FINAL Tar Removal Completion Report Cabot Carbon/Koppers Superfund Site Gainesville, Florida

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1 Introduction

The purpose of this report is to document the details of the 2011 tar removal work completed by Cabot Corporation (Cabot) in Springstead and Hogtown Creeks (creeks) in Gainesville, Florida. The project, which involved the successful removal of visible and accessible tar deposits from 14 accumulation areas in the creeks, was performed in accordance with the US EPA-approved Tar Removal Work Plan, dated January 3, 2011 (Gradient and Weston, 2011). The project was a cooperative effort between Cabot, US Environmental Protection Agency (US EPA) Region 4, Florida Department of Environmental Protection (FDEP), Alachua County Environmental Protection Department (ACEPD) and the City of Gainesville. The tar removal activities were completed between February and April 2011. The results of the confirmatory sediment sampling, conducted after tar removal activities were completed, demonstrated that polynuclear aromatic hydrocarbons (PAHs) were either not detected or detected at low concentrations, consistent with background, in most of the confirmation samples. The residual PAH concentrations are expected to pose an insignificant risk to human health and the environment, and are expected to further attenuate over time.

2 Background

Springstead and Hogtown Creeks are urbanized creeks located downstream of the Cabot Carbon/Koppers Superfund Site in Gainesville, Florida ("Site"; Figure 1). Although operations at the Cabot Carbon facility ceased in 1966, historical facility-related inputs, including storm and waste water discharges and a breach of former pine products lagoon by a developer, may have contributed Cabot-related contamination to Springstead and Hogtown Creeks. The Koppers wood treating facility, which stopped operating in 2009, discharged untreated storm water from 1916 onwards to these creeks. In addition, storm and waste water discharges from several other commercial properties in the area and storm water from roads and highways also flow into the creeks.

2.1 Summary of Sediment Investigations

A number of investigations have been undertaken to evaluate sediment quality in Springstead and Hogtown Creeks. While the objective of some of these studies was general characterization of conditions, others were undertaken in response to citizen observations of tar within the creeks, *i.e.*, were biased towards areas believed to be affected by tar. These prior studies generally found the presence of low levels of volatile organic compounds (VOCs) and semi-volatile organics in sediments, with the highest concentrations being detected in the same general areas. However, recent investigations undertaken by ACEPD (2009, 2010a,b) were the most comprehensive in scope, the best indicator of pretar removal creek conditions, and a relatively accurate locator and delineator of tar deposits in the creeks. Consequently, the tar removal plan relied heavily on the findings of the ACEPD studies and supplemental verification surveys.

In 2008, a comprehensive field reconnaissance survey and follow-up, focused sediment chemical characterization program was undertaken by ACEPD to characterize sediment quality in the creeks (ACEPD, 2009). The field reconnaissance portion of the 2008 ACEPD sediment investigation was extremely thorough and included advancement of sediment probes at hundreds of locations, including depositional areas and exposed sand bars, in Springstead and Hogtown Creeks. The field reconnaissance identified the presence of tar-like material, typically at a depth of 18 to 24 inches below the creek bed, at 10 discrete locations. The sediment chemical characterization results for sediment samples collected at

the 10 locations indicated the presence of PAHs, although at relatively low concentrations.¹ PAHs are ubiquitous in the environment, especially in an urban setting, and may also be attributed to sources such as "cigarette smoke, vehicle exhausts, asphalt roads, coal, coal tar, wildfires, agricultural burning, residential wood burning, municipal and industrial waste incineration" (ATSDR, 1995).

In 2010, ACEPD performed supplemental sediment surveys in areas that were not investigated in the 2008 study. Visual and olfactory reconnaissance of these areas using a similar approach to that previously used by ACEPD revealed the presence of additional locations with buried tar deposits and staining (ACEPD, 2010a,b). Although several impacted locations were identified during this survey, only a fraction of these locations (~20%) contained recoverable volume of tar and/or showed heavy staining. Due to the relatively low contaminant concentrations associated with the tarry materials, and their depth and inaccessibility, these areas were expected to pose insignificant risks to human health and the environment.

Overall, the ACEPD studies were well-designed, thorough, and well-implemented, and successfully defined the tar impacted areas within the creeks.

2.2 Human Health and Ecological Risks

The PAH concentrations in the 2008 ACEPD samples, which were collected in areas with heavy tar staining (*i.e.*, biased high), were compared to regulatory screening benchmarks (Figures 2 and 3; Gradient and Weston, 2011). To assess ecological risks or potential risks posed to sediment dwelling organisms, the sediment data were compared to Florida's conservative sediment screening benchmarks, referred to as Probable Effect Concentrations (PECs). With the exception of two sediment samples, the PECs for total PAHs were exceeded only in deep sediment samples (Figure 2). However, the PECs are not generally applicable to deep sediment samples, because benthic organisms are only present in shallow sediments. Thus, based on pre-remediation PAH levels in the creek sediments, risks to ecological receptors were expected to be insignificant, and only expected to be associated with isolated areas.

A comparison of the Benzo(a)pyrene Total Equivalent (BAP-TEQ) levels in creek sediments to the conservative, site-specific, Alternate Cleanup Target Levels (ACTLs) range of 0.5 to 1 mg/kg (Roberts and Stuchal, 2010b), developed by University of Florida for human health protection, indicated

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Gradient/Weston

 $^{^{1}}$ Note, PAHs are a minor component of pine tar. The primary components of pine tar (e.g., phenols) were not detected in the sediment samples.

that any exceedances of the ACTLs were marginal, isolated, and in sediment that is currently not accessible (Figure 3). In addition, the arithmetic mean of the BAP-TEQ concentration for the creek sediment samples $(0.6 \text{ mg/kg})^2$ were within the range of proposed ACTLs. Thus, the pre-remediation PAH concentrations in the creek sediments were expected to pose insignificant risks to human health.

2.3 Record of Decision Requirements

In February 2011, US EPA issued an updated Record of Decision (ROD) addressing the Koppers portion of the Superfund Site (US EPA, 2011). This ROD also addressed contamination in off-Site media, including sediments and surface water in Springstead and Hogtown Creeks. Specifically, the ROD-selected remedy for the sediments and surface water in Springstead and Hogtown Creeks included (US EPA, 2011, pp. 19):

- "Excavation and removal of impacted sediments in excess of levels shown to likely cause an adverse effect when in direct contact (Probable Effects Concentration)"; and
- "Monitored natural recovery of remaining impacted sediment until concentrations reach threshold effects concentrations [TECs] (contaminant concentrations above these levels could adversely affect a plant or animal) or background levels."

The objectives, approach and results of the tar removal project are discussed in detail in the following sections.

² Note, US EPA guidance specifies that the average contaminant concentration within an exposure unit should be used to assess human health risks.

3 Tar Removal Objectives and Approach

3.1 Removal Objectives

Overall, an examination of the detected PAH concentrations in sediments and the depth of the tar deposits indicated that they were inaccessible and likely to pose insignificant human health and ecological risks. However, there was a possibility, although small, that the buried tar deposits could be mobilized during hurricanes and flooding events. Additionally, the presence of the tar was an aesthetic issue and had raised concerns in the local community. Thus, Cabot decided to excavate and remove tar from 19 targeted locations: a) where significant tar accumulation had been observed by ACEPD and subsequent surveys; and b) that could be readily accessed using equipment (*i.e.*, backhoes, *etc.*) necessary to remove impacted sediments. Although visual and olfactory observations were used to select the sediment removal locations, the remediation of these locations would also generally result in the removal of sediments that showed PEC and ACTL exceedances during the 2008 ACEPD study. In general, the proposed tar removal approach balanced the environmental and human health benefit from the removal action with the harm caused in accessing and disrupting the creeks during the removal process.

Specifically, the objectives of the tar removal project were as follows:

- Address the local community's concerns associated with the tar deposits;
- Eliminate risk of tar-affected sediment mobilization;
- Address exceedances of the PECs associated with the presence of tar; and
- Address any potential human health risks associated with exposures to the tar-affected sediments, although such risks were expected to be insignificant.

Overall, the removal of tar affected sediments would provide further protection to human health and the environment, address the community related concerns associated with the presence of tar in the creek sediments, and be consistent with the updated ROD (US EPA, 2011). The 19 sediment locations that were identified for tar removal in the 2011 work plan are listed in Table 1 and shown in Figure 4.

3.2 Removal Approach

The primary objective for the project was the removal of tar from the creeks. In general, the following approach was used to conduct the tar removal:

- 1. In each of the areas pre-selected for removal (Table 1; Figure 4), Cabot, with assistance from ACEPD, undertook additional field delineation using sediment probes. Visual and olfactory data were used to accurately define and mark the lateral and vertical extent of tar-affected sediments requiring removal.
- 2. In each area, the thickness of "clean" sediments that overlay the tar-affected sediments were defined for segregation/reuse during sediment removal.
- 3. Once the tar-affected sediments were delineated in each area, sediments were removed using either manual or mechanical techniques. To the extent possible, clean, surficial sediments were segregated, staged and reused. Excavated sediments were placed in a dewatering box (*i.e.*, a specially designed roll-off container).
- 4. Additional sediment probing was conducted upon reaching the previously established excavation limits to evaluate if all tar in the targeted area had been addressed. If tar was detected on the probe, excavation continued. If no tar was detected on the probes, excavation of the tar deposits was deemed to be complete. This process was repeated until no tar was detected on the probes.
- 5. The excavated sediments were transported to and stored at a central staging area. Water accumulated during excavation and dewatering activities was tested and then discharged at the Cabot lift station for treatment by the local POTW.
- 6. Once the sediments dried sufficiently, they were transported to Clark Environmental's thermal treatment facility in Mulberry, Florida.
- 7. Either segregated clean sediments or available sediments in the creek were used to fill-in the removal areas to at least half of the excavated depth.
- 8. Although the removal action was not being undertaken to address potential risks associated with chemical exposures, confirmation sampling was performed after tar removal, to determine PAH concentrations in the sediments left-in-place.

The next section of the report provides additional details of the means and methods used to conduct the sediment removal work.

4 Tar Removal Implementation

4.1 Pre Mobilization Activities

Pre-mobilization activities included characterizing the tar deposits prior to removal and disposal, securing property access, developing project specific health and safety and air monitoring plans, securing a work staging area, and conducting public outreach.

4.1.1 Waste Characterization

Representative samples of the tar deposits targeted for removal were collected and characterized for disposal. Based on the characterization, the material was categorized as a non-hazardous waste and was deemed suitable for thermal treatment at the Clark Environmental's high temperature thermal treatment facility located in Mulberry, Florida.

4.1.2 Property Access

Property access agreements were secured from owners of properties located along the creeks to allow for access to the tar removal locations. Overall, the property owners were cooperative in allowing access and helpful in supporting the execution of the work. In all, 15 different properties were utilized to access the creek banks and remove the tar deposits from the proposed locations. However, access was denied to the property that contained locations SC and 13 (Figure 4). Thus, tar deposits at both locations were left in place.

4.1.3 Health & Safety

A site specific health and safety plan (HASP) was prepared in accordance with OSHA requirements prior to mobilization for field activities. This document included a summary of relevant site historical information, a task by task hazard assessment of physical, chemical, radiological, and biological hazards. The HASP also included a description of the air monitoring program, including instruments and action levels used for monitoring. Additionally, the HASP included a description of health and safety equipment requirements, a decontamination plan, a traffic control plan and an emergency response plan.

The creek restoration work was completed in Modified Level D personal protective equipment (PPE). The Modified Level D PPE provided protection from dermal contact with contamination; however, no respiratory protection was required or provided. Pine tar is an extremely thick, viscous and sticky material, and thus, workers removing and handling the tar deposits wore rubber boots/waders and gloves. Supervisors and other workers outside the immediate excavation zones did not need special protective clothing.

A detailed air monitoring plan was also developed. Risk evaluations determined that air monitoring should include organic vapor monitoring and particulate monitoring. Additionally, as a precautionary measure, air samples were collected using SUMMA canisters and submitted for laboratory analysis. Details of the air monitoring program are discussed in Section 4.2.5.

4.1.4 Public Outreach

Public outreach for the creek restoration efforts included preparation and distribution of a project fact sheet, and multiple press releases to local television, radio and print media prior to project mobilization. The fact sheet is provided in Appendix A. Additionally, ACEPD officials, Cabot personnel, and contractor personnel participated in media interviews, and were made available to answer questions from local citizens. The project was also opened for filming and photography as a portion of a Superfund Arts project being conducted by Santa Fe Community College.

4.2 Implementation Approach

A total of 19 areas with tar deposits were identified and agreed upon for removal based on visual and olfactory observations made during the 2008 and 2010 ACEPD studies. Efforts were made to access and remove tar from each of these areas. Tar impacted sediments were effectively removed from the following 14 locations: SS5, SS2, 75 (surface exposure), 58, 9, SD/S3/10, SA, 60, 61, 62, HB/H7, H4, H4A/1, and HA. The tar deposits at the remaining 5 locations were inaccessible, due to reasons described below, and thus, could not be removed. The tar removal locations are listed in Table 1 and shown in Figure 4. Photographs of the tar removal efforts are provided in Appendix B. A detailed discussion of the tar removal project is provided in the sections below.

4.2.1 Work Staging Area

A work staging area was established in the northern portion of the Recycling Services of America property located at 2874 NE 1st Terrace Gainesville, Florida. The work staging area included an office trailer, an equipment and vehicle parking area, a materials staging area, and a sediment containment area.

4.2.2 Erosion Control

Erosion control measures were used in the staging area and at the excavation sites. In the staging area, silt fencing was placed along the edge of the work area, where surface soils were exposed, to prevent sediment erosion into surrounding ditches and surface water. Silt fencing was also installed at the top of the stream banks in sediment excavation areas to control potential sediment runoff. Crushed concrete was also added to the staging area access road to make the road more stable for vehicle traffic and reduce erosion potential during rain events.

4.2.3 Water Control

Water was controlled in the targeted excavation areas using a pump-around system. The pump-around system consisted of dams made with either sand bags or plastic Jersey type barriers positioned both upstream and downstream of the target excavation area. The sandbags were typically more effective in blocking the water on the upstream side and the Jersey type barriers were more effective on the downstream end of the work zone. The upstream and downstream barriers were covered with plastic sheeting to improve their performance. In some instances an additional row of sand bags were used between the upstream and downstream dams to control creek bed seepage.

Water was extracted and pumped from upstream of the upstream barrier *via* a flexible 6-inch hose placed around the excavation area and discharged downstream of the downstream dam. A diesel powered trailer mounted pump was used. In some instances it was necessary to use two 6-inch pumps to handle the stream flow. Smaller gasoline powered 2-inch diameter pumps were also used to remove water seeping in to the excavation site from the creek bed between the upstream and downstream dams. For smaller tar deposits, sand bags were used to create a berm and isolate the area to be excavated. Hand shovels were then used to excavate the impacted sediments from these areas.

4.2.4 Turbidity Control and Monitoring

Turbidity in and downstream of the excavation areas was controlled using a combination of 6-inch wattles, hay bales, and plastic sheeting. Plastic sheeting was placed on top of the stream bed at the downstream pump discharge to prevent the discharge water from stirring up the bottom sediments. Two or more rows of wattles and hay bales were placed downstream of the downstream water control barrier. The wattles were fastened to the banks and the hay bales were fastened to the stream bed using stakes. The turbidity control devices were placed in the stream before any other stream activities began and were left in place (except for rain events) until all in-stream activities had been completed. Absorbent floating booms were also placed in front of the hay bales and wattles to absorb any floating product or tar globules that was accidentally released from the excavation area. Additionally, absorbents pads were used to soak up tar released into the excavation water, within the contained areas.

Turbidity monitoring was conducted on an hourly basis, both upstream of the work area and immediately downstream of the last row of hay bales and wattles, using a turbidity meter. The meter was calibrated every day in accordance with the manufacturer's specifications and using vendor supplied calibration solutions. Turbidity monitoring began as soon as in-stream activities were started and the monitoring continued until in-stream activities were completed. The downstream measurements were typically taken prior to upstream measurements. In accordance with FDEP regulations, which requires that the downstream turbidity readings be within 29 NTU of the upstream or background measurement, upstream measurements were not recorded if the downstream measurement was less than 29 NTU.

In general, the downstream turbidity was maintained within 29 NTU of background or upstream measurements throughout most of the project execution. However, in a few excavation areas where naturally occurring clays were already exposed in the stream bed, clay was readily suspended in water and caused the turbidity measurements to exceed 29 NTU. This condition was typically short lived and downstream turbidity returned to background values within one to two hours. A summary of the turbidity measurements recorded in each excavation area is provided in Table 2. Personnel from ACEPD routinely visited the excavation work sites to inspect the water and turbidity control devices and review the turbidity monitoring data.

4.2.5 Air Monitoring

Pre-Removal Monitoring

In accordance with the air monitoring plan, baseline air monitoring (pre pine tar removal) was conducted at select locations along the creek to evaluate ambient air conditions for the project area. A set of five background air samples (4 samples and 1 duplicate) were collected on February 1, 2011, *i.e.*, prior to the start of sediment removal activities. The SUMMA canisters were positioned both upwind and downwind of the tar deposits. A map of the air sampling locations is provided as Figure 5. The pre-excavation air samples were analyzed for terpenes, including alpha-Pinene and beta-Pinene, and tentatively identified compounds (TICs), 3-carene and alpha-terpineol, using EPA Method TO15. The analytical results for the samples showed no detections of alpha-pinene and beta-pinene. The TICs, 3-carene and alpha-terpineol, were also not detected in the samples. The analytical results for the air monitoring samples are summarized in Table 3. The laboratory reports for the air samples are provided in Appendix C.

Additionally, pre-removal monitoring was performed at select locations for particulates using a MIE DataRAM with PM₁₀ heads and for VOCs using a RAE® Photo ionization Detector instrument (Figure 5). The instruments were calibrated in accordance with the manufacturer's specifications prior to use. Results showed elevated background concentrations in Springstead Creek behind Holbrook Travel at the upwind monitoring station. These elevated concentrations were attributed to morning and late afternoon traffic on 13th Street, because background readings decreased as the traffic volume decreased on the nearby four lane road.

Monitoring During Removal Action

During sediment excavation activities, continuous air monitoring for dust and organic vapors was conducted upwind and downwind of the excavation sites, in accordance with the air monitoring plan. The particulate monitoring was conducted using a MIE DataRAM with PM₁₀ heads and the VOC monitoring was conducted using a RAE® Photo ionization Detector instrument. The instruments were calibrated daily in accordance with the manufacturer's specifications. The instruments were placed on top of 30-gallon plastic trash cans and the locations of the instruments were adjusted to maintain an upwind and downwind position relative to the work zone. Periodically, measurements were taken within the open

excavation area. The occupational and residential action levels were not exceeded either for particulates or VOCs. A summary of the air monitoring action levels is provided in Table 4.

The air monitoring program during sediment excavation activities also included collection of air samples in SUMMA canisters. A set of five air samples (4 samples and 1 duplicate) were collected on March 15, 2011 during the excavation of sediments at location H4A/1. The samples were collected over a 4 hour period and the SUMMA canisters were positioned in upwind and downwind positions. Similar to the pre-removal samples, the air samples collected during excavation were analyzed for terpenes, including alpha-Pinene and beta-Pinene, and TICs, 3-carene and alpha-terpineol, using EPA Method TO15. The analytical results for the samples showed no detections of alpha-pinene, beta-pinene and the TICs, 3-carene and alpha-terpineol. The analytical results for the air monitoring samples are summarized in Table 3. The laboratory reports for the air samples are provided in Appendix C.

Overall, based on the field air monitoring data and the laboratory analytical results for the air samples, there were no significant emissions related to the excavation activities that detrimentally affected the workers or the surrounding residents.

4.2.6 Tar Removal

As previously mentioned, a total of 19 locations were identified in the creek for tar removal based on the results of the 2008 and 2010 ACEPD investigations (Figure 4). These locations were selected because they showed evidence of tar contamination and were accessible to removal equipment. As discussed in the Work Plan, although the S9/S10 area was found to contain tar deposits during the 2008 ACEPD investigation, it was not selected for sediment removal due to concerns regarding access and erosion of the banks. The north stream bank is already highly eroded and is within a few feet of the apartment building foundation. Additionally, these locations contain low levels of PAHs (ACEPD, 2009). The 19 selected sediment removal locations were agreed upon in a meeting with ACEPD, FDEP, US EPA and Cabot on November 4, 2010. Of the 19 selected locations, tar deposits could not be removed from the following 5 locations for the reasons listed below:

- Location SC Property access was denied;
- Location 13 Property access was denied;
- Location 56 Buried under bricks, difficult to access and concerns about erosion outweighed the need for tar removal;

- Location 59 Buried underneath creek bank; difficult to access and concerns about erosion outweighed the need for tar removal; and
- Location 6 Unable to access creek; mucky, soft soil conditions approaching creek bank.

Note, the access constraints associated with above-listed locations 6, 56, and 59 were discussed at length with ACEPD and the City of Gainesville representatives, who agreed that it was prudent to leave the tar deposits in-place to avoid long-term damage to the creeks.

In addition, due to access constraints at location 75, only the portion of the tar deposits exposed at the surface was removed. The locations from which tar deposits were removed are listed in Table 1 and shown in Figure 4.

Prior to excavation activities, Cabot personnel, with assistance from ACEPD staff, used an insulated soil probe rod to clearly delineate and mark the lateral and vertical extents of the area containing tar at each location. Additionally, the creek bed was cleared of obstructions (*e.g.*, logs, debris, *etc.*) to allow access to the excavation sites. Any trash cleared from the work area was accumulated in roll-off containers for off-Site disposal.

Excavation of the pine tar deposits was conducted using a small track mounted excavator. Excavated sediments were directly loaded into a 1 cubic yard steel box equipped with lifting hooks that was lifted in and out of the creek bed using a rubber tired Lull Telehandler forklift (Lull). At the first location, SS5, the sediment was loaded in to large geotextile bags (*i.e.*, Super Sacks). However, releasing the sediment from the bags proved to be too time consuming and the steel box was used for excavated sediments at the remaining locations.

The Lull was positioned such that it did not encroach on the stream banks and the extending forks were able to lift the sediment box in and out of the creek bed without damaging the banks. The sediments were transported in the Lull from the top of the creek bank to a dewatering box located at the nearest access road. The dewatering box contained a screened bottom covered with a nonwoven geotextile, fabric. The water in the sediment drained into a bottom compartment in the dewatering box, separating it from the sediment.

Once the dewatering box was filled with excavated sediments, the sediment was transported back to the work staging area and the dewatering box was dumped into the lined sediment containment area.

The water accumulated in the bottom of the dewatering box was pumped into a 6,900 gallon capacity poly-tank located adjacent to the sediment containment area.

A total of approximately 115 tons of impacted sediments were excavated from the creek during the tar removal effort. In general, the actual volume of the tar deposits found at each location was significantly less than the estimated volume.

4.2.7 Sediment Drying

Excavated sediments were dumped from the dewatering boxes into the sediment containment area, located on the western side of the work staging area. This area consisted of 40-mil plastic sheeting surrounded by hay bales to form a barrier dike. The 40-mil plastic was draped over the hay bales and the ground surface was graded and sloped to allow water draining from the excavated sediments to collect at the southwest corner of the containment area. The accumulated water was periodically pumped into the storage tank located adjacent to the sediment containment area. The excavated sediments were covered with plastic sheeting to control odors and to prevent contact with rainfall.

4.2.8 Sediment Transportation & Disposal

After the excavated sediments had been accumulated and sufficiently dried, the sediments were loaded into dump trucks using a rubber tired front end loader. A layer of sediment was left on the bottom of the containment area until the final load was removed to protect the liner from contact with the loader blade. The trucks transported the sediment to Clark Environmental's thermal treatment facility in Mulberry, Florida. A total of approximately 115 tons of sediments were transported off-site and thermally treated. The soil recycling certificates are provided in Appendix D.

The thermal treatment process included screening out any remaining debris greater than 2 inches in size. This debris was disposed of at an FDEP permitted landfill. The sediment was then sent through a desorber cyclone, which is an 8 foot long stainless steel drum that contains rotating flights that turn the sediment and create a curtain of dirt as it moves through the drum. The sediment inside the drum is then heated to temperatures ranging from 700 to 900°F. The dust is separated from the incinerated sediments in a cyclone. The dust is deposited by augers into the desorber's direct flame for reburning at temperatures ranging from 1100 to 1200°F. The extracted sediments are then reheated in an oxidizer to 1500-1600° F and then cooled on the way to the bag house. The dust accumulated in the bag house is

added back to the treated sediment. The heated sediment is cooled with water spray and stock piled for post burn testing. If the treated sediment does not pass the post burn testing, it is reincinerated. If the treated sediment passes the post burn testing, it is placed in the clean soil pile and can be resold for commercial applications.

4.2.9 Restoration & Enhancements

The areas affected by the pine tar deposit removal were restored upon completion of excavation activities. These areas included the stream bed, the stream bank, the stream access routes, and the sediment loading areas. The property owners were directly consulted regarding the details of restoration at their respective properties. The restoration of each property was customized based on the desires of the property owner.

In the stream bed, the excavated area was filled to at least one half of the total excavated depth using surrounding, clean sediments from nearby sand bars. In some instances the excavated area was filled completely, if adequate sediment was available. Impacts to the stream bank were limited to foot traffic and lowering the excavator in and out of the stream bed. The stream banks were restored by covering them with organic erosion control matting composed of woven coconut husk. The matting was fastened in place with 6-inch U-shaped spikes.

The access points to the stream banks and the sediment loading areas were restored by smoothing out any ruts. In some of the upland areas away from the stream, grass seed was sown based on the property owner's preference and hay was placed on top of the seed. In the Gainesville City park, where locations H4A/1 and HA were excavated, some of the small branches and small trees that were removed to clear a safe path were chipped into mulch. This mulch was spread on the restored access paths to help aid the return of vegetation.

In some instances, property enhancements were carried out based on discussions with the property owners. Cabot willingly provided these enhancements as a token of appreciation for granting access for the stream restoration. These enhancements included removing fallen trees and trash from the stream bed, mowing over-grown vegetation around buildings, placement of gravel in a driveway, and removing a tree at the stream bank at risk of being blown over onto adjacent properties. Trees were

purchased and planted on this same property in accordance with the City of Gainesville mitigation requirements.

4.2.10 Demobilization

Equipment and materials were removed from each excavation site as the work was completed at that location. The sediment containment area was disassembled, and all equipment and materials were removed from the staging area by April 1, 2011. Accumulated solid non-hazardous waste was disposed of at the local landfill.

5 Confirmation Sampling

The primary objective of the tar removal project was to address the local community's concerns regarding the tar's presence in the creeks. Consequently, the visual presence of tar was used to define the limits of removal. The tar removal project also aimed to minimize any potential risks to human health and the environment. In order to assess the residual contaminant concentrations in sediments and associated risks, if any, confirmation sampling was performed, after the completion of sediment excavation activities in the creeks.

The objectives, methodology, and results of the confirmation sampling program are discussed in the sections below.

5.1 Sampling Objectives

The objective of the confirmation sampling program was to document concentrations of PAHs, if any, remaining in the creek after the removal of tar deposits from the areas targeted for remediation. Given the numerous sources of PAHs, especially in urban settings, the confirmation sampling program and the data analysis approach only addressed the tar removal areas and not the other areas. In addition, there are other compounds present in the creek sediments (*e.g.*, dioxins, arsenic) unrelated to the pine tar, that were not addressed by the confirmation sampling.

5.2 Sampling Methodology

Grab sediments were collected, based on FDEP's recommendation, from the creek bed, post tarremoval.³ Samples were collected from the bottom of the excavation or the creek bed, prior to backfilling
and restoration of the creek. Samples were not collected from the creek banks, since tar deposits were
generally found in the inundated portion of the creeks. Note, up to more than 2 feet of sediment was back
filled in the creek to address safety concerns (*i.e.*, to prevent a potential recreator from stumbling and
falling into the excavated area), thus the confirmation samples represent concentrations measured in deep
sediments, buried under approximately 12 to 24 inches of overlying sediments.

³ The initial confirmatory sampling plan submitted to US EPA proposed collection of composite samples from each excavation area. However, FDEP requested that grab samples be collected instead from each excavation area.

The general sampling approach was to collect one sample from small excavation areas (<10 cubic yards), two from medium sized areas (10 to 20 cubic yards), and three or more from large areas (>20 cubic yards). Duplicate samples were also collected for quality control purposes. With the exception of locations 61 and 75, at least one grab sample was collected from each excavation area. Location 61 contained a small tar deposit, which was excavated by hand, and was surrounded by other deposits where post excavation samples were collected. Confirmation samples were not collected from location 75 because only surficial tar was accessible for removal in this area, and it is likely that some impacted material was left-in-place. In addition, since tar deposits 58 and 9 were found to be continuous, these were combined into one work area for excavation and sampling purposes. Similarly, deposits SA and 62 were combined into one work area.

Overall, a total of 22 grab post-excavation confirmatory sediment samples were collected for analysis of PAHs (Method 8270C). Additionally, a total of 8 samples were collected for analysis of total organic carbon (TOC) (Method 9060).⁴ Samples were collected directly into laboratory containers and shipped in a cooler with ice to Test America Labs in Savannah, GA. Table 5 provides a summary of the confirmatory sediment samples collected from each excavation area.

5.3 Sampling Results

A summary of the post-excavation confirmatory sediment sampling results is provided in Table 6. The laboratory reports for the confirmatory sediment samples are provided in Appendix E. Total PAH and BAP-TEQ concentrations in the post-excavation sediment samples are shown in Figures 6a/b and 7a/b, respectively. In general, an evaluation of the confirmatory sediment sampling results indicated that PAH sediment concentrations in the targeted areas have declined significantly, post tar removal, *i.e.*, in comparison to pre-remediation PAH levels in these areas (Figure 2 and 3). At several locations, such as SS5, S22, SA/62, and H4, total PAH concentrations have decreased by at least an order of magnitude (Figure 6b *versus* Figure 2). Similarly, concentrations of BAP-TEQ also declined by several fold in sediments following the removal of tar deposits from the creeks (Figure 7b *versus* Figure 3).

-

⁴ TOC data provide an indication of the bioavailability of PAHs to benthic organisms and can assist with developing a refined understanding of environmental risks.

5.3.1 Choice of Screening Benchmarks

In order to place the sediment sampling results in perspective, the post-excavation confirmatory sediment data were screened against regulatory benchmarks developed for protection of ecological and human health. As discussed in Section 2.3, the updated ROD that was issued by US EPA for the Site in February 2011 stated that the selected remedy for the creeks should remove "impacted sediments in excess of levels shown to likely cause an adverse effect when in direct contact (Probable Effects Concentration)" (US EPA, 2011, pp. 19). Thus, the PEC for total PAHs (23 mg/kg) was used as the primary benchmark to assess PAH levels in the confirmatory sediment samples and evaluate the effectiveness of the tar removal work.

