs reviewed. In a 1944 aerial photograph, mounded material was visible in the northwest portion of the installation. Debris and mounded material were visible in the southeast portion of the installation in the 1968 and 1978 aerial photographs reviewed. No further information was available regarding the burial activities and disposal pits. The Old Incinerator Ash Dump Site (FTMP-06) is located near the center of Fort McPherson. The area was used for burning trash in open pits and for disposal of solid waste incineration ash. Until the late 1960s, combustible solid wastes were burned daily in open, unlined pits excavated in the area. Burn residue was left in the pits; when a pit became full, it was covered with dirt. Waste materials burned in these pits reportedly included domestic garbage, hospital waste, minor industrial waste, (i.e. waste paints, solvents, oils, etc.) and construction and demolition debris.

Pesticides. Building 341 is currently the location of the pesticide storage and mixing facility; however, pesticide storage and mixing has occurred at a number of locations on Fort McPherson. From review of USAEHA pest management reviews (various dates), records indicate that historic pesticide storage and mixing occurred at the following sites: Building 343, Building 363, Building 356, and Building 456. USAEHA pest management reviews and Army environmental compliance assessments that have been conducted starting in the 1970s have indicated that pesticide storage and mixing operations were inadequate at Buildings 341, 356, and 456. Building 341 was upgraded in 2002 to bring the facility in compliance. Buildings 356, 363, and 456 are currently considered a REC.

Other Issues. Fort McPherson is listed in the RCRA-SQG database. There are 19 records of violations reported for Fort McPherson but all have achieved compliance.

Dry cleaning activities involving chlorinated solvents were conducted in Buildings 208/209 and 302. The buildings were demolished between 1988 and 1990. The previous dry cleaning sites are considered a REC.

7.0 Certification

All information/documentation provided accurately reflects the condition of the property. This report meets the DoD requirements for completion of an ECP Report.

Victor Bonilla

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Fort Gillem

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Restoration Manager

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APPENDIX A

ECP PARCELS AND 2006 VISUAL SITE INSPECTION APPROACH SUMMARY

APPENDIX B

AERIAL PHOTOGRAPHY ANALYSIS

APPENDIX C

SANBORN MAPS

ECP Report – FTMP – 25 Jan 07			
SANBORN MAPS	WERE NOT AVAIL	ABLE FOR FOR	RT MCPHERSON

APPENDIX D

HISTORICAL TOPOGRAPHIC MAPS

APPENDIX E

REGULATORY DATABASE REPORT (EDR REPORT)

APPENDIX F

JURISDICTION SUMMARY

APPENDIX G

INTERVIEW REPORTS

APPENDIX H

ASBESTOS SURVEY DATABASE

ADDENDUM 1

HISTORICAL SITE ASSESMENT AND ADDENDUM TO ENVIRONMENTAL CONDITION OF PROPERTY REPORT

ECP Report – FTMP – 25 Jan 07					



APPENDIX E LABORATORY CERTIFICATION AND ANALYTICAL DATA REPORTS

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



April 20, 2011

Michael H. Wilson Peachtree Environmental 5384 Chaversham Lane Norcross GA 300922167

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

RE: Davidson Kennedy

Dear Michael H. Wilson: Order No: 1104400

Analytical Environmental Services, Inc. received 5 samples on April 6, 2011 12:30 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 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

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.

Alysse Kowalski

Cllysse Konal

Project Manager

Revision 4/20/2011

CHAIN OF CUSTODY

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

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10 4 400

Work Order:

S No # of Containers VI III Same Day Rush (auth req.) Fax? Y/ your results, place bottle to check on the status of Turnaround Time Request Standard 5 Business Days www.aesatlanta.com Next Business Day Rush 2 Business Day Rush II I Visit our website Total # of Containers RECEIPT orders, etc. STATE PROGRAM (if any): REMARKS DATA PACKAGE: B-mail? ON, **8**0000 SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE. 1cenned とう、そろうな女 Mike Wilson PROJECT INFORMATION ANALYSIS REQUESTED PRESERVATION (See codes) Davidson (IF DIFFERENT FROM ABOVE) 3185 SEND REPORT TO: ROJECT NAME SITE ADDRESS INVOICE TO ROJECT # KCRA MELEIS DATE/[IME 2 5384 charersham try (See codes) Noveross, LM 30092 Matrix UPS MAIL COURIER Composite SHIPMENT METHOD VIA Grab OTHER 720 H49-6119 143 28 240 1130 FedEx 1135 REYHOUND RECEIVED BY TURE 4-1 DATE OCT DATE/TIME feachtree Eminonmentur In \2\-\-\2\ Michael H Wilson からな 46.90 0219-644 (014 -6100) 198 1 = 10 HQ J-961 -1440-71C SAMPLE ID PECIAL INSTRUCTIONS/COMMENTS シストゥルニノ しいかのととの 5 K-04 1 AMPLED BY ELINOUISI 01 11 13 7 9

NA = None White Copy - Original; Yellow Copy - Client 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 O = Other (specify) N = Nitric acid -S+I = Sulfunc acid + ice -S/M+I = Sodium Bisulfate/Methanol + ice PRESERVATIVE CODES.

Page 2 of 13

Client: Peachtree Environmental

Project: Davidson Kennedy
Lab ID: 1104400

Case Narrative

Date:

13-Apr-11

Metals Analysis by Method 6010B

Due to matrix interferences, samples 1104400-001A through 005A required dilution during analysis for Selenium resulting in elevated reporting limits for this analyte.

