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April 13, 2015

Ms. Maria Pineda
Capital Improvement Program
City of Miami
444 S.W. 2nd Ave. Miami, FL 33130-1910

Curtis Park Soil Management Plan
Curtis Park (HWR-777)
1901 NW 24 Ave
Miami, Florida

Contaminated soils have been identified at Curtis Park in Miami, FL Miami-Dade County Property Appraiser Folio # 01-3134-000-0330. The Extent of the soil contamination is documented in a Site Assessment Report Addendum (SARA) by SCS Engineers dated July 10, 2014. The following plan is designed to guide the management of contaminated soils encountered during construction work for the Proposed Curtis Park Boat Ramp Improvements. A copy of the SARA describing the locations of the soil contamination is included as **Attachment 1**.

The following compounds have been found in the groundwater above the groundwater cleanup target level:

- Aluminum
- Antimony
- Iron

In addition to buried solid waste the following compounds have been found in the soils above the residential direct exposure clean up target level and should be considered contaminated:

- Arsenic
- Lead
- Antimony
- Barium

The following compounds were also fond above the commercial/industrial direct exposure clean up target level and should be considered contaminated:

- Arsenic
- Lead

Soil Management

Disturbance, excavation and management of soils with contaminant concentrations above the commercial/industrial direct exposure clean up target level should only be performed by a contractor experienced in hazardous waste operations and who employs workers who have received the 40 hour HAZWOPER training as per 29 CFR 1910.120. Disturbance, excavation and management of soils with contaminant concentrations below the commercial / industrial direct exposure clean up target level can be performed by a construction contractor in adherence with this plan and all applicable, federal state and local regulations.

When soils from any contaminated areas are excavated and temporarily stored or stockpiled on-site, the soil shall be placed on an impermeable surface to prevent leachate infiltration and secured in a manner that prevents human exposure to contaminated soil and prevents soil exposure to precipitation that may cause surface runoff. Any excavation shall be secured to prevent entry by the public. The temporary storage or stockpiling of excavated contaminated soil shall not exceed 60 days, unless the excavated contaminated soil contains hazardous waste and a different time frame is authorized pursuant to Chapter 62-730, F.A.C. The Contractor is advised that other federal or local laws and regulations may apply to these activities.

Erosion Control and Dewatering

The Contractor should prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit a Notice of Intent to the U.S. EPA for coverage under EPA's National Pollutant Discharge Elimination System (NPDES) Construction General Permit. The SWPPP will detail methods for preventing soil erosion and pollution of downstream receiving waters due to stormwater runoff from construction zones and stockpiled soils, and will be a "living" document to be revised as construction phasing dictates. The SWPPP will include both structural and non-structural best management practices (BMPs) to be used during construction, and will require site inspections in accordance with the Permit during all periods when ground surfaces remain un-stabilized or stock piled soils are present. Locations for materials stockpiles, construction staging, construction trailers, and equipment storage will be identified.

Construction-period erosion and sediment controls will include both non-structural and structural BMPs. These controls should be designed, installed, and maintained in accordance with the SWPPP as well as the following documents:

- "Storm Water Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices" (EPA 832-R92-005, Sept. 1992);
- "Storm Water Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices - Summary Guidance" (EPA 833-R92-001, Oct. 1992);

Operations at the site that generate dusts form contaminated soils should be minimized during the excavation, handling, storage and transport of contaminate soils. Specific air quality mitigation measures will be as follows:

- Air monitoring for the contaminants of concern, under the supervision of a Certified Industrial Hygienist, should be performed during the operations that disturb the contaminated soils.
- Use of appropriately designed construction entrances and wheel wash facilities at all construction exists by all vehicles that would otherwise track mud or dirt onto public roadways to prevent off-site migration of soils;
- Covering of stockpiled soils with plastic sheeting;
- Wetting of exposed soils, excavations and stockpiles to prevent dust generation;
- Minimizing stockpiling of contaminated soils on site;
- Minimizing the duration that soils are left exposed.

Dewatering should not be performed without a dewatering permit, a discharge permit and a plan to mitigate any groundwater discharge contaminant concentrations above the NPDES discharge parameters.

Soil Disposal

Prior to Disposal a determination shall be made as to whether or not the contaminated soil contains hazardous waste. If the soil is known to be contaminated by hazardous waste, listed in 40 CFR Part 261 Subpart D, testing is not required to make the determination. If the soil is not known to be contaminated with listed hazardous waste, but is contaminated with any of the toxic constituents identified in 40 CFR 261.24(b) (and the contamination does not result solely from manufactured gas plant waste), then USEPA Test Method 1311, Toxicity Characteristic Leaching Procedure (TCLP) and subsequent analysis of the leachate, shall be performed on a number of samples sufficient to determine whether or not the contaminated soil exceeds maximum concentrations for the toxicity characteristics. [Refer to the contaminated media guidelines referenced in subsection 62-780.100(6), F.A.C., for guidance in managing soil that contains hazardous waste.].

- Any Soils considered Hazardous waste must be disposed of in a permitted hazardous waste landfill.
- Soils containing solid waste that is not considered hazardous waste should be disposed of in a permitted Class I Landfill.
- Soils with contaminant concentrations above the commercial / industrial direct exposure clean up target levels that are not considered hazardous waste should be disposed of in permitted Class I Landfill.
- Soils with contaminant concentrations below the commercial / industrial direct exposure clean up target levels that are not considered hazardous waste can be disposed of or reused according to all applicable federal, state and local regulations.

Decontamination of all equipment that comes in contact with contaminated soils should be performed so that the wash water is collected, tested for hazardous waste determination and disposed of accordingly.

Back Fill and Final Stabilization

All soil excavations shall be backfilled with clean fill material containing no solid waste or contaminants above the soil cleanup target levels. Final stabilization for all unpaved areas

where contaminated soil or solid waste remains shall include a vegetated one-foot of clean fill cover underlain by a non-woven geotextile. Specifications for the approved Geotextile fabric is included as **Attachment 2**. Paved areas should be covered with a minimum of one foot of clean fill prior to paving.

Reporting

All activities associated with the Excavation, Storage, Removal, Disposal or reuse of any and all soils from the contaminated areas will be documented and provided to the City Of Miami and the Miami-Dade County, Department of Regulatory and Economic Resources, Division of Environmental Resources Management (DERM). The documentation of contaminated soil removal shall contain the following information in detail, as applicable:

- The volume of contaminated soil excavated and treated or properly disposed;
- The disposal or recycling methods for contaminated soil;
- The disposal methods for other contaminated media and any investigation-derived waste;
- A scaled site map (including a graphical representation of the scale used) that shows the location(s) of all known on-site structures, the area of soil removal or treatment, and the approximate locations where all samples were collected;
- The type of field screening instrument, analytical methods, or other methods used;
- The dimensions and location of the excavation(s).
- A table that indicates the identification, depth, and field soil screening results of each sample collected;
- Depth to groundwater if encountered at the time of each excavation, measurement locations, and method used to obtain that information;
- A scaled site map (including a graphical representation of the scale used) that shows the locations and results of confirmatory soil samples in relation to the area of the soil removal; and
- Documentation or certification that confirms the proper treatment or proper disposal of the contaminated soil, or contaminated sediment, including disposal manifests, and a copy of the documentation or certification of treatment or acceptance of the contaminated soil or contaminated sediment.

If you have any questions regarding the soil management plan please contact the undersigned at 305-818-2648 or 305-818-2640 respectively.

Joshua Blanco
Environmental Scientist

4/13/15
Yudex Hasbun P.E.
Senior Engineer
#54810

Attachments:
1. Site Assessment Report Addendum (SARA) by SCS Engineers dated July 10, 2014
2. Geotextile Fabric Specifications

Environmental Consultants
and Contractors

7700 N. Kendall Drive
Suite 300
Miami, FL 33156

305 412-8185
FAX 305 412-8105
www.scsengineers.com

SCS ENGINEERS

July 10, 2014
File No. 09213010.31

Mr. Wilbur Mayorga, P.E., Chief
Environmental Monitoring and Restoration Division
Miami-Dade County Department of Regulatory and Economic Resources
701 Northwest 1st Court, 4th Floor
Miami, Florida 33136

Re: **Curtis Park (HWR-777)**
1901 NW 24 Ave
Miami, Florida

Subject: **Site Assessment Report Addendum**

Dear Mr. Mayorga:

SCS Engineers (SCS), on behalf of the City of Miami (the City), submits this Site Assessment Report Addendum (SARA) for the referenced site to the Department of Regulatory and Economic Resources, Division of Environmental Resources Management (DERM). SCS previously submitted to DERM a SAR for the site dated April 21, 2014. This SARA provides a response to DERM's comments on the Site Assessment Report (dated April 21, 2014 and submitted by SCS) as well as conclusions and recommendations based upon the supplemental assessment results.

RESPONSE TO DERM COMMENTS

Outlined below, are DERM's comments in italics, as provided in the May 29, 2014 letter (**Attachment A**), followed by our response.

Comment 1. *The concentrations of antimony and aluminum in temporary monitoring wells TMW-2 and TMW-3, respectively, exceeds the groundwater cleanup target level; additionally, the concentration of iron in TMW-3 and TMW-4 are inconsistent with the Miami-Dade County background concentration of iron in groundwater. Based on the foregoing, install permanent monitoring wells in the vicinity of the above mentioned temporary wells and sample and analyze groundwater as indicated below:*

- *The monitoring well installed in the vicinity of TMW-2 shall be sampled and the groundwater analyzed for antimony.*
- *The monitoring well installed in the vicinity of TMW-3 shall be sampled and the groundwater analyzed for aluminum and iron.*
- *The monitoring well installed in the vicinity of TMW-4 shall be sampled and the groundwater analyzed for iron.*

If resampling confirms groundwater contamination, additional assessment as needed to fully delineate the groundwater plume will be required.

Response 1. On June 3, 2014, under the supervision of SCS, JAEE Drilling, Inc. installed three permanent monitoring wells (MW-1 through MW-3) in the locations of temporary monitoring wells TMW-2 through TMW-4. The wells were installed to a total depth of 14-feet below land surface (bls) and constructed of 1.5-inch PVC with 10-feet of 0.010-inch slotted screen from 4 to 14-feet. Well Construction and Development Logs are provided in **Attachment B**. The well completion reports will be provided under separate cover.

Groundwater samples were collected from wells MW-1 through MW-3 on June 6, 2014 and submitted to a NELAP-accredited laboratory for analysis. Samples were analyzed for antimony, iron and/or aluminum via EPA Method 6010. The analytical results for the groundwater samples are summarized in **Table 1** and depicted on **Figure 1**. Groundwater sampling logs, groundwater laboratory reports, with quality control information and chain-of-custody forms, are provided in **Attachment C**.

Investigation-derived waste (development and purge water) was placed in 55-gallon drums for proper off-site disposal.

Comments 2. Based on the dioxin concentration through the 0-1 foot interval, conduct source removal, with confirmation sampling, in the right-of-way in the area of SB-70. Based on the lead concentration at the 1 to 2 feet interval DERM recommends including the 1 to 2 feet interval in the source removal.

Response 2. SCS is coordinating with the City to schedule the source removal around SB-70 and will provide the details under separate cover.

Comment 3. Offsite delineation is required as follows:

- *Along the eastern property based on the contaminant concentrations documented at soil borings SB-72, SB-73, SB-74, SB-54 and SB-76. Dioxin shall be included as a contaminant of concern for offsite delineation in the vicinity of SB-72.*
- *West of SB-40 and SB-6*
- *Additional offsite delineation is required to the north of soil borings SB-77 (arsenic only) and SB-78 through SB-81*

Response 3. Off-site delineation will be conducted after access agreements are obtained.

Comment 4. Based on the contaminant concentrations at soil boring SB-58 and SB-60 additional delineation, in the direction of the property boundary, is required and shall include analysis for dioxins.

Response 4. The analytical results for the soil samples are summarized in **Table 2** and depicted on **Figures 2** through **4**. Eight borings (SB-82 through SB-88) were advanced along the property boundary to the east, south and west of soil borings SB-58 and SB-60 with no solid waste observed. Soil samples were collected from

0-0.5 and 0.5-2 foot intervals and submitted for laboratory analyses targeting heavy metals (antimony, arsenic, barium, cadmium, copper, iron and lead) via EPA Method 6010. On June 12, 2014, via email correspondence with DERM, SCS proposed soil samples to submit for dioxin analysis. In response on June 19, 2014, DERM recommended analyzing both the 0-0.5 and 0.5-2 foot interval from soil boring SB-83. The dioxin analyses for the samples are pending; the results will be submitted under separate cover.

Soil boring logs, soil laboratory reports, with quality control information and chain-of-custody forms, are provided in **Attachment D**.

Comment 5. *The solid waste delineation provided in Figure 8 is inconsistent with the delineation provided in Figure 2. As an example Figure 2 indicates that within Area 3 (playground area) solid waste occurs below 1 foot throughout most of this area; however, based on Figure 8, solid waste occurs at 6 inch throughout most of the area. Similar inconsistencies are noted in other areas. The maps shall be revised as appropriate and included in the next submittal.*

Response 5. **Figure 5** is provided to clearly define the area(s) of visible solid waste.

Comment 6. *Offsite solid waste delineation is required outside the northeastern property boundary and additional offsite delineation is required to the north of SB-79 through SB-81.*

Response 6. Off-site delineation will be conducted after access agreements are obtained.

Comment 7. *Provide north/south and east/west cross sections indicating the vertical extent of the solid waste layer. Given the size of the park, more than one cross section maybe required in each direction.*

Response 7. **Figures 6** and **6a** depict north/south and east/west vertical cross-sections of the solid waste layer across the site with the exception of the pool area and borings advanced to the east of the baseball field. As shown, the presence of solid waste is observed across the site at varying intervals predominantly from 1 foot to 4-feet bls with intermittent pockets of waste at the 0-0.5 foot interval.

Comment 8. *Provide concentration contour for each of the major contaminants of concern for each vertical interval. The contours shall be overlaid with the solid waste distribution for that interval.*

Response 8. **Figures 7**, **7a**, **8**, **8a**, **9** and **9a** illustrate the soil analytical summary for each interval with an isocontour for each of the contaminants of concern (COCs) and the solid waste distribution for each interval.

Comment 9. *Provide a map indicating the solid waste thickness at each soil boring location.*

Response 9. **Figure 5** illustrates the depth to solid waste based on visual observation at each soil boring location overlaid with color contouring for visualization.

CONCLUSIONS AND RECOMMENDATIONS

Groundwater concentrations of antimony and iron were reported above the Groundwater Cleanup Target Levels (GCTLs) in monitoring wells MW-1 and MW-2, respectively. SCS recommends continuing groundwater monitoring of MW-1 and MW-2.

With regard to soils surrounding SB-58 and SB-60, it appears that delineation of heavy metals associated with solid waste has been achieved with the exception of arsenic to the west of SB-83.

Figure 10 illustrates arsenic contours of 2.1 mg/kg (the Residential SCTL), 5 mg/kg, 7 mg/kg and 12 mg/kg at the 0-0.5 interval. As shown, the 2.1 mg/kg contour encompasses nearly the entire site; similarly the 5 mg/kg and 7 mg/kg contours do as well. With the exception of a few locations, most notably the eastern fenceline located east of the football field/track, the 12 mg/kg contour correlates with the solid waste COC contours and/or visible solid waste.

The on-site assessment conducted to date is sufficient to develop the corrective action plan (CAP) for this site. The proposed CAP will include a two-foot clean fill cover in the playground area and a vegetated one-foot clean fill cover underlain by a high-visibility, non-woven geotextile for the remainder of the park. In addition to one-foot of clean fill cover and geotextile fabric, the baseball field may be overlaid with artificial turf.

We trust that the information included herein satisfies your comments, should you have any questions or comments, please contact the undersigned.

Sincerely,

Brittney Odom
Project Professional
SCS ENGINEERS

Eduardo F. Smith, P.E.
Vice President
SCS ENGINEERS

EDUARDO FRANCISCO SMITH LICENSE No. 50845 STATE OF FLORIDA PROFESSIONAL ENGINEER

Enclosures

Cc Mr. Jeovanny Rodriguez and Mr. Harry James, City of Miami

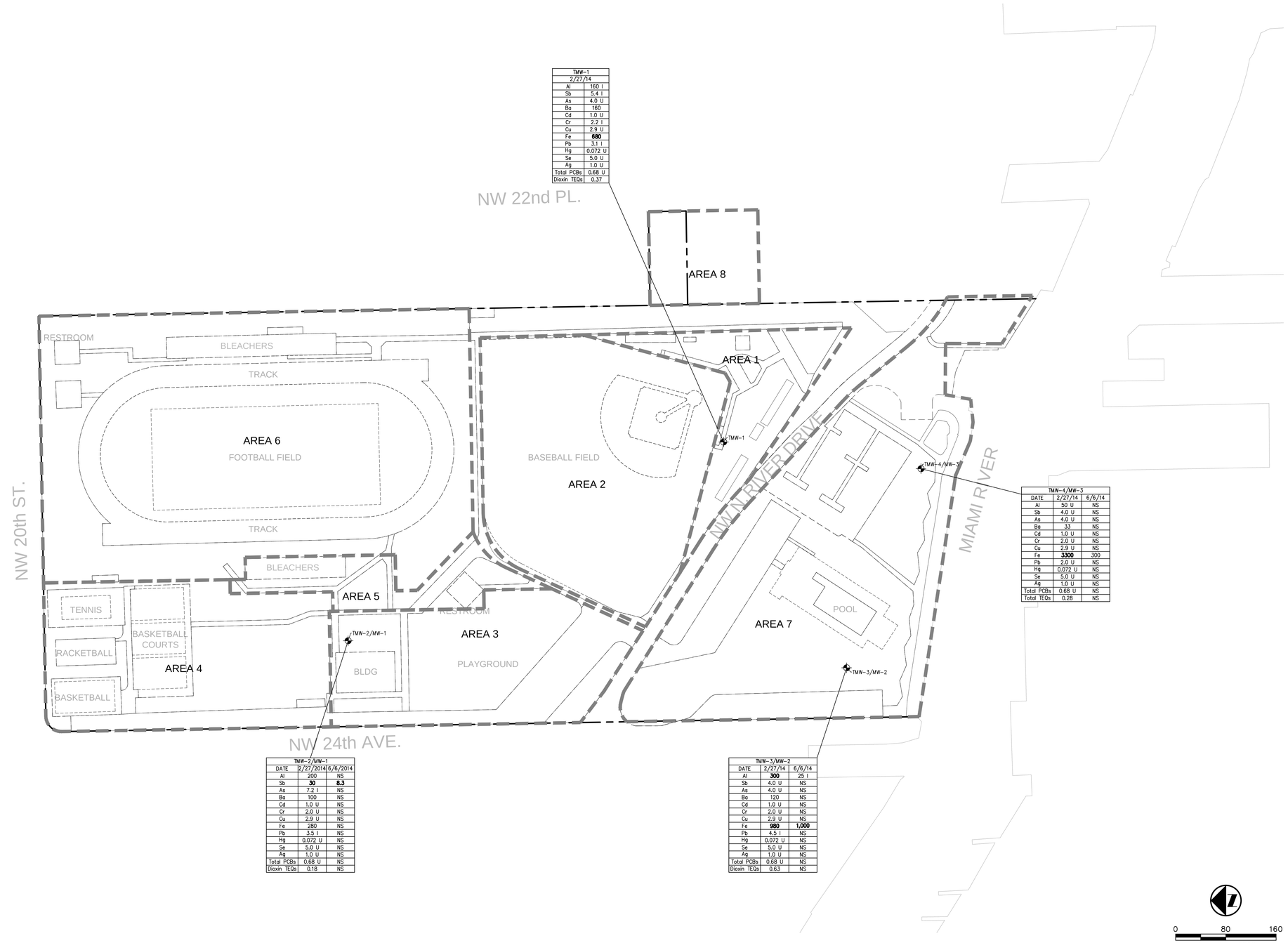
Attachments

Attachment A – Regulatory Correspondence
Attachment B – Well Construction and Development Logs
Attachment C – Groundwater Sampling Logs, Groundwater Laboratory Reports & Chain-of-Custody
Attachment D – Soil Boring Logs, Soil Laboratory Report & Chain-of-Custody

Table 1 – Groundwater Analytical Summary
Table 2 – Soil Analytical Summary

Figure 1 – Groundwater Analytical Summary
Figure 2 – Soil Analytical Summary (0-0.5)
Figure 3 – Soil Analytical Summary (0.5-1.0)
Figure 4 – Soil Analytical Summary (1.0-2.0)
Figure 5 – Depth to Solid Waste (Visual Observation)
Figure 6 – Sampling Locations Map w/ Cross-Sections
Figure 6a – Profiles of Cross Sections
Figure 7 – Soil Analytical Summary (0-0.5) w/Metal Isocontours (Sb, As, Ba, Cu, Fe & Pb)
Figure 7a – Soil Isocontours w/ Visible Solid Waste (0-0.5)
Figure 8 – Soil Analytical Summary (0.5-1.0) w/Metal Isocontours (Sb, As, Ba, Cu, Fe & Pb)
Figure 8a – Soil Isocontours w/ Visible Solid Waste (0.5-1.0)
Figure 9 – Soil Analytical Summary (1.0-2.0) w/Metal Isocontours (Sb, As, Ba, Cu, Fe & Pb)
Figure 9a – Soil Isocontours w/ Visible Solid Waste (1.0-2.0)
Figure 10 – Soil Analytical Summary (0-0.5) w/Metal Isocontours (As)

FIGURES



TMW-1	
2/27/14	
Al	160 I
Sb	5.4 I
As	4.0 U
Ba	160
Cd	1.0 U
Cr	2.2 I
Cu	2.9 U
Fe	**680**
Pb	3.1 I
Hg	0.072 U
Se	5.0 U
Ag	1.0 U
Total PCBs	0.68 U
Dioxin TEQs	0.37

TMW-4/MW-3		
DATE	2/27/14	6/6/14
Al	50 U	NS
Sb	4.0 U	NS
As	4.0 U	NS
Ba	33	NS
Cd	1.0 U	NS
Cr	2.0 U	NS
Cu	2.9 U	NS
Fe	**3300**	300
Pb	2.0 U	NS
Hg	0.072 U	NS
Se	5.0 U	NS
Ag	1.0 U	NS
Total PCBs	0.68 U	NS
Total TEQs	0.28	NS

TMW-2/MW-1		
DATE	2/27/2014	6/6/2014
Al	200	NS
Sb	**30**	**8.3**
As	7.2 I	NS
Ba	100	NS
Cd	1.0 U	NS
Cr	2.0 U	NS
Cu	2.9 U	NS
Fe	280	NS
Pb	3.5 I	NS
Hg	0.072 U	NS
Se	5.0 U	NS
Ag	1.0 U	NS
Total PCBs	0.68 U	NS
Dioxin TEQs	0.18	NS

TMW-3/MW-2		
DATE	2/27/14	6/6/14
Al	**300**	25 I
Sb	4.0 U	NS
As	4.0 U	NS
Ba	120	NS
Cd	1.0 U	NS
Cr	2.0 U	NS
Cu	2.9 U	NS
Fe	**980**	**1,000**
Pb	4.5 I	NS
Hg	0.072 U	NS
Se	5.0 U	NS
Ag	1.0 U	NS
Total PCBs	0.68 U	NS
Dioxin TEQs	0.63	NS

0 80 160
SCALE IN FEET

NOTES

µg/L – micrograms per Liter
pg/L – picograms per Liter
U – Analyte was not detected at the laboratory Method Detection Limit (MDL).
I – The reported value is between the MDL and the Laboratory Practical Quantitation Limit (PQL).
Bold – Indicates an exceedence of the Groundwater Cleanup Target Level (GCTL)

LEGEND

PROPERTY LINE

TEMPORARY / PERMANENT MONITORING WELL LOCATION

TABLE

SAMPLE ID	
DATE	
Al	µg/L
Sb	µg/L
As	µg/L
Ba	µg/L
Cd	µg/L
Cr	µg/L
Cu	µg/L
Fe	µg/L
Pb	µg/L
Hg	µg/L
Se	µg/L
Ag	µg/L
Total PCBs	µg/L
Dioxin TEQs	pg/L

CLEAN UP TARGET LEVELS (µg/L)

ANALYTE	GCTL
Al	200
Sb	6
As	10
Ba	2,000
Cd	5
Cu	1,000
Fe	300
Pb	15
Hg	2
Se	50
Ag	100
Total PCBs	0.5
Dioxin TEQs	30

REV	DATE	DESCRIPTION	CHK. BY

LICENSE NO.

SHEET TITLE
GROUNDWATER ANALYTICAL SUMMARY MAP

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31
DWN. BY: WCR
CHK. BY: MCP
Q/A RVW BY: MCP
APP. BY: EFS

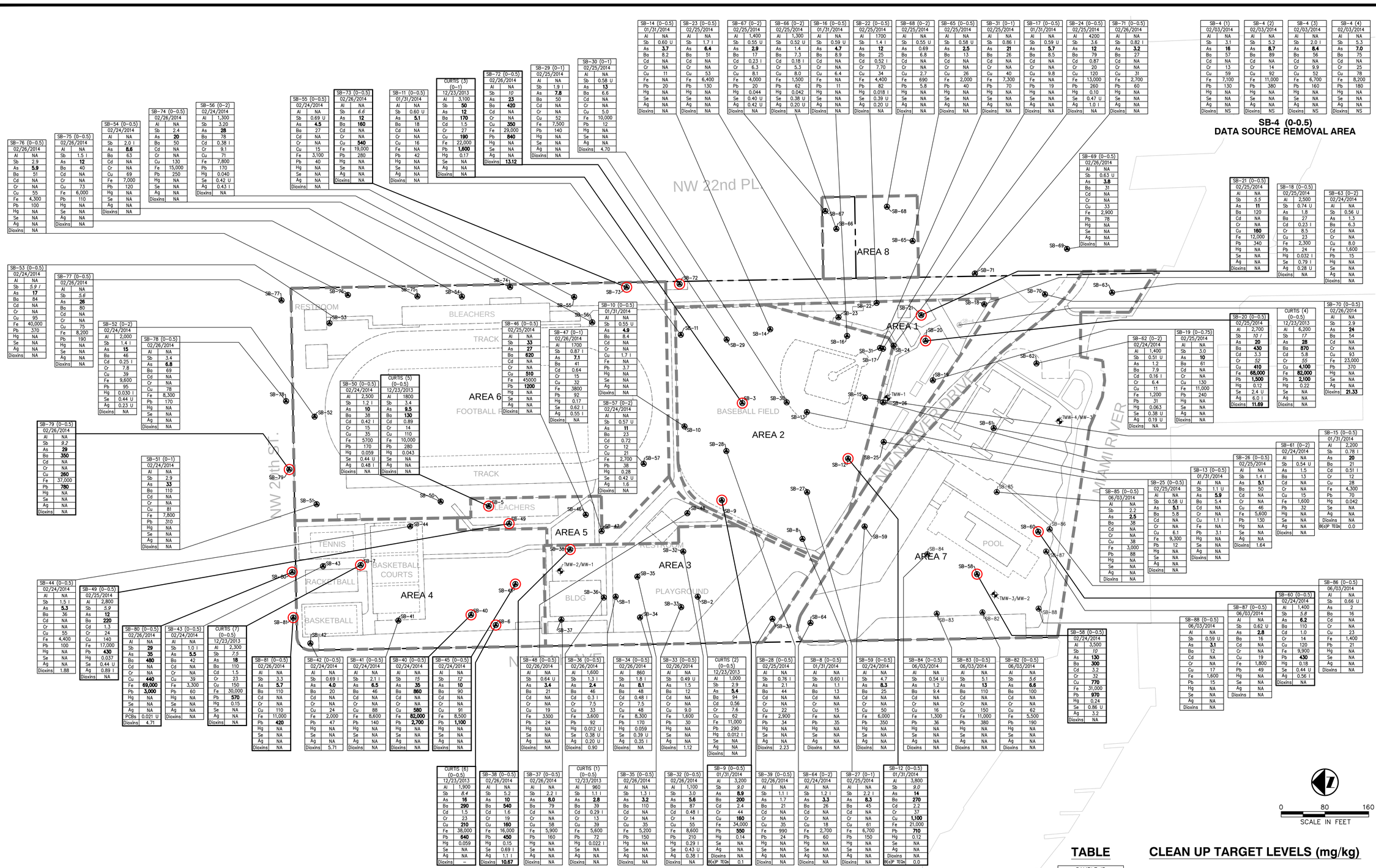
CADD FILE:

DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO.
Fig. 1
SHEET **1** of **14**

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.01 – GROUNDWATER ANALYTICAL SUMMARY MAP.dwg Jul 01, 2014 – 11:25am Layout Name: Layout By: 3618wcr



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami–Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed
NS – Not Sampled

LEGEND

— - - —	PROPERTY LINE
▲	SOIL BORING LOCATION
⊕	TEMPORARY / PERMANENT MONITORING WELL LOCATION
◉	SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
△	SOIL BORING LOCATION REMOVED

TABLE

SAMPLE ID	
DATE	
Al	mg/kg
Sb	mg/kg
As	mg/kg
Ba	mg/kg
Cd	mg/kg
Cr	mg/kg
Cu	mg/kg
Fe	mg/kg
Pb	mg/kg
Hg	mg/kg
Se	mg/kg
Ag	mg/kg
Total PCBs	mg/kg
Dioxins	ng/kg
B(a)P TEQs	mg/kg

CLEAN UP TARGET LEVELS (mg/kg)

ANALYTE	RESIDENTIAL	INDUSTRIAL	LEACHABILITY
Al	80,000	*	*
Sb	27	370	5.4
As	2.1	12	*
Ba	120	130,000	1,600
Cd	82	1,700	7.5
Cr	310	470	38
Cu	150	89,000	*
Fe	53,000	N/A	*
Pb	400	1,400	*
Hg	3	17	2.1
Se	440	11,000	5.2
Ag	410	8,200	17
Total PCBs	0.5	2.6	17
Dioxins ng/kg	7	30	3,000
Benzo(a)Pyrene Equivalent	0.1	0.7	NA

LICENSE NO.