A risk assessment previously conducted by Florida Department of Health (FDOH) using pre-tar removal sediment data collected by ACEPD (2009) found that the risks to human health associated with current and future exposure to small amounts of PAH impacted sediments in the creeks are insignificant (FDOH, 2010). Regardless, a secondary screening was performed to assess risks to human health from direct contact with sediments in the creeks. From a human health standpoint, given the exposure setting, only risks *via* recreational exposures to the creek sediments need to be considered. Previous risk assessment work done by the University of Florida, at the request of FDEP, that led to the development of site-specific, risk-based ACTLs for recreational exposures (Roberts and Stuchal, 2010b), provides a helpful framework to screen and understand post tar-removal human health risks.

The University of Florida developed ACTLs for BAP-TEQ in sediments for protection of human health from direct contact with sediments during recreational activities (Roberts and Stuchal, 2010a,b). The evaluation utilized a conservative exposure frequency of 104 days per year. The ACTLs were developed for "exposed" sediments on creek banks, creek bottoms and sand bars, *i.e.*, material that is not submerged underwater. According to US EPA Region 4 guidance, submerged sediments are not expected to pose human health risks, since any material that is underwater would be mostly washed off during contact (Roberts and Stuchal, 2010a,b). Given that the tar deposits found in the creeks were generally submerged and the confirmation samples were obtained from inundated portions of the creek beds, the ACTLs serve as an extremely conservative benchmark for assessing post tar-removal human health risks.

5.3.2 Screening Results

For the purpose of the screening analysis, all available sediment analytical data that are reflective of post tar removal conditions within the creeks (*i.e.*, confirmation sampling results and data from locations that could not be addressed due to access or other constraints) were used. These data were screened against both PECs and ACTLs.

Figures 6a and b present a comparison of the post tar-removal sediment concentrations to the Florida PECs, whereas Figures 7a and b present a comparison against human health-based ACTLs. In addition to comparing the data on a point to point basis, the plots also compare the 95% Upper Confidence Level of the mean (UCLM) for each section of the creek or exposure unit to the screening benchmarks. The use of the 95% UCLM, which is consistent with US EPA guidance for risk assessment (US EPA, 1989, 1997), provides an indication of risks on average within an exposure unit.

Total PAH Levels versus PECs

A review of the post tar-removal sampling results indicate that the measured total PAH levels on average are less than the Florida PEC of 23 mg/kg within both shallow and deep sediments in North Main St. Ditch and Springstead Creek (Figures 6a). The average total PAH concentration in Hogtown Creek, however, marginally exceeds the Florida PEC (28.3 vs. 23 mg/kg) (Figure 6a). The point by point comparison indicates that total PAH levels in sediments exceed the PEC at two locations – 60 and HA (Figure 6b), and shows a marginal exceedance (24 vs. 23 mg/kg) in the deep sediment sample collected at location S9, which could not be addressed due to access issues (Figure 6b). Although isolated exceedances of the PAH PEC are present at a few locations post tar-removal, tar-related risks to environmental receptors (benthic organisms) within the creeks are expected to be insignificant because:

- Tar from all accessible locations has been removed.
- After tar and affected sediments were removed, clean sediments from the creek were used
 to fill-in the removal areas. Consequently, the confirmation sediment samples collected
 post tar-removal are represent concentrations in deep sediments, and are not accessible to
 benthic organisms.
- The 95% UCLM concentration for creek segments, a more appropriate indicator of potential risks associated with sediments, are less than or comparable to the PECs.

⁵ Note, the calculated average concentrations for each exposure unit included pre-remediation data for locations that could not be remediated due to access issues.

Overall, a comparison of the post tar removal sediment sampling results against the PEC for total PAHs demonstrates ecological risks associated with exposure to creek sediments are expected to be insignificant. At the few locations, where PECs are exceeded, concentrations over time are expected to attenuate and attain background concentrations and/or comply with the TECs.

BAP-TEQ Levels versus ACTLs

As previously discussed, site-specific ACTLs were used as secondary benchmarks to evaluate potential human health risks associated with post tar removal sediments. The post tar-removal sampling results indicate that the BAP-TEQ levels on-average (95% UCLM) in North Main Street Ditch and Springstead Creek are either below or within the range of ACTLs developed for the Site (Figure 7a). However, the average BAP-TEQ level in sediments within Hogtown Creek marginally exceeds the upper bound ACTL (1.26 *vs.* 1.0 mg/kg) (Figure 7a). A point by point comparison of the BAP-TEQ levels in the sediment samples to the ACTLs showed that the ACTLs were exceeded at two locations – 60 and HA, and in the deep sediment sample collected at location SC, which could not be addressed due to access issues (Figure 7b).

The results of the screening analysis showed that, on average, the creek sediment data are less than or comparable to the human health-based ACTLs. Any exceedances of ACTLs associated with residual tar in the creeks do not represent a significant risk to human health for the following reasons:

- Tar from all accessible locations has been removed;
- Any tar deposits left behind are isolated, buried at depth (*i.e.*, >12 inches below the creek bottom), and inaccessible. Given that these tar deposits could not be accessed with machinery during remedial efforts, they are also expected to be inaccessible to potential human receptors.
- Any tar deposits left behind in the creek are also submerged underwater. Submerged material would wash off during contact and is not expected to be pose risks to humans *via* direct contact as stated in US EPA Region 4 risk assessment guidance (Roberts and Stuchal, 2010a,b).

Overall, the results of the primary and secondary screening analyses indicate that the tar removal project successfully removed a significant portion of the tar deposits in each excavation area and reduced the PAH concentrations in the creek sediments to levels that, on average, are expected to pose insignificant risks to ecological and human health.

6 Summary and Conclusions

Pine tar identified in the sections of Springstead and Hogtown Creeks downstream of the Cabot/Koppers Superfund Site has been successfully removed. Pine tar was found and delineated by a series of studies undertaken by ACEPD and Cabot between 2008 and 2010. Although contaminant concentrations (for PAHs, a minor constituent of pine tar) were low and the tar was generally present in deep sediments (18 to 24 inches below the creek bed), resulting in insignificant human health and environmental risks, Cabot decided to excavate and remove the tar since the tar was sticky, had a distinct color/odor, and was a cause of concern for the local community. Cabot worked cooperatively with US EPA, FDEP, ACEPD and the City of Gainesville to develop a Work Plan that identified tar deposits for removal and outlined the removal approach. The Work Plan, which was approved by US EPA in January 2011, was implemented between February and April 2011. Key findings and conclusion from this work are:

- Approximately 140 yd³ of tar and affected sediments were removed from the creeks, and treated *via* thermal destruction at a facility located in Mulberry, Florida. The materials removed represents a vast majority of the tar that had been identified in the creeks.
- Tar could not be removed from a few of the locations indentified in the US EPA approved Work Plan due to access constraints and/or land owners' refusal to provide property access needed for removing the tar. At locations with access constraints, the tar was left-in-place because concerns regarding bank erosion and long-term damage to the creeks outweighed the need for tar removal. An examination of the post tar removal concentrations in the creek (including data from areas where tar could not be removed) indicates that post tar removal creek sediments are expected to pose insignificant risks to human health and the environment.
- After tar removal activities had been completed, a total of 22 confirmation sediment samples were collected from the creek bed and analyzed for PAHs, a minor constituent of pine tar. However, it is widely acknowledged in the scientific literature that there are a multitude of PAH sources in urban settings, such as the Site. The post tar removal sediment concentration measurements were compared to total PAH PEC, the ecological risk benchmark specified in the updated ROD. In addition, sediment concentrations were also compared to site-specific, recreational exposure-based, human health benchmarks or ACTLs, developed by the University of Florida.
- A comparison of the post tar-removal total PAH sediment concentrations, on-average (95% UCLM), are less than or comparable to the PEC. Therefore, post tar removal sediment concentrations are expected to pose insignificant risks to environmental receptors. At the few locations, where PECs are exceeded, concentrations over time are expected to attenuate and attain background concentrations and/or comply with the PAH TEC.

• A comparison of the post tar-removal sediment concentrations to ACTLs indicates that sediment concentrations, on-average (95% UCLM), within the creeks are generally below or comparable to the ACTLs. Furthermore, since the available data represents sediment samples from the inundated portions of the creek – any sediment that is potentially contacted by humans is expected to wash off, further reducing human health risks. Therefore, post tar removal sediment concentrations are expected to pose insignificant risks to human health.

To summarize, the tar removal Work Plan, approved by US EPA, has been successfully implemented at the Site. The post tar removal sediment concentrations are expected to pose insignificant risks to human and ecological health. Sediment concentrations are expected to further attenuate over time and attain background concentrations and/or comply with the PAH TEC.

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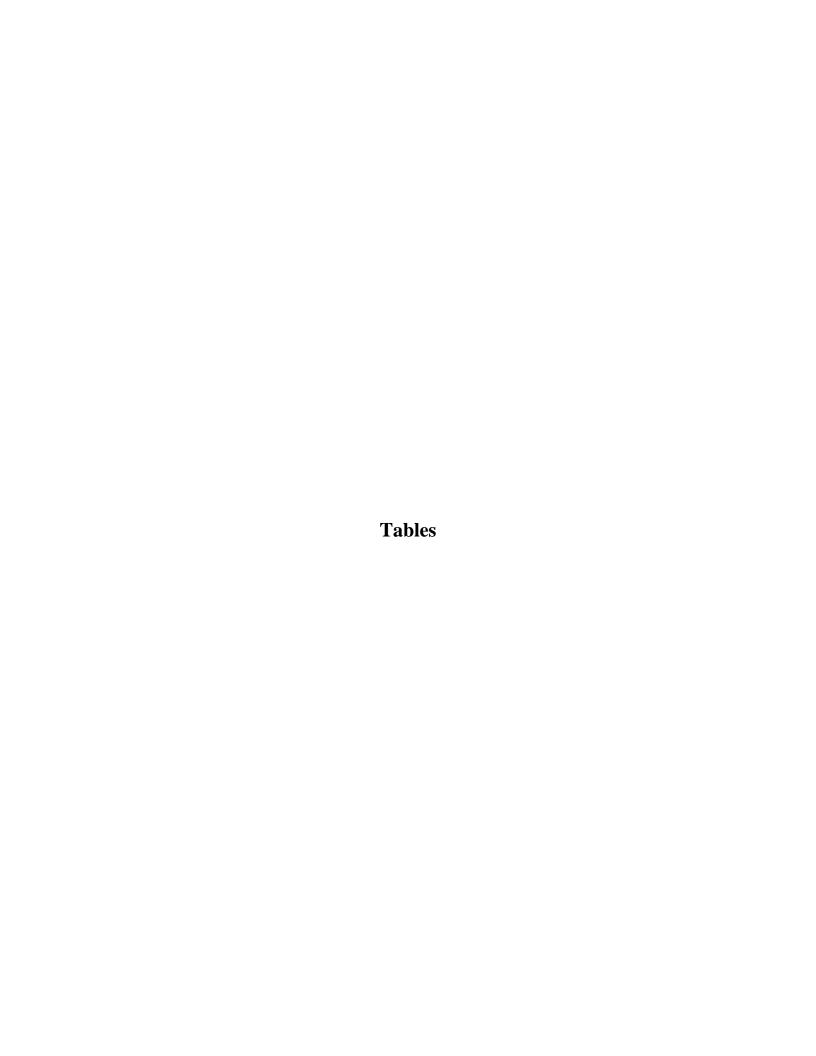


Table 1 Summary of Tar Removal Locations Cabot Carbon/Koppers Superfund Site, Gainesville, FL

			Extents o	f Excavation		
Tar-Removal Location ID	Sediment Removal Y/N	Sediment Removed in Cubic Yards	Coordinate Description		ordinates	Comments
Location 1D	Removal 1/11	Cubic Tarus	Coordinate Description	North	West	
			NE Corner	29.68157756	-82.32254787	
70.5	**		NW Corner	29.68159831	-82.32254527	
SS 5	Yes	15	SE Corner	29.68157892		
			SW Corner		-82.32256551	
			North	29.684175	-82.324351	
SS 2	Yes	3	South	29.684148	-82.324375	
SC/S4	No	NA				Property access refused
			NE Corner	29.685093	-82.340284	1 7
TD /02 /10	**	27	NW Corner	29.685123	-82.340365	
SD/S3/10	Yes	27	SE Corner	29.685058	-82.340288	
			SW Corner	29.685091	-82.340379	
			NE Corner	29.684916	-82.340881	
			NW Corner	29.684964	-82.340897	
SA/62	Yes	10	SE Corner	29.68491	-82.340898	Deposits SA and 62 were continuous
HB/H7 H4 H4A/1			SW Corner	29.684916	-82.340932	
HB/H7	Yes	1.5	Center	29.68493	-82.34154	
1 4	Yes	1	Center	29.6819364	-82.3422123	
			NE Corner	29.6801983	-82.3416218	
			NW Corner	29.6801957	-82.3416397	
		51	SE Corner	29.6801368	-82.3415632	
H4A/1	Yes		SW 1	29.6801242	-82.3415971	
			SW 2	29.6800723	-82.3415986	
			SW Corner	29.6800674	-82.3416184	
			North	29.679592	-82.341906	
			South	29.679555	-82.341944	
HA	Yes	7	East	29.679558	-82.341911	
			West	29.679575	-82.341936	
56	No	NA	11 Cat	27.017313	02.541750	Buried under piles of bricks
59	No	NA				Buried in creek bank; no seepage observed
.3	No	NA				Property access refused
.5	110	1111	NE Corner	29.685128	-82.340074	Troporty access refused
			NW Corner	29.685139	-82.340122	
58/9	Yes	10	SE Corner	29.685124	-82.340092	Deposits 58 and 9 were continuous
			SW Corner	29.685122	-82.340143	
j	No	NA	5 W Corner	29.003122	02.3 101 13	Unable to access creek in this area
	110	11/11	NE Corner	29.684904	-82.340481	chaote to access creek in this area
			NW Corner	29.684961	-82.340489	
50	Yes	12	SE Corner	29.684899	-82.340506	
			SW Corner	29.684941	-82.340538	
61	Yes	1	Center	29.684818	-82.340706	
75	Yes	1	Center	29.687154	-82.337008	Surface deposits were excavated
	ent Removed	139.5	Center	27.00/134	02.337000	Surface deposits were excavated

Note:

1) NA - Not Applicable.

Table 2 Turbidity Measurements Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Work Area	Date	Time	Up-Stream	Downstream	Difference	Comments
		11:45	1.5	6.78	5.28	
		12:20	4.13	30.3	26.17	
	2/11/2011	13:20		19	NA	
		15:10		25	NA	
		17:20				
		8:30	2.36	3.85	1.49	
		9:40		9.98	NA	
	2/12/2011	10:20		21.9	NA	
SS 5	2/12/2011	11:20		14.2	NA	
		12:45		75.7	NA	Stopped using 2-inch pump in excavation
		13:50		4.98	NA	
		10:45	1.46	29.7	28.24	
		11:15		205	NA	
		12:00		7.8	NA	
	2/14/2011	12:50		4.98	NA	
		14:20		3.75	NA	
		15:10		4.87	NA	
		16:20		3.79	NA	
58/9	2/16/2011	9:45	2.56	12.8	10.24	
	2/10/2011	14:30		3.96	NA	
		8:20	2.64	3.48	0.84	
		9:20		3.76	NA	
SS 5 SB/9 SD/S3/10		10:15		5.01	NA	
	2/17/2011	11:05		9.9	NA	
	2/17/2011	12:15		4.92	NA	
		14:05		3.74	NA	
SD/S3/10		15:20		5.39	NA	
		17:15		7.31	NA	
		9:50	1.88	25.1	23.22	
		10:25		3.67	NA	
	2/19/2011	11:30		3.15	NA	
	2/18/2011	14:05		18.6	NA	
		15:15		2.6	NA	
		16:20		20.2	NA	
		9:30	2	13.9	11.9	
		10:40		3.41	NA	
SS 2	2/23/2011	11:20		4.37	NA	
		11:45		2.76	NA	
		12:30		20.2	NA	
CD/62/10		11:10		3.67	NA	
DD/23/10		12:00		4.81	NA	
		8:00	1.77	41.5	39.8	Foot traffic on clay exposed in stream bed
		9:10		7.53	NA	* *
S 5 D/S3/10 S 2 D/S3/10		9:35		7.5	NA	
		10:42		2.83	NA	
70	2/2/2011	11:20		4.73	NA	
OU	3/2/2011	12:45		7.03	NA	
		13:45		3.33	NA	
		14:50		2.52	NA	
		15:35		2.14	NA	
		17:50		6.7	NA	
		13:00	1.48	19.8	18.3	
		14:00		12.3	NA	
		14:50		18.2	NA	
51 & SA/62	3/4/2011	15:35		34.6	NA	Turned off 2-inch pump near excavation
	J 1/2011	16:30		25.1	NA NA	rumed on 2 men pump near excavation
					11/1	
		17:10		210	NA	Dams taken down

Table 2 Turbidity Measurements Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Work Area	Date	Time	Up-Stream	Downstream	Difference	Comments
		13:00	1.81	7.45	5.64	
		15:25		5.56	NA	
HA	3/9/2011	16:25		6.95	NA	
		17:15		3.89	NA	
		18:30		5.81	NA	
		10:10	1.51	7.59	6.08	
		11:15		7.37	NA	
		12:50		3.5	NA	
		13:50		6.93	NA	
		14:20		12.6	NA	
	3/16/2011	15:00		5.39	NA	
	3/10/2011	15:50		5.64	NA	
		16:30		15.7	NA	
		17:20		30.7	NA	
		18:15		12.6	NA	
		19:30		12.9	NA	
		10:00	2.03	5.97	3.94	
		10:50		10.1	NA	
		11:45		5.11	NA	
	3/17/2011	13:00		5.36	NA	
H4A/1		16:15		21.6	NA	
H4A/ I		11:20	1.64	11	9.36	
		12:15		9.69	NA	
		13:25		9.36	NA	
	2/19/2011	14:00		28.1	NA	
	3/18/2011	14:50		6.65	NA	
		17:15		26.8	NA	
		10:05	2.84	8.84	6	
		11:00		9.48	NA	
		12:00		14.8	NA	
		12:50		14.9	NA	
		14:10		10.2	NA	
	3/21/2011	15:00		9.41	NA	
		16:10		25.1	NA	
		17:00		14.1	NA	
		18:05		8.14	NA	
		19:10		9.36	NA	

Notes:

 $^{1) \} Turbidity \ measurements \ in \ Nephelometric \ Turbidity \ Units \ (NTUs).$

²⁾ Turbidty measurements taken for machine excavated deposits only.

 $^{{\}it 3) Only one upstream measurement taken for each sample location per day.}$

⁴⁾ NA - Not Applicable; indicates difference in turbidity was not estimated because upstream sample was not measured.

Table 3 Summary of Air Sampling Data Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Sample ID	Logotion Description	Analytas	Result	Comment					
Sample 1D	Location Description	Analytes	(μg/m ³)	Comment					
		Alpha Pinene	< 55						
TR-01022011-02N TR01022011-03N TR01022011-03D TR01022011-04N Air South Air West	Upwind of Tar Deposit SS5	Beta Pinene	< 55	Background Sample					
	Opwind of Tai Deposit 555	3-Carene	ND	Dackground Sample					
		Alpha-Terpinol	ND						
TR01022011-01N TR-01022011-02N TR01022011-03N TR01022011-03D TR01022011-04N		Alpha Pinene	< 53						
TD 01022011 02N	Harried of Tay Dansite 0, 50, 50, 50, 50, 10, 60, 62	Beta Pinene	< 53	D. d 1 C 1					
71R-01022011-02N	Upwind of Tar Deposits 9, 58, 59, SD, 10, 60, 62	3-Carene	ND	Background Sample					
PTR-01022011-02N PTR01022011-03N PTR01022011-03D PTR01022011-04N Air South		Alpha-Terpinol	ND						
PTR01022011-03N PTR01022011-03D PTR01022011-04N		Alpha Pinene	< 54						
VED 0 1 0 2 2 0 1 1 0 2 N	Demonial of Ten Demonia HA HA HA	Beta Pinene	< 54	D. d 1 C 1					
71R01022011-03N	Downwind of Tar Deposits HA, H4, H4A	3-Carene	ND	Background Sample					
PTR01022011-01N PTR-01022011-02N PTR01022011-03N PTR01022011-03D PTR01022011-04N Air South Air East 2		Alpha-Terpinol	ND						
		Alpha Pinene	< 55						
TD01022011 02D	D 11 + 5 G 1 00M	Beta Pinene	< 55	D l 1 C 1 -					
	Duplicate for Sample 03N	3-Carene	ND	Background Sample					
		Alpha-Terpinol	ND						
		Alpha Pinene	< 53						
		Beta Pinene	< 53						
	Downwind of Tar Deposits 9, 58, 59, SD, 10, 60, 62	3-Carene	ND	Background Sample (Duplicate)					
		Alpha-Terpinol	ND						
		Alpha Pinene	< 49						
	**	Beta Pinene	< 49						
TR01022011-03N TR01022011-03D TR01022011-04N ir South ir West ir East 2	Upwind of Deposit H4A	3-Carene	ND	Sample During Excavation					
		Alpha-Terpinol	ND						
		Alpha Pinene	< 50						
*****	V	Beta Pinene	< 50						
ir South	Upwind of Deposit H4A	3-Carene	ND	Sample During Excavation					
		Alpha-Terpinol	ND						
		Alpha Pinene	< 50						
	D	Beta Pinene	< 50						
Air East 2	Downwind of Deposit H4A	3-Carene	ND	Sample During Excavation					
		Alpha-Terpinol	ND						
		Alpha Pinene	< 48						
		Beta Pinene	< 48						
Air East 1	Downwind of Deposit H4A	3-Carene	ND	Sample During Excavation					
		Alpha-Terpinol	ND						
		Alpha Pinene	< 48						
		Beta Pinene	< 48	•					
Air North	Downwind of Tar Deposit H4A	3-Carene	ND	Sample During Excavation					
		Alpha-Terpinol	ND						

Notes

 $^{{\}it 1) Air samples analyzed using Modified US EPA Method TO 15~GC/MS~Full~Scan.}$

²⁾ The action level for pine tar constituents is $16,000 \, \mu g/m3$ (see Air Monitoring Plan, dated 1-24-2011).

^{3) 3-}Carene and alpha-Terpinol are reported as tentatively identified compounds (TICs).

 $^{4) \} ND-Non-Detect; < indicates\ less\ than\ the\ reported\ value\ (actual\ measurement\ not\ available).$

Table 4
Summary of Air Monitoring Levels
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Constituents of	Health-Based Ac	ction Levels	Instrument 1	Monitoring Limit			
Concern	Occupational	Ambient Air	Occupational	Ambient Air			
VOCs	7 ppm Turpentine	2.8 ppm Turpentine	20 ppm as Isobutylene ¹	8 ppm as Isobutylene (1)			
PM ₁₀	NA	0.15 mg/m³	NA —	0.15 mg/m^3			
1 14110	IVA	0.15 mg/m^3	IVA	1 mg/m ^{3 (2)}			

Notes:

¹⁾ The instrument monitoring limit was determined for a PID calibrated with isobutylene using the calibration response factor of 0.3 for turpentine (Attachment B).

^{2) 0.15} mg/m3 is a daily average value and 1 mg/m3 is a ceiling limit.

Table 5
Summary of Confirmatory Sediment Samples
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Tar-Removal Location ID	Sediment Removal Y/N	Number of Confirmatory Samples Collected	Confirmatory Sample ID	Comments
SS5	Yes	3	SS5-01A, SS5-02A, SS5-03A	
SS2	Yes	2	SS2-01, SS2-02	
SC/S4	No	NA		
SD/S3/10	Yes	5	SD10-01, SD10-01A, SD10- 01B, SD10-02, SD-10-03	
SA/62	Yes	3	62-01, 62-02, 62-03	Locations SA and 62 were combined
HB/H7	Yes	1	HB/H7-01	
H4	Yes	1	H4-01	
H4A/1	Yes	7	H4A-01, H4A-02, H4A-03, H4A-04, H4A-05, H4A-06, H4A-07	
НА	Yes	2	HA-01, HA-02	
56	No	NA		
59	No	NA		
13	No	NA		
58/9	Yes	3	SB9-01, SB9-02, SB9-03	Locations 58 and 9 were combined
6	No	NA		
60	Yes	3	60-01, 60-02, 60-03	
61	Yes	0		Small tar deposit area
75	Yes	0		-

Note:

1) NA - Not Applicable.

Table 6 Summary of Confirmatory Sediment Data Cabot Carbon/Koppers Superfund Site, Gainesville, FL

	1		CC5		_	SS2	-			B-9		T			c	D/10				_		60		1	62		1	шл	1			Н4А				H4	HB/H7
-			000												~			- 1 1							02			11/4									,
Compound	SS5-01A	SS5-	02A	SS5-03A	SS2-01	SS	2-02	SB-901	SB9-	-02	SB9-03	SD/10-01	В	SD-1001A	SD-	10-01	SD-10-0	2	SD-10-03	60-0	1	60-02	60-03	62-01	62-02	62-03	HA-01	HA-02	H4A-01	H4A-02	H4A-03	H4A-04	H4A-05	H4A-06	H4A-07	H4-01	HB/H7-01
Benzo[g,h,i]perylene	26	U 2:	5 U	380	U 40	U N	NΑ	26	U 27	7 U	NA	140		150		50 J	38		NA	190) J	120	NA	26	U 26	U NA	630	NA	79	J 26	U 220	J NA	91	J 28	U 25 U	J 390	U 390 U
Benzo[k]fluoranthene	78	U 74	4 U	380	U 70	J N	NA	78	U 80) U	NA	170		260		71 J	58	J	NA	510)	370	NA	76	U 76	U NA	1700	NA	120	J 77	U 75	U NA	79	U 81	U 75 U	J 390	U 390 U
Acenaphthene	110	J 4'	7 U	380	U 40	U N	NA	49	U 50) U	NA	40	U	40		41 U	40	J	NA	3000	0	340	NA	48	U 48	U NA	2600	NA	310	J 48	U 47	U NA	50	U 51	U 48 U	J 390	U 390 U
Acenaphthylene	43	U 4	l U	380	U 40	U N	NA	43	U 44	4 U	NA	40	U	41	J	41 U	38	U	NA	2300	0	350	NA	42	U 42	U NA	1800	NA	43	U 42	U 41	U NA	44	U 45	U 42 U	J 390	U 390 U
Benzo[a]anthracene	35	J 3	l U	380	U 98	N	NA	32	U 33	3 U	NA	150		400	1	30	100		NA	1300	0	680	NA	44	J 32	U NA	3000	NA	250	J 32	U 31	U NA	33	U 34	U 31 U	J 390	U 390 U
Benzo[a]pyrene	63	U 60) U	380	U 110	N	NA	62	U 64	4 U	NA	200		320	1	.00 J	80		NA	860)	440	NA	61	U 61	U NA	2100	NA	170	J 61	U 110	J NA	63	U 65	U 60 U	J 390	U 390 U
Benzo[b]fluoranthene	46	U 4:	3 U	380	U 79	J N	NA	46	U 47	7 U	NA	200		310	1	10	59	J	NA	440)	420	NA	44	U 45	U NA	1300	NA	120	J 45	U 44	U NA	46	U 48	U 44 U	J 390	U 390 U
1-Methylnaphthalene	120	J 3:	5 U	380	U 38	U N	NA	37	U 38	3 U	NA	37	U	38	U	38 U	36	U	NA	4400	0	530	NA	36	U 36	U NA	1200	NA	420	37	U 36	U NA	38	U 39	U 36 U	J 390	U 390 U
2-Methylnaphthalene	89	J 4:	3 U	380	U 40	U N	NA	46	U 47	7 U	NA	40	U	40	U	41 U	38	U	NA	4900	0	700	NA	44	U 45	U NA	680	NA	560	45	U 44	U NA	46	U 48	U 44 U	J 390	U 390 U
Chrysene	39	J 24	4 U	380	U 130	N	NA	25	U 26	5 U	NA	210		510	1	.60	130		NA	1500	0	860	NA	55	J 25	U NA	3500	NA	270	J 51	J 24	U NA	26	U 26	U 24 U	J 390	U 390 U
Dibenz(a,h)anthracene	47	U 4:	5 U	380	U 40	U N	NA	47	U 48	B U	NA	40	U	40	U	41 U	38	U	NA	190	U	47	U NA	46	U 46	U NA	220	U NA	47	U 46	U 210	J NA	79	J 49	U 45 U	J 390	U 390 U
Fluoranthene	100	J 3	7 U	380	U 40	U N	NA	38	U 39	U	NA	380		990		240	340		NA	190) U	1600	NA	65	J 38	U NA	220	U NA	920	210	J 37	U NA	60	J 40	U 49	390	U 390 U
Fluorene	70	I 4	l U	380	U 40	U N	NA	43	U 44	1 U	NA	40	U	40	U	41 U	40	J	NA	2100	0	310	NA	42.	U 42	U NA	2000	NA	43	U 42	U 41	U NA	44	U 45	U 42 I	J 390	U 390 U
Indeno[1,2,3-cd]pyrene	34	II 3'	2 11	380	II 40	U N	NA.	34	II 34	1 11	NA	130		140		41 11	38	II	NA	230		120	NA	33	II 33	II NA	630	NA	89	I 33	II 230	I NA	82	I 35	II 32 I	1 390	II 390 II
Naphthalene	99	J 34	4 U	380	U 47	J N		36	U 37	7 U	NA	40	U	40	U .	41 U	38	U	NA	1500		340	NA	35	U 35	U NA	220	U NA	36	U 35	U 34	U NA	37	U 38	U 35 I	J 390	U 390 U
Phenanthrene	360	1 3	1 11	380	U 110		NA	77	I 33	3 1	NA	93	-	260	-	74 I	120	-	NA	1500		1700	NA	130	I 78	I NA	14000	NA	1600	130	I 31	II NA	33	II 34	II 31 I	1 390	U 390 U
Pyrene	33	II 3		380	U 250	N		32	II 33	3 11	NΔ	370		910		260	320		NA	3500		1400	NA	55	I 32	U NA	7600	NA	590	160	J 31	U NA	45	I 3/	11 38	390	U 390 U
Anthracene	30	II 2) II	380	U 40	UN		30	U 31	1 11	NA	40	11	86	-	41 II	64	ī	NA	2400		460	NA	29	II 29	II NA	3100	NA	290	I 31	I 29	U NA	31	II 31	II 29 I	J 390	U 390 U
Dibenzofuran	NA	N.	Δ	NΔ	82	UN		NA.	NA NA	Δ	NΔ	81	11	81	II	82 11	77	11	NA	390		250	J NA	30	II 30	II NA	460	U NA	40	II 30	38	II NA	40	U 41	II 38 I	1 390	U 390 U
Total PAH	1422	U 70	n. 12 II	6840	11 1274	U N		781	U 75	n. E II	NA NA	2441	U	4606		642 U	1602	U		4490		11037		950	U 808	U NA	46960	NA NA	5997	1100	17 1252	U NA	967	U 812	U 768 U	J 7410	U 7410 U
Total BAP-TEQ	122.3	U 116			U 1374	UN		121.0	U /5:) U	INA.	289.9	11	4696	II 1	043 70.0 U	138.4	11	NA NA	1253		613.6	NA U NA	119.9		U NA U NA	2833.5	NA NA	264.4	U 118.8	U 1333	U NA U NA	158.9	U 126.5		J 901.3	U 901.3 U
	122.3	0 110	5.4 U	878.2 3000	U 172.5		NA 400	121.0	U 124	1.2 U	3000 I	289.9	U	446.1	U I	70.0 U	3000	U	NA 5700	1255	.0 U	015.0	U NA 3000 I	119.9	U 118.8		2833.3	16000	204.4	U 118.8	U 351.3	U NA 3000	138.9	U 120.5	U 116.5 U	901.3	901.3
TOC (mg/kg)				3000	U	54	400				3000 L	1					3000	U	5700	1			3000 L	1		3000	U	10000	I			3000	U			1	