Client: Peachtree Environmental Client Sample ID: DK-0411-BG 6

Project Name: Davidson Kennedy Collection Date: 4/6/2011 11:30:00 AM

Date:

20-Apr-11

Lab ID: 1104400-001 **Matrix:** Soil

Analyses		Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TOTAL MERCURY	SW7471B					(SW7471	1)			
Mercury		BRL		0.0384	0.110	mg/Kg-dry	144746	1	04/11/2011 15:23	MP
METALS, TOTAL	SW6010C					(SW3050)B)			
Arsenic		0.717	J	0.594	5.58	mg/Kg-dry	144612	1	04/11/2011 12:40	TA
Barium		74.7		0.0853	5.58	mg/Kg-dry	144612	1	04/11/2011 12:40	TA
Cadmium		0.241	J	0.0649	2.00	mg/Kg-dry	144612	1	04/11/2011 12:40	TA
Chromium		30.9		0.0983	2.79	mg/Kg-dry	144612	1	04/11/2011 12:40	TA
Lead		210		0.306	5.58	mg/Kg-dry	144612	1	04/11/2011 12:40	TA
Selenium		BRL		1.73	8.93	mg/Kg-dry	144612	4	04/11/2011 14:05	TA
Silver		BRL		0.0396	2.00	mg/Kg-dry	144612	1	04/11/2011 12:40	TA
PERCENT MOISTU	RE D2216									
Percent Moisture		11.2		0	0	wt%	R194515	1	04/11/2011 11:00	AS

Qualifiers: * Value exceeds maximum contaminant level

BRL Not detected at MDL

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

NC Not confirmed

E Estimated value above quantitation range

S Spike Recovery outside limits due to matrix

J Estimated value detected below Reporting Limit

> Greater than Result value < Less than Result value

Narr See case narrative

Client: Peachtree Environmental Client Sample ID: DK-0411-BG 7

Project Name: Davidson Kennedy Collection Date: 4/6/2011 11:35:00 AM

Lab ID: 1104400-002 **Matrix:** Soil

Analyses		Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TOTAL MERCURY	SW7471B					(SW7471)			
Mercury		0.0563	J	0.0378	0.108	mg/Kg-dry	144746	1	04/11/2011 15:25	MP
METALS, TOTAL	SW6010C					(SW3050	(B)			
Arsenic		1.33	J	0.583	5.47	mg/Kg-dry	144612	1	04/11/2011 12:44	TA
Barium		79.6		0.0836	5.47	mg/Kg-dry	144612	1	04/11/2011 12:44	TA
Cadmium		1.09	J	0.0636	2.00	mg/Kg-dry	144612	1	04/11/2011 12:44	TA
Chromium		31.8		0.0963	2.74	mg/Kg-dry	144612	1	04/11/2011 12:44	TA
Lead		187		0.300	5.47	mg/Kg-dry	144612	1	04/11/2011 12:44	TA
Selenium		BRL		0.846	4.38	mg/Kg-dry	144612	2	04/11/2011 14:09	TA
Silver		BRL		0.0389	2.00	mg/Kg-dry	144612	1	04/11/2011 12:44	TA
PERCENT MOISTU	RE D2216									
Percent Moisture		9.56		0	0	wt%	R194515	1	04/11/2011 11:00	AS

Qualifiers: * Value exceeds maximum contaminant level

BRL Not detected at MDL

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

NC Not confirmed

E Estimated value above quantitation range

S Spike Recovery outside limits due to matrix

J Estimated value detected below Reporting Limit

> Greater than Result value < Less than Result value

Narr See case narrative

Page 5 of 13

20-Apr-11

Client: Peachtree Environmental Client Sample ID: DK-0411-BG 8

Project Name: Davidson Kennedy Collection Date: 4/6/2011 11:40:00 AM

Lab ID: 1104400-003 **Matrix:** Soil

Analyses		Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TOTAL MERCURY	SW7471B				((SW7471	1)			
Mercury		0.0482	J	0.0421	0.120	mg/Kg-dry	144746	1	04/11/2011 15:27	MP
METALS, TOTAL	SW6010C					(SW3050)B)			
Arsenic		2.41	J	0.603	5.66	mg/Kg-dry	144612	1	04/11/2011 12:48	TA
Barium		58.2		0.0865	5.66	mg/Kg-dry	144612	1	04/11/2011 12:48	TA
Cadmium		0.521	J	0.0658	2.00	mg/Kg-dry	144612	1	04/11/2011 12:48	TA
Chromium		60.9		0.0996	2.83	mg/Kg-dry	144612	1	04/11/2011 12:48	TA
Lead		89.8		0.310	5.66	mg/Kg-dry	144612	1	04/11/2011 12:48	TA
Selenium		BRL		1.75	9.06	mg/Kg-dry	144612	4	04/11/2011 14:23	TA
Silver		BRL		0.0402	2.00	mg/Kg-dry	144612	1	04/11/2011 12:48	TA
PERCENT MOISTU	JRE D2216									
Percent Moisture		18.6		0	0	wt%	R194515	1	04/11/2011 11:00	AS

Qualifiers: * Value exceeds maximum contaminant level

BRL Not detected at MDL

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

NC Not confirmed

E Estimated value above quantitation range

S Spike Recovery outside limits due to matrix

J Estimated value detected below Reporting Limit

> Greater than Result value < Less than Result value

Narr See case narrative

20-Apr-11

Client: Peachtree Environmental Client Sample ID: DK-0411-BG-9

Project Name: Davidson Kennedy Collection Date: 4/6/2011 11:45:00 AM

Lab ID: 1104400-004 **Matrix:** Soil

Analyses		Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TOTAL MERCURY	SW7471B					(SW7471)			
Mercury		0.0494	J	0.0426	0.122	mg/Kg-dry	144746	1	04/11/2011 15:30	MP
METALS, TOTAL	SW6010C					(SW3050)B)			
Arsenic		2.01	J	0.622	5.84	mg/Kg-dry	144612	1	04/11/2011 12:53	TA
Barium		73.6		0.0892	5.84	mg/Kg-dry	144612	1	04/11/2011 12:53	TA
Cadmium		0.408	J	0.0678	2.00	mg/Kg-dry	144612	1	04/11/2011 12:53	TA
Chromium		55.7		0.103	2.92	mg/Kg-dry	144612	1	04/11/2011 12:53	TA
Lead		64.3		0.320	5.84	mg/Kg-dry	144612	1	04/11/2011 12:53	TA
Selenium		BRL		1.80	9.34	mg/Kg-dry	144612	4	04/11/2011 14:35	TA
Silver		BRL		0.0414	2.00	mg/Kg-dry	144612	1	04/11/2011 12:53	TA
PERCENT MOISTUR	RE D2216									
Percent Moisture		18.6		0	0	wt%	R194515	1	04/11/2011 11:00	AS