REV	DATE	DESCRIPTION	CHK. BY
△			
△			
△			
△			
△			
△			

SHEET TITLE
SOIL ANALYTICAL SUMMARY (0-0.5)

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31
DWN. BY: WCR
Q/A RVW BY: MCP
DSN. BY: MCP
CHK. BY: MCP
APP. BY: EFS

CADD FILE:

DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO.
Fig. 2
SHEET **2** of **14**

SB-76 (0.5-1)	
02/26/2014	
Al	NA
Sb	*13*
As	**6.9**
Ba	47
Cd	NA
Cr	NA
Cu	88
Fe	12,000
Pb	**560**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-75 (0.5-1)	
02/26/2014	
Al	NA
Sb	0.73 I
As	**7.4**
Ba	24
Cd	NA
Cr	NA
Cu	38
Fe	4,800
Pb	57
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-54 (0.5-1)	
02/24/2014	
Al	NA
Sb	*6.2*
As	**14**
Ba	**140**
Cd	NA
Cr	NA
Cu	**220**
Fe	33,000
Pb	320
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-74 (0.5-1)	
02/26/2014	
Al	NA
As	**22**
Ba	33
Cd	NA
Cr	NA
Cu	51
Fe	6,300
Pb	90
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-56 (0-2)	
02/24/2014	
Al	1,300
Sb	3.20
As	**28**
Ba	78
Cd	0.38 I
Cr	9.1
Cu	71
Fe	7,800
Pb	170
Hg	0.040
Se	0.42 U
Ag	0.43 I
Dioxins	NA

SB-55 (0.5-1.5)	
02/24/2014	
Al	NA
Sb	1.6 I
As	**4.2**
Ba	34
Cd	NA
Cr	NA
Cu	58
Fe	6,900
Pb	55
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-10 (0-2)	
01/31/2014	
Al	NA
Sb	*6.7*
As	**16**
Ba	**210**
Cd	NA
Cr	NA
Cu	**280**
Fe	NA
Pb	**490**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-73 (0-1)	
02/26/2014	
Al	NA
Sb	*7.9 I*
As	**12**
Ba	**340**
Cd	NA
Cr	NA
Cu	**1,400**
Fe	NA
Pb	**670**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-11 (0.5-2)	
01/31/2014	
Al	NA
Sb	*9.5*
As	**14**
Ba	**370**
Cd	NA
Cr	NA
Cu	**1,400**
Fe	NA
Pb	**670**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-72 (0-1)	
02/26/2014	
Al	NA
Sb	**130**
As	**21**
Ba	**420**
Cd	NA
Cr	NA
Cu	**380**
Fe	25,000
Pb	**2,700**
Hg	NA
Se	NA
Ag	NA
PCBs	0.019 U
Dioxins	**12.95**

SB-29 (0-1)	
02/25/2014	
Al	NA
Sb	1.9 I
As	**7.8**
Ba	50
Cd	NA
Cr	NA
Cu	52
Fe	7,500
Pb	140
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-30 (0.5-1)	
02/25/2014	
Al	NA
Sb	0.58 U
As	**13**
Ba	66
Cd	NA
Cr	NA
Cu	5.0
Fe	10,000
Pb	12
Hg	NA
Se	NA
Ag	NA
Dioxins	4.70

SB-16 (0-2)	
01/31/2014	
Al	NA
Sb	4.1
As	**14**
Ba	**160**
Cd	NA
Cr	NA
Cu	120
Fe	NA
Pb	**500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-23 (0.5-2)	
02/25/2014	
Al	NA
Sb	*15*
As	**32**
Ba	**530**
Cd	NA
Cr	NA
Cu	**400**
Fe	**87,000**
Pb	**1,700**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-67 (0-2)	
02/25/2014	
Al	1,400
Sb	0.55 U
As	**2.9**
Ba	17
Cd	0.23 I
Cr	6.3
Cu	8.1
Fe	4,000
Pb	20
Hg	**16**
Se	0.40 U
Ag	0.42 U
Dioxins	NA

SB-66 (0-2)	
02/25/2014	
Al	1,300
Sb	0.52 U
As	1.4
Ba	7.3
Cd	0.18 I
Cr	5.3
Cu	8.0
Fe	1,500
Pb	62
Hg	0.042
Se	0.38 U
Ag	0.20 U
Dioxins	NA

SB-68 (0-2)	
02/25/2014	
Al	NA
Sb	0.55 U
As	0.69
Ba	6.8
Cd	NA
Cr	NA
Cu	2.7
Fe	690
Pb	5.8
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-22 (0.5-1.5)	
02/25/2014	
Al	NA
Sb	3.8
As	**15**
Ba	**630**
Cd	0.86
Cr	15
Cu	140
Fe	15,000
Pb	320
Hg	0.075
Se	0.42 U
Ag	0.50 I
Dioxins	NA

SB-65 (0.5-1)	
02/25/2014	
Al	NA
Sb	0.67 I
As	**3.2**
Ba	19
Cd	NA
Cr	NA
Cu	36
Fe	12,000
Pb	38
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-24 (0.5-2)	
02/25/2014	
Al	NA
Sb	20
As	**36**
Ba	**860**
Cd	5.8
Cr	*66*
Cu	**1200**
Fe	**130,000**
Pb	**2,700**
Hg	0.063
Se	3.5 U
Ag	4.7 I
Dioxins	NA

SB-21 (0.5-2)	
02/25/2014	
Al	NA
Sb	20
As	**20**
Ba	**1,200**
Cd	NA
Cr	NA
Cu	**520**
Fe	47,000
Pb	**4,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-71 (0-1)	
02/26/2014	
Al	NA
Sb	0.66 I
As	**4.7**
Ba	100
Cd	NA
Cr	NA
Cu	20
Fe	5,400
Pb	240
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-20 (0.5-2)	
02/25/2014	
Al	NA
Sb	*27*
As	**46**
Ba	**2,700**
Cd	6.6
Cr	*69*
Cu	**930**
Fe	**110,000**
Pb	**3,200**
Hg	0.059
Se	2.6 I
Ag	9.7
PCBs	0.020 U
Dioxins	**48.12**

SB-18 (0.5-1.5)	
02/25/2014	
Al	900
Sb	0.55 U
As	0.71
Ba	7.1
Cd	0.12 I
Cr	5.8
Cu	3.2
Fe	750
Pb	7.4
Hg	0.012 U
Se	0.40 U
Ag	0.41 U
Dioxins	NA

SB-69 (0.5-1)	
02/26/2014	
Al	NA
Sb	0.59 U
As	0.82
Ba	8.5
Cd	NA
Cr	NA
Cu	0.78 I
Fe	950
Pb	2.3
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-70 (0.5-1)	
02/26/2014	
Al	NA
Sb	*9.5 I*
As	**32**
Ba	**140**
Cd	NA
Cr	NA
Cu	**320**
Fe	**54,000**
Pb	**1,000**
Hg	NA
Se	NA
Ag	NA
Dioxins	**31.16**

SB-63 (0-2)	
02/24/2014	
Al	NA
Sb	0.56 U
As	1.3
Ba	6.3
Cd	NA
Cr	NA
Cu	21
Fe	1,600
Pb	15
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-13 (0.5-2)	
01/31/2014	
Al	NA
Sb	15
As	**30**
Ba	**660**
Cd	NA
Cr	NA
Cu	**2,000**
Fe	NA
Pb	**1400**
Hg	NA
Se	–
Ag	–
Dioxins	–
B(a)P TEQs	0.00

SB-53 (0.5-2)	
02/24/2014	
Al	NA
Sb	1.8 I
As	**11**
Ba	66
Cd	NA
Cr	NA
Cu	42
Fe	5,000
Pb	110
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-77 (0-1)	
02/26/2014	
Al	NA
Sb	1.3 I
As	**12**
Ba	20
Cd	NA
Cr	NA
Cu	25
Fe	4,600
Pb	56
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-46 (0.5-2)	
02/25/2014	
Al	NA
Sb	*21*
As	**31**
Ba	**820**
Cd	NA
Cr	NA
Cu	**980**
Fe	**100,000**
Pb	**2,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-47 (0-1)	
02/25/2014	
Al	1,700
Sb	0.87 I
As	**7.1**
Ba	41
Cd	0.64
Cr	15
Cu	32
Fe	3,800
Pb	92
Hg	0.17
Se	0.62 I
Ag	0.55 I
Dioxins	NA

SB-57 (0-2)	
02/24/2014	
Al	1,200
Sb	0.57 U
As	**11**
Ba	23
Cd	0.72
Cr	12
Cu	21
Fe	2,700
Pb	38
Hg	0.28
Se	0.42 U
Ag	1.6
Dioxins	NA

SB-31 (0-1)	
02/25/2014	
Al	NA
Sb	0.86 I
As	**21**
Ba	26
Cd	NA
Cr	NA
Cu	40
Fe	7,300
Pb	70
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-17 (0.5-2)	
01/31/2014	
Al	NA
Sb	*6.2*
As	**28**
Ba	**240**
Cd	NA
Cr	NA
Cu	**290**
Fe	NA
Pb	**480**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-62 (0-2)	
02/24/2014	
Al	1400
Sb	0.51 U
As	1.2
Ba	7.9
Cd	0.16 I
Cr	6.4
Cu	11
Fe	1,200
Pb	31
Hg	0.063
Se	0.38 U
Ag	0.19 U
Dioxins	NA

SB-19		
02/25/2014		
	0–0.75	0.75–2
Al	NA	NA
Sb	3.0	*18*
As	**10**	**27**
Ba	61	**700**
Cd	NA	NA
Cr	NA	NA
Cu	130	**540**
Fe	11,000	**89,000**
Pb	240	**1,700**
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
Dioxins	NA	NA

SB-78 (0.5-1)	
02/26/2014	
Al	NA
As	**12**
Ba	**130**
Cd	NA
Cr	NA
Cu	80
Fe	11,000
Pb	220
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-52 (0-2)	
02/24/2014	
Al	2,000
Sb	1.4 I
As	**15**
Ba	46
Cd	0.25 I
Cr	7.8
Cu	39
Fe	9,600
Pb	95
Hg	0.030 I
Se	0.44 U
Ag	0.23 U
Dioxins	NA

SB-49 (0.5-2)	
02/25/2014	
Al	NA
Sb	*14*
As	**19**
Ba	**710**
Cd	NA
Cr	NA
Cu	**270**
Fe	**61,000**
Pb	**1,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-25 (0.5-2)	
02/25/2014	
Al	NA
Sb	1.6 I
As	**8.3**
Ba	34
Cd	NA
Cr	NA
Cu	27
Fe	3,500
Pb	61
Hg	NA
Se	NA
Ag	NA
Dioxins	–

SB-85 (0.5-2)	
06/03/2014	
Al	NA
Sb	2.4
As	**2.3**
Ba	44
Cd	NA
Cr	NA
Cu	36
Fe	4,200
Pb	94
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-61 (0-2)	
02/24/2014	
Al	NA
Sb	0.54 U
As	1.5
Ba	13
Cd	NA
Cr	NA
Cu	15
Fe	1,600
Pb	32
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-26 (0.5-1)	
02/25/2014	
Al	NA
Sb	5.4
As	**12**
Ba	71
Cd	NA
Cr	NA
Cu	88
Fe	19,000
Pb	**570**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-15 (0.5-2)	
01/31/2014	
Al	NA
Sb	*21*
As	**43**
Ba	**1,200**
Cd	NA
Cr	NA
Cu	**830**
Fe	NA
Pb	**2,900**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-79 (0.5-1)	
02/26/2014	
Al	NA
Sb	*13*
As	**24**
Ba	**390**
Cd	NA
Cr	NA
Cu	**370**
Fe	39,000
Pb	**1,200**
Hg	NA
Se	NA
Ag	NA
PCBs	0.020 U
Dioxins	NA

SB-51 (0-1)	
02/24/2014	
Al	NA
Sb	*13*
As	**74**
Ba	110
Cd	NA
Cu	81
Fe	7,800
Pb	310
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-50 (0.5-1.5)	
02/24/2014	
Al	NA
Sb	0.55 U
As	1.4
Ba	7.0
Cd	NA
Cr	NA
Cu	3.5
Fe	2,100
Pb	7.9
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-44 (0.5-1)	
02/24/2014	
Al	NA
Sb	1.6 I
As	**3.6**
Ba	48
Cd	NA
Cr	NA
Cu	45
Fe	4,700
Pb	130
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-43 (0.5-1)	
02/24/2014	
Al	NA
Sb	1.1 I
As	**2.6**
Ba	33
Cd	NA
Cr	NA
Cu	22
Fe	2,900
Pb	82
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-80 (0.5-1)	
02/26/2014	
Al	NA
Sb	**170**
As	**33**
Ba	**500**
Cd	NA
Cr	NA
Cu	**760**
Fe	**71,000**
Pb	**1,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	1.97

SB-81 (0.5-1)	
02/26/2014	
Al	NA
Sb	**53**
As	**13**
Ba	**340**
Cd	NA
Cr	NA
Cu	**270**
Fe	25,000
Pb	**2,200**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-42 (0.5-1)	
02/24/2014	
Al	NA
Sb	0.62 U
As	**2.8**
Ba	18
Cd	NA
Cr	NA
Cu	18
Fe	1,500
Pb	32
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-41 (0.5-1)	
02/24/2014	
Al	NA
Sb	0.54 U
As	0.83
Ba	8.5
Cd	NA
Cr	NA
Cu	2.7
Fe	770
Pb	4.5
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-40 (0.5-1)	
02/24/2014	
Al	NA
Sb	*7.3*
As	**17**
Ba	**310**
Cd	NA
Cr	NA
Cu	**170**
Fe	16,000
Pb	**580**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-45 (0.5-1)	
02/24/2014	
Al	NA
Sb	**32**
As	**9.2**
Ba	86
Cd	NA
Cr	NA
Cu	81
Fe	9,000
Pb	380
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-38 (0.5-1)	
02/26/2014	
Al	NA
Sb	*9.5 I*
As	**44**
Ba	**740**
Cd	2.2 I
Cr	*41*
Cu	**430**
Fe	**56,000**
Pb	**1,400**
Hg	0.11
Se	2.2 U
Ag	2.7 I
Dioxins	**16.21**

SB-36 (0.5-1)	
02/26/2014	
Al	NA
Sb	*9.9 I*
As	**28**
Ba	**330**
Cd	2.3 I
Cr	32
Cu	**250**
Fe	47,000
Pb	**1,100**
Hg	0.20
Se	2.4 U
Ag	1.9 I
Dioxins	NA

SB-33 (0.5-1)	
02/26/2014	
Al	NA
Sb	*6.3*
As	**9.7**
Ba	**380**
Cd	NA
Cr	NA
Cu	**180**
Fe	16,000
Pb	**1,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-32 (0.5-1)	
02/26/2014	
Al	NA
Sb	**64**
As	**21**
Ba	98
Cd	0.60
Cr	18
Cu	**220**
Fe	10,000
Pb	310
Hg	0.29 I
Se	0.40 U
Ag	0.50 I
Dioxins	NA

SB-9 (0.5-2)	
01/31/2014	
Al	*NA*
Sb	*9.6*
As	**8.6**
Ba	**200**
Cd	NA
Cr	NA
Cu	120
Fe	NA
Pb	**1,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-64 (0-2)	
02/24/2014	
Al	NA
Sb	1.2 I
As	**3.3**
Ba	26
Cd	NA
Cr	NA
Cu	18
Fe	2,700
Pb	60
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-27 (0-1)	
02/25/2014	
Al	NA
Sb	2.2 I
As	**8.3**
Ba	45
Cd	NA
Cr	61
Fe	6,700
Pb	150
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-84 (0.5-2)	
06/03/2014	
Al	NA
Sb	3.6
As	**5**
Ba	59
Cd	NA
Cr	NA
Cu	45
Fe	5,200
Pb	220
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-83 (0.5-2)	
06/03/2014	
Al	NA
Sb	2.3
As	**25**
Ba	49
Cd	NA
Cr	NA
Cu	33
Fe	3,700
Pb	110
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-82 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.87 I
As	1.4
Ba	48
Cd	NA
Cr	NA
Cu	20
Fe	1,500
Pb	53
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-88 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.54 U
As	0.71
Ba	7.4
Cd	NA
Cr	NA
Cu	5.7
Fe	540
Pb	19
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-87 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.56 U
As	**0.81**
Ba	6.3
Cd	NA
Cr	NA
Cu	4.3
Fe	850
Pb	11
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-12 (0.5-2)	
01/31/2014	
Al	NA
Sb	**35**
As	**20**
Ba	**730**
Cd	NA
Cr	NA
Cu	**490**
Fe	NA
Pb	**1,800**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-60 (0.5-2)	
02/24/2014	
Al	NA
Sb	**110**
As	**50**
Ba	**180**
Cd	NA
Cr	NA
Cu	150
Fe	19,000
Pb	**2,300**
Hg	NA
Se	NA
Ag	NA
PCBs	0.019 U
Dioxins	NA

SB-86 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.90 I
As	**1.9**
Ba	6.4
Cd	NA
Cr	NA
Cu	21
Fe	8,100
Pb	28
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-37 (0.5-1.5)	
02/26/2014	
Al	NA
Sb	1.4 I
As	**16**
Ba	94
Cd	NA
Cr	NA
Cu	33
Fe	9,600
Pb	82
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-35 (0.5-1.5)	
02/26/2014	
Al	NA
Sb	0.81 I
As	**2.5**
Ba	34
Cd	NA
Cr	NA
Cu	21
Fe	1,700
Pb	260
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-34 (0.5-1)	
02/26/2014	
Al	NA
Sb	5.2
As	**15**
Ba	**180**
Cd	1.0
Cr	16
Cu	140
Fe	15,000
Pb	**620**
Hg	0.050
Se	0.41 U
Ag	0.93 I
Dioxins	NA

SB-48 (0.5-1.5)	
02/25/2014	
Al	NA
Sb	0.52 U
As	1.7
Ba	9.4
Cd	NA
Cr	NA
Cu	7.8
Fe	1,100
Pb	12
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

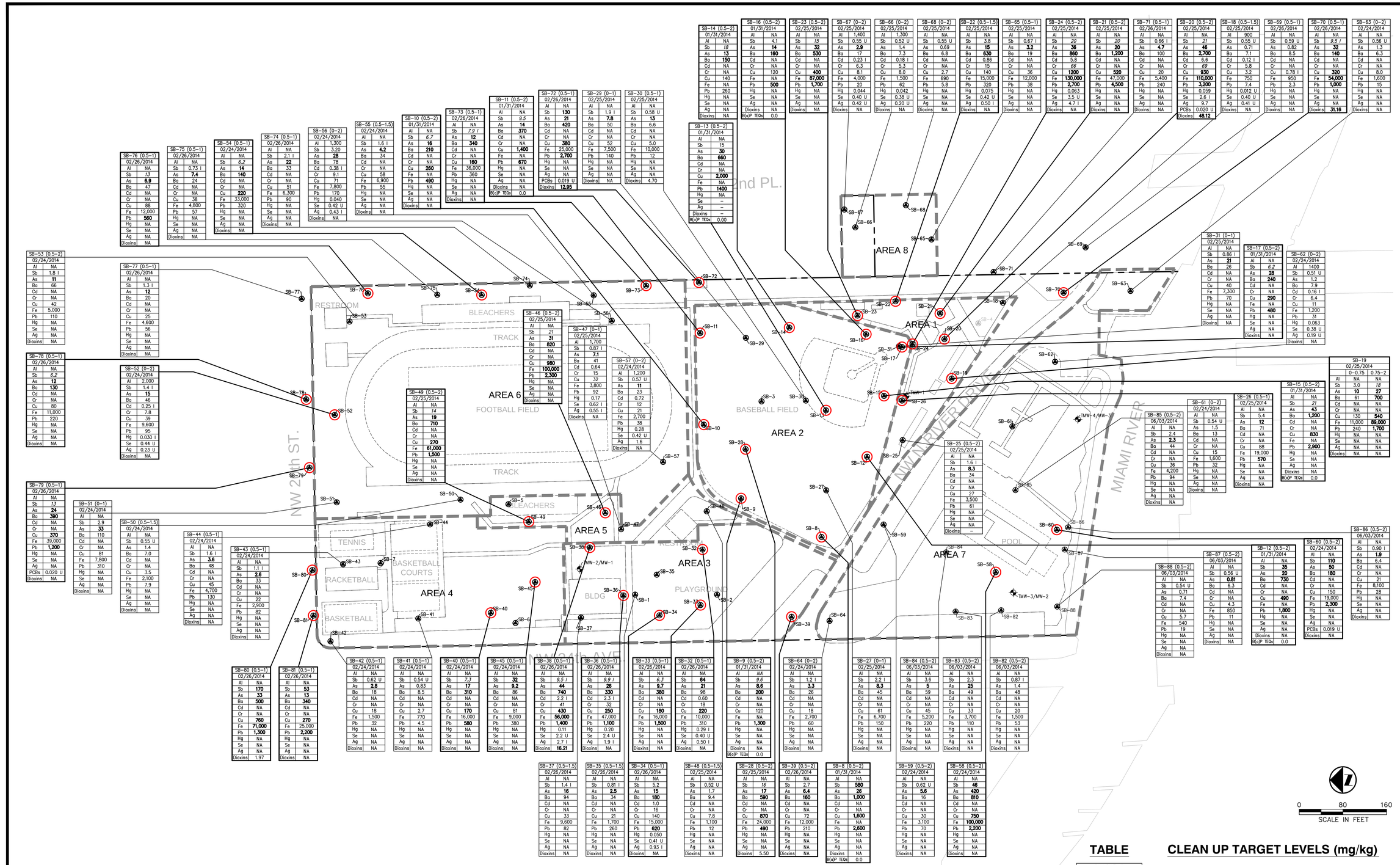
SB-28 (0.5-2)	
02/25/2014	
Al	NA
Sb	*16*
As	**17**
Ba	**590**
Cd	NA
Cr	NA
Cu	**870**
Fe	24,000
Pb	**490**
Hg	NA
Se	NA
Ag	NA
Dioxins	5.50

SB-39 (0.5-2)	
02/26/2014	
Al	NA
Sb	2.7
As	**6.4**
Ba	**160**
Cd	NA
Cr	NA
Cu	72
Fe	12,000
Pb	210
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-8 (0.5-2)	
01/31/2014	
Al	NA
Sb	**580**
As	**26**
Ba	**1,000**
Cd	NA
Cr	NA
Cu	**1,600**
Fe	NA
Pb	**2,600**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-59 (0.5-2)	
02/24/2014	
Al	NA
Sb	0.62 U
As	**5.6**
Ba	16
Cd	NA
Cr	NA
Cu	30
Fe	3,100
Pb	70
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-58 (0.5-2)	
02/24/2014	
Al	NA
Sb	**46**
As	**420**
Ba	**810**
Cd	NA
Cr	NA
Cu	**750**
Fe	**100,000**
Pb	**2,200**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami-Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed

LEGEND

PROPERTY LINE
SOIL BORING LOCATION
TEMPORARY / PERMANENT MONITORING WELL LOCATION
SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
SOIL BORING LOCATION REMOVED

TABLE

SAMPLE ID	
DATE	
Al	mg/kg
Sb	mg/kg
As	mg/kg
Ba	mg/kg
Cd	mg/kg
Cr	mg/kg
Cu	mg/kg
Fe	mg/kg
Pb	mg/kg
Hg	mg/kg
Se	mg/kg
Ag	mg/kg
Total PCBs	mg/kg
Dioxins	ng/kg
B(a)P TEQs	mg/kg

CLEAN UP TARGET LEVELS (mg/kg)

ANALYTE	RESIDENTIAL	INDUSTRIAL	LEACHABILITY
Al	80,000	*	*
Sb	27	370	5.4
As	2.1	12	*
Ba	120	130,000	1,600
Cd	82	1,700	7.5
Cr	310	470	38
Cu	150	89,000	*
Fe	53,000	N/A	*
Pb	400	1,400	*
Hg	3	17	2.1
Se	440	11,000	5.2
Ag	410	8,200	17
Total PCBs	0.5	2.6	17
Dioxins ng/kg	7	30	3,000
Benzo(a)Pyrene Equivalent	0.1	0.7	NA

REV	DATE	DESCRIPTION	CHK BY

LICENSE NO.

SHEET TITLE
SOIL ANALYTICAL SUMMARY (0.5-1.0)

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
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FL CERTIFICATE OF AUTHORIZATION NO. 00004892

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DRAWING NO. **Fig. 3**

SHEET **3** of **14**

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.03 - SOIL ANALYTICAL SUMMARY 0.5-1.0.dwg Jul 01, 2014 - 11:27am Layout Name: Layout By: 3618wcr

SB-76 (1-2)	
02/26/2014	
Al	NA
Sb	4.1
As	**5.5**
Ba	120
Cd	NA
Cr	NA
Cu	**240**
Fe	11,000
Pb	200
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-75 (1-2)	
02/26/2014	
Al	NA
Sb	1.4 I
As	**14**
Ba	23
Cd	NA
Cr	NA
Cu	49
Fe	8,400
Pb	92
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-54 (1-2)	
02/24/2014	
Al	NA
Sb	4.40
As	**8.1**
Ba	**130**
Cd	NA
Cr	NA
Cu	90
Fe	12,000
Pb	290
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-56 (0-2)	
02/24/2014	
Al	NA
Sb	3.20
As	**28**
Ba	78
Cd	0.38 I
Cr	9.1
Cu	71
Fe	7,800
Pb	170
Hg	0.040
Se	0.42 U
Ag	0.43 I
Dioxins	NA

SB-55 (0.5-1.5)		
02/24/2014		
	0.5-1.5	1.5-2
Al	NA	NA
Sb	1.6 I	1.8 I
As	**4.2**	**3.3**
Ba	34	47
Cd	NA	NA
Cr	NA	NA
Cu	58	41
Fe	6,900	6,400
Pb	55	100
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
Dioxins	NA	NA

SB-10 (0.5-2)	
01/31/2014	
Al	NA
Sb	6.7
As	**16**
Ba	**210**
Cd	NA
Cr	NA
Cu	**260**
Fe	NA
Pb	**490**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-73 (1-2)	
02/26/2014	
Al	NA
Sb	5.9
As	**13**
Ba	120
Cd	NA
Cr	NA
Cu	130
Fe	21,000
Pb	260
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-11 (0.5-2)	
01/31/2014	
Al	NA
Sb	9.5
As	**14**
Ba	**370**
Cd	NA
Cr	NA
Cu	**1,400**
Fe	NA
Pb	**670**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-29 (1-2)	
02/25/2014	
Al	NA
Sb	2.0 I
As	**11**
Ba	36
Cd	NA
Cr	NA
Cu	50
Fe	10,000
Pb	170
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-72 (1-2)	
02/26/2014	
Al	NA
Sb	7.5
As	**9.9**
Ba	**220**
Cd	NA
Cr	NA
Cu	150
Fe	11,000
Pb	**2,700**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-30 (1-2)	
02/25/2014	
Al	NA
Sb	8.0
As	**120**
Ba	120
Cd	NA
Cr	NA
Cu	**240**
Fe	15,000
Pb	300
Hg	NA
Se	NA
Ag	NA
Dioxins	**8.08**

SB-13 (0.5-2)	
01/31/2014	
Al	NA
Sb	7.5
As	**30**
Ba	**660**
Cd	NA
Cr	NA
Cu	**2,000**
Fe	NA
Pb	**1,400**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-14 (0.5-2)	
01/31/2014	
Al	NA
Sb	18
As	**13**
Ba	**150**
Cd	NA
Cr	NA
Cu	140
Fe	NA
Pb	260
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-67 (0-2)	
02/25/2014	
Al	NA
Sb	0.55 U
As	**2.9**
Ba	17
Cd	0.23 I
Cr	6.3
Cu	8.1
Fe	4,000
Pb	20
Hg	0.044
Se	0.40 U
Ag	0.42 U
Dioxins	NA

SB-66 (0-2)	
02/25/2014	
Al	NA
Sb	0.52 U
As	1.4
Ba	7.3
Cd	0.18 I
Cr	5.3
Cu	8.0
Fe	1,500
Pb	62
Hg	0.042
Se	0.38 U
Ag	0.20 U
Dioxins	NA

SB-22		
02/25/2014		
	0.5-1.5	1.5-2.0
Al	NA	NA
Sb	3.8	4.10
As	**15**	**19**
Ba	**630**	100
Cd	0.86	1.3
Cr	15	15
Cu	140	130
Fe	15,000	21,000
Pb	320	350
Hg	0.075	0.07
Se	0.42 U	0.43 U
Ag	0.50 I	0.96 I
Dioxins	NA	NA

SB-68 (0-2)	
02/25/2014	
Al	NA
Sb	0.55 U
As	0.69
Ba	6.8
Cd	NA
Cr	NA
Cu	2.7
Fe	690
Pb	5.8
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-65 (1-2)	
02/25/2014	
Al	NA
Sb	0.60 U
As	1.1
Ba	8.0
Cd	NA
Cr	NA
Cu	7.2
Fe	2,400
Pb	11
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-31 (1-2)	
02/25/2014	
Al	NA
Sb	3.2
As	**16**
Ba	84
Cd	NA
Cr	NA
Cu	140
Fe	16,000
Pb	340
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-17 (0.5-2)	
01/31/2014	
Al	NA
Sb	6.2
As	**28**
Ba	**240**
Cd	NA
Cr	NA
Cu	**290**
Fe	NA
Pb	**480**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-24 (0.5-2)	
02/25/2014	
Al	NA
Sb	20
As	**36**
Ba	**860**
Cd	5.8
Cr	66
Cu	**1,200**
Fe	**130,000**
Pb	**2,700**
Hg	0.063
Se	3.5 U
Ag	4.7 I
Dioxins	NA

SB-21 (0.5-2)	
02/25/2014	
Al	NA
Sb	20
As	**20**
Ba	**1,200**
Cd	NA
Cr	NA
Cu	**520**
Fe	47,000
Pb	**4,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-71 (1-2)	
02/26/2014	
Al	NA
Sb	2.2 I
As	**5.8**
Ba	48
Cd	NA
Cr	NA
Cu	45
Fe	11,000
Pb	120
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-69 (1-2)	
02/26/2014	
Al	NA
Sb	0.61 I
As	**4.3**
Ba	23
Cd	NA
Cr	NA
Cu	10
Fe	3,800
Pb	43
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-70 (1-2)	
02/26/2014	
Al	NA
Sb	**69**
As	**77**
Ba	**1,500**
Cd	NA
Cr	NA
Cu	**850**
Fe	**260,000**
Pb	**4,700**
Hg	NA
Se	NA
Ag	NA
PCBs	0.026 U
Dioxins	5.41

SB-63 (0-2)	
02/24/2014	
Al	NA
Sb	0.56 U
As	1.3
Ba	6.3
Cd	NA
Cr	NA
Cu	21
Fe	8,100
Pb	28
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-16 (0.5-2)	
01/31/2014	
Al	NA
Sb	4.1
As	**14**
Ba	**160**
Cd	NA
Cr	NA
Cu	120
Fe	NA
Pb	**500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-23 (0.5-2)	
02/25/2014	
Al	NA
Sb	15
As	**32**
Ba	**530**
Cd	NA
Cr	NA
Cu	**400**
Fe	**87,000**
Pb	**1,700**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-18		
02/25/2014		
	0.5-1.5	1.5-2.0
Al	900	1,600
Sb	0.55 U	4.4
As	0.71	**5.2**
Ba	7.1	80
Cd	0.12 I	0.55 I
Cr	5.8	9.5
Cu	3.2	48
Fe	750	6,400
Pb	7.4	120
Hg	0.012 U	0.028 I
Se	0.40 U	0.46 U
Ag	0.41 U	0.46 I
Dioxins	NA	NA

SB-20 (0-2)	
02/25/2014	
Al	NA
Sb	21
As	**46**
Ba	**2,700**
Cd	6.6
Cr	69
Cu	**930**
Fe	**110,000**
Pb	**3,200**
Hg	0.059
Se	2.6 I
Ag	9.7
Dioxins	**48.12**

SB-19 (0.75-2)	
02/25/2014	
Al	NA
Sb	18
As	**27**
Ba	**700**
Cd	NA
Cr	NA
Cu	**540**
Fe	**89,000**
Pb	**1,700**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-62 (0-2)	
02/24/2014	
Al	NA
Sb	0.51 U
As	1.2
Ba	7.9
Cd	0.16 I
Cr	6.4
Cu	11
Fe	1,200
Pb	31
Hg	0.063
Se	0.38 U
Ag	0.19 U
Dioxins	NA

SB-77 (1-2)	
02/26/2014	
Al	NA
Sb	4.4
As	**10**
Ba	94
Cd	NA
Cr	NA
Cu	71
Fe	6,800
Pb	170
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-53 (0.5-2)	
02/24/2014	
Al	NA
Sb	1.8 I
As	**11**
Ba	66
Cd	NA
Cr	NA
Cu	42
Fe	5,000
Pb	110
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-57 (0-2)	
02/24/2014	
Al	NA
Sb	0.57 U
As	**11**
Ba	23
Cd	0.72
Cr	12
Cu	21
Fe	2,700
Pb	38
Hg	0.28
Se	0.42 U
Ag	1.6
Dioxins	NA

SB-78 (1-2)	
02/26/2014	
Al	NA
Sb	6.7
As	**12**
Ba	82
Cd	NA
Cr	NA
Cu	100
Fe	6,300
Pb	180
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-52 (0-2)	
02/24/2014	
Al	NA
Sb	1.4 I
As	**15**
Ba	46
Cd	0.25 I
Cr	7.8
Cu	39
Fe	9,600
Pb	95
Hg	0.030 I
Se	0.44 U
Ag	0.23 U
Dioxins	NA

SB-49 (0.5-2)	
02/25/2014	
Al	NA
Sb	14
As	**19**
Ba	**710**
Cd	NA
Cr	NA
Cu	**270**
Fe	**61,000**
Pb	**1,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-46 (0.5-2)	
02/25/2014	
Al	NA
Sb	27
As	**31**
Ba	**820**
Cd	NA
Cr	NA
Cu	**980**
Fe	**100,000**
Pb	**2,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-47 (1-2)	
02/25/2014	
Al	NA
Sb	17
As	**34**
Ba	**650**
Cd	NA
Cr	NA
Cu	**420**
Fe	**110,000**
Pb	**2,300**
Hg	NA
Se	NA
Ag	NA
PCBs	0.018 U
Dioxins	NA

SB-15 (0.5-2)	
01/31/2014	
Al	NA
Sb	27
As	**43**
Ba	**1,200**
Cd	NA
Cr	NA
Cu	**830**
Fe	NA
Pb	**2,900**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-85 (0.5-2)	
06/03/2014	
Al	NA
Sb	2.4
As	**2.3**
Ba	44
Cd	NA
Cr	NA
Cu	36
Fe	4,200
Pb	94
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-12 (0.5-2)	
01/31/2014	
Al	NA
Sb	**35**
As	**20**
Ba	**730**
Cd	NA
Cr	NA
Cu	**490**
Fe	NA
Pb	**1,800**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-61 (0-2)	
02/24/2014	
Al	NA
Sb	0.54 U
As	1.5
Ba	13
Cd	NA
Cr	NA
Cu	15
Fe	1,600
Pb	32
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-25 (0.5-2)	
02/25/2014	
Al	NA
Sb	1.6 I
As	**8.3**
Ba	34
Cd	NA
Cr	NA
Cu	27
Fe	3,500
Pb	61
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-26 (1-2)	
02/25/2014	
Al	NA
Sb	**53**
As	**57**
Ba	**1,400**
Cd	NA
Cr	NA
Cu	**2,500**
Fe	**180,000**
Pb	**4,800**
Hg	NA
Se	NA
Ag	NA
Dioxins	**20.91**

SB-79 (1-1.5)	
02/26/2014	
Al	NA
Sb	7.1
As	**13**
Ba	**250**
Cd	NA
Cr	NA
Cu	**300**
Fe	20,000
Pb	**530**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-51 (1-2)	
02/24/2014	
Al	NA
Sb	9.2
As	**20**
Ba	**530**
Cd	NA
Cr	NA
Cu	**400**
Fe	41,000
Pb	**780**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-50		
02/24/2014		
	0.5-1.5	1.5-2
Al	NA	NA
Sb	0.55 U	1.3
As	1.4	**27**
Ba	7.0	**470**
Cd	NA	NA
Cr	NA	NA
Cu	3.5	**280**
Fe	2100	**110,000**
Pb	7.9	**1,100**
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
PCBs	NA	0.020 U
Dioxins	NA	NA

SB-44 (1-2)	
02/24/2014	
Al	NA
Sb	**35**
As	**68**
Ba	**1,400**
Cd	NA
Cr	NA
Cu	**1,400**
Fe	**140,000**
Pb	**3100**
Hg	NA
Se	NA
Ag	NA
Dioxins	**22.06**

SB-43 (1-2)	
02/24/2014	
Al	NA
Sb	15
As	**37**
Ba	**580**
Cd	NA
Cr	NA
Cu	**580**
Fe	41,000
Pb	**1,700**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-80 (1-2)	
02/26/2014	
Al	NA
Sb	5.2
As	**11**
Ba	**200**
Cd	NA
Cr	NA
Cu	120
Fe	17,000
Pb	340
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-81 (1-2)	
02/26/2014	
Al	NA
Sb	11
As	**21**
Ba	**500**
Cd	NA
Cr	NA
Cu	**310**
Fe	29,000
Pb	**860**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-42		
02/24/2014		
	1-1.5	1.5-2
Al	NA	NA
Sb	13	6.6 I
As	**11**	**17**
Ba	**350**	**320**
Cd	NA	NA
Cr	NA	NA
Cu	**310**	**3,300**
Fe	30,000	31,000
Pb	**930**	400
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
Dioxins	NA	**18.90**

SB-41 (1-2)	
02/24/2014	
Al	NA
Sb	0.56 U
As	0.26 U
Ba	2.4
Cd	NA
Cr	NA
Cu	0.56 U
Fe	850
Pb	1.2
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-40 (1-2)	
02/24/2014	
Al	NA
Sb	11
As	**20**
Ba	**650**
Cd	NA
Cr	NA
Cu	**280**
Fe	38,000
Pb	**1,800**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-45 (1-2)	
02/24/2014	
Al	NA
Sb	23
As	**54**
Ba	**1,800**
Cd	NA
Cr	NA
Cu	**890**
Fe	**99,000**
Pb	**5,900**
Hg	NA
Se	NA
Ag	NA
PCBs	0.021 U
Dioxins	NA