Notes:

1) Sediment data in µg/kg

2) U indicates values detected below reporting limit
3) NA - Not Available/Not Analyzed



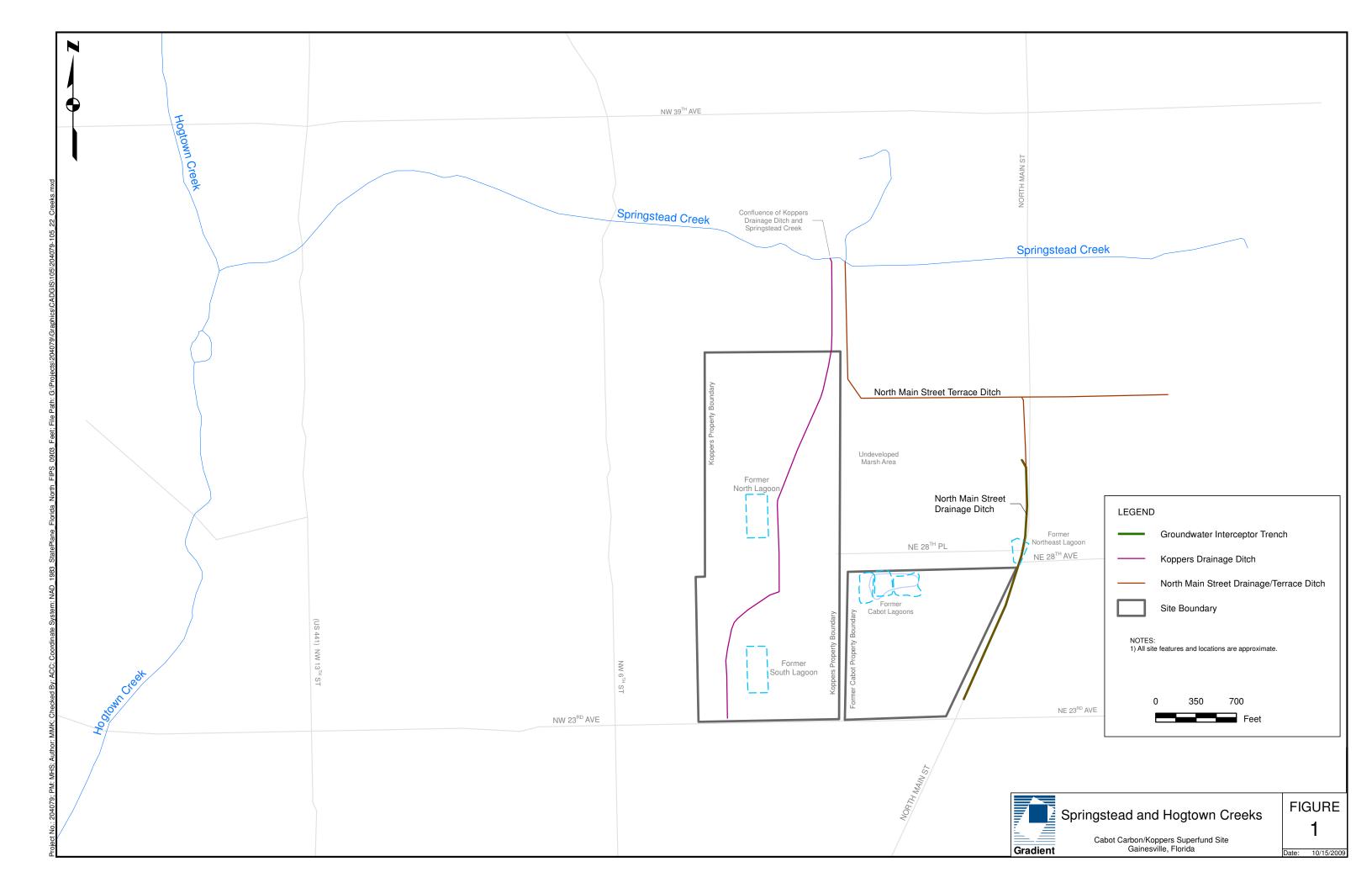


Figure 2
Pre-Remediation Sediment Data: Total PAH Concentrations
Cabot Carbon/Koppers Superfund Site

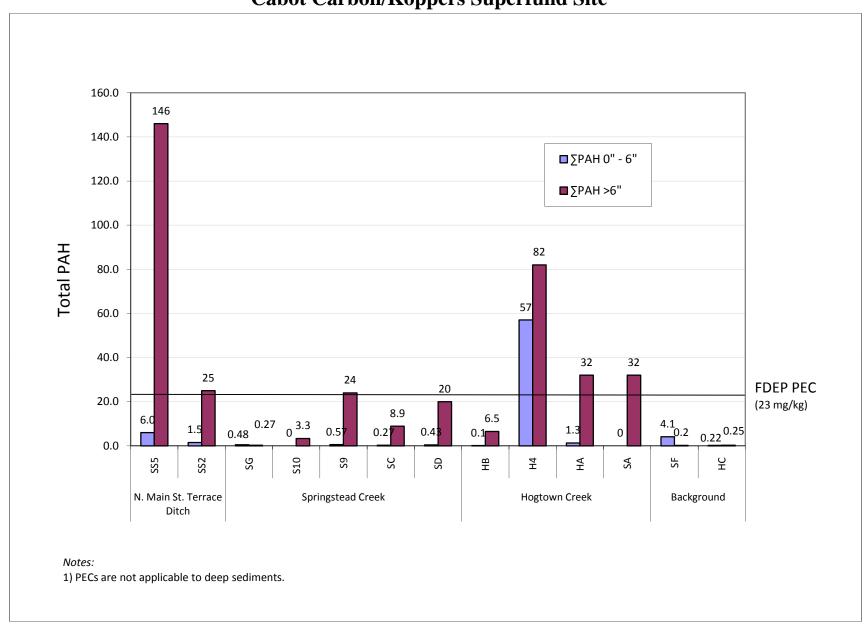
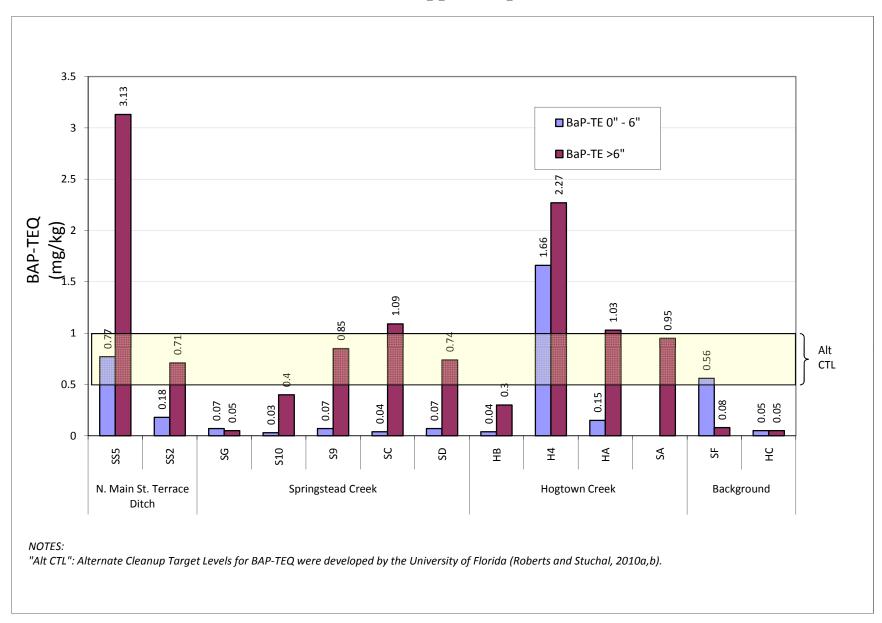
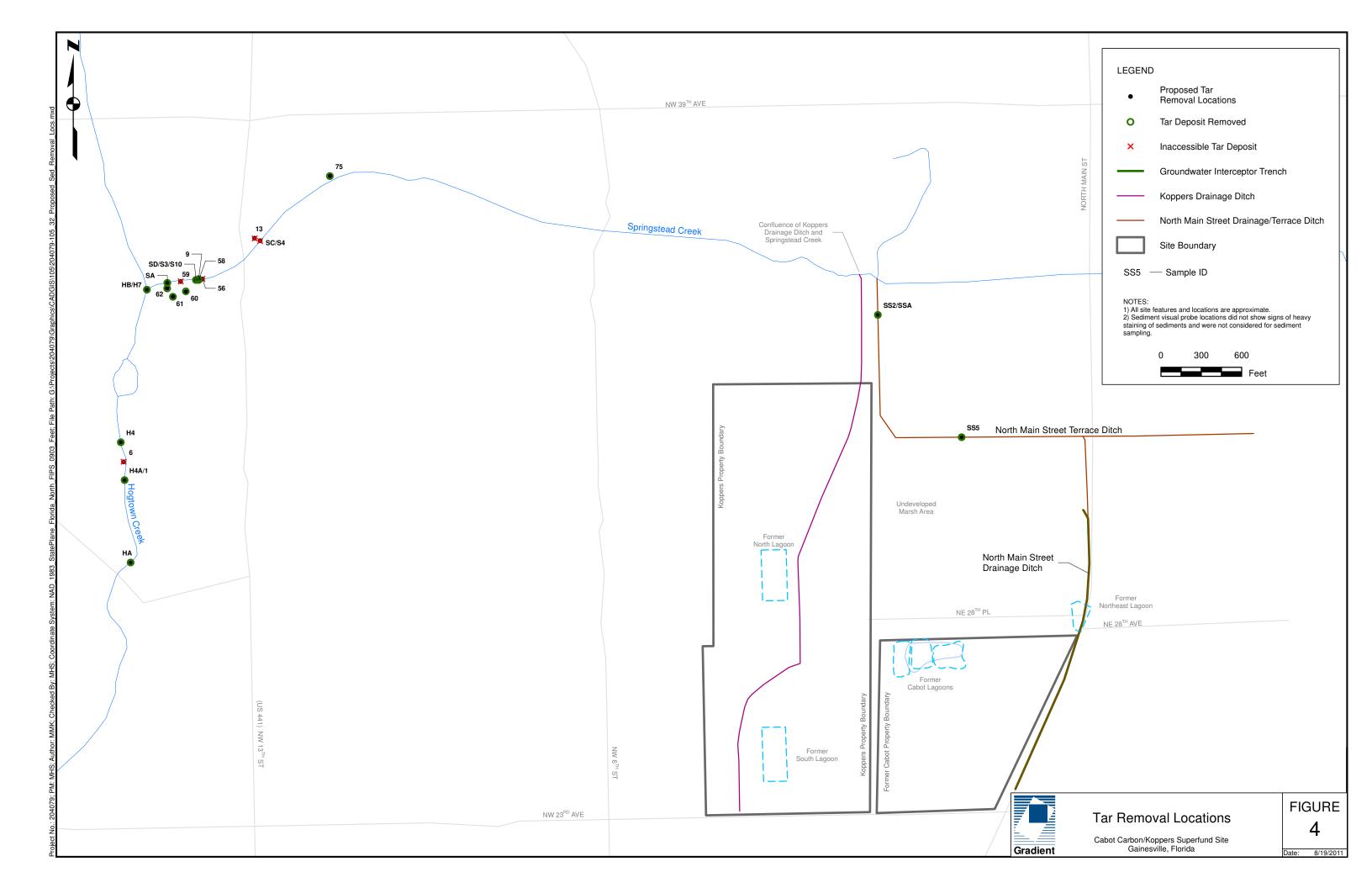


Figure 3
Pre-Remediation Sediment Data: BAP-TEQ Levels
Cabot Carbon/Koppers Superfund Site





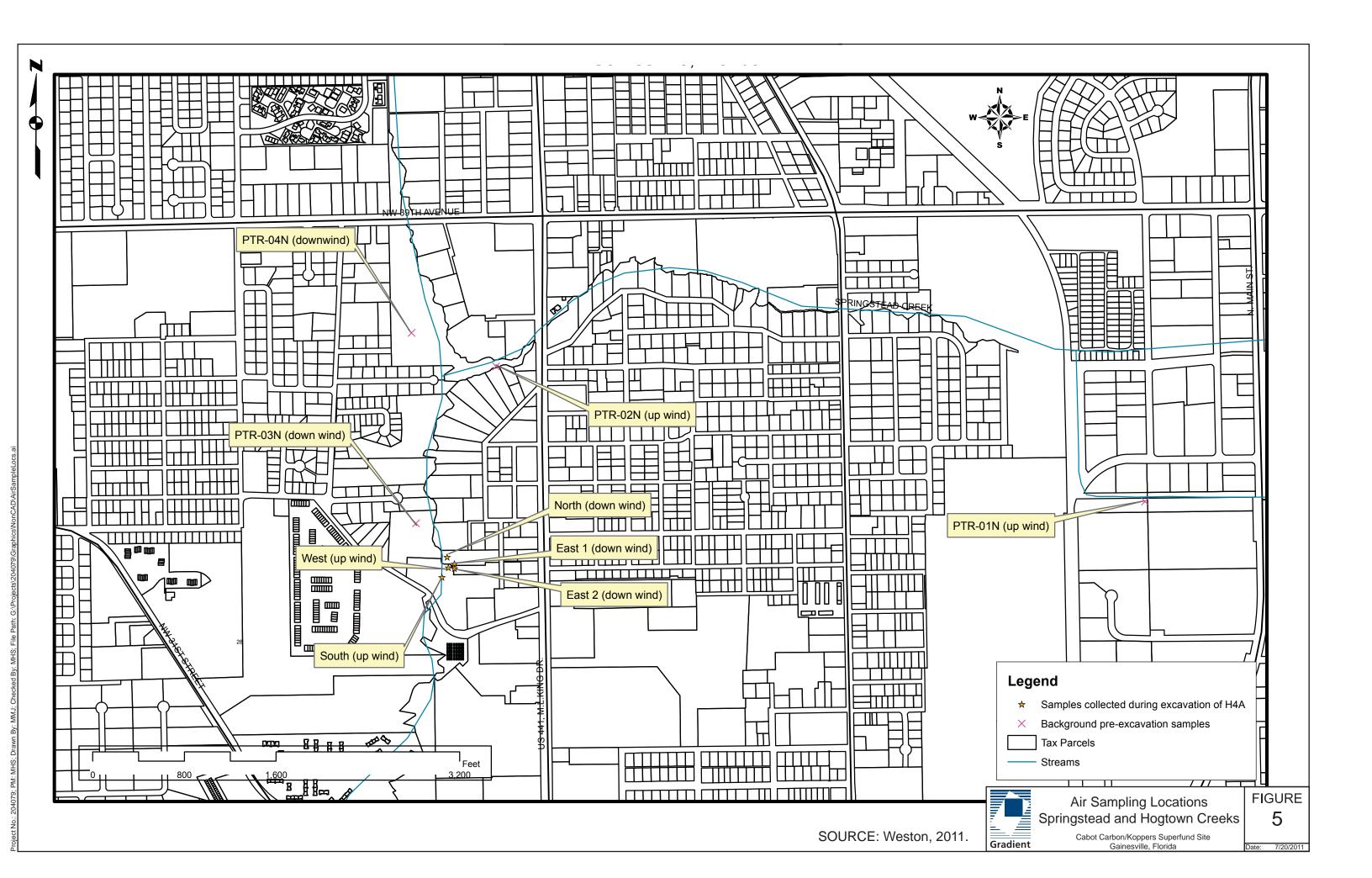


Figure 6a
Post-Excavation Sediment Data: Total PAH vs. Florida PEC - 95% UCLM
Cabot Carbon/Koppers Superfund Site

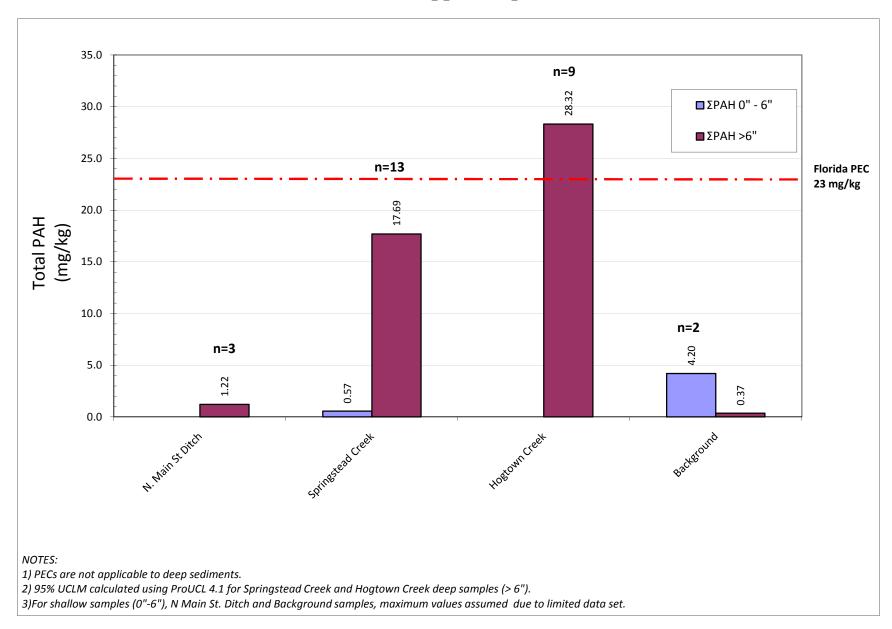


Figure 6b
Post-Excavation Sediment Data: Total PAH vs. Florida PEC - All Data
Cabot Carbon/Koppers Superfund Site

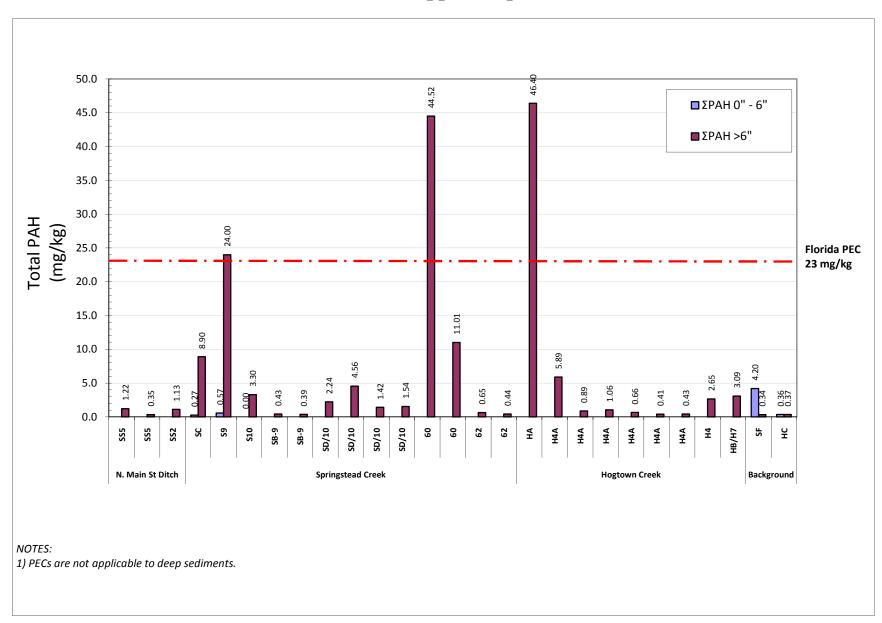


Figure 7a
Post-Excavation Sediment Data: BAP-TEQ vs. ACTLs - 95% UCLM
Cabot Carbon/Koppers Superfund Site

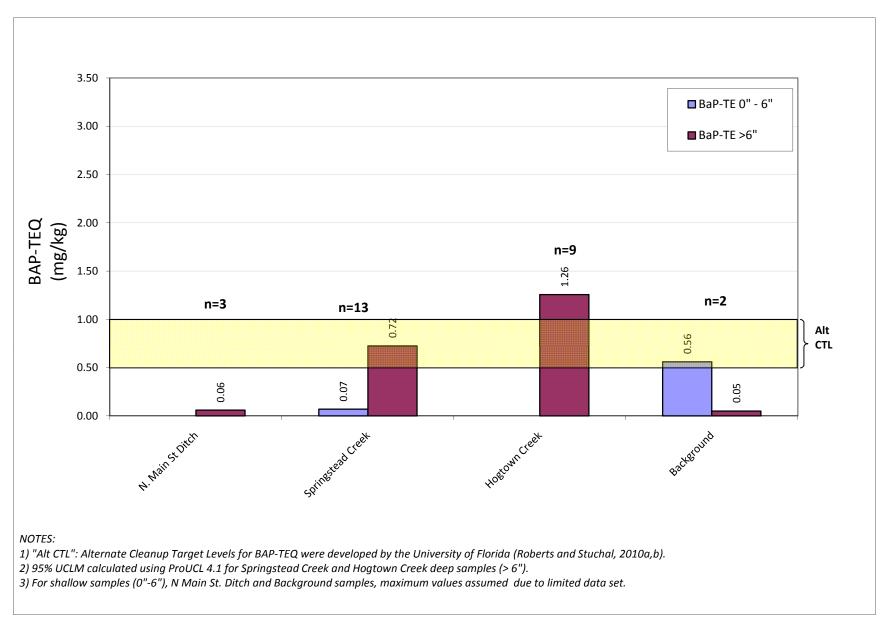
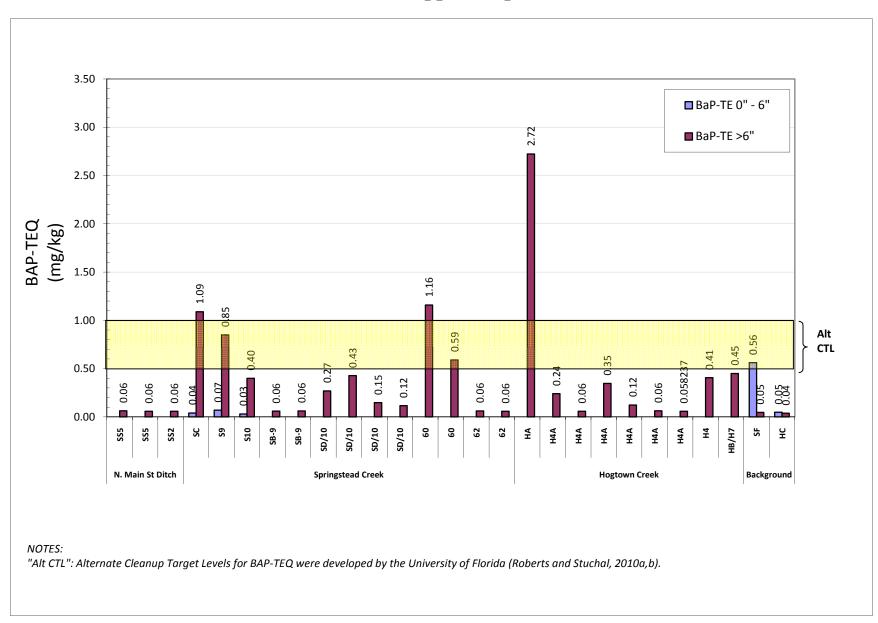


Figure 7b
Post-Excavation Sediment Data: BAP-TEQ vs. ACTLs - All Data
Cabot Carbon/Koppers Superfund Site



Appendix A

Project Fact Sheet

Springstead and Hogtown Creeks Pine Tar Removal Plan

What:

Cabot Corp will begin the clean up of the Springstead and Hogtown Creeks, to remove isolated deposits of pine tar in the creeks. Cabot's contractor, Weston Solutions, will be carrying out this work.

Why:

Recently, the Alachua County Environmental Protection Department (ACEPD) located and identified specific locations along the creek where pine tar is present. Cabot believes that the best course of action is to remove them and submitted a plan to the United States Environmental Protection Agency (USEPA) and Florida Department of Environmental Protection (FDEP), ACEPD, and the City of Gainesville to do just that. This work is an interim removal action to address areas of the creeks containing significant tarry deposits and address citizens concern regarding potential contact with those deposits. It is not intended to address all site related contamination in the creek nor is it the final Superfund remedy.

Where:

The clean up is focused on 17 isolated areas in the creeks which were identified in a comprehensive study done by ACEPD.

When:

The plan has been reviewed, commented on and approved by the USEPA, FDEP, ACEPD and the City of Gainesville. It is expected that the work will be done in January and February 2011, a time when rainfall in Gainesville is usually low. The work is expected to take up to one to two days at each clean up area. Appropriate property access will be sought to undertake the work.

Clean Up Plan Elements:

- Remove pine tar deposits from all 17 areas in the creeks.
- Removal will be conducted using small-sized back hoes and similar equipment.
- Removed material will be transported to a central location for appropriate disposal off site.
- Odor control measures will be implemented since pine tars have an odor. Some odors may be noticeable near the work area. Air monitoring will be conducted.
- Properties and work areas affected by this work will be restored.

Background

- Cabot operated a pine tar plant that distilled pine oil and tar from pine trees into a variety
 of products. Cabot's plant operations ceased in 1966 and the property was sold to a local
 developer.
- After Cabot sold the facility, the property was redeveloped, during which time some of the contents of the pine processing lagoons were bulldozed and released.
- Some of the released pine tar entered Springstead and Hogtown Creeks. Accordingly, the Florida Department of Environmental Protection ordered the developer to clean up the release.
- In the 1990s, Cabot installed and continues to maintain a multi-million dollar, 2000-foot long groundwater interceptor trench along North Main Street to address any pine tar related impacts to the groundwater. Recent studies confirm that this remedial system is working effectively.
- Federal, state, and local environmental agencies, among others have previously examined potential impacts to the creek. Last year and earlier this year the ACEPD conducted comprehensive investigations and identified residual pine tar in 17 localized areas, most are 18–24 inches below the creek bed.
- These locations are the focus of Cabot's creek clean up efforts.

For over 25 years, Cabot has proactively implemented remedial actions at its portion of the Superfund Site and has worked cooperatively with regulatory authorities to ensure that these actions remain protective of human health and the environment.

If you have questions or need additional information, please contact:

Mark Taylor, Project Manager

Weston Solutions

Tel: 904-261-3085 Email: Mark.Taylor@WestonSolutions.com Wayne M. Reiber,

Manager, Environmental Assessment &

Remediation Cabot Corporation

Tel: 617-342-6023

Email: wayne_reiber@cabot-corp.com

You can also contact:

Scott Miller

Remedial Project Manager, United States Environmental Protection Agency

Tel: (404) 562-9120

E-mail: Miller.Scott@epamail.epa.gov

John Mousa

Pollution Prevention Manager, Alachua County Environmental Protection Department

Tel: (352) 264-6805

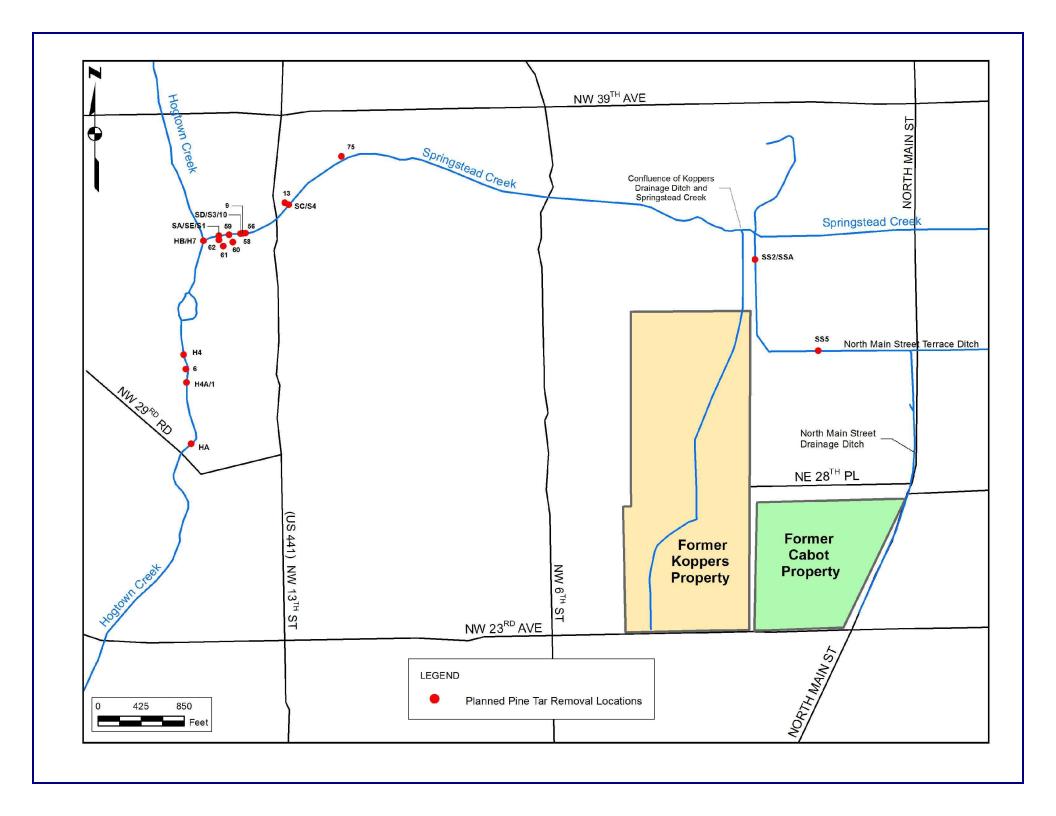
E-mail: jjm@alachuacounty.us

Anthony Dennis

Environmental Health Director, Alachua County Health Department

Tel: (352) 334-7931

E-mail: Anthony Dennis@doh.state.fl.us



Appendix B

Project Photographs



Sediment containment area located in northwest corner of staging area



Silt fencing at staging area



Air monitoring equipment downwind of excavation at location SS5



Lifting of Super Sack at tar deposit location SS5



Diesel powered pump used to move water around creek excavation



Downstream Jersey barrier dam with plastic sheeting covering stream bed to reduce turbidity



Excavator used to remove pine tar deposits



Excavation in progress at location 58 & 9 behind Holbrook Travel



Excavation at deposit H4A in City of Gainesville Park on 29th Road



Excavator lowered into Springstead Creek at deposit SS2



Sediment dewatering box being loaded for transport to staging area



Turbidity meter showing downstream reading on 3-21-2011



Jersey type barriers at staging area used for downstream dams



Excavation at location SD/10



Downstream dam with plastic sheeting on the stream bottom with hay bales & absorbent booms



Steel box used to transport sediments from creek bed



Downstream turbidity controls



Loading truck with stock piled sediment at the work staging area



HDPE Mats used to reduce ground impact from equipment traffic



Erision control matting at 29th Road Park



Clearing of flower beds at Holbrook Travel



Grass seeding with hay cover behind Holbrook Travel



Replacement tree at 29th Road Park



Replacement tree at Shea Property



Slope at 29^{th} Road Park with vegetation returning.



