Site Assessment Report -Addendum
United States Department of Agriculture
U.S. Citrus and Subtropical
Products Research Laboratory

FDEP Site #COM_334166/Project #346171

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LIST OF ACRONYMS & ABBREVIATIONS

ARS	Agricultural Research Service
ASCTL	Alternate soil cleanup target level
2-3-7-8 TCDD	2,3,7,8 Tetrachlorodibenzo-p-dioxin
BaP	Benzo(a)pyrene
bgs	Below ground surface
BTS	Badger Technical Services
CoC	Chemicals of concern
C/I	Commercial/Industrial
C/IDE	Commercial/Industrial direct exposure
ELLE	Eurofins Lancaster Laboratories Environmental
ESA	Environmental Site Assessment
FDEP	Florida Department of Environmental Protection
FTS	FTS Analytical Services
GWL	Groundwater leachability
IDW	Investigative derived wastes
MDL	Method Detection Limit
mg/Kg	Milligrams per kilogram
ng/Kg	Nanograms per kilogram
PAH	Polycyclic aromatic hydrocarbon
RDE	Residential direct exposure
SAR	Site Assessment Report
SCTL	Soil cleanup target level
SVOC	Semivolatile organic compound
SPS	SpecPro Professional Services
USCSPRL	United States Citrus and Subtropical Products Research Laboratory
USDA	United States Department of Agriculture

FLORIDA PROFESSIONAL GEOLOGIST CERTIFICATION

This Site Assessment Report Addendum for the United States Department of Agriculture U.S. Citrus and Subtropical Products Research Laboratory in Winter Haven, Florida has been reviewed by George K. Foster of Creative Environmental Solutions, Inc. (CES), Brooksville, Florida, and appears to comply with the current standards and practices in the field of geology in the State of Florida. CES's professional services have been performed using the degree of care and skill ordinarily exercised under similar circumstances by other professionals practicing in this field. The certification of geologic work contained herein applies only to the original sealed document(s), and specifically does not pertain to any copies of this document or any portion thereof including mylars, linen, sepia or other materials which can be changed by the entity or entities with whom such document(s) are filed. No other warranty, expressed or implied, is made as to the professional advice in this report.

7/31/18

George K. Foster, FL PG 403
President/Principal
Creative Environmental Solutions, Inc.

Date of signature

1.0 INTRODUCTION

1.1 Background

The United States Department of Agriculture (USDA) Agricultural Research Service (ARS) has authorized SpecPro Professional Services, LLC (SPS) to continue assessing the three (3) areas where contamination has been identified on the former United States Citrus and Subtropical Products Research Laboratory (USCSPRL) property located in Winter Haven, Florida (See Figure 1, Figure 2, and Figure 3 in Appendix I). The facility was shut down in August 2011 and it is currently vacant. The USDA is working towards resolving environmental issues at the former research laboratory and disposing the facility.

A USDA staff member conducted a Phase I Environmental Site Assessment (ESA) of the property on June 22, 2011. A summary of the findings was presented in a report dated August 11, 2011. In March 2013, Badger Technical Services (BTS) conducted a Phase II ESA at the facility that included collecting soil and concrete samples at each of the areas where hazardous substances may have been present. Areas assessed included the garage bay concrete floor, soil along fence lines and property line, soil around the former cooling tower, soil in the area around the former heating oil underground storage tank (UST), and the soil in the area where a solvent drum had been located. Soil analytical data reported in the Phase II ESA, dated September 18, 2013, verified soil samples collected around the former heating oil UST that was removed in the early 1990s did not contain any petroleum-based compounds at concentrations that exceeded Florida Department of Environmental Protection (FDEP) soil cleanup target levels (SCTL)s.

In September 2015, BTS continued to collect soil samples along the fence line to assess the areas adjacent to the fence line and property line for the presence of polycyclic aromatic hydrocarbons (PAH)s, inside the garage for the presence of 2,3,7,8 tetrachlorodibenzo-p-dioxin (2-3-7-8 TCDD), and around the cooling tower slab for the presence of chromium. Lab data indicated the extent of PAH and the chromium contamination had not been completely delineated to the extent that is less than the FDEP SCTLs. The data also indicated PAH contamination extended onto the adjacent property located on the south side of the facility. In March 2017, SPS again collected soil samples along the fence line and property boundary on the south side of the facility to delineate the extent of the PAH contamination. Evaluation of the laboratory data indicates the extent of PAH contamination resulting from the spraying and disposal of used laboratory equipment oil along the fence line and property lines had not been completely delineated and additional assessment activities were required.

SPS returned to the USCSPRL and conducted field activities from February 5, 2018 through February 9, 2018. The goal of the field work was to collect soil samples in the areas where PAH and chromium contamination had not been completely delineated. The locations where soil samples were collected included the areas adjacent to the fence line and the property line, the Salvation Army property located south of the facility, the area around the former cooling tower, and the area adjacent to the garage. Another goal was to determine the depth to the groundwater table and whether groundwater may have been impacted by any CoCs present on the facility.

The coordinates identifying the source areas for each of the three locations where contamination has been identified are as follows:

Former Cooling Tower:
North 28 Degrees, 02 Minutes, 30.25 Seconds
West 81 Degrees, 44 Minutes, 01.42 Seconds

Garage – Bay #1:
North 28 Degrees, 02 Minutes, 29.77 Seconds
West 81 Degrees, 43 Minutes, 59.90 Seconds

Oil Sprayed on Fence Line – South of USDA Building:
North 28 Degrees, 02 Minutes, 30.18 Seconds
West 81 Degrees, 44 Minutes, 01.83 Seconds

1.1.1 Recalculation of the Benzo(a)pyrene Soil Cleanup Target Level For Direct Exposure

The assessment activities conducted in the past were planned to delineate the PAH contamination along the fence line using a Benzo(a)pyrene (BaP) SCTL of 0.1 milligrams per kilogram (mg/Kg) for residential direct exposure (RDE) and 0.7 mg/Kg for commercial/industrial direct exposure (C/IDE). In February 2017, the FDEP issued a memo stating the BaP alternative soil cleanup target level (ASCTL) had been changed to 1.5 mg/Kg for RDE and to 6.4 mg/Kg for C/IDE. On May 11, 2017, the FDEP determined there was an error present in the calculations pertaining to the BaP ASCTL. A letter from FDEP, dated August 1, 2017, clarified the issue and presented revised BaP ASCTLs, based on a revised calculation by scientists at the University of Florida. The letter stated the revised and updated BaP ASCTL would be 1.0 mg/Kg for RDE and 3.1 mg/Kg for C/IDE. The BaP SCTL for Groundwater Leachability (GWL) remains at 8 mg/kg.

1.1.2 Water Wells on USDA Property

There are no monitoring wells located on the USDA property, but an irrigation well is located approximately 43 feet west of the western edge of the concrete cooling tower slab. The USDA was not able to provide any written documentation about this well, or the total depth of the well, or a water level. During fieldwork conducted by SPS in March 2017 the field team attempted to measure the depth of the irrigation well and the water level elevation, but the pump was still present inside the casing. The technician was only able to lower the water level indicator probe down to a depth of approximately 41 feet below the surface before encountering an obstruction. The water level indicator did not detect the presence of water at 41 feet, and the probe and tape were dry when brought to the surface, indicating the groundwater level was deeper than 41 feet. There is no information available suggesting which direction the groundwater may be flowing across the property.

Data provided by the Southwest Florida Management District indicates an irrigation well with an unknown owner name and address has coordinates that place the well at the northeast corner of the USDA property. Field reconnaissance of this area indicated there is no water well located at

the location in the District database. Data provided by the Southwest Florida Management District indicates the water level in the well was 26 feet. The casing depth in the database is shown to be at 196 feet and the well depth is 385 feet. It is possible the information of this unknown owner well applies to the irrigation well located on the south side of the USDA main laboratory building, as the District's database did not contain any well information pertaining to a USDA-owned irrigation well, which should have been in their database.

Information pertaining to domestic wells and irrigation wells located near the property indicate a domestic well is located approximately 500 feet northeast/east of this site. Data indicates the water level in this well is at 48 feet. The casing depth in the database is shown to be at 126 feet and the well depth is recorded as 220 feet.

1.1.3 Multiple Sources of PAH Contamination

Prior to conducting the recent field work in February 2018, the USDA assumed the source of the PAH contamination along the fence lines surrounding the facility was caused by spraying used oil along the fence. Evaluation of the laboratory data from recent samples, along with visual evidence of the areas adjacent to the fence lines, and information obtained from published scientific literature and studies, indicates there are multiple sources of the PAH contamination. Review of all the data and information collected since 2013 indicates PAH contamination resulting from used oil is minor compared the contamination originating from other sources.

The laboratory observed pieces of black material in some soil samples collected from the north and the south fence line, and laboratory analysis of this material indicates it is the source of the PAH contamination observed in multiple soil samples. Observations made by field technicians suggests the black material is asphaltic roofing material.

Evaluation of the figures documenting the distribution of the PAH contamination indicates most of the PAH contamination adjacent to the eastern fence line originated from leaching of PAH compounds from creosote treated lumber that were used as a landscaping border along the east side of the facility. The PAH contamination detected approximately seven feet east of the fence likely originated from asphaltic debris and weathered sealcoat material transported in rain water originating from the USDA parking that was deposited in the soil. A detailed discussion of the recent data and information supporting these conclusions is present in Section 4.1 of this report.

1.2 Project Objectives

Prior to initiating field work in February 2018, the USDA had determined contamination exceeding FDEP SCTLs was present along the facility fence line and property line, in the area surrounding the former cooling tower, and in the concrete slab located inside garage bay #1. The lateral extent of the contamination in the three areas had not been delineated to the point where the concentration values of the CoCs fell below FDEP RDE SCTLs. The objectives of this recent assessment are to delineate the full extent (lateral and vertical) of the soil contamination resulting from USDA activities, and to assess whether any CoCs have migrated downward and affected the shallow groundwater that may be present beneath the facility. Once analytical data verifies the extent of contamination has been delineated, a Site Assessment Report (SAR) will be

prepared and submitted to the FDEP for review and approval. If the FDEP concurs the delineation of each of the CoCs has been completed, a formal remediation plan will be prepared that describes the options available to remediate the areas of concern that exceed the SCTLs.

2.0 FIELD WORK ACTIVITIES

2.1 Assessment of the Fence Line and the Property Line for PAH Contamination

2.1.1 Assessment of Shallow Soil

SPS conducted additional soil assessment in this area to better characterize PAH impacts identified previously. From February 5, 2018 through February 9, 2018 SPS drilled fifty (50) soil borings along the fence line and the property line using a stainless-steel hand auger. Borings were installed along the northern and the eastern fence line and along the southern fence line. Some borings were installed on the Salvation Army property located south of the fence line.

The spacing along the north and east fence lines and along the south property line between many of the contaminated soil samples is significantly greater than the 15 feet recommended in FDEP guidance for assessment of shallow soils. Following discussions in 2015 between the FDEP Environmental Specialist assigned to this facility and the USDA environmental consultant, the FDEP representative agreed that a larger spacing between sample locations was acceptable, due to fact that the total linear feet of fence requiring assessment exceeded 950 feet and contamination values should be consistent along the fence, based upon the method USDA used to disburse the used oil.

Each boring was advanced to a depth of approximately six (6) feet below ground surface (bgs). Soil samples were collected from each boring at depths of 0.0 feet to 0.5 feet bgs, 0.5 feet to 2.0 feet bgs, 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs. The stainless-steel auger was decontaminated prior to collecting each soil sample. The soil samples were placed into labeled, laboratory-supplied jars and placed into ice-filled coolers. A FTS Analytical Services (FTS) laboratory employee picked up the coolers at the end of the day and hand-delivered the soil samples to the company's laboratory in Tampa. The soil samples were analyzed for PAHs (SVOCs) by Method 8270D. Each boring was backfilled with clean sand purchased from the hardware store and the investigative derived waste (IDW) generated was placed in 55-gallon steel drums for storage until the waste (cuttings) could be characterized and disposed off-site at a licensed landfill. See the Figure 10 through Figure 16 in Appendix I for locations of the soil borings.

FTS analyzed the soil samples and provided SPS with the laboratory analytical reports. The laboratory was instructed to only analyze the samples collected from depths of 0.0 feet to 0.5 feet bgs and 0.5 feet to 2.0 feet bgs, and to hold the samples collected from 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs until the analytical results from the two shallow samples have been reported. If data indicated BaP contamination is present in the sample collected at 0.5 feet to 2.0 feet bgs, at a concentration greater than the BaP RDE ASCTL, the last two samples from the boring were analyzed for PAH.

2.1.2 Evaluation of Groundwater

To determine whether the PAH contamination had the potential to migrate down to the water table a direct-push drilling rig was used to install one deep boring (FLB-242) near the location where the soil collected during previous site assessments contained the highest concentrations of PAHs. The deep boring was located west of the former cooling tower slab, and south of concrete pad located west of the former cooling tower. Information obtained from former facility employees indicates a diesel-fueled emergency generator was located on the slab. See Figures 10 through Figure 16 in Appendix I for locations of the soil borings.