Qualifiers: * Value exceeds maximum contaminant level

BRL Not detected at MDL

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

NC Not confirmed

E Estimated value above quantitation range

S Spike Recovery outside limits due to matrix

J Estimated value detected below Reporting Limit

> Greater than Result value < Less than Result value

Narr See case narrative

5 7

20-Apr-11

Client:Peachtree EnvironmentalClient Sample ID:DK-0411-BG-10Project Name:Davidson KennedyCollection Date:4/6/2011 11:50:00 AM

Lab ID: 1104400-005 **Matrix:** Soil

Analyses		Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TOTAL MERCURY	SW7471B					(SW747	1)			
Mercury		0.0598	J	0.0405	0.116	mg/Kg-dry	144746	1	04/11/2011 15:32	MP
METALS, TOTAL	SW6010C					(SW305	0B)			
Arsenic		2.70	J	0.574	5.39	mg/Kg-dry	144612	1	04/11/2011 12:57	TA
Barium		142		0.0824	5.39	mg/Kg-dry	144612	1	04/11/2011 12:57	TA
Cadmium		1.37	J	0.0626	2.00	mg/Kg-dry	144612	1	04/11/2011 12:57	TA
Chromium		68.7		0.0949	2.69	mg/Kg-dry	144612	1	04/11/2011 12:57	TA
Lead		406		0.295	5.39	mg/Kg-dry	144612	1	04/11/2011 12:57	TA
Selenium		BRL		0.833	4.31	mg/Kg-dry	144612	2	04/11/2011 14:39	TA
Silver		0.173	J	0.0383	2.00	mg/Kg-dry	144612	1	04/11/2011 12:57	TA
PERCENT MOISTU	RE D2216									
Percent Moisture		15.4		0	0	wt%	R194515	1	04/11/2011 11:00	AS

Qualifiers: * Value exceeds maximum contaminant level

BRL Not detected at MDL

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

NC Not confirmed

E Estimated value above quantitation range

S Spike Recovery outside limits due to matrix

J Estimated value detected below Reporting Limit

> Greater than Result value

< Less than Result value

Narr See case narrative

20-Apr-11

Sample/Cooler Receipt Checklist

Client Peachtree		Work Orde	r Number	1104400
Checklist completed by Signature Date	<u>/w/11</u>			
Carrier name: FedEx UPS Courier Client US	S Mail Other	·		
Shipping container/cooler in good condition?	Yes 🗹	No	Not Present	
Custody seals intact on shipping container/cooler?	Yes	No	Not Present $\underline{\hspace{0.2cm}}$	
Custody seals intact on sample bottles?	Yes _	No	Not Present _	
Container/Temp Blank temperature in compliance? (4°C±2)*	Yes 🖊	No _		
Cooler #1 3.9 Cooler #2 Cooler #3	_ Cooler #4 _	Coo	oler#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 i	No _		
Proceed with Standard TAT as per project history?	Yes	No _	Not Applicable	; <u> </u>
Water - VOA vials have zero headspace? No VOA vials su	bmitted	Yes _	No	
Water - pH acceptable upon receipt?	Yes _	No	Not Applicable	:
Adjusted? Sample Condition: Good Other(Explain)				
(For diffusive samples or AIHA lead) Is a known blank include	ed? Yes	N	io /	

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

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

Peachtree Environmental Davidson Kennedy 1104400 Client:

Project Name: Workorder:

ANALYTICAL QC SUMMARY REPORT

Date: 12-Apr-11

BatchID: 144612

Result RPT Limit SPK Netlva SPK Netl	Sample ID: MB-144612	Client ID:				Units:	its: mg/Kg			04/08/2011		
Part	SampleType: MBLK	TestCode:	METALS, TOTAL	SW6010C		Bat	chID: 144612	Anal		4/11/2011	Seq No: 4057825	
BRL Sol Color	Analyte	Result	RPT Limit		SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref V	_	RPD Limit	Qual
PRL S500 0 0 0 0 0 0 0 0 0	Arsenic	BRL	5.00	0	0	0	0	0	0	0	0	
Minite BRL 2.50 0 0 0 0 0 0 0 0 0	Barium	BRL	5.00	0	0	0	0	0	0	0	0	
He He Le Sido	Cadmium	BRL	2.50	0	0	0	0	0	0	0	0	
PRL Sign S	Chromium	BRL	2.50	0	0	0	0	0	0	0	0	
BRL Sign S	Lead	BRL	5.00	0	0	0	0	0	0	0	0	
PRID: LCS-14612 Client ID: LCS-14612 C	Selenium	BRL	5.00	0	0	0	0	0	0	0	0	
Parch LCS H4612 Client Discription Client Client Discription Client Discription Client Discription Client	Silver	BRL	2.50	0	0	0	0	0	0	0	0	
	Sample ID: LCS-144612	Client ID:				Uni				4/08/2011	Run No: 194439	
Control Cont	SampleType: LCS	TestCode:		SW6010C		Bat	chID: 144612	Anal		4/11/2011	Seq No: 4057824	
Harman H	Analyte	Result	RPT Limit		SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref V		RPD Limit	Qual
um 48.20 5.00 50 96.4 80 120 0 0 0 96.4 80 120 0 0 0 0 96.4 80 120 0	Arsenic	46.63	5.00	50	0	93.3	80	120	0	0	0	
ium 46.89 2.50 50 0.0 9.38 80 120 0.0	Barium	48.20	5.00	50	0	96.4	80	120	0	0	0	
ium 49.82	Cadmium	46.89	2.50	50	0	93.8	08	120	0	0	0	
Hand	Chromium	49.82	2.50	50	0.2124	99.2	80	120	0	0	0	
Hand	Lead	47.27	5.00	50	0	94.5	80	120	0	0	0	
10 11 11 11 14 13 Client ID: Sw6010C	Selenium	46.01	5.00	50	0	92	80	120	0	0	0	
Figure 1104403-006AMS Client ID: Sw610C	Silver	4.703	2.50	S	0	94.1	80	120	0	0	0	
Para Result RPT Limit SPK value SPK Ref Val 9/REC Low Limit High Limit RPD Ref Val 9/RPD	Sample ID: 1104403-006AMS SampleType: MS	Client ID: TestCode:		SW6010C		Uni Bat	;;		ate:	4/08/2011	Run No: 194439 Seq No: 4057829	
m 45.94 4.90 49.03 0.5664 92.5 75 125 0 0 m 46.79 2.45 49.03 9.108 102 75 125 0 0 lm 46.79 2.45 49.03 3.886 103 75 125 0 0 s Greater than Result value 1 Less than Result value 1 1 Analyte detected in the associated method blank BRL Below reporting limit 1 Analyte not NELAC certified 1 Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified R PHO outside limits due to matrix RPI Limit Reporting Limit Spike Recovery outside limits due to matrix R RPD outside limits due to matrix	Analyte	Result			SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref V		RPD Limit	Qual
m 46.79 49.03 9.108 102 75 125 0 0 um 46.79 2.45 49.03 0 95.4 75 125 0 0 um 54.27 2.45 49.03 3.886 103 75 125 0 0 > Creator than Result value Less than Result value Less than Result value Analyte of value above quantitation range) 75 125 0 0 BRL Below reporting limit Analyte not NELAC certified Analyte not NELAC certified R Politing times for preparation or analysis exceeded 9 Estimated value detected below Reporting Limit N Analyte not NELAC certified R Politing times for paratix R Politing times for paratix	Arsenic	45.94	4.90	49.03	0.5664	92.5	75	125	0	0	0	
m 46.79 2.45 49.03 0 95.4 75 125 0 0 Jm 54.27 2.45 49.03 3.886 103 75 125 0 0 State of the reporting limit > Less than Result value Less than Result value BRL Analyte detected below Reporting Limit Analyte not NELAC certified BR Holding times for preparation or analysis exceeded BRL Estimated value detected below Reporting Limit Analyte not NELAC certified BR RPD outside limits due to matrix RP Limit Reporting Limit Spike Recovery outside limits due to matrix RR RPD outside limits due to matrix	Barium	59.00	4.90	49.03	9.108	102	75	125	0	0	0	
Image: Time of the standard of	Cadmium	46.79	2.45	49.03	0	95.4	75	125	0	0	0	
S Greater than Result value SRL Below reporting limit J Estimated value detected below Reporting Limit Spike Recovery outside limits due to matrix Spike Recovery outside limits due to matrix	Chromium	54.27	2.45	49.03	3.886	103	75	125	0	0	0	
Below reporting limit Estimated (value above quantitation range) H Analyte not NELAC certified N Analyte not NELAC certified R Impropring Limit S Spike Recovery outside limits due to matrix	٨	alue			han Result value				nalyte detected in t	he associated method	blank	
detected below Reporting Limit N Analyte not NELAC certified R Spike Recovery outside limits due to matrix					tted (value above quantita	tion range)			olding times for pr	eparation or analysis e	papaax	
S		cted below Reporting	Limit		te not NELAC certified				PD outside limits	lue to matrix		
	Rpt Lim Reporting Limit				Recovery outside limits d	ue to matrix						

Date: 12-Apr-11

ANALYTICAL QC SUMMARY REPORT

Peachtree Environmental Davidson Kennedy 1104400 Project Name: Client:

Workorder:

	194439
71.0	Run No. 194439
Batch1D: 144612	04/08/2011
	Pren Date:
	mo/Ko
	Units.

Sample ID: 1104403-006AMS SampleType: MS	Client ID: TestCode: M	Client ID: TestCode: METALS, TOTAL	SW6010C		Units: BatchII	Units: mg/Kg BatchID: 144612	Prep Anal	Prep Date: 04/08/2011 Analysis Date: 04/11/2011		Run No: 194439 Seq No: 4057829
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	Low Limit High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Lead	49.97	4.90	49.03	3.297	95.2	75	125	0	0	0
Selenium	43.77	4.90	49.03	0	89.3	75	125	0	0	0
Silver	4.738	2.45	4.903	0	9.96	75	125	0	0	0
Sample ID: 1104403-006AMSD SampleType: MSD	Client ID: TestCode: M	Client ID: TestCode: METALS, TOTAL	SW6010C		Units: BatchII	Units: mg/Kg BatchID: 144612	Prep Anal	Prep Date: 04/08/2011 Analysis Date: 04/11/2011		Run No: 194439 Seq No: 4057831
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Arsenic	44.63	4.92	49.23	0.5664	89.5	75	125	45.94	2.91	20
Barium	58.36	4.92	49.23	9.108	100	75	125	59.00	1.09	20
Cadmium	45.42	2.46	49.23	0	92.3	75	125	46.79	2.98	20
Chromium	52.51	2.46	49.23	3.886	8.86	75	125	54.27	3.3	20
Lead	48.77	4.92	49.23	3.297	92.4	75	125	49.97	2.41	20
Selenium	42.72	4.92	49.23	0	8.98	75	125	43.77	2.42	20
Silver	4.560	2.46	4.923	0	92.6	75	125	4.738	3.84	20