SB-38 (1-2)	
02/26/2014	
Al	NA
Sb	18 I
As	**43**
Ba	**1,000**
Cd	10
Cr	75
Cu	**2,300**
Fe	**140,000**
Pb	**2,700**
Hg	0.035
Se	4.3 U
Ag	5.6 I
Dioxins	NA

SB-37		
02/26/2014		
	0.5-1.5	1.5-2
Al	NA	NA
Sb	1.4 I	5.3 I
As	**16**	**14**
Ba	94	**140**
Cd	NA	NA
Cr	NA	NA
Cu	33	**170**
Fe	9,600	30,000
Pb	82	**560**
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
Dioxins	NA	NA

SB-36 (1-2)	
02/26/2014	
Al	NA
Sb	20
As	**32**
Ba	**2,900**
Cd	5.2
Cr	79
Cu	**1,200**
Fe	**90,000**
Pb	**2,900**
Hg	0.20
Se	2.5 U
Ag	5.1 I
PCBs	0.23 U
Dioxins	**17.76**

SB-35		
02/26/2014		
	0.5-1.5	1.5-2
Al	NA	NA
Sb	0.81 I	23
As	**2.5**	**50**
Ba	34	**1,400**
Cd	NA	NA
Cr	NA	NA
Cu	21	**760**
Fe	1,700	**61,000**
Pb	260	**5,900**
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
Dioxins	NA	NA

SB-33 (1-2)	
02/26/2014	
Al	NA
Sb	14
As	**20**
Ba	**730**
Cd	NA
Cr	NA
Cu	**1000**
Fe	50,000
Pb	**3,000**
Hg	NA
Se	NA
Ag	NA
Dioxins	**20.08**

SB-48		
02/25/2014		
	0.5-1.5	1.5-2
Al	NA	NA
Sb	0.52 U	6.2
As	1.7	**40**
Ba	9.4	**140**
Cd	NA	NA
Cr	NA	NA
Cu	7.8	140
Fe	1,100	28,000
Pb	12	250
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
Dioxins	NA	NA

SB-39 (0.5-2)	
02/26/2014	
Al	NA
Sb	2.7
As	**6.4**
Ba	**160**
Cd	NA
Cr	NA
Cu	72
Fe	12,000
Pb	210
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-64 (0-2)	
02/24/2014	
Al	NA
Sb	1.2 I
As	**3.3**
Ba	26
Cd	NA
Cr	NA
Cu	18
Fe	2,700
Pb	60
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-27		
02/25/2014		
	1-1.5	1.5-2
Al	NA	NA
Sb	0.52 U	**39**
As	**13**	**41**
Ba	28	**1,500**
Cd	NA	NA
Cr	NA	NA
Cu	52	**3,800**
Fe	6,500	**160,000**
Pb	150	**3,400**
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
PCBs	NA	0.023 U
Dioxins	NA	NA

SB-34 (1-2)	
02/26/2014	
Al	NA
Sb	13
As	**12**
Ba	**430**
Cd	1.5
Cr	18
Cu	**210**
Fe	24,000
Pb	**1,200**
Hg	0.017 I
Se	0.77 U
Ag	1.8 I
Dioxins	NA

SB-32 (1-2)	
02/26/2014	
Al	NA
Sb	20
As	**39**
Ba	**2,600**
Cd	5.9
Cr	72
Cu	**890**
Fe	**98,000**
Pb	**3,500**
Hg	0.060
Se	2.1 U
Ag	6.0
PCBs	0.020 U
Dioxins	NA

SB-9 (0.5-2)	
01/31/2014	
Al	NA
Sb	16
As	**8.6**
Ba	**200**
Cd	NA
Cr	NA
Cu	120
Fe	NA
Pb	**1,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-28 (0.5-2)	
02/25/2014	
Al	NA
Sb	**580**
As	**17**
Ba	**580**
Cd	NA
Cr	NA
Cu	**870**
Fe	24,000
Pb	**490**
Hg	NA
Se	NA
Ag	NA
Dioxins	5.50

SB-8 (0.5-2)	
01/31/2014	
Al	NA
Sb	**580**
As	**28**
Ba	**1,000**
Cd	NA
Cr	NA
Cu	**1,600**
Fe	NA
Pb	**2,600**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-59 (0.5-2)	
02/24/2014	
Al	NA
Sb	0.62 U
As	**5.6**
Ba	16
Cd	NA
Cr	NA
Cu	30
Fe	3,100
Pb	70
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-83 (0.5-2)	
06/03/2014	
Al	NA
Sb	2.3
As	**25**
Ba	49
Cd	NA
Cr	NA
Cu	33
Fe	3,700
Pb	110
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-84 (0.5-2)	
06/03/2014	
Al	NA
Sb	3.6
As	**5**
Ba	59
Cd	NA
Cr	NA
Cu	45
Fe	5,200
Pb	220
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-82 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.87 I
As	1.4
Ba	48
Cd	NA
Cr	NA
Cu	20
Fe	1,500
Pb	53
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

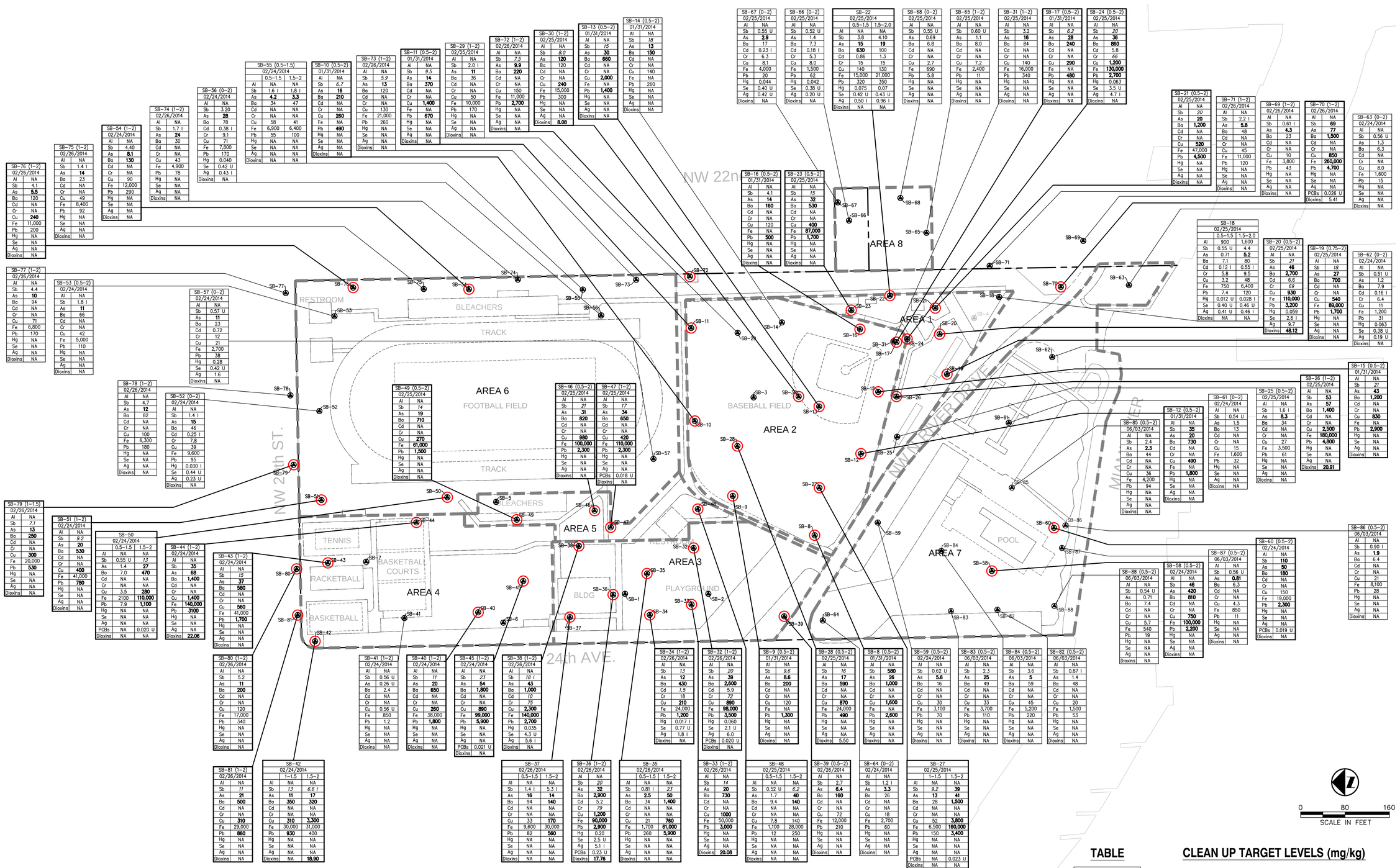
SB-87 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.56 U
As	**0.81**
Ba	6.3
Cd	NA
Cr	NA
Cu	4.3
Fe	850
Pb	11
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-88 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.54 U
As	0.71
Ba	7.4
Cd	NA
Cr	NA
Cu	5.7
Fe	540
Pb	19
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-58 (0.5-2)	
02/24/2014	
Al	NA
Sb	**46**
As	**420**
Ba	**810**
Cd	NA
Cr	NA
Cu	**750**
Fe	**100,000**
Pb	**2,200**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-60 (0.5-2)	
02/24/2014	
Al	NA
Sb	**110**
As	**1.9**
Ba	6.4
Cd	NA
Cr	NA
Cu	21
Fe	19,000
Pb	**2,300**
Hg	NA
Se	NA
Ag	NA
PCBs	0.019 U
Dioxins	NA

SB-86 (0.5-2)	
06/03/2014	
Al	NA
Sb	0.90 I
As	**1.9**
Ba	6.4
Cd	NA
Cr	NA
Cu	21
Fe	8,100
Pb	28
Hg	NA
Se	NA
Ag	NA
Dioxins	NA



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami-Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed

LEGEND

PROPERTY LINE
SOIL BORING LOCATION
TEMPORARY / PERMANENT MONITORING WELL LOCATION
SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
SOIL BORING LOCATION REMOVED

TABLE

SAMPLE ID	
DATE	
Al	mg/kg
Sb	mg/kg
As	mg/kg
Ba	mg/kg
Cd	mg/kg
Cr	mg/kg
Cu	mg/kg
Fe	mg/kg
Pb	mg/kg
Hg	mg/kg
Se	mg/kg
Ag	mg/kg
Total PCBs	mg/kg
Dioxins	ng/kg
B(a)P TEQs	mg/kg

CLEAN UP TARGET LEVELS (mg/kg)

ANALYTE	RESIDENTIAL	INDUSTRIAL	LEACHABILITY
Al	80,000	*	*
Sb	27	370	5.4
As	2.1	12	*
Ba	120	130,000	1,600
Cd	82	1,700	7.5
Cr	310	470	38
Cu	150	89,000	*
Fe	53,000	N/A	*
Pb	400	1,400	*
Hg	3	17	2.1
Se	440	11,000	5.2
Ag	410	8,200	17
Total PCBs	0.5	2.6	17
Dioxins ng/kg	7	30	3,000
Benzo(a)Pyrene Equivalent	0.1	0.7	NA

REV	DATE	DESCRIPTION	CHK BY	LICENSE NO.

SHEET TITLE
SOIL ANALYTICAL SUMMARY (1.0-2.0)

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8188 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31 | DSN. BY: MCP | DWN. BY: WCR | CHK. BY: MCP | Q/A R/W BY: MCP | APP. BY: EFES

CADD FILE:

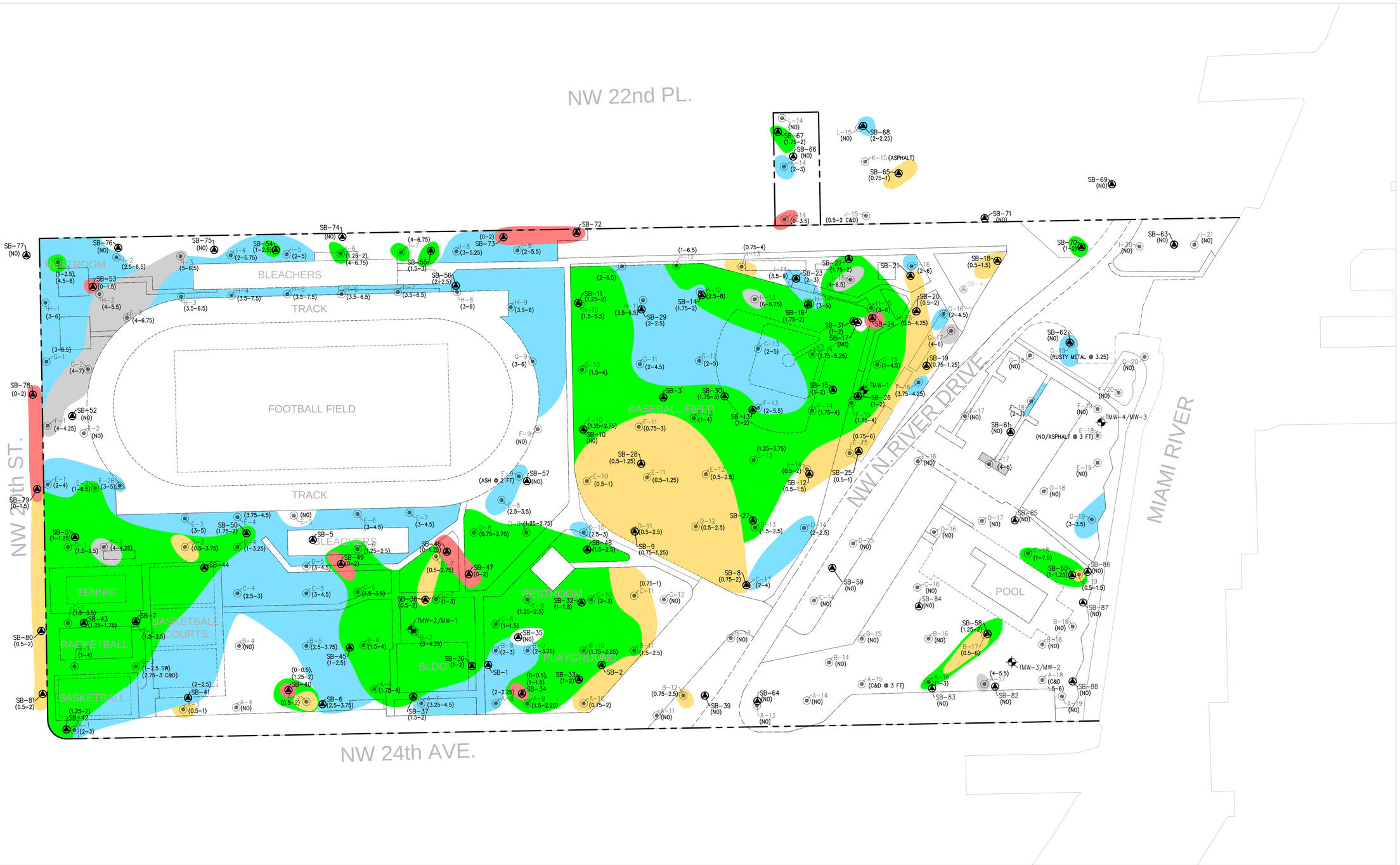
DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO. **Fig. 4**

SHEET 4 of 14

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.04 – SOIL ANALYTICAL SUMMARY 1.0-2.0.dwg Jul 01, 2014 – 11:27am Layout Name: Layout By: 3618wcr



LEGEND

- PROPERTY LINE
- VISUAL DELINEATION SOIL BORINGS
- SOIL BORING LOCATION
- TEMPORARY / PERMANENT MONITORING WELL LOCATION

- NO SOLID WASTE WITHIN THE CORE
- SOLID WASTE AT 0–0.5 FT
- SOLID WASTE AT 0.5–1.0 FT
- SOLID WASTE AT 1.0–2.0 FT
- SOLID WASTE AT 2.0–4.0 FT
- SOLID WASTE AT 4.0 FT AND DEEPER

0 60 120
SCALE IN FEET

REV	DATE	DESCRIPTION	CHK BY

LICENSE NO.

SHEET TITLE: DEPTH TO SOLID WASTE (VISUAL OBSERVATION)

PROJECT TITLE: CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT: CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31
DSN. BY: MCP
DWN. BY: WCR
CHK. BY: MCP
QA/QA RVW BY: MCP
APP. BY: EFS

CADD FILE:

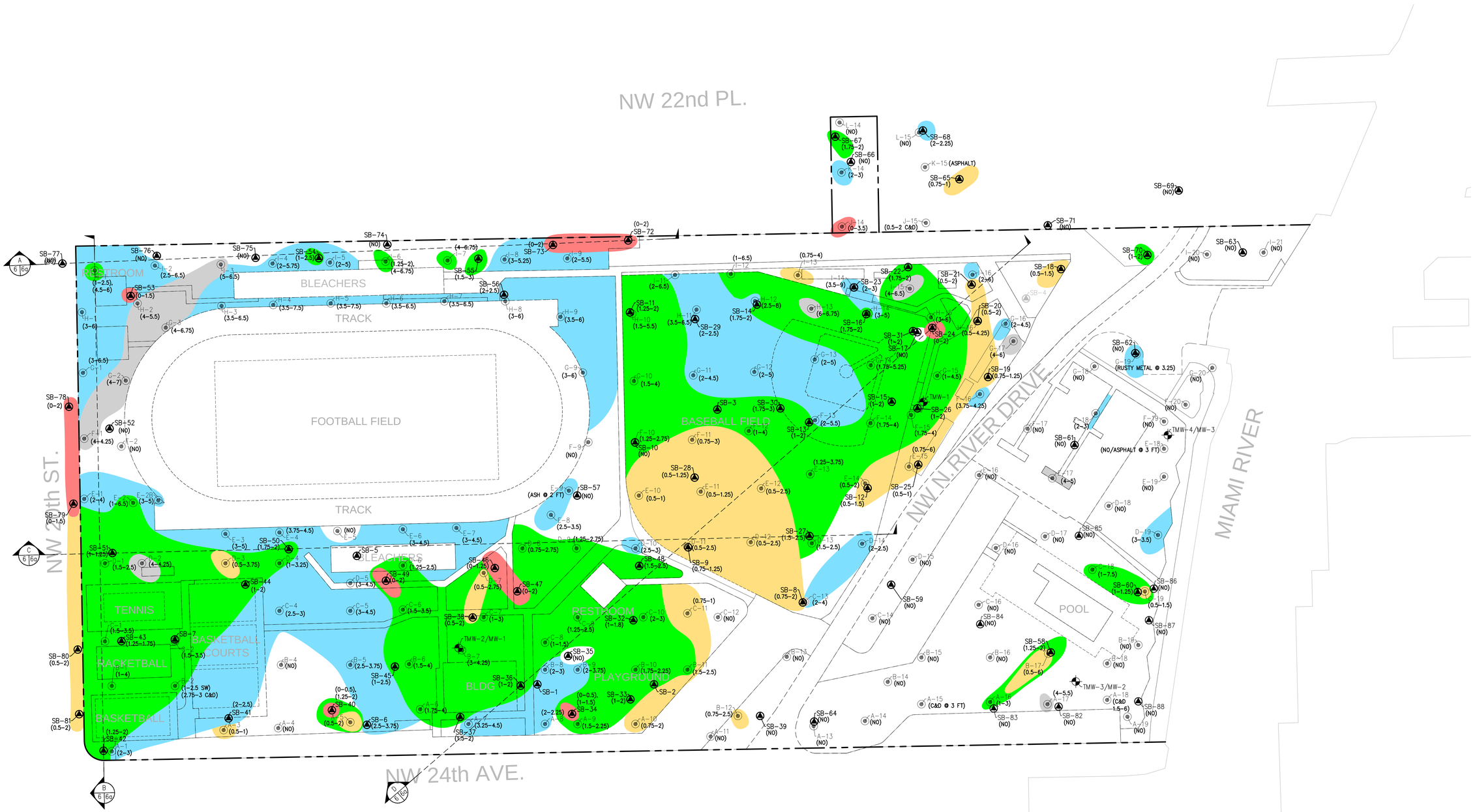
DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO. **Fig. 5**

SHEET 5 of 14

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.05 – DEPTH TO SOLID WASTE (VISUAL OBSERVATION).dwg Jul 01, 2014 – 11:48am Layout Name: layout By: 3618wcr



LEGEND

- PROPERTY LINE
- VISUAL DELINEATION SOIL BORINGS
- SOIL BORING LOCATION
- TEMPORARY / PERMANENT MONITORING WELL LOCATION

- NO SOLID WASTE WITHIN THE CORE
- SOLID WASTE AT 0–0.5 FT
- SOLID WASTE AT 0.5–1.0 FT
- SOLID WASTE AT 1.0–2.0 FT
- SOLID WASTE AT 2.0–4.0 FT
- SOLID WASTE AT 4.0 FT AND DEEPER

SECTION LETTER
SECTION BUBBLE
SHEET WHERE DETAIL IS REFERENCED
SHEET WHERE SECTION IS DRAWN

0 60 120
SCALE IN FEET

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.06 – SAMPLING LOCATIONS MAP WITH CROSS SECTIONS.dwg Jul 01, 2014 - 11:47am Layout Name: LAYOUT By: 3618wcr

REV	DATE	DESCRIPTION	CHK. BY

LICENSE NO.

SHEET TITLE **SAMPLING LOCATIONS MAP w/ CROSS-SECTIONS**

PROJECT TITLE **CURTIS PARK**
1901 NW 24th AVE.
MIAMI, FL

CLIENT **CITY OF MIAMI**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31 | DWN. BY: WCR | Q/A RVW BY: MCP
DSN. BY: MCP | CHK. BY: MCP | APP. BY: EFS

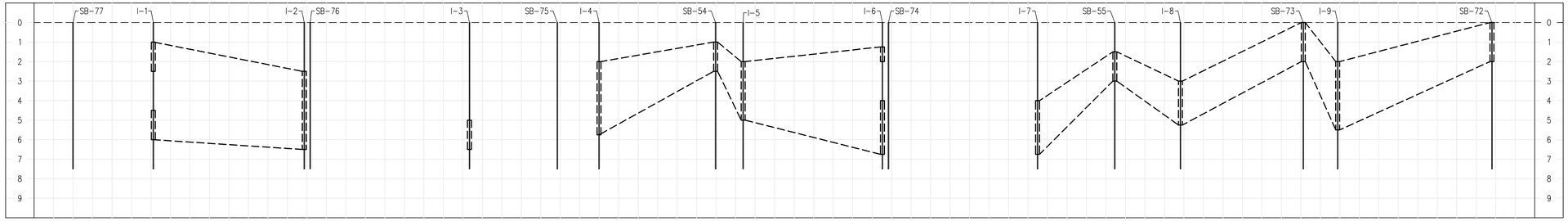
CADD FILE:

DATE: JULY–2014

SCALE: AS NOTED

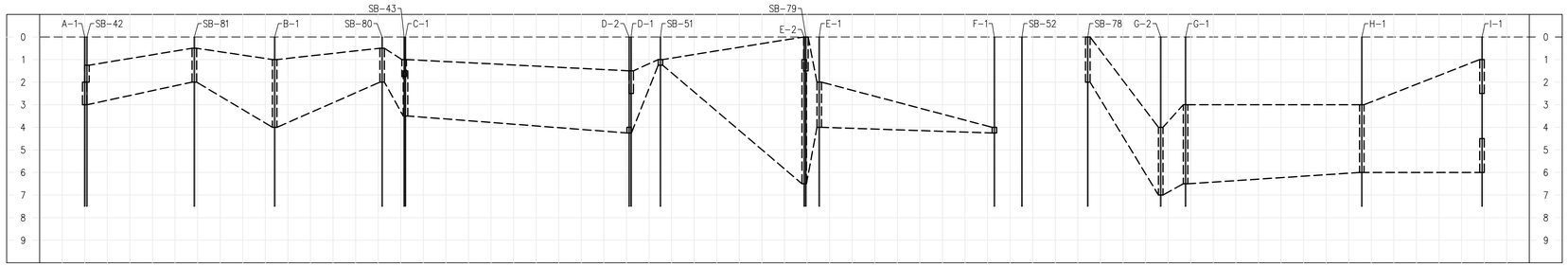
DRAWING NO. **Fig. 6**

SHEET **6** of **14**



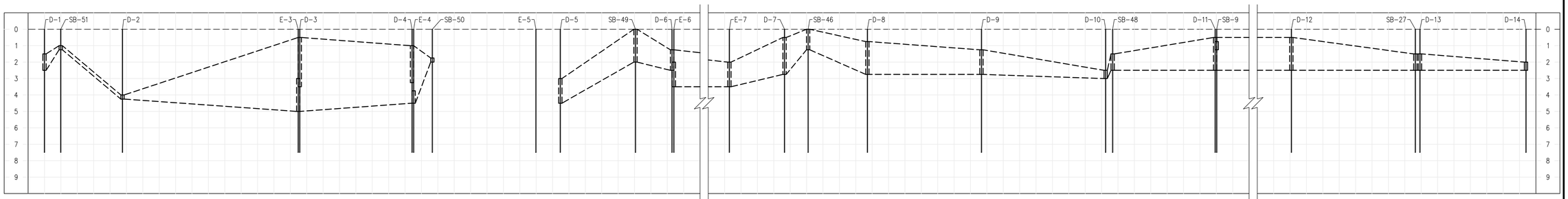
A
6 | 6a

PROFILE A
HOR. SCALE: 1"=30'
VERT. SCALE 1"=3'



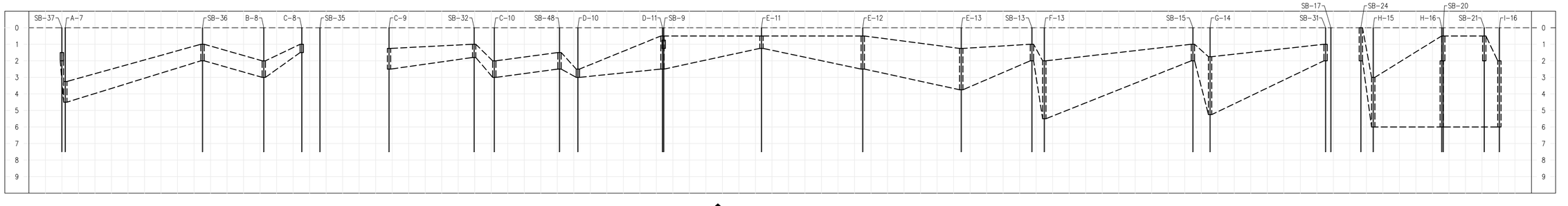
B
6 | 6a

PROFILE B
HOR. SCALE: 1"=30'
VERT. SCALE 1"=3'



C
6 | 6a

PROFILE C
HOR. SCALE: 1"=30'
VERT. SCALE 1"=3'



D
6 | 6a

PROFILE D
HOR. SCALE: 1"=30'
VERT. SCALE 1"=3'

LEGEND

SB-1 — SOIL BORING LOCATION / ID

DASHED WHERE INFERRED

LICENSE NO.

REV	DATE	DESCRIPTION	CHK. BY
1			
2			
3			
4			
5			
6			

SHEET TITLE
PROFILES OF CROSS SECTIONS

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31
DSN. BY: MCP
DWN. BY: WCR
CHK. BY: MCP
QA/QA RVW BY: MCP
APP. BY: EFS

CADD FILE:

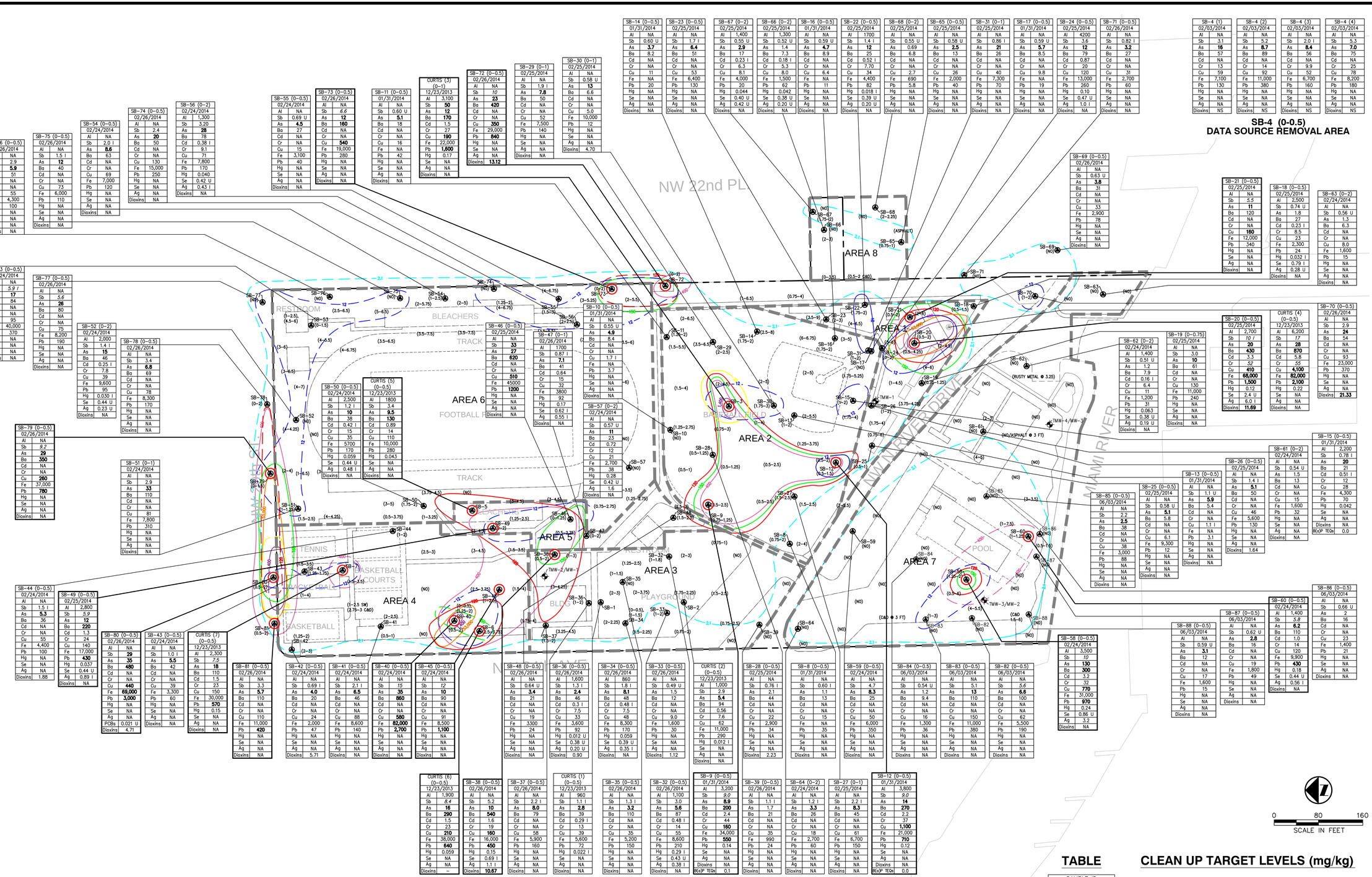
DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO.
Fig. 6a

SHEET 7 of 14

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.06a - PROFILES OF CROSS SECTIONS.dwg Jul 01, 2014 - 11:34am Layout Name: LAYOUT By: 3618wcr



0 80 160
SCALE IN FEET

NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami–Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed
NS – Not Sampled

LEGEND

━ ‒ ━	PROPERTY LINE
▲	SOIL BORING LOCATION
⊕	TEMPORARY / PERMANENT MONITORING WELL LOCATION
◉	SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
△	SOIL BORING LOCATION REMOVED VIA EXCAVATION

CONTOURS

RESIDENTIAL			INDUSTRIAL		
━	ANTIMONY	27		ANTIMONY	370
━	ARSENIC	2.1	━	ARSENIC	12
━	BARIUM	120		BARIUM	130,000
━	COPPER	150		COPPER	89,000
━	IRON	53,000			
━	LEAD	400	━	LEAD	1,400

NOTE: CONCENTRATION CONTOURS DASHED WHERE INFERRED

TABLE

SAMPLE ID	
DATE	
Al	mg/kg
Sb	mg/kg
As	mg/kg
Ba	mg/kg
Cd	mg/kg
Cr	mg/kg
Cu	mg/kg
Fe	mg/kg
Pb	mg/kg
Hg	mg/kg
Se	mg/kg
Ag	mg/kg
Total PCBs	mg/kg
Dioxins	ng/kg
B(a)P TEQs	mg/kg

CLEAN UP TARGET LEVELS (mg/kg)

ANALYTE	RESIDENTIAL	INDUSTRIAL	LEACHABILITY
Al	80,000	*	*
Sb	27	370	5.4
As	2.1	12	*
Ba	120	130,000	1,600
Cd	82	1,700	7.5
Cr	310	470	38
Cu	150	89,000	*
Fe	53,000	N/A	*
Pb	400	1,400	*
Hg	3	17	2.1
Se	440	11,000	5.2
Ag	410	8,200	17
Total PCBs	0.5	2.6	17
Dioxins ng/kg	7	30	3,000
Benzo(a)Pyrene Equivalent	0.1	0.7	NA

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.07 – SOIL ANALYTICAL SUMMARY 0–0.5 w METAL ISOCONTOURS.dwg Jul 01, 2014 – 11:34am Layout Name: LAYOUT By: 3618wcr

REV	DATE	DESCRIPTION	CHK. BY
△			
△			
△			
△			
△			
△			

LICENSE NO.