The soil boring was drilled to a depth of 29 feet bgs. The initial plan was to drill the boring to a depth of 25 feet bgs, but the drilling rig was placed on top of a concrete slab and the boring was drilled to 29 feet bgs to allow collection of a soil sample from the depth of 23 feet bgs to 25 feet bgs. Soil samples were collected from the depths of 0.0 feet to 0.5 feet bgs, 0.5 feet to 2.0 feet bgs, 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs, and 6.0 feet bgs to 8.0 feet bgs, and 8.0 feet to 10.0 feet bgs. After reaching a depth of 10.0 feet bgs two soil samples were collected from each five-foot plastic sleeve until reaching the total depth of 29 feet bgs. The boring did not encounter any groundwater prior to reaching a depth of 29 feet bgs. After reaching total depth the boring was backfilled with clean sand and the IDW generated was placed in 55-gallon steel drums for storage. See the Figure 10 through Figure 16 in Appendix I for the location of boring FLB-242.

The laboratory was instructed to only analyze the samples collected from 0.0 feet bgs to 6.0 feet bgs and the sample collected from 23 feet bgs to 25 feet bgs, and to hold the samples collected from intervals between 6.0 feet and 25 feet bgs until the analytical results from the shallower samples have been reported. If data indicated contamination was present in the sample collected at 4.0 feet bgs to 6.0 feet bgs, then the laboratory would analyze additional soil samples collected from deeper intervals below 6.0 feet bgs for PAH.

2.2 Assessment of the Cooling Tower Area for Chromium Contamination

2.2.1 Assessment of Shallow Soil

SPS conducted additional soil assessment in this area to better characterize chromium impacts identified previously. On February 6, 2018 SPS drilled five (5) soil borings in the area south and west of the former cooling tower using a stainless-steel hand auger. Borings were installed along the southern fence line, and some borings were installed on the Salvation Army property located south of the fence line.

Each boring was advanced to a depth of approximately six (6) feet bgs. Soil samples were collected from each boring at depths of 0.0 feet to 0.5 feet bgs, 0.5 feet to 2.0 feet bgs, 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs. The stainless-steel auger was decontaminated prior to collecting each soil sample. The soil samples were placed into labeled, laboratory-supplied jars and placed into ice-filled coolers. A FTS laboratory employee picked up the coolers at the end of the day and hand-delivered the soil samples to the company's laboratory. The soil samples were analyzed for chromium by Method 1610C. Each boring was backfilled with clean sand and

the IDW generated was placed in 55-gallon steel drums for storage until the waste (cuttings) could be characterized and disposed off-site at a licensed landfill. See the Figure 20 and Figure 21 in Appendix I for locations of the soil borings.

The laboratory was instructed to only analyze the samples collected from depths of 0.0 feet to 0.5 feet bgs and 0.5 feet to 2.0 feet bgs, and to hold the samples collected from 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs until the analytical results from the two shallow samples have been reported. If data indicated contamination was present in the sample collected at 0.5 feet to 2.0 feet bgs, at a concentration greater than the RDE SCTL, the last two samples from the boring would be analyzed for chromium.

2.2.2 Evaluation of Groundwater

To determine whether the chromium contamination had the potential to migrate vertically down to the water table a direct-push drilling rig was used to install one deep boring (CTB-41) near the location where the soil collected during a previous assessment mobilization contained the highest chromium concentration. The deep boring was located north of the former cooling tower slab. Laboratory analysis of soil samples collected near the slab indicates chromium is present at concentrations that exceed the chromium FDEP RDE SCTL.

The soil boring was drilled to a depth of 25 feet bgs. Soil samples were collected from the depths of 0.0 feet to 0.5 feet bgs, 0.5 feet to 2.0 feet bgs, 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs, and 6.0 feet bgs to 8.0 feet bgs, and 8.0 feet to 10.0 feet bgs. After reaching a depth of 10.0 feet bgs two soil samples were collected from each five-foot plastic sleeve until reaching the total depth of 25 feet bgs. The boring did not encounter any groundwater prior to reaching a depth of 25 feet bgs. After reaching total depth the boring was backfilled with clean sand and the IDW generated was placed in 55-gallon steel drums for storage. See the Figure 20 and Figure 21 in Appendix I for the location of the deep soil boring.

The laboratory was instructed to only analyze the samples collected 0.0 feet bgs to 6.0 feet bgs and the sample collected from 23 feet bgs to 25 feet bgs, and to hold the samples collected from intervals below 6.0 feet bgs until the analytical results from the shallower samples have been reported. If data indicated contamination was present in the sample collected at 4.0 feet bgs to 6.0 feet bgs, then the laboratory would analyze additional soil samples collected from deeper intervals below 6.0 feet bgs for chromium.

2.3 Assessment of the Garage Area for 2-3-7-8 TCDD Contamination

2.3.1 Assessment of Shallow Soil

SPS conducted additional soil assessment in this area to better characterize 2-3-7-8 TCDD occurrences identified previously. In September 2015 nine (9) soil samples were collected of the shallow soil beneath the Bay #1 garage slab and laboratory analysis indicated none of samples contained 2-3-7-8 TCDD at concentrations exceeding the RDE SCTL. No soil samples were collected from outside the garage during this field mobilization. To assess if 2-3-7-8 TCDD was present in the shallow soil outside of the garage, adjacent to the Bay #1, a shallow soil boring

was drilled on the southern side of the garage, between BGS-10 and BGS-13.

The boring was advanced to a depth of approximately six (6) feet bgs. Soil samples were collected at depths of 0.0 feet to 0.5 feet bgs, 0.5 feet to 2.0 feet bgs, 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs. The stainless-steel auger was decontaminated prior to collecting each soil sample. The soil samples were placed into labeled, laboratory-supplied jars and placed into an ice-filled cooler. A FTS laboratory employee picked up the coolers at the end of the day and hand-delivered the soil samples to the company's laboratory. The soil samples were analyzed for 2-3-7-8 TCDD by Method SW8290. The boring was backfilled with clean sand and the IDW generated was placed in 55-gallon steel drums for storage until the waste (cuttings) could be characterized and disposed off-site at a licensed landfill. See the Figure 30 and Figure 31 in Appendix I for locations of the soil borings.

2.3.2 Evaluation of Groundwater

To determine whether the 2-3-7-8 TCDD contamination had the potential to migrate vertically down to the water table a direct-push drilling rig was used to install one deep boring (GSB-16) near the location where the Agent Orange had leaked in the late 1960s. The deep boring was located outside of the southwest corner of the garage.

The soil boring was drilled to a depth of 25 feet bgs. Soil samples were collected from the depths of 0.0 feet to 0.5 feet bgs, 0.5 feet to 2.0 feet bgs, 2.0 feet to 4.0 feet bgs, and 4.0 feet bgs to 6.0 feet bgs, and 6.0 feet bgs to 8.0 feet bgs, and 8.0 feet to 10.0 feet bgs. After reaching a depth of 10.0 feet bgs two soil samples were collected from each five-foot plastic sleeve until reaching the total depth of 25 feet bgs. The boring did not encounter any groundwater prior to reaching a depth of 25 feet bgs. After reaching total depth the boring was backfilled with clean sand and the IDW generated was placed in 55-gallon steel drums for storage. See the Figure 30 and Figure 31 Appendix I for the location of the deep soil boring.

The laboratory was instructed to only analyze the samples collected 0.0 feet bgs to 6.0 feet bgs and to analyze the sample collected from 23 feet bgs to 25 feet bgs, and to hold the samples collected from intervals below 6.0 feet bgs until the analytical results from the shallower samples have been reported. If data indicated contamination was present in the sample collected at 4.0 feet bgs to 6.0 feet bgs, then the laboratory would analyze additional soil samples collected from deeper intervals below 6.0 feet bgs for 2-3-7-8 TCDD.

3.0 ANALYTICAL RESULTS

3.1 Fence Line and Property Line Area – PAH Data

3.1.1 Shallow Soil Review

Multiple shallow soil samples contained the carcinogenic PAH benzo(a)pyrene (BaP) and BaP Equivalent at concentrations in excess of the RDE ASCTL and some of these same samples contained BaP and BaP Equivalent at concentrations that also exceeded the C/IDE. The results

were placed onto figures depicting the locations of the soil boring for each sample depth interval. Borings labeled "BFL-xx" were installed in September 2015, and borings labeled "FLB-xx" were installed in March 2017 and February 2018.

Figures showing BaP Equivalent values for each sample depth are presented on Figures 10 through Figure 15 in Appendix I. Cross Sections depicting the subsurface distribution of the BaP Equivalent contamination is presented in Figures 10A, 10B, and 10C in Appendix I. Tables summarizing the PAH compound sample results are presented in Table 1, Table 2, Table 3, and Table 4 in Appendix II, and copies of the FTS laboratory reports are presented in Appendix IV.
Samples exceeding the BaP Equivalent RDE ASCTL were collected within the boundaries of the USDA facility and on the adjacent property located south of the USDA facility, on property owned by the Salvation Army. The BaP Equivalent values of the samples collected on the Salvation Army property at the depth of 0.0 feet bgs to 0.5 feet bgs ranged from 0.056 to 373.3 mg/Kg, and the values of the samples collected on the Salvation Army property at the depth of 0.5 feet bgs to 2 feet bgs ranged from "None Detected" (ND) to 3.06 mg/Kg. PAH chemicals of concern were not detected in the samples collected from 2 feet to 4 feet bgs or from 4 feet to 6 feet bgs.

Samples exceeding the BaP Equivalent RDE ASCTL were collected on the south side of the USDA building and north of the property line (fence), within the boundaries of the USDA facility. The BaP Equivalent values of the samples collected on the USDA property at the depth of 0.0 feet bgs to 0.5 feet bgs ranged from "None Detected" to 14.19 mg/Kg, and the values of the samples collected at the depth of 0.5 feet bgs to 2 feet bgs ranged from "None Detected" to 1.35 mg/Kg. PAH chemicals of concern were not detected in the samples collected from 2 feet to 4 feet bgs or from 4 feet to 6 feet bgs.

Samples exceeding the BaP Equivalent RDE ASCTL were collected along the northern fence line of the facility (FLB-201 @0.0-0.5 feet) and along the east fence line (FLB-211 @0.0-0.5 feet), within the boundaries of the USDA facility. The BaP Equivalent values of the samples collected on the USDA property at the depth of 0.0 feet bgs to 0.5 feet bgs ranged from "None Detected" to 42.18 mg/Kg, and PAH chemicals of concern were not detected in the samples collected from 0.5 feet to 2 feet bgs, from 2 feet to 4 feet bgs, or from 4 feet to 6 feet bgs from any of the samples collected along the northern and the eastern fence line.

FLB-201 is located approximately 6 feet east of the USDA Building and 8 feet north of the fence. The BaP Equivalent value for the sample collected from FLB-201, at 0.0-0.5 feet, was 42.18 mg/Kg while the sample collected from FLB-200, located approximately 1-foot east of the USDA Building and 8 feet north of the fence, had a BaP Equivalent value of 0.140 mg/Kg. The sample collected from BFL-27, located approximately 1-foot east of the USDA Building and 3 feet north of the fence, had a BaP Equivalent value of 3.6 mg/Kg.

FLB-211 is located approximately 7 feet east of the eastern fence line, approximately midway between the north and south end of the fence. The calculated BaP Equivalent value for the sample collected at 0.0-0.5 feet was 1.112 mg/Kg while the BaP laboratory value of this sample was 0.919 mg/Kg. The BaP Equivalent value exceeds the ASCTL, while the BaP value is less than the BaP ASCTL. The BaP Equivalent values of the samples collected from FLB-212 and

FLB-213, located approximately 5 feet north and south of FLB-211, at depths of 0.0-0.5 feet bgs were less than the BaP Equivalent ASCTL.

At all but three sampling areas along the norther fence line, the BaP and BaP Equivalent impacts were limited to the surface samples (0 to 0.5 feet bgs). At two boring locations, these impacts persisted to 2 feet bgs, and at one boring location to 4 feet bgs. The PAH impacts were delineated vertically. The data indicates the objective of delineating PAH contamination resulting from disposal of used oil along the path of the northern fence lines and property line was accomplished.

The data indicates the impacts that exceeded the BaP Equivalent RDE ASCTL were not delineated at one location set off from the north fence line, at a location east of the fence line, and at several locations set off from the south property line. For example, delineation is incomplete to the north of FLB-201, at FLB-211 to the east, at FLB-220, and FLB-221 south of the fence line, and to the south of FLB-224, FLB-241, FLB-248 and FLB-249. The non-carcinogenic impacts were not delineated laterally at the location of FLB-221. Also, the impacts at FLB-250, near the southwest corner of the building, were not delineated to the west. Based upon the location being eight feet from the fence, the USDA believes the contamination is not due to disposal of used oil, but is likely due to the presence of minute pieces of asphaltic materials dropping from the roof overhang directly above the boring location. The analytical data from these boring locations is discussed in detail in Sections 4.1.2 and 4.1.3.

3.1.2 Data Quality Issues

The holding time for extracting soil sample for PAH is 14 days. The laboratory extracted all soil samples for PAH within the 14 days period, except for four (4) samples. This was not an oversight by the lab, as the geologist did not correctly complete the Chain of Custody form and request the samples be analyzed for PAH. He requested that the samples should be analyzed for chromium, which has a holding time of six months. Samples from boring FLB-218 and FLB-219 were collected on February 6, 2018 and were extracted on February 21, 2018, which is fifteen days after the samples were collected. The analytical data indicates the BaP Equivalent values of the two shallowest samples were less than 1.0 mg/Kg, and there were no PAH compounds detected in the other two deeper soil samples. The borings were located west of the northwest corner of the garage, inside the USDA property, north of the facility property line.