Date: 12-Apr-11

ANALYTICAL QC SUMMARY REPORT

ANALYTICAL QC SUMMARY REPORT	BatchID: 144746	Prep Date: 04/11/2011 Run No: 194504 Analysis Date: 04/11/2011 Seq No: 4058151
ANALYI		7 1
		Units: mg/Kg BatchID: 144746
ital		Client ID: TestCode: TOTAL MERCURY SW7471B
Peachtree Environmental Davidson Kennedy	1104400) 9t
Client: Project Name:	Workorder:	Sample ID: MB-144746 SampleType: MBLK

	:						,			
Sample ID: MB-144746 SampleType: MBLK	Client ID: TestCode: TO	Client ID: TestCode: TOTAL MERCURY S	SW7471B		Units: BatchI	Units: mg/kg BatchID: 144746	Prep Date: Analysis D	ate:		Kun No: 194504 Seq No: 4058151
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	BRL	0.100	0	0	0	0	0	0	0	0
Sample ID: LCS-144746 SampleType: LCS	Client ID: TestCode: TO	Client ID: TestCode: TOTAL MERCURY SW7471B	W7471B		Units: BatchII	Units: mg/Kg BatchID: 144746	Prep Date: Analysis D	ate:		Run No: 194504 Seq No: 4058155
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	Low Limit High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.4361	0.100	0.4	0	109	80	120	0	0	0
Sample ID: 1104403-001AMS SampleType: MS	Client ID: TestCode: TO	Client ID: TestCode: TOTAL MERCURY SW7471B	W7471B		Units: BatchI	Units: mg/Kg BatchID: 144746	Prep Date: Analysis D	ate:	04/11/2011 04/11/2011	Run No: 194504 Seq No: 4058164
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	Low Limit High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.4339	0.0990	0.396	0	110	70	130	0	0	0
Sample ID: 1104403-001AMSD SampleType: MSD	Client ID: TestCode: TO	Client ID: TestCode: TOTAL MERCURY S	SW7471B		Units: BatchII	Units: mg/Kg BatchID: 144746	Prep Date: Analysis D	ate:	04/11/2011 04/11/2011	Run No: 194504 Seq No: 4058168
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.4353	0.0988	0.3953	0	110	70	130	0.4339	0.332	30

Qualifiers:	٨	Greater than Result value	c Less than Result value	B Analyte detected in the associated method blank
	BRL	BRL Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded
	ſ	J Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
	Rpt Li	pt Lim Reporting Limit	S Spike Recovery outside limits due to matrix	







Department of Health, Bureau of Laboratories This is to certify that State of Florida

E87582

ANALYTICAL ENVIRONMENTAL SERVICES, INC. 3785 PRESIDENTIAL PARKWAY ATLANTA, GA 30340

for the examination of Environmental samples in the following categories has complied with Elorida Administrative Code 64E-1,

DRINKING WATER - MICROBIOLOGY, NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

EFFECTIVE July 01, 2010 THROUGH June 30, 2011



Supersedes all previously issued certificates NON-TRANSFERABLE E87582-15-07/01/2010 Chief, Bureau of Laboratories Florida Department of Health DH Form 1697, 7/04 Max Salfinger, M.D

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



April 06, 2011

Michael H. Wilson Peachtree Environmental 5384 Chaversham Lane Norcross GA 300922167

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

RE: Davidson Kennedy Site

Dear Michael H. Wilson: Order No: 1102H61

Analytical Environmental Services, Inc. received 5 samples on 2/21/2011 2:45:00 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 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

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.

Alysse Kowalski

Project Manager

Revision 4/6/2011

Chysse Kount

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

Work Order: \\0246

CHAIN OF CUSTODY

Page

7-5-11

No # of Containers S your results, place bottle to check on the status of **Furnaround Time Request** Standard 5 Business Days www.aesatlanta.com Visit our website 2 Business Day Rush Total # of Containers orders, etc. REMARKS 80000 Davidson Kenneds Site ANALYSIS REQUESTED PROJECT INFORMATION PRESERVATION (See codes) SITE ADDRESS: WAYKNAM, G.P. ROJECT NAME ROJECT #: DATE/TIME 5384 One vershim Ln. (See codes) Norwess, GA 30092 000 5.21/17/ Viatrix Composite Grab 3 FAX: 770 | 444 1950 517 330 270 1400 TIME SAMPI RECEIVED BY DATE 12-2 Peachtree Environmental, tx. DATE/TIME Michael H-Witzer 045 HONE 770 | 449- 6100 DIC- 0211 - 1363 OK-0211- B64 DK-0211-462 SAMPLE ID DK-0211- 15F DK-0211

AMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT. <u>SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.</u>

Adex UPS MAIL COURIER

OTHER

GREYHOUND

VIA

QUOTE #:

O = Other (specify) NA = None
White Copy - Original: Yellow Copy - Client W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water SE = Sediment SO = Soil SW = Surface Water GW = Groundwater MATRIX CODES: A = Air PRESERVATIVE CODES:

 \geq

Ξ

DATA PACKAGE

E-mail?

Fax? Y

STATE PROGRAM (if any):

Other

Same Day Rush (auth req.)

Next Business Day Rush

SEND REPORT TO: THINK & WILLSON

IF DIFFERENT FROM ABOVE)

INVOICE TO:

SHIPMENT METHOD VIA

> OUT Z

SPECIAL INSTRUCTIONS/COMMENTS

ELINQUISHED BY

01

7

Client: Peachtree Environmental
Project: Davidson Kennedy Site

Lab ID: 1102H61

Case Narrative

Date:

6-Apr-11

Per Michael Wilson on 3/30/11 all samples were taken off hold and analyzed for the following additional metals: Total Cd, Cr, Se, Ag, and Hg at standard TAT. Per Michael Wilson, the lab proceeded with Mercury analysis out of hold.