SHEET TITLE
SOIL ANALYTICAL SUMMARY (0-0.5)
w/ METAL ISOCONTOURS (Sb, As, Ba, Cu, Fe & Pb)

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

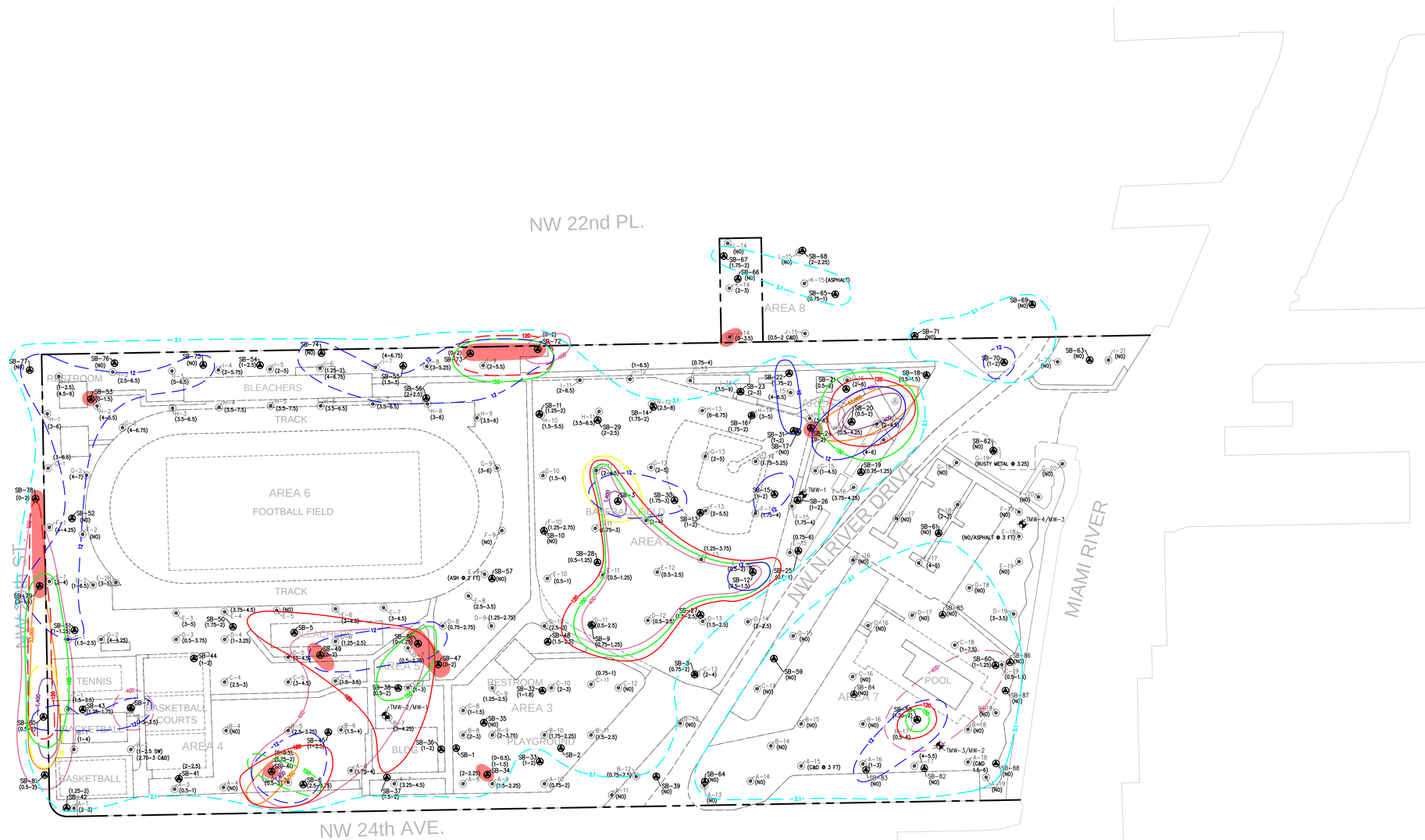
PROJ. NO. 09213010.31
DWN. BY: WCR
Q/A RVW BY: MCP
DSN. BY: MCP
CHK. BY: MCP
APP. BY: EFS

CADD FILE:

DATE:
JULY–2014

SCALE:
AS NOTED

DRAWING NO.
Fig. 7
SHEET **8** of **14**



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami-Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed
NS – Not Sampled

LEGEND

- PROPERTY LINE
- SOIL BORING LOCATION
- TEMPORARY / PERMANENT MONITORING WELL LOCATION
- SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
- SOIL BORING LOCATION REMOVED VIA EXCAVATION

CONTOURS

RESIDENTIAL		INDUSTRIAL	
ANTIMONY	27	ANTIMONY	370
ARSENIC	2.1	ARSENIC	12
BARIUM	120	BARIUM	130,000
COPPER	150	COPPER	89,000
IRON	53,000		
LEAD	400	LEAD	1,400

NOTE: CONCENTRATION CONTOURS DASHED WHERE INFERRED

SOLID WASTE STARTS AT 0–0.5 FT

REV	DATE	DESCRIPTION	CHK. BY

LICENSE NO.

SHEET TITLE: SOIL ISOCONTOURS w/ VISIBLE SOLID WASTE (0-0.5)

PROJECT TITLE: CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT: CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31
DSN. BY: MCP
DWN. BY: WCR
CHK. BY: MCP
O/A. RVW. BY: MCP
APP. BY: EFS

CADD FILE:

DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO. **Fig. 7a**

SHEET **9** of **14**

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.07a – SOIL ISOCONTOURS w VISIBLE SOLID WASTE (0–0.5).dwg Jul 01, 2014 – 11:38am Layout Name: LAYOUT By: 3618wcr

SB-14 (0.5–2)	
01/31/2014	
Al	NA
Sb	*18*
As	**13**
Ba	**150**
Cd	NA
Cr	NA
Cu	140
Fe	NA
Pb	260
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-16 (0.5–2)	
01/31/2014	
Al	NA
Sb	4.1
As	**14**
Ba	**160**
Cd	NA
Cr	NA
Cu	120
Fe	NA
Pb	**500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-23 (0.5–2)	
02/25/2014	
Al	NA
Sb	*15*
As	**32**
Ba	**530**
Cd	NA
Cr	NA
Cu	**400**
Fe	**87,000**
Pb	**1,700**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-67 (0–2)	
02/25/2014	
Al	1,400
Sb	0.55 U
As	**2.9**
Ba	17
Cd	0.23 I
Cr	6.3
Cu	8.1
Fe	4,000
Pb	20
Hg	0.04
Se	0.40 U
Ag	0.42 U
Dioxins	NA

SB-66 (0–2)	
02/25/2014	
Al	1,300
Sb	0.52 U
As	1.4
Ba	7.3
Cd	0.18 I
Cr	5.3
Cu	8.0
Fe	1,500
Pb	62
Hg	0.042
Se	0.38 U
Ag	0.20 U
Dioxins	NA

SB-68 (0–2)	
02/25/2014	
Al	NA
Sb	0.55 U
As	0.69
Ba	6.8
Cd	NA
Cr	NA
Cu	2.7
Fe	690
Pb	5.8
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-22 (0.5–1.5)	
02/25/2014	
Al	NA
Sb	3.8
As	**15**
Ba	**630**
Cd	0.86
Cr	15
Cu	140
Fe	15,000
Pb	320
Hg	0.075
Se	0.42 U
Ag	0.50 I
Dioxins	NA

SB-65 (0.5–1)	
02/25/2014	
Al	NA
Sb	0.67 I
As	**3.2**
Ba	19
Cd	NA
Cr	NA
Cu	36
Fe	12,000
Pb	38
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-24 (0.5–2)	
02/25/2014	
Al	NA
Sb	20
Ba	**860**
Cd	5.8
Cr	66
Cu	**1200**
Fe	**130,000**
Pb	**2,700**
Hg	0.063
Se	3.5 U
Ag	NA
Dioxins	NA

SB-21 (0.5–2)	
02/25/2014	
Al	NA
Sb	20
As	**20**
Ba	**1,200**
Cd	NA
Cr	NA
Cu	**520**
Fe	47,000
Pb	**4,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-71 (0.5–1)	
02/26/2014	
Al	NA
Sb	0.66 I
As	**4.7**
Ba	100
Cd	NA
Cr	NA
Cu	20
Fe	5,400
Pb	240
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-20 (0.5–2)	
02/25/2014	
Al	NA
Sb	*27*
As	**45**
Ba	**2,700**
Cd	6.6
Cr	*69*
Cu	**930**
Fe	**110,000**
Pb	**3,200**
Hg	0.059
Se	2.6 I
Ag	9.7
PCBs	0.020 U
Dioxins	**48.12**

SB-18 (0.5–1.5)	
02/25/2014	
Al	900
Sb	0.55 U
As	0.71
Ba	7.1
Cd	0.12 I
Cr	5.8
Cu	3.2
Fe	750
Pb	7.4
Hg	0.012 U
Se	0.40 U
Ag	0.41 U
Dioxins	NA

SB-69 (0.5–1)	
02/26/2014	
Al	NA
Sb	0.59 U
As	0.82
Ba	8.5
Cd	NA
Cr	NA
Cu	0.78 I
Fe	950
Pb	2.3
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-70 (0.5–1)	
02/26/2014	
Al	NA
Sb	*9.5 I*
As	**32**
Ba	**140**
Cd	NA
Cr	NA
Cu	**320**
Fe	**54,000**
Pb	**1,000**
Hg	NA
Se	NA
Ag	NA
Dioxins	**31.16**

SB-63 (0–2)	
02/24/2014	
Al	NA
Sb	0.56 U
As	1.3
Ba	6.3
Cd	NA
Cr	NA
Cu	21
Fe	1,600
Pb	15
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-13 (0.5–2)	
01/31/2014	
Al	NA
Sb	15
As	**30**
Ba	**660**
Cd	NA
Cr	NA
Cu	**2,000**
Fe	NA
Pb	**1400**
Hg	NA
Se	–
Ag	–
Dioxins	–
B(a)P TEQs	0.00

SB-72 (0.5–1)	
02/26/2014	
Al	NA
Sb	**130**
As	**21**
Ba	**420**
Cd	NA
Cr	NA
Cu	**380**
Fe	25,000
Pb	**2,700**
Hg	NA
Se	NA
Ag	NA
PCBs	0.019 U
Dioxins	**12.95**

SB-29 (0–1)	
02/25/2014	
Al	NA
Sb	1.9 I
As	**7.8**
Ba	50
Cd	NA
Cr	NA
Cu	52
Fe	7,500
Pb	140
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-30 (0.5–1)	
02/25/2014	
Al	NA
Sb	0.58 U
As	**13**
Ba	6.6
Cd	NA
Cr	NA
Cu	5.0
Fe	10,000
Pb	12
Hg	NA
Se	NA
Ag	NA
Dioxins	4.70

SB-11 (0.5–2)	
01/31/2014	
Al	NA
Sb	*9.5*
As	**14**
Ba	**370**
Cd	NA
Cr	NA
Cu	**1,400**
Fe	NA
Pb	**670**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-73 (0.5–1)	
02/26/2014	
Al	NA
Sb	*7.9 I*
As	**12**
Ba	**340**
Cd	NA
Cr	NA
Cu	**160**
Fe	36,000
Pb	360
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-10 (0–2)	
01/31/2014	
Al	NA
Sb	*6.7*
As	**16**
Ba	**210**
Cd	NA
Cr	NA
Cu	**280**
Fe	NA
Pb	**490**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-55 (0.5–1.5)	
02/24/2014	
Al	NA
Sb	1.6 I
As	**4.2**
Ba	34
Cd	NA
Cr	NA
Cu	58
Fe	6,900
Pb	55
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-56 (0–2)	
02/24/2014	
Al	1,300
Sb	3.20
As	**28**
Ba	78
Cd	0.38 I
Cr	9.1
Cu	71
Fe	7,800
Pb	170
Hg	0.040
Se	0.42 U
Ag	0.43 I
Dioxins	NA

SB-74 (0.5–1)	
02/26/2014	
Al	NA
Sb	2.1 I
As	**22**
Ba	33
Cd	NA
Cr	NA
Cu	51
Fe	6,300
Pb	90
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-54 (0.5–1)	
02/24/2014	
Al	NA
Sb	*6.2*
As	**14**
Ba	**140**
Cd	NA
Cr	NA
Cu	**220**
Fe	33,000
Pb	320
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-75 (0.5–1)	
02/26/2014	
Al	NA
Sb	0.73 I
As	**7.4**
Ba	24
Cd	NA
Cr	NA
Cu	38
Fe	4,800
Pb	57
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-76 (0.5–1)	
02/26/2014	
Al	NA
Sb	*13*
As	**6.9**
Ba	47
Cd	NA
Cr	NA
Cu	88
Fe	12,000
Pb	**560**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-53 (0.5–2)	
02/24/2014	
Al	NA
Sb	1.8 I
As	**11**
Ba	66
Cd	NA
Cr	NA
Cu	42
Fe	5,000
Pb	110
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-77 (0.5–1)	
02/26/2014	
Al	NA
Sb	1.3 I
As	**12**
Ba	20
Cd	NA
Cr	NA
Cu	25
Fe	4,600
Pb	56
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-78 (0.5–1)	
02/26/2014	
Al	NA
Sb	*6.2*
As	**12**
Ba	**130**
Cd	NA
Cr	NA
Cu	80
Fe	11,000
Pb	220
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-52 (0–2)	
02/24/2014	
Al	2,000
Sb	1.4 I
As	**15**
Ba	46
Cd	0.25 I
Cr	7.8
Cu	39
Fe	9,600
Pb	95
Hg	0.030 I
Se	0.44 U
Ag	0.23 U
Dioxins	NA

SB-79 (0.5–1)	
02/26/2014	
Al	NA
Sb	*13*
As	**24**
Ba	**390**
Cd	NA
Cr	NA
Cu	**370**
Fe	39,000
Pb	**1,200**
Hg	NA
Se	NA
Ag	NA
PCBs	0.020 U
Dioxins	NA

SB-51 (0–1)	
02/24/2014	
Al	NA
Sb	*13*
As	**74**
Ba	110
Cd	NA
Cu	81
Fe	7,800
Pb	310
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-50 (0.5–1.5)	
02/24/2014	
Al	NA
Sb	0.55 U
As	1.4
Ba	7.0
Cd	NA
Cr	NA
Cu	3.5
Fe	2,100
Pb	7.9
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-44 (0.5–1)	
02/24/2014	
Al	NA
Sb	1.6 I
As	**3.6**
Ba	48
Cd	NA
Cr	NA
Cu	45
Fe	4,700
Pb	130
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-43 (0.5–1)	
02/24/2014	
Al	NA
Sb	1.1 I
As	**2.6**
Ba	33
Cd	NA
Cr	NA
Cu	22
Fe	2,900
Pb	82
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-80 (0.5–1)	
02/26/2014	
Al	NA
Sb	**170**
As	**33**
Ba	**500**
Cd	NA
Cr	NA
Cu	**760**
Fe	**71,000**
Pb	**1,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	1.97

SB-81 (0.5–1)	
02/26/2014	
Al	NA
Sb	**53**
As	**13**
Ba	**340**
Cd	NA
Cr	NA
Cu	**270**
Fe	25,000
Pb	**2,200**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-42 (0.5–1)	
02/24/2014	
Al	NA
Sb	0.62 U
As	**2.8**
Ba	18
Cd	NA
Cr	NA
Cu	18
Fe	1,500
Pb	32
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-41 (0.5–1)	
02/24/2014	
Al	NA
Sb	0.54 U
As	0.83
Ba	8.5
Cd	NA
Cr	NA
Cu	2.7
Fe	770
Pb	4.5
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-40 (0.5–1)	
02/24/2014	
Al	NA
Sb	*7.3*
As	**17**
Ba	**310**
Cd	NA
Cr	NA
Cu	**170**
Fe	16,000
Pb	**580**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-45 (0.5–1)	
02/24/2014	
Al	NA
Sb	**32**
As	**9.2**
Ba	86
Cd	NA
Cr	NA
Cu	81
Fe	9,000
Pb	380
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-38 (0.5–1)	
02/26/2014	
Al	NA
Sb	*9.5 I*
As	**44**
Ba	**740**
Cd	2.2 I
Cr	*41*
Cu	**430**
Fe	**56,000**
Pb	**1,400**
Hg	0.11
Se	2.2 U
Ag	2.7 I
Dioxins	**16.21**

SB-36 (0.5–1)	
02/26/2014	
Al	NA
Sb	*9.9 I*
As	**28**
Ba	**330**
Cd	2.3 I
Cr	32
Cu	**250**
Fe	47,000
Pb	**1,100**
Hg	0.20
Se	2.4 U
Ag	1.9 I
Dioxins	NA

SB-33 (0.5–1)	
02/26/2014	
Al	NA
Sb	*6.3*
As	**9.7**
Ba	**380**
Cd	NA
Cr	NA
Cu	**180**
Fe	16,000
Pb	**1,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-32 (0.5–1)	
02/26/2014	
Al	NA
Sb	**64**
As	**21**
Ba	98
Cd	0.60
Cr	18
Cu	**220**
Fe	10,000
Pb	310
Hg	0.29 I
Se	0.40 U
Ag	0.50 I
Dioxins	NA

SB-9 (0.5–2)	
01/31/2014	
Al	*NA*
Sb	*9.6*
As	**8.6**
Ba	**200**
Cd	NA
Cr	NA
Cu	120
Fe	NA
Pb	**1,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-64 (0–2)	
02/24/2014	
Al	NA
Sb	1.2 I
As	**3.3**
Ba	26
Cd	NA
Cr	NA
Cu	18
Fe	2,700
Pb	60
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-27 (0–1)	
02/25/2014	
Al	NA
Sb	2.2 I
As	**8.3**
Ba	45
Cd	NA
Cr	NA
Cu	61
Fe	6,700
Pb	150
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-84 (0.5–2)	
06/03/2014	
Al	NA
Sb	3.6
As	**5**
Ba	59
Cd	NA
Cr	NA
Cu	45
Fe	5,200
Pb	220
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-83 (0.5–2)	
06/03/2014	
Al	NA
Sb	2.3
As	**25**
Ba	49
Cd	NA
Cr	NA
Cu	33
Fe	3,700
Pb	110
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-82 (0.5–2)	
06/03/2014	
Al	NA
Sb	0.87 I
As	1.4
Ba	48
Cd	NA
Cr	NA
Cu	20
Fe	1,500
Pb	53
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-31 (0–1)	
02/25/2014	
Al	NA
Sb	0.86 I
As	**21**
Ba	26
Cd	NA
Cr	NA
Cu	40
Fe	7,300
Pb	70
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-17 (0.5–2)	
01/31/2014	
Al	NA
Sb	*6.2*
As	**28**
Ba	**240**
Cd	NA
Cr	NA
Cu	**290**
Fe	NA
Pb	**480**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-62 (0–2)	
02/24/2014	
Al	1400
Sb	0.51 U
As	1.2
Ba	7.9
Cd	0.16 I
Cr	6.4
Cu	11
Fe	1,200
Pb	31
Hg	0.063
Se	0.38 U
Ag	0.19 U
Dioxins	NA

SB-19		
02/25/2014		
	0–0.75	0.75–2
Al	NA	NA
Sb	3.0	*18*
As	**10**	**27**
Ba	61	**700**
Cd	NA	NA
Cr	NA	NA
Cu	130	**540**
Fe	11,000	**89,000**
Pb	240	**1,700**
Hg	NA	NA
Se	NA	NA
Ag	NA	NA
Dioxins	NA	NA

SB-15 (0.5–2)	
01/31/2014	
Al	NA
Sb	*21*
As	**43**
Ba	**1,200**
Cd	NA
Cr	NA
Cu	**830**
Fe	NA
Pb	**2,900**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-26 (0.5–1)	
02/25/2014	
Al	NA
Sb	5.4
As	**12**
Ba	71
Cd	NA
Cr	NA
Cu	88
Fe	19,000
Pb	**570**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-85 (0.5–2)	
06/03/2014	
Al	NA
Sb	2.4
As	**2.3**
Ba	44
Cd	NA
Cr	NA
Cu	36
Fe	4,200
Pb	94
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-61 (0–2)	
02/24/2014	
Al	NA
Sb	0.54 U
As	1.5
Ba	13
Cd	NA
Cr	NA
Cu	15
Fe	1,600
Pb	32
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-25 (0.5–2)	
02/25/2014	
Al	NA
Sb	1.6 I
As	**8.3**
Ba	34
Cd	NA
Cr	NA
Cu	27
Fe	3,500
Pb	61
Hg	NA
Se	NA
Ag	NA
Dioxins	–

SB-88 (0.5–2)	
06/03/2014	
Al	NA
Sb	0.54 U
As	0.71
Ba	7.4
Cd	NA
Cr	NA
Cu	5.7
Fe	540
Pb	19
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-87 (0.5–2)	
06/03/2014	
Al	NA
Sb	0.56 U
As	**0.81**
Ba	6.3
Cd	NA
Cr	NA
Cu	4.3
Fe	850
Pb	11
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-12 (0.5–2)	
01/31/2014	
Al	NA
Sb	**35**
As	**20**
Ba	**730**
Cd	NA
Cr	NA
Cu	**490**
Fe	NA
Pb	**1,800**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-60 (0–2)	
02/24/2014	
Al	NA
Sb	**110**
As	**50**
Ba	**180**
Cd	NA
Cr	NA
Cu	150
Fe	19,000
Pb	**2,300**
Hg	NA
Se	NA
Ag	NA
PCBs	0.019 U
Dioxins	NA

SB-86 (0.5–2)	
06/03/2014	
Al	NA
Sb	0.90 I
As	**1.9**
Ba	6.4
Cd	NA
Cr	NA
Cu	21
Fe	8,100
Pb	28
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-46 (0.5–2)	
02/25/2014	
Al	NA
Sb	*21*
As	**31**
Ba	**820**
Cd	NA
Cr	NA
Cu	**980**
Fe	**100,000**
Pb	**2,300**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-47 (0–1)	
02/25/2014	
Al	1,700
Sb	0.87 I
As	**7.1**
Ba	41
Cd	0.64
Cr	15
Cu	32
Fe	3,800
Pb	92
Hg	0.17
Se	0.62 I
Ag	0.55 I
Dioxins	NA

SB-57 (0–2)	
02/24/2014	
Al	1,200
Sb	0.57 U
As	**11**
Ba	23
Cd	0.72
Cr	12
Cu	21
Fe	2,700
Pb	38
Hg	0.28
Se	0.42 U
Ag	1.6
Dioxins	NA

SB-49 (0.5–2)	
02/25/2014	
Al	NA
Sb	*14*
As	**19**
Ba	**710**
Cd	NA
Cr	NA
Cu	**270**
Fe	**61,000**
Pb	**1,500**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-37 (0.5–1.5)	
02/26/2014	
Al	NA
Sb	1.4 I
As	**16**
Ba	94
Cd	NA
Cr	NA
Cu	33
Fe	9,600
Pb	82
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-35 (0.5–1.5)	
02/26/2014	
Al	NA
Sb	0.81 I
As	**2.5**
Ba	34
Cd	NA
Cr	NA
Cu	21
Fe	1,700
Pb	260
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-34 (0.5–1)	
02/26/2014	
Al	NA
Sb	5.2
As	**15**
Ba	**180**
Cd	1.0
Cr	16
Cu	140
Fe	15,000
Pb	**620**
Hg	0.050
Se	0.41 U
Ag	0.93 I
Dioxins	NA

SB-48 (0.5–1.5)	
02/25/2014	
Al	NA
Sb	0.52 U
As	1.7
Ba	9.4
Cd	NA
Cr	NA
Cu	7.8
Fe	1,100
Pb	12
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

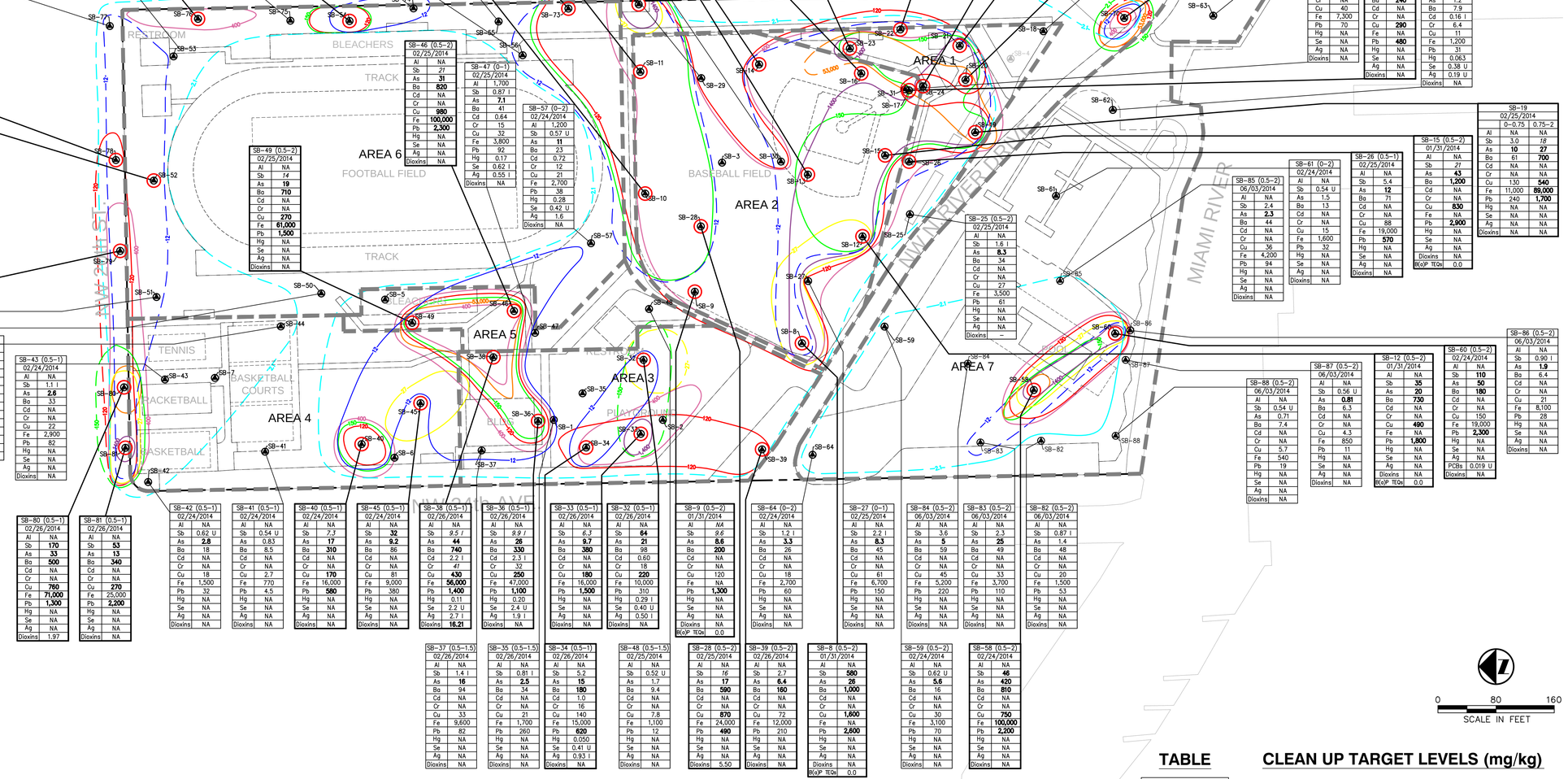
SB-28 (0.5–2)	
02/25/2014	
Al	NA
Sb	*16*
As	**17**
Ba	**590**
Cd	NA
Cr	NA
Cu	**870**
Fe	24,000
Pb	**490**
Hg	NA
Se	NA
Ag	NA
Dioxins	5.50

SB-39 (0.5–2)	
02/26/2014	
Al	NA
Sb	2.7
As	**6.4**
Ba	**160**
Cd	NA
Cr	NA
Cu	72
Fe	12,000
Pb	210
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-8 (0.5–2)	
01/31/2014	
Al	NA
Sb	**580**
As	**26**
Ba	**1,000**
Cd	NA
Cr	NA
Cu	**1,600**
Fe	NA
Pb	**2,600**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA
B(a)P TEQs	0.0

SB-59 (0.5–2)	
02/24/2014	
Al	NA
Sb	0.62 U
As	**5.6**
Ba	16
Cd	NA
Cr	NA
Cu	30
Fe	3,100
Pb	70
Hg	NA
Se	NA
Ag	NA
Dioxins	NA

SB-58 (0.5–2)	
02/24/2014	
Al	NA
Sb	**46**
As	**420**
Ba	**810**
Cd	NA
Cr	NA
Cu	**750**
Fe	**100,000**
Pb	**2,200**
Hg	NA
Se	NA
Ag	NA
Dioxins	NA



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami-Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed

LEGEND

PROPERTY LINE
SOIL BORING LOCATION
TEMPORARY / PERMANENT MONITORING WELL LOCATION
SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
SOIL BORING LOCATION REMOVED

CONTOURS

RESIDENTIAL		INDUSTRIAL	
ANTIMONY	27	ANTIMONY	370
ARSENIC	2.1	ARSENIC	12
BARIUM	120	BARIUM	130,000
COPPER	150	COPPER	89,000
IRON	53,000		
LEAD	400	LEAD	1,400

NOTE: CONCENTRATION CONTOURS DASHED WHERE INFERRED

TABLE

SAMPLE ID	
DATE	
Al	mg/kg
Sb	mg/kg
As	mg/kg
Ba	mg/kg
Cd	mg/kg
Cr	mg/kg
Cu	mg/kg
Fe	mg/kg
Pb	mg/kg
Hg	mg/kg
Se	mg/kg
Ag	mg/kg
Total PCBs	mg/kg
Dioxins	ng/kg
B(a)P TEQs	mg/kg

CLEAN UP TARGET LEVELS (mg/kg)

ANALYTE	RESIDENTIAL	INDUSTRIAL	LEACHABILITY
Al	80,000	*	*
Sb	27	370	5.4
As	2.1	12	*
Ba	120	130,000	1,600
Cd	82	1,700	7.5
Cr	310	470	38
Cu	150	89,000	*
Fe	53,000	N/A	*
Pb	400	1,400	*
Hg	3	17	2.1
Se	440	11,000	5.2
Ag	410	8,200	17
Total PCBs	0.5	2.6	17
Dioxins ng/kg	7	30	3,000
Benzo(a)Pyrene Equivalent	0.1	0.7	NA

REV	DATE	DESCRIPTION	CHK BY
1			
2			
3			
4			
5			

LICENSE NO.

SHEET TITLE: **SOIL ANALYTICAL SUMMARY (0.5-1.0) w/ METAL ISOCONTOURS (Sb, As, Ba, Cu, Fe & Pb)**

PROJECT TITLE: **CURTIS PARK**
1901 NW 24th AVE.
MIAMI, FL

CLIENT: **CITY OF MIAMI**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31 | DWN. BY: WCR | CHK. BY: MCP | Q/A RVW BY: MCP | APP. BY: EFS | DSN. BY: MCP

CADD FILE:

DATE: JULY–2014

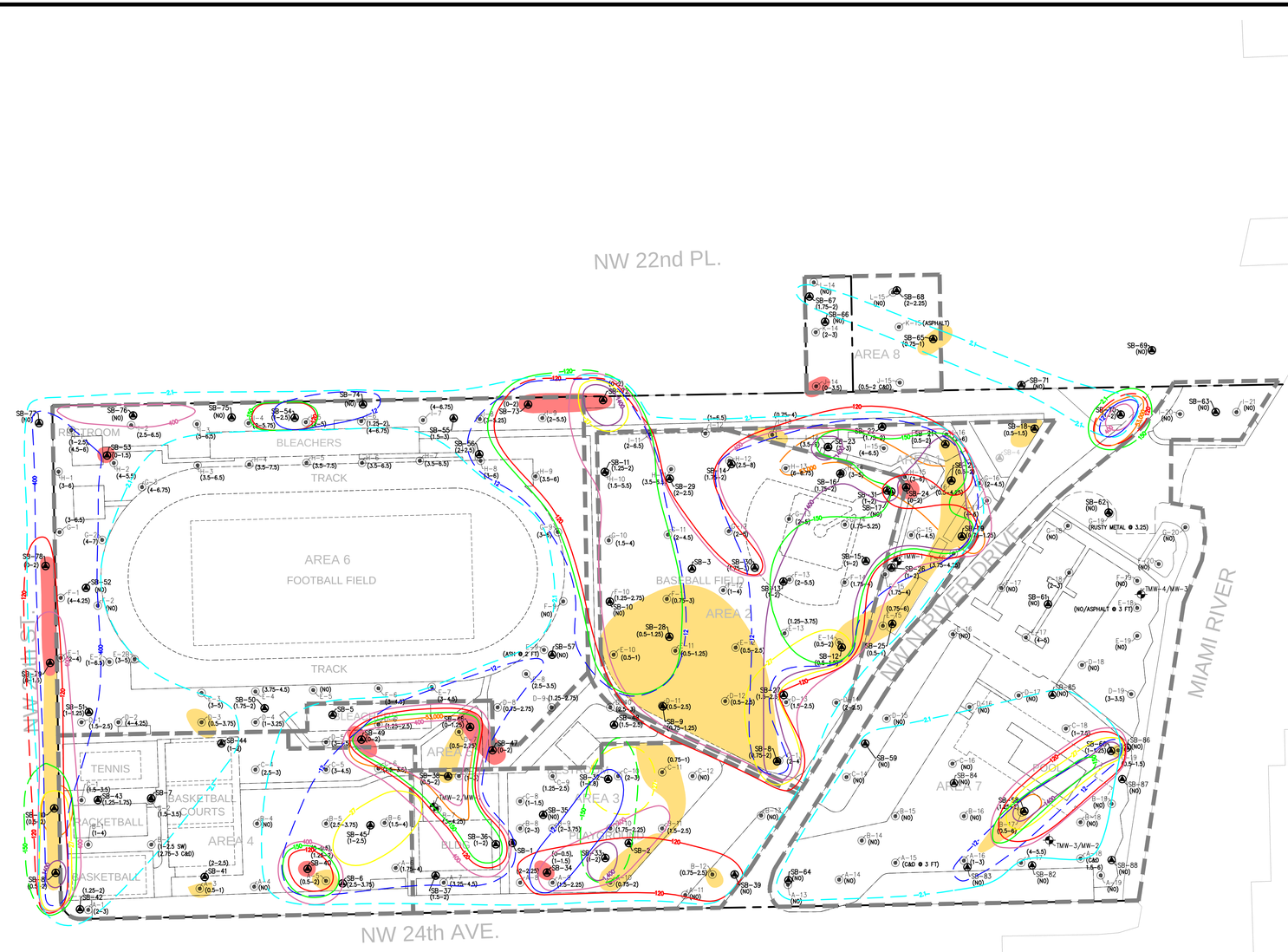
SCALE: AS NOTED

DRAWING NO. **Fig. 8**

SHEET **10** of **14**

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.08 – SOIL ANALYTICAL SUMMARY 0.5-1.0 w METAL ISOCONTOURS.dwg Jul 01, 2014 – 11:39am Layout Name: Layout By: 3618wcr

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.08a – SOIL ISOCONTOURS w VISIBLE SOLID WASTE (0.5–1).dwg Jul 01, 2014 – 11:42am Layout Name: LAYOUT By: 3618wcr



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami–Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed

LEGEND

— - - —	PROPERTY LINE
●	SOIL BORING LOCATION
⊕	TEMPORARY / PERMANENT MONITORING WELL LOCATION
◉	SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
○	SOIL BORING LOCATION REMOVED

CONTOURS

RESIDENTIAL		INDUSTRIAL	
ANTIMONY	27	ANTIMONY	370
ARSENIC	2.1	ARSENIC	12
BARIUM	120	BARIUM	130,000
COPPER	150	COPPER	89,000
IRON	53,000		
LEAD	400	LEAD	1,400

NOTE: CONCENTRATION CONTOURS DASHED WHERE INFERRED

🟥	SOLID WASTE STARTS AT 0–0.5 FT
🟨	SOLID WASTE STARTS AT 0.5–1.0 FT

REV	DATE	DESCRIPTION	CHK. BY	LICENSE NO.