3.1.3 Groundwater Review

Groundwater was not encountered in boring FLB-242, which indicates the water table at this location is deeper than 29 feet bgs and is likely to be deeper than 41 feet bgs, as suggested from water level data collected from the irrigation well located approximately 30 feet northwest of FLB-242. A copy of the boring log of this boring is presented in Appendix VI.

The sample from 0 to 0.5 feet bgs collected in boring FLB-242 contained the carcinogenic PAHs benzo(a)anthracene, benzo(b)fluoranthene, and dibenz(a,h)anthracene at concentrations that exceeded the applicable GTCLs for GWL. The deeper samples were all clean. Multiple shallow soil samples from current and previous borings contained carcinogenic PAHs, including BaP,

benzo(a)anthracene, benzo(b)fluoranthene, and/or dibenz(a,h)anthracene, at concentrations that exceeded the applicable SCTLs for GWL. Three samples contained indeno(1,2,3-cd)pyrene at concentrations above the SCTL for GWL. All of these samples were part of the larger group of samples that contained BaP Equivalents at concentrations above the RDE ASCTL discussed above.

One sample from the 2015 event and two from the 2018 event contained non-carcinogenic PAHs, including naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, and/or phenanthrene, at concentrations that exceeded the applicable SCTLs for GWL. These were all surface (0 to 0.5 feet bgs) samples, and underlying samples (0.5 to 2 feet bgs) were clean. Soil samples were not screened with an organic vapor analyzer so there was no data collected for these samples, and as a result no correlation between the naphthalene compounds and organic vapors in the soil can be made. There were no organic vapors detected in soil samples screened during previous field investigations. No petroleum odors or visual staining or discoloration were observed at any of the sampling locations during the 2018 field investigation. The data indicates the non-carcinogenic PAH impacts were delineated vertically.

FDEP agreed in advance that if the water table is deeper than 25 feet bgs that collection and analysis of groundwater samples for PAHs would not be required.

3.2 Cooling Tower – Chromium Data

3.2.1 Shallow Soil Review

Chromium was detected in each of the five borings (CTB-42 to CTB-46) in the samples collected at the depth of 0.0-0.5 feet bgs, but the reported values were less than the chromium RDE SCTL. The samples analyzed from the depth of 0.5 feet-2.0 feet bgs were analyzed and the lab report indicates chromium was not detected at this depth in any of the five borings. The laboratory did not analyze any soil samples collected from the depths below 2.0 feet. Figures showing chromium values for each sample depth are presented on Figure 20 and Figure 21 in Appendix I. Cross Sections depicting the subsurface distribution of the chromium contamination is presented in Figure 21D and Figure 21E in Appendix I. Tables containing the chromium sample results are presented in Table 5 in Appendix II and copies of the FTS laboratory reports are presented in Appendix IV. Borings labeled “BCT-xx” were installed in March 2013 and September 2015, while borings labeled “CTB-xx” were installed in February 2018.

Lateral and vertical delineation of the chromium that exceeded the RDE SCTL of 210 mg/kg was accomplished at all locations.

3.2.2 Groundwater Review

Groundwater was not encountered in boring CTB-41, which indicates the water table at this location is deeper than 25 feet bgs, and is likely to be deeper than 41 feet bgs as suggested from water level data collected from the irrigation well. A copy of the boring log of this boring is presented in Appendix VI.

The samples collected between the surface and 6 feet bgs consisted of sand. The sample collected at 23 feet-25 feet bgs consisted of sandy clay. The laboratory analyzed the samples collected from 0.0-0.5 feet bgs, 0.5 feet-2.0 feet bgs, 2.0 feet-4.0 feet bgs, 4 feet-6 feet bgs, and 23 feet-25 feet bgs for chromium. The value for chromium was 104 mg/Kg in the sample collected from 0.0 feet to0.5 feet bgs, which is greater than the SCTL for GWL of 38 mg/L. The chromium SCTL for GWL was not exceeded in the deeper samples.

Multiple shallow soil samples from current and previous borings contained chromium at concentrations that exceeded the SCTL for GWL, suggesting these compounds have the potential to leach to the aquifer at concentrations that would exceed the applicable GCTLs. These samples include all the samples that also exceeded the RDE SCTL discussed above.

Almost all impacted soil is restricted to the 0 to 0.5 feet bgs interval, though impacts persisted to a depth of 6 feet at the location of BCT-29. The impacts were delineated vertically at all locations except BCT-29, where the bottom sample (4 to 6 feet bgs) contained 39.9 mg/kg chromium.

The chromium in the soil that exceeded the SCTL for GWL was not delineated laterally in any direction except to the east and southeast. Additional delineation to the north is not possible due to the location of the laboratory building.

FDEP agreed in advance that if the water table is deeper than 25 feet bgs that collection and analysis of groundwater samples for chromium would not be required.

3.3 Garage Bay #1: 2-3-7-8 TCDD Data

3.3.1 Shallow Soil Review

A soil boring (GSB-17) was drilled to a depth of 6 feet bgs with a hand auger adjacent to the south side of the garage bay approximately 9 feet west of the southeast corner of the garage (Appendix I, Figure 30 and Figure 31). The soil samples collected from this boring were submitted to FTS, and FTS subcontracted the analysis for 2-3-7-8 TCDD to Eurofins Lancaster Laboratories Environmental (ELLE). The laboratory analyzed the samples collected from 0.0-0.5 feet bgs, 0.5 feet-2.0 feet bgs, 2.0 feet-4.0 feet bgs, 4 feet-6 feet bgs. The 2-3-7-8 TCDD value of the sample collected from 0.0-0.5 feet bgs was 0.0500JQ nanograms per kilogram (ng/Kg) while 2-3-7-8 TCDD was not detected in the samples collected from 0.5 feet to 6 feet bgs. None of the values reported in this boring exceeded the RDE SCTL which is 7 ng/Kg. Tables containing the 2-3-7-8 TCDD sample results are presented in Table 6 in Appendix II and copies of the FTS laboratory reports are presented in Appendix IV. Borings labeled “BGS-xx” were installed in September 2015 while borings labeled “GSB-xx” were installed in February 2018.

None of the soil samples collected previously contained 2-3-7-8 TCDD at concentrations above the RDE SCTL. No soil impacts by 2-3-7-8 TCDD have been identified. Previous work identified 2-3-7-8 TCDD at concentrations as high as 69 ng/Kg in samples of the concrete slab, well above the RDE SCTL, but the SCTL does not apply to concrete.

3.3.2 Groundwater Review

Groundwater was not encountered in this boring, which indicates the water table is deeper than 25 feet bgs, and is likely to be deeper than 41 feet bgs as suggested from water level data collected from the irrigation well. A copy of the boring log of this boring is presented in Appendix VI.

None of the samples from boring GSB-16 contained 2-3-7-8 TCDD at concentrations above the SCTL for GWL of 3,000 ng/Kg. None of the samples collected previously contained 2-3-7-8 TCDD at concentrations above the SCTL for GWL. The 2-3-7-8 TCDD sample data are summarized Table 6 in Appendix II.

Based on the lack of any soil impacts by 2-3-7-8 TCDD, groundwater sampling for this compound would not normally be required. FDEP agreed in advance that if the water table is deeper than 25 feet bgs that collection and analysis of groundwater samples for 2-3-7-8 TCDD would not be required.

4.0 DISCUSSION and RECOMMENDATIONS

4.1 PAH Contamination

4.1.1 Groundwater Assessment Site-Wide

Multiple shallow soil samples contained carcinogenic PAHs, including BaP, benzo(a)anthracene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene at concentrations that exceeded the applicable SCTLs for GWL. The soils impacted by carcinogenic PAHs persist to a maximum depth of 4 feet bgs and have been delineated vertically where investigated but not laterally.

Three surface (0 to 0.5 feet bgs) samples contained non-carcinogenic PAHs, including naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, and/or phenanthrene, at concentrations that exceeded the applicable SCTLs for GWL. The soils impacted by non-carcinogenic PAHs persist to a maximum depth of 0.5 feet bgs and have been delineated vertically where investigated but not laterally.

The water table in this area is at least 29 feet deep and may be deeper than 41 feet. Spraying oil along the fence line ceased in the early 1980s, indicating the soil impacts occurred at least 35 years ago. The great depth of the groundwater and the age of the release, coupled with the finding that PAHs that exceeded SCTLs for GWL do not exist below 4 feet bgs, suggests the potential for groundwater impacts are minimal.

Additional delineation of PAHs that exceed SCTLs for GWL is not warranted and groundwater sampling is not warranted.

4.1.2 Soil Along the Northern and Eastern Fence Line

The USDA originally assumed all the PAH contamination along the north and the east side fence lines was solely the result of spraying used oil along the fence. Visual information collected, and analytical data obtained during the field work conducted in February 2018 indicates the PAH contamination in the shallow soil in some areas on the north and east side of the facility originated from sources other than used oil. The USDA believes the sample analytical data indicates PAH contamination resulting from the application of used oil along the north and the east side of the property has been delineated to the BaP RDE ASCTL. Delineation was not accomplished at the locations of FBL-201 (0.0 to 0.5 feet bgs interval) and BLB-211 (0.0 to 0.5 feet bgs interval), but these locations are believed to be beyond the area sprayed with used oil, as explained below.

Evaluation of the BaP Equivalent values calculated for two soil samples collected northeast of the USDA building appear to be anomalous. FLB-201 is located approximately 6 feet east of the USDA Building and 8 feet north of the fence (PAH source). The BaP Equivalent value for the sample collected from FLB-201 at 0.0-0.5 feet was 42.18 mg/Kg, while the sample collected from FLB-200, located approximately 1-foot east of the USDA Building and 8 feet north of the fence, had a BaP Equivalent value of 0.140 mg/Kg. The sample collected from BFL-27, located approximately 1-foot east of the USDA Building and 3 feet north of the fence, had a BaP Equivalent value of 3.6 mg/Kg. The data suggests the contamination detected in BFL-27 and FLB-201 is not the result of applying used oil along the fence line, but likely originated from other sources, such as petroleum-based roofing materials, paving work on the adjacent road, or another unknown activity that is not related to spraying/applying used oil along the fence line.

Additional laboratory analysis and visual examination of sample material from FLB-201 verifies this conclusion. The geologist and field technician noted the presence of small, hard black substances in the soil at several locations. The geologist requested that the laboratory examine the contents of the sample from FLB-201, at 0.0-0.5 feet bgs, to see if the soil sample also contained fragments of the unknown black substance. The black foreign material was identified in the sample from FLB-201 at 0.0-0.5 feet bgs. The black material was isolated and analyzed and the laboratory report indicated the BaP value was 167 mg/Kg, while the total original total soil sample from this interval contained 26.2 mg/Kg. It appears the PAH compounds detected in the soil sample originated from the foreign material in the soil. Photograph #1 and Photograph #2 in Appendix III show the material collected and analyzed. The analytical data from the samples containing the black debris is summarized in Table 2 in Appendix II, and the laboratory report is presented in Appendix IV.

The PAH contamination in soil samples collected from the area adjacent to the concrete flagpole base, north of the fence and boring BFL-13, indicated the PAH CoCs migrated vertically to a depth of 4.0 feet bgs in this area. PAH contamination was not detected in the soil collected from the 4.0 feet to 6.0 feet bgs in the borings adjacent to the concrete flagpole base. Soil analyzed from nearby borings contained low concentrations of PAH CoCs, verifying the lateral and vertical extent of the PAH contamination in this area has been delineated to values below the BaP RDE ASCTL.

FLB-211 is located approximately 7 feet east of the eastern fence line, approximately midway between the north and south end of the fence. The BaP Equivalent value for the sample collected from FLB-211 at 0.0-0.5 feet bgs was 1.112 mg/Kg and the BaP value of this sample was 0.919 mg/Kg. The BaP Equivalent value exceeds the RDE ASCTL, but the reported BaP value is less than the BaP RDE ASCTL. The BaP Equivalent values of the samples collected from FLB-212 and FLB-213, located 5 feet north and south of FLB-211, were less than the BaP Equivalent RDE ASCTL.

Information obtained during the field work conducted in February 2018 indicates the PAH contamination in the shallow soil on the east side of the facility originated from sources other than used oil. Treated railroad ties are located adjacent to the fence on the east side of the facility, just inside the fence and numerous soil samples were collected within one foot of the railroad ties. Photograph #37, Photograph #38, Photograph #39, and Photograph #40 in Appendix V show the relationship between the fence and the railroad ties. A review of the published scientific literature available on the internet shows there is evidence indicating PAH compounds can leach from creosote treated railroad timbers and contaminate the shallow soil located adjacent to the railroad timbers. The analytical data from the USDA facility suggest the elevated PAH contamination values observed in the soil samples originated primarily from leaching of the PAH compounds from the landscaping timbers, and not from the oil sprayed along the fence line. Review of Figure 10 in Appendix I substantiates this conclusion. The figure shows nearly every sample collected on the east side of the facility, near the railroad ties, has elevated concentrations of PAH compounds, while soil samples collected south of the metal frame shed and west of the garage, along the fence line and the property line, contain very low concentrations of PAH compounds, usually below BaP RDE ASCTLs. Additionally, nearly all soil samples collected south of the USDA main building (north of the fence line), and north of the fence contain low concentrations of PAH compounds, and railroad ties were not placed at these locations.