New grass in work area at Holbrook Travel

Appendix C

Air Testing Data



2/11/2011 Mr. Brian Benson Weston Solutions, Inc. 1625 Pumphrey Avenue

Auburn AL 36832-4303

Project Name: Cabot-Hogtown Crk Project #: 05791.004.005.0003.0

Workorder #: 1102072

Dear Mr. Brian Benson

The following report includes the data for the above referenced project for sample(s) received on 2/3/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15/TICs are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager



WORK ORDER #: 1102072

Work Order Summary

CLIENT: Mr. Brian Benson BILL TO: Accounts Payable-Norcross

Weston Solutions, Inc.
Weston Solutions, Inc.
1625 Pumphrey Avenue
5430 Metric Place

Auburn, AL 36832-4303 Suite 100

Norcross, GA 30092-2550

PHONE: 334-466-5600 **P.O.** # 0074294

FAX: 334-466-5660 PROJECT # 05791.004.005.0003.0 Cabot-Hogtown

DATE RECEIVED: 02/03/2011 CONTACT: Crk Ausha Scot DATE COMPLETED: 02/11/2011

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	PTR-01022011-01N	Modified TO-15/TICs	9.8 "Hg	5 psi
02A	PTR-01022011-02N	Modified TO-15/TICs	9.0 "Hg	5 psi
03A	PTR-01022011-03N	Modified TO-15/TICs	9.4 "Hg	5 psi
04A	PTR-01022011-03D	Modified TO-15/TICs	9.8 "Hg	5 psi
05A	PTR-01022011-04N	Modified TO-15/TICs	8.8 "Hg	5 psi
06A	Lab Blank	Modified TO-15/TICs	NA	NA
07A	CCV	Modified TO-15/TICs	NA	NA
08A	LCS	Modified TO-15/TICs	NA	NA
08AA	LCSD	Modified TO-15/TICs	NA	NA

CERTIFIED BY:

Linda d. Fruman

DATE: $\frac{02/11/11}{}$

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP - AI 30763, NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.



LABORATORY NARRATIVE EPA Method TO-15 Weston Solutions, Inc. Workorder# 1102072

Five 6 Liter Summa Canister samples were received on February 03, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates



as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: PTR-01022011-01N

Lab ID#: 1102072-01A

No Detections Were Found.

Client Sample ID: PTR-01022011-02N

Lab ID#: 1102072-02A

No Detections Were Found.

Client Sample ID: PTR-01022011-03N

Lab ID#: 1102072-03A

No Detections Were Found.

Client Sample ID: PTR-01022011-03D

Lab ID#: 1102072-04A

No Detections Were Found.

Client Sample ID: PTR-01022011-04N

Lab ID#: 1102072-05A

No Detections Were Found.



Client Sample ID: PTR-01022011-01N

Lab ID#: 1102072-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020910	Date of Collection: 2/1/11 4:30:00 PM
Dil. Factor:	1.99	Date of Analysis: 2/9/11 02:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	10	Not Detected	55	Not Detected
beta-Pinene	10	Not Detected	55	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: PTR-01022011-02N

Lab ID#: 1102072-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020911	Date of Collection: 2/1/11 4:42:00 PM
Dil. Factor:	1.91	Date of Analysis: 2/9/11 02:37 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	9.6	Not Detected	53	Not Detected
beta-Pinene	9.6	Not Detected	53	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	91	70-130



Client Sample ID: PTR-01022011-03N

Lab ID#: 1102072-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020912	Date of Collection: 2/1/11 5:04:00 PM
Dil. Factor:	1.95	Date of Analysis: 2/9/11 03:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	9.8	Not Detected	54	Not Detected
beta-Pinene	9.8	Not Detected	54	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	106	70-130	
4-Bromofluorobenzene	90	70-130	



Client Sample ID: PTR-01022011-03D

Lab ID#: 1102072-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020913	Date of Collection: 2/1/11 5:04:00 PM
Dil. Factor:	1.99	Date of Analysis: 2/9/11 03:52 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	10	Not Detected	55	Not Detected
beta-Pinene	10	Not Detected	55	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	97	70-130	
1,2-Dichloroethane-d4	105	70-130	
4-Bromofluorobenzene	84	70-130	



Client Sample ID: PTR-01022011-04N

Lab ID#: 1102072-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Dil. Factor:	1.90 Rpt. Limit	Dar Amount	te of Analysis: 2/9/11 Rpt. Limit	04:27 PM Amount
File Name:	2020914	Da	te of Collection: 2/1/	11

Company	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
alpha-Pinene	9.5	Not Detected	53	Not Detected
beta-Pinene	9.5	Not Detected	53	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

O a many a many d	CAC November	Matala Ossalitas	Amount
Compound	CAS Number	Match Quality	(ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	107	70-130	
4-Bromofluorobenzene	95	70-130	



Client Sample ID: Lab Blank Lab ID#: 1102072-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	2020909a 1.00			1 01:00 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	5.0	Not Detected	28	Not Detected
beta-Pinene	5.0	Not Detected	28	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	91	70-130	



Client Sample ID: CCV Lab ID#: 1102072-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020902	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/9/11 09:09 AM

Compound	%Recovery
alpha-Pinene	95
beta-Pinene	95

		Wethod	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	89	70-130	
4-Bromofluorobenzene	104	70-130	



Client Sample ID: LCS Lab ID#: 1102072-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 2020903 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 2/9/11 09:38 AM

Compound%Recoveryalpha-PineneNot Spikedbeta-PineneNot Spiked

остано турсти постърновано		Method
Surrogates	%Recovery	Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: LCSD Lab ID#: 1102072-08AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 2020904 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 2/9/11 10:07 AM

Compound%Recoveryalpha-PineneNot Spikedbeta-PineneNot Spiked

21 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	91	70-130	
4-Bromofluorobenzene	102	70-130	



4/19/2011 Mr. Brian Benson Weston Solutions, Inc.

1625 Pumphrey Avenue

Auburn AL 36832-4303

Project Name: Cabot Pine Tar Project #: 05791.004.005.0003

Workorder #: 1103664

Dear Mr. Brian Benson

The following report includes the data for the above referenced project for sample(s) received on 3/30/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager



PHONE:

WORK ORDER #: 1103664

Work Order Summary

CLIENT: Mr. Brian Benson BILL TO: Accounts Payable-Norcross

Weston Solutions, Inc.
Weston Solutions, Inc.
1625 Pumphrey Avenue
5430 Metric Place

P.O. #

74294

Auburn, AL 36832-4303 Suite 100

Norcross, GA 30092-2550

FAX: 334-466-5660 **PROJECT** # 05791.004.005.0003 Cabot Pine Tar

DATE RECEIVED: 03/30/2011 **CONTACT:** Ausha Scott **DATE COMPLETED:** 04/18/2011

334-466-5600

			RECEIPT	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	AIR SOUTH	Modified TO-15	7.0 "Hg	5 psi
02A	AIR WEST	Modified TO-15	7.4 "Hg	5 psi
03A	AIR EAST 2	Modified TO-15	7.4 "Hg	5 psi
04A	AIR EAST 1	Modified TO-15	6.8 "Hg	5 psi
05A	AIR NORTH	Modified TO-15	6.8 "Hg	5 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA

CERTIFIED BY:

Linda d. Fruman

DATE: <u>04/18/11</u>

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP - AI 30763, NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.



LABORATORY NARRATIVE EPA Method TO-15 Weston Solutions, Inc. Workorder# 1103664

Five 6 Liter Summa Canister samples were received on March 30, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Sample collection date was incomplete on the Chain of Custody for samples AIR SOUTH, AIR WEST, AIR EAST 2, AIR EAST 1, and AIR NORTH. The year of collection was assumed to be 2011.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: AIR SOUTH

Lab ID#: 1103664-01A

No Detections Were Found.

Client Sample ID: AIR WEST

Lab ID#: 1103664-02A

No Detections Were Found.

Client Sample ID: AIR EAST 2

Lab ID#: 1103664-03A

No Detections Were Found.

Client Sample ID: AIR EAST 1

Lab ID#: 1103664-04A

No Detections Were Found.

Client Sample ID: AIR NORTH

Lab ID#: 1103664-05A

No Detections Were Found.



Client Sample ID: AIR SOUTH Lab ID#: 1103664-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041314	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.75	Date of Analysis: 4/13/11 06:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.8	Not Detected	49	Not Detected
beta-Pinene	8.8	Not Detected	49	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	115	70-130



Client Sample ID: AIR WEST Lab ID#: 1103664-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041315	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.78	Date of Analysis: 4/13/11 06:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.9	Not Detected	50	Not Detected
beta-Pinene	8.9	Not Detected	50	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Surrogates	%Recovery	Metnod Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	107	70-130



Client Sample ID: AIR EAST 2 Lab ID#: 1103664-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041316	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.78	Date of Analysis: 4/13/11 06:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.9	Not Detected	50	Not Detected
beta-Pinene	8.9	Not Detected	50	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	89	70-130	
4-Bromofluorobenzene	112	70-130	



Client Sample ID: AIR EAST 1 Lab ID#: 1103664-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041317	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.73	Date of Analysis: 4/13/11 07:12 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.6	Not Detected	48	Not Detected
beta-Pinene	8.6	Not Detected	48	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	91	70-130	
4-Bromofluorobenzene	108	70-130	



Client Sample ID: AIR NORTH Lab ID#: 1103664-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041320	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.73	Date of Analysis: 4/13/11 08:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.6	Not Detected	48	Not Detected
beta-Pinene	8.6	Not Detected	48	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	92	70-130	
4-Bromofluorobenzene	110	70-130	



Client Sample ID: Lab Blank Lab ID#: 1103664-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	3041313a 1.00		e of Collection: NA e of Analysis: 4/13	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	5.0	Not Detected	28	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Not Detected

28

Not Detected

5.0

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: NA - Not Applicable

beta-Pinene

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	94	70-130	
1,2-Dichloroethane-d4	91	70-130	
4-Bromofluorobenzene	109	70-130	



Client Sample ID: CCV Lab ID#: 1103664-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041307a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/13/11 10:56 AM

Compound	%Recovery
alpha-Pinene	100
beta-Pinene	107

Abr and a br and a		Method
Surrogates	%Recovery	Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	116	70-130

Appendix D

Soil Recycling Certificates

Invoice #48656

CERTIFICATE OF TREATMENT

This is to certify that Clark Environmental, Inc. received 115.34 Tons of Non-Regulated Industrial Waste material from:

GENERATOR:

CABOT CORPORATION

2874 NE 1st TERRACE GAINESVILLE, FLORIDA

ON:

MARCH 18 - MARCH 29, 2011

and that said material has been processed by Thermal Treatment as certified by post burn analytical number(s) CP3809 and CP3810. All work is performed to meet and exceed all EPA and DEP Guidelines.

June 20, 2011

James W. Clark, Vice President, General Manager

Thermal Treatment Division



T3141 115.34 V





1910 Harden Boulevard Suite 101 Lakeland, FL 33803 (863) 686-4271 Phone (863) 686-4389 Fax

Clark Environmental, Inc. 755 Prairie Industrial Parkway Mulberry, FL 33860 Project Name:

Clark Environmental - Postburn

Project Number:

CP3809

Project Location:

Mulberry, FL

Project Manager:

John Warren

Reported:

12-Apr-11 07:50

Lab Work Order (COC): 1104074

CP3809 1104074-01 (Soil)

			1 0 1 (001.)			-		
Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
	*	**************************************						
			Ī	Prepared: 08	-Apr-11 14	:00		
EPA Method 8260B - VOA/BTEX+MTBE			,	Analyzed: 08	8-Apr-11 19	:50	Bato	h: B104076
Methyl tert-Butyl Ether (MTBE)	U	0.00197	0.000862	mg/kg dry	0.909			
Benzene	0.00245	0.00197	0.000369	mg/kg dry	0.909			
Toluene	0.00334	0.00197	0.000453	mg/kg dry	0.909			
Ethylbenzene	0.000716	0.00493	0.000496	mg/kg dry	0.909			1
m- & p-Xylenes	0.00203	0.00986	0.000887	mg/kg dry	0.909			L
o-Xylene	0.000955	0.00197	0.000432	mg/kg dry	0.909			1
Surrogate: Toluene-d8	0.0649			mg/kg dry		120 %	80-120	
			İ	Prepared: 08	3-Apr-11 15	:34		
EPA Method 8270C - PAHs				Analyzed: 0 8	200		Bato	h: B104063
1-Methylnaphthalene	U	0.0543	0.0244	mg/kg dry	1		The second secon	
2-Methylnaphthalene	U	0.0543	0.0340	mg/kg dry	1			
Acenaphthene	U	0.0543	0.0349	mg/kg dry	1			
Acenaphthylene	U	0.0543	0.0116	mg/kg dry	1			
Anthracene	U	0.0543	0.0173	mg/kg dry	1			
Benzo(a)anthracene	_, U	0.0543	0.0170	mg/kg dry	_1			
Benzo(a)pyrene	U	0.0543	0.0161	mg/kg dry	1			
Benzo(b)fluoranthene	U	0.0543	0.0202	mg/kg dry	1			
Benzo(g,h,i)perylene	U	0.0543	0.0242	mg/kg dry	1			
Benzo(k)fluoranthene	U	0.0543	0.0283	mg/kg dry	1			
Chrysene	U	0.0543	0.0214	mg/kg dry	1			
Dibenzo(a,h)anthracene	U	0.0543	0.0172	mg/kg dry	1			
Fluoranthene	U	0.0543	0.0161	mg/kg dry	1			
Fluorene	U	0.0543	0.0232	mg/kg dry	1			
		-	-				-,	Ones dans





1910 Harden Boulevard Suite 101 Lakeland, FL 33803 (863) 686-4271 Phone (863) 686-4389 Fax

Clark Environmental, Inc. 755 Prairie Industrial Parkway Mulberry, FL 33860 Project Name:

Clark Environmental - Postburn

Project Number:

CP3809

Project Location: Project Manager:

Mulberry, FL

John Warren

Reported: 12-Apr-11 07:50

Lab Work Order (COC): 1104074

CP3809 1104074-01 (Soil)

							%Rec	
Analyte	Result	PQL	MDL	Units	Dilution	%Rec	Limits	Qualifiers
			F	Prepared: 08	-Apr-11 15:	:34		
EPA Method 8270C - PAHs			,	Analyzed: 08	-Apr-11 22:	:20	Bato	h: B104063
Indeno(1,2,3-cd)pyrene	U	0.0543	0.0259	mg/kg dry	1			
Naphthalene	U	0.0543	0.0230	mg/kg dry	1			
Phenanthrene	U	0.0543	0.0129	mg/kg dry	1			
Pyrene	U	0.0543	0.0218	mg/kg dry	1			
Surrogate: 2-Fluorobiphenyl	0.724			mg/kg dry		80 %	60-100	
			1	Prepared: 08	-Apr-11 15	:36		
Petroleum Hydrocarbons by GC/FID			,	Analyzed: 08	-Apr-11 20	:40	Bato	h: B104064
FL-PRO (C8-C40)	6.81	4.34	2.96	mg/kg dry	1			
Surrogate: o-Terphenyl	3.54			mg/kg dry		98 %	62-109	
Surrogate: n-Nonatriacontane	3.09			mg/kg dry		85 %	60-118	
				Prepared: 11	-Apr-11 10	:36		
EPA Method 6010B - Metals by ICP				Analyzed: 11	-Apr-11 11	:33	Bate	ch: B10407
Arsenic	1.57	0.434	0.180	mg/kg dry	1			
Cadmium	0.0723	0.0217	0.0130	mg/kg dry	. 1			
Chromium	5.24	0.434	0.227	mg/kg dry	1			
Lead	7.24	0.434	0.136	mg/kg dry	1			
				Prepared: 11	-Apr-11 07	:25		
SM 2540G - % Dry Solids				Analyzed: 11	-Apr-11 12	:44	Bate	ch: B10407
	92.2	0.100	2.400	% by Weight	1			

Florida NELAP Certificate No. E84880

LAKELAND LABORATORIES, LLC

1910 HARDEN BOULEVARD, SUITE 101 LAKELAND, FLORIDA 33803-1829

PHONE: (863) 686-4271 FAX: (863) 686-4389

Chain of Created To Dogged

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<u> </u>	Chain of	Custouy 1	Vecol a	and the state of t	CONTRACTOR	
Company:	Project Name:	Clark Enviro	Page 1 of 1			
Clark Environmental, Inc.	Project #:	Thermal Tre	atment Facil	ity	DEP Form #: 62-770.900(2)	
Address: 755 Prairie Industrial Parkway	Project Manager:	John Warren	1,		Form Title: Chain of Custody Record	
Mulberry, FL 33860	Project Location:	Mulberry, Fl	C		Effective Date: September 23, 1997	
Phone: 425-4884 Fax: 425-4642	P. O. #: CP(s) 3809	7		FDEP Facility No.:	
Sampled by [Print Name(s)] Affiliation			Preservative	es (see codes)	Project Name:	
Istuel Valencia	/Clark Environmental, Inc	. I I	I I	I		
Sampler(s)/Signature(s)		- 12 - 12 - 12	Analyses	Requested		
halllad'		00	O A		REQUESTED DUE DA	TE
Item Sampled Grab	or Matrix Number of	8260B (VOA) FL-PRO (TRPH)	8270 (PAHs) 4 RCRA Metals	lad spi	/ /	
No. Field ID No. Date Time Compo	1 1	1 28 S E E	827 (PA 4 R Me	Sol	Remarks	Lab. No.
1 CP 3809 4-8-11 1:40 pm Gral	so 3	X X	X X	X	Post-Treatment	
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Returned: / / Via: 1	mailen 4	/CEI	4-8-11	1345 4 M L	Clu-C4KatGrand Labs 4.8.11	1345
Additional Comments:		0				
	Cooler No.(s)/Temperatu	re(s) (°C)		Sampling Kit No.	Equipment ID No.	
	2.8 WIN MARKE	O WE	TICE			
MATRIX CODES: A = Air GW = Groundwater	SE = Sediment SO = Soil	SW = Surfa	ice Water	W = Water (Blanks)	O = Other (specify)	





1910 Harden Boulevard Suite 101 Lakeland, FL 33803 (863) 686-4271 Phone (863) 686-4389 Fax

Clark Environmental, Inc. 755 Prairie Industrial Parkway Mulberry, FL 33860 Project Name:

Clark Environmental - Postburn

Project Number:

CP3810

Project Location:

Mulberry, FL

Project Manager:

John Warren

Reported:

20-Apr-11 10:14

Lab Work Order (COC): 1104138

CP3810 1104138-01 (Soil)

1104138-01 (Soil)								
Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
			ſ	Prepared: 18	-Apr-11 15:	12		
EPA Method 8260B - VOA/BTEX+MTBE			,	Analyzed: 18	-Apr-11 16:	:58	Bato	h: B104136
Methyl tert-Butyl Ether (MTBE)	U	0.00185	0.000809	mg/kg dry	0.892			
Benzene	0.00250	0.00185	0.000346	mg/kg dry	0.892			
Toluene	0.00184	0.00185	0.000426	mg/kg dry	0.892			1
Ethylbenzene	U	0.00463	0.000465	mg/kg dry	0.892			
m- & p-Xylenes	U	0.00926	0.000832	mg/kg dry	0.892			
o-Xylene	U	0.00185	0.000406	mg/kg dry	0.892			
Surrogate: Toluene-d8	0.0513			mg/kg dry		99 %	80-120	
EPA Method 8270C - PAHs				Prepared: 18 Analyzed: 18			Pot	ch: B104114
1-Methylnaphthalene	U	0.0519	0.0234		1		Dati	511. D 104 114
2-Methylnaphthalene	U	0.0519	0.0234	mg/kg dry mg/kg dry	1			
Acenaphthene	U	0.0519	0.0323	mg/kg dry	1			
Acenaphthylene	Ü	0.0519	0.0334	mg/kg dry	1			
Anthracene	Ü	0.0519	0.0165	mg/kg dry	1			
Benzo(a)anthracene	0.0198	0.0519	0.0162	mg/kg dry	1			1
Benzo(a)pyrene	0.0186	0.0519	0.0154	mg/kg dry	-1			i
Benzo(b)fluoranthene	0.0240	0.0519	0.0194	mg/kg dry	1			i
Benzo(g,h,i)perylene	0.02-70	0.0010						•
	Ŭ	0.0519	0.0232	ma/ka drv	1			
	U U	0.0519 0.0519	0.0232 0.0271	mg/kg dry ma/ka drv	1 1			
Benzo(k)fluoranthene		0.0519	0.0271	mg/kg dry				
Benzo(k)fluoranthene Chrysene	U			mg/kg dry mg/kg dry	1			
	U	0.0519 0.0519	0.0271 0.0205	mg/kg dry	1 1			I





1910 Harden Boulevard Suite 101 Lakeland, FL 33803 (863) 686-4271 Phone (863) 686-4389 Fax

Clark Environmental, Inc. 755 Prairie Industrial Parkway Mulberry, FL 33860 Project Name:

Clark Environmental - Postburn

Project Number:

CP3810

Project Location:

Mulberry, FL

Project Manager:

John Warren

Reported:

20-Apr-11 10:14

Lab Work Order (COC): 1104138

CP3810 1104138-01 (Soil)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
	rtoduit	1 0,0			Dilation	701160	Limito	Qualifora
			ı	Prepared: 1	8-Apr-11 12	:24		
EPA Method 8270C - PAHs			,	Analyzed: 1	8-Apr-11 23	:30	Bato	h: B104114
Indeno(1,2,3-cd)pyrene	U	0.0519	0.0248	mg/kg dry	1			
Naphthalene	U	0.0519	0.0220	mg/kg dry	1			
Phenanthrene	U	0.0519	0.0124	mg/kg dry	1			
Pyrene	U	0.0519	0.0208	mg/kg dry	1			
Surrogate: 2-Fluorobiphenyl	0.613			mg/kg dry		71 %	56.1-95.2	
			i	Prepared: 1	8-Apr-11 14	:33		
Petroleum Hydrocarbons by GC/FID			,	Analyzed: 1	8-Apr-11 21	:25	Bato	h: B104126
FL-PRO (C8-C40)	32.9	4.15	2.83	mg/kg dry	1			
Surrogate: o-Terphenyl	2.99		и	mg/kg dry		87 %	62-109	
Surrogate: n-Nonatriacontane	2.40			mg/kg dry		69 %	60-118	
			j	Prepared: 1	8-Apr-11 14	:24		
EPA Method 6010B - Metals by ICP			,	Analyzed: 1	8-Apr-11 16	:13	Bato	h: B104124
Arsenic	1.52	0.415	0.172	mg/kg dry	1			
Cadmium	U	0.0208	0.0125	mg/kg dry	1			
Chromium	4.67	0.415	0.217	mg/kg dry	1			
Lead	11.6	0.415	0.130	mg/kg dry	1			
				Prepared: 1	8-Apr-11 12	!:15		
SM 2540G - % Dry Solids					9-Apr-11 10		Bato	h: B104130
% Dry Solids	96.3	0.100	0.100	% by Weigh	it 1		-	

LAKELAND LABORATORIES, LLC

1910 HARDEN BOULEVARD, SUITE 101 LAKELAND, FLORIDA 33803-1829

PHONE: (863) 686-4271 Fax: (863) 686-4389

1104138

Florida NELAP Certificate No. E84880



Chain of Custody Record

Company:	Project Name:	Clark Envir	onmental, Inc	c.		Page 1	of 1		
Clark Environmental, Inc.	Project #:	Project #: Thermal Treatment Facility DI					DEP Form #: 62-770.900(2)		
Address: 755 Prairie Industrial Parkway	Project Manager:	John Warre	n			Form Title: Chain of Custody Record			
Mulberry, FL 33860	Project Location:	Mulberry, F	'L			Effective Date: September 23, 1997			
Phone: 425-4884 Fax: 425-4642	P. O. #: CF	(s) 38/	10			FDEP Facility No.:			
Sampled by [Print Name(s)] / Affiliation			Preservative	es (see codes)		Project Name:			
John Warren	/Clark Environmental, In	nc. I I	III	I					
Sampler(s) Signature(s)				Requested		DEOLEGIED DUE D	A TTT		
foto Vone			8270 (PAHs) 4 RCRA Metals	R		REQUESTED DUE D	AIE		
Item Sampled Grab No. Field ID No. Date Time Compo		3 % (VOA) (VOA) FL-PRO	8270 (PAHs) 4 RCRA Metals	Total Solids		Remarks	Lab. No.		
1 CP 38/0 4-18-11 7:30 Grat		X X	X X	X	1	Post-Treatment			
9 00 / 0 / 1 / 3						A STATE OF THE STA			
						•			
Shipment Method		<= Total	Number of C	Containers					
Out: / / Via: Item N	o. Relinquished by /	Affiliation	Date	Time	Accept	ted by Affiliation Date			
Returned: / / Via: 1	marlesex	R JCEI	4-18-11	916	2/	Kakeland Labs 445	1918		
Additional Comments:		0			-				
	Cooler No.(s) / Temperat	ure(s) (°C)		Sampling Ki	t No.	Equipment ID No.			
	3.4	′ °c /	1/2/2/VE/						
MATRIX CODES: A = Air GW = Groundwater	E = Sediment SO = Soil	SW = Surf	ace Water	W = Water (Blan	ıks) O	= Other (specify)			
PRESERVATIVE CODES: H = Hydrochloric acid + ic	I = Ice only N = Nit	ric acid + ice	S = Sulfurio	c acid + ice O	= Other ((specify) Pa	ge 14 of 14		

Appendix E

Post Excavation Sediment Data Package



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue Savannah, GA 31404 Tel: (912)354-7858

TestAmerica Job ID: 680-65837-2

Client Project/Site: Springstead & Hogtown Creek

For:

Weston Solutions, Inc. 94072 Summer Breeze Drive Fernandina Beach, Florida 32034

Attn: Mr. Mark Taylor

Mi gys

Authorized for release by: 06/03/2011 04:49:58 PM

Abbie Yant
Project Manager I

abbie.yant@testamericainc.com

····· Links ·····

results through
Total Access

Review your project

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Visit us at: www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Page 1 of 19 06/03/2011

Client: Weston Solutions, Inc. Project/Site: Springstead & Hogtown Creek TestAmerica Job ID: 680-65837-2

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Case Narrative

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Job ID: 680-65837-2

Laboratory: TestAmerica Savannah

Narrative

Job Narrative 680-65837-2

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 8270C LL: The following sample(s) was prepped outside the method defined holding time because the request for the test was made after the holding time for the sample expired: LOC HA-01 (680-6657-1), LOC60-01 (680-66244-7), LOC60-02 (680-66244-8), SD/10-01B (680-66244-6), SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9), SS2-01 (680-66244-4).