SHEET TITLE
SOIL ISOCONTOURS w/
VISIBLE SOLID WASTE (0.5-1.0)

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31	DWN. BY: WCR	Q/A RVW BY: MCP
DSN. BY: MCP	CHK. BY: MCP	APP. BY: EFS

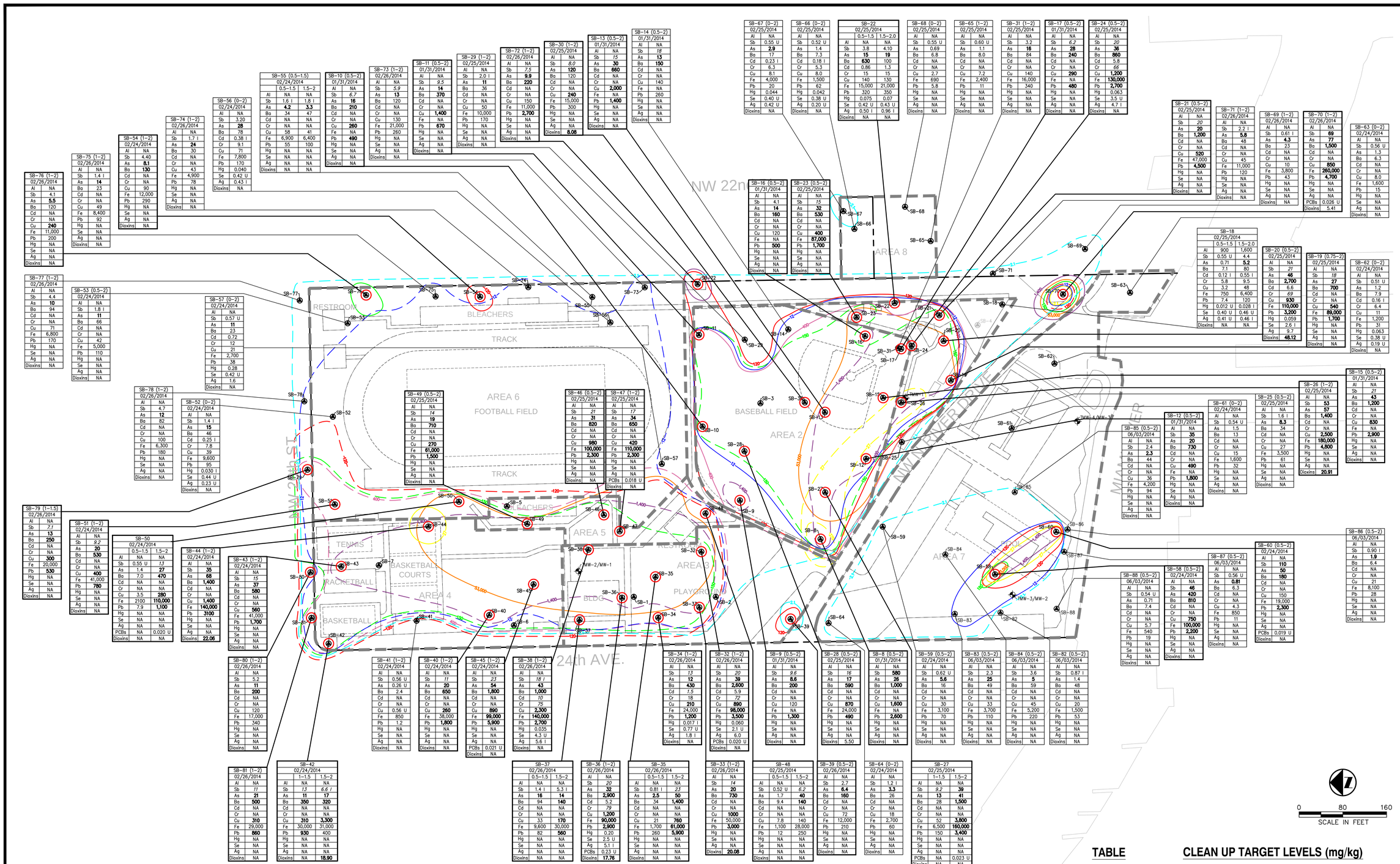
CADD FILE:

DATE:
JULY–2014

SCALE:
AS NOTED

DRAWING NO.
Fig. 8a
SHEET **11** of **14**

M:\ESMASTER\City of Miami\Curtis Park\Drawings\FIG.09 – SOIL ANALYTICAL SUMMARY 1.0–2.0 w METAL ISOCONTOURS.dwg Jul 01, 2014 – 11:44am Layout Name: Layout By: 3618wcr



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami-Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed

LEGEND

—— - - ——	PROPERTY LINE
▲	SOIL BORING LOCATION
⌖	TEMPORARY / PERMANENT MONITORING WELL LOCATION
🔴	SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
△	SOIL BORING LOCATION REMOVED

CONTOURS

RESIDENTIAL		INDUSTRIAL	
ANTIMONY	27	ANTIMONY	370
ARSENIC	2.1	ARSENIC	12
BARIUM	120	BARIUM	130,000
COPPER	150	COPPER	89,000
IRON	53,000		
LEAD	400	LEAD	1,400

NOTE: CONCENTRATION CONTOURS DASHED WHERE INFERRED

TABLE

SAMPLE ID	
DATE	
Al	mg/kg
Sb	mg/kg
As	mg/kg
Ba	mg/kg
Cd	mg/kg
Cr	mg/kg
Cu	mg/kg
Fe	mg/kg
Pb	mg/kg
Hg	mg/kg
Se	mg/kg
Ag	mg/kg
Total PCBs	mg/kg
Dioxins	ng/kg
B(a)P TEQs	mg/kg

CLEAN UP TARGET LEVELS (mg/kg)

ANALYTE	RESIDENTIAL	INDUSTRIAL	LEACHABILITY
Al	80,000	*	*
Sb	27	370	5.4
As	2.1	12	*
Ba	120	130,000	1,600
Cd	82	1,700	7.5
Cr	310	470	38
Cu	150	89,000	*
Fe	53,000	N/A	*
Pb	400	1,400	*
Hg	3	17	2.1
Se	440	11,000	5.2
Ag	410	8,200	17
Total PCBs	0.5	2.6	17
Dioxins ng/kg	7	30	3,000
Benzo(a)Pyrene Equivalent	0.1	0.7	NA

REV	DATE	DESCRIPTION	CHK. BY	LICENSE NO.
△				
△				
△				
△				
△				
△				

SHEET TITLE
SOIL ANALYTICAL SUMMARY (1.0-2.0)
w/ METAL ISOCONTOURS (Sb, As, Ba, Cu, Fe & Pb)

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

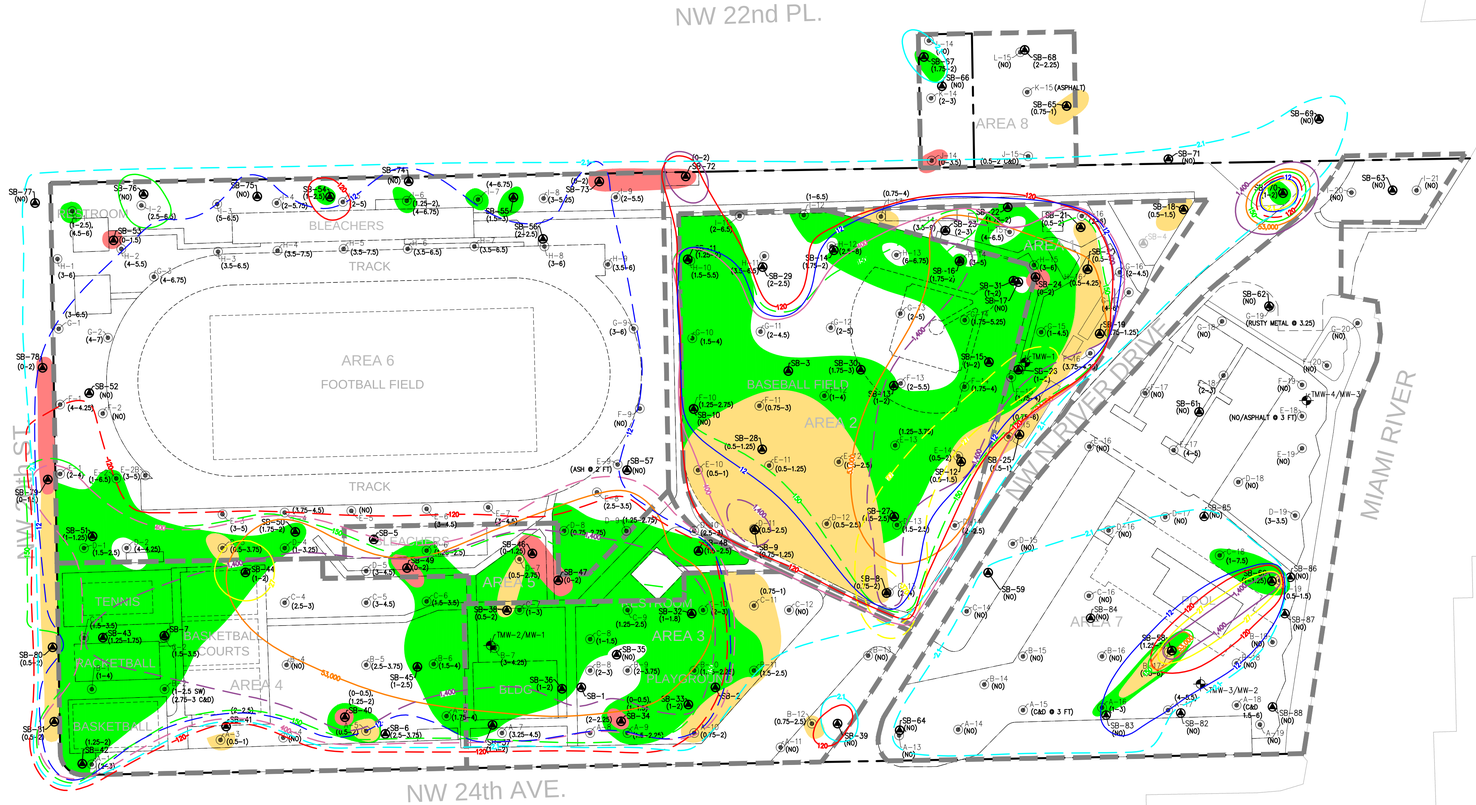
PROJ. NO. 09213010.31	DWN. BY: WCR	Q/A RVW BY: MCP
DSN. BY: MCP	CHK. BY: MCP	APP. BY: EFS

CADD FILE:

DATE:
JULY–2014

SCALE:
AS NOTED

DRAWING NO.
Fig. 9
SHEET 12 of 14



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami-Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed

LEGEND

PROPERTY LINE
SOIL BORING LOCATION
TEMPORARY / PERMANENT MONITORING WELL LOCATION
SOIL SCTLs EXCEEDANCE (ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
SOIL BORING LOCATION REMOVED

CONTOURS

	RESIDENTIAL	INDUSTRIAL
ANTIMONY	27	370
ARSENIC	2.1	12
BARIUM	120	130,000
COPPER	150	89,000
IRON	53,000	
LEAD	400	1,400

NOTE: CONCENTRATION CONTOURS DASHED WHERE INFERRED

SOLID WASTE STARTS AT 0–0.5 FT
SOLID WASTE STARTS AT 0.5–1.0 FT
SOLID WASTE STARTS AT 1.0–2.0 FT

REV	DATE	DESCRIPTION	CHK. BY

LICENSE NO.

SHEET TITLE: **SOIL ISOCONTOURS w/ VISIBLE SOLID WASTE (1.0-2.0)**

PROJECT TITLE: **CURTIS PARK**
1901 NW 24th AVE.
MIAMI, FL

CLIENT: **CITY OF MIAMI**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
PH. (305) 412-8185 FAX. (305) 412-8105
FL CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09213010.31 | DSN. BY: MCP | DWN. BY: WCR | CHK. BY: MCP | Q/A RVW BY: MCP | APP. BY: EFS

CADD FILE:

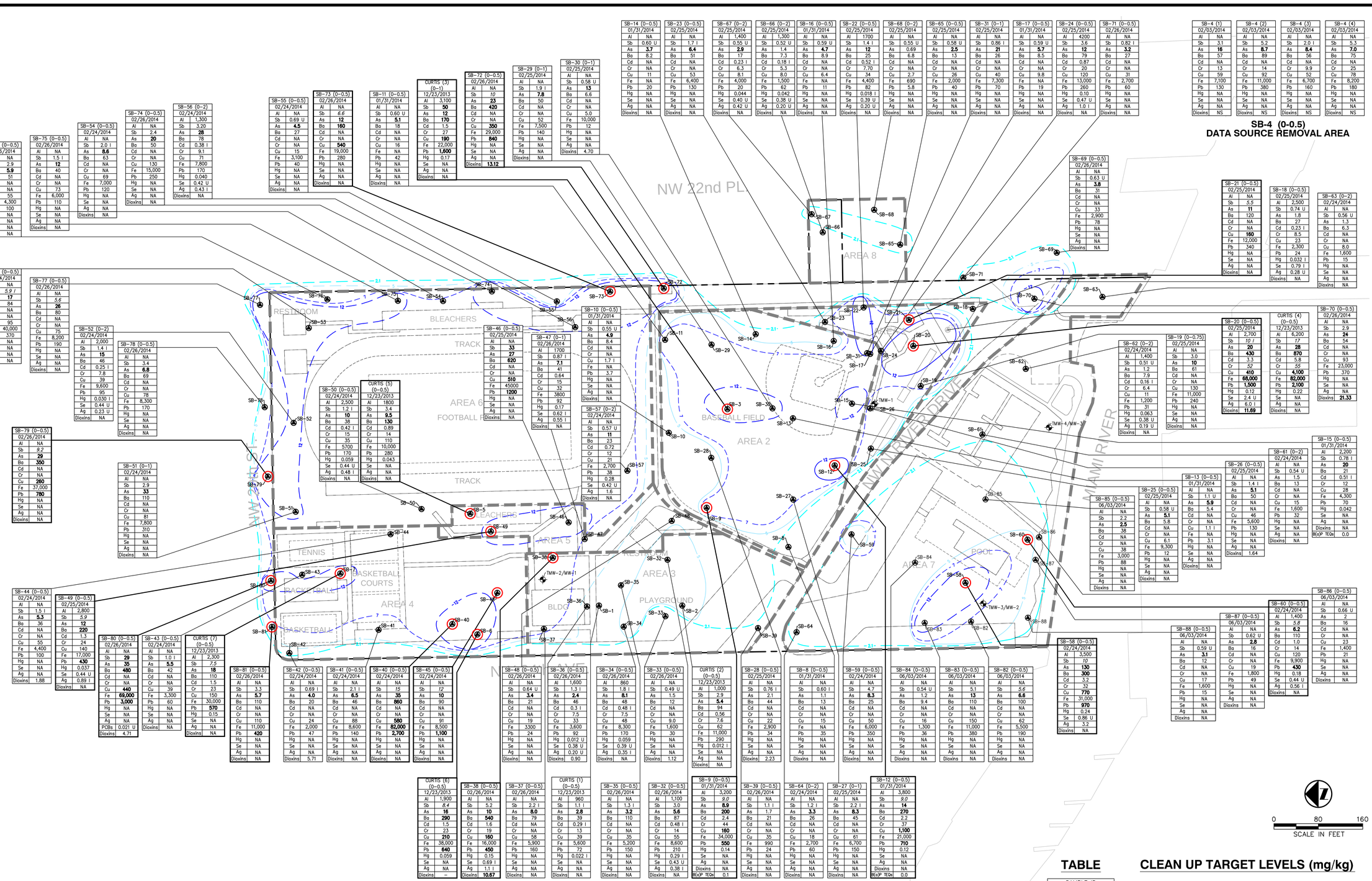
DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO. **Fig. 9a**

SHEET **13** of **14**

M:\ESMASTER\City of Miami\Curtis Park\Drawings\Fig.09a – SOIL ISOCONTOURS w VISIBLE SOLID WASTE (1-2).dwg Jul 01, 2014 - 11:47am Layout Name: LAYOUT By: 3618wcr



NOTES

mg/kg – milligrams per kilogram
ng/kg – nanograms per kilogram
U – Not detected at the Laboratory Method Limit (MDL).
I – Estimated value, the reported value is between the MDL and the Practical Quantitation Limit (PQL).
SCTLs – Soil Cleanup Target Levels specified in Table II of Chapter 24. Miami–Dade County Code
Bold – Indicates an exceedance of the residential SCTLs
Italics – Indicates an exceedance of the leachability based on the groundwater criteria
NA – Not Analyzed
NS – Not Sampled

LEGEND

— - - — PROPERTY LINE
▲ SOIL BORING LOCATION
⊕ TEMPORARY / PERMANENT MONITORING WELL LOCATION
◉ SOIL SCTLs EXCEEDANCE
(ARSENIC ONLY EXCEEDANCE NOT INCLUDED)
△ SOIL BORING LOCATION REMOVED VIA EXCAVATION

ARSENIC CONTOURS

RESIDENTIAL **INDUSTRIAL**

—— ARSENIC 2.1
—— ARSENIC 12
– – – ARSENIC 7
—— ARSENIC 5

NOTE: CONCENTRATION CONTOURS DASHED WHERE INFERRED

TABLE

SAMPLE ID	
DATE	
Al	mg/kg
Sb	mg/kg
As	mg/kg
Ba	mg/kg
Cd	mg/kg
Cr	mg/kg
Cu	mg/kg
Fe	mg/kg
Pb	mg/kg
Hg	mg/kg
Se	mg/kg
Ag	mg/kg
Total PCBs	mg/kg
Dioxins	ng/kg
B(a)P TEQs	mg/kg

CLEAN UP TARGET LEVELS (mg/kg)

ANALYTE	RESIDENTIAL	INDUSTRIAL	LEACHABILITY
Al	80,000	*	*
Sb	27	370	5.4
As	2.1	12	*
Ba	120	130,000	1,600
Cd	82	1,700	7.5
Cr	310	470	38
Cu	150	89,000	*
Fe	53,000	N/A	*
Pb	400	1,400	*
Hg	3	17	2.1
Se	440	11,000	5.2
Ag	410	8,200	17
Total PCBs	0.5	2.6	17
Dioxins ng/kg	7	30	3,000
Benzo(a)Pyrene Equivalent	0.1	0.7	NA

REV	DATE	DESCRIPTION	CHK. BY
△			
△			
△			
△			
△			
△			

LICENSE NO.

SHEET TITLE
SOIL ANALYTICAL SUMMARY (0-0.5) w/ METAL ISOCONTOURS (As)

PROJECT TITLE
CURTIS PARK
1901 NW 24th AVE.
MIAMI, FL

CLIENT
CITY OF MIAMI

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156
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PROJ. NO. 09213010.31
DWN. BY: WCR
Q/A RVW BY: MCP
DSN. BY: MCP
CHK. BY: MCP
APP. BY: EFS

CADD FILE:

DATE: JULY–2014

SCALE: AS NOTED

DRAWING NO.
Fig. 10

TABLES

TABLE 1: GROUNDWATER ANALYTICAL SUMMARY (Metals, PCBs and Dioxins)

GERRY CURTIS PARK

Sample															
Sample Location/ Sample ID	**Date Collected**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Cadmium**	**Chromium**	**Copper**	**Iron**	**Lead**	**Mercury**	**Selenium**	**Silver**	**Total PCB**	**Dioxins Total 2,3,7,8-TCDD Equivalents**
		(µg/L)	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(pg/L)**
Groundwater Cleanup Target Levels		200	6	10	2000	5	100	1000	300	15	2	50	100	0.5	30
Natural Attenuation Default Concentrations		2000	60	100	20000	50	1,000	10000	3000	150	20	500	1000	NA	NA
TMW-1	27-Feb-14	160 I	5.4 I	4.0 U	160	1.0 U	2.2 I	2.9 U	**680**	3.1 I	0.072 U	5.0 U	1.0 U	0.68 U	0.37
TMW-2	27-Feb-14	200	**30**	7.2 I	100	1.0 U	2.0 U	2.9 U	280	3.5 I	0.072 U	5.0 U	1.0 U	0.68 U	0.18
TMW-3	27-Feb-14	**300**	4.0 U	4.0 U	120	1.0 U	2.0 U	2.9 U	**980**	4.5 I	0.072 U	5.0 U	1.0 U	0.68 U	0.63
TMW-4	27-Feb-14	50 U	4.0 U	4.0 U	33	1.0 U	2.0 U	2.9 U	**3300**	2.0 U	0.072 U	5.0 U	1.0 U	0.68 U	0.28
MW-1	6-Jun-14	NS	**8.3**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	6-Jun-14	25 I	NS	NS	NS	NS	NS	NS	**1000**	NS	NS	NS	NS	NS	NS
MW-3	6-Jun-14	NS	NS	NS	NS	NS	NS	NS	300	NS	NS	NS	NS	NS	NS

Notes -

µg/L - micrograms per liter

pg/L - picograms per liter

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

** = As provided in Chapter 62-550, F.A.C.

U - Not detected at the laboratory method detection limit (MDL)

I - Estimated value, the reported value is between the MDL and the practical quantitaion limit (PQL)

Bold - Indicates an exceedance of the applicable GCTL

NS = Not Sampled

TABLE 2 - SOIL ANALYTICAL SUMMARY (Metals, PCBs and Dioxins)

GERRY CURTIS PARK

Sample				Parameters														
Sample Location/ Sample ID	**Date Collected**	**Sample Interval (fbls)**	**Type of Solid Waste (SW) Observed**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Cadmium**	**Chromium**	**Copper**	**Iron**	**Lead**	**Mercury**	**Selenium**	**Silver**	**Total PCBs**	**Dioxins Total 2,3,7,8-TCDD Equivalents[#]**	**Comment**
				(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)**	**(ng/Kg)**	
Direct Exposure Residential				80000	27	2.1	120**	82	310	150**	53000	400	3	440	410	0.5	7	
Direct Exposure Industrial				*	370	12	130000	1700	470	89000	*	1400	17	11000	8200	2.6	30	
Leachability Based on Groundwater Criteria				***	5.4	***	1600	7.5	38	***	***	***	2.1	5.2	17	17	3000	
Miami-Dade County Background Concentration				2656	NA	1.2	7	0.1	6.8	4.1	2176	26	0.08	<0.45 [a]	<0.025 [a]	NA	NA	
Baseball Field Perimeter December 2013 Samples																		
Curtis (4)(0-0.5)	23-Dec-13	0-0.5	**SW**	6200	*17*	**28**	**870**	5.8	*55*	**4100**	**82000**	**2100**/TCLP 0.24 I	0.22	NA	NA	NA	NA	
Source Removal Area																		
SB-4(1)	3-Feb-14	0-0.5	**Glass**	NA	3.1	**16**	57	NA	13	59	7100	130	NA	NA	NA	NA	NS	
SB-4(2)	3-Feb-14	0-0.5	**Glass**	NA	5.2	**8.7**	89	NA	14	92	11000	380	NA	NA	NA	NA	NS	
SB-4(3)	3-Feb-14	0-0.5	**Metal & Glass**	NA	2.0 I	**8.4**	56	NA	9.9	52	6700	160	NA	NA	NA	NA	NS	
SB-4(4)	3-Feb-14	0-0.5	**No SW**	NA	5.3	**7.0**	75	NA	25	78	8200	180	NA	NA	NA	NA	NS	Dilution X5
Area 1 - Baseball Field Perimeter																		
SB-18 (0-0.5)	25-Feb-14	0-0.5	**No SW**	2500	0.74 U	1.8	27	0.23 I	8.5	23	2300	24	0.032 I	0.79 I	0.28 U	NA	NA	
SB-18 (0.5-1.5)	25-Feb-14	0.5-1.5	**No SW**	900	0.55 U	0.71	7.1	0.12 I	5.8	3.2	750	7.4	0.012 U	0.40 U	0.41 U	NA	NA	Dilution X2 Silver
SB-18 (1.5-2)	25-Feb-14	1.5-2	**SW**	1600	4.4	**5.2**	80	0.55 I	9.5	48	6400	120	0.028 I	0.46 U	0.46 I	NA	NA	
SB-19 (0-0.75)	25-Feb-14	0-0.75	**No SW**	NA	3.0	**10**	61	NA	NA	130	11000	240	NA	NA	NA	NA	NA	
SB-19 (0.75-2)	25-Feb-14	0.75-2	**SW**	NA	*18*	**27**	**700**	NA	NA	**540**	**89000**	**1700**	NA	NA	NA	NA	NA	Dilution X5
SB-20 (0-0.5)	25-Feb-14	0-0.5	**SW**	2700	*10 I*	**20**	**430**	3.3	*52*	**410**	**68000**	**1500**	0.12	2.4 U	6.0 I	NA	**11.69**	Dilution X5
SB-20 (0.5-2)	25-Feb-14	0.5-2	**SW**	10000	*21*	**46**	**2700**	6.6	*69*	**930**	**110000**	**3200**	0.059	2.6 I	9.7	0.020U	**48.12**	
SB-21 (0-0.5)	25-Feb-14	0-0.5	**Metal**	NA	*5.5*	**11**	120	NA	NA	**160**	12000	340	NA	NA	NA	NA	NA	
SB-21 (0.5-2)	25-Feb-14	0.5-2	**Metal & Glass**	NA	*20*	**20**	**1200**	NA	NA	**520**	47000	**4500**	NA	NA	NA	NA	NA	Dilution x3
SB-22 (0-0.5)	25-Feb-14	0-0.5	**No SW**	1700	1.4 I	**12**	25	0.52 I	7.7	34	4400	82	0.018 I	0.39 U	0.20 U	NA	NA	
SB-22 (0.5-1.5)	25-Feb-14	0.5-1.5	**No SW**	1500	3.8	**15**	**630**	0.86	15	140	15000	320	0.075	0.42 U	0.50 I	NA	NA	
SB-22 (1.5-2)	25-Feb-14	1.5-2	**SW**	1500	4.1	**19**	100	1.3	15	130	21000	350	0.070	0.43 U	0.96 I	NA	NA	
SB-23 (0-0.5)	25-Feb-14	0-0.5	**No SW**	NA	1.7 I	**6.4**	51	NA	NA	53	6400	130	NA	NA	NA	NA	NA	
SB-23 (0.5-2)	25-Feb-14	0.5-2	**SW**	NA	*15*	**32**	**530**	NA	NA	**400**	**87000**	**1700**	NA	NA	NA	NA	NA	
SB-24 (0-0.5)	25-Feb-14	0-0.5	**Metal & Glass**	4200	3.6	**12**	79	0.87	20	120	13000	260	0.10	0.47 U	1.0 I	NA	NA	
SB-24 (0.5-2)	25-Feb-14	0.5-2	**SW**	6100	*20*	**36**	**860**	5.8	*66*	**1200**	**130000**	**2700**	0.063	3.5 U	4.7 I	NA	NA	Dilution x8
SB-25 (0-0.5)	25-Feb-14	0-0.5	**No SW**	NA	0.58 U	**5.1**	5.8	NA	NA	6.1	9300	12	NA	NA	NA	NA	NA	
SB-25 (0.5-2)	25-Feb-14	0.5-2	**SW**	NA	1.6 I	**8.3**	34	NA	NA	27	3500	61	NA	NA	NA	NA	NA	
SB-26 (0-0.5)	25-Feb-14	0-0.5	**No SW**	NA	1.4 I	**5.1**	50	NA	NA	46	5600	130	NA	NA	NA	NA	1.64	
SB-26 (0.5-1)	25-Feb-14	0.5-1	**No SW**	NA	5.4	**12**	71	NA	NA	88	19000	**570**	NA	NA	NA	NA	NA	
SB-26 (1-2)	25-Feb-14	1-2	**SW**	NA	**53**	**57**	**1400**	NA	NA	**2500**	**180000**	**4800**	NA	NA	NA	NA	**20.91**	
ROW - Samples #1 (NW 23rd Ave, South)																		
SB-69 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	0.63 U	**3.8**	31	NA	NA	33	2900	78	NA	NA	NA	NA	NA	
SB-69 (0.5-1)	26-Feb-14	0.5-1	**No SW**	NA	0.59 U	0.82	8.5	NA	NA	0.78 I	950	2.3	NA	NA	NA	NA	NA	
SB-69 (1-2)	26-Feb-14	1-2	**No SW**	NA	0.61 I	**4.3**	23	NA	NA	10	3800	43	NA	NA	NA	NA	NA	
SB-70 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	2.9	**24**	54	NA	NA	93	23000	370	NA	NA	NA	NA	**21.33**	
SB-70 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	NA	*9.5 I*	**32**	**140**	NA	NA	**320**	**54000**	**1000**	NA	NA	NA	NA	**31.16**	Dilution x5
SB-70 (1-2)	26-Feb-14	1-2	**Metal & Glass**	NA	**69**	**77**	**1500**	NA	NA	**850**	**260000**	**4700**	NA	NA	NA	0.026U	5.41	Dilution x20
SB-71 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	0.82 I	**3.2**	27	NA	NA	31	2700	60	NA	NA	NA	NA	NA	
SB-71 (0.5-1)	26-Feb-14	0.5-1	**No SW**	NA	0.66 I	**4.7**	100	NA	NA	20	5400	240	NA	NA	NA	NA	NA	
SB-71 (1-2)	26-Feb-14	1-2	**No SW**	NA	2.2 I	**5.8**	48	NA	NA	45	11000	120	NA	NA	NA	NA	NA	
Baseball Field - December 2013 Samples																		
Curtis (3)(0-0.5)	23-Dec-13	0-0.5	**SW**	3100	**50**	**12**	**170**	1.5	27	**190**	22000	**1600**	0.17	NA	NA	NA	NA	

TABLE 2 - SOIL ANALYTICAL SUMMARY (Metals, PCBs and Dioxins)