This laboratory data suggests the PAH compounds detected in the samples from BFL-38 and FLB-211 at 0.0 feet-0.5 feet bgs also may have originated from PAH compounds that were transported in the rain water flowing from the parking lot. The water has been flowing from the parking lot and onto the grass since the late 1950s, when the facility was constructed. It is possible the PAH compounds detected in the samples originated from used motor oil that had dripped from parked cars and then was transported by rain on to the grass over time. It is documented in the literature that PAH compounds are often present at elevated concentrations in the soil located adjacent to parking lots and streets due to transportation of petroleum compounds from the roads and parking lots during rain events. Copies of sections extracted from several articles documenting these conclusions are included in Appendix IX.

Observations of the area where BFL-38 and FLB-211 is located indicates rainwater from the USDA property parking area and driveways flows toward the east, across the asphalt parking lot, and discharges onto the grassy area east of the fence. A gap in the railroad ties bordering the landscape planters that run parallel to the eastern fence, north and south of FLB-211, allows rainwater from the facility to flow out of the parking lot through a low spot and on to the grassy area where FLB-211 is located. The PAH contamination east of the fence may also have originated for weathering and leaching of asphaltic sealcoating that has been applied on the

surfaces of the parking lots. Photographs #30 through Photograph #36 show the weathered sealcoat on the parking lot. Information in the literature indicates soil samples collected adjacent to parking lots where sealcoating has been applied often contain PAH compounds at concentrations that exceed the regulatory SCTLs. Copies of the literature discussing this information is presented in Appendix IX.

The data from other soil borings located along the eastern fence line indicates the minor amount of PAH contamination originating from the spraying of oil along the fence is insignificant compared to other sources of contamination. The shallow soil at the facility consists of poorly sorted sand, devoid of clay. Used oil that was applied up until the early 1980s would likely have migrate vertically, and not migrate horizontally in the sandy soil. Laboratory data from samples collected at the facility substantiate this theory, as very few samples collected from 0.5 feet to 2.0 feet bgs contain PAH CoCs, even though the shallow sample collected from 0.0 feet to 0.5 feet bgs contains BAP at concentrations exceeding the RDE ASCTL.

The USDA believes lateral extent of the PAH contamination along the north and the east fence lines resulting from spraying oil has been delineated to the BaP RDE ASCTL and no further assessment is necessary. The elevated BaP values observed in the shallow sample in BFL-38 and in FLB-211 is likely from a combination of sources, which include transport of PAH CoCs originating from hydrocarbon spills in the parking lot, leaching of PAH compounds from sealcoating applied on the parking lot, from transport of sealcoating dust on to the soil during storm water flow, and leaching of PAH compounds from creosote-treated railroad ties. This conclusion regarding multiple sources of the PAH contamination indicates it is not necessary to conduct any additional work to delineate the extent of the PAH contamination along the norther or eastern fence line of the facility, as the contamination detected three feet and seven feet from the fence is not the result of applying oil along the fence.

4.1.3 Soil Adjacent to the Southern Fence Line – Property Line

The BaP Equivalent values of some shallow samples collected in March 2018, from borings located in the area south of the main USDA laboratory building, were found to exceed the BaP Equivalent RDE ASCTL. Some of the exceedances were in samples from soil borings located north of the fence line (property boundary) and some from borings located south of the fence line on Salvation Army property. See Figure 14 and Figure 15 in Appendix I for a detailed view of this area. The PAH impacts associated with the application of used oil along the fence line have been delineated laterally and vertically, except at the location of FLB-221. The contamination in FLB-221 and in other borings in this area is believed to be associated with other sources, as explained below, and have not been delineated.

Evaluation of the BaP Equivalent values calculated for soil samples collected south of the USDA property line, on Salvation Army property, appear to be anomalous. The data indicates BaP Equivalent values in the soil on the south side of the fence increase with the increase of distance from the fence line (assumed source of the PAH contamination). Data indicates PAH Equivalent values in the soil in samples collected north of the fence decrease with the increase of distance from the fence line. If the source of the contamination was applying (spraying) used oil to the areas along the fence to suppress weed growth, the PAH concentrations in the samples south of

the fence should decrease with increased horizontal distance from the fence. The data suggests the opposite relationship between distance and concentration of the PAH contamination.

While drilling the borings on the Salvation Army property the field technician and geologist noted the presence of a small piece of a hard, black substance in the grass and the shallow soil. The area where the substance was found was between the fence and the building located on the Salvation Army property. It is possible the black material could be a piece of petroleum-based roofing material (tar) originated from the roof of the adjacent Salvation Army building, and it may have fallen off when the roof was repaired or replaced.

The SPS geologist spoke with Mr. Chad Bechtold, the FTS VP of Client Services, about the high PAH vales reported in several samples. The geologist told Mr. Bechtold he noted a small black piece of material on the surface on the Salvation Army property, and he thought the material could be roofing material. The geologist requested that the laboratory technician pull the sample jar from sample FLB-221 @ 0.0-0.5 feet bgs and examine the contents of the jar for any unusual material. The technician reported he found a piece of black material, about a one-half centimeter in diameter. The technician placed the material into methylene chloride, a solvent, and the material dissolved. Mr. Bechtold informed the SPS geologist that the black material did not dissolve in water, but it would dissolve in solvent. If small pieces of the black material were collected in the shallow surface samples and analyzed with the soil samples, the PAH concentration of the sample may be elevated, mainly due to the presence of this foreign material (asphaltic roofing material?) that was dissolved in the soil sample material.

The SPS geologist requested that the laboratory examine the contents of five (5) additional sample jars to see if the soil samples that contained high concentrations of PAH compounds also contained fragments of the unknown black substance. The laboratory conducted additional sample processing and analysis on the shallow samples (0.0 feet bgs to 0.5 feet bgs) collected from FLB-221, FLB-223, FLB-224, FLB-227, and FLB-241. The locations that were selected for additional evaluation were picked because the PAH results in these borings were anomalous, as the samples collected closest to the source area (fence) contained lower concentrations of PAH compounds than the samples collected five to ten feet south of the fence.

The FTS laboratory technicians examined the contents of each of the selected sample jars and placed the soil sample on a screen sieve to separate the sand sample from the larger pieces of foreign material. The technicians then removed the larger pieces of material that did not pass through the screen and processed the material separately from the sand that had passed through the screen. The technician noted that the black material was brittle and could easily be broken into smaller pieces. The lab technicians collected pieces of the black material and processed the material in a similar manner as a normal soil sample. They dissolved the foreign material in methylene chloride and analyzed the sample for PAH. The technicians diluted two of these samples to a concentration that would not damage the mass spectrometer when it was analyzed. Because the total sample material weight was not as high as a normal soil sample weight the Method Detection Limit (MDL) was higher than the MDL for a normal soil sample that contained a greater amount of sample material.

Photographs of the black material collected and analyzed are presented in Appendix III. Evaluation of the laboratory report indicated four samples of foreign material located on the Salvation Army property contained high concentrations of PAH compounds, and the values of BaP exceeded the BaP value of the original shallow soil sample. The BaP values of the foreign material samples are as follows: FLB-221 - 3,360 mg/Kg; FLB-224 - 244U mg/Kg; FLB-227 - 1,780 mg/Kg; and FLB-241 - 73 mg/Kg. The analytical data from the samples of the black debris is summarized in Table 2 in Appendix II, and the laboratory report in presented in Appendix IV. Photograph 3 through Photograph 7 in Appendix III show the material collected and analyzed.

4.2 Chromium Contamination Adjacent to the Cooling Tower

4.2.1 Groundwater Assessment

Multiple shallow soil samples contained chromium at concentrations that exceeded the SCTL for GWL. The soils impacted by chromium at concentrations that exceed the SCTL for GWL persist to a maximum depth of 6 feet bgs. The impacts have been delineated vertically at all but one location and have not been delineated laterally.

The water table in this area is at least 29 feet deep and may be deeper than 41 feet. The soil impacts occurred at least 35 years ago. The great depth of the groundwater and the age of the release, coupled with the finding that chromium that exceeded SCTLs for GWL doesn't exist below 6 feet bgs (with the possible exception of a single location), suggests the potential for groundwater impacts are minimal.

Additional delineation of chromium that exceeds the SCTL for GWL is not warranted. Groundwater sampling is not warranted.

4.2.2 Shallow Soil Assessment

Multiple shallow soil samples contained chromium at concentrations that exceeded the SCTL for RDE. The soils impacted by chromium at concentrations that exceed the SCTL for RDE persist to a maximum depth of 2 feet bgs. The impacts have been delineated vertically and laterally. All impacts are confined to the site. No additional soil assessment is warranted.

4.3 2-3-7-8 TCDD Contamination Adjacent to the Garage

4.3.1 Groundwater Assessment

None of the soil samples contained 2-3-7-8 TCDD at concentrations that exceeded the SCTL for GWL. The water table in this area is at least 29 feet deep and may be deeper than 41 feet. The spill/leak of the Agent Orange that contained the 2-3-7-8 TCDD occurred at approximately 40 years ago. The great depth of the groundwater and the age of the release, coupled with the finding that the SCTL for GWL was not exceeded, suggests the potential for groundwater impacts are minimal. Additional delineation of 2-3-7-8 TCDD is not warranted. Groundwater sampling is not warranted.

4.3.1 Shallow Soil Assessment

None of the soil samples contained 2-3-7-8 TCDD at concentrations that exceeded the SCTL for RDE. Samples of the concrete slab inside the building did contain 2-3-7-8 TCDD at concentrations that exceeded the SCTL for RDE, but concrete is not regulated like soil.

5.0 CONCLUSIONS

5.1 PAH Contamination Along the Fence Line: North Side

The vertical and horizontal extent of the PAH contamination attributed to the application of the used oil along the fence line has been adequately delineated and it does not extend beyond the northern property boundary. The USDA will evaluate the options available to determine the best method for addressing the PAH contamination resulting from application of used oil, which may include remediation of the contamination, removal of the contamination, or enacting engineering and institutional controls on the facility. The USDA will not initiate any further actions in areas where contamination was not the result of activities conducted by USDA staff.

5.2 PAH Contamination Along the Fence Line: East Side

The vertical and horizontal extent of the PAH contamination attributed to the application of the used oil along the east fence line has been adequately delineated and it does not extend beyond the east property boundary. Laboratory data pertaining to the soil samples collected on the east side of the USDA facility, adjacent to the fence, achieved the goal of delineating the BaP contamination resulting from the spraying of used oil to values less than the BaP Equivalent RDE ASCTL. Two samples collected three feet and seven feet east of the fence did exceed the BaP Equivalent RDE SCTL, but assessment of adjacent soil samples in this area indicated the source of the contamination was not the used oil. It is likely the source of the PAH contamination detected was from a combination of sources, including leaching of creosote-treated landscape railroad ties, weathered sealcoating dust, asphalt debris, and spilled hydrocarbons (motor oil) that were transported by the rain water flowing from the parking lot and deposited in the soil east of the fence. The USDA will not initiate any further actions in areas where contamination was not the result of activities conducted by USDA staff.

5.3 PAH Contamination Along the Fence Line: South Side

The vertical and horizontal extent of the PAH contamination attributed to the application of the used oil along the south fence line has been adequately delineated and some PAH extends just offsite to the south, just slightly beyond the fence line. The USDA will evaluate the options available and determine the best method for addressing the PAH contamination resulting from disposal of used oil, which may include remediation of the contamination, removal of the contamination from the small area on Salvation Army property immediately adjacent to the fence, or enacting engineering and institutional controls on the facility.

The USDA will not initiate any further actions in areas along and adjacent to the southern fence line where contamination was not the result of activities conducted by USDA staff. The USDA did not conduct any activities involving the use asphaltic materials in the area on or adjacent to the southern fence line and property line, and the USDA will not be responsible to remove any of the PAH contamination located on the Salvation Army property where the PAH contamination in the soil is due to the presence of small pieces of asphaltic roofing material. Numerous published scientific studies have concluded that asphaltic material in the soil does not present a risk to the environment or to people, and does not require removal, as it is inert.

5.4 Chromium Contamination

The vertical and horizontal extent of the chromium contamination that exceeds the RDE SCTL attributed to the past activities at the cooling tower has been adequately delineated and it does not extend offsite. The USDA to will evaluate the options available and determine the best method for addressing the chromium contamination, which may include remediation of the contamination, removal of the contamination, or enacting engineering and institutional controls on the facility.

5.4 2-3-7-8 TCDD Contamination

2-3-7-8 TCDD was not found in the soil above SCTLs so remediation is not required. The concrete that contains 2-3-7-8 TCDD is not regulated. The USDA to will evaluate the options available and determine the best method for addressing the concrete contaminated with 2-3-7-8 TCDD, which may include removal and disposal of the concrete, encapsulation, or enacting engineering and institutional controls on the garage slab.

6.0 WASTE DISPOSAL

6.1 Soil Disposal – Investigative Derived Waste

On March 15, 2018, Clark Environmental picked up eight (8) 55-gallon drums containing soil cuttings (IDW). Mr. Lloyd French, a SPS Senior Program Manager, was present at the facility and he signed the Waste Manifest as the agent representing the U.S Department of Agriculture. Clark Environmental informed SPS the contents of the soil drums will be dumped at Clark Environmental, Inc. in Mulberry, Florida, processed, and then be co-mingled with other approved nonhazardous soils. The bulk load will be ultimately disposed in a lined FDEP approved landfill. A copy of the signed waste manifest is presented in Appendix VII.