Client: Peachtree Environmental Client Sample ID: DK-0211-BG1

Project Name: Davidson Kennedy Site Collection Date: 2/21/2011 1:30:00 PM

Date:

6-Apr-11

Lab ID: 1102H61-001 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				(SW)	7471)			
Mercury	0.145	0.132	Н	mg/Kg-dry	144366	1	04/04/2011 15:49	JR
METALS, TOTAL SW6010C				(SW3	3050B)			
Arsenic	17.4	6.55		mg/Kg-dry	142436	1	02/23/2011 12:50	MP
Barium	87.2	6.55		mg/Kg-dry	142436	1	02/23/2011 12:50	MP
Cadmium	BRL	3.28		mg/Kg-dry	142436	1	02/23/2011 12:50	MP
Chromium	31.7	3.28		mg/Kg-dry	142436	1	02/23/2011 12:50	MP
Lead	109	6.55		mg/Kg-dry	142436	1	02/23/2011 12:50	MP
Selenium	BRL	6.55		mg/Kg-dry	142436	1	02/23/2011 12:50	MP
Silver	BRL	3.28		mg/Kg-dry	142436	1	02/23/2011 12:50	MP
PERCENT MOISTURE D2216								
Percent Moisture	26.7	0		wt%	R191156	5 1	02/23/2011 17:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative NC Not confirmed

< Less than Result value

Client: Peachtree Environmental Client Sample ID: DK-0211-BG2

Project Name: Davidson Kennedy Site Collection Date: 2/21/2011 1:40:00 PM

Date:

6-Apr-11

Lab ID: 1102H61-002 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				(SW	7471)			
Mercury	BRL	0.124	Н	mg/Kg-dry	144366	1	04/04/2011 14:40	JR
METALS, TOTAL SW6010C				(SW:	3050B)			
Arsenic	12.3	5.85		mg/Kg-dry	142436	1	02/23/2011 12:54	MP
Barium	121	5.85		mg/Kg-dry	142436	1	02/23/2011 12:54	MP
Cadmium	BRL	2.92		mg/Kg-dry	142436	1	02/23/2011 12:54	MP
Chromium	38.1	2.92		mg/Kg-dry	142436	1	02/23/2011 12:54	MP
Lead	43.9	5.85		mg/Kg-dry	142436	1	02/23/2011 12:54	MP
Selenium	BRL	5.85		mg/Kg-dry	142436	1	02/23/2011 12:54	MP
Silver	BRL	2.92		mg/Kg-dry	142436	1	02/23/2011 12:54	MP
PERCENT MOISTURE D2216								
Percent Moisture	20.1	0		wt%	R191156	5 1	02/23/2011 17:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative NC Not confirmed

< Less than Result value

Client: Peachtree Environmental Client Sample ID: DK-0211-BG3

Project Name: Davidson Kennedy Site Collection Date: 2/21/2011 1:50:00 PM

Date:

6-Apr-11

Lab ID:1102H61-003Matrix:Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				(SW	7471)			
Mercury	BRL	0.121	Н	mg/Kg-dry	144366	1	04/04/2011 14:42	JR
METALS, TOTAL SW6010C				(SW:	3050B)			
Arsenic	20.8	5.79		mg/Kg-dry	142436	1	02/23/2011 12:58	MP
Barium	116	5.79		mg/Kg-dry	142436	1	02/23/2011 12:58	MP
Cadmium	BRL	2.90		mg/Kg-dry	142436	1	02/23/2011 12:58	MP
Chromium	54.9	2.90		mg/Kg-dry	142436	1	02/23/2011 12:58	MP
Lead	95.8	5.79		mg/Kg-dry	142436	1	02/23/2011 12:58	MP
Selenium	BRL	5.79		mg/Kg-dry	142436	1	02/23/2011 12:58	MP
Silver	BRL	2.90		mg/Kg-dry	142436	1	02/23/2011 12:58	MP
PERCENT MOISTURE D2216								
Percent Moisture	17.6	0		wt%	R191156	1	02/23/2011 17:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client: Peachtree Environmental Client Sample ID: DK-0211-BG4

Project Name: Davidson Kennedy Site Collection Date: 2/21/2011 2:00:00 PM

Date:

6-Apr-11

Lab ID: 1102H61-004 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				(SW	7471)			
Mercury	BRL	0.115	Н	mg/Kg-dry	144366	1	04/04/2011 14:44	JR
METALS, TOTAL SW6010C				(SW:	3050B)			
Arsenic	BRL	5.76		mg/Kg-dry	142436	1	02/23/2011 12:16	MP
Barium	61.3	5.76		mg/Kg-dry	142436	1	02/23/2011 12:16	MP
Cadmium	BRL	2.88		mg/Kg-dry	142436	1	02/23/2011 12:16	MP
Chromium	36.0	2.88		mg/Kg-dry	142436	1	02/23/2011 12:16	MP
Lead	32.9	5.76		mg/Kg-dry	142436	1	02/23/2011 12:16	MP
Selenium	BRL	5.76		mg/Kg-dry	142436	1	02/23/2011 12:16	MP
Silver	BRL	2.88		mg/Kg-dry	142436	1	02/23/2011 12:16	MP
PERCENT MOISTURE D2216								
Percent Moisture	14.2	0		wt%	R191156	5 1	02/23/2011 17:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client: Peachtree Environmental Client Sample ID: DK-0211-BG5

Project Name: Davidson Kennedy Site Collection Date: 2/21/2011 2:15:00 PM

Date:

6-Apr-11

Lab ID: 1102H61-005 Matrix: Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				(SW7	7471)			
Mercury	BRL	0.133	Н	mg/Kg-dry	144366	1	04/04/2011 14:47	JR
METALS, TOTAL SW6010C				(SW3	8050B)			
Arsenic	8.27	6.32		mg/Kg-dry	142436	1	02/23/2011 13:02	MP
Barium	59.0	6.32		mg/Kg-dry	142436	1	02/23/2011 13:02	MP
Cadmium	BRL	3.16		mg/Kg-dry	142436	1	02/23/2011 13:02	MP
Chromium	57.4	3.16		mg/Kg-dry	142436	1	02/23/2011 13:02	MP
Lead	36.1	6.32		mg/Kg-dry	142436	1	02/23/2011 13:02	MP
Selenium	BRL	6.32		mg/Kg-dry	142436	1	02/23/2011 13:02	MP
Silver	BRL	3.16		mg/Kg-dry	142436	1	02/23/2011 13:02	MP
PERCENT MOISTURE D2216								
Percent Moisture	25.5	0		wt%	R191156	5 1	02/23/2011 17:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Sample/Cooler Receipt Checklist

Client Peachtree Env		Work Order	r Number	1102461
Checklist completed by	<u>la III</u>			
Carrier name: FedEx UPS Courier Client US	S Mail Other	r	_	
Shipping container/cooler in good condition?	Yes V	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? (4°C±2)*	Yes	No		
Cooler #1 Cooler #2 Cooler #3	_ Cooler #4 _	Coc	oler#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 V	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 su	bmitted	Yes	No	
Water - pH acceptable upon receipt?	Yes	No _	Not Applicable	<u> </u>
/ Adjusted?				
Sample Condition: Good Other(Explain)				
(For diffusive samples or AIHA lead) Is a known blank includ	ed? Yes	N	lo 🗸	

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists\Sample_Cooler_Receipt_Checklists\Sample_Cooler_Receipt_Checklists

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

Date: 6-Apr-11

Client: Peachtree Environmental Project: Davidson Kennedy Site

Lab Order: 1102H61

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1102H61-001A	DK-0211-BG1	2/21/2011 1:30:00PM	Soil	TOTAL METALS BY ICP		02/22/2011	02/23/2011
1102H61-001A	DK-0211-BG1	2/21/2011 1:30:00PM	Soil	MERCURY		04/04/2011	04/04/2011
1102H61-001A	DK-0211-BG1	2/21/2011 1:30:00PM	Soil	PERCENT MOISTURE			02/23/2011
1102H61-002A	DK-0211-BG2	2/21/2011 1:40:00PM	Soil	TOTAL METALS BY ICP		02/22/2011	02/23/2011
1102H61-002A	DK-0211-BG2	2/21/2011 1:40:00PM	Soil	MERCURY		04/04/2011	04/04/2011
1102H61-002A	DK-0211-BG2	2/21/2011 1:40:00PM	Soil	PERCENT MOISTURE			02/23/2011
1102H61-003A	DK-0211-BG3	2/21/2011 1:50:00PM	Soil	TOTAL METALS BY ICP		02/22/2011	02/23/2011
1102H61-003A	DK-0211-BG3	2/21/2011 1:50:00PM	Soil	MERCURY		04/04/2011	04/04/2011
1102H61-003A	DK-0211-BG3	2/21/2011 1:50:00PM	Soil	PERCENT MOISTURE			02/23/2011
1102H61-004A	DK-0211-BG4	2/21/2011 2:00:00PM	Soil	TOTAL METALS BY ICP		02/22/2011	02/23/2011
1102H61-004A	DK-0211-BG4	2/21/2011 2:00:00PM	Soil	MERCURY		04/04/2011	04/04/2011
1102H61-004A	DK-0211-BG4	2/21/2011 2:00:00PM	Soil	PERCENT MOISTURE			02/23/2011
1102H61-005A	DK-0211-BG5	2/21/2011 2:15:00PM	Soil	TOTAL METALS BY ICP		02/22/2011	02/23/2011
1102H61-005A	DK-0211-BG5	2/21/2011 2:15:00PM	Soil	MERCURY		04/04/2011	04/04/2011
1102H61-005A	DK-0211-BG5	2/21/2011 2:15:00PM	Soil	PERCENT MOISTURE			02/23/2011

Client: Peachtree Environmental
Project Name: Davidson Kennedy Site

1102H61

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Workorder:

ANALYTICAL QC SUMMARY REPORT

Date:

6-Apr-11

BatchID: 142436

Sample ID: MB-142436 SampleType: MBLK	Client ID: TestCode:	METALS, TOTAL S	SW6010C		Un Bat	its: mg/Kg chID: 142436		p Date: 02/22 alysis Date: 02/23	/2011 /2011	Run No: 19107 9 Seq No: 39871 9	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	5.00	0	0	0	0	0	0	0	0	
Barium	BRL	5.00	0	0	0	0	0	0	0	0	
Cadmium	BRL	2.50	0	0	0	0	0	0	0	0	
Chromium	BRL	2.50	0	0	0	0	0	0	0	0	
Lead	BRL	5.00	0	0	0	0	0	0	0	0	
Selenium	BRL	5.00	0	0	0	0	0	0	0	0	
Silver	BRL	2.50	0	0	0	0	0	0	0	0	
Sample ID: LCS-142436 SampleType: LCS	Client ID: TestCode:	METALS, TOTAL S	SW6010C		Un Bat	its: mg/Kg cchID: 142436		p Date: 02/22 alysis Date: 02/23	/2011 /2011	Run No: 19107 9 Seq No: 39871 9	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	50.84	5.00	50	0	102	80	120	0	0	0	
Barium	51.14	5.00	50	0	102	80	120	0	0	0	
Cadmium	50.25	2.50	50	0	101	80	120	0	0	0	
Chromium	51.88	2.50	50	0.1301	103	80	120	0	0	0	
Lead	49.46	5.00	50	0	98.9	80	120	0	0	0	
Selenium	50.70	5.00	50	0	101	80	120	0	0	0	
Silver	5.060	2.50	5	0	101	80	120	0	0	0	
Sample ID: 1102H61-004AMS SampleType: MS		DK-0211-BG4 METALS, TOTAL S	SW6010C		Un Bat	its: mg/Kg- chID: 142436	·	p Date: 02/22 alysis Date: 02/23	/2011 /2011	Run No: 19107 Seq No: 39872	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qua
Arsenic	47.80	5.75	57.45	4.077	76.1	75	125	0	0	0	
Barium	99.72	5.75	57.45	61.27	66.9	75	125	0	0	0	S
Cadmium	48.66	2.87	57.45	0	84.7	75	125	0	0	0	
Chromium	81.87	2.87	57.45	36.02	79.8	75	125	0	0	0	
Qualifiers: > Greater than Result val	ue		< Less	than Result value			В	Analyte detected in the ass	ociated method	blank	
BRL Below reporting limit			E Estim	ated (value above quantit	ation range)		Н	Holding times for preparat			