Method(s) 8270C LL: The following sample(s) was diluted due to the nature of the sample matrix: LOC HA-01 (680-66657-1), LOC60-01 (680-66244-7), LOC60-02 (680-66244-8), SD/10-01B (680-66244-6), SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9), SS2-01 (680-66244-4). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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TestAmerica Job ID: 680-65837-2

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Sample Summary

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-65837-8	SD-10-01	Solid	02/17/11 17:40	02/22/11 09:19
680-65837-9	SD-10-02	Solid	02/17/11 17:45	02/22/11 09:19
680-65837-12	SD-10-01A	Solid	02/18/11 11:50	02/22/11 09:19
680-66244-4	SS2-01	Solid	02/23/11 12:00	03/08/11 09:25
680-66244-6	SD/10-01B	Solid	02/25/11 12:15	03/08/11 09:25
680-66244-7	LOC60-01	Solid	03/02/11 16:30	03/08/11 09:25
680-66244-8	LOC60-02	Solid	03/02/11 16:35	03/08/11 09:25
680-66657-1	LOC HA-01	Solid	03/09/11 17:00	03/23/11 09:47

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TestAmerica Job ID: 680-65837-2

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Method Summary

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Method	Method Description	Protocol	Laboratory
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV

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

TestAmerica Job ID: 680-65837-2

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Definitions/Glossary

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-65837-2

Project/Site: Springstead & Hogtown Creek

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be
	flagged with a D.
Н	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

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Detection Summary

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Client Sample ID: SD-10-01 Lab Sample ID: 680-65837-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	130	Н	82	41	ug/Kg	10	☼	8270C LL	Total/NA
Benzo[b]fluoranthene	110	Н	82	41	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[k]fluoranthene	71	JH	82	25	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[g,h,i]perylene	50	JH	82	41	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]pyrene	100	Н	82	15	ug/Kg	10	₽	8270C LL	Total/NA
Chrysene	160	Н	82	41	ug/Kg	10	₽	8270C LL	Total/NA
Fluoranthene	240	Н	82	41	ug/Kg	10	₽	8270C LL	Total/NA
Phenanthrene	74	JH	82	29	ug/Kg	10	₽	8270C LL	Total/NA
Pyrene	260	Н	82	41	ug/Kg	10	₽	8270C LL	Total/NA

Client Sample ID: SD-10-02 Lab Sample ID: 680-65837-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	40	JH	77	38	ug/Kg	10	₩	8270C LL	Total/NA
Anthracene	64	JH	77	38	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]anthracene	100	Н	77	38	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[b]fluoranthene	59	JH	77	38	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[k]fluoranthene	58	JH	77	23	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]pyrene	80	Н	77	14	ug/Kg	10	₽	8270C LL	Total/NA
Chrysene	130	Н	77	38	ug/Kg	10	₩	8270C LL	Total/NA
Fluoranthene	340	Н	77	38	ug/Kg	10	₽	8270C LL	Total/NA
Fluorene	40	JH	77	38	ug/Kg	10	₽	8270C LL	Total/NA
Phenanthrene	120	Н	77	28	ug/Kg	10	₩	8270C LL	Total/NA
Pyrene	320	Н	77	38	ug/Kg	10	₩	8270C LL	Total/NA

Client Sample ID: SD-10-01A Lab Sample ID: 680-65837-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	41	J H	81	40	ug/Kg		₩	8270C LL	Total/NA
Anthracene	86	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]anthracene	400	Н	81	40	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[b]fluoranthene	310	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[k]fluoranthene	260	Н	81	24	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[g,h,i]perylene	150	Н	81	40	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[a]pyrene	320	Н	81	15	ug/Kg	10	₽	8270C LL	Total/NA
Chrysene	510	Н	81	40	ug/Kg	10	₩	8270C LL	Total/NA
Fluoranthene	990	Н	81	40	ug/Kg	10	₩	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	140	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Phenanthrene	260	Н	81	29	ug/Kg	10	₽	8270C LL	Total/NA
Pyrene	910	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA

Client Sample ID: SS2-01 Lab Sample ID: 680-66244-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	98	H	82	40	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[b]fluoranthene	79	JH	82	40	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[k]fluoranthene	70	JH	82	25	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]pyrene	110	Н	82	15	ug/Kg	10	₽	8270C LL	Total/NA
Chrysene	130	Н	82	40	ug/Kg	10	₩	8270C LL	Total/NA
Naphthalene	47	JH	82	40	ug/Kg	10	₽	8270C LL	Total/NA
Phenanthrene	110	Н	82	29	ug/Kg	10	₽	8270C LL	Total/NA
Pyrene	250	Н	82	40	ug/Kg	10	₽	8270C LL	Total/NA

TestAmerica Job ID: 680-65837-2

Detection Summary

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Client Sample ID: SD/10-01B Lab Sample ID: 680-66244-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	150	H	81	40	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[b]fluoranthene	200	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[k]fluoranthene	170	Н	81	24	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[g,h,i]perylene	140	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]pyrene	200	Н	81	14	ug/Kg	10	₽	8270C LL	Total/NA
Chrysene	210	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Fluoranthene	380	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	130	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA
Phenanthrene	93	Н	81	29	ug/Kg	10	₩	8270C LL	Total/NA
Pyrene	370	Н	81	40	ug/Kg	10	₽	8270C LL	Total/NA

Client Sample ID: LOC60-01 Lab Sample ID: 680-66244-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	3000	H	390	190	ug/Kg	50	₩	8270C LL	Total/NA
Acenaphthylene	2300	Н	390	190	ug/Kg	50	₽	8270C LL	Total/NA
Anthracene	2400	Н	390	190	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[a]anthracene	1300	Н	390	190	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[b]fluoranthene	440	Н	390	190	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[k]fluoranthene	510	Н	390	120	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[g,h,i]perylene	190	JΗ	390	190	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[a]pyrene	860	Н	390	70	ug/Kg	50	₩	8270C LL	Total/NA
Chrysene	1500	Н	390	190	ug/Kg	50	₩	8270C LL	Total/NA
Fluorene	2100	Н	390	190	ug/Kg	50	₩	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	230	JH	390	190	ug/Kg	50	₩	8270C LL	Total/NA
2-Methylnaphthalene	4900	Н	390	190	ug/Kg	50	₩	8270C LL	Total/NA
1-Methylnaphthalene	4400	Н	390	180	ug/Kg	50	₽	8270C LL	Total/NA
Naphthalene	1500	Н	390	190	ug/Kg	50	₽	8270C LL	Total/NA
Phenanthrene	15000	Н	390	140	ug/Kg	50	₽	8270C LL	Total/NA
Pyrene	3500	Н	390	190	ug/Kg	50	₩	8270C LL	Total/NA

Client Sample ID: LOC60-02 Lab Sample ID: 680-66244-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	340	Н	96	47	ug/Kg	10	☼	8270C LL	Total/NA
Acenaphthylene	350	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
Anthracene	460	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]anthracene	680	Н	96	47	ug/Kg	10	₩	8270C LL	Total/NA
Benzo[b]fluoranthene	420	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[k]fluoranthene	370	Н	96	29	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[g,h,i]perylene	120	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
Benzo[a]pyrene	440	Н	96	17	ug/Kg	10	₽	8270C LL	Total/NA
Chrysene	860	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
Dibenzofuran	250	JH	470	96	ug/Kg	10	₽	8270C LL	Total/NA
Fluoranthene	1600	Н	96	47	ug/Kg	10	₩	8270C LL	Total/NA
Fluorene	310	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	120	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
2-Methylnaphthalene	700	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA
1-Methylnaphthalene	530	Н	96	45	ug/Kg	10	₩	8270C LL	Total/NA
Naphthalene	340	Н	96	47	ug/Kg	10	₩	8270C LL	Total/NA
Phenanthrene	1700	Н	96	35	ug/Kg	10	₩	8270C LL	Total/NA
Pyrene	1400	Н	96	47	ug/Kg	10	₽	8270C LL	Total/NA

TestAmerica Job ID: 680-65837-2

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Detection Summary

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Client Sample ID: LOC HA-01 Lab Sample ID: 680-66657-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	2600	Н	460	220	ug/Kg	50	₩	8270C LL	Total/NA
Acenaphthylene	1800	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
Anthracene	3100	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[a]anthracene	3000	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[b]fluoranthene	1300	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[k]fluoranthene	1700	Н	460	140	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[g,h,i]perylene	630	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
Benzo[a]pyrene	2100	Н	460	82	ug/Kg	50	₽	8270C LL	Total/NA
Chrysene	3500	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
Fluorene	2000	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	630	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
2-Methylnaphthalene	680	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA
1-Methylnaphthalene	1200	Н	460	210	ug/Kg	50	₽	8270C LL	Total/NA
Phenanthrene	14000	Н	460	160	ug/Kg	50	₽	8270C LL	Total/NA
Pyrene	7600	Н	460	220	ug/Kg	50	₽	8270C LL	Total/NA

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TestAmerica Job ID: 680-65837-2

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Client Sample Results

Client: Weston Solutions, Inc.

Client Sample ID: SD-10-01

Date Collected: 02/17/11 17:40

Date Received: 02/22/11 09:19

2-Fluorobiphenyl

Nitrobenzene-d5

Terphenyl-d14

Project/Site: Springstead & Hogtown Creek

Lab Sample ID: 680-65837-8

05/17/11 11:01

05/12/11 17:45

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Matrix: Solid

TestAmerica Job ID: 680-65837-2

Percent Solids: 81.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<41	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Acenaphthylene	<41	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Anthracene	<41	Н	82	41	ug/Kg	₩	05/12/11 17:45	05/17/11 11:01	10
Benzo[a]anthracene	130	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Benzo[b]fluoranthene	110	H	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Benzo[k]fluoranthene	71	JH	82	25	ug/Kg	₩	05/12/11 17:45	05/17/11 11:01	10
Benzo[g,h,i]perylene	50	JH	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Benzo[a]pyrene	100	H	82	15	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Chrysene	160	H	82	41	ug/Kg	₩	05/12/11 17:45	05/17/11 11:01	10
Dibenz(a,h)anthracene	<41	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Dibenzofuran	<82	Н	410	82	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Fluoranthene	240	H	82	41	ug/Kg	₩	05/12/11 17:45	05/17/11 11:01	10
Fluorene	<41	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Indeno[1,2,3-cd]pyrene	<41	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
2-Methylnaphthalene	<41	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
1-Methylnaphthalene	<38	Н	82	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Naphthalene	<41	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Phenanthrene	74	JH	82	29	ug/Kg	₩	05/12/11 17:45	05/17/11 11:01	10
Pyrene	260	Н	82	41	ug/Kg	₽	05/12/11 17:45	05/17/11 11:01	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Client Sample ID: SD-10-02 Lab Sample ID: 680-65837-9 Date Collected: 02/17/11 17:45 **Matrix: Solid**

11 - 130

18 - 130

27 - 130

0 D

0 D

0 D

Date Received: 02/22/11 09:19 Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	40	JH	77	38	ug/Kg		05/12/11 17:45	05/17/11 11:28	10
Acenaphthylene	<38	Н	77	38	ug/Kg	₩	05/12/11 17:45	05/17/11 11:28	10
Anthracene	64	JH	77	38	ug/Kg	₩	05/12/11 17:45	05/17/11 11:28	10
Benzo[a]anthracene	100	Н	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Benzo[b]fluoranthene	59	JH	77	38	ug/Kg	≎	05/12/11 17:45	05/17/11 11:28	10
Benzo[k]fluoranthene	58	JH	77	23	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Benzo[g,h,i]perylene	<38	Н	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Benzo[a]pyrene	80	H	77	14	ug/Kg	₩	05/12/11 17:45	05/17/11 11:28	10
Chrysene	130	H	77	38	ug/Kg	₩	05/12/11 17:45	05/17/11 11:28	10
Dibenz(a,h)anthracene	<38	Н	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Dibenzofuran	<77	Н	380	77	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Fluoranthene	340	H	77	38	ug/Kg	₩	05/12/11 17:45	05/17/11 11:28	10
Fluorene	40	JН	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Indeno[1,2,3-cd]pyrene	<38	Н	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
2-Methylnaphthalene	<38	Н	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
1-Methylnaphthalene	<36	Н	77	36	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Naphthalene	<38	Н	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Phenanthrene	120	Н	77	28	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10
Pyrene	320	Н	77	38	ug/Kg	₽	05/12/11 17:45	05/17/11 11:28	10

Client Sample Results

Client: Weston Solutions, Inc.

Client Sample ID: SD-10-02

Date Collected: 02/17/11 17:45

Date Received: 02/22/11 09:19

Project/Site: Springstead & Hogtown Creek

Lab Sample ID: 680-65837-9

TestAmerica Job ID: 680-65837-2

Matrix: Solid

Percent Solids: 86.4

Surrogate % Recovery Qualifier Limits Analyzed Dil Fac Prepared 2-Fluorobiphenyl 0 D 11 - 130 10 0 D Nitrobenzene-d5 18 - 130 05/12/11 17:45 05/17/11 11:28 10 0 D Terphenyl-d14 27 - 130 10

Client Sample ID: SD-10-01A

Lab Sample ID: 680-65837-12

Date Collected: 02/18/11 11:50

Matrix: Solid

Date Received: 02/22/11 09:19

Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<40	Н	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
Acenaphthylene	41	J H	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 11:55	10
Anthracene	86	H	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
Benzo[a]anthracene	400	Н	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
Benzo[b]fluoranthene	310	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Benzo[k]fluoranthene	260	H	81	24	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Benzo[g,h,i]perylene	150	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 11:55	10
Benzo[a]pyrene	320	H	81	15	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Chrysene	510	H	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
Dibenz(a,h)anthracene	<40	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 11:55	10
Dibenzofuran	<81	Н	400	81	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Fluoranthene	990	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Fluorene	<40	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 11:55	10
Indeno[1,2,3-cd]pyrene	140	H	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
2-Methylnaphthalene	<40	Н	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
1-Methylnaphthalene	<38	Н	81	38	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
Naphthalene	<40	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 11:55	10
Phenanthrene	260	H	81	29	ug/Kg	₩	05/12/11 17:45	05/17/11 11:55	10
Pyrene	910	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 11:55	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130				05/12/11 17:45	05/17/11 11:55	10
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	05/17/11 11:55	10
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	05/17/11 11:55	10

Client Sample ID: SS2-01

Date Collected: 02/23/11 12:00

Matrix: Solid

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-4

Matrix: Solid

Percent Solids: 81.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<40	H	82	40	ug/Kg	₩	05/12/11 17:45	05/17/11 12:22	10
Acenaphthylene	<40	Н	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Anthracene	<40	Н	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Benzo[a]anthracene	98	Н	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Benzo[b]fluoranthene	79	JH	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Benzo[k]fluoranthene	70	JH	82	25	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Benzo[g,h,i]perylene	<40	Н	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Benzo[a]pyrene	110	Н	82	15	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Chrysene	130	Н	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Dibenz(a,h)anthracene	<40	Н	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10

TestAmerica Savannah 06/03/2011

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Client Sample Results

Client: Weston Solutions, Inc.

Terphenyl-d14

Project/Site: Springstead & Hogtown Creek

Client Sample ID: SS2-01 Lab Sample ID: 680-66244-4

 Date Collected: 02/23/11 12:00
 Matrix: Solid

 Date Received: 03/08/11 09:25
 Percent Solids: 81.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	<82	Н	400	82	ug/Kg	₩	05/12/11 17:45	05/17/11 12:22	10
Fluoranthene	<40	Н	82	40	ug/Kg	≎	05/12/11 17:45	05/17/11 12:22	10
Fluorene	<40	Н	82	40	ug/Kg	≎	05/12/11 17:45	05/17/11 12:22	10
Indeno[1,2,3-cd]pyrene	<40	Н	82	40	ug/Kg	≎	05/12/11 17:45	05/17/11 12:22	10
2-Methylnaphthalene	<40	Н	82	40	ug/Kg	≎	05/12/11 17:45	05/17/11 12:22	10
1-Methylnaphthalene	<38	Н	82	38	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Naphthalene	47	JH	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Phenanthrene	110	H	82	29	ug/Kg	≎	05/12/11 17:45	05/17/11 12:22	10
Pyrene	250	Н	82	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:22	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130				05/12/11 17:45	05/17/11 12:22	10
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	05/17/11 12:22	10

Client Sample ID: SD/10-01B Lab Sample ID: 680-66244-6

Date Collected: 02/25/11 12:15

Date Received: 03/08/11 09:25

Matrix: Solid
Percent Solids: 82.2

27 - 130

0 D

ate Received: 03/08/11 09:2	5							Percent Soli	ds: 82.:
Method: 8270C LL - Semivo Analyte	•	oounds by (GCMS - Low Lev	vels MDL	Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	<40		81		ug/Kg	— ¤	05/12/11 17:45	05/17/11 12:49	1
Acenaphthylene	<40		81		ug/Kg	₩	05/12/11 17:45	05/17/11 12:49	1
Anthracene	<40		81		ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
Benzo[a]anthracene	150		81		ug/Kg	ф	05/12/11 17:45	05/17/11 12:49	1
Benzo[b]fluoranthene	200	н	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 12:49	1
Benzo[k]fluoranthene	170	Н	81	24	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
Benzo[g,h,i]perylene	140	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
Benzo[a]pyrene	200	Н	81	14	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
Chrysene	210	Н	81	40	ug/Kg	₩	05/12/11 17:45	05/17/11 12:49	1
Dibenz(a,h)anthracene	<40	Н	81	40	ug/Kg		05/12/11 17:45	05/17/11 12:49	1
Dibenzofuran	<81	Н	400	81	ug/Kg	₩	05/12/11 17:45	05/17/11 12:49	1
Fluoranthene	380	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
Fluorene	<40	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	
Indeno[1,2,3-cd]pyrene	130	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
2-Methylnaphthalene	<40	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
1-Methylnaphthalene	<37	Н	81	37	ug/Kg	₩	05/12/11 17:45	05/17/11 12:49	1
Naphthalene	<40	Н	81	40	ug/Kg	₽	05/12/11 17:45	05/17/11 12:49	1
Phenanthrene	93	Н	81	29	ug/Kg	₩	05/12/11 17:45	05/17/11 12:49	1
Pyrene	370	Н	81	40	ug/Kg	*	05/12/11 17:45	05/17/11 12:49	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
2-Fluorobiphenyl		D	11 - 130				05/12/11 17:45	05/17/11 12:49	1
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	05/17/11 12:49	1
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	05/17/11 12:49	1

TestAmerica Job ID: 680-65837-2

Client Sample Results

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Lab Sample ID: 680-66244-7

TestAmerica Job ID: 680-65837-2

Client Sample ID: LOC60-01 Date Collected: 03/02/11 16:30 Matrix: Solid Date Received: 03/08/11 09:25 Percent Solids: 84.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3000	Н	390	190	ug/Kg	≎	05/12/11 17:45	06/02/11 20:27	50
Acenaphthylene	2300	H	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Anthracene	2400	H	390	190	ug/Kg	≎	05/12/11 17:45	06/02/11 20:27	50
Benzo[a]anthracene	1300	Н	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Benzo[b]fluoranthene	440	H	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Benzo[k]fluoranthene	510	H	390	120	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Benzo[g,h,i]perylene	190	JH	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Benzo[a]pyrene	860	H	390	70	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Chrysene	1500	H	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Dibenz(a,h)anthracene	<190	Н	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Dibenzofuran	<390	Н	1900	390	ug/Kg	≎	05/12/11 17:45	06/02/11 20:27	50
Fluoranthene	<190	Н	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Fluorene	2100	Н	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Indeno[1,2,3-cd]pyrene	230	JH	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
2-Methylnaphthalene	4900	H	390	190	ug/Kg	≎	05/12/11 17:45	06/02/11 20:27	50
1-Methylnaphthalene	4400	Н	390	180	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Naphthalene	1500	H	390	190	ug/Kg	≎	05/12/11 17:45	06/02/11 20:27	50
Phenanthrene	15000	H	390	140	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Pyrene	3500	Н	390	190	ug/Kg	₽	05/12/11 17:45	06/02/11 20:27	50
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl		D	11 - 130				05/12/11 17:45	06/02/11 20:27	50
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	06/02/11 20:27	50
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	06/02/11 20:27	50

Client Sample ID: LOC60-02 Lab Sample ID: 680-66244-8

Date Collected: 03/02/11 16:35 Matrix: Solid Date Received: 03/08/11 09:25 Percent Solids: 68.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	340	H	96	47	ug/Kg		05/12/11 17:45	05/17/11 13:43	10
Acenaphthylene	350	H	96	47	ug/Kg	₩	05/12/11 17:45	05/17/11 13:43	10
Anthracene	460	H	96	47	ug/Kg	₩	05/12/11 17:45	05/17/11 13:43	10
Benzo[a]anthracene	680	Н	96	47	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Benzo[b]fluoranthene	420	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Benzo[k]fluoranthene	370	H	96	29	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Benzo[g,h,i]perylene	120	Н	96	47	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Benzo[a]pyrene	440	H	96	17	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Chrysene	860	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Dibenz(a,h)anthracene	<47	Н	96	47	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Dibenzofuran	250	JH	470	96	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Fluoranthene	1600	Н	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Fluorene	310	Н	96	47	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Indeno[1,2,3-cd]pyrene	120	Н	96	47	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
2-Methylnaphthalene	700	Н	96	47	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
1-Methylnaphthalene	530	Н	96	45	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Naphthalene	340	Н	96	47	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Phenanthrene	1700	Н	96	35	ug/Kg	₽	05/12/11 17:45	05/17/11 13:43	10
Pyrene	1400	Н	96	47	ug/Kg	\$	05/12/11 17:45	05/17/11 13:43	10

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Client Sample Results

Client: Weston Solutions, Inc.

Client Sample ID: LOC60-02

Project/Site: Springstead & Hogtown Creek

Lab Sample ID: 680-66244-8

TestAmerica Job ID: 680-65837-2

Matrix: Solid

Date Collected: 03/02/11 16:35 Date Received: 03/08/11 09:25 Percent Solids: 68.6

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130	05/12/11 17:45	05/17/11 13:43	10
Nitrobenzene-d5	0	D	18 - 130	05/12/11 17:45	05/17/11 13:43	10
Terphenyl-d14	0	D	27 - 130	05/12/11 17:45	05/17/11 13:43	10

Client Sample ID: LOC HA-01 Lab Sample ID: 680-66657-1

Date Collected: 03/09/11 17:00 **Matrix: Solid** Date Received: 03/23/11 09:47 Percent Solids: 73.4

0ate Received: 03/23/11 09:47 - Method: 8270C LL - Semivo	·	nounds by	GCMS - Low Lev	vole.				Percent Soli	<u>us. 75</u>
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	2600	Н	460	220	ug/Kg		05/12/11 17:45	06/02/11 20:54	5
Acenaphthylene	1800	H	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Anthracene	3100	H	460	220	ug/Kg	₩	05/12/11 17:45	06/02/11 20:54	5
Benzo[a]anthracene	3000	Н	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Benzo[b]fluoranthene	1300	H	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Benzo[k]fluoranthene	1700	H	460	140	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Benzo[g,h,i]perylene	630	Н	460	220	ug/Kg	₩	05/12/11 17:45	06/02/11 20:54	50
Benzo[a]pyrene	2100	Н	460	82	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Chrysene	3500	H	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Dibenz(a,h)anthracene	<220	Н	460	220	ug/Kg	₩	05/12/11 17:45	06/02/11 20:54	50
Dibenzofuran	<460	Н	2200	460	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Fluoranthene	<220	Н	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Fluorene	2000	Н	460	220	ug/Kg	₩	05/12/11 17:45	06/02/11 20:54	50
Indeno[1,2,3-cd]pyrene	630	Н	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
2-Methylnaphthalene	680	H	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
1-Methylnaphthalene	1200	Н	460	210	ug/Kg	₩	05/12/11 17:45	06/02/11 20:54	50
Naphthalene	<220	Н	460	220	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Phenanthrene	14000	H	460	160	ug/Kg	₽	05/12/11 17:45	06/02/11 20:54	50
Pyrene	7600	Н	460	220	ug/Kg	\$	05/12/11 17:45	06/02/11 20:54	50
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
2-Fluorobiphenyl		D	11 - 130				05/12/11 17:45	06/02/11 20:54	5
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	06/02/11 20:54	50
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	06/02/11 20:54	50

Surrogate	∕₀ Recovery	Qualifier	LIIIIII	Prepareu	Allalyzeu	DII Fac
2-Fluorobiphenyl		D	11 - 130	05/12/11 17:45	06/02/11 20:54	50
Nitrobenzene-d5	0	D	18 - 130	05/12/11 17:45	06/02/11 20:54	50
Terphenyl-d14	0	D	27 - 130	05/12/11 17:45	06/02/11 20:54	50

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Lab Sample ID: MB 680-202758/9-A

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Solid

Analysis Batch: 203148

Client Sample ID: MB 680-202758/9-A

TestAmerica Job ID: 680-65837-2

Prep Type: Total/NA

Prep Batch: 202758

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Acenaphthylene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Anthracene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[a]anthracene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[b]fluoranthene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[k]fluoranthene	<2.0		6.6	2.0	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[g,h,i]perylene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[a]pyrene	<1.2		6.6	1.2	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Chrysene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Dibenz(a,h)anthracene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Dibenzofuran	<6.6		33	6.6	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Fluoranthene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Fluorene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Indeno[1,2,3-cd]pyrene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
2-Methylnaphthalene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
1-Methylnaphthalene	<3.1		6.6	3.1	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Naphthalene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Phenanthrene	<2.4		6.6	2.4	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Pyrene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	75		11 - 130	05/12/11 17:45	05/17/11 04:41	1
Nitrobenzene-d5	74		18 - 130	05/12/11 17:45	05/17/11 04:41	1
Terphenyl-d14	95		27 - 130	05/12/11 17:45	05/17/11 04:41	1

Lab Sample ID: LCS 680-202758/10-A

Matrix: Solid

Analysis Batch: 203148

Client Sample ID: LCS 680-202758/10-A
Prep Type: Total/NA

Prep Batch: 202758

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Acenaphthene	66.3	41.6		ug/Kg		63	13 - 130
Acenaphthylene	66.3	46.5		ug/Kg		70	10 - 130
Anthracene	66.3	45.2		ug/Kg		68	18 - 130
Benzo[a]anthracene	66.3	49.3		ug/Kg		74	16 - 130
Benzo[b]fluoranthene	66.3	46.9		ug/Kg		71	18 - 130
Benzo[k]fluoranthene	66.3	50.3		ug/Kg		76	22 - 130
Benzo[g,h,i]perylene	66.3	43.4		ug/Kg		65	21 - 130
Benzo[a]pyrene	66.3	50.5		ug/Kg		76	18 - 139
Chrysene	66.3	46.6		ug/Kg		70	12 - 130
Dibenz(a,h)anthracene	66.3	43.8		ug/Kg		66	17 - 130
Dibenzofuran	332	212		ug/Kg		64	20 - 130
Fluoranthene	66.3	46.5		ug/Kg		70	14 - 130
Fluorene	66.3	45.1		ug/Kg		68	10 - 130
Indeno[1,2,3-cd]pyrene	66.3	44.2		ug/Kg		67	11 - 130
2-Methylnaphthalene	66.3	40.8		ug/Kg		62	20 - 130
1-Methylnaphthalene	66.3	43.1		ug/Kg		65	14 - 130
Naphthalene	66.3	42.5		ug/Kg		64	10 - 130
Phenanthrene	66.3	45.7		ug/Kg		69	18 - 130
Pyrene	66.3	51.3		ug/Kg		77	11 - 136

QC Sample Results

Client: Weston Solutions, Inc. TestAmerica Job ID: 680-65837-2

Project/Site: Springstead & Hogtown Creek

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 680-202758/10-A

Matrix: Solid

Analysis Batch: 203148

Client Sample ID: LCS 680-202758/10-A

Prep Type: Total/NA

Prep Batch: 202758

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
2-Fluorobiphenyl	68		11 - 130
Nitrobenzene-d5	69		18 - 130
Terphenvl-d14	79		27 - 130

Client: Weston Solutions, Inc.

Project/Site: Springstead & Hogtown Creek

Client Sample ID: SD-10-01

Date Collected: 02/17/11 17:40 Date Received: 02/22/11 09:19 Lab Sample ID: 680-65837-8

Matrix: Solid

Percent Solids: 81.0

Percent Solids: 86.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 11:01	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SD-10-02 Lab Sample ID: 680-65837-9

Date Collected: 02/17/11 17:45 Date Received: 02/22/11 09:19 Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 11:28	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SD-10-01A Lab Sample ID: 680-65837-12

Date Collected: 02/18/11 11:50 Date Received: 02/22/11 09:19 Matrix: Solid Percent Solids: 82.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 11:55	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SS2-01 Lab Sample ID: 680-66244-4

Date Collected: 02/23/11 12:00 Matrix: Solid
Date Received: 03/08/11 09:25 Percent Solids: 81.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 12:22	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SD/10-01B Lab Sample ID: 680-66244-6

Date Collected: 02/25/11 12:15

Date Received: 03/08/11 09:25

Matrix: Solid
Percent Solids: 82.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546	-		202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 12:49	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Lab Chronicle

Client: Weston Solutions, Inc.

Client Sample ID: LOC60-01

Date Collected: 03/02/11 16:30

Date Received: 03/08/11 09:25

Project/Site: Springstead & Hogtown Creek

Lab Sample ID: 680-66244-7

TestAmerica Job ID: 680-65837-2

Matrix: Solid

Percent Solids: 84.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		50	204675	06/02/11 20:27	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: LOC60-02 Lab Sample ID: 680-66244-8

Date Collected: 03/02/11 16:35 **Matrix: Solid** Date Received: 03/08/11 09:25 Percent Solids: 68.6

Batch Batch Dilution Batch Prepared

	Daton	Datcii		Dilution	Dateii	riepaieu		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 13:43	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: LOC HA-01 Lab Sample ID: 680-66657-1

Date Collected: 03/09/11 17:00 **Matrix: Solid** Date Received: 03/23/11 09:47 Percent Solids: 73.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		50	204675	06/02/11 20:54	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Laboratory References:

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

Certification Summary

Client: Weston Solutions, Inc.

TestAmerica Savannah

Wyoming

Project/Site: Springstead & Hogtown Creek

Certification ID Laboratory Authority Program **EPA Region** USDA SAV 3-04 TestAmerica Savannah TestAmerica Savannah A2LA DoD ELAP 0 0399-01 TestAmerica Savannah A2LA ISO/IEC 17025 0 399.01 TestAmerica Savannah Alabama State Program 41450 TestAmerica Savannah Arkansas Arkansas DOH 6 N/A TestAmerica Savannah Arkansas State Program 6 88-0692 TestAmerica Savannah California **NELAC** 9 3217CA 8 TestAmerica Savannah Colorado State Program N/A TestAmerica Savannah Connecticut State Program PH-0161 3 Delaware State Program N/A TestAmerica Savannah TestAmerica Savannah Florida 4 E87052 TestAmerica Savannah Georgia Georgia EPD N/A TestAmerica Savannah Georgia State Program 803 TestAmerica Savannah Guam State Program 9 09-005r TestAmerica Savannah Hawaii State Program 9 N/A 5 200022 TestAmerica Savannah Illinois **NELAC** 5 TestAmerica Savannah Indiana State Program N/A TestAmerica Savannah Iowa State Program 7 353 TestAmerica Savannah Kansas **NELAC** E-10322 TestAmerica Savannah Kentucky Kentucky UST 4 18 TestAmerica Savannah Kentucky State Program 90084 30690 TestAmerica Savannah Louisiana **NELAC** NELAC 6 LA100015 TestAmerica Savannah Louisiana GA00006 TestAmerica Savannah State Program 3 TestAmerica Savannah Maryland State Program 250 TestAmerica Savannah State Program M-GA006 Massachusetts 5 9925 TestAmerica Savannah Michigan State Program TestAmerica Savannah Mississippi State Program 4 N/A 8 **CERT0081** TestAmerica Savannah Montana State Program TestAmerica Savannah Nebraska State Program 7 TestAmerica-Savannah TestAmerica Savannah Nevada State Program GA6 2 TestAmerica Savannah New Jersey **NELAC GA769** TestAmerica Savannah New Mexico State Program 6 N/A 2 TestAmerica Savannah New York NFI AC 10842 North Carolina TestAmerica Savannah North Carolina DENR 4 269 North Carolina North Carolina PHL 4 13701 TestAmerica Savannah State Program 9984 TestAmerica Savannah Oklahoma **NELAC** 3 68-00474 TestAmerica Savannah Pennsylvania TestAmerica Savannah Puerto Rico State Program 2 GA00006 TestAmerica Savannah Rhode Island State Program LAO00244 TestAmerica Savannah South Carolina State Program 4 98001 State Program TestAmerica Savannah Tennessee 4 TN02961 6 TestAmerica Savannah Texas **NELAC** T104704185-08-TX TestAmerica Savannah Vermont State Program 87052 Virginia 3 302 TestAmerica Savannah State Program TestAmerica Savannah Washington State Program 10 C1794 West Virginia West Virginia DEP 3 TestAmerica Savannah 94 West Virginia DHHR (DW) 3 TestAmerica Savannah West Virginia 9950C 5 TestAmerica Savannah Wisconsin State Program 999819810

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

State Program

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TestAmerica Job ID: 680-65837-2

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue Savannah, GA 31404 Tel: (912)354-7858

TestAmerica Job ID: 680-66657-1

Client Project/Site: Cabot Springstead & Hogtown Creek

Revision: 1

For:

Weston Solutions, Inc. 94072 Summer Breeze Drive Fernandina Beach, Florida 32034

Attn: Mark Taylor

Authorized for release by:

Abbie Yant Project Manager I

abbie.yant@testamericainc.com

Mi gys 04/15/2011 10:54:51 AM

Have a Question?