GERRY CURTIS PARK

Sample				Parameters														
Sample Location/ Sample ID	Date Collected	Sample Interval (fbls)	Type of Solid Waste (SW) Observed	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Mercury	Selenium	Silver	Total PCBs	Dioxins Total 2,3,7,8-TCDD Equivalents[#]	Comment
				(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)	(ng/Kg)	
Direct Exposure Residential				80000	27	2.1	120**	82	310	150**	53000	400	3	440	410	0.5	7	
Direct Exposure Industrial				*	370	12	130000	1700	470	89000	*	1400	17	11000	8200	2.6	30	
Leachability Based on Groundwater Criteria				***	5.4	***	1600	7.5	38	***	***	***	2.1	5.2	17	17	3000	
Miami-Dade County Background Concentration				2656	NA	1.2	7	0.1	6.8	4.1	2176	26	0.08	<0.45 [a]	<0.025 [a]	NA	NA	
Baseball Field - January 31, 2014 Samples																		
SB-8 (0-0.5)	31-Jan-14	0-0.5	**No SW**	NA	0.60 I	1.1	13	NA	NA	15	NA	35	NA	NA	NA	NA	NA	
SB-8 (0.5-2)	31-Jan-14	0.5-2	**Metal, Glass & Tile**	NA	**580**	**26**	**1000**	NA	NA	**1600**	NA	**2600**	NA	NA	NA	NA	NA	
SB-9 (0-0.5)	31-Jan-14	0-0.5	**No SW**	3200	*9.0*	**8.9**	**200**	2.4	44	**160**	34000	**550**	0.14	NA	NA	NA	NA	Dilution x10
SB-9 (0.5-2)	31-Jan-14	0.5-2	**Metal & Glass**	NA	*9.6*	**8.6**	**200**	NA	NA	120	NA	**1300**	NA	NA	NA	NA	NA	
SB-10 (0-0.5)	31-Jan-14	0-0.5	**No SW**	NA	0.55 U	**4.9**	8.4	NA	NA	1.7 I	NA	3.7	NA	NA	NA	NA	NA	
SB-10 (0.5-2)	31-Jan-14	0.5-2	**No SW**	NA	*6.7*	**16**	**210**	NA	NA	**260**	NA	**490**	NA	NA	NA	NA	NA	
SB-11 (0-0.5)	31-Jan-14	0-0.5	**No SW**	NA	0.60 U	**5.1**	18	NA	NA	16	NA	42	NA	NA	NA	NA	NA	
SB-11 (0.5-2)	31-Jan-14	0.5-2	**Metal & Glass**	NA	*9.5*	**14**	**370**	NA	NA	**1400**	NA	**670**	NA	NA	NA	NA	NA	
SB-12 (0-0.5)	31-Jan-14	0-0.5	**No SW**	3800	*9.0*	**14**	**270**	2.2	37	**1100**	21000	**710**	0.12	NA	NA	NA	NA	
SB-12 (0.5-2)	31-Jan-14	0.5-2	**Metal & Glass**	NA	**35**	**20**	**730**	NA	NA	**490**	NA	**1800**	NA	NA	NA	NA	NA	
SB-13 (0-0.5)	31-Jan-14	0-0.5	**No SW**	NA	1.1 U	**5.9**	5.4	NA	NA	1.1 I	NA	3.1	NA	NA	NA	NA	NA	
SB-13 (0.5-2)	31-Jan-14	0.5-2	**SW**	NA	*15*	**30**	**660**	NA	NA	**2000**	NA	**1400**	NA	NA	NA	NA	NA	
SB-14 (0-0.5)	31-Jan-14	0-0.5	**No SW**	NA	0.60 U	**3.7**	8.2	NA	NA	11	NA	20	NA	NA	NA	NA	NA	
SB-14 (0.5-2)	31-Jan-14	0.5-2	**Metal & Glass**	NA	*18*	**13**	**150**	NA	NA	140	NA	260	NA	NA	NA	NA	NA	
SB-15 (0-0.5)	31-Jan-14	0-0.5	**No SW**	2200	0.78 I	**20**	21	0.51 I	12	28	4300	70	0.042	NA	NA	NA	NA	
SB-15 (0.5-2)	31-Jan-14	0.5-2	**Metal & Glass**	NA	*21*	**43**	**1200**	NA	NA	**830**	NA	**2900**	NA	NA	NA	NA	NA	
SB-16 (0-0.5)	31-Jan-14	0-0.5	**No SW**	NA	0.59 U	**4.7**	8.9	NA	NA	6.4	NA	11	NA	NA	NA	NA	NA	
SB-16 (0.5-2)	31-Jan-14	0.5-2	**Metal & Glass**	NA	4.1	**14**	**160**	NA	NA	120	NA	**500**	NA	NA	NA	NA	NA	
SB-17 (0-0.5)	31-Jan-14	0-0.5	**No SW**	NA	0.59 U	**5.7**	8.5	NA	NA	9.8	NA	19	NA	NA	NA	NA	NA	
SB-17 (0.5-2)	31-Jan-14	0.5-2	**No SW**	NA	*6.2*	**28**	**240**	NA	NA	**290**	NA	**480**	NA	NA	NA	NA	NA	
Area 2 - Baseball Field																		
SB-27 (0-1)	25-Feb-14	0-1	**No SW**	NA	2.2 I	**8.3**	45	NA	NA	61	6700	150	NA	NA	NA	NA	NA	
SB-27 (1-1.5)	25-Feb-14	1-1.5	**No SW**	NA	*9.2*	**13**	28	NA	NA	52	6500	150	NA	NA	NA	NA	NA	
SB-27 (1.5-2)	25-Feb-14	1.5-2	**SW**	NA	**39**	**41**	**1500**	NA	NA	**3800**	**160000**	**3400**	NA	NA	NA	0.023U	NA	
SB-28 (0-0.5)	25-Feb-14	0-0.5	**No SW**	NA	0.76 I	2.1	44	NA	NA	22	2900	34	NA	NA	NA	NA	2.23	
SB-28 (0.5-2)	25-Feb-14	0.5-2	**SW**	NA	**16**	**17**	**590**	NA	NA	**870**	24000	**490**	NA	NA	NA	NA	5.50	
SB-29 (0-1)	25-Feb-14	0-1	**No SW**	NA	1.9 I	**7.8**	50	NA	NA	52	7500	140	NA	NA	NA	NA	NA	
SB-29 (1-2)	25-Feb-14	1-2	**No SW**	NA	2.0 I	**11**	36	NA	NA	50	10000	170	NA	NA	NA	NA	NA	
SB-30 (0-1)	25-Feb-14	0-1	**No SW**	NA	0.58 U	**13**	6.6	NA	NA	5.0	10000	12	NA	NA	NA	NA	4.70	
SB-30 (1-2)	25-Feb-14	1-2	**SW**	NA	*8.0*	**120**	120	NA	NA	**240**	15000	300	NA	NA	NA	NA	**8.08**	
SB-31 (0-1)	25-Feb-14	0-1	**No SW**	NA	0.86 I	**21**	26	NA	NA	40	7300	70	NA	NA	NA	NA	NA	
SB-31 (1-2)	25-Feb-14	1-2	**Metal & Glass**	NA	3.2	**16**	84	NA	NA	140	16000	340	NA	NA	NA	NA	NA	
Playground December 2013 Samples																		
Curtis (1)(0-0.5)	23-Dec-13	0-0.5	**SW**	960	1.1 I	**2.8**	39	0.29 I	13	39	5600	72	0.022 I	NA	NA	NA	NA	
Curtis (2)(0-0.5)	23-Dec-13	0-0.5	**SW**	1000	2.9	**5.4**	94	0.56	7.6	62	11000	290	0.012 I	NA	NA	NA	NA	

TABLE 2 - SOIL ANALYTICAL SUMMARY (Metals, PCBs and Dioxins)

GERRY CURTIS PARK

Sample				Parameters														
Sample Location/ Sample ID	Date Collected	Sample Interval (fbls)	Type of Solid Waste (SW) Observed	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Mercury	Selenium	Silver	Total PCBs	Dioxins Total 2,3,7,8-TCDD Equivalents[#]	Comment
				(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)	(ng/Kg)	
Direct Exposure Residential				80000	27	2.1	120**	82	310	150**	53000	400	3	440	410	0.5	7	
Direct Exposure Industrial				*	370	12	130000	1700	470	89000	*	1400	17	11000	8200	2.6	30	
Leachability Based on Groundwater Criteria				***	5.4	***	1600	7.5	38	***	***	***	2.1	5.2	17	17	3000	
Miami-Dade County Background Concentration				2656	NA	1.2	7	0.1	6.8	4.1	2176	26	0.08	<0.45 [a]	<0.025 [a]	NA	NA	
Area 3 - Playground																		
SB-32 (0-0.5)	26-Feb-14	0-0.5	**No SW**	1100	3.0	**5.6**	87	0.48 I	14	55	8600	210	0.29 I	0.43 U	0.38 I	NA	NA	
SB-32 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	960	**64**	**21**	98	0.60	18	**220**	10000	310	0.29 I	0.40 U	0.50 I	NA	NA	
SB-32 (1-2)	26-Feb-14	1-2	**Metal & Glass**	5600	*20*	**39**	**2600**	5.9	*72*	**890**	**98000**	**3500**	0.060	2.1 U	6.0	0.020U	NA	Dilution x5
SB-33 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	0.49 U	1.5	12	NA	NA	9.0	1600	30	NA	NA	NA	NA	1.12	
SB-33 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	NA	*6.3*	**9.7**	**380**	NA	NA	**180**	16000	**1500**	NA	NA	NA	NA	NA	
SB-33 (1-2)	26-Feb-14	1-2	**Metal & Glass**	NA	*14*	**20**	**730**	NA	NA	**1000**	50000	**3000**	NA	NA	NA	NA	**20.08**	Dilution x5
SB-34 (0-0.5)	26-Feb-14	0-0.5	**Metal & Glass**	860	1.8 I	**8.1**	48	0.48 I	7.5	48	8300	170	0.059	0.39 U	0.35 I	NA	NA	
SB-34 (0.5-1)	26-Feb-14	0.5-1	**No SW**	2200	5.2	**15**	**180**	1.0	16	140	15000	**620**	0.050	0.41 U	0.93 I	NA	NA	
SB-34 (1-2)	26-Feb-14	1-2	**Metal & Glass**	2100	*13*	**12**	**430**	1.5	18	**210**	24000	**1200**	0.017 I	0.77 U	1.8 I	NA	NA	Dilution x2
SB-35 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	1.3 I	**3.2**	110	NA	NA	35	5200	150	NA	NA	NA	NA	NA	
SB-35 (0.5-1.5)	26-Feb-14	0.5-1	**No SW**	NA	0.81 I	**2.5**	34	NA	NA	21	1700	260	NA	NA	NA	NA	NA	
SB-35 (1.5-2)	26-Feb-14	1-2	**Metal & Glass**	NA	*23*	**50**	**1400**	NA	NA	**760**	**61000**	**5900**	NA	NA	NA	NA	NA	Dilution x5
Area 3A - Playground																		
SB-36 (0-0.5)	26-Feb-14	0-0.5	**No SW**	1600	1.3 I	**2.4**	46	0.31 I	7.5	33	3600	92	0.012 U	0.38 U	0.20 U	NA	0.90	
SB-36 (0.5-1)	26-Feb-14	0.5-1	**No SW**	2300	*9.9 I*	**26**	**330**	2.3 I	32	**250**	47000	**1100**	0.20	2.4 U	1.9 I	NA	NA	Dilution x5
SB-36 (1-2)	26-Feb-14	1-2	**SW**	6100	*20*	**32**	**2900**	5.2	*79*	**1200**	**90000**	**2900**	0.20	2.5 U	5.1 I	0.023U	**17.76**	Dilution x5
SB-37 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	2.2 I	**8.0**	79	NA	NA	58	5900	160	NA	NA	NA	NA	NA	
SB-37 (0.5-1.5)	26-Feb-14	0.5-1	**No SW**	NA	1.4 I	**16**	94	NA	NA	33	9600	82	NA	NA	NA	NA	NA	
SB-37 (1.5-2)	26-Feb-14	1-2	**Metal & Glass**	NA	5.3 I	**14**	**140**	NA	NA	**170**	30000	**560**	NA	NA	NA	NA	NA	Dilution x5
SB-38 (0-0.5)	26-Feb-14	0-0.5	**No SW**	2300	5.2	**10**	**540**	1.6	19	**160**	16000	**450**	0.15	0.69 I	1.1 I	NA	**10.67**	
SB-38 (0.5-1)	26-Feb-14	0.5-1	**SW**	3400	*9.5 I*	**44**	**740**	2.2 I	*41*	**430**	**56000**	**1400**	0.11	2.2 U	2.7 I	NA	**16.21**	Dilution x5
SB-38 (1-2)	26-Feb-14	1-2	**SW**	4600	*18 I*	**43**	**1000**	*10*	*75*	**2300**	**140000**	**2700**	0.035	4.3 U	5.6 I	NA	NA	Dilution x10
SB-39 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	1.1 I	1.7	21	NA	NA	35	990	24	NA	NA	NA	NA	NA	
SB-39 (0.5-2)	26-Feb-14	0.5-1	**No SW**	NA	2.7	**6.4**	**160**	NA	NA	72	12000	210	NA	NA	NA	NA	NA	
Courts December 2013 Samples																		
Curtis (6)(0-0.5)	23-Dec-13	0-0.5	**SW**	1900	*8.4*	**16**	**290**	1.5	23	**210**	38000	**640**	0.059	NA	NA	NA	NA	
Curtis (7)(0-0.5)	23-Dec-13	0-0.5	**SW**	2300	*7.5*	**18**	110	1.5	23	150	30000	**570**	0.15	NA	NA	NA	NA	

TABLE 2 - SOIL ANALYTICAL SUMMARY (Metals, PCBs and Dioxins)

GERRY CURTIS PARK

Sample				Parameters														
Sample Location/ Sample ID	Date Collected	Sample Interval (fbls)	Type of Solid Waste (SW) Observed	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Mercury	Selenium	Silver	Total PCBs	Dioxins Total 2,3,7,8-TCDD Equivalents[#]	Comment
				(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)	(ng/Kg)	
Direct Exposure Residential				80000	27	2.1	120**	82	310	150**	53000	400	3	440	410	0.5	7	
Direct Exposure Industrial				*	370	12	130000	1700	470	89000	*	1400	17	11000	8200	2.6	30	
Leachability Based on Groundwater Criteria				***	5.4	***	1600	7.5	38	***	***	***	2.1	5.2	17	17	3000	
Miami-Dade County Background Concentration				2656	NA	1.2	7	0.1	6.8	4.1	2176	26	0.08	<0.45 [a]	<0.025 [a]	NA	NA	
Area 4 - Courts																		
SB-40 (0-0.5)	24-Feb-14	0-0.5	**Metal & Glass**	NA	*15*	**35**	**860**	NA	NA	**580**	**82000**	**2700**	NA	NA	NA	NA	NA	Dilution x5
SB-40 (0.5-1)	24-Feb-14	0.5-1	**No SW**	NA	*7.3*	**17**	**310**	NA	NA	**170**	16000	**580**	NA	NA	NA	NA	NA	
SB-40 (1-2)	24-Feb-14	1-2	**Metal & Glass**	NA	*11*	**20**	**650**	NA	NA	**260**	38000	**1800**	NA	NA	NA	NA	NA	Dilution x5
SB-41 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	2.1 I	**6.5**	46	NA	NA	88	8600	140	NA	NA	NA	NA	NA	
SB-41 (0.5-1)	24-Feb-14	0.5-1	**No SW**	NA	0.54 U	0.83	8.5	NA	NA	2.7	770	4.5	NA	NA	NA	NA	NA	
SB-41 (1-2)	24-Feb-14	1-2	**Metal**	NA	0.56 U	0.26 U	2.4	NA	NA	0.56 U	850	1.2	NA	NA	NA	NA	NA	
SB-42 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	0.69 I	**4.0**	20	NA	NA	24	2000	47	NA	NA	NA	NA	5.71	
SB-42 (0.5-1)	24-Feb-14	0.5-1	**No SW**	NA	0.62 U	**2.8**	18	NA	NA	18	1500	32	NA	NA	NA	NA	NA	
SB-42 (1-1.5)	24-Feb-14	1-1.5	**No SW**	NA	*13*	**11**	**350**	NA	NA	**310**	30000	**930**	NA	NA	NA	NA	NA	
SB-42 (1.5-2)	24-Feb-14	1.5-2	**SW**	NA	*6.6 I*	**17**	**320**	NA	NA	**3300**	31000	400	NA	NA	NA	NA	**18.90**	
SB-43 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	1.0 I	**5.5**	42	NA	NA	39	3300	60	NA	NA	NA	NA	NA	
SB-43 (0.5-1)	24-Feb-14	0.5-1	**No SW**	NA	1.1 I	**2.6**	33	NA	NA	22	2900	82	NA	NA	NA	NA	NA	
SB-43 (1-2)	24-Feb-14	1-2	**Metal & Glass**	NA	*15*	**37**	**580**	NA	NA	**560**	**41000**	**1700**	NA	NA	NA	NA	NA	Dilution x5
SB-44 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	1.5 I	**5.3**	36	NA	NA	55	4400	100	NA	NA	NA	NA	1.88	
SB-44 (0.5-1)	24-Feb-14	0.5-1	**No SW**	NA	1.6 I	**3.6**	48	NA	NA	45	4700	130	NA	NA	NA	NA	NA	
SB-44 (1-2)	24-Feb-14	1-2	**Metal & Glass**	NA	**35**	**68**	**1400**	NA	NA	**1400**	**140000**	**3100**	NA	NA	NA	NA	**22.06**	Dilution x10
SB-45 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	*12*	**10**	90	NA	NA	91	8500	**1100**	NA	NA	NA	NA	NA	
SB-45 (0.5-1)	24-Feb-14	0.5-1	**No SW**	NA	3.2	**9.2**	86	NA	NA	81	9000	380	NA	NA	NA	NA	NA	
SB-45 (1-2)	24-Feb-14	1-2	**SW**	NA	*23*	**54**	**1800**	NA	NA	**890**	**99000**	**5900**	NA	NA	NA	0.021U	NA	Dilution x5
ROW - Samples #3 (NW 20th Street)																		
SB-80 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	**29**	**35**	**480**	NA	NA	**440**	**69000**	**3000**	NA	NA	NA	0.021U	4.71	Dilution x5
SB-80 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	NA	**170**	**33**	**500**	NA	NA	**760**	**71000**	**1300**	NA	NA	NA	NA	1.97	Dilution x5
SB-80 (1-2)	26-Feb-14	1-2	**Metal & Glass**	NA	5.2	**11**	**200**	NA	NA	120	17000	340	NA	NA	NA	NA	NA	
SB-81 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	3.3	**5.7**	110	NA	NA	110	11000	**420**	NA	NA	NA	NA	NA	
SB-81 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	NA	**53**	**13**	**340**	NA	NA	**270**	25000	**2200**	NA	NA	NA	NA	NA	
SB-81 (1-2)	26-Feb-14	1-2	**Metal & Glass**	NA	**11**	**21**	**500**	NA	NA	**310**	29000	**860**	NA	NA	NA	NA	NA	
Western Bleachers December 2013 Samples																		
Curtis (5)(0-0.5)	23-Dec-13	0-0.5	**SW**	1800	3.4	**9.5**	**130**	0.89	14	110	10000	280	0.043	NA	NA	NA	NA	
Area 5 - Western Bleachers																		
SB-46 (0-0.5)	25-Feb-14	0-0.5	**Metal & Glass**	NA	**33**	**27**	**620**	NA	NA	**510**	45000	**1200**	NA	NA	NA	NA	NA	Dilution x5
SB-46(0.5-2)	25-Feb-14	0.5-2	**Metal & Glass**	NA	*21*	**31**	**820**	NA	NA	**980**	**100000**	**2300**	NA	NA	NA	NA	NA	Dilution x5
SB-49 (0-0.5)	25-Feb-14	0-0.5	**Metal & Glass**	2800	*5.9*	**12**	**220**	1.3	24	140	17000	**430**	0.037	0.44 U	0.89 I	NA	NA	
SB-49 (0.5-2)	25-Feb-14	0.5-2	**Metal & Glass**	NA	*14*	**19**	**710**	NA	NA	**270**	**61000**	**1500**	NA	NA	NA	NA	NA	Dilution x5

TABLE 2 - SOIL ANALYTICAL SUMMARY (Metals, PCBs and Dioxins)

GERRY CURTIS PARK

Sample				Parameters														
Sample Location/ Sample ID	Date Collected	Sample Interval (fbls)	Type of Solid Waste (SW) Observed	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Mercury	Selenium	Silver	Total PCBs	Dioxins Total 2,3,7,8-TCDD Equivalents[#]	Comment
				(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)	(ng/Kg)	
Direct Exposure Residential				80000	27	2.1	120**	82	310	150**	53000	400	3	440	410	0.5	7	
Direct Exposure Industrial				*	370	12	130000	1700	470	89000	*	1400	17	11000	8200	2.6	30	
Leachability Based on Groundwater Criteria				***	5.4	***	1600	7.5	38	***	***	***	2.1	5.2	17	17	3000	
Miami-Dade County Background Concentration				2656	NA	1.2	7	0.1	6.8	4.1	2176	26	0.08	<0.45 [a]	<0.025 [a]	NA	NA	
Area 5A - Western Bleachers																		
SB-47 (0-1)	26-Feb-14	0-1	**Metal & Glass**	1700	0.87 I	**7.1**	41	0.64	15	32	3800	92	0.17	0.62 I	0.55 I	NA	NA	
SB-47 (1-2)	26-Feb-14	1-2	**Metal & Glass**	NA	*17*	**34**	**650**	NA	NA	**420**	**110000**	**2300**	NA	NA	NA	0.018U	NA	Dilution x5
SB-48 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	0.64 U	**3.4**	21	NA	NA	19	3300	24	NA	NA	NA	NA	NA	
SB-48 (0.5-1.5)	26-Feb-14	0.5-1.5	**No SW**	NA	0.52 U	1.7	9.4	NA	NA	7.8	1100	12	NA	NA	NA	NA	NA	
SB-48 (1.5-2)	26-Feb-14	1.5-2	**Metal & Glass**	NA	*6.2*	**40**	**140**	NA	NA	140	28000	250	NA	NA	NA	NA	NA	Dilution x2
Area 6 - Football Field																		
SB-50 (0-0.5)	24-Feb-14	0-0.5	**No SW**	2500	1.2 I	**10**	38	0.42 I	15	35	5700	170	0.059	0.44 U	0.48 I	NA	NA	
SB-50 (0.5-1.5)	24-Feb-14	0.5-1.5	**No SW**	NA	0.55 U	1.4	7.0	NA	NA	3.5	2100	7.9	NA	NA	NA	NA	NA	
SB-50 (1.5-2)	24-Feb-14	1.5-2	**Metal & Glass**	NA	*13*	**27**	**470**	NA	NA	**280**	**110000**	**1100**	NA	NA	NA	0.020U	NA	
SB-51 (0-1)	24-Feb-14	0-1	**No SW**	NA	2.9	**33**	110	NA	NA	81	7800	310	NA	NA	NA	NA	NA	
SB-51 (1-2)	24-Feb-14	1-2	**Metal & Glass**	NA	*9.2*	**20**	**530**	NA	NA	**400**	41000	**780**	NA	NA	NA	NA	NA	
SB-52 (0-2)	24-Feb-14	0-2	**No SW**	2000	1.4 I	**15**	46	0.25 I	7.8	39	9600	95	0.030 I	0.44 U	0.23 U	NA	NA	
SB-53 (0-0.5)	24-Feb-14	0-0.5	**Glass**	NA	*5.9 I*	**17**	84	NA	NA	95	40000	370	NA	NA	NA	NA	NA	
SB-53 (0.5-2)	24-Feb-14	0.5-2	**Glass**	NA	1.8 I	**11**	66	NA	NA	42	5000	110	NA	NA	NA	NA	NA	
SB-54 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	2.0 I	**8.6**	63	NA	NA	69	7000	120	NA	NA	NA	NA	NA	
SB-54 (0.5-1)	24-Feb-14	0.5-1	**No SW**	NA	*6.2*	**14**	**140**	NA	NA	**220**	33000	320	NA	NA	NA	NA	NA	
SB-54 (1-2)	24-Feb-14	1-2	**Metal & Glass**	NA	4.4	**8.1**	**130**	NA	NA	90	12000	290	NA	NA	NA	NA	NA	
SB-55 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	0.69 U	**4.5**	27	NA	NA	15	3100	40	NA	NA	NA	NA	NA	
SB-55 (0.5-1.5)	24-Feb-14	0.5-1.5	**No SW**	NA	1.6 I	**4.2**	34	NA	NA	58	6900	55	NA	NA	NA	NA	NA	
SB-55 (1.5-2)	24-Feb-14	1.5-2	**Metal & Glass**	NA	1.8 I	**3.3**	47	NA	NA	41	6400	100	NA	NA	NA	NA	NA	
SB-56 (0-2)	24-Feb-14	0-2	**Metal & Glass**	1300	3.2	**28**	78	0.38 I	9.1	71	7800	170	0.040	0.42 U	0.43 I	NA	NA	
SB-57 (0-2)	24-Feb-14	0-2	**No SW**	1200	0.57 U	**11**	23	0.72	12	21	2700	38	0.28	0.42 U	1.6	NA	NA	
ROW - Samples #2 (NW 23rd Ave, North)																		
SB-72 (0-0.5)	26-Feb-14	0-0.5	**Glass**	NA	*10*	**23**	**420**	NA	NA	**350**	29000	**840**	NA	NA	NA	NA	**13.12**	
SB-72 (0.5-1)	26-Feb-14	0.5-1	**Glass**	NA	**130**	**21**	**420**	NA	NA	**380**	25000	**2700**	NA	NA	NA	0.019U	**12.95**	
SB-72 (1-2)	26-Feb-14	1-2	**Glass**	NA	*7.5*	**9.9**	**220**	NA	NA	150	11000	**2700**	NA	NA	NA	NA	NA	
SB-73 (0-0.5)	26-Feb-14	0-0.5	**Metal & Glass**	NA	*6.6*	**12**	**160**	NA	NA	**540**	19000	280	NA	NA	NA	NA	NA	
SB-73 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	NA	*7.9 I*	**12**	**340**	NA	NA	**160**	36000	360	NA	NA	NA	NA	NA	Dilution X5
SB-73 (1-2)	26-Feb-14	1-2	**Metal**	NA	*5.9*	**13**	120	NA	NA	130	21000	260	NA	NA	NA	NA	NA	
SB-74 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	2.4	**20**	50	NA	NA	130	15000	250	NA	NA	NA	NA	NA	
SB-74 (0.5-1)	26-Feb-14	0-0.5	**No SW**	NA	2.1 I	**22**	33	NA	NA	51	6300	90	NA	NA	NA	NA	NA	
SB-74 (1-2)	26-Feb-14	1-2	**Glass**	NA	1.7 I	**24**	30	NA	NA	43	4900	78	NA	NA	NA	NA	NA	
SB-75 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	1.5 I	**12**	40	NA	NA	73	6000	110	NA	NA	NA	NA	NA	
SB-75 (0.5-1)	26-Feb-14	0.5-1	**Glass**	NA	0.73 I	**7.4**	24	NA	NA	38	4800	57	NA	NA	NA	NA	NA	
SB-75 (1-2)	26-Feb-14	1-2	**Glass**	NA	1.4 I	**14**	23	NA	NA	49	8400	92	NA	NA	NA	NA	NA	
SB-76 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	2.9	**5.9**	51	NA	NA	55	4300	100	NA	NA	NA	NA	NA	
SB-76 (0.5-1)	26-Feb-14	0.5-1	**No SW**	NA	*13*	**6.9**	47	NA	NA	88	12000	**560**	NA	NA	NA	NA	NA	
SB-76 (1-2)	26-Feb-14	1-2	**Glass**	NA	4.1	**5.5**	120	NA	NA	**240**	11000	200	NA	NA	NA	NA	NA	

TABLE 2 - SOIL ANALYTICAL SUMMARY (Metals, PCBs and Dioxins)

GERRY CURTIS PARK

Sample				Parameters														
Sample Location/ Sample ID	Date Collected	Sample Interval (fbls)	Type of Solid Waste (SW) Observed	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Mercury	Selenium	Silver	Total PCBs	Dioxins Total 2,3,7,8-TCDD Equivalents[#]	Comment
				(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)	(ng/Kg)	
Direct Exposure Residential				80000	27	2.1	120**	82	310	150**	53000	400	3	440	410	0.5	7	
Direct Exposure Industrial				*	370	12	130000	1700	470	89000	*	1400	17	11000	8200	2.6	30	
Leachability Based on Groundwater Criteria				***	5.4	***	1600	7.5	38	***	***	***	2.1	5.2	17	17	3000	
Miami-Dade County Background Concentration				2656	NA	1.2	7	0.1	6.8	4.1	2176	26	0.08	<0.45 [a]	<0.025 [a]	NA	NA	
ROW - Samples #3 (NW 20th Street)																		
SB-77 (0-0.5)	26-Feb-14	0-0.5	**No SW**	NA	*5.6*	**26**	80	NA	NA	75	8200	190	NA	NA	NA	NA	NA	
SB-77 (0.5-1)	26-Feb-14	0.5-1	**No SW**	NA	1.3 I	**12**	20	NA	NA	25	4600	56	NA	NA	NA	NA	NA	
SB-77 (1-2)	26-Feb-14	1-2	**No SW**	NA	4.4	**10**	94	NA	NA	71	6800	170	NA	NA	NA	NA	NA	
SB-78 (0-0.5)	26-Feb-14	0-0.5	**Metal & Glass**	NA	3.4	**6.8**	69	NA	NA	78	8300	170	NA	NA	NA	NA	NA	
SB-78 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	NA	*6.2*	**12**	**130**	NA	NA	80	11000	220	NA	NA	NA	NA	NA	
SB-78 (1-2)	26-Feb-14	1-2	**Metal & Glass**	NA	4.7	**12**	82	NA	NA	100	6300	180	NA	NA	NA	NA	NA	
SB-79 (0-0.5)	26-Feb-14	0-0.5	**Metal & Glass**	NA	*9.2*	**29**	**350**	NA	NA	**260**	37000	**780**	NA	NA	NA	NA	NA	Dilution x3
SB-79 (0.5-1)	26-Feb-14	0.5-1	**Metal & Glass**	NA	*13*	**24**	**390**	NA	NA	**370**	39000	**1200**	NA	NA	NA	0.020U	NA	Dilution x3
SB-79 (1-1.5)	26-Feb-14	1-1.5	**Metal & Glass**	NA	*7.1*	**13**	**250**	NA	NA	**300**	20000	**530**	NA	NA	NA	NA	NA	
Area 7 - Pool																		
SB-58 (0-0.5)	24-Feb-14	0-0.5	**No SW**	3500	*10*	**130**	**300**	3.2	32	**770**	31000	**970**	0.24	0.86 U	3.2	NA	NA	Dilution x2
SB-58 (0.5-2)	24-Feb-14	0.5-2	**Metal & Glass**	NA	**46**	**420**	**810**	NA	NA	**750**	**100000**	**2200**	NA	NA	NA	NA	NA	Dilution x5
SB-59 (0-0.5)	24-Feb-14	0-0.5	**No SW**	NA	4.7	**8.3**	**25**	NA	NA	50	6000	350	NA	NA	NA	NA	NA	
SB-59 (0.5-2)	24-Feb-14	0.5-2	**No SW**	NA	0.62 U	**5.6**	16	NA	NA	30	3100	70	NA	NA	NA	NA	NA	
SB-60 (0-0.5)	24-Feb-14	0-0.5	**No SW**	1400	*5.8*	**6.2**	110	1.0	14	120	9900	**430**	0.18	0.44 U	0.65 I	NA	NA	
SB-60 (0.5-2)	24-Feb-14	0.5-2	**Metal & Glass**	NA	**110**	**50**	**180**	NA	NA	150	19000	**2300**	NA	NA	NA	0.019U	NA	
SB-61 (0-2)	24-Feb-14	0-2	**No SW**	NA	0.54 U	1.5	13	NA	NA	15	1600	32	NA	NA	NA	NA	NA	
SB-62 (0-2)	24-Feb-14	0-2	**No SW**	1400	0.51 U	1.2	7.9	0.16 I	6.4	11	1200	31	0.063	0.38 U	0.19 U	NA	NA	
SB-63 (0-2)	24-Feb-14	0-2	**No SW**	NA	0.56 U	1.3	6.3	NA	NA	8.0	1600	15	NA	NA	NA	NA	NA	
SB-64 (0-2)	24-Feb-14	0-2	**No SW**	NA	1.2 I	**3.3**	26	NA	NA	18	2700	60	NA	NA	NA	NA	NA	
SB-82 (0-0.5)	3-Jun-14	0-0.5	**No SW**	NA	*5.6*	**6.6**	100	NA	NA	62	5500	190	NA	NA	NA	NA	NA	
SB-82 (0.5-2)	3-Jun-14	0.5-2	**No SW**	NA	0.87 I	1.4	48	NA	NA	20	1500	53	NA	NA	NA	NA	NA	
SB-83 (0-0.5)	3-Jun-14	0-0.5	**No SW**	NA	5.1	**13**	110	NA	NA	150	11000	380	NA	NA	NA	NA	NA	
SB-83 (0.5-2)	3-Jun-14	0.5-2	**No SW**	NA	2.3	**25**	49	NA	NA	33	3700	110	NA	NA	NA	NA	NA	
SB-84 (0-0.5)	3-Jun-14	0-0.5	**No SW**	NA	0.54 U	1.2	9.4	NA	NA	16	1300	36	NA	NA	NA	NA	NA	
SB-84 (0.5-2)	3-Jun-14	0.5-2	**No SW**	NA	3.6	**5**	59	NA	NA	45	5200	220	NA	NA	NA	NA	NA	
SB-85 (0-0.5)	3-Jun-14	0-0.5	**No SW**	NA	2.2	**2.5**	38	NA	NA	38	3000	88	NA	NA	NA	NA	NA	
SB-85 (0.5-2)	3-Jun-14	0.5-2	**No SW**	NA	2.4	**2.3**	44	NA	NA	36	4200	94	NA	NA	NA	NA	NA	
SB-86 (0-0.5)	3-Jun-14	0-0.5	**No SW**	NA	0.66 U	2	16	NA	NA	23	1400	21	NA	NA	NA	NA	NA	
SB-86 (0.5-2)	3-Jun-14	0.5-2	**No SW**	NA	0.90 I	1.9	6.4	NA	NA	21	8100	28	NA	NA	NA	NA	NA	
SB-87 (0-0.5)	3-Jun-14	0-0.5	**No SW**	NA	0.62 U	**2.8**	16	NA	NA	19	1800	49	NA	NA	NA	NA	NA	
SB-87 (0.5-2)	3-Jun-14	0.5-2	**No SW**	NA	0.56 U	0.81	6.3	NA	NA	4.3	850	11	NA	NA	NA	NA	NA	
SB-88 (0-0.5)	3-Jun-14	0-0.5	**No SW**	NA	0.59 U	**3.1**	12	NA	NA	17	1600	15	NA	NA	NA	NA	NA	
SB-88 (0.5-2)	3-Jun-14	0.5-2	**No SW**	NA	0.54 U	0.71	7.4	NA	NA	5.7	540	19	NA	NA	NA	NA	NA	
Area 8 - Eastern Parking Lot																		
SB-65 (0-0.5)	25-Feb-14	0-0.5	**No SW**	NA	0.58 U	**2.5**	13	NA	NA	26	2000	40	NA	NA	NA	NA	NA	
SB-65 (0.5-1)	25-Feb-14	0.5-1	**Metal**	NA	0.67 I	**3.2**	19	NA	NA	36	12000	38	NA	NA	NA	NA	NA	
SB-65 (1-2)	25-Feb-14	1-2	**No SW**	NA	0.60 U	1.1	8.0	NA	NA	7.2	2400	11	NA	NA	NA	NA	NA	
SB-66 (0-2)	25-Feb-14	0-2	**No SW**	1300	0.52 U	1.4	7.3	0.18 I	5.3	8.0	1500	62	0.042	0.38 U	0.20 U	NA	NA	
SB-67 (0-2)	25-Feb-14	0-2	**Metal**	1400	0.55 U	**2.9**	17	0.23 I	6.3	8.1	4000	20	0.044	0.40 U	0.42 U	NA	NA	
SB-68 (0-2)	25-Feb-14	0-2	**No SW**	NA	0.55 U	0.69	6.8	NA	NA	2.7	690	5.8	NA	NA	NA	NA	NA	

Notes -

mg/kg - milligrams per kilogram

ng/kg - nanograms per kilogram

U - Not detected at the laboratory method detection limit (MDL)

I - Estimated value, the reported value is between the MDL and the practical quantitaion limit (PQL)

Bold - Indicates an exceedance of the residential direct exposure soil cleanup target level (SCTL)

SCTLs = Soil Cleanup Target Levels specified in Table II of Chapter 24, Miami-Dade County Code

Italics - Indicates an exceedance of the leachability based on the groundwater criteria

NA = Not Analyzed or Not Available

fbls = Feet below land surface

SW = Observation of ash, metal and glass.

H = samples on Hold with laboratory

= 2,3,7,8-TCDD equivalents calculated by the laboratory using the 2005 World Health Organization toxicity equivalency factors
Tabulated laboratory data has been rounded as specified in FDEP Memorandum "Rounding Analytical Data for Site Rehabilitation Completion" dated November 17, 2011

* = Contaminant is not a health concern for this exposure scenario

** = Direct exposure value based on acute toxicity considerations. This criterion is applicable in scenarios where children might be exposed to soils (e.g. residences, schools, playgrounds)

*** = Leachability value may be determined using Synthetic Precipitate Leachate Procedure (SPLP) or TCLP, in the event of an oil waste.