APPENDIX I

FIGURES

Figure 1 - Location of Citrus and Subtropical Products Research Laboratory

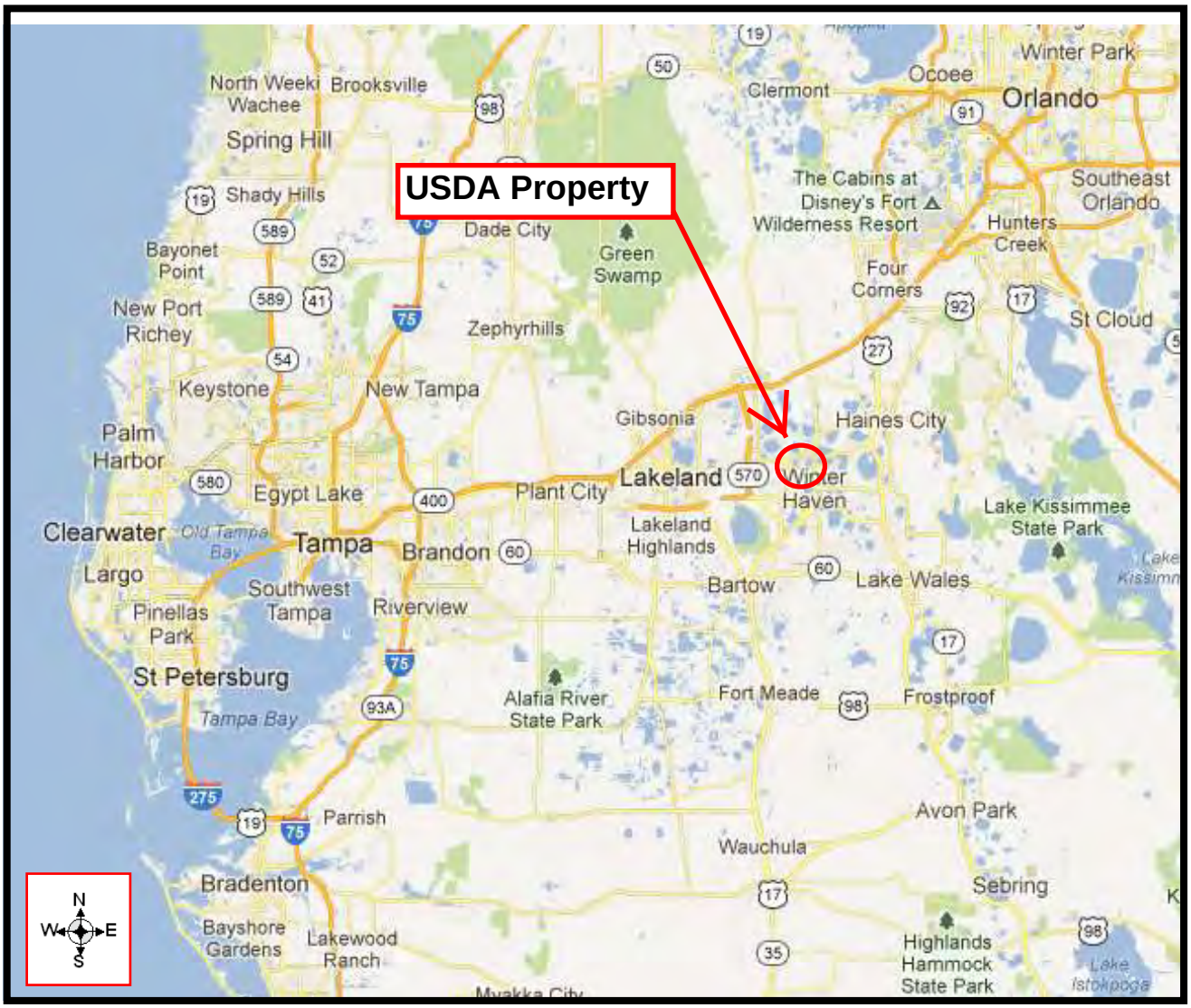
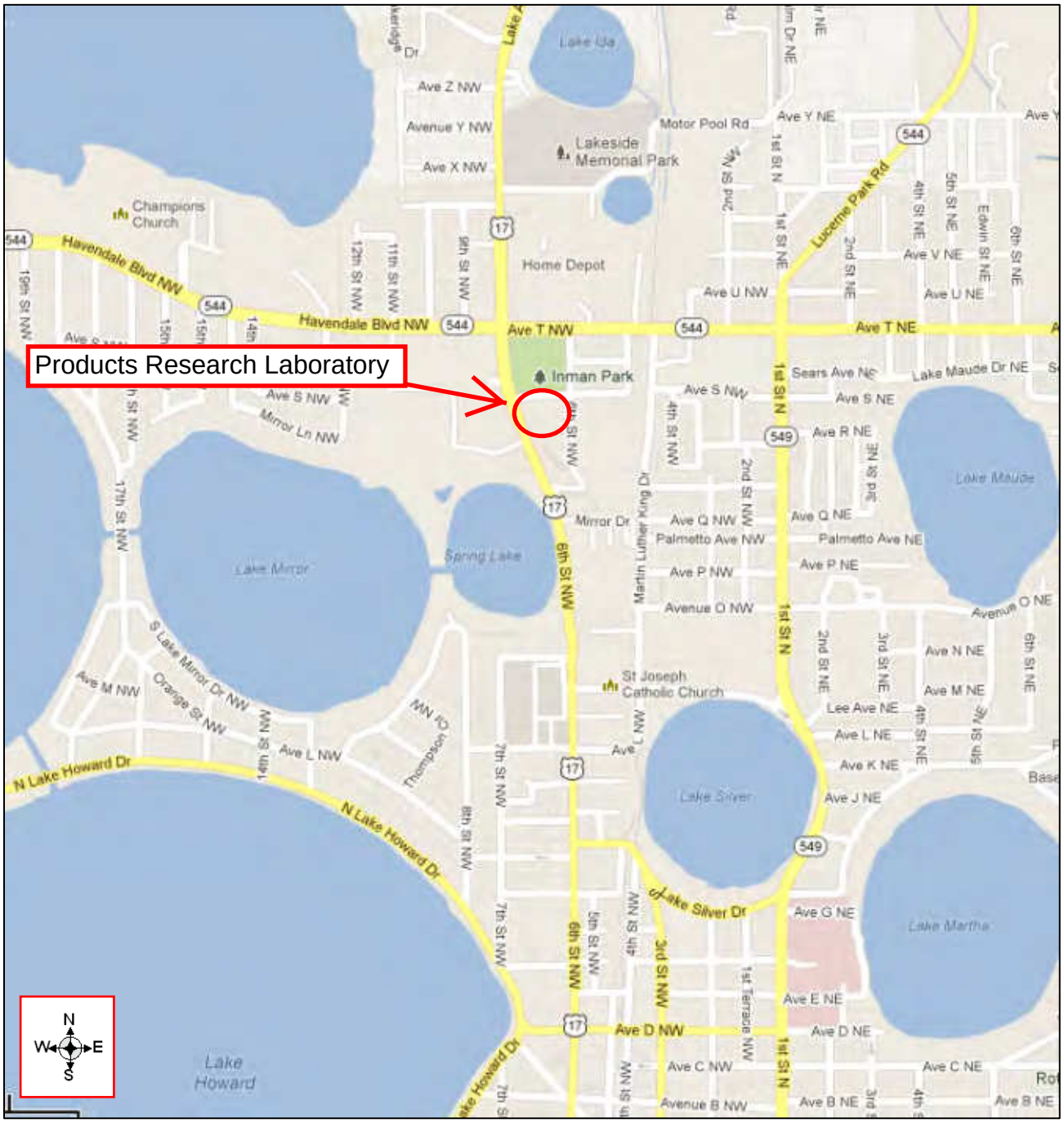
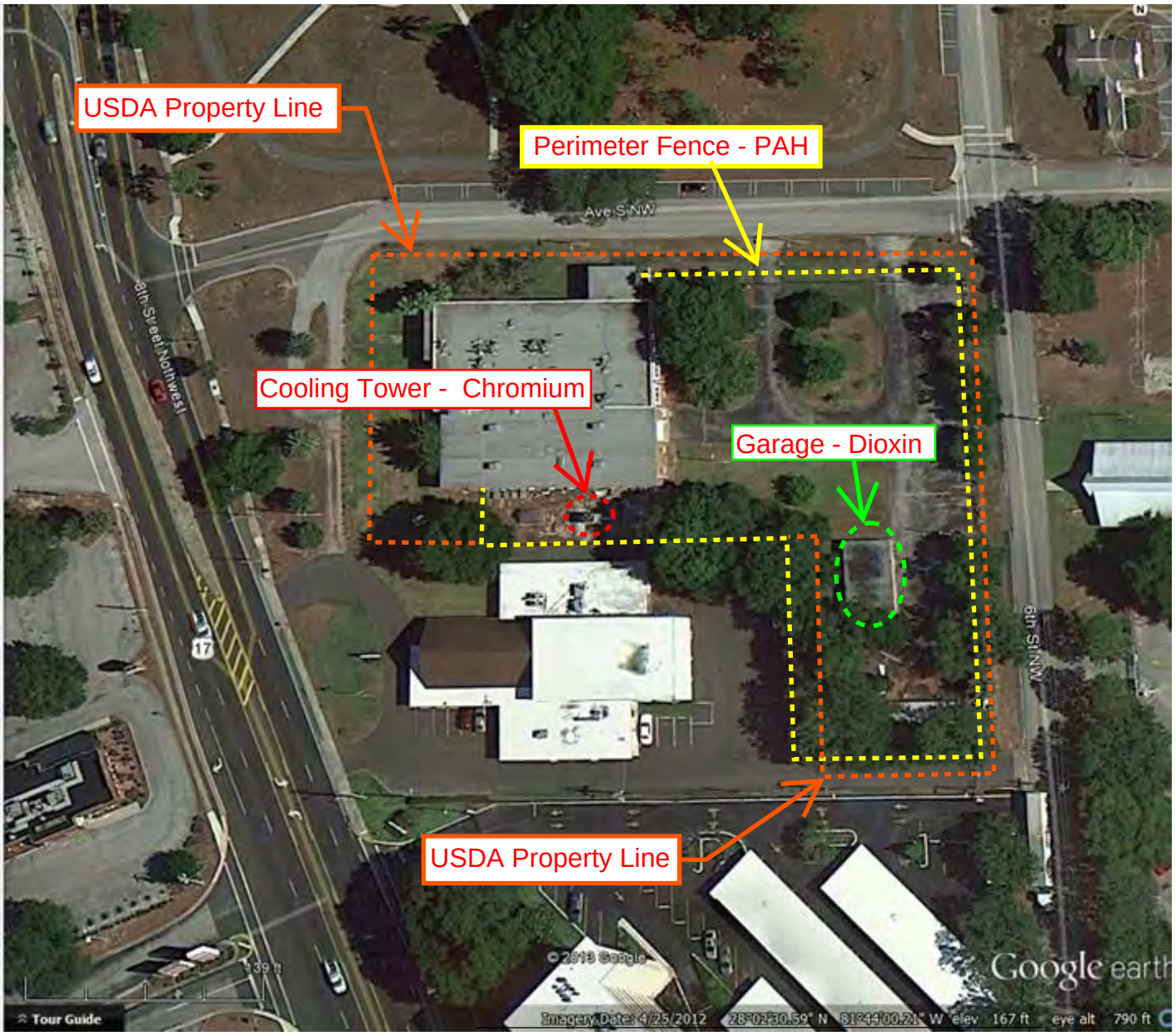


Figure 2 - Map of Citrus and Subtropical Products Research Laboratory





0 140

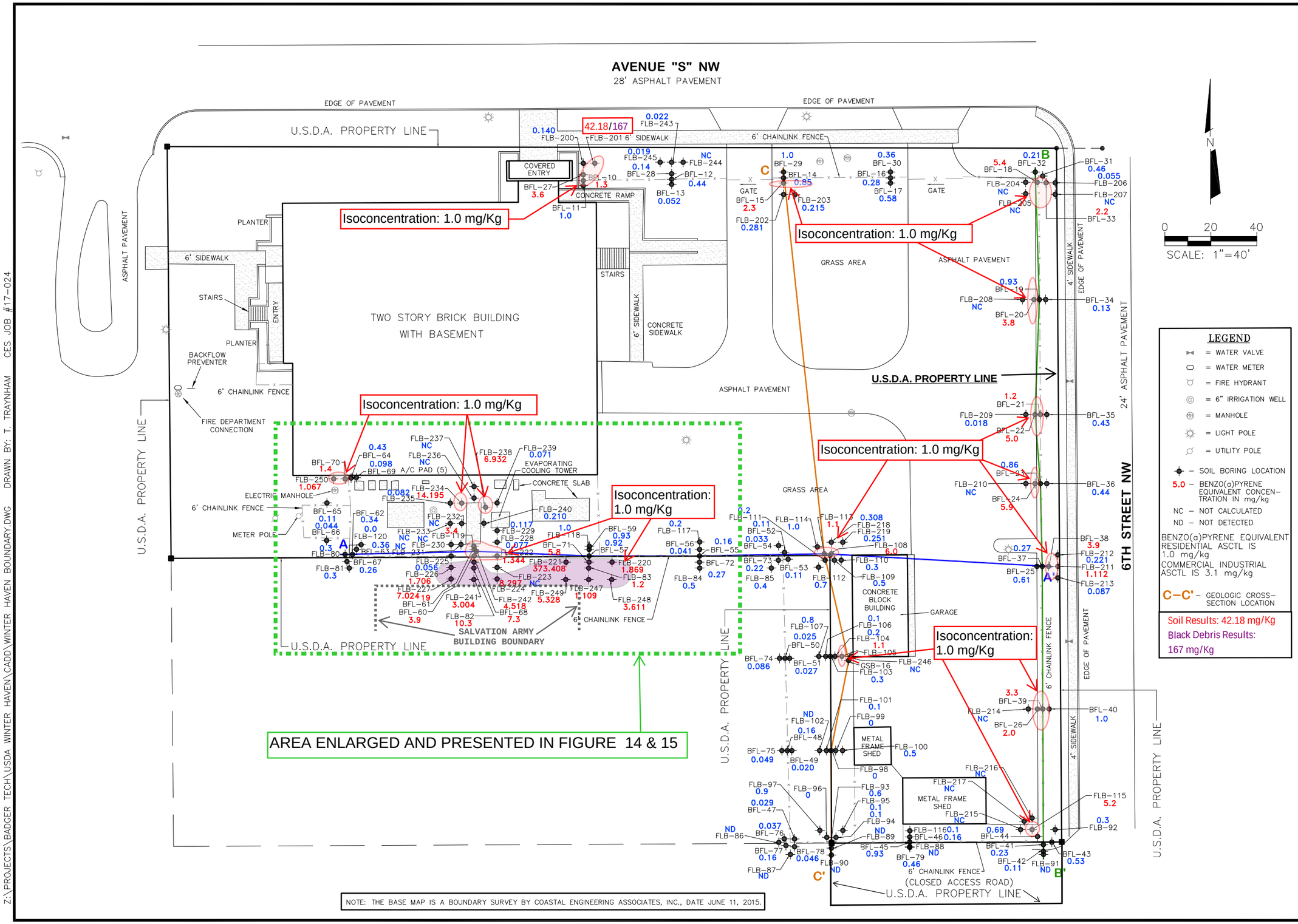
Scale (Feet)