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

R RPD outside limits due to matrix

Client: Peachtree Environmental

ANALYTICAL QC SUMMARY REPORT

Date:

6-Apr-11

BatchID: 142436

Chent.	i cacitice Environmental
Project Name:	Davidson Kennedy Site

1102H61

Workorder:

Sample ID: 1102H61-004AMS SampleType: MS		DK-0211-BG4 METALS, TOTAL	SW6010C		Uni Bat	ts: mg/Kg- chID: 142436	•	ep Date: 02/2 alysis Date: 02/2	2/2011 3/2011	Run No: 19107 Seq No: 39872	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	72.81	5.75	57.45	32.92	69.4	75	125	0	0	0	S
Selenium	41.17	5.75	57.45	0	71.7	75	125	0	0	0	S
Silver	4.711	2.87	5.745	0	82	75	125	0	0	0	
Sample ID: 1102H61-004AMSD	Client ID: 1	DK-0211-BG4			Uni	ts: mg/Kg-	dry Pro	ep Date: 02/2	2/2011	Run No: 19107	'9
SampleType: MSD	TestCode:	METALS, TOTAL	SW6010C		Bat	chID: 142436	Ar	alysis Date: 02/2	3/2011	Seq No: 39872	204
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Oual

Sample Type: MSD	l'estCode: ME	IALS, IOIAL	5 VV 0010C		Ват	cnID: 142436	Ana	lysis Date: 02/23/	2011 5	eq No: 398/2	04
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	48.70	5.74	57.4	4.077	77.7	75	125	47.80	1.86	20	
Barium	102.2	5.74	57.4	61.27	71.4	75	125	99.72	2.5	20	S
Cadmium	49.22	2.87	57.4	0	85.8	75	125	48.66	1.15	20	
Chromium	84.23	2.87	57.4	36.02	84	75	125	81.87	2.84	20	
Lead	72.30	5.74	57.4	32.92	68.6	75	125	72.81	0.71	20	S
Selenium	40.69	5.74	57.4	0	70.9	75	125	41.17	1.16	20	S
Silver	4.796	2.87	5.74	0	83.6	75	125	4.711	1.8	20	

Qualifiers: Greater than Result value

> BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Client: Peachtree Environmental

ANALYTICAL QC SUMMARY REPORT

Date:

6-Apr-11

BatchID: 144366

Chent.	1 cucini ce Environmentai
Project Name:	Davidson Kennedy Site
Workorder:	1102H61

Sample ID: MB-144366 Client ID: Run No: 194033 Units: mg/Kg Prep Date: 04/04/2011 SampleType: MBLK TestCode: TOTAL MERCURY SW7471B BatchID: 144366 Analysis Date: 04/04/2011 Seq No: 4048298 Analyte Result **RPT Limit** SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val %RPD RPD Limit Oual BRL 0.100 0 0 0 0 0 0 0 0 Mercury Sample ID: LCS-144366 Client ID: Units: mg/Kg Prep Date: 04/04/2011 Run No: 194033 SampleType: LCS TestCode: TOTAL MERCURY SW7471B Seq No: 4048302 BatchID: 144366 Analysis Date: 04/04/2011 Result **RPT Limit** SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val %RPD RPD Limit Qual Analyte 80 Mercury 0.3629 0.100 0.4 0 90.7 120 0 0 0 Sample ID: 1103P24-009BMS mg/Kg-dry Prep Date: 04/04/2011 Run No: 194033 Client ID: Units: TestCode: TOTAL MERCURY SW7471B BatchID: 144366 Analysis Date: 04/04/2011 SampleType: MS Seq No: 4048309 SPK value SPK Ref Val %REC Analyte Result **RPT Limit** Low Limit High Limit RPD Ref Val %RPD RPD Limit Qual 0.5726 0.127 0.5089 0 113 70 130 0 0 0 Mercury Sample ID: 1103P24-009BMSD Client ID: Prep Date: 04/04/2011 Run No: 194033 Units: mg/Kg-dry TestCode: TOTAL MERCURY SW7471B SampleType: MSD BatchID: 144366 Analysis Date: 04/04/2011 Seq No: 4048311 Analyte Result **RPT** Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val %RPD RPD Limit Qual

Qualifiers: > Greater than Result value

Mercury

BRL Below reporting limit

Estimated value detected below Reporting Limit

0.5816

Rpt Lim Reporting Limit

Less than Result value

0.5079

0.127

Estimated (value above quantitation range)

0

115

70

Analyte not NELAC certified

Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

0.5726

130

30

1.56







State of Florida Department of Health, Bureau of Laboratories

This is to certify that

E87582

ANALYTICAL ENVIRONMENTAL SERVICES, INC. 3785 PRESIDENTIAL PARKWAY ATLANTA, GA 30340

has complied with Florida Administrative Code 64E-1, for the examination of Environmental samples in the following categories

DRINKING WATER - MICROBIOLOGY, NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS -PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

EFFECTIVE July 01, 2010 THROUGH June 30, 2011



Max Salfinger, M.D. Chief, Bureau of Laboratories Florida Department of Health DH Form 1697, 7/04 NON-TRANSFERABLE E87582-15-07/01/2010 Supersedes all previously issued certificates



APPENDIX F
SCHEDULE