[a] = Data for selenium and silver were not analyzed statistically, Soil Reuse Guidance for Miami-Dade County, SWP Guidance No.1 March 22, 2004

ATTACHMENT A

REGULATORY CORRESPONDENCE

MIAMI-DADE COUNTY
Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources
Environmental Resources Management
701 NW 1st Court, 4th Floor
Miami, Florida 33136-3912
T 305-372-6700 F 305-372-6982
miamidade.gov

May 29, 2014

CERTIFIED MAIL NO: 7011 0470 0002 4386 3776
RETURN RECEIPT REQUESTED

Alice Bravo, P.E.
Assistant City Manager - Chief of Infrastructure
City of Miami
444 SW 2nd Avenue
Miami, FL 33130

Re: Site Assessment Report dated April 21, 2014 and submitted by SCS Consultants for the City of Miami (the City) Curtis Park (HWR-777) located at, near or in the vicinity of 1901 NW 24 Ave, Miami, Florida.

Dear Ms. Bravo:

The Department of Regulatory and Economic Resources' Division of Environmental Resources Management (DERM) has reviewed the referenced report received on April 23, 2014 and finds that additional assessment is required. Specifically;

Groundwater

1. The concentrations of antimony and aluminum in temporary monitory wells TMW-2 and TMW-3, respectively, exceeds the groundwater cleanup target level; additionally, the concentration of iron in TMW-3 and TMW-4 are inconsistent with the Miami-Dade County background concentration of iron in groundwater. Based on the foregoing, install permanent monitoring wells in the vicinity of the above mentioned temporary wells and sample and analyze groundwater as indicated below.

    - The monitoring well installed in the vicinity of TMW-2 shall be sampled and the groundwater analyzed for antimony.
    - The monitoring well installed in the vicinity of TMW-3 shall be sampled and the groundwater analyzed for aluminum and iron.
    - The monitoring well installed in the vicinity of TMW-4 shall be sampled and the groundwater analyzed for iron.

    If resampling confirms groundwater contamination, additional assessment as needed to fully delineate the groundwater plume will be required.

Soil

2. Based on the dioxin concentration through the 0-1 foot interval, conduct source removal, with confirmation sampling, in the right-of way in the area of SB-70. Based on the lead concentration at the 1 to 2 feet interval DERM recommends including the 1 to 2 feet interval in the source removal.

3. Offsite delineation, is required as follows:
   - Along the eastern property based on the contaminant concentrations documented at soils borings SB-72, SB-73, SB-74, SB-54 and SB-76. Dioxin shall be included as a contaminant of concern for offsite delineation in the vicinity of SB-72.
   - West of SB-40 and SB-6
   - Additional offsite delineation is required to the north of soil borings SB-77 (arsenic only) and SB-78 through SB-81

4. Based on the contaminant concentrations at soil boring SB-58 and SB-60 additional delineation, in the direction of the property boundary, is required and shall include analysis for dioxins.

Solid Waste Delineation

5. The solid waste delineation provided in Figure 8 is inconsistent with the delineation provided in Figure 2. As an example Figure 2 indicates that within Area 3 (playground area) solid waste occurs below 1 foot throughout most of this area; however, based on Figure 8, solid waste occurs at 6 inch throughout most of the area. Similar inconsistencies are note in other areas. The maps shall be revised as appropriate and included in the next submittal.

6. Offsite solid waste delineation is required outside the northeastern property boundary and additional offsite delineation is required to the north of SB-79 through SB-81.

7. Provide north/south and east/west cross sections indicating the vertical extent of the solid waste layer. Given the size of the park, more than one cross section maybe required in each direction.

General

8. Provide concentration contour for each of the major contaminants of concern for each vertical interval. The contours shall be overlaid with the solid waste distribution for that interval.

9. Provide a map indicating the soiled waste thickness at each soil boring location.

Notwithstanding the need for additional assessment, DERM finds that the SAR provides sufficient information to allow for the development of a corrective action plan to address the contamination documented at the park.

Based on the above, within forty-five (45) days of receipt of this correspondence, submit a site assessment report addendum that addresses the requirements above along with a corrective action plan to address the contamination documented at the site.

The consultant collecting the samples shall perform field sampling work in accordance with the Standard Operating Procedures provided in Chapter 62-160, Florida Administrative Code (FAC). The laboratory analyzing the samples shall perform laboratory analyses pursuant to the

National Environmental Laboratory Accreditation Program (NELAP) certification requirements. DERM reserves the right to split samples with the consultant as deemed necessary; therefore, DERM shall be notified via email a minimum of three (3) working days prior to the implementation of any sampling or field activities. Email notifications shall be directed to bucknl@miamidade.gov as well as to DERMPCD@miamidade.gov. Please include the DERM file number on all correspondence.

If you have any questions concerning the above contact me at mayorw@miamidade.gov or Lorna Bucknor at bucknl@miamidade.gov or via telephone at (305) 372-6700.

Sincerely

Wilbur Mayorga, P.E. Chief
Environmental Monitoring and Restoration Division

ec: Jeovanny Rodriquez, City of Miami - jeovannyrodriquez@miamigov.com
Eduardo Smith, SCS ES Consultants - ESmith@scsengineers.com
Samir Elmir, Ph.D., FDOH-Miami Dade County - Samir.Elmir@flhealth.gov
Lee Hefty, Director, DERM – heftyl@miamidade.gov

ATTACHMENT B

WELL CONSTRUCTION AND DEVELOPMENT LOGS

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
MW-1	Curtis Park (1901 NW 24th Ave, Miami, FL)		3-June-14

Well Location and Type (check appropriate boxes): ☑ On-Site ☐ Right-of-Way ☐ Off-Site Private Property ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose: ☐ Perched Monitoring ☑ Shallow (Water-Table) Monitoring ☐ Intermediate or Deep Monitoring ☐ Remediation or Other (describe)

Well Install Method: Direct Push

Surface Casing Install Method: N/A.

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
14.5	14	3 1/4	6"	1 feet by 1 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
Solid PVC / 1.5"	☑ Flush-Threaded ☐ Other (describe)	4 feet from 0 feet to 4 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
Slotted PVC / 1.5"	0.01	10 feet from 4 feet to 14 feet

	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
1st Surface Casing Material: also check: ☐ Permanent ☐ Temporary		feet from 0 feet to feet
2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length: feet from 0 feet to feet
3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length: feet from 0 feet to feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
#1/20	☑ Yes ☐ No	13 feet from 1.5 feet to 14.5 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
Fine Grain Sand	0.75 feet from 0.75 feet to 1.5 feet

Surface Seal Material:	Surface Seal Length:
Neat Grout	0.5 feet from 0.25 feet to 0.75 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):	
3-June-14	☐ Surge/Pump ☑ Pump ☐ Compressed Air ☐ Other (describe)	

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☑ Centrifugal ☐ Peristaltic ☐ Submersible ☐ Other (describe)	5

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~0.7		☐ Yes ☑ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	55	80	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Tanish Brown / Turbid - No Odor	Clear / No Odor.

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
MW-2	Curtis Park (1901 NW 24th Ave, Miami, FL)		3-Jun-14

Well Location and Type (check appropriate boxes): ☑ On-Site ☐ Right-of-Way ☐ Off-Site Private Property ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose: ☐ Perched Monitoring ☑ Shallow (Water-Table) Monitoring ☐ Intermediate or Deep Monitoring ☐ Remediation or Other (describe)

Well Install Method: Direct Push

Surface Casing Install Method: N/A

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
15	14	3 1/4	6"	1 feet by 1 feet

Riser Diameter and Material: Solid PVC 1.5"

Riser/Screen Connections: ☑ Flush-Threaded ☐ Other (describe)

Riser Length: 4 feet from 0 feet to 4 feet

Screen Diameter and Material: SLOTTED PVC 1.5"

Screen Slot Size: 0.01

Screen Length: 10 feet from 4 feet to 14 feet

1st Surface Casing Material: also check: ☐ Permanent ☐ Temporary

1st Surface Casing I.D. (inches):

1st Surface Casing Length: ____ feet from 0 feet to ____ feet

2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

2nd Surface Casing I.D. (inches):

2nd Surface Casing Length: ____ feet from 0 feet to ____ feet

3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

3rd Surface Casing I.D. (inches):

3rd Surface Casing Length: ____ feet from 0 feet to ____ feet

Filter Pack Material and Size: 6/20

Prepacked Filter Around Screen (check one): ☑ Yes ☐ No

Filter Pack Length: 13 feet from 2 feet to 15 feet

Filter Pack Seal Material and Size: Fine grain Sand

Filter Pack Seal Length: 1 feet from 1 feet to 2 feet

Surface Seal Material: Neat grout.

Surface Seal Length: 0.5 feet from 0.5 feet to 1 feet

WELL DEVELOPMENT DATA

Well Development Date: 3-June-14

Well Development Method (check one): ☐ Surge/Pu ☑ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check): ☒ Centrifugal ☐ Peristaltic ☐ Submersible ☑ Other (describe)

Depth to Groundwater (before developing in feet): 5

Pumping Rate (gallons per minute): 0.9

Maximum Drawdown of Groundwater During Development (feet):

Well Purged Dry (check one): ☐ Yes ☑ No

Pumping Condition (check one): ☑ Continuous ☐ Intermittent

Total Development Water Removed (gallons): 55

Development Duration (minutes): 60

Development Water Drummed (check one): ☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development: White / Turbid - No odor.

Water Appearance (color and odor) At End of Development: Clear. No odor.

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
MW-3	Curtis Park (1901 NW 24th Ave, Miami, FL)		3-Jun-14

Well Location and Type (check appropriate boxes): ☑ On-Site ☐ Right-of-Way ☐ Off-Site Private Property ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose: ☐ Perched Monitoring ☑ Shallow (Water-Table) Monitoring ☐ Intermediate or Deep Monitoring ☐ Remediation or Other (describe)

Well Install Method: Direct Push

Surface Casing Install Method: N/A

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
15	14	3 1/4	6"	1 feet by 1 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
Solid PVC - 1.5"	☑ Flush-Threaded ☐ Other (describe)	4 feet from 0 feet to 4 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
Slotted PVC - 1.5"	0.01	10 feet from 4 feet to 14 feet

1st Surface Casing Material: also check: ☐ Permanent ☐ Temporary	1st Surface Casing I.D. (inches):	1st Surface Casing Length: ____ feet from 0 feet to ____ feet
2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length: ____ feet from 0 feet to ____ feet
3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length: ____ feet from 0 feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
#1 20	☑ Yes ☐ No	13 feet from 2 feet to 15 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
Fine grain Sand	1 feet from 1 feet to 2 feet

Surface Seal Material:	Surface Seal Length:
Neat Grout.	0.5 feet from 0.5 feet to 1 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one): ☐ Surge/Pu ☑ Pump ☐ Compressed Air ☐ Other (describe)
3-June-14	

Development Pump Type (check): ☐ Centrifugal ☐ Peristaltic ☐ Submersible ☑ Other (describe)	Depth to Groundwater (before developing in feet):

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): ☐ Yes ☑ No

Pumping Condition (check one): ☑ Continuous ☐ Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one): ☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
White/Turbid - No Odor.	Clear. No Odor

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

ATTACHMENT C

GROUNDWATER SAMPLING LOGS, GROUNDWATER LABORATORY ANALYTICAL REPORTS & CHAIN-OF-CUSTODY

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Curtis Park	SITE LOCATION:	1901 NW 24 Ave, Miami, FL
WELL NO:	MW-1	SAMPLE ID:	MW-1
DATE:	6-Jun-2014.		

PURGING DATA

WELL DIAMETER (inches):	1.25	TUBING DIAMETER (inches):	3/16	WELL SCREEN INTERVAL DEPTH:	3.5 feet to 13.5 feet	STATIC DEPTH TO WATER (feet):	5.46	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (13.5 feet – 5.46 feet) X 0.06. gallons/foot = 0.48 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	9.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	9.5	PURGING INITIATED AT:	12:48	PURGING ENDED AT:	14:12	TOTAL VOLUME PURGED (gallons):	8.2

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:48	–	–	–	5.44	–	–	–	–	4.13	clear	None
13:55	6.5	6.5	0.1	5.45	6.97	25.98	1245	14.6	12.1	clear	None
14:03	0.8	7.3	0.1	5.45	6.95	25.99	1238	12.2	7.23	clear	None
14:06	0.3	7.6	0.1	5.45	6.95	26.02	1236	11.9	~~5.29~~ 6.92	clear	None
14:09	0.3	7.9	0.1	5.44	6.95	26.01	1234	11.7	5.29	clear	None
14:12	0.3	8.2	0.1	5.44	6.94	26.03	1234	11.2	4.98	clear	None

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	Maria Pages / SCS	SAMPLER(S) SIGNATURE(S):	MPages	SAMPLING INITIATED AT:	14:13	SAMPLING ENDED AT:	14:15

PUMP OR TUBING DEPTH IN WELL (feet):	9.5	TUBING MATERIAL CODE:	PE, S	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N-replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-1	1	PE	250	HNO_3	–	<2	Total Sb	APP	~125

REMARKS: 5 well volumes = 2.4.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Curtis Park	SITE LOCATION:	1901 NW 24 Ave, Miami, FL
WELL NO:	MW-2	SAMPLE ID:	MW-2
		DATE:	6 Jun 2014

PURGING DATA

WELL DIAMETER (inches):	1.25	TUBING DIAMETER (inches):	3/16	WELL SCREEN INTERVAL DEPTH:	3.57 feet to 13.57 feet	STATIC DEPTH TO WATER (feet):	3.68	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (13.57 feet – 3.68 feet) X 0.06 gallons/foot = 0.59 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	8.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	8.5	PURGING INITIATED AT:	14:25	PURGING ENDED AT:	14:58	TOTAL VOLUME PURGED (gallons):	3.4

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L ~~or~~ % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
14:25	–	–	–	3.68	–	–	–	–	12.14	clear	None
14:35	1.0	1.0	0.1	3.66	6.92	25.20	1467	18.4	4.61	clear	None
14:54	2.0	3.0	0.1	3.66	6.93	25.67	1455	10.9	5.12	clear	None
14:56	0.2	3.2	0.1	3.67	6.93	25.65	1453	10.6	4.99	clear	None
14:58	0.2	3.4	0.1	3.67	6.94	25.65	1456	10.4	4.63	clear	None

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	Maria Pages / SCS	SAMPLER(S) SIGNATURE(S):	Maria Pages	SAMPLING INITIATED AT:	15:00	SAMPLING ENDED AT:	15:03
PUMP OR TUBING DEPTH IN WELL (feet):	8.5	TUBING MATERIAL CODE:	PE, S	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N (replaced)) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-2	1	PE	250	HNO_3	–	<2	Total FE & Total Al	APP	~125

REMARKS: 5 Well Volumes = 2.95.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Curtis Park	SITE LOCATION:	1901 NW 24 Ave Miami FL
WELL NO:	MW-3	SAMPLE ID:	MW-3
DATE:	26 Jun 2014		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
1.25	3/16	3.52 feet to 13.52 feet	3.68	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (13.52 feet − 3.68 feet) X 0.06 gallons/foot = 0.59 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
8.5	8.5	15:10	15:58	8.3

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
15:10	—	—	—	3.45	—	—	—	—	129	Turbid	None
15:45	7.0	7.0	0.2	3.68	6.98	26.21	1489	18.2	35.4	Turbid	None
15:50	0.5	7.5	0.1	3.65	6.96	26.25	1458	14.2	23.9	Turbid	None
15:54	0.4	7.9	0.1	3.64	6.90	26.24	1454	13.9	20.1	Turbid	None
15:56	0.2	8.1	0.1	3.64	6.89	26.25	1457	13.6	18.3	Turbid	None
15:58	0.2	8.3	0.1	3.63	6.89	26.25	1454	12.8	18.9	Turbid	None

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Maria Pages / SCS	M Pages	1600	1603

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
8.5	PE, S		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-3	1	PE	250	HNO_3	—	<2	Total Fe	APP	~125

REMARKS: 5 well volumes - 2.95 gallons

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Tel: (850)878-3994

TestAmerica Job ID: 640-48171-1
Client Project/Site: Curtis Park

For:
SCS ES Consultants
7700 N. Kendall Drive, Suite 300
Miami, Florida 33156

Attn: Mr. Bob Speed

Authorized for release by:
6/16/2014 3:27:02 PM
Matt Jones, Project Management Assistant I
matt.jones@testamericainc.com

Designee for

Amy Marks, Project Manager II
(850)878-3994
amy.marks@testamericainc.com

Table of Contents

Definitions/Glossary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Job ID: 640-48171-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative
640-48171-1

Comments
No additional comments.

Receipt
The samples were received on 6/10/2014 at 8:30 AM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 1.9º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Client Sample ID: MW-1 — Lab Sample ID: 640-48171-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	8.3		5.0	2.3	ug/L	1		6020A	Total Recoverable

Client Sample ID: MW-2 — Lab Sample ID: 640-48171-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	25	I	50	23	ug/L	1		6020A	Total Recoverable
Iron	1000		100	33	ug/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Client Sample ID: MW-1
Date Collected: 06/06/14 14:13
Date Received: 06/10/14 08:30

Lab Sample ID: 640-48171-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.3		5.0	2.3	ug/L		06/12/14 08:40	06/12/14 16:27	1

Client Sample Results

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Client Sample ID: MW-2
Date Collected: 06/06/14 15:00
Date Received: 06/10/14 08:30

Lab Sample ID: 640-48171-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	25	I	50	23	ug/L		06/12/14 08:40	06/12/14 16:32	1
Iron	1000		100	33	ug/L		06/12/14 08:40	06/12/14 16:32	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-333791/1-A
Matrix: Water
Analysis Batch: 334172

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 333791

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	23	U	50	23	ug/L		06/12/14 08:40	06/12/14 15:50	1
Antimony	2.3	U	5.0	2.3	ug/L		06/12/14 08:40	06/12/14 15:50	1
Iron	33	U	100	33	ug/L		06/12/14 08:40	06/12/14 15:50	1

Lab Sample ID: LCS 680-333791/2-A
Matrix: Water
Analysis Batch: 334172

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 333791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	4740		ug/L		95	75 - 125
Antimony	50.0	50.6		ug/L		101	75 - 125
Iron	5000	4650		ug/L		93	75 - 125

QC Association Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Metals

Prep Batch: 333791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48171-1	MW-1	Total Recoverable	Water	3005A	
640-48171-2	MW-2	Total Recoverable	Water	3005A	
LCS 680-333791/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-333791/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 334172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48171-1	MW-1	Total Recoverable	Water	6020A	333791
640-48171-2	MW-2	Total Recoverable	Water	6020A	333791
LCS 680-333791/2-A	Lab Control Sample	Total Recoverable	Water	6020A	333791
MB 680-333791/1-A	Method Blank	Total Recoverable	Water	6020A	333791

Lab Chronicle

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Client Sample ID: MW-1

Lab Sample ID: 640-48171-1

Date Collected: 06/06/14 14:13

Matrix: Water

Date Received: 06/10/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			333791	06/12/14 08:40	BJB	TAL SAV
Total Recoverable	Analysis	6020A		1	334172	06/12/14 16:27	BWR	TAL SAV

Client Sample ID: MW-2

Lab Sample ID: 640-48171-2

Date Collected: 06/06/14 15:00

Matrix: Water

Date Received: 06/10/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			333791	06/12/14 08:40	BJB	TAL SAV
Total Recoverable	Analysis	6020A		1	334172	06/12/14 16:32	BWR	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Certification Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Laboratory: TestAmerica Tallahassee

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-14 *
Georgia	State Program	4		06-30-14 *
Louisiana	NELAP	6	30663	06-30-14 *
New Jersey	NELAP	2	FL012	06-30-14 *
Texas	NELAP	6	T104704459-11-2	03-31-15
USDA	Federal		P330-08-00158	08-05-14

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E87052	06-30-14 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-48171-1	MW-1	Water	06/06/14 14:13	06/10/14 08:30
640-48171-2	MW-2	Water	06/06/14 15:00	06/10/14 08:30

TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Phone (850) 878-3994 Fax (850) 878-9504

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-45918-11952.1
Client Contact: Mr. Bob Speed	Phone:	E-Mail: amy.marks@testamericainc.com		Page: Page 1 of 1
Company: SCS ES Consultants				Job #: 640-48171
Address: 7700 N. Kendall Drive, Suite 300	Due Date Requested:			
City: Miami	TAT Requested (days):			
State, Zip: FL, 33156				
Phone: 786-390-9963(Tel)	PO #: Purchase Order Requested			
Email: rspeed@scsengineers.com	WO #:			
Project Name: Curtis Park	Project #: 64007698			
Site:	SSOW#:			

Analysis Requested

Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 6020A - Antimony | 6020A - Iron | 6020A - Aluminum | Total Number of containers

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A - Antimony	6020A - Iron	6020A - Aluminum	Total Number of containers	Special Instructions/Note:
MW-1	6/4/14	1413					X				
MW-2	6/6/14	1500						X	X		

640-48171 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date: 6/13/14	Time: 1000	Method of Shipment:			
Relinquished by:	Date/Time: 6-9-14 1900	Company: SCS	Received by:	Date/Time: 6/9/14 1900	Company: TA		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6-10-14 @ 0830	Company: TA TPA		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.5/2.9 GW-07

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Tel: (850)878-3994

TestAmerica Job ID: 640-48171-2
Client Project/Site: Curtis Park

For:
SCS ES Consultants
7700 N. Kendall Drive, Suite 300
Miami, Florida 33156

Attn: Mr. Bob Speed

Authorized for release by:
6/16/2014 3:30:13 PM
Matt Jones, Project Management Assistant I
matt.jones@testamericainc.com

Designee for

Amy Marks, Project Manager II
(850)878-3994
amy.marks@testamericainc.com

Table of Contents

Definitions/Glossary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 640-48171-2

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative
640-48171-2

Comments
No additional comments.

Receipt
The samples were received on 6/10/2014 at 8:30 AM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 1.9º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Client Sample ID: MW-3 — Lab Sample ID: 640-48171-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	300		100	33	ug/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Client Sample ID: MW-3
Date Collected: 06/06/14 16:00
Date Received: 06/10/14 08:30

Lab Sample ID: 640-48171-3
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	300		100	33	ug/L		06/12/14 08:40	06/12/14 16:48	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-333791/1-A
Matrix: Water
Analysis Batch: 334172

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 333791

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	33	U	100	33	ug/L		06/12/14 08:40	06/12/14 15:50	1

Lab Sample ID: LCS 680-333791/2-A
Matrix: Water
Analysis Batch: 334172

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 333791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	4650		ug/L		93	75 - 125

QC Association Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Metals

Prep Batch: 333791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48171-3	MW-3	Total Recoverable	Water	3005A	
LCS 680-333791/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-333791/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 334172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48171-3	MW-3	Total Recoverable	Water	6020A	333791
LCS 680-333791/2-A	Lab Control Sample	Total Recoverable	Water	6020A	333791
MB 680-333791/1-A	Method Blank	Total Recoverable	Water	6020A	333791

Lab Chronicle

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Client Sample ID: MW-3
Date Collected: 06/06/14 16:00
Date Received: 06/10/14 08:30

Lab Sample ID: 640-48171-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			333791	06/12/14 08:40	BJB	TAL SAV
Total Recoverable	Analysis	6020A		1	334172	06/12/14 16:48	BWR	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Certification Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Laboratory: TestAmerica Tallahassee

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-14 *
Georgia	State Program	4		06-30-14 *
Louisiana	NELAP	6	30663	06-30-14 *
New Jersey	NELAP	2	FL012	06-30-14 *
Texas	NELAP	6	T104704459-11-2	03-31-15
USDA	Federal		P330-08-00158	08-05-14

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E87052	06-30-14 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48171-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-48171-3	MW-3	Water	06/06/14 16:00	06/10/14 08:30

Serial Number 024053

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Tampa
6712 Benjamin Road, Suite 100
Tampa, FL 33634
Website: www.testamericainc.com
Phone: (813) 885-7427
Fax: (813) 885-7049

Alternate Laboratory Name/Location
Phone: 640-48171
Fax:

PROJECT REFERENCE: Curtis Park	PROJECT NO.	PROJECT LOCATION (STATE)
SAMPLER'S SIGNATURE	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Bob Spiezed	CLIENT PHONE	CLIENT FAX
CLIENT NAME: SCS-ES Consultants	CLIENT E-MAIL	
CLIENT ADDRESS: 1700 N. Kendall Dr #300		
COMPANY CONTRACTING THIS WORK (if applicable)		

MATRIX TYPE: COMPOSITE (C) OR GRAB (G) *INDICATE*; AQUEOUS (WATER); SOLID OR SEMISOLID; AIR; NONAQUEOUS LIQUID (OIL, SOLVENT,...)

REQUIRED ANALYSIS: Total Iron (HNO3)

PRESERVATIVE

PAGE ___ OF ___
STANDARD REPORT DELIVERY ○ DATE DUE ____
EXPEDITED REPORT DELIVERY (SURCHARGE) ○ DATE DUE ____
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G)	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID	NUMBER OF CONTAINERS SUBMITTED: Total Iron									REMARKS
6/6/14	1600	MW-3		✓				X									

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS			[signature]	6/9/14	1910			
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
EMPTY CONTAINERS			[signature]	6/9/14	1910	[signature]	6/10/14	0830

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	TAMPA LOG NO.	COOLER TEMP. UPON RECEIPT	LABORATORY REMARKS
			YES ○ NO ○			2.5	

TAL8240-660 (0209)

ATTACHMENT D

SOIL BORING LOGS, SOIL LABORATORY ANALYTICAL REPORT & CHAIN-OF-CUSTODY

CURTIS PARK
BORING LOG

Site Name:	Sample Location ID:	Miami-Dade County Folio Number:
Curtis Park	SB-82	01-3134-000-0330

Site Address:	Borehole Start Date: 3-Jun-14	Borehole Start Time: 9:15 ☑ AM ☐ PM
1901 NW 24th Ave, Miami, FL	End Date: 3-Jun-14	End Time: 9:20 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
SCS Engineers	Maria Pages	

Drilling Contractor / Method(s):	Borehole Diameter (inches):	Diposition of Drill Cuttings:	Borehole Completion:
JAEE / Geoprobe (DP)	3	Used for Samples.	Fine Grain Sand

Sample Type	Sample Depth Interval (feet)	Moisture Content	Depth (feet)	Sample Description (include grain size based, odors, staining, and other remarks)	Lab Soil Sample/ Collection Time
DP	0-0.5	D	0.5	(0-0.75) Dark Brown silty top soil	SB-82 (0-0.5) 9:20
	0.5-2		1.0		
			1.5		
			2.0	(0.75-2) Tan to off white limerock fill with medium to small limestone fragments.	
DP		D	2.5		SB-82 (0.5-2) 9:25
			3.0		
			3.5		
			4.0		
			4.5		
			5.0		
			5.5		
			6.0	SOIL BORING TERMINATED @ 2 feet BGS.	
			6.5		
			7.0		
			7.5		
			8.0		
			8.5		
			9.0		
			9.5		
			10.0		
			10.5		
			11.0		
			11.5		
			12.0		
			12.5		
			13.0		
			13.5		
			14.0		
			14.5		
			15.0		

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cutting

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

CURTIS PARK
BORING LOG

Site Name:	Sample Location ID:	Miami-Dade County Folio Number:
Curtis Park	SB-83	01-3134-000-0330
Site Address:	**Borehole Start Date:** 3 Jun 14	**Borehole Start Time:** 9:35 ☐ AM ☐ PM
1901 NW 24th Ave, Miami, FL	**End Date:** 3 Jun 14	**End Time:** 9:40 ☑ AM ☐ PM
Environmental Contractor:	**Geologist's Name:**	**Environmental Technician's Name:**
SCS Engineers	Maria Pages	
Drilling Contractor / Method(s):	**Borehole Diameter (inches):**	**Diposition of Drill Cuttings:**	**Borehole Completion:**
JAEE / Geoprobe (DP)	3	Used for Samples	Fine Grain Sand

Sample Type	Sample Depth Interval (feet)	Moisture Content	Depth (feet)	Sample Description (include grain size based, odors, staining, and other remarks)	Lab Soil Sample/ Collection Time
DP	0-0.5	D	0.5	(0-0.75) Dark Brown Silty Topsoil with small limestone fragments (vegetation - roots - grass)	SB-83 (0-0.5) 9:42
			1.0		
			1.5		
			2.0		
			2.5		
DP	0.5-2	DP.	3.0	(0.75+2) Tan to off white limerock fill with small to medium limestone fragments.	SB-83 (0.5-1) 9:45
			3.5		
			4.0		
			4.5		
			5.0		
			5.5	Soil Boring terminated @ 2 feet BGS.	
			6.0		
			6.5		
			7.0		
			7.5		
			8.0		
			8.5		
			9.0		
			9.5		
			10.0		
			10.5		
			11.0		
			11.5		
			12.0		
			12.5		
			13.0		
			13.5		
			14.0		
			14.5		
			15.0		

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cutting

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

CURTIS PARK
BORING LOG

Site Name:	Sample Location ID:	Miami-Dade County Folio Number:
Curtis Park	SB-84	01-3134-000-0330
Site Address:	**Borehole Start Date:** 3-Jun-14	**Borehole Start Time:** 9:50 ☐ AM ☐ PM
1901 NW 24th Ave, Miami, FL	**End Date:** 3-Jun-14	**End Time:** 9:55 ☒ AM ☐ PM
Environmental Contractor:	**Geologist's Name:**	**Environmental Technician's Name:**
SCS Engineers	Maria Pages	
Drilling Contractor / Method(s):	**Borehole Diameter (inches):**	**Diposition of Drill Cuttings:**	**Borehole Completion:**
JAEE / Geoprobe (DP)	3	Used for Samples	Fine Grain Sand

Sample Type	Sample Depth Interval (feet)	Moisture Content	Depth (feet)	Sample Description (include grain size based, odors, staining, and other remarks)	Lab Soil Sample/ Collection Time
DP	0-0.5	D	0.5	(0-0.5) Dark Brown silty top soil with vegetation (roots)	SB-84 (0-0.5) 10:00
DP	0.5-2	D.	2.0	(0.5-2) Tan to off white Limerock fill with medium to large limestone fragments	SB-84 (0.5-2) 10:03
			4.5	Soil Boring terminated @ 2 feet BGS.	
			8.0		
			15.0		

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cutting

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

CURTIS PARK
BORING LOG

Site Name:	Sample Location ID:	Miami-Dade County Folio Number:
Curtis Park	SB-85	01-3134-000-0330
Site Address:	**Borehole Start Date:** 3-Jun-14	**Borehole Start Time:** 10:45 ☑ AM ☐ PM
1901 NW 24th Ave, Miami, FL	**End Date:** 3-Jun-14	**End Time:** 10:50 ☑ AM ☐ PM
Environmental Contractor:	**Geologist's Name:**	**Environmental Technician's Name:**
SCS Engineers	Maria Pages	
Drilling Contractor / Method(s):	**Borehole Diameter (inches):**	**Diposition of Drill Cuttings:**	**Borehole Completion:**
JAEE / Geoprobe (DP)	3	Used for Samples	Fine Grain Sand

Sample Type	Sample Depth Interval (feet)	Moisture Content	Depth (feet)	Sample Description (include grain size based, odors, staining, and other remarks)	Lab Soil Sample/ Collection Time
DP	0-0.5	D	0.5	(0-1.5) Dark Brown to Black silty top soil with small to medium size limestone fragments.	SB-85 (0-0.5) 10:53
			1.0		
			1.5		
			2.0		
DP	0.5-2	D	2.5	(1.5-2) Tan to off white Limerock fill with small to medium Limestone fragments.	SB-85 (0.5-2) 10:56
			3.0		
			3.5		
			4.0		
			4.5		
			5.0		
			5.5	Soil Boring terminated @ 2 ft BGS.	
			6.0		
			6.5		
			7.0		
			7.5		
			8.0		
			8.5		
			9.0		
			9.5		
			10.0		
			10.5		
			11.0		
			11.5		
			12.0		
			12.5		
			13.0		
			13.5		
			14.0		
			14.5		
			15.0		

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cutting

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

CURTIS PARK
BORING LOG

Site Name:	Sample Location ID:	Miami-Dade County Folio Number:
Curtis Park	SB-86	01-3134-000-0330
Site Address:	**Borehole Start Date:** 3-Jun-14	**Borehole Start Time:** 11:00 ☑ AM ☐ PM
1901 NW 24th Ave, Miami, FL	**End Date:** 3-Jun-14	**End Time:** 11:05 ☑ AM ☐ PM
Environmental Contractor:	**Geologist's Name:**	**Environmental Technician's Name:**
SCS Engineers	Maria Pages	
Drilling Contractor / Method(s):	**Borehole Diameter (inches):**	**Diposition of Drill Cuttings:**	**Borehole Completion:**
JAEE / Geoprobe (DP)	3	Used for Samples.	Fine Grain Sand

Sample Type	Sample Depth Interval (feet)	Moisture Content	Depth (feet)	Sample Description (include grain size based, odors, staining, and other remarks)	Lab Soil Sample/ Collection Time
DP	0-0.5	D	0.5	(0-0.75) Dark Brown silty top soil with vegetation (roots/grass)	SB-86 (0-0.5) 11:08
			1.0		
			1.5		
			2.0	(0.75-2) Tan to off white limerock fill with small to medium size limestone fragments	SB-86 (0.5-2) 11:11
DP	0.5-2	D	2.5		
			3.0		
			3.5		
			4.0		
			4.5		
			5.0		
			5.5	Soil Boring terminated @ 2 feet BGS.	
			6.0		
			6.5		
			7.0		
			7.5		
			8.0		
			8.5		
			9.0		
			9.5		
			10.0		
			10.5		
			11.0		
			11.5		
			12.0		
			12.5		
			13.0		
			13.5		
			14.0		
			14.5		
			15.0		

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cutting

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

CURTIS PARK
BORING LOG

Site Name:	Sample Location ID:	Miami-Dade County Folio Number:
Curtis Park	SB-87	01-3134-000-0330
Site Address:	**Borehole Start Date:** 3-Jun-14	**Borehole Start Time:** 11:20 ☑ AM ☐ PM
1901 NW 24th Ave, Miami, FL	**End Date:** 3-Jun-14	**End Time:** 11:25 ☑ AM ☐ PM
Environmental Contractor:	**Geologist's Name:**	**Environmental Technician's Name:**
SCS Engineers	Maria Pages	
Drilling Contractor / Method(s):	**Borehole Diameter (inches):**	**Diposition of Drill Cuttings:**	**Borehole Completion:**
JAEE / Geoprobe (DP)	3	Used for Samples.	Fine Grain Sand

Sample Type	Sample Depth Interval (feet)	Moisture Content	Depth (feet)	Sample Description (include grain size based, odors, staining, and other remarks)	Lab Soil Sample/ Collection Time
DP	0-0.5	D	0.5	(0-0.5) Dark Brown silty top soil with vegetation (roots)	SB-87 (0-0.5) 11:28
			1.0		
			1.5		
			2.0		
DP	0.5-2	D	2.5	(0.5-2) Tan to offwhite limerock fill with small to medium limestone fragments.	SB-87 (0.5-2) 11:31
			3.0		
			3.5		
			4.0		
			4.5		
			5.0	Soil Boring terminated @ 2ft BGS.	
			5.5		
			6.0		
			6.5		
			7.0		
			7.5		
			8.0		
			8.5		
			9.0		
			9.5		
			10.0		
			10.5		
			11.0		
			11.5		
			12.0		
			12.5		
			13.0		
			13.5		
			14.0		
			14.5		
			15.0		

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cutting

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

CURTIS PARK
BORING LOG

Site Name:	Sample Location ID:	Miami-Dade County Folio Number:
Curtis Park	SB-88	01-3134-000-0330
Site Address:	**Borehole Start Date:** 3 Jun 14	**Borehole Start Time:** 11:40 ☑ AM ☐ PM
1901 NW 24th Ave, Miami, FL	End Date: 3 Jun 14	End Time: 11:45 ☑ AM ☐ PM
Environmental Contractor:	**Geologist's Name:**	**Environmental Technician's Name:**
SCS Engineers	Maria Pages	
Drilling Contractor / Method(s):	**Borehole Diameter (inches):**	**Diposition of Drill Cuttings:**	**Borehole Completion:**
JAEE / Geoprobe (DP)	3	Used for Sampler	Fine Grain Sand

Sample Type	Sample Depth Interval (feet)	Moisture Content	Depth (feet)	Sample Description (include grain size based, odors, staining, and other remarks)	Lab Soil Sample/ Collection Time
DP	0-0.5	D	0.5	(0-0.75) Dark Brown to Black silty top soil with small limestone fragments.	SB-88 (0-0.5) 11:48
			1.0		
			1.5		
			2.0		
DP	0.5-2	D	2.5	(0.75-2) Tan to off white Limerock fill with small to medium size limestone fragments.	SB-88 (0.5-2) 11:51
			3.0		
			3.5		
			4.0		
			4.5		
			5.0	Soil Boring terminated @ 2 FT BGS.	
			5.5		
			6.0		
			6.5		
			7.0		
			7.5		
			8.0		
			8.5		
			9.0		
			9.5		
			10.0		
			10.5		
			11.0		
			11.5		
			12.0		
			12.5		
			13.0		
			13.5		
			14.0		
			14.5		
			15.0		

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cutting
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Tel: (850)878-3994

TestAmerica Job ID: 640-48133-1
Client Project/Site: Curtis Park

For:
SCS ES Consultants
7700 N. Kendall Drive, Suite 300
Miami, Florida 33156

Attn: Mr. Bob Speed

Authorized for release by:
6/10/2014 11:03:54 PM

Amy Marks, Project Manager II
(850)878-3994
amy.marks@testamericainc.com

Table of Contents

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Qualifiers

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 640-48133-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative
640-48133-1

Comments
No additional comments.