N
W E
S

USDA - USCSPRL
Winter Haven, Florida

Figure 3
Contaminated Areas

PERIMETER FENCE LINE and PROPERTY BOUNDARY

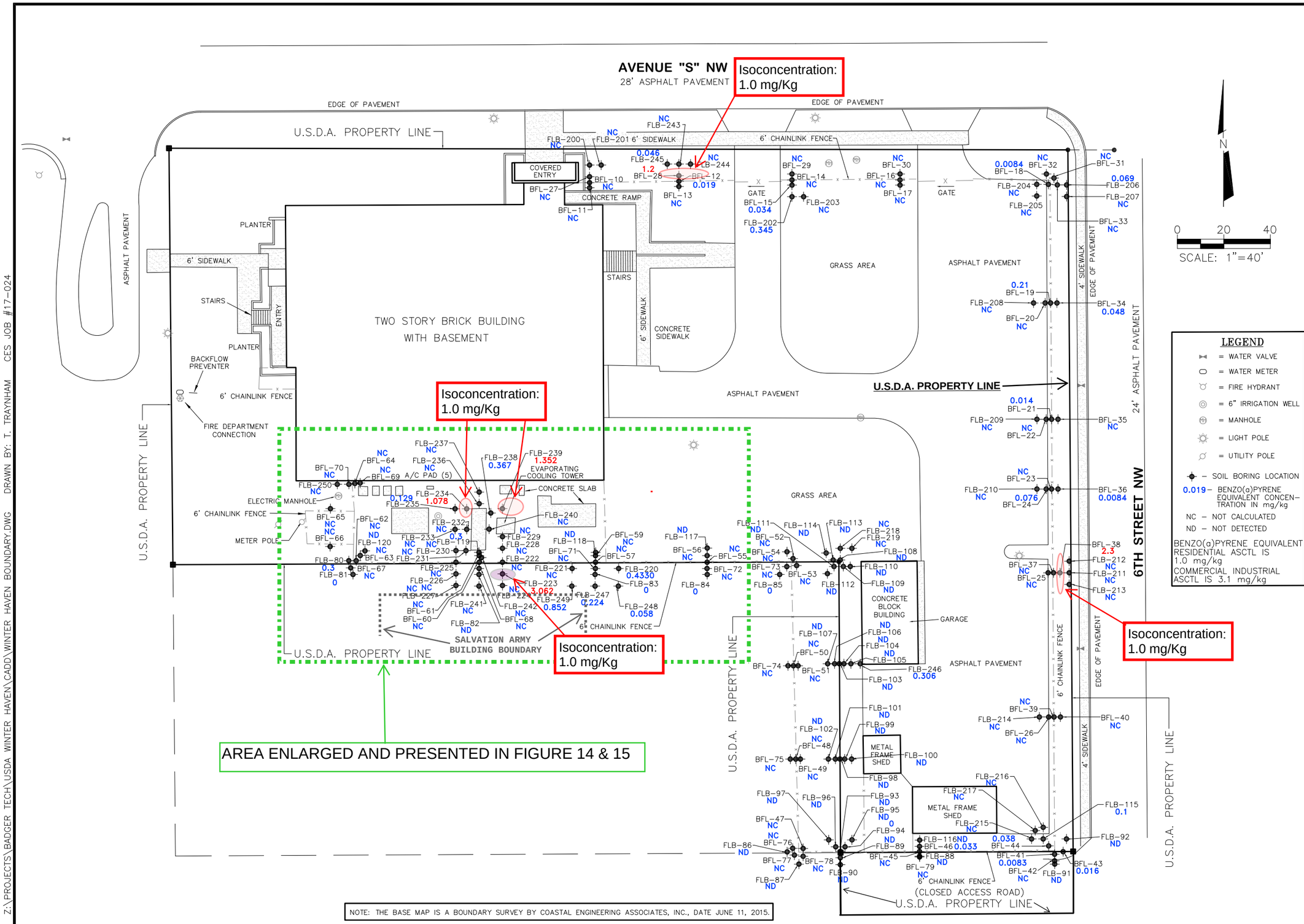


NOTE: THE BASE MAP IS A BOUNDARY SURVEY BY COASTAL ENGINEERING ASSOCIATES, INC., DATE JUNE 11, 2015.

FIGURE 10
SOIL BENZO(a)PYRENE EQUIVALENT CONCENTRATION MAP
(0'-0.5' BLS)
FENCE LINE
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

United States Department of Agriculture

Z:\PROJECTS\BADGER TECH\USDA WINTER HAVEN\CADD\WINTER HAVEN BOUNDARY.DWG DRAWN BY: T. TRAYNHAM CES JOB #17-024



NOTE: THE BASE MAP IS A BOUNDARY SURVEY BY COASTAL ENGINEERING ASSOCIATES, INC., DATE JUNE 11, 2015.

FIGURE 11
SOIL BENZO(a)PYRENE EQUIVALENT CONCENTRATION MAP
(0.5'-2' BLS)
FENCE LINE
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

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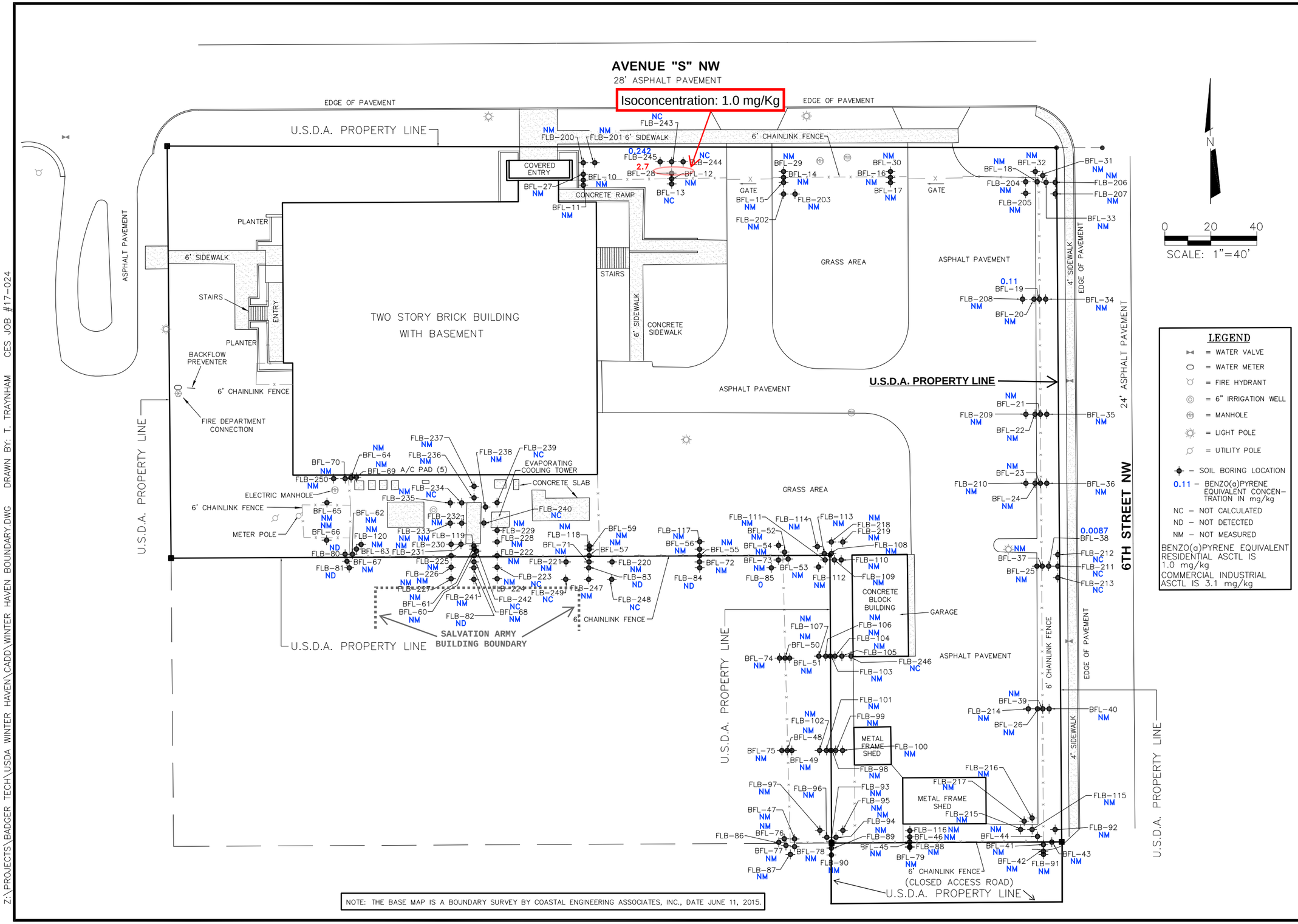

NOTE: THE BASE MAP IS A BOUNDARY SURVEY BY COASTAL ENGINEERING ASSOCIATES, INC., DATE JUNE 11, 2015.

FIGURE 12
SOIL BENZO(a)PYRENE EQUIVALENT CONCENTRATION MAP
(2'-4' BLS)
FENCE LINE
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WINTER HAVEN, POLK COUNTY, FLORIDA

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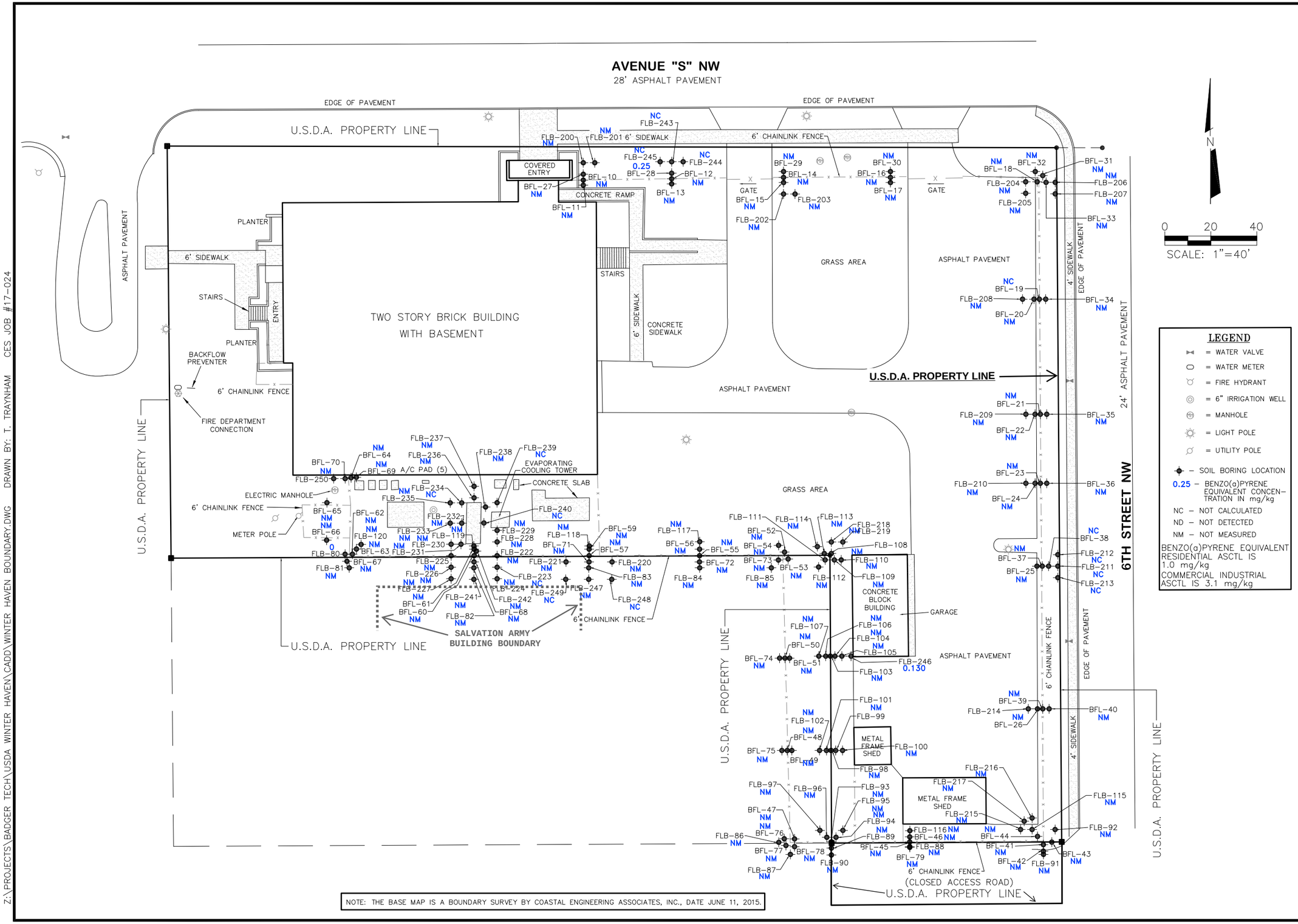

NOTE: THE BASE MAP IS A BOUNDARY SURVEY BY COASTAL ENGINEERING ASSOCIATES, INC., DATE JUNE 11, 2015.