Visit us at: www.testamericainc.com

.....LINKS

Review your project results through

Total Access

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Case Narrative

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Job ID: 680-66657-1

Laboratory: TestAmerica Savannah

Narrative

Job Narrative 680-66657-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 8270C: The following sample(s) was diluted due to the nature of the sample matrix LOC HA-01 (680-66657-1). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

TestAmerica Job ID: 680-66657-1

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Sample Summary

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-66657-1

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-66657-1	LOC HA-01	Solid	03/09/11 17:00	03/23/11 09:47
680-66657-2	LOC HA-02	Solid	03/09/11 17:10	03/23/11 09:47
680-66657-3	LOC H4A-01	Solid	03/18/11 14:40	03/23/11 09:47
680-66657-4	LOC H4A-02	Solid	03/18/11 14:45	03/23/11 09:47
680-66657-5	LOC H4A-03	Solid	03/21/11 13:00	03/23/11 09:47
680-66657-6	LOC H4A-04	Solid	03/21/11 13:05	03/23/11 09:47
680-66657-7	LOC H4A-05	Solid	03/21/11 15:35	03/23/11 09:47
680-66657-8	LOC H4A-06	Solid	03/21/11 18:30	03/23/11 09:47
680-66657-9	LOC H4A-07	Solid	03/21/11 18:35	03/23/11 09:47

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Method Summary

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

MethodMethod DescriptionProtocolLaboratory8270CSemivolatile Organic Compounds (GC/MS)SW846TAL SAV9060Organic Carbon, Total (TOC)SW846TAL 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

TestAmerica Job ID: 680-66657-1

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Qualifier Definition/Glossary

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-66657-1

Project/Site: Cabot Springstead & Hogtown Creek

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be
	flagged with a D.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
DDD	Polative Percent Difference, a measure of the relative difference between two points

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Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Client Sample ID: LOC HA-01 Lab Sample ID: 680-66657-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	640	J	4500	300	ug/Kg		₩	8270C	Total/NA
Benzo[k]fluoranthene	1300	J	4500	880	ug/Kg	10	₩	8270C	Total/NA
Acenaphthene	4100	J	4500	560	ug/Kg	10	₩	8270C	Total/NA
Benzo[a]anthracene	2700	J	4500	370	ug/Kg	10	₽	8270C	Total/NA
Benzo[a]pyrene	1600	J	4500	710	ug/Kg	10	₩	8270C	Total/NA
Benzo[b]fluoranthene	1200	J	4500	520	ug/Kg	10	₩	8270C	Total/NA
1-Methylnaphthalene	5700		4500	420	ug/Kg	10	₩	8270C	Total/NA
2-Methylnaphthalene	4800		4500	520	ug/Kg	10	₩	8270C	Total/NA
Chrysene	3500	J	4500	290	ug/Kg	10	₩	8270C	Total/NA
Fluoranthene	11000		4500	440	ug/Kg	10	₩	8270C	Total/NA
Fluorene	4000	J	4500	490	ug/Kg	10	₩	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	680	J	4500	380	ug/Kg	10	₽	8270C	Total/NA
Phenanthrene	23000		4500	370	ug/Kg	10	₩	8270C	Total/NA
Pyrene	7100		4500	370	ug/Kg	10	₩	8270C	Total/NA
	4200	.1	4500	340	ug/Kg	10	₩	8270C	Total/NA

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Meth	
Total Organic Carbon	16000	3000	mg/Kg	1 9060	Total/NA

Client Sample ID: LOC H4A-01

Client Sample ID: LOC H4A-01								Sample II	D: 680-66657-
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	79	J	400	27	ug/Kg		₩	8270C	Total/NA
Benzo[k]fluoranthene	120	J	400	78	ug/Kg	1	₽	8270C	Total/NA
Acenaphthene	310	J	400	49	ug/Kg	1	₽	8270C	Total/NA
Benzo[a]anthracene	250	J	400	33	ug/Kg	1	₽	8270C	Total/NA
Benzo[a]pyrene	170	J	400	63	ug/Kg	1	₽	8270C	Total/NA
Benzo[b]fluoranthene	120	J	400	46	ug/Kg	1	₽	8270C	Total/NA
1-Methylnaphthalene	420		400	37	ug/Kg	1	₽	8270C	Total/NA
2-Methylnaphthalene	560		400	46	ug/Kg	1	₽	8270C	Total/NA
Chrysene	270	J	400	25	ug/Kg	1	₽	8270C	Total/NA
Fluoranthene	920		400	39	ug/Kg	1	₽	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	89	J	400	34	ug/Kg	1	₽	8270C	Total/NA
Phenanthrene	1600		400	33	ug/Kg	1	₽	8270C	Total/NA
Pyrene	590		400	33	ug/Kg	1	₽	8270C	Total/NA
Anthracene	290	J	400	30	ug/Kg	1	₽	8270C	Total/NA

Client Sample ID: LOC H4A-02

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene		390	25	ug/Kg	1	₩	8270C	Total/NA
Fluoranthene	210 J	390	38	ug/Kg	1	₽	8270C	Total/NA
Phenanthrene	130 J	390	32	ug/Kg	1	₽	8270C	Total/NA
Pyrene	160 J	390	32	ug/Kg	1	₽	8270C	Total/NA
Anthracene	31 J	390	29	ug/Kg	1	₩	8270C	Total/NA

Client Sample ID: LOC H4A-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	220	J	380	25	ug/Kg	1	₩	8270C	Total/NA
Benzo[a]pyrene	110	J	380	60	ug/Kg	1	₩	8270C	Total/NA
Dibenz(a,h)anthracene	210	J	380	45	ug/Kg	1	₩	8270C	Total/NA

Page 7 of 20

Lab Sample ID: 680-66657-4

Lab Sample ID: 680-66657-5

TestAmerica Job ID: 680-66657-1

Detection Summary

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-03 (Continued)

Lab Sample ID: 680-66657-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D I	Method	Prep Type
Indeno[1,2,3-cd]pyrene	230	J	380	32	ug/Kg		1	~ (8270C	Total/NA

Client Sample ID: LOC H4A-04 Lab Sample ID: 680-66657-6

No Detections.

Client Sample ID: LOC H4A-05 Lab Sample ID: 680-66657-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	91	J	400	27	ug/Kg	1	₩	8270C	Total/NA
Dibenz(a,h)anthracene	79	J	400	48	ug/Kg	1	₽	8270C	Total/NA
Fluoranthene	60	J	400	39	ug/Kg	1	₩	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	82	J	400	34	ug/Kg	1	₽	8270C	Total/NA
Pyrene	45	J	400	33	ug/Kg	1	₩	8270C	Total/NA

Client Sample ID: LOC H4A-06 Lab Sample ID: 680-66657-8

No Detections.

Client Sample ID: LOC H4A-07 Lab Sample ID: 680-66657-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	49	J	380	37	ug/Kg	1	₩	8270C	Total/NA
Pyrene	38	J	380	31	ug/Kg	1	₩	8270C	Total/NA

Client: Weston Solutions, Inc.

Client Sample ID: LOC HA-01

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66657-1

TestAmerica Job ID: 680-66657-1

Date Collected: 03/09/11 17:00 Matrix: Solid Date Received: 03/23/11 09:47 Percent Solids: 73.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	640	J	4500	300	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Benzo[k]fluoranthene	1300	J	4500	880	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Acenaphthene	4100	J	4500	560	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Acenaphthylene	<490		4500	490	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Benzo[a]anthracene	2700	J	4500	370	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Benzo[a]pyrene	1600	J	4500	710	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Benzo[b]fluoranthene	1200	J	4500	520	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
1-Methylnaphthalene	5700		4500	420	ug/Kg	₩	03/23/11 15:25	03/25/11 15:16	10
2-Methylnaphthalene	4800		4500	520	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Chrysene	3500	J	4500	290	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Dibenz(a,h)anthracene	<530		4500	530	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Fluoranthene	11000		4500	440	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Fluorene	4000	J	4500	490	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Indeno[1,2,3-cd]pyrene	680	J	4500	380	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Naphthalene	<410		4500	410	ug/Kg	₩	03/23/11 15:25	03/25/11 15:16	10
Phenanthrene	23000		4500	370	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Pyrene	7100		4500	370	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Anthracene	4200	J	4500	340	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Dibenzofuran	<450		4500	450	ug/Kg	₽	03/23/11 15:25	03/25/11 15:16	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl		D	58 - 130				03/23/11 15:25	03/25/11 15:16	10
Nitrobenzene-d5	0	D	46 - 130				03/23/11 15:25	03/25/11 15:16	10
Terphenyl-d14	0	D	60 - 130				03/23/11 15:25	03/25/11 15:16	10

Lab Sample ID: 680-66657-2 **Client Sample ID: LOC HA-02**

Date Collected: 03/09/11 17:10

Date Received: 03/23/11 09:47

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	16000		3000		mg/Kg			03/28/11 11:15	1

Client Sample ID: LOC H4A-01 Lab Sample ID: 680-66657-3 Date Collected: 03/18/11 14:40 Matrix: Solid Date Received: 03/23/11 09:47

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	79	J	400	27	ug/Kg		03/24/11 16:15	03/25/11 18:47	1
Benzo[k]fluoranthene	120	J	400	78	ug/Kg	₩	03/24/11 16:15	03/25/11 18:47	1
Acenaphthene	310	J	400	49	ug/Kg	₩	03/24/11 16:15	03/25/11 18:47	1
Acenaphthylene	<43		400	43	ug/Kg	\$	03/24/11 16:15	03/25/11 18:47	1
Benzo[a]anthracene	250	J	400	33	ug/Kg	₩	03/24/11 16:15	03/25/11 18:47	1
Benzo[a]pyrene	170	J	400	63	ug/Kg	₩	03/24/11 16:15	03/25/11 18:47	1
Benzo[b]fluoranthene	120	J	400	46	ug/Kg	₽	03/24/11 16:15	03/25/11 18:47	1
1-Methylnaphthalene	420		400	37	ug/Kg	₩	03/24/11 16:15	03/25/11 18:47	1
2-Methylnaphthalene	560		400	46	ug/Kg	₩	03/24/11 16:15	03/25/11 18:47	1
Chrysene	270	J	400	25	ug/Kg	₽	03/24/11 16:15	03/25/11 18:47	1
Dibenz(a,h)anthracene	<47		400	47	ug/Kg	₩	03/24/11 16:15	03/25/11 18:47	1
Fluoranthene	920		400	39	ug/Kg	⇔	03/24/11 16:15	03/25/11 18:47	1

TestAmerica Savannah

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Matrix: Solid

Percent Solids: 82.5

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-01

Date Collected: 03/18/11 14:40 Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-3

Matrix: Solid Percent Solids: 82.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<43		400	43	ug/Kg	*	03/24/11 16:15	03/25/11 18:47	1
Indeno[1,2,3-cd]pyrene	89	J	400	34	ug/Kg	₽	03/24/11 16:15	03/25/11 18:47	1
Naphthalene	<36		400	36	ug/Kg	₽	03/24/11 16:15	03/25/11 18:47	1
Phenanthrene	1600		400	33	ug/Kg	\$	03/24/11 16:15	03/25/11 18:47	1
Pyrene	590		400	33	ug/Kg	₽	03/24/11 16:15	03/25/11 18:47	1
Anthracene	290	J	400	30	ug/Kg	₽	03/24/11 16:15	03/25/11 18:47	1
Dibenzofuran	<40		400	40	ug/Kg	₽	03/24/11 16:15	03/25/11 18:47	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	75		58 - 130	03/24/11 16:15	03/25/11 18:47	1
Nitrobenzene-d5	71		46 - 130	03/24/11 16:15	03/25/11 18:47	1
Terphenyl-d14	76		60 - 130	03/24/11 16:15	03/25/11 18:47	1

Client Sample ID: LOC H4A-02

Date Collected: 03/18/11 14:45 Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-4

Matrix: Solid Percent Solids: 83.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<26		390	26	ug/Kg		03/24/11 16:15	03/25/11 18:19	1
Benzo[k]fluoranthene	<77		390	77	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Acenaphthene	<48		390	48	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Acenaphthylene	<42		390	42	ug/Kg	\$	03/24/11 16:15	03/25/11 18:19	1
Benzo[a]anthracene	<32		390	32	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Benzo[a]pyrene	<61		390	61	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Benzo[b]fluoranthene	<45		390	45	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
1-Methylnaphthalene	<37		390	37	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
2-Methylnaphthalene	<45		390	45	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Chrysene	51	J	390	25	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Dibenz(a,h)anthracene	<46		390	46	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Fluoranthene	210	J	390	38	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Fluorene	<42		390	42	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Indeno[1,2,3-cd]pyrene	<33		390	33	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Naphthalene	<35		390	35	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Phenanthrene	130	J	390	32	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Pyrene	160	J	390	32	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Anthracene	31	J	390	29	ug/Kg	₽	03/24/11 16:15	03/25/11 18:19	1
Dibenzofuran	<39		390	39	ug/Kg		03/24/11 16:15	03/25/11 18:19	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	82		58 - 130	03/24/11 16:15	03/25/11 18:19	1
Nitrobenzene-d5	74		46 - 130	03/24/11 16:15	03/25/11 18:19	1
Terphenyl-d14	94		60 - 130	03/24/11 16:15	03/25/11 18:19	1

Client Sample ID: LOC H4A-03

Date Collected: 03/21/11 13:00 Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-5

Matrix: Solid Percent Solids: 86.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result Qualifie	-,	MDL U	Init D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	220 J	380	25 u	g/Kg 🌣	03/24/11 16:15	03/25/11 16:27	1

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66657-5 Client Sample ID: LOC H4A-03

Date Collected: 03/21/11 13:00 **Matrix: Solid** Date Received: 03/23/11 09:47 Percent Solids: 86.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<75		380	75	ug/Kg	*	03/24/11 16:15	03/25/11 16:27	1
Acenaphthene	<47		380	47	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Acenaphthylene	<41		380	41	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Benzo[a]anthracene	<31		380	31	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Benzo[a]pyrene	110	J	380	60	ug/Kg	≎	03/24/11 16:15	03/25/11 16:27	1
Benzo[b]fluoranthene	<44		380	44	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
1-Methylnaphthalene	<36		380	36	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
2-Methylnaphthalene	<44		380	44	ug/Kg	≎	03/24/11 16:15	03/25/11 16:27	1
Chrysene	<24		380	24	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Dibenz(a,h)anthracene	210	J	380	45	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Fluoranthene	<37		380	37	ug/Kg	≎	03/24/11 16:15	03/25/11 16:27	1
Fluorene	<41		380	41	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Indeno[1,2,3-cd]pyrene	230	J	380	32	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Naphthalene	<34		380	34	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Phenanthrene	<31		380	31	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Pyrene	<31		380	31	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Anthracene	<29		380	29	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Dibenzofuran	<38		380	38	ug/Kg	₽	03/24/11 16:15	03/25/11 16:27	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	85		58 - 130				03/24/11 16:15	03/25/11 16:27	1
Nitrobenzene-d5	83		46 - 130				03/24/11 16:15	03/25/11 16:27	1
Terphenyl-d14	97		60 - 130				03/24/11 16:15	03/25/11 16:27	1

Client Sample ID: LOC H4A-04 Lab Sample ID: 680-66657-6

Date Collected: 03/21/11 13:05

Date Received: 03/23/11 09:47

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<3000		3000		mg/Kg			03/28/11 11:15	1

Lab Sample ID: 680-66657-7 Client Sample ID: LOC H4A-05

Date Collected: 03/21/11 15:35 **Matrix: Solid** Date Received: 03/23/11 09:47 Percent Solids: 81.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	91	J	400	27	ug/Kg	₩	03/24/11 16:15	03/25/11 16:55	1
Benzo[k]fluoranthene	<79		400	79	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Acenaphthene	<50		400	50	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Acenaphthylene	<44		400	44	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Benzo[a]anthracene	<33		400	33	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Benzo[a]pyrene	<63		400	63	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Benzo[b]fluoranthene	<46		400	46	ug/Kg	\$	03/24/11 16:15	03/25/11 16:55	1
1-Methylnaphthalene	<38		400	38	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
2-Methylnaphthalene	<46		400	46	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Chrysene	<26		400	26	ug/Kg	\$	03/24/11 16:15	03/25/11 16:55	1
Dibenz(a,h)anthracene	79	J	400	48	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Fluoranthene	60	J	400	39	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Fluorene	<44		400	44	ug/Kg		03/24/11 16:15	03/25/11 16:55	1

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TestAmerica Savannah 04/15/2011

TestAmerica Job ID: 680-66657-1

Matrix: Solid

Project/Site: Cabot Springstead & Hogtown Creek

95

Client Sample ID: LOC H4A-05

Terphenyl-d14

Date Collected: 03/21/11 15:35 **Matrix: Solid** Date Received: 03/23/11 09:47 Percent Solids: 81.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	82	J	400	34	ug/Kg	*	03/24/11 16:15	03/25/11 16:55	1
Naphthalene	<37		400	37	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Phenanthrene	<33		400	33	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Pyrene	45	J	400	33	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Anthracene	<31		400	31	ug/Kg	₩	03/24/11 16:15	03/25/11 16:55	1
Dibenzofuran	<40		400	40	ug/Kg	₽	03/24/11 16:15	03/25/11 16:55	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	80		58 - 130				03/24/11 16:15	03/25/11 16:55	1
Nitrobenzene-d5	73		46 - 130				03/24/11 16:15	03/25/11 16:55	1

Lab Sample ID: 680-66657-8 Client Sample ID: LOC H4A-06

60 - 130

Date Collected: 03/21/11 18:30 **Matrix: Solid**

Pate Received: 03/23/11 09:4	.7							Percent Soli	ds: 79.2
Method: 8270C - Semivolati Analyte	•	•	S) RL	MDL	1114	_	Dd	Austral	D!! E
Benzo[g,h,i]perylene	Result	Qualifier	410	28	ug/Kg	— <u>D</u>	Prepared 03/24/11 16:15	Analyzed 03/25/11 17:23	Dil Fac
,	<81		410	81		₩	03/24/11 16:15	03/25/11 17:23	١
Benzo[k]fluoranthene	<51		410	51	ug/Kg	₩	03/24/11 16:15	03/25/11 17:23	1
Acenaphthene					ug/Kg				! ر
Acenaphthylene	<45		410		ug/Kg		03/24/11 16:15	03/25/11 17:23	1
Benzo[a]anthracene	<34		410	34	ug/Kg	\$	03/24/11 16:15	03/25/11 17:23	1
Benzo[a]pyrene	<65		410	65	ug/Kg	<u>.</u>	03/24/11 16:15	03/25/11 17:23	
Benzo[b]fluoranthene	<48		410		ug/Kg	₩.	03/24/11 16:15	03/25/11 17:23	1
1-Methylnaphthalene	<39		410	39	ug/Kg	₩.	03/24/11 16:15	03/25/11 17:23	1
2-Methylnaphthalene	<48		410		- 5 5		03/24/11 16:15	03/25/11 17:23	1
Chrysene	<26		410	26	ug/Kg	₩	03/24/11 16:15	03/25/11 17:23	1
Dibenz(a,h)anthracene	<49		410	49	ug/Kg	₽	03/24/11 16:15	03/25/11 17:23	1
Fluoranthene	<40		410	40	ug/Kg	₽	03/24/11 16:15	03/25/11 17:23	1
Fluorene	<45		410	45	ug/Kg	₽	03/24/11 16:15	03/25/11 17:23	1
Indeno[1,2,3-cd]pyrene	<35		410	35	ug/Kg	₽	03/24/11 16:15	03/25/11 17:23	1
Naphthalene	<38		410	38	ug/Kg	₽	03/24/11 16:15	03/25/11 17:23	1
Phenanthrene	<34		410	34	ug/Kg		03/24/11 16:15	03/25/11 17:23	1
Pyrene	<34		410	34	ug/Kg	₽	03/24/11 16:15	03/25/11 17:23	1
Anthracene	<31		410	31	ug/Kg	₽	03/24/11 16:15	03/25/11 17:23	1
Dibenzofuran	<41		410	41	ug/Kg	\$	03/24/11 16:15	03/25/11 17:23	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	77		58 - 130				03/24/11 16:15	03/25/11 17:23	1
Nitrobenzene-d5	71		46 - 130				03/24/11 16:15	03/25/11 17:23	1
Terphenyl-d14	87		60 - 130				03/24/11 16:15	03/25/11 17:23	1

	70 110001019	Quanno		rreparea	rinaryzou	2111 40
2-Fluorobiphenyl	77		58 - 130	03/24/11 16:15	03/25/11 17:23	1
Nitrobenzene-d5	71		46 - 130	03/24/11 16:15	03/25/11 17:23	1
Terphenyl-d14	87		60 - 130	03/24/11 16:15	03/25/11 17:23	1
-						

Client Sample ID: LOC H4A-07 Lab Sample ID: 680-66657-9 Date Collected: 03/21/11 18:35

Matrix: Solid Date Received: 03/23/11 09:47 Percent Solids: 85.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS)									
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
	Benzo[g,h,i]perylene	<25	380	25 ug/Kg	<u> </u>	03/24/11 16:15	03/25/11 17:51	1	
	Benzo[k]fluoranthene	<75	380	75 ug/Kg	₩	03/24/11 16:15	03/25/11 17:51	1	

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TestAmerica Job ID: 680-66657-1

Lab Sample ID: 680-66657-7

Client: Weston Solutions, Inc.

Date Collected: 03/21/11 18:35

Date Received: 03/23/11 09:47

Client Sample ID: LOC H4A-07

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66657-9

TestAmerica Job ID: 680-66657-1

Matrix: Solid

Percent Solids: 85.4

Method: 8270C - Semivolatile Or	ganic Compounds	(GC/MS)	(Continued)
	3	((

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<48		380	48	ug/Kg	\tilde{\pi}	03/24/11 16:15	03/25/11 17:51	1
Acenaphthylene	<42		380	42	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Benzo[a]anthracene	<31		380	31	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Benzo[a]pyrene	<60		380	60	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Benzo[b]fluoranthene	<44		380	44	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
1-Methylnaphthalene	<36		380	36	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
2-Methylnaphthalene	<44		380	44	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Chrysene	<24		380	24	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Dibenz(a,h)anthracene	<45		380	45	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Fluoranthene	49	J	380	37	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Fluorene	<42		380	42	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Indeno[1,2,3-cd]pyrene	<32		380	32	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Naphthalene	<35		380	35	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Phenanthrene	<31		380	31	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Pyrene	38	J	380	31	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Anthracene	<29		380	29	ug/Kg	₽	03/24/11 16:15	03/25/11 17:51	1
Dibenzofuran	<38		380	38	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1

Surrogate	% Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	74		58 - 130	0	3/24/11 16:15	03/25/11 17:51	1
Nitrobenzene-d5	72		46 - 130	0	3/24/11 16:15	03/25/11 17:51	1
Terphenyl-d14	92		60 - 130	0	3/24/11 16:15	03/25/11 17:51	1

Quality Control Data

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-66657-1

Project/Site: Cabot Springstead & Hogtown Creek

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-197931/15-A

Matrix: Solid

Analysis Batch: 198030

Client Sample ID: MB 680-197931/15-A

Prep Type: Total/NA

Prep Batch: 197931

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<22		330	22	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[k]fluoranthene	<65		330	65	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Acenaphthene	<41		330	41	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Acenaphthylene	<36		330	36	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[a]anthracene	<27		330	27	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[a]pyrene	<52		330	52	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[b]fluoranthene	<38		330	38	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
1-Methylnaphthalene	<31		330	31	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
2-Methylnaphthalene	<38		330	38	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Chrysene	<21		330	21	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Dibenz(a,h)anthracene	<39		330	39	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Fluoranthene	<32		330	32	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Fluorene	<36		330	36	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Indeno[1,2,3-cd]pyrene	<28		330	28	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Naphthalene	<30		330	30	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Phenanthrene	<27		330	27	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Pyrene	<27		330	27	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Anthracene	<25		330	25	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Dibenzofuran	<33		330	33	ug/Kg		03/23/11 15:25	03/24/11 13:43	1

MB MB

MR MR

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	80		58 - 130	03/23/11 15:25	03/24/11 13:43	1
Nitrobenzene-d5	65		46 - 130	03/23/11 15:25	03/24/11 13:43	1
Terphenyl-d14	85		60 - 130	03/23/11 15:25	03/24/11 13:43	1

Lab Sample ID: LCS 680-197931/16-A

Matrix: Solid

Analysis Batch: 198030

Client Sample ID: LCS 680-197931/16-A
Prep Type: Total/NA
Prep Batch: 197931

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Benzo[g,h,i]perylene	3320	3080		ug/Kg		93	54 - 130
Benzo[k]fluoranthene	3320	2800		ug/Kg		84	57 - 130
Acenaphthene	3320	2440		ug/Kg		74	58 - 130
Acenaphthylene	3320	2750		ug/Kg		83	58 - 130
Benzo[a]anthracene	3320	2880		ug/Kg		87	62 - 130
Benzo[a]pyrene	3320	3220		ug/Kg		97	68 - 131
Benzo[b]fluoranthene	3320	3020		ug/Kg		91	53 - 130
1-Methylnaphthalene	3320	2370		ug/Kg		71	48 - 130
2-Methylnaphthalene	3320	2430		ug/Kg		73	55 - 130
Chrysene	3320	2890		ug/Kg		87	62 - 130
Dibenz(a,h)anthracene	3320	3070		ug/Kg		93	56 - 130
Fluoranthene	3320	3000		ug/Kg		90	62 - 130
Fluorene	3320	2750		ug/Kg		83	58 - 130
Indeno[1,2,3-cd]pyrene	3320	3280		ug/Kg		99	52 - 130
Naphthalene	3320	2490		ug/Kg		75	54 - 130
Phenanthrene	3320	2950		ug/Kg		89	61 - 130
Pyrene	3320	2720		ug/Kg		82	59 - 130
Anthracene	3320	2880		ug/Kg		87	60 - 130
Dibenzofuran	3320	2660		ug/Kg		80	56 - 130

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Quality Control Data

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-197931/16-A

Matrix: Solid

Analysis Batch: 198030

Client Sample ID: LCS 680-197931/16-A

TestAmerica Job ID: 680-66657-1

Prep Type: Total/NA

Prep Batch: 197931

LCS LCS

Surrogate	% Recovery	Qualifier	Limits		
2-Fluorobiphenyl	78		58 - 130		
Nitrobenzene-d5	62		46 - 130		
Terphenyl-d14	78		60 - 130		

Lab Sample ID: MB 680-198062/14-A Client Sample ID: MB 680-198062/14-A

Matrix: Solid

Analysis Batch: 198226

Prep Type: Total/NA

Prep Batch: 198062

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<22		330	22	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[k]fluoranthene	<65		330	65	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Acenaphthene	<41		330	41	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Acenaphthylene	<36		330	36	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[a]anthracene	<27		330	27	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[a]pyrene	<52		330	52	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[b]fluoranthene	<38		330	38	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
1-Methylnaphthalene	<31		330	31	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
2-Methylnaphthalene	<38		330	38	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Chrysene	<21		330	21	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Dibenz(a,h)anthracene	<39		330	39	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Fluoranthene	<32		330	32	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Fluorene	<36		330	36	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Indeno[1,2,3-cd]pyrene	<28		330	28	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Naphthalene	<30		330	30	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Phenanthrene	<27		330	27	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Pyrene	<27		330	27	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Anthracene	<25		330	25	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Dibenzofuran	<33		330	33	ug/Kg		03/24/11 16:15	03/25/11 15:31	1

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	78		58 - 130	03/24/11 16:15	03/25/11 15:31	1
Nitrobenzene-d5	78		46 - 130	03/24/11 16:15	03/25/11 15:31	1
Terphenvl-d14	93		60 - 130	03/24/11 16:15	03/25/11 15:31	1

Lab Sample ID: LCS 680-198062/15-A

Matrix: Solid

Analysis Batch: 198226

Client Sample ID: LCS 680-198062/15-A Prep Type: Total/NA

Prep Batch: 198062

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Benzo[g,h,i]perylene	3330	2630		ug/Kg		79	54 - 130	
Benzo[k]fluoranthene	3330	3410		ug/Kg		102	57 - 130	
Acenaphthene	3330	3070		ug/Kg		92	58 - 130	
Acenaphthylene	3330	3230		ug/Kg		97	58 - 130	
Benzo[a]anthracene	3330	3350		ug/Kg		101	62 - 130	
Benzo[a]pyrene	3330	3640		ug/Kg		109	68 - 131	
Benzo[b]fluoranthene	3330	3310		ug/Kg		99	53 - 130	
1-Methylnaphthalene	3330	2750		ug/Kg		83	48 - 130	
2-Methylnaphthalene	3330	2920		ug/Kg		88	55 - 130	
Chrysene	3330	3300		ug/Kg		99	62 - 130	

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TestAmerica Savannah 04/15/2011

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-198062/15-A

Matrix: Solid

Analysis Batch: 198226

Client Sample ID: LCS 680-198062/15-A

Prep Type: Total/NA Prep Batch: 198062

Client Sample ID: MB 680-198526/1

Client Sample ID: LCS 680-198526/2

Client Sample ID: LOC HA-02

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Dibenz(a,h)anthracene	3330	2710		ug/Kg		81	56 - 130
Fluoranthene	3330	3270		ug/Kg		98	62 - 130
Fluorene	3330	3180		ug/Kg		95	58 - 130
Indeno[1,2,3-cd]pyrene	3330	2560		ug/Kg		77	52 - 130
Naphthalene	3330	2830		ug/Kg		85	54 - 130
Phenanthrene	3330	3280		ug/Kg		98	61 - 130
Pyrene	3330	3430		ug/Kg		103	59 - 130
Anthracene	3330	3280		ug/Kg		98	60 - 130
Dibenzofuran	3330	3070		ug/Kg		92	56 - 130

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
2-Fluorobiphenyl	87		58 - 130
Nitrobenzene-d5	84		46 - 130
Terphenyl-d14	94		60 - 130

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-198526/1

Matrix: Solid

Analysis Batch: 198526

MB MB

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<3000	3000	mg/Kg			03/28/11 11:15	1

Lab Sample ID: LCS 680-198526/2

Matrix: Solid

Analysis Batch: 198526

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Total Organic Carbon	60000	65000		ma/Ka	_	108	60 - 140	

Lab Sample ID: 680-66657-2 MS

Matrix: Solid

Analysis Batch: 198526										
	Sample	Sample	Spike	MS	MS				% Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Total Organic Carbon	16000		65900	80300		mg/Kg		98	60 - 140	

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66657-1

TestAmerica Job ID: 680-66657-1

Matrix: Solid

Percent Solids: 73.4

Client	Sample	ID:	LOC	HA-01

Date Collected: 03/09/11 17:00 Date Received: 03/23/11 09:47

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			197931	03/23/11 15:25	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		10	198220	03/25/11 15:16	LH	TestAmerica Savannah

Client Sample ID: LOC HA-02

Date Collected: 03/09/11 17:10 Date Received: 03/23/11 09:47 Lab Sample ID: 680-66657-2

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		1	198526	03/28/11 11:15	KB	TestAmerica Savannah

Client Sample ID: LOC H4A-01

Date Collected: 03/18/11 14:40 Date Received: 03/23/11 09:47 Lab Sample ID: 680-66657-3

Matrix: Solid

Percent Solids: 82.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 18:47	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-02

Date Collected: 03/18/11 14:45 Date Received: 03/23/11 09:47 Lab Sample ID: 680-66657-4

Matrix: Solid Percent Solids: 83.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 18:19	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-03

Date Collected: 03/21/11 13:00 Date Received: 03/23/11 09:47 **Lab Sample ID: 680-66657-5**

Matrix: Solid Percent Solids: 86.5

Batch Batch Dilution Batch Prepared Method Factor Number Prep Type Type Run Or Analyzed Lab Analyst Total/NA Prep 3546 198062 03/24/11 16:15 JW TestAmerica Savannah Total/NA 8270C 198226 03/25/11 16:27 LH TestAmerica Savannah Analysis 1

Client Sample ID: LOC H4A-04

Date Collected: 03/21/11 13:05 Date Received: 03/23/11 09:47 Lab Sample ID: 680-66657-6

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		1	198526	03/28/11 11:15	KB	TestAmerica Savannah

Lab Chronicle

Client: Weston Solutions, Inc.