Receipt
The samples were received on 6/4/2014 at 4:30 PM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 1.4º C.

Metals
Method 6010B: The method blank (MB) associated with batch 148830 contained Lead and Iron above the method detection limit (MDL). These target analyte concentrations were less than the practical quantitation limit (PQL); therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-82 (0-0.5) — Lab Sample ID: 640-48133-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	5.6		2.3	0.56	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.6		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	100		1.1	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	62		2.3	0.56	mg/Kg	1	☼	6010B	Total/NA
Iron	5500		5.6	3.4	mg/Kg	1	☼	6010B	Total/NA
Lead	190		0.56	0.17	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-82 (0.5-2) — Lab Sample ID: 640-48133-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.87	I	2.4	0.61	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.4		0.61	0.28	mg/Kg	1	☼	6010B	Total/NA
Barium	48		1.2	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	20		2.4	0.61	mg/Kg	1	☼	6010B	Total/NA
Iron	1500		6.1	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	53		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-83 (0-0.5) — Lab Sample ID: 640-48133-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	5.1		2.3	0.57	mg/Kg	1	☼	6010B	Total/NA
Arsenic	13		0.57	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	110		1.1	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	150		2.3	0.57	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		5.7	3.4	mg/Kg	1	☼	6010B	Total/NA
Lead	380		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-83 (0.5-2) — Lab Sample ID: 640-48133-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.3		2.2	0.56	mg/Kg	1	☼	6010B	Total/NA
Arsenic	25		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	49		1.1	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	33		2.2	0.56	mg/Kg	1	☼	6010B	Total/NA
Iron	3700		5.6	3.3	mg/Kg	1	☼	6010B	Total/NA
Lead	110		0.56	0.17	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-84 (0-0.5) — Lab Sample ID: 640-48133-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	9.4		1.1	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	16		2.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Iron	1300		5.4	3.2	mg/Kg	1	☼	6010B	Total/NA
Lead	36		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-84 (0.5-2) — Lab Sample ID: 640-48133-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.6		2.2	0.56	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-84 (0.5-2) (Continued) — Lab Sample ID: 640-48133-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.0		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	59		1.1	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	45		2.2	0.56	mg/Kg	1	☼	6010B	Total/NA
Iron	5200		5.6	3.4	mg/Kg	1	☼	6010B	Total/NA
Lead	220		0.56	0.17	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-85 (0-0.5) — Lab Sample ID: 640-48133-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		2.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.5		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	38		1.1	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	38		2.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Iron	3000		5.4	3.3	mg/Kg	1	☼	6010B	Total/NA
Lead	88		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-85 (0.5-2) — Lab Sample ID: 640-48133-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.4		2.2	0.56	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.3		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	44		1.1	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	36		2.2	0.56	mg/Kg	1	☼	6010B	Total/NA
Iron	4200		5.6	3.3	mg/Kg	1	☼	6010B	Total/NA
Lead	94		0.56	0.17	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-86 (0-0.5) — Lab Sample ID: 640-48133-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0		0.66	0.31	mg/Kg	1	☼	6010B	Total/NA
Barium	16		1.3	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	23		2.7	0.66	mg/Kg	1	☼	6010B	Total/NA
Iron	1400		6.6	4.0	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.66	0.20	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-86 (0.5-2) — Lab Sample ID: 640-48133-10

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.90	I	2.1	0.53	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.9		0.53	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	6.4		1.1	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	21		2.1	0.53	mg/Kg	1	☼	6010B	Total/NA
Iron	8100		5.3	3.2	mg/Kg	1	☼	6010B	Total/NA
Lead	28		0.53	0.16	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-87 (0-0.5) — Lab Sample ID: 640-48133-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.8		0.62	0.29	mg/Kg	1	☼	6010B	Total/NA
Barium	16		1.2	0.20	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-87 (0-0.5) (Continued) — Lab Sample ID: 640-48133-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	19		2.5	0.62	mg/Kg	1	☼	6010B	Total/NA
Iron	1800		6.2	3.7	mg/Kg	1	☼	6010B	Total/NA
Lead	49		0.62	0.19	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-87 (0.5-2) — Lab Sample ID: 640-48133-12

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.81		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA
Barium	6.3		1.1	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	4.3		2.2	0.56	mg/Kg	1	☼	6010B	Total/NA
Iron	850		5.6	3.4	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.56	0.17	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-88 (0-0.5) — Lab Sample ID: 640-48133-13

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Barium	12		1.2	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	17		2.4	0.59	mg/Kg	1	☼	6010B	Total/NA
Iron	1600		5.9	3.6	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.59	0.18	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SB-88 (0.5-2) — Lab Sample ID: 640-48133-14

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.71		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA
Barium	7.4		1.1	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	5.7		2.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Iron	540		5.4	3.3	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-82 (0-0.5)
Date Collected: 06/03/14 09:20
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-1
Matrix: Solid
Percent Solids: 88.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.6		2.3	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:19	1
Arsenic	6.6		0.56	0.26	mg/Kg	☼	06/06/14 10:50	06/10/14 07:19	1
Barium	100		1.1	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 07:19	1
Copper	62		2.3	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:19	1
Iron	5500		5.6	3.4	mg/Kg	☼	06/06/14 10:50	06/10/14 07:19	1
Lead	190		0.56	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:19	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-82 (0.5-2)
Date Collected: 06/03/14 09:25
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-2
Matrix: Solid
Percent Solids: 79.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.87	I	2.4	0.61	mg/Kg	☼	06/06/14 10:50	06/10/14 07:22	1
Arsenic	1.4		0.61	0.28	mg/Kg	☼	06/06/14 10:50	06/10/14 07:22	1
Barium	48		1.2	0.20	mg/Kg	☼	06/06/14 10:50	06/10/14 07:22	1
Copper	20		2.4	0.61	mg/Kg	☼	06/06/14 10:50	06/10/14 07:22	1
Iron	1500		6.1	3.7	mg/Kg	☼	06/06/14 10:50	06/10/14 07:22	1
Lead	53		0.61	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 07:22	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-83 (0-0.5)
Date Collected: 06/03/14 09:42
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-3
Matrix: Solid
Percent Solids: 89.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.1		2.3	0.57	mg/Kg	☼	06/06/14 10:50	06/10/14 07:26	1
Arsenic	13		0.57	0.26	mg/Kg	☼	06/06/14 10:50	06/10/14 07:26	1
Barium	110		1.1	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 07:26	1
Copper	150		2.3	0.57	mg/Kg	☼	06/06/14 10:50	06/10/14 07:26	1
Iron	11000		5.7	3.4	mg/Kg	☼	06/06/14 10:50	06/10/14 07:26	1
Lead	380		0.57	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:26	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-83 (0.5-2)
Date Collected: 06/03/14 09:45
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-4
Matrix: Solid
Percent Solids: 90.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3		2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:36	1
Arsenic	25		0.56	0.26	mg/Kg	☼	06/06/14 10:50	06/10/14 07:36	1
Barium	49		1.1	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 07:36	1
Copper	33		2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:36	1
Iron	3700		5.6	3.3	mg/Kg	☼	06/06/14 10:50	06/10/14 07:36	1
Lead	110		0.56	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:36	1

Client Sample Results

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-84 (0-0.5)
Date Collected: 06/03/14 10:00
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-5
Matrix: Solid
Percent Solids: 92.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	U	2.2	0.54	mg/Kg	☼	06/06/14 10:50	06/10/14 07:39	1
Arsenic	**1.2**		0.54	0.25	mg/Kg	☼	06/06/14 10:50	06/10/14 07:39	1
Barium	**9.4**		1.1	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:39	1
Copper	**16**		2.2	0.54	mg/Kg	☼	06/06/14 10:50	06/10/14 07:39	1
Iron	**1300**		5.4	3.2	mg/Kg	☼	06/06/14 10:50	06/10/14 07:39	1
Lead	**36**		0.54	0.16	mg/Kg	☼	06/06/14 10:50	06/10/14 07:39	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-84 (0.5-2)
Date Collected: 06/03/14 10:03
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-6
Matrix: Solid
Percent Solids: 88.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.6		2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:43	1
Arsenic	5.0		0.56	0.26	mg/Kg	☼	06/06/14 10:50	06/10/14 07:43	1
Barium	59		1.1	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 07:43	1
Copper	45		2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:43	1
Iron	5200		5.6	3.4	mg/Kg	☼	06/06/14 10:50	06/10/14 07:43	1
Lead	220		0.56	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:43	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-85 (0-0.5)
Date Collected: 06/03/14 10:53
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-7
Matrix: Solid
Percent Solids: 90.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		2.2	0.54	mg/Kg	☼	06/06/14 10:50	06/10/14 07:46	1
Arsenic	2.5		0.54	0.25	mg/Kg	☼	06/06/14 10:50	06/10/14 07:46	1
Barium	38		1.1	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:46	1
Copper	38		2.2	0.54	mg/Kg	☼	06/06/14 10:50	06/10/14 07:46	1
Iron	3000		5.4	3.3	mg/Kg	☼	06/06/14 10:50	06/10/14 07:46	1
Lead	88		0.54	0.16	mg/Kg	☼	06/06/14 10:50	06/10/14 07:46	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-85 (0.5-2)
Date Collected: 06/03/14 10:56
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-8
Matrix: Solid
Percent Solids: 88.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.4		2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:50	1
Arsenic	2.3		0.56	0.26	mg/Kg	☼	06/06/14 10:50	06/10/14 07:50	1
Barium	44		1.1	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 07:50	1
Copper	36		2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 07:50	1
Iron	4200		5.6	3.3	mg/Kg	☼	06/06/14 10:50	06/10/14 07:50	1
Lead	94		0.56	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:50	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-86 (0-0.5)
Date Collected: 06/03/14 11:08
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-9
Matrix: Solid
Percent Solids: 76.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.66	U	2.7	0.66	mg/Kg	☼	06/06/14 10:50	06/10/14 07:53	1
Arsenic	**2.0**		0.66	0.31	mg/Kg	☼	06/06/14 10:50	06/10/14 07:53	1
Barium	**16**		1.3	0.21	mg/Kg	☼	06/06/14 10:50	06/10/14 07:53	1
Copper	**23**		2.7	0.66	mg/Kg	☼	06/06/14 10:50	06/10/14 07:53	1
Iron	**1400**		6.6	4.0	mg/Kg	☼	06/06/14 10:50	06/10/14 07:53	1
Lead	**21**		0.66	0.20	mg/Kg	☼	06/06/14 10:50	06/10/14 07:53	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-86 (0.5-2)
Date Collected: 06/03/14 11:11
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-10
Matrix: Solid
Percent Solids: 91.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.90	I	2.1	0.53	mg/Kg	☼	06/06/14 10:50	06/10/14 07:57	1
Arsenic	1.9		0.53	0.25	mg/Kg	☼	06/06/14 10:50	06/10/14 07:57	1
Barium	6.4		1.1	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 07:57	1
Copper	21		2.1	0.53	mg/Kg	☼	06/06/14 10:50	06/10/14 07:57	1
Iron	8100		5.3	3.2	mg/Kg	☼	06/06/14 10:50	06/10/14 07:57	1
Lead	28		0.53	0.16	mg/Kg	☼	06/06/14 10:50	06/10/14 07:57	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-87 (0-0.5)
Date Collected: 06/03/14 11:28
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-11
Matrix: Solid
Percent Solids: 81.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	U	2.5	0.62	mg/Kg	☼	06/06/14 10:50	06/10/14 08:00	1
Arsenic	**2.8**		0.62	0.29	mg/Kg	☼	06/06/14 10:50	06/10/14 08:00	1
Barium	**16**		1.2	0.20	mg/Kg	☼	06/06/14 10:50	06/10/14 08:00	1
Copper	**19**		2.5	0.62	mg/Kg	☼	06/06/14 10:50	06/10/14 08:00	1
Iron	**1800**		6.2	3.7	mg/Kg	☼	06/06/14 10:50	06/10/14 08:00	1
Lead	**49**		0.62	0.19	mg/Kg	☼	06/06/14 10:50	06/10/14 08:00	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-87 (0.5-2)
Date Collected: 06/03/14 11:31
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-12
Matrix: Solid
Percent Solids: 90.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	U	2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 08:04	1
Arsenic	**0.81**		0.56	0.26	mg/Kg	☼	06/06/14 10:50	06/10/14 08:04	1
Barium	**6.3**		1.1	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 08:04	1
Copper	**4.3**		2.2	0.56	mg/Kg	☼	06/06/14 10:50	06/10/14 08:04	1
Iron	**850**		5.6	3.4	mg/Kg	☼	06/06/14 10:50	06/10/14 08:04	1
Lead	**11**		0.56	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 08:04	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-88 (0-0.5)
Date Collected: 06/03/14 11:48
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-13
Matrix: Solid
Percent Solids: 82.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	U	2.4	0.59	mg/Kg	☼	06/06/14 10:50	06/10/14 08:07	1
Arsenic	**3.1**		0.59	0.27	mg/Kg	☼	06/06/14 10:50	06/10/14 08:07	1
Barium	**12**		1.2	0.19	mg/Kg	☼	06/06/14 10:50	06/10/14 08:07	1
Copper	**17**		2.4	0.59	mg/Kg	☼	06/06/14 10:50	06/10/14 08:07	1
Iron	**1600**		5.9	3.6	mg/Kg	☼	06/06/14 10:50	06/10/14 08:07	1
Lead	**15**		0.59	0.18	mg/Kg	☼	06/06/14 10:50	06/10/14 08:07	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-88 (0.5-2)
Date Collected: 06/03/14 11:51
Date Received: 06/04/14 16:30

Lab Sample ID: 640-48133-14
Matrix: Solid
Percent Solids: 91.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	U	2.2	0.54	mg/Kg	☼	06/06/14 10:50	06/10/14 08:17	1
Arsenic	**0.71**		0.54	0.25	mg/Kg	☼	06/06/14 10:50	06/10/14 08:17	1
Barium	**7.4**		1.1	0.17	mg/Kg	☼	06/06/14 10:50	06/10/14 08:17	1
Copper	**5.7**		2.2	0.54	mg/Kg	☼	06/06/14 10:50	06/10/14 08:17	1
Iron	**540**		5.4	3.3	mg/Kg	☼	06/06/14 10:50	06/10/14 08:17	1
Lead	**19**		0.54	0.16	mg/Kg	☼	06/06/14 10:50	06/10/14 08:17	1

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-148830/1-A
Matrix: Solid
Analysis Batch: 148883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 148830

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.50	U	2.0	0.50	mg/Kg		06/06/14 10:50	06/10/14 06:55	1
Arsenic	0.23	U	0.50	0.23	mg/Kg		06/06/14 10:50	06/10/14 06:55	1
Barium	0.16	U	1.0	0.16	mg/Kg		06/06/14 10:50	06/10/14 06:55	1
Copper	0.50	U	2.0	0.50	mg/Kg		06/06/14 10:50	06/10/14 06:55	1
Iron	3.86	I	5.0	3.0	mg/Kg		06/06/14 10:50	06/10/14 06:55	1
Lead	0.187	I	0.50	0.15	mg/Kg		06/06/14 10:50	06/10/14 06:55	1

Lab Sample ID: LCS 660-148830/2-A
Matrix: Solid
Analysis Batch: 148883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 148830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	49.5	50.2		mg/Kg		101	75 - 125
Arsenic	49.5	49.3		mg/Kg		100	75 - 125
Barium	49.5	51.1		mg/Kg		103	75 - 125
Copper	49.5	51.3		mg/Kg		104	75 - 125
Iron	49.5	52.4		mg/Kg		106	75 - 125
Lead	49.5	50.7		mg/Kg		102	75 - 125

Metals

Prep Batch: 148830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48133-1	SB-82 (0-0.5)	Total/NA	Solid	3050B	
640-48133-2	SB-82 (0.5-2)	Total/NA	Solid	3050B	
640-48133-3	SB-83 (0-0.5)	Total/NA	Solid	3050B	
640-48133-4	SB-83 (0.5-2)	Total/NA	Solid	3050B	
640-48133-5	SB-84 (0-0.5)	Total/NA	Solid	3050B	
640-48133-6	SB-84 (0.5-2)	Total/NA	Solid	3050B	
640-48133-7	SB-85 (0-0.5)	Total/NA	Solid	3050B	
640-48133-8	SB-85 (0.5-2)	Total/NA	Solid	3050B	
640-48133-9	SB-86 (0-0.5)	Total/NA	Solid	3050B	
640-48133-10	SB-86 (0.5-2)	Total/NA	Solid	3050B	
640-48133-11	SB-87 (0-0.5)	Total/NA	Solid	3050B	
640-48133-12	SB-87 (0.5-2)	Total/NA	Solid	3050B	
640-48133-13	SB-88 (0-0.5)	Total/NA	Solid	3050B	
640-48133-14	SB-88 (0.5-2)	Total/NA	Solid	3050B	
LCS 660-148830/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 660-148830/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 148883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48133-1	SB-82 (0-0.5)	Total/NA	Solid	6010B	148830
640-48133-2	SB-82 (0.5-2)	Total/NA	Solid	6010B	148830
640-48133-3	SB-83 (0-0.5)	Total/NA	Solid	6010B	148830
640-48133-4	SB-83 (0.5-2)	Total/NA	Solid	6010B	148830
640-48133-5	SB-84 (0-0.5)	Total/NA	Solid	6010B	148830
640-48133-6	SB-84 (0.5-2)	Total/NA	Solid	6010B	148830
640-48133-7	SB-85 (0-0.5)	Total/NA	Solid	6010B	148830
640-48133-8	SB-85 (0.5-2)	Total/NA	Solid	6010B	148830
640-48133-9	SB-86 (0-0.5)	Total/NA	Solid	6010B	148830
640-48133-10	SB-86 (0.5-2)	Total/NA	Solid	6010B	148830
640-48133-11	SB-87 (0-0.5)	Total/NA	Solid	6010B	148830
640-48133-12	SB-87 (0.5-2)	Total/NA	Solid	6010B	148830
640-48133-13	SB-88 (0-0.5)	Total/NA	Solid	6010B	148830
640-48133-14	SB-88 (0.5-2)	Total/NA	Solid	6010B	148830
LCS 660-148830/2-A	Lab Control Sample	Total/NA	Solid	6010B	148830
MB 660-148830/1-A	Method Blank	Total/NA	Solid	6010B	148830

General Chemistry

Analysis Batch: 148854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48133-1	SB-82 (0-0.5)	Total/NA	Solid	Moisture	
640-48133-1 DU	SB-82 (0-0.5)	Total/NA	Solid	Moisture	
640-48133-2	SB-82 (0.5-2)	Total/NA	Solid	Moisture	
640-48133-3	SB-83 (0-0.5)	Total/NA	Solid	Moisture	
640-48133-4	SB-83 (0.5-2)	Total/NA	Solid	Moisture	
640-48133-5	SB-84 (0-0.5)	Total/NA	Solid	Moisture	
640-48133-6	SB-84 (0.5-2)	Total/NA	Solid	Moisture	
640-48133-7	SB-85 (0-0.5)	Total/NA	Solid	Moisture	
640-48133-8	SB-85 (0.5-2)	Total/NA	Solid	Moisture	
640-48133-9	SB-86 (0-0.5)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 148854 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-48133-10	SB-86 (0.5-2)	Total/NA	Solid	Moisture	
640-48133-11	SB-87 (0-0.5)	Total/NA	Solid	Moisture	
640-48133-12	SB-87 (0.5-2)	Total/NA	Solid	Moisture	
640-48133-13	SB-88 (0-0.5)	Total/NA	Solid	Moisture	
640-48133-14	SB-88 (0.5-2)	Total/NA	Solid	Moisture	

Client Sample ID: SB-82 (0-0.5)

Lab Sample ID: 640-48133-1

Date Collected: 06/03/14 09:20

Matrix: Solid

Date Received: 06/04/14 16:30

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:19	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-82 (0.5-2)

Lab Sample ID: 640-48133-2

Date Collected: 06/03/14 09:25

Matrix: Solid

Date Received: 06/04/14 16:30

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:22	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-83 (0-0.5)

Lab Sample ID: 640-48133-3

Date Collected: 06/03/14 09:42

Matrix: Solid

Date Received: 06/04/14 16:30

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:26	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-83 (0.5-2)

Lab Sample ID: 640-48133-4

Date Collected: 06/03/14 09:45

Matrix: Solid

Date Received: 06/04/14 16:30

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:36	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-84 (0-0.5)

Lab Sample ID: 640-48133-5

Date Collected: 06/03/14 10:00

Matrix: Solid

Date Received: 06/04/14 16:30

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:39	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-84 (0.5-2) — **Lab Sample ID: 640-48133-6**
Date Collected: 06/03/14 10:03 — **Matrix: Solid**
Date Received: 06/04/14 16:30 — **Percent Solids: 88.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:43	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-85 (0-0.5) — **Lab Sample ID: 640-48133-7**
Date Collected: 06/03/14 10:53 — **Matrix: Solid**
Date Received: 06/04/14 16:30 — **Percent Solids: 90.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:46	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-85 (0.5-2) — **Lab Sample ID: 640-48133-8**
Date Collected: 06/03/14 10:56 — **Matrix: Solid**
Date Received: 06/04/14 16:30 — **Percent Solids: 88.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:50	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-86 (0-0.5) — **Lab Sample ID: 640-48133-9**
Date Collected: 06/03/14 11:08 — **Matrix: Solid**
Date Received: 06/04/14 16:30 — **Percent Solids: 76.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:53	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-86 (0.5-2) — **Lab Sample ID: 640-48133-10**
Date Collected: 06/03/14 11:11 — **Matrix: Solid**
Date Received: 06/04/14 16:30 — **Percent Solids: 91.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 07:57	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Lab Chronicle

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Client Sample ID: SB-87 (0-0.5)

Lab Sample ID: 640-48133-11

Date Collected: 06/03/14 11:28
Date Received: 06/04/14 16:30

Matrix: Solid
Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 08:00	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-87 (0.5-2)

Lab Sample ID: 640-48133-12

Date Collected: 06/03/14 11:31
Date Received: 06/04/14 16:30

Matrix: Solid
Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 08:04	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-88 (0-0.5)

Lab Sample ID: 640-48133-13

Date Collected: 06/03/14 11:48
Date Received: 06/04/14 16:30

Matrix: Solid
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 08:07	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Client Sample ID: SB-88 (0.5-2)

Lab Sample ID: 640-48133-14

Date Collected: 06/03/14 11:51
Date Received: 06/04/14 16:30

Matrix: Solid
Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148830	06/06/14 10:50	GH1	TAL TAM
Total/NA	Analysis	6010B		1	148883	06/10/14 08:17	GAF	TAL TAM
Total/NA	Analysis	Moisture		1	148854	06/09/14 05:55	AJG	TAL TAM

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Laboratory: TestAmerica Tallahassee

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-14 *
Georgia	State Program	4		06-30-14 *
Louisiana	NELAP	6	30663	06-30-14 *
New Jersey	NELAP	2	FL012	06-30-14 *
Texas	NELAP	6	T104704459-11-2	03-31-15
USDA	Federal		P330-08-00158	08-05-14

Laboratory: TestAmerica Tampa

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40610	06-30-14 *
Florida	NELAP	4	E84282	06-30-14 *
Georgia	State Program	4	905	06-30-14 *
USDA	Federal		P330-14-00159	05-07-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL TAM
Moisture	Percent Moisture	EPA	TAL TAM

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Sample Summary

Client: SCS ES Consultants
Project/Site: Curtis Park

TestAmerica Job ID: 640-48133-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-48133-1	SB-82 (0-0.5)	Solid	06/03/14 09:20	06/04/14 16:30
640-48133-2	SB-82 (0.5-2)	Solid	06/03/14 09:25	06/04/14 16:30
640-48133-3	SB-83 (0-0.5)	Solid	06/03/14 09:42	06/04/14 16:30
640-48133-4	SB-83 (0.5-2)	Solid	06/03/14 09:45	06/04/14 16:30
640-48133-5	SB-84 (0-0.5)	Solid	06/03/14 10:00	06/04/14 16:30
640-48133-6	SB-84 (0.5-2)	Solid	06/03/14 10:03	06/04/14 16:30
640-48133-7	SB-85 (0-0.5)	Solid	06/03/14 10:53	06/04/14 16:30
640-48133-8	SB-85 (0.5-2)	Solid	06/03/14 10:56	06/04/14 16:30
640-48133-9	SB-86 (0-0.5)	Solid	06/03/14 11:08	06/04/14 16:30
640-48133-10	SB-86 (0.5-2)	Solid	06/03/14 11:11	06/04/14 16:30
640-48133-11	SB-87 (0-0.5)	Solid	06/03/14 11:28	06/04/14 16:30
640-48133-12	SB-87 (0.5-2)	Solid	06/03/14 11:31	06/04/14 16:30
640-48133-13	SB-88 (0-0.5)	Solid	06/03/14 11:48	06/04/14 16:30
640-48133-14	SB-88 (0.5-2)	Solid	06/03/14 11:51	06/04/14 16:30

Chain of Custody Record

TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
phone 850.878.3994 fax

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

6/10/2014

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Maria Pages

Client Contact	Project Manager: Eddy Smith	Site Contact: ~~Brittney Odom~~	Date:	COC No:
SCS Engineers	Tel/Fax:	Lab Contact: Amy Marks	Carrier:	1 of 2 COCs
7700 North Kendall Drive	**Analysis Turnaround Time**			Sampler:
Miami, Florida 33156	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
305.412.8185 Phone	TAT if different from Below _____			Walk-in Client:
305.412.8105 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Curtis Park	☐ 1 week			Job / SDG No.:
Site: 1901 NW 24th Ave, Miami, FL	☐ 2 days			
P O #	☐ 1 day			

640-48133 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Metals 6010 (Sb, As, Ba, Cu, Pb, Fe)	Metals 6010/7471 (Al, Cd, Cr, Hg, Se, Ag)	Dioxins (8290)	PCBs (8082)	Sample Specific Notes:
SB-82 (0-0.5)	3-Jun-14	9:20	C	Soil	2			X				ALL MDL's and PQL's must be @ or below all governing SCTL's. If this cannot be achieved please contact Maria Pages ASAP
SB-82 (0.5-2)		9:25	C	S	2			X				
SB-83 (0-0.5)		9:42	C	S	2			X				
SB-83 (0.5-2)		9:45	C	S	2			X				
SB-84 (0-0.5)		10:00	C	S	2			X				
SB-84 (0.5-2)		10:03	C	S	2			X				
SB-85 (0-0.5)		10:53	C	S	2			X				
SB-85 (0.5-2)		10:56	C	S	2			X				
SB-86 (0-0.5)		11:08	C	S	2			X				
SB-86 (0.5-2)		11:11	C	S	2			X				
SB-87 (0-0.5)		11:28	C	S	2			X				
SB-87 (0.5-2)		11:31	C	S	2			X				

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4= HNO_3; 5= NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

1.4°C

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____	Therm ID No.:_____
Relinquished by: Maria Pages	Company: SCS	Date/Time: 6/3/14 16:45	Received by:	Company: TA	Date/Time: 6/3/14 1645
Relinquished by:	Company:	Date/Time:	Received by:	Company: TA	Date/Time: 6/4/14 1630
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Tallahassee
2846 Industrial Plaza Drive

Tallahassee, FL 32301
phone 850.878.3994 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

6/10/2014

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Maria Pages

Client Contact	Project Manager: Eddy Smith	Site Contact: ~~Brittney Odom~~	Date:	COC No:
SCS Engineers	Tel/Fax:	Lab Contact: Amy Marks	Carrier:	2 of 2 COCs
7700 North Kendall Drive	**Analysis Turnaround Time**			Sampler:
Miami, Florida 33156	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
305.412.8185 Phone	TAT if different from Below _____			Walk-in Client:
305.412.8105 FAX 305 412 8105	☑ 2 weeks			Lab Sampling:
Project Name: Curtis Park	☐ 1 week			
Site: 1901 NW 24th Ave, Miami, FL	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			640-48133

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Metals 6010 (Sb, As, Ba, Cu, Pb, Fe)	Metals 6010/7471 (Al, Cd, Cr, Hg, Se, Ag)	Dioxins (8290)	PCBs (8082)	Sample Specific Notes:
SB-88(0-0.5)	3 Jun 14	11:48	C	Soil	2			X				
SB-88(0.5-2)	1	11:51	C	S	2			X				
												All MDL's + PQL's must be at or below all governing SCTL's if this cannot be achieved contact Maria Pages ASAP.

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

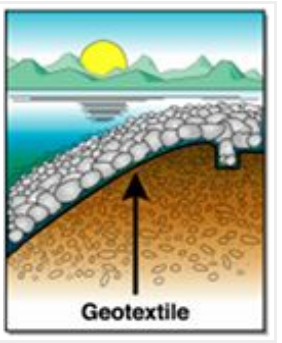
1.4°C

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: SCS	Date/Time: 6/3/14 10:45	Received by:	Company: TA	Date/Time: 6/3/14 1645
Relinquished by:	Company:	Date/Time:	Received by:	Company: TA	Date/Time: 6/4/14 1630
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

US 205NW

Nonwoven Geotextile

NTPEP APPROVED - GTX-2013-01-030. US 205NW is a nonwoven needlepunched geotextile made of 100% polypropylene staple filaments. US 205NW resists ultraviolet and biological deterioration, rotting, naturally encountered basics and acids. Polypropylene is stable within a pH range of 2 to 13. US 205NW will satisfy the requirements as outlined in AASHTO M-288-06 for Class 1 applications and meets the following M.A.R.V. values except where noted:



PROPERTY	TEST METHOD	ENGLISH	METRIC
Weight - Typical	ASTM D-5261	8.0 oz/sy	271 g/sm
Tensile Strength	ASTM D-4632	205 lbs	912 N
Elongation @ Break	ASTM D-4632	50%	50%
Mullen Burst*	ASTM D-3786*	350 psi	2,413 kPa
Puncture Strength*	ASTM D-4833*	130 lbs	579 N
CBR Puncture	ASTM D-6241	535 lbs	2,381 N
Trapezoidal Tear	ASTM D-4533	85 lbs	378 N
Apparent Opening Size	ASTM D-4751	80 US Sieve	0.180 mm
Permittivity	ASTM D-4491	1.35 Sec-1	1.35 Sec-1
Water Flow Rate	ASTM D-4491	90 g/min/sf	3,657 l/min/sm
UV Resistance @ 500 Hours	ASTM D-4355	70%	70%

ROLL SIZE	ROLL DIAMETER	AREA	WEIGHT
12.5' x 360'	16.0 in	500 sys	270 lbs
15' x 300'	16.0 in	500 sys	270 lbs

* Historical averages (current values not available): Mullen Burst Strength ASTM D3786 is no longer recognized by ASTM D-35 on Geosynthetics as an acceptable test method. Puncture Strength ASTM D4833 is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D6241.

US Fabrics, Inc. | 3904 Virginia Avenue | Cincinnati, OH 45227 (USA) | Phone: 800-518-2290 | Fax: (513) 271-4420