FIGURE 13
SOIL BENZO(a)PYRENE EQUIVALENT CONCENTRATION MAP
(4'-6' BLS)
FENCE LINE
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

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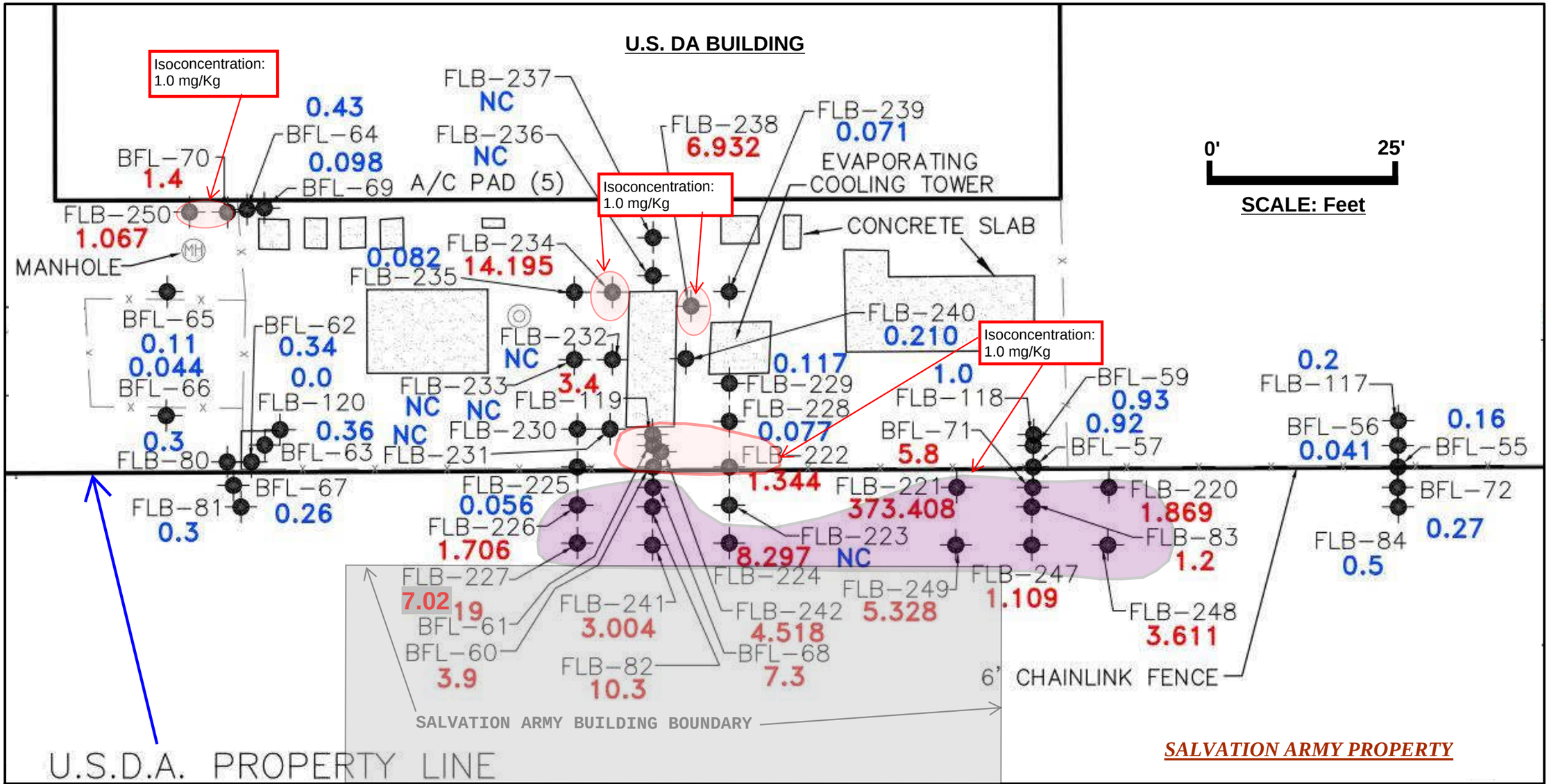
FIGURE 14

SOIL - Benzo(a)pyrene Equivalent Concentration Map (0.0 Feet-to-0.5 Feet Below Ground Surface) South Side of USDA Facility



LEGEND

NC = Value Not Calculated (No PAH Compounds Were Detected in the Soil Sample)

1.0 mg/Kg = Benzo(a)pyrene Equivalent Residential Alternative Soil Cleanup Target Level

3.1 mg/Kg = Benzo(a)pyrene Equivalent Commercial/Industrial Alternative Soil Cleanup Target Level

Contaminated Area Resulting From Applying Used Oil Along the Fence.

Contaminated Area Resulting From Analyzing Soil Containing Asphalt Material.

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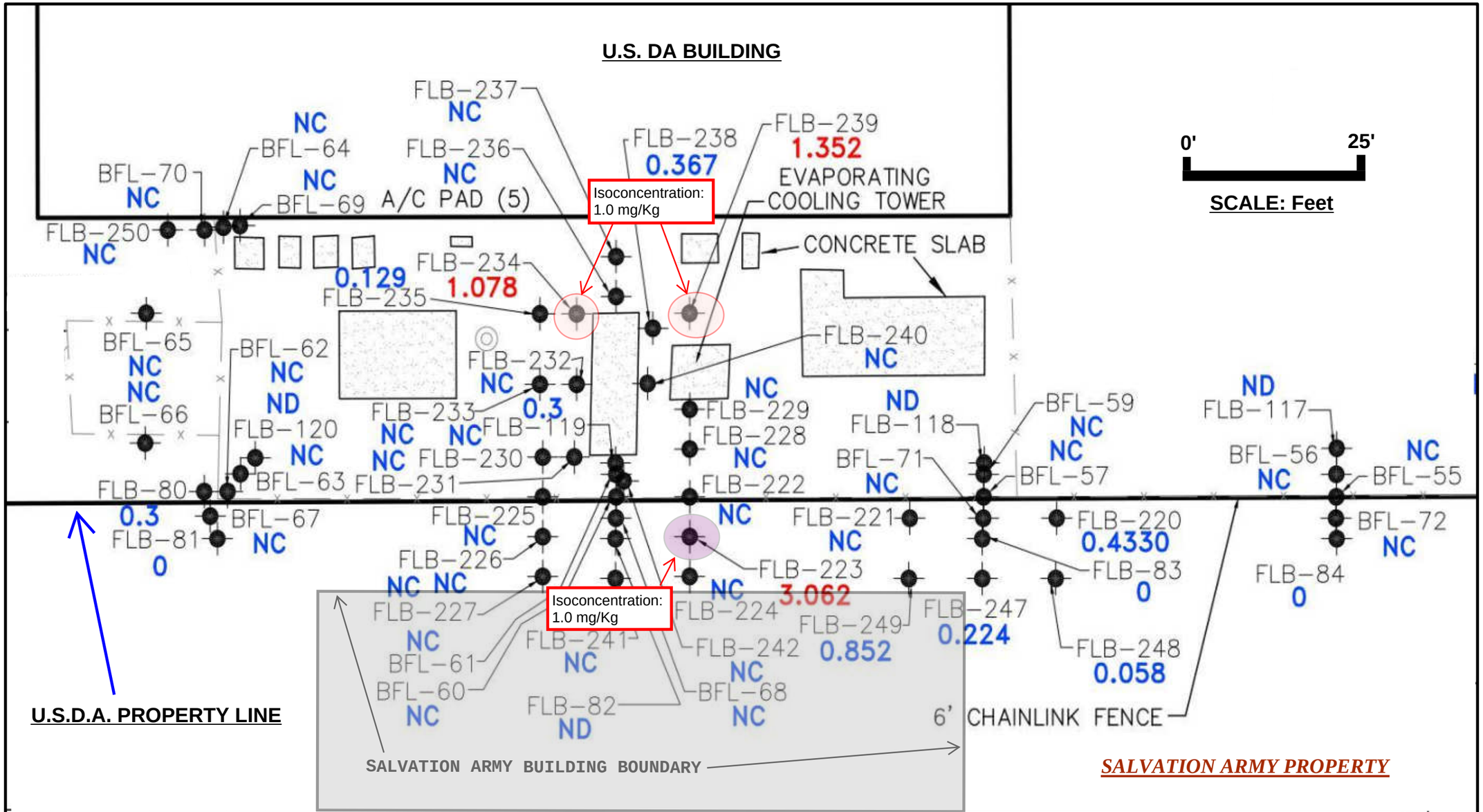
N

FIGURE 15

SOIL - Benzo(a)pyrene Equivalent Concentration Map (0.5 Feet-to-2.0 Feet Below Ground Surface) South Side of USDA Facility



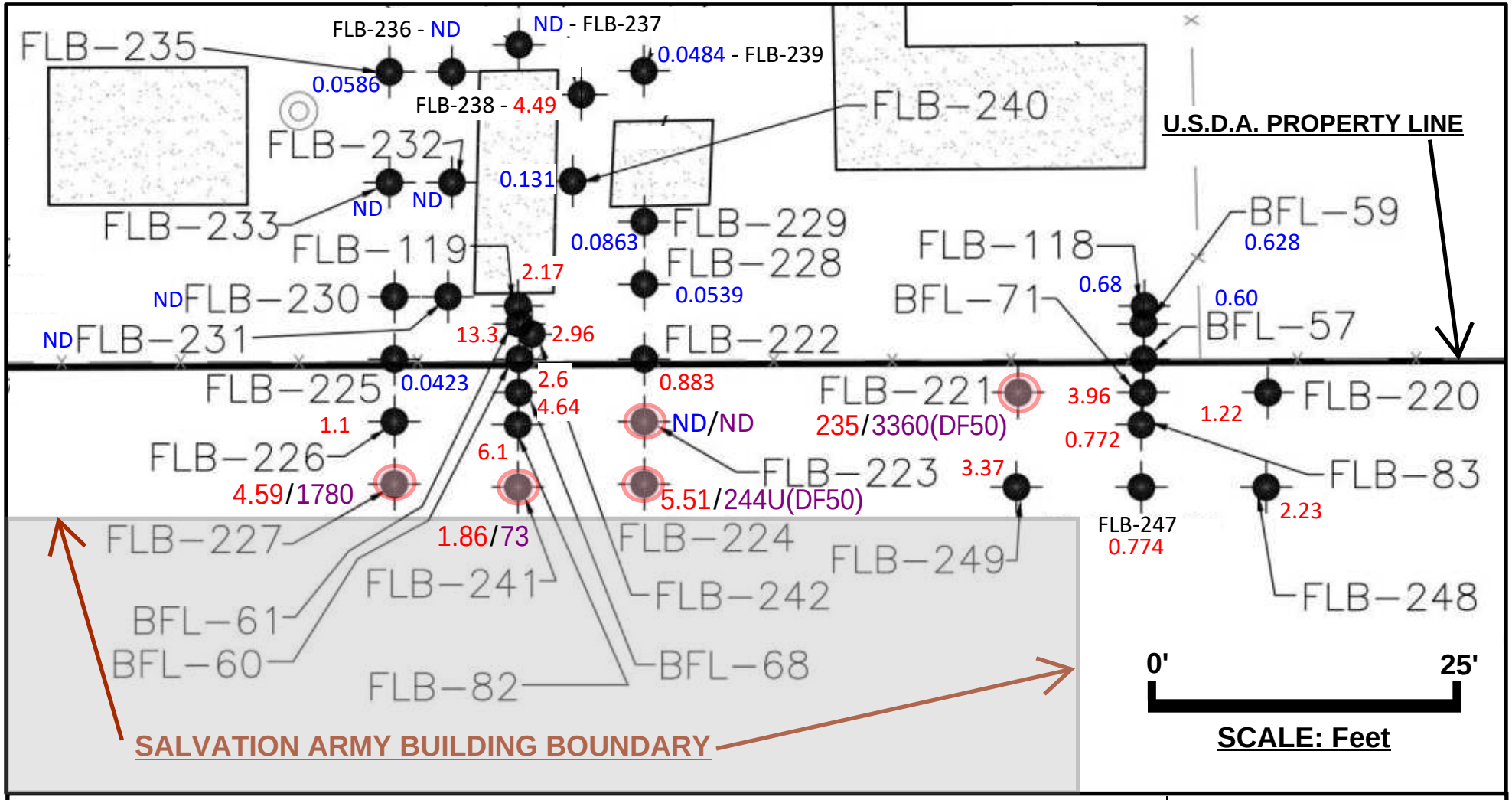
LEGEND

NC = Value Not Calculated (No PAH Compounds Were Detected in the Soil Sample)
ND = No PAH Compounds Were Detected in the Soil Sample
1.0 mg/Kg = Benzo(a)pyrene Equivalent Residential Alternative Soil Cleanup Target Level
3.1 mg/Kg = Benzo(a)pyrene Equivalent Commercial/Industrial Alternative Soil Cleanup Target Level
Contaminated Area Resulting From Applying Used Oil Along the Fence.
Contaminated Area Resulting From Analyzing Soil Containing Asphalt Material.