Date Received: 03/23/11 09:47

Client Sample ID: LOC H4A-05 Date Collected: 03/21/11 15:35

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66657-7

TestAmerica Job ID: 680-66657-1

Percent Solids: 81.7

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 16:55	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-06 Lab Sample ID: 680-66657-8

Date Collected: 03/21/11 18:30 Matrix: Solid Date Received: 03/23/11 09:47 Percent Solids: 79.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 17:23	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-07 Lab Sample ID: 680-66657-9

Date Collected: 03/21/11 18:35 Matrix: Solid

Date Received: 03/23/11 09:47 Percent Solids: 85.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 17:51	LH	TestAmerica Savannah

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Certification Summary

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-66657-1

Project/Site: Cabot Springstead & Hogtown Creek

aboratory	Authority	Program	EPA Region	Certification ID
estAmerica Savannah		USDA		SAV 3-04
estAmerica Savannah	A2LA	DoD ELAP	0	0399-01
estAmerica Savannah	A2LA	ISO/IEC 17025	0	399.01
estAmerica Savannah	Alabama	State Program	4	41450
estAmerica Savannah	Arkansas	Arkansas DOH	6	N/A
estAmerica Savannah	Arkansas	State Program	6	88-0692
estAmerica Savannah	California	NELAC	9	3217CA
estAmerica Savannah	Colorado	State Program	8	N/A
estAmerica Savannah	Connecticut	State Program	1	PH-0161
estAmerica Savannah	Delaware	State Program	3	N/A
estAmerica Savannah	Florida	NELAC	4	E87052
estAmerica Savannah	Georgia	Georgia EPD	4	N/A
estAmerica Savannah	Georgia	State Program	4	803
estAmerica Savannah	Guam	State Program	9	09-005r
estAmerica Savannah	Hawaii	State Program	9	N/A
estAmerica Savannah	Illinois	NELAC	5	200022
estAmerica Savannah	Indiana	State Program	5	N/A
estAmerica Savannah	lowa	State Program	7	353
estAmerica Savannah	Kansas	NELAC	7	E-10322
estAmerica Savannah			4	18
	Kentucky	Kentucky UST		
estAmerica Savannah estAmerica Savannah	Kentucky	State Program	4	90084
	Louisiana	NELAC	6	30690
estAmerica Savannah	Louisiana	NELAC	6	LA100015
estAmerica Savannah	Maine	State Program	1	GA00006
estAmerica Savannah	Maryland	State Program	3	250
estAmerica Savannah	Massachusetts	State Program	1	M-GA006
estAmerica Savannah	Michigan	State Program	5	9925
estAmerica Savannah	Mississippi	State Program	4	N/A
estAmerica Savannah	Montana	State Program	8	CERT0081
estAmerica Savannah	Nebraska	State Program	7	TestAmerica-Savannah
estAmerica Savannah	Nevada	State Program	9	GA6
estAmerica Savannah	New Jersey	NELAC	2	GA769
estAmerica Savannah	New Mexico	State Program	6	N/A
estAmerica Savannah	New York	NELAC	2	10842
estAmerica Savannah	North Carolina	North Carolina DENR	4	269
estAmerica Savannah	North Carolina	North Carolina PHL	4	13701
estAmerica Savannah	Oklahoma	State Program	6	9984
estAmerica Savannah	Pennsylvania	NELAC	3	68-00474
estAmerica Savannah	Puerto Rico	State Program	2	GA00006
estAmerica Savannah	Rhode Island	State Program	1	LAO00244
estAmerica Savannah	South Carolina	State Program	4	98001
estAmerica Savannah	Tennessee	State Program	4	TN02961
estAmerica Savannah	Texas	NELAC	6	T104704185-08-TX
stAmerica Savannah	Vermont	State Program	1	87052
estAmerica Savannah	Virginia	State Program	3	302
estAmerica Savannah	Washington	State Program	10	C1794
estAmerica Savannah	West Virginia	West Virginia DEP	3	94
	-			
estAmerica Savannah	West Virginia	West Virginia DHHR (DW)	3	9950C
estAmerica Savannah	Wisconsin	State Program	5	999819810

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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ANALYTICAL REPORT

Job Number: 680-65837-1

Job Description: Springstead & Hogtown Creek

For:

Weston Solutions, Inc. 94072 Summer Breeze Drive Fernandina Beach, FL 32034

Attention: Mr. Mark Taylor

Approved for release Abbie G Yant Project Manager I 4/15/2011 10:26 AM

Abbie G Yant Project Manager I abbie.yant@testamericainc.com 04/15/2011

Revision: 1

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LA000244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q



Job Narrative 680-65837-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 8270C: The following sample(s) was diluted due to the nature of the sample matrix: SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9). Sample is dark, viscous and sticking to the vial. Elevated reporting limits (RLs) are provided.

Method(s) 8270C: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9).

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

METHOD SUMMARY

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS) Microwave Extraction	TAL SAV TAL SAV	SW846 8270C	SW846 3546
Organic Carbon, Total (TOC)	TAL SAV	SW846 9060	
Percent Moisture	TAL SAV	EPA Moisture	

Lab References:

TAL SAV = TestAmerica Savannah

Method References:

EPA = US Environmental Protection Agency

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

SAMPLE SUMMARY

Client: Weston Solutions, Inc. Job Number: 680-65837-1

			Date/Time	Date/Time
Lab Sample ID	Client Sample ID	Client Matrix	Sampled	Received
680-65837-1	SS5-01A-DUP	Solid	02/14/2011 1110	02/22/2011 0919
680-65837-2	SS5-01A	Solid	02/14/2011 1115	02/22/2011 0919
680-65837-3	SS5-02A	Solid	02/14/2011 1550	02/22/2011 0919
680-65837-4	SS5-03A	Solid	02/14/2011 1550	02/22/2011 0919
680-65837-5	SB-9-01	Solid	02/17/2011 1245	02/22/2011 0919
680-65837-6	SB-9-02	Solid	02/17/2011 1250	02/22/2011 0919
680-65837-7	SB-9-03	Solid	02/17/2011 1250	02/22/2011 0919
680-65837-8	SD-10-01	Solid	02/17/2011 1740	02/22/2011 0919
680-65837-9	SD-10-02	Solid	02/17/2011 1745	02/22/2011 0919
680-65837-10	SD-10-03	Solid	02/17/2011 1750	02/22/2011 0919
680-65837-11	SD-10-03DUP	Solid	02/17/2011 1755	02/22/2011 0919
680-65837-12	SD-10-01A	Solid	02/18/2011 1150	02/22/2011 0919
680-65837-13	SD-10-02A	Solid	02/18/2011 1155	02/22/2011 0919

Job Number: 680-65837-1 Client: Weston Solutions, Inc.

Client Sample ID: SS5-01A-DUP

Lab Sample ID: 680-65837-1 Date Sampled: 02/14/2011 1110

Client Matrix: Date Received: 02/22/2011 0919 Solid % Moisture: 15.6

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195203 Instrument ID: MSG Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: g5792.d Dilution: Initial Weight/Volume: 30.26 g 1.0

02/23/2011 2321 Analysis Date: Final Weight/Volume: 1 mL 02/22/2011 1625 Prep Date: Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<26		26	390
Benzo[k]fluoranthene		<76		76	390
Acenaphthene		<48		48	390
Acenaphthylene		<42		42	390
Benzo[a]anthracene		<32		32	390
Benzo[a]pyrene		<61		61	390
Benzo[b]fluoranthene		<45		45	390
1-Methylnaphthalene		<36		36	390
2-Methylnaphthalene		<45		45	390
Chrysene		<25		25	390
Dibenz(a,h)anthracene		<46		46	390
Fluoranthene		<38		38	390
Fluorene		<42		42	390
Indeno[1,2,3-cd]pyrene		<33		33	390
Naphthalene		<35		35	390
Phenanthrene		82	J	32	390
Pyrene		<32		32	390
Anthracene		<29		29	390
Surrogate		%Rec	Qualifier	Accepta	ance Limits
2-Fluorobiphenyl		72		58 - 130)
Nitrobenzene-d5		60		46 - 130)
Ternhenyl_d1/		70		60 130	

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Client Sample ID: SS5-01A

Lab Sample ID: 680-65837-2 Date Sampled: 02/14/2011 1115

Client Matrix: Solid % Moisture: 17.1 Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195203 Instrument ID: MSG Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: g5793.d Dilution: Initial Weight/Volume: 30.06 g 1.0

Analysis Date: 02/23/2011 2349 Final Weight/Volume: 1 mL

Prep Date: 02/22/2011 1625 Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<26		26	400
Benzo[k]fluoranthene		<78		78	400
Acenaphthene		110	J	49	400
Acenaphthylene		<43		43	400
Benzo[a]anthracene		35	J	33	400
Benzo[a]pyrene		<63		63	400
Benzo[b]fluoranthene		<46		46	400
1-Methylnaphthalene		120	J	37	400
2-Methylnaphthalene		89	J	46	400
Chrysene		39	J	25	400
Dibenz(a,h)anthracene		<47		47	400
Fluoranthene		100	J	39	400
Fluorene		70	J	43	400
Indeno[1,2,3-cd]pyrene		<34		34	400
Naphthalene		99	J	36	400
Phenanthrene		360	J	33	400
Pyrene		<33		33	400
Anthracene		<30		30	400
Surrogate		%Rec	Qualifier	Accepta	nce Limits
2-Fluorobiphenyl		81		58 - 130	
Nitrobenzene-d5		70		46 - 130	
Terphenyl-d14		89		60 - 130	

Job Number: 680-65837-1 Client: Weston Solutions, Inc.

Client Sample ID: SS5-02A

Lab Sample ID: 680-65837-3 Date Sampled: 02/14/2011 1550

Client Matrix: Solid % Moisture: 12.8 Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195203 Instrument ID: MSG Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: g5794.d Dilution: Initial Weight/Volume: 30.07 g 1.0

02/24/2011 0017 Analysis Date: Final Weight/Volume: 1 mL 02/22/2011 1625 Prep Date: Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<25		25	380
Benzo[k]fluoranthene		<74		74	380
Acenaphthene		<47		47	380
Acenaphthylene		<41		41	380
Benzo[a]anthracene		<31		31	380
Benzo[a]pyrene		<60		60	380
Benzo[b]fluoranthene		<43		43	380
1-Methylnaphthalene		<35		35	380
2-Methylnaphthalene		<43		43	380
Chrysene		<24		24	380
Dibenz(a,h)anthracene		<45		45	380
Fluoranthene		<37		37	380
Fluorene		<41		41	380
Indeno[1,2,3-cd]pyrene		<32		32	380
Naphthalene		<34		34	380
Phenanthrene		<31		31	380
Pyrene		<31		31	380
Anthracene		<29		29	380
Surrogate		%Rec	Qualifier	Acceptance Limits	
2-Fluorobiphenyl		83		58 - 130)
Nitrobenzene-d5		73		46 - 130	
Terphenyl-d14		100		60 - 130	

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Client Sample ID: SB-9-01

Lab Sample ID: 680-65837-5 Date Sampled: 02/17/2011 1245

Client Matrix: Solid % Moisture: 16.6 Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195748 Instrument ID: MSG Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: g5902.d Dilution: Initial Weight/Volume: 30.01 g 1.0

Analysis Date: 03/02/2011 1924 Final Weight/Volume: 1 mL

Prep Date: 02/22/2011 1625 Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<26		26	400
Benzo[k]fluoranthene		<78		78	400
Acenaphthene		<49		49	400
Acenaphthylene		<43		43	400
Benzo[a]anthracene		<32		32	400
Benzo[a]pyrene		<62		62	400
Benzo[b]fluoranthene		<46		46	400
1-Methylnaphthalene		<37		37	400
2-Methylnaphthalene		<46		46	400
Chrysene		<25		25	400
Dibenz(a,h)anthracene		<47		47	400
Fluoranthene		<38		38	400
Fluorene		<43		43	400
Indeno[1,2,3-cd]pyrene		<34		34	400
Naphthalene		<36		36	400
Phenanthrene		77	J	32	400
Pyrene		<32		32	400
Anthracene		<30		30	400
Surrogate		%Rec	Qualifier	Accepta	ance Limits
2-Fluorobiphenyl		73		58 - 130)
Nitrobenzene-d5		65		46 - 130)
Terphenyl-d14		77		60 - 130)

Job Number: 680-65837-1 Client: Weston Solutions, Inc.

Client Sample ID: SB-9-02

Lab Sample ID: 680-65837-6 Date Sampled: 02/17/2011 1250

Client Matrix: Solid % Moisture: 19.0 Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195203 Instrument ID: MSG Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: g5796.d Dilution: 1.0 Initial Weight/Volume: 30.07 g

02/24/2011 0114 Analysis Date: Final Weight/Volume: 1 mL Pren Date: 02/22/2011 1625 Injection Volume:

Prep Date: 02/22	2/2011 1625		Injec	tion Volume:	1 uL
Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<27		27	410
Benzo[k]fluoranthene		<80		80	410
Acenaphthene		<50		50	410
Acenaphthylene		<44		44	410
Benzo[a]anthracene		<33		33	410
Benzo[a]pyrene		<64		64	410
Benzo[b]fluoranthene		<47		47	410
1-Methylnaphthalene		<38		38	410
2-Methylnaphthalene		<47		47	410
Chrysene		<26		26	410
Dibenz(a,h)anthracene		<48		48	410
Fluoranthene		<39		39	410
Fluorene		<44		44	410
ndeno[1,2,3-cd]pyrene		<34		34	410
Naphthalene		<37		37	410
Phenanthrene		33	J	33	410
Pyrene		<33		33	410
Anthracene		<31		31	410
Surrogate		%Rec	Qualifier	Accepta	nce Limits
2-Fluorobiphenyl		77		58 - 130	
Nitrobenzene-d5		54		46 - 130	1
Ternhenyl-d14		83		60 - 130	1

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Client Sample ID: SD-10-01

Lab Sample ID: 680-65837-8 Date Sampled: 02/17/2011 1740

Client Matrix: Solid % Moisture: 19.0 Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195567 Instrument ID: MSN Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: n1325.d Dilution: Initial Weight/Volume: 30.39 g 10

 Dilution:
 10
 Initial Weight/Volume:
 30.39 g

 Analysis Date:
 02/26/2011 1256
 Final Weight/Volume:
 1 mL

 Prep Date:
 02/22/2011 1625
 Injection Volume:
 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
·	Drywt Corrected. 1	780	J	270	4000
Benzo[g,h,i]perylene		<790	J	790	4000
Benzo[k]fluoranthene					
Acenaphthene		<500		500	4000
Acenaphthylene		<440		440	4000
Benzo[a]anthracene		<330		330	4000
Benzo[a]pyrene		<630		630	4000
Benzo[b]fluoranthene		<460		460	4000
1-Methylnaphthalene		<380		380	4000
2-Methylnaphthalene		<460		460	4000
Chrysene		<260		260	4000
Dibenz(a,h)anthracene		630	J	480	4000
Fluoranthene		460	J	390	4000
Fluorene		<440		440	4000
Indeno[1,2,3-cd]pyrene		760	J	340	4000
Naphthalene		<370		370	4000
Phenanthrene		<330		330	4000
Pyrene		400	J	330	4000
Anthracene		<300		300	4000
Surrogate		%Rec	Qualifier	Acceptan	ce Limits
2-Fluorobiphenyl		0	D	58 - 130	
Nitrobenzene-d5		0	D	46 - 130	
Terphenyl-d14		0	D	60 - 130	

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Client Sample ID: SD-10-02

Lab Sample ID: 680-65837-9 Date Sampled: 02/17/2011 1745

Client Matrix: Solid % Moisture: 13.6 Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195567 Instrument ID: MSN Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: n1326.d Dilution: Initial Weight/Volume: 10 30.31 g

Analysis Date: 02/26/2011 1324 Final Weight/Volume: 1 mL
Prep Date: 02/22/2011 1625 Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<250		250	3800
Benzo[k]fluoranthene		<740		740	3800
Acenaphthene		<470		470	3800
Acenaphthylene		<410		410	3800
Benzo[a]anthracene		<310		310	3800
Benzo[a]pyrene		<600		600	3800
Benzo[b]fluoranthene		<440		440	3800
1-Methylnaphthalene		<350		350	3800
2-Methylnaphthalene		<440		440	3800
Chrysene		<240		240	3800
Dibenz(a,h)anthracene		<450		450	3800
Fluoranthene		<370		370	3800
Fluorene		<410		410	3800
Indeno[1,2,3-cd]pyrene		<320		320	3800
Naphthalene		<340		340	3800
Phenanthrene		<310		310	3800
Pyrene		<310		310	3800
Anthracene		<290		290	3800
Surrogate		%Rec	Qualifier	Acceptar	nce Limits
2-Fluorobiphenyl		0	D	58 - 130	
Nitrobenzene-d5		0	D	46 - 130	
Terphenyl-d14		0	D	60 - 130	

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Client Sample ID: SD-10-01A

Lab Sample ID: 680-65837-12 Date Sampled: 02/18/2011 1150

Client Matrix: Solid % Moisture: 17.9 Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 680-195567 Instrument ID: MSN Prep Method: 3546 Prep Batch: 680-195008 Lab File ID: n1327.d Dilution: Initial Weight/Volume: 10 30.23 g

 Dilution:
 10
 Initial Weight/Volume:
 30.23 g

 Analysis Date:
 02/26/2011 1352
 Final Weight/Volume:
 1 mL

 Prep Date:
 02/22/2011 1625
 Injection Volume:
 1 uL

A b - d	D= M4 O= == = += += V	D It (/IX)	O 116	MDI	DI
Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		280	J	270	4000
Benzo[k]fluoranthene		<790		790	4000
Acenaphthene		<500		500	4000
Acenaphthylene		<440		440	4000
Benzo[a]anthracene		510	J	330	4000
Benzo[a]pyrene		<630		630	4000
Benzo[b]fluoranthene		590	J	460	4000
1-Methylnaphthalene		<370		370	4000
2-Methylnaphthalene		<460		460	4000
Chrysene		610	J	250	4000
Dibenz(a,h)anthracene		<470		470	4000
Fluoranthene		1800	J	390	4000
Fluorene		<440		440	4000
Indeno[1,2,3-cd]pyrene		<340		340	4000
Naphthalene		<360		360	4000
Phenanthrene		2100	J	330	4000
Pyrene		1200	J	330	4000
Anthracene		420	J	300	4000
Surrogate		%Rec	Qualifier	Acceptar	nce Limits
2-Fluorobiphenyl		0	D	58 - 130	
Nitrobenzene-d5		0	D	46 - 130	
Terphenyl-d14		0	D	60 - 130	
•					

Client: Weston Solutions, Inc. Job Number: 680-65837-1

General Chemistry

Client Sample ID: SS5-03A

Lab Sample ID: 680-65837-4 Date Sampled: 02/14/2011 1550

Client Matrix: Date Received: 02/22/2011 0919 Solid

RL Analyte Units Dil Method Result Qual **Total Organic Carbon** <3000 3000 1.0 9060

mg/Kg

Analysis Batch: 680-196053 Analysis Date: 03/04/2011 1015 DryWt Corrected: N

Result Analyte Qual Units RLDil Method Percent Moisture 12 0.010 1.0 Moisture

> Analysis Batch: 680-195060 Analysis Date: 02/23/2011 0952 DryWt Corrected: N

Client: Weston Solutions, Inc. Job Number: 680-65837-1

General Chemistry

Client Sample ID: SB-9-03

Lab Sample ID: 680-65837-7 Date Sampled: 02/17/2011 1250

Client Matrix: Solid Date Received: 02/22/2011 0919

Analyte Result Qual Units RL Dil Method
Total Organic Carbon <3000 mg/Kg 3000 1.0 9060

on <3000 mg/Kg 3000 1.0 9060
Analysis Batch: 680-196053 Analysis Date: 03/04/2011 1015 DryWt Corrected: N

Analyte Result Qual Units RL Dil Method
Percent Moisture 17 % 0.010 1.0 Moisture

Analysis Batch: 680-195060 Analysis Date: 02/23/2011 0952 DryWt Corrected: N

Client: Weston Solutions, Inc. Job Number: 680-65837-1

General Chemistry

Client Sample ID: SD-10-03

Lab Sample ID: 680-65837-10 Date Sampled: 02/17/2011 1750

Client Matrix: Solid Date Received: 02/22/2011 0919

Analyte Result Qual Units RL Dil Method
Total Organic Carbon 5700 mg/Kg 3000 1.0 9060

Analysis Batch: 680-196053 Analysis Date: 03/04/2011 1015 DryWt Corrected: N

Analyte Result Qual Units RL Dil Method Percent Moisture 19 % 0.010 1.0 Moisture

Analysis Batch: 680-195060 Analysis Date: 02/23/2011 0952 DryWt Corrected: N

Client: Weston Solutions, Inc. Job Number: 680-65837-1

General Chemistry Client Sample ID: **SD-10-03DUP** Lab Sample ID: 680-65837-11 Date Sampled: 02/17/2011 1755 Client Matrix: Date Received: 02/22/2011 0919 Solid RL Analyte Units Dil Method Result Qual **Total Organic Carbon** 3300 mg/Kg 3000 1.0 9060 Analysis Batch: 680-196053 Analysis Date: 03/04/2011 1015 DryWt Corrected: N

Client: Weston Solutions, Inc. Job Number: 680-65837-1

General Chemistry

Client Sample ID: SD-10-02A

Lab Sample ID: 680-65837-13 Date Sampled: 02/18/2011 1155

Client Matrix: Date Received: 02/22/2011 0919 Solid

RL Analyte Units Dil Method Result Qual **Total Organic Carbon** <3000 3000 1.0 9060

mg/Kg Analysis Batch: 680-196053 Analysis Date: 03/04/2011 1015 DryWt Corrected: N

Result Analyte Qual Units RLDil Method

Percent Moisture 20 0.010 1.0 Moisture Analysis Batch: 680-195060 Analysis Date: 02/23/2011 0952 DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Method Blank - Batch: 680-195008

Method: 8270C Preparation: 3546

Lab Sample ID:	MB 680-195008/9-A	Analysis Batch:	680-195203	Instrument ID:	MSG
Client Matrix:	Solid	Prep Batch:	680-195008	Lab File ID:	g5790.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.09 g
Analysis Date:	02/23/2011 2226	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Leach Date: N/A

Analyte	Result	Qual	MDL	RL
Benzo[g,h,i]perylene	<22		22	330
Benzo[k]fluoranthene	<65		65	330
Acenaphthene	<41		41	330
Acenaphthylene	<36		36	330
Benzo[a]anthracene	<27		27	330
Benzo[a]pyrene	<52		52	330
Benzo[b]fluoranthene	<38		38	330
1-Methylnaphthalene	<31		31	330
2-Methylnaphthalene	<38		38	330
Chrysene	<21		21	330
Dibenz(a,h)anthracene	<39		39	330
Fluoranthene	<32		32	330
Fluorene	<36		36	330
Indeno[1,2,3-cd]pyrene	<28		28	330
Naphthalene	<30		30	330
Phenanthrene	<27		27	330
Pyrene	<27		27	330
Anthracene	<25		25	330
Surrogate	% Rec		Acceptance Limits	
2-Fluorobiphenyl	80		58 - 130	
Nitrobenzene-d5	64		46 - 130	
Terphenyl-d14	95		60 - 130	

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Lab Control Sample - Batch: 680-195008

Method: 8270C Preparation: 3546

Lab Sample ID: LCS 680-195008/10-A Analysis Batch: 680-195203 Instrument ID: MSG Client Matrix: Prep Batch: 680-195008 Lab File ID: g5791.d Dilution: 1.0 Leach Batch: N/A Initial Weight/Volume: 30.02 g 02/23/2011 2253 Units: Final Weight/Volume: Analysis Date: ug/Kg 1 mL 02/22/2011 1625 Prep Date: Injection Volume: 1 uL

Leach Date: N/A

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzo[g,h,i]perylene	3330	3200	96	54 - 130	
Benzo[k]fluoranthene	3330	3090	93	57 - 130	
Acenaphthene	3330	2800	84	58 - 130	
Acenaphthylene	3330	2940	88	58 - 130	
Benzo[a]anthracene	3330	3140	94	62 - 130	
Benzo[a]pyrene	3330	3610	108	68 - 131	
Benzo[b]fluoranthene	3330	3180	96	53 - 130	
1-Methylnaphthalene	3330	2720	82	48 - 130	
2-Methylnaphthalene	3330	2840	85	55 - 130	
Chrysene	3330	3140	94	62 - 130	
Dibenz(a,h)anthracene	3330	3000	90	56 - 130	
Fluoranthene	3330	3120	94	62 - 130	
Fluorene	3330	2940	88	58 - 130	
Indeno[1,2,3-cd]pyrene	3330	3240	97	52 - 130	
Naphthalene	3330	2940	88	54 - 130	
Phenanthrene	3330	3130	94	61 - 130	
Pyrene	3330	3240	97	59 - 130	
Anthracene	3330	3070	92	60 - 130	
Surrogate	% R	ec	Acc	ceptance Limits	
2-Fluorobiphenyl	82			58 - 130	
Nitrobenzene-d5	75			46 - 130	
Terphenyl-d14	90			60 - 130	

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Matrix Spike/ Method: 8270C

Matrix Spike Duplicate Recovery Report - Batch: 680-195008 Preparation: 3546

MS Lab Sample ID:	680-65837-1	Ana	lysis Batch:	680-195203	Instrume	nt ID:	MSG	
Client Matrix:	Solid	Prep	Batch:	680-195008	Lab File	ID:	g5797.d	
Dilution:	1.0	Lea	ch Batch:	N/A	Initial We	eight/Volume:	30.24 g	
Analysis Date:	02/24/2011 0141					ight/Volume:	1 mL	
Prep Date:	02/22/2011 1625				Injection	Volume:	1 uL	
Leach Date:	N/A							
MSD Lab Sample ID	0: 680-65837-1	Ana	lysis Batch:	680-195567	Instrume	nt ID:	MSN	
Client Matrix:	Solid	Prep	Batch:	680-195008	Lab File	ID:	n1328.d	
Dilution:	1.0	Lea	ch Batch:	N/A	Initial We	eight/Volume:	30.03 g	
Analysis Date:	02/26/2011 1420				Final We	ight/Volume:	1 mL	
Prep Date:	02/22/2011 1625				Injection	Volume:	1 uL	
Leach Date:	N/A							
		<u>%</u>	Rec.					
Analyte		MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzo[g,h,i]perylene	•	95	91	41 - 143	4	50		
Benzo[k]fluoranthen	e	96	84	45 - 142	12	50		
Acenaphthene		85	80	46 - 142	6	50		
Acenaphthylene		87	81	46 - 142	6	50		
Benzo[a]anthracene		93	93	51 - 141	1	50		
Benzo[a]pyrene		105	105	58 - 142	0	50		
Benzo[b]fluoranthen	е	87	90	40 - 143	4	50		
1-Methylnaphthalen	е	81	79	34 - 144	1	50		
2-Methylnaphthalen	е	85	84	43 - 143	1	50		
Chrysene		94	93	51 - 141	1	50		
Dibenz(a,h)anthrace	ene	90	91	44 - 142	2	50		
Fluoranthene		88	94	51 - 141	8	50		
Fluorene		88	88	46 - 142	1	50		
Indeno[1,2,3-cd]pyre	ene	99	101	39 - 143	2	50		
Naphthalene		85	81	41 - 143	4	50		
Phenanthrene		91	90	50 - 142	1	50		
Pyrene		94	90	47 - 142	3	50		
Anthracene		92	89	48 - 142	3	50		
Surrogate			MS % Rec	MSD %	% Rec	Acc	eptance Limits	S
2-Fluorobiphenyl			80	82			58 - 130	
Nitrobenzene-d5			75	77		4	1 6 - 130	

90

60 - 130

85

Terphenyl-d14

Client: Weston Solutions, Inc. Job Number: 680-65837-1

Method Blank - Batch: 680-196053 Method: 9060
Preparation: N/A

Lab Sample ID: MB 680-196053/1 Analysis Batch: 680-196053 Instrument ID: No Equipment

Client Matrix: Solid Prep Batch: N/A Lab File ID: N/A

Dilution: 1.0 Leach Batch: N/A Initial Weight/Volume: 100 mg

Analysis Date: 03/04/2011 1015 Units: mg/Kg Final Weight/Volume: 1.0 mL
Prep Date: N/A

Analyte Result Qual RL

Total Organic Carbon <3000 3000

Lab Control Sample - Batch: 680-196053 Method: 9060
Preparation: N/A

Leach Date:

Leach Date:

Prep Date:

Leach Date:

N/A

N/A

N/A

N/A

Lab Sample ID: LCS 680-196053/2 Analysis Batch: 680-196053 Instrument ID: No Equipment

Client Matrix: Solid Prep Batch: N/A Lab File ID: N/A
Dilution: 1.0 Leach Batch: N/A Initial Weight/Volume: 100 mg

Analysis Date: 03/04/2011 1015 Units: mg/Kg Final Weight/Volume: 100 mg
Prep Date: N/A

Analyte Spike Amount Result % Rec. Limit

Analyte Spike Amount Result % Rec. Limit Qual

Total Organic Carbon 60000 53900 90 60 - 140

Matrix Spike/ Method: 9060
Matrix Spike Duplicate Recovery Report - Batch: 680-196053 Preparation: N/A

MS Lab Sample ID: 680-65837-7 Analysis Batch: 680-196053 Instrument ID: No Equipment

Client Matrix: Solid Prep Batch: N/A Lab File ID: N/A
Dilution: 1.0 Leach Batch: N/A Initial Weight/Volume: 93.2 mg

Analysis Date: 03/04/2011 1015 Eeach Batch. N/A limital Weight/Volume: 93.2 mg

Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 680-65837-7 Analysis Batch: 680-196053 Instrument ID: No Equipment

Client Matrix: Solid Prep Batch: N/A Lab File ID: N/A

Dilution: 1.0 Leach Batch: N/A Initial Weight/Volume: 93.8 mg

Analysis Date: 03/04/2011 1015 Final Weight/Volume: 93.8 mg

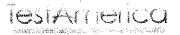
<u>% Rec.</u>

Analyte MS MSD Limit RPD RPD Limit MS Qual MSD Qual
Total Organic Carbon 83 84 60 - 140 1 40

TestAmerica Savannah

5102 LaRoche Avenue

Chain of Custody Record



Savannah, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165				•									or and making			-	er nymmt t				
Client Information Client Contact Wr Reight McKeon Theory Market Company:	Sampler I M	Lines	a.	T.v. Yan	м I. Abbie	G			-		C	amer T	racking	No(s).				XC No 30-31845.1	mily of the lateral o		
Client Contact	Phone 770)	₹ 200 -6	069	E-We	ie yant@	Diesta	merica	ain e co	מוכ									ge: age 1 of 3			
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50-10-03		17:50	<u></u>	Solid	П				X									TOTAL .	Ozce	mrc	APPO
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TestAmerica Savannah

5102 LaRoche Avenue

Chain of Custody Record

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Savannah, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165 Client Information Client Contact: Mr. Palph McKeen (1900) Why Palph McKeen (1900) Why Palph McKeen (1900) Weston Solutions, Inc. Mark Taylor 5430 Metric Place Suite 100	(suga)	*4		The state of the				٠.			Carri	er Tracking	No(s):	15 - 1 - 1		ÓC ÑÓ	· Andreks of d	abalan akidi. Banki nilihi ni menda	1
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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue Savannah, GA 31404 Tel: (912)354-7858

TestAmerica Job ID: 680-66244-2

Client Project/Site: Cabot Springstead & Hogtown Creek

Revision: 2

For:

Weston Solutions, Inc. 94072 Summer Breeze Drive Fernandina Beach, Florida 32034

Attn: Mark Taylor

Authorized for release by: 04/15/2011 10:36:46 AM

Abbie Yant Project Manager I

abbie.yant@testamericainc.com

Mi gys

Review your project results through Total Access

----- LINKS -----

Have a Question?



Visit us at: www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Client: Weston Solutions, Inc. Project/Site: Cabot Springstead & Hogtown Creek TestAmerica Job ID: 680-66244-2

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Case Narrative

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Job ID: 680-66244-2

Laboratory: TestAmerica Savannah

Narrative

Job Narrative 680-66244-2

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 8270C: The following sample(s) was diluted due to the nature of the sample matrix LOC60-01 (680-66244-7), LOC60-02 (680-66244-8), SD/10-01B (680-66244-6), SS2-01 (680-66244-4). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

TestAmerica Job ID: 680-66244-2

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Sample Summary

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-66244-2

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-66244-4	SS2-01	Solid	02/23/11 12:00	03/08/11 09:25
680-66244-5	SS2-02	Solid	02/23/11 12:05	03/08/11 09:25
680-66244-6	SD/10-01B	Solid	02/25/11 12:15	03/08/11 09:25
680-66244-7	LOC60-01	Solid	03/02/11 16:30	03/08/11 09:25
680-66244-8	LOC60-02	Solid	03/02/11 16:35	03/08/11 09:25
680-66244-9	LOC60-03	Solid	03/02/11 16:40	03/08/11 09:25
680-66244-10	LOC62-01	Solid	03/04/11 15:40	03/08/11 09:25
680-66244-11	LOC62-02	Solid	03/04/11 15:45	03/08/11 09:25
680-66244-12	LOC62-03	Solid	03/04/11 15:50	03/08/11 09:25

Method Summary

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL SAV
9060	Organic Carbon, Total (TOC)	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

TestAmerica Job ID: 680-66244-2

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Qualifier Definition/Glossary

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-66244-2

Project/Site: Cabot Springstead & Hogtown Creek

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be
	flagged with a D.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points

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Detection Summary

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66244-2

Client Sample ID: SS2-01

Lab Sample ID: 680-66244-4

No Detections.

Client Sample ID: SS2-02 Lab Sample ID: 680-66244-5

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac I	D Method	Prep Type
Total Organic Carbon	5400	3000	mg/Kg		9060	Total/NA

Client Sample ID: SD/10-01B Lab Sample ID: 680-66244-6

No Detections.

Client Sample ID: LOC60-01 Lab Sample ID: 680-66244-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	1700	J	3900	480	ug/Kg	10	₽	8270C	Total/NA
Acenaphthylene	1300	J	3900	420	ug/Kg	10	₽	8270C	Total/NA
Benzo[a]anthracene	720	J	3900	320	ug/Kg	10	₽	8270C	Total/NA
1-Methylnaphthalene	3000	J	3900	360	ug/Kg	10	₽	8270C	Total/NA
2-Methylnaphthalene	4300		3900	450	ug/Kg	10	₽	8270C	Total/NA
Chrysene	780	J	3900	250	ug/Kg	10	₽	8270C	Total/NA
Fluoranthene	2400	J	3900	380	ug/Kg	10	₽	8270C	Total/NA
Fluorene	1300	J	3900	420	ug/Kg	10	₽	8270C	Total/NA
Naphthalene	1800	J	3900	350	ug/Kg	10	₽	8270C	Total/NA
Phenanthrene	8500		3900	320	ug/Kg	10	₽	8270C	Total/NA
Pyrene	1700	J	3900	320	ug/Kg	10	₽	8270C	Total/NA
Anthracene	1200	J	3900	290	ug/Kg	10	₽	8270C	Total/NA

Client Sample ID: LOC60-02 Lab Sample ID: 680-66244-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	410	J	4700	390	ug/Kg	10	₩	8270C	Total/NA
1-Methylnaphthalene	930	J	4700	450	ug/Kg	10	₽	8270C	Total/NA
2-Methylnaphthalene	1100	J	4700	550	ug/Kg	10	₽	8270C	Total/NA
Chrysene	540	J	4700	300	ug/Kg	10	₽	8270C	Total/NA
Fluoranthene	1100	J	4700	460	ug/Kg	10	₽	8270C	Total/NA
Naphthalene	790	J	4700	430	ug/Kg	10	₩	8270C	Total/NA
Phenanthrene	2200	J	4700	390	ug/Kg	10	₩	8270C	Total/NA
Pyrene	740	J	4700	390	ug/Kg	10	₽	8270C	Total/NA
Anthracene	390	J	4700	360	ug/Kg	10	₩	8270C	Total/NA

Client Sample ID: LOC60-03 Lab Sample ID: 680-66244-9

No Detections.

Client Sample ID: LOC62-01 Lab Sample ID: 680-66244-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	44	J	390	32	ug/Kg	1	₩	8270C	Total/NA
Chrysene	55	J	390	25	ug/Kg	1	₽	8270C	Total/NA
Fluoranthene	65	J	390	37	ug/Kg	1	₽	8270C	Total/NA
Phenanthrene	130	J	390	32	ug/Kg	1	₩	8270C	Total/NA
Pyrene	55	J	390	32	ug/Kg	1	₩	8270C	Total/NA

Client Sample ID: LOC62-02 Lab Sample ID: 680-66244-11

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Detection Summary

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66244-2

Client Sample ID: LOC62-02 (Continued)

Lab Sample ID: 680-66244-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	78	J	390	32	ug/Kg	1	₩	8270C	 Total/NA

Client Sample ID: LOC62-03 Lab Sample ID: 680-66244-12

No Detections.

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Client Sample ID: SS2-01 Lab Sample ID: 680-66244-4

 Date Collected: 02/23/11 12:00
 Matrix: Solid

 Date Received: 03/08/11 09:25
 Percent Solids: 81.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<270		4000	270	ug/Kg	₩	03/08/11 15:15	03/10/11 18:41	10
Benzo[k]fluoranthene	<800		4000	800	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Acenaphthene	<500		4000	500	ug/Kg	≎	03/08/11 15:15	03/10/11 18:41	10
Acenaphthylene	<440		4000	440	ug/Kg	≎	03/08/11 15:15	03/10/11 18:41	10
Benzo[a]anthracene	<330		4000	330	ug/Kg	≎	03/08/11 15:15	03/10/11 18:41	10
Benzo[a]pyrene	<640		4000	640	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Benzo[b]fluoranthene	<470		4000	470	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
1-Methylnaphthalene	<380		4000	380	ug/Kg	≎	03/08/11 15:15	03/10/11 18:41	10
2-Methylnaphthalene	<470		4000	470	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Chrysene	<260		4000	260	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Dibenz(a,h)anthracene	<480		4000	480	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Fluoranthene	<390		4000	390	ug/Kg	≎	03/08/11 15:15	03/10/11 18:41	10
Fluorene	<440		4000	440	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Indeno[1,2,3-cd]pyrene	<340		4000	340	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Naphthalene	<370		4000	370	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Phenanthrene	<330		4000	330	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Pyrene	<330		4000	330	ug/Kg	≎	03/08/11 15:15	03/10/11 18:41	10
Anthracene	<310		4000	310	ug/Kg	₽	03/08/11 15:15	03/10/11 18:41	10
Dibenzofuran	<400		4000	400	ug/Kg	₩	03/08/11 15:15	03/10/11 18:41	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl		D	58 - 130				03/08/11 15:15	03/10/11 18:41	10
Nitrobenzene-d5	0	D	46 - 130				03/08/11 15:15	03/10/11 18:41	10
Terphenyl-d14	0	D	60 - 130				03/08/11 15:15	03/10/11 18:41	10

Client Sample ID: SS2-02 Lab Sample ID: 680-66244-5

Date Collected: 02/23/11 12:05 Date Received: 03/08/11 09:25

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	5400		3000		mg/Kg			03/18/11 13:15	1

Client Sample ID: SD/10-01B

Date Collected: 02/25/11 12:15

Lab Sample ID: 680-66244-6

Matrix: Solid

Date Received: 03/08/11 09:25 Percent Solids: 82.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<270		4000	270	ug/Kg	₩	03/08/11 15:15	03/10/11 19:08	10
Benzo[k]fluoranthene	<790		4000	790	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Acenaphthene	<500		4000	500	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Acenaphthylene	<440		4000	440	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Benzo[a]anthracene	<330		4000	330	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Benzo[a]pyrene	<630		4000	630	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Benzo[b]fluoranthene	<460		4000	460	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
1-Methylnaphthalene	<380		4000	380	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
2-Methylnaphthalene	<460		4000	460	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Chrysene	<250		4000	250	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Dibenz(a,h)anthracene	<470		4000	470	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Fluoranthene	<390		4000	390	ug/Kg	₩	03/08/11 15:15	03/10/11 19:08	10

TestAmerica Savannah 04/15/2011

2

TestAmerica Job ID: 680-66244-2

3

5

7

9

10

11

12

TestAmerica Job ID: 680-66244-2

Client Sample ID: SD/10-01B

Date Collected: 02/25/11 12:15 Date Received: 03/08/11 09:25 Lab Sample ID: 680-66244-6

Matrix: Solid Percent Solids: 82.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<440		4000	440	ug/Kg	₩	03/08/11 15:15	03/10/11 19:08	10
Indeno[1,2,3-cd]pyrene	<340		4000	340	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Naphthalene	<360		4000	360	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Phenanthrene	<330		4000	330	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Pyrene	<330		4000	330	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Anthracene	<300		4000	300	ug/Kg	₽	03/08/11 15:15	03/10/11 19:08	10
Dibenzofuran	<400		4000	400	ug/Kg	\$	03/08/11 15:15	03/10/11 19:08	10
Surrogata	0/	O					D	A t	D# 5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl		D	58 - 130	03/08/11 15:15	03/10/11 19:08	10
Nitrobenzene-d5	0	D	46 - 130	03/08/11 15:15	03/10/11 19:08	10
Terphenyl-d14	0	D	60 - 130	03/08/11 15:15	03/10/11 19:08	10

Client Sample ID: LOC60-01 Lab Sample ID: 680-66244-7

Date Collected: 03/02/11 16:30 **Matrix: Solid** Date Received: 03/08/11 09:25 Percent Solids: 84.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<260		3900	260	ug/Kg	*	03/08/11 15:15	03/10/11 19:35	10
Benzo[k]fluoranthene	<760		3900	760	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Acenaphthene	1700	J	3900	480	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Acenaphthylene	1300	J	3900	420	ug/Kg	₽	03/08/11 15:15	03/10/11 19:35	10
Benzo[a]anthracene	720	J	3900	320	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Benzo[a]pyrene	<610		3900	610	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Benzo[b]fluoranthene	<450		3900	450	ug/Kg	₽	03/08/11 15:15	03/10/11 19:35	10
1-Methylnaphthalene	3000	J	3900	360	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
2-Methylnaphthalene	4300		3900	450	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Chrysene	780	J	3900	250	ug/Kg	₽	03/08/11 15:15	03/10/11 19:35	10
Dibenz(a,h)anthracene	<460		3900	460	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Fluoranthene	2400	J	3900	380	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Fluorene	1300	J	3900	420	ug/Kg	₽	03/08/11 15:15	03/10/11 19:35	10
Indeno[1,2,3-cd]pyrene	<330		3900	330	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Naphthalene	1800	J	3900	350	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Phenanthrene	8500		3900	320	ug/Kg	₽	03/08/11 15:15	03/10/11 19:35	10
Pyrene	1700	J	3900	320	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Anthracene	1200	J	3900	290	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Dibenzofuran	<390		3900	390	ug/Kg	₩	03/08/11 15:15	03/10/11 19:35	10
Surrogato	0/ 5	0 ""	1::4-				Dramarad	A t	Dil 500

Surrogate	% Recovery	Qualifier	Limits	Prepar	red	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	58 - 130	03/08/11	15:15	03/10/11 19:35	10
Nitrobenzene-d5	0	D	46 - 130	03/08/11	15:15	03/10/11 19:35	10
Terphenyl-d14	0	D	60 - 130	03/08/11	15:15	03/10/11 19:35	10

Client Sample ID: LOC60-02

Lab Sample ID: 680-66244-8 Date Collected: 03/02/11 16:35

Date Received: 03/08/11 09:25 Percent Solids: 68.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<320	4700	320 ug/Kg	\	03/08/11 15:15	03/10/11 20:02	10

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66244-8 Client Sample ID: LOC60-02

Date Collected: 03/02/11 16:35 Matrix: Solid Date Received: 03/08/11 09:25 Percent Solids: 68.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<930		4700	930	ug/Kg	*	03/08/11 15:15	03/10/11 20:02	10
Acenaphthene	<590		4700	590	ug/Kg	☼	03/08/11 15:15	03/10/11 20:02	10
Acenaphthylene	<520		4700	520	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Benzo[a]anthracene	410	J	4700	390	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Benzo[a]pyrene	<750		4700	750	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Benzo[b]fluoranthene	<550		4700	550	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
1-Methylnaphthalene	930	J	4700	450	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
2-Methylnaphthalene	1100	J	4700	550	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Chrysene	540	J	4700	300	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Dibenz(a,h)anthracene	<560		4700	560	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Fluoranthene	1100	J	4700	460	ug/Kg	☼	03/08/11 15:15	03/10/11 20:02	10
Fluorene	<520		4700	520	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Indeno[1,2,3-cd]pyrene	<400		4700	400	ug/Kg	☼	03/08/11 15:15	03/10/11 20:02	10
Naphthalene	790	J	4700	430	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Phenanthrene	2200	J	4700	390	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Pyrene	740	J	4700	390	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Anthracene	390	J	4700	360	ug/Kg	₽	03/08/11 15:15	03/10/11 20:02	10
Dibenzofuran	<470		4700	470	ug/Kg	₩	03/08/11 15:15	03/10/11 20:02	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl		D	58 - 130				03/08/11 15:15	03/10/11 20:02	10
Nitrobenzene-d5	0	D	46 - 130				03/08/11 15:15	03/10/11 20:02	10
Terphenyl-d14	0	D	60 - 130				03/08/11 15:15	03/10/11 20:02	10

Client Sample ID: LOC60-03 Lab Sample ID: 680-66244-9

Date Collected: 03/02/11 16:40 **Matrix: Solid**

Date Received: 03/08/11 09:25

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<3000	3000	ma/Ka			03/18/11 13:15	

Client Sample ID: LOC62-01 Lab Sample ID: 680-66244-10

Date Collected: 03/04/11 15:40 Date Received: 03/08/11 09:25 Percent Solids: 84.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<26		390	26	ug/Kg	*	03/08/11 15:15	03/10/11 20:29	1
Benzo[k]fluoranthene	<76		390	76	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Acenaphthene	<48		390	48	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Acenaphthylene	<42		390	42	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Benzo[a]anthracene	44	J	390	32	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Benzo[a]pyrene	<61		390	61	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Benzo[b]fluoranthene	<44		390	44	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
1-Methylnaphthalene	<36		390	36	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
2-Methylnaphthalene	<44		390	44	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Chrysene	55	J	390	25	ug/Kg	\$	03/08/11 15:15	03/10/11 20:29	1
Dibenz(a,h)anthracene	<46		390	46	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Fluoranthene	65	J	390	37	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Fluorene	<42		390	42	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1

TestAmerica Savannah 04/15/2011

TestAmerica Job ID: 680-66244-2

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66244-10

TestAmerica Job ID: 680-66244-2

Matrix: Solid

Percent Solids: 84.6

Client Sample ID: LOC62-01 Date Collected: 03/04/11 15:40

Date Received: 03/08/11 09:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<33		390	33	ug/Kg	\$	03/08/11 15:15	03/10/11 20:29	1
Naphthalene	<35		390	35	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Phenanthrene	130	J	390	32	ug/Kg	\$	03/08/11 15:15	03/10/11 20:29	1
Pyrene	55	J	390	32	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Anthracene	<29		390	29	ug/Kg	₽	03/08/11 15:15	03/10/11 20:29	1
Dibenzofuran	<39		390	39	ug/Kg		03/08/11 15:15	03/10/11 20:29	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	79		58 - 130	03/08/11 15:15	03/10/11 20:29	1
Nitrobenzene-d5	69		46 - 130	03/08/11 15:15	03/10/11 20:29	1
Terphenyl-d14	87		60 - 130	03/08/11 15:15	03/10/11 20:29	1

Client Sample ID: LOC62-02 Lab Sample ID: 680-66244-11

Date Collected: 03/04/11 15:45

Matrix: Solid

Pate Received: 03/08/11 09:2	25							Percent Soli	ds: 85.1
Method: 8270C - Semivolat	ile Organic Compou	nds (GC/MS	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<26		390	26	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Benzo[k]fluoranthene	<76		390	76	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
Acenaphthene	<48		390	48	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
Acenaphthylene	<42		390	42	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
Benzo[a]anthracene	<32		390	32	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
Benzo[a]pyrene	<61		390	61	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
Benzo[b]fluoranthene	<45		390	45	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
1-Methylnaphthalene	<36		390	36	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
2-Methylnaphthalene	<45		390	45	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Chrysene	<25		390	25	ug/Kg	₽	03/08/11 15:15	03/10/11 20:56	1
Dibenz(a,h)anthracene	<46		390	46	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Fluoranthene	<38		390	38	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Fluorene	<42		390	42	ug/Kg	φ.	03/08/11 15:15	03/10/11 20:56	1
Indeno[1,2,3-cd]pyrene	<33		390	33	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Naphthalene	<35		390	35	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Phenanthrene	78	J	390	32	ug/Kg		03/08/11 15:15	03/10/11 20:56	1
Pyrene	<32		390	32	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Anthracene	<29		390	29	ug/Kg	₩	03/08/11 15:15	03/10/11 20:56	1
Dibenzofuran	<39		390	39	ug/Kg	\$	03/08/11 15:15	03/10/11 20:56	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		58 - 130				03/08/11 15:15	03/10/11 20:56	1
Nitrobenzene-d5	60		46 - 130				03/08/11 15:15	03/10/11 20:56	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		58 - 130	03/08/11 15	03/10/11 20:56	
Nitrobenzene-d5	60		46 - 130	03/08/11 15	15 03/10/11 20:56	1
Terphenyl-d14	89		60 - 130	03/08/11 15	15 03/10/11 20:56	1

Client Sample ID: LOC62-03

Date Collected: 03/04/11 15:50 Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-12

Matrix: Solid

General Chemistry

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<3000		3000		mg/Kg			03/18/11 13:15	1

Quality Control Data

Client: Weston Solutions, Inc. TestAmerica Job ID: 680-66244-2

Project/Site: Cabot Springstead & Hogtown Creek

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-196271/12-A

Matrix: Solid

Analysis Batch: 196762

Client Sample ID: MB 680-196271/12-A

Prep Type: Total/NA

Prep Batch: 196271

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<22		330	22	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Benzo[k]fluoranthene	<65		330	65	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Acenaphthene	<41		330	41	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Acenaphthylene	<36		330	36	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Benzo[a]anthracene	<27		330	27	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Benzo[a]pyrene	<52		330	52	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Benzo[b]fluoranthene	<38		330	38	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
1-Methylnaphthalene	<31		330	31	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
2-Methylnaphthalene	<38		330	38	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Chrysene	<21		330	21	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Dibenz(a,h)anthracene	<39		330	39	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Fluoranthene	<32		330	32	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Fluorene	<36		330	36	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Indeno[1,2,3-cd]pyrene	<28		330	28	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Naphthalene	<30		330	30	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Phenanthrene	<27		330	27	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Pyrene	<27		330	27	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Anthracene	<25		330	25	ug/Kg		03/08/11 15:15	03/10/11 16:53	1
Dibenzofuran	<33		330	33	ug/Kg		03/08/11 15:15	03/10/11 16:53	1

MB MB

мв мв

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	89		58 - 130	03/08/11 15:15	03/10/11 16:53	1
Nitrobenzene-d5	77		46 - 130	03/08/11 15:15	03/10/11 16:53	1
Terphenyl-d14	100		60 - 130	03/08/11 15:15	03/10/11 16:53	1

Lab Sample ID: LCS 680-196271/13-A

Matrix: Solid

Analysis Batch: 196762

Client Sample ID: LCS 680-196271/13	3-A
Prep Type: Total/I	NA

Prep Batch: 196271

Spike LCS LCS % Rec. Limits Added Result Qualifier D Analyte Unit % Rec 3320 Benzo[g,h,i]perylene 3270 ug/Kg 99 54 - 130 3320 Benzo[k]fluoranthene 3240 ug/Kg 98 57 - 130 Acenaphthene 3320 2820 ug/Kg 85 58 - 130 Acenaphthylene 3320 2990 90 ug/Kg 58 - 130 3320 ug/Kg Benzo[a]anthracene 3260 98 62 - 130 Benzo[a]pyrene 3320 3890 ug/Kg 117 68 - 131 3320 3280 99 53 - 130 Benzo[b]fluoranthene ug/Kg 1-Methylnaphthalene 3320 2710 ug/Kg 82 48 - 130 2-Methylnaphthalene 3320 2840 ug/Kg 85 55 - 130 Chrysene 3320 3390 ug/Kg 102 62 - 130 3320 98 Dibenz(a,h)anthracene 3240 ug/Kg 56 - 130 Fluoranthene 3320 3180 ug/Kg 96 62 - 130 Fluorene 3320 2990 ug/Kg 90 58 - 130 3320 Indeno[1,2,3-cd]pyrene 3310 ug/Kg 100 52 - 130 Naphthalene 3320 2780 ug/Kg 84 54 - 130 Phenanthrene 3320 3090 ug/Kg 93 61 - 130 Pyrene 3320 3180 ug/Kg 96 59 - 130 3320 Anthracene 3070 ug/Kg 92 60 - 130 Dibenzofuran 3320 2880 56 - 130

04/15/2011

ug/Kg

Project/Site: Cabot Springstead & Hogtown Creek

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-196271/13-A

Matrix: Solid

Analysis Batch: 196762

Client: Weston Solutions, Inc.

Client Sample ID: LCS 680-196271/13-A

Client Sample ID: MB 680-197612/1

Client Sample ID: LCS 680-197612/2

Prep Type: Total/NA

Client Sample ID: LOC60-03

Client Sample ID: LOC60-03

Prep Batch: 196271

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
2-Fluorobiphenyl	87		58 - 130
Nitrobenzene-d5	74		46 - 130
Terphenyl-d14	92		60 - 130

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-197612/1

Matrix: Solid

Analysis Batch: 197612

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Total Organic Carbon <3000 3000 mg/Kg 03/18/11 13:15

Lab Sample ID: LCS 680-197612/2

Matrix: Solid

Analysis Batch: 197612

LCS LCS Spike % Rec. Added Analyte Result Qualifier Unit % Rec Limits Total Organic Carbon 60000 61700 mg/Kg 103 60 - 140

Lab Sample ID: 680-66244-9 MS

Matrix: Solid

Analysis Batch: 197612

_	Sample	Sample	Spike	MS	MS				% Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Total Organic Carbon	<3000		66400	62600	-	ma/Ka	_	92	60 - 140	

Lab Sample ID: 680-66244-9 MSD

Matrix: Solid

Analysis Batch: 197612

Analysis Daton. 197012											
	Sample	Sample	Spike	MSD	MSD				% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Total Organic Carbon	<3000		66600	61000		mg/Kg		89	60 - 140	3	40

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID: 680-66244-4

TestAmerica Job ID: 680-66244-2

Matrix: Solid

Percent Solids: 81.5

Client Sample ID: SS2-01
Date Collected: 02/23/11 12:00

Date Received: 03/08/11 09:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			196271	03/08/11 15:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		10	196762	03/10/11 18:41	LH	TestAmerica Savannah

Client Sample ID: SS2-02

Date Collected: 02/23/11 12:05 Date Received: 03/08/11 09:25 Lab Sample ID: 680-66244-5

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		1	197612	03/18/11 13:15	KB	TestAmerica Savannah

Client Sample ID: SD/10-01B

Date Collected: 02/25/11 12:15 Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-6

Matrix: Solid Percent Solids: 82.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			196271	03/08/11 15:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		10	196762	03/10/11 19:08	LH	TestAmerica Savannah

Client Sample ID: LOC60-01

Date Collected: 03/02/11 16:30

Lab Sample ID: 680-66244-7

Matrix: Solid Date Received: 03/08/11 09:25 Percent Solids: 84.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			196271	03/08/11 15:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		10	196762	03/10/11 19:35	LH	TestAmerica Savannah

Client Sample ID: LOC60-02

Date Collected: 03/02/11 16:35

Lab Sample ID: 680-66244-8

Matrix: Solid

Date Received: 03/08/11 09:25 Percent Solids: 68.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			196271	03/08/11 15:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		10	196762	03/10/11 20:02	LH	TestAmerica Savannah

Client Sample ID: LOC60-03

Date Collected: 03/02/11 16:40

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	9060			197612	03/18/11 13:15	KB	TestAmerica Savannah

Lab Chronicle

Client: Weston Solutions, Inc.

Date Received: 03/08/11 09:25

Total/NA

Project/Site: Cabot Springstead & Hogtown Creek

Analysis

8270C

Lab Sample ID: 680-66244-10

TestAmerica Savannah

TestAmerica Job ID: 680-66244-2

Percent Solids: 84.6

Client Sample ID: LOC62-01 Date Collected: 03/04/11 15:40 **Matrix: Solid**

Dilution Batch Batch Batch Prepared Prep Type Type Method Run Factor Number Or Analyzed Analyst Lab Prep Total/NA 3546 196271 03/08/11 15:15 JW TestAmerica Savannah

1

Client Sample ID: LOC62-02 Lab Sample ID: 680-66244-11

196762

03/10/11 20:29

LH

Date Collected: 03/04/11 15:45 Matrix: Solid Date Received: 03/08/11 09:25 Percent Solids: 85.1

Prepared Batch Batch Dilution Batch Prep Type Type Method Run Factor Number Or Analyzed Analyst Lab Total/NA Prep 3546 196271 03/08/11 15:15 JW TestAmerica Savannah Total/NA 8270C Analysis 1 196762 03/10/11 20:56 LH TestAmerica Savannah

Client Sample ID: LOC62-03 Lab Sample ID: 680-66244-12

Date Collected: 03/04/11 15:50 Matrix: Solid

Date Received: 03/08/11 09:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	9060			197612	03/18/11 13:15	KB	TestAmerica Savannah

TestAmerica Savannah											_						14.	1111		Con rate		
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Certification Summary

Client: Weston Solutions, Inc.

Project/Site: Cabot Springstead & Hogtown Creek

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Savannah		USDA		SAV 3-04
TestAmerica Savannah	A2LA	DoD ELAP	0	0399-01
TestAmerica Savannah	A2LA	ISO/IEC 17025	0	399.01
TestAmerica Savannah	Alabama	State Program	4	41450
TestAmerica Savannah	Arkansas	Arkansas DOH	6	N/A
TestAmerica Savannah	Arkansas	State Program	6	88-0692
TestAmerica Savannah	California	NELAC	9	3217CA
TestAmerica Savannah	Colorado	State Program	8	N/A
TestAmerica Savannah	Connecticut	State Program	1	PH-0161
TestAmerica Savannah	Delaware	State Program	3	N/A
TestAmerica Savannah	Florida	NELAC	4	E87052
TestAmerica Savannah	Georgia	Georgia EPD	4	N/A
TestAmerica Savannah	Georgia	State Program	4	803
TestAmerica Savannah	Guam	State Program	9	09-005r
TestAmerica Savannah	Hawaii	State Program	9	N/A
TestAmerica Savannah	Illinois	NELAC	5	200022
TestAmerica Savannah	Indiana	State Program	5	N/A
TestAmerica Savannah	lowa	State Program	7	353
TestAmerica Savannah	Kansas	NELAC	7	E-10322
TestAmerica Savannah	Kentucky	Kentucky UST	4	18
TestAmerica Savannah	Kentucky	State Program	4	90084
TestAmerica Savannah	Louisiana	NELAC	6	30690
TestAmerica Savannah	Louisiana	NELAC	6	LA100015
TestAmerica Savannah	Maine	State Program	1	GA00006
TestAmerica Savannah	Maryland	State Program	3	250
TestAmerica Savannah	Massachusetts	State Program	1	M-GA006
TestAmerica Savannah	Michigan	State Program	5	9925
TestAmerica Savannah	Mississippi	State Program	4	N/A
TestAmerica Savannah	Montana	State Program	8	CERT0081
TestAmerica Savannah	Nebraska	State Program	7	TestAmerica-Savannah
TestAmerica Savannah	Nevada	State Program	9	GA6
TestAmerica Savannah	New Jersey	NELAC	2	GA769
TestAmerica Savannah	New Mexico	State Program	6	N/A
TestAmerica Savannah	New York	NELAC	2	10842
TestAmerica Savannah	North Carolina	North Carolina DENR	4	269
TestAmerica Savannah	North Carolina	North Carolina PHL	4	13701
TestAmerica Savannah	Oklahoma	State Program	6	9984
TestAmerica Savannah	Pennsylvania	NELAC	3	68-00474
TestAmerica Savannah	Puerto Rico	State Program	2	GA00006
TestAmerica Savannah	Rhode Island	State Program	1	LAO00244
TestAmerica Savannah	South Carolina	State Program	4	98001
TestAmerica Savannah	Tennessee	State Program	4	TN02961
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TestAmerica Savannah	West Virginia	West Virginia DHHR (DW)	3	9950C
TestAmerica Savannah	Wisconsin	State Program	5	999819810
TestAmerica Savannah	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

TestAmerica Job ID: 680-66244-2

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