USDA United States Department of Agriculture

N

FIGURE 16
Benzo(a)pyrene Results for Soil Samples at 0.0' to 0.5' and Unidentified Black Material



LEGEND

ND = No PAH Compounds Were Detected in the Sample.

Benzo(a)pyrene Sample Results: SOIL mg/Kg/DEBRIS (Dilution Factor) mg/Kg

1.0 mg/Kg = Benzo(a)pyrene Residential Alternative Soil Cleanup Target Level

3.1 mg/Kg = Benzo(a)pyrene Commercial/Industrial Alternative Soil Cleanup Target Level

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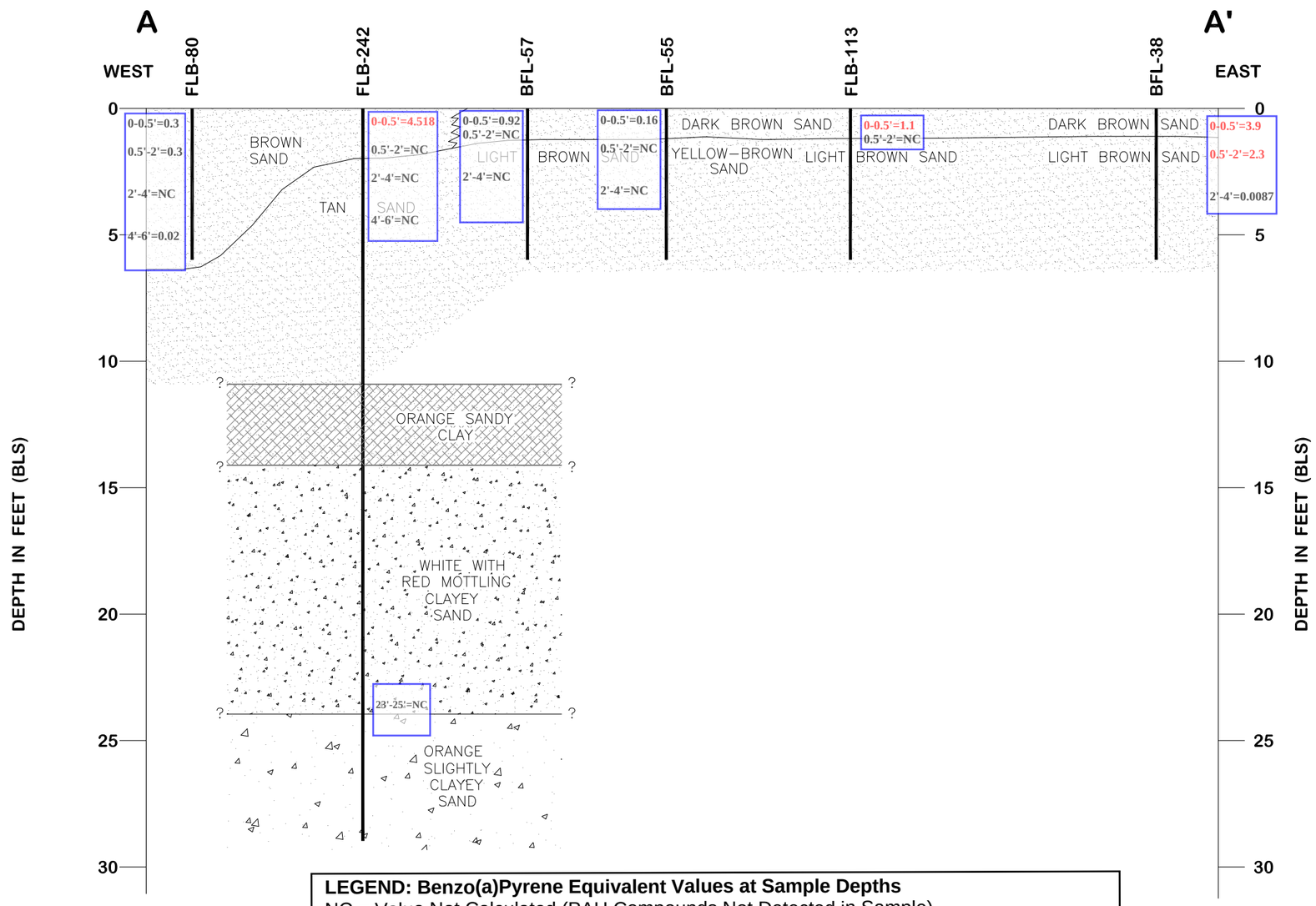

LEGEND: Benzo(a)Pyrene Equivalent Values at Sample Depths
NC = Value Not Calculated (PAH Compounds Not Detected in Sample)
1.0 mg/Kg = B(a)P Equivalent Residential Alternative Soil Cleanup Target Level
3.1 mg/Kg = B(a)P Equivalent Commercial/Industrial Alternative Soil Cleanup Target Level

0 1/2" 1"
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'

FIGURE 10A
GEOLOGIC CROSS-SECTION A-A'
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
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USDA United States Department of Agriculture

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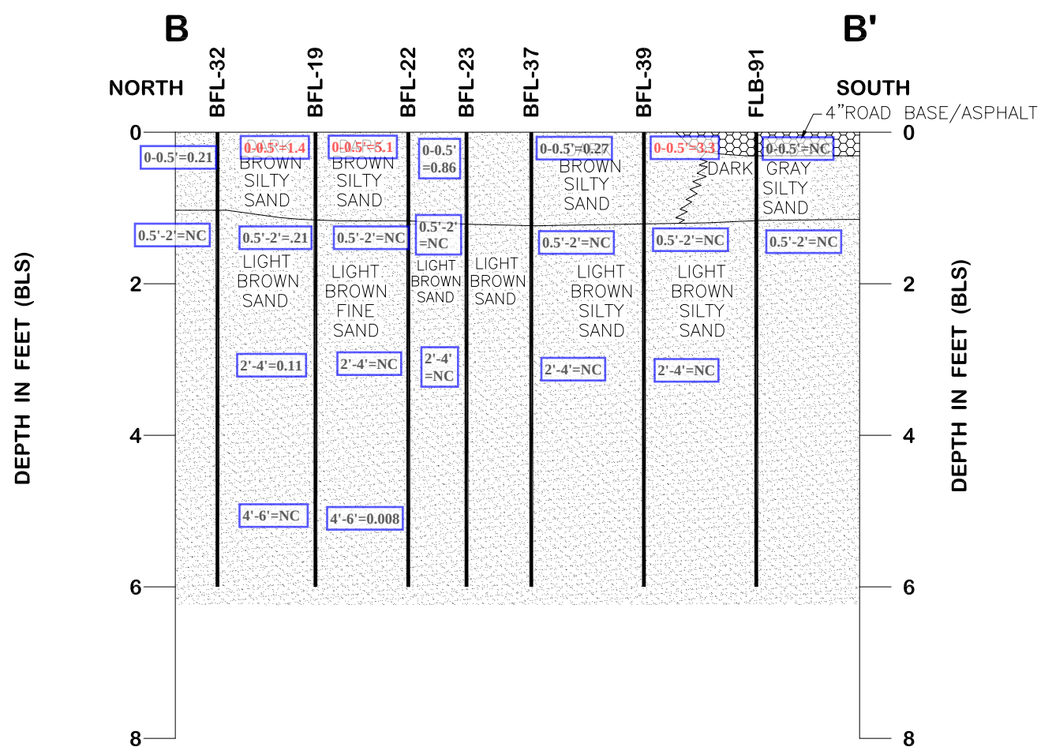

LEGEND: Benzo(a)Pyrene Equivalent Values at Sample Depths
NC = Value Not Calculated (PAH Compounds Not Detected in Sample)
1.0 mg/Kg = B(a)P Equivalent Residential Alternative Soil Cleanup Target Level
3.1 mg/Kg = B(a)P Equivalent Commercial/Industrial Alternative Soil Cleanup Target Level

0 1/2" 1"
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=2'

FIGURE 10B
GEOLOGIC CROSS-SECTION B-B'
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
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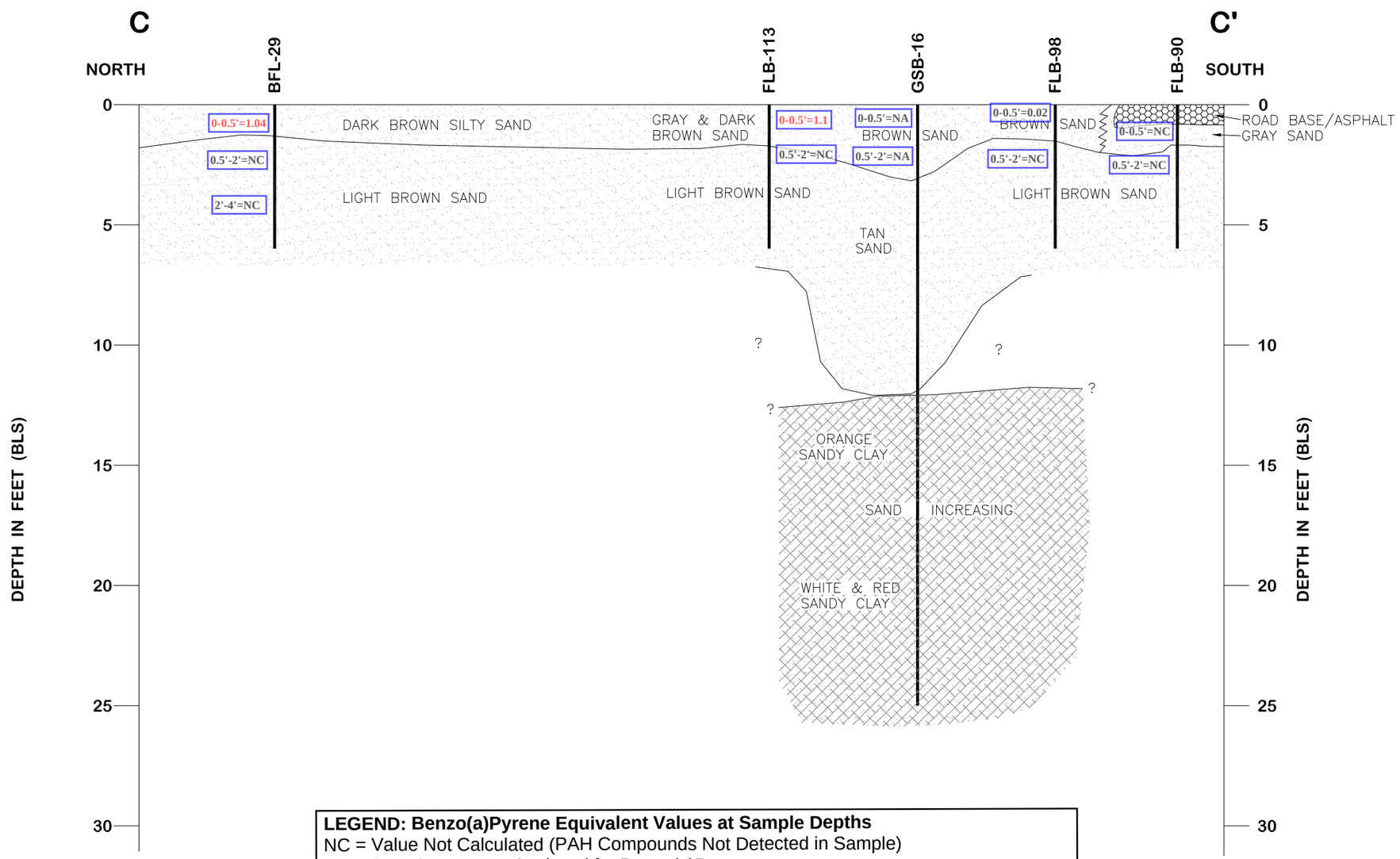

LEGEND: Benzo(a)Pyrene Equivalent Values at Sample Depths
NC = Value Not Calculated (PAH Compounds Not Detected in Sample)
NA = Sample Was Not Analyzed for Benzo(a)Pyrene
1.0 mg/Kg = B(a)P Equivalent Residential Alternative Soil Cleanup Target Level
3.1 mg/Kg = B(a)P Equivalent Commercial/Industrial Alternative Soil Cleanup Target Level

0 1/2" 1"
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'

FIGURE 10C
GEOLOGIC CROSS-SECTION C-C'
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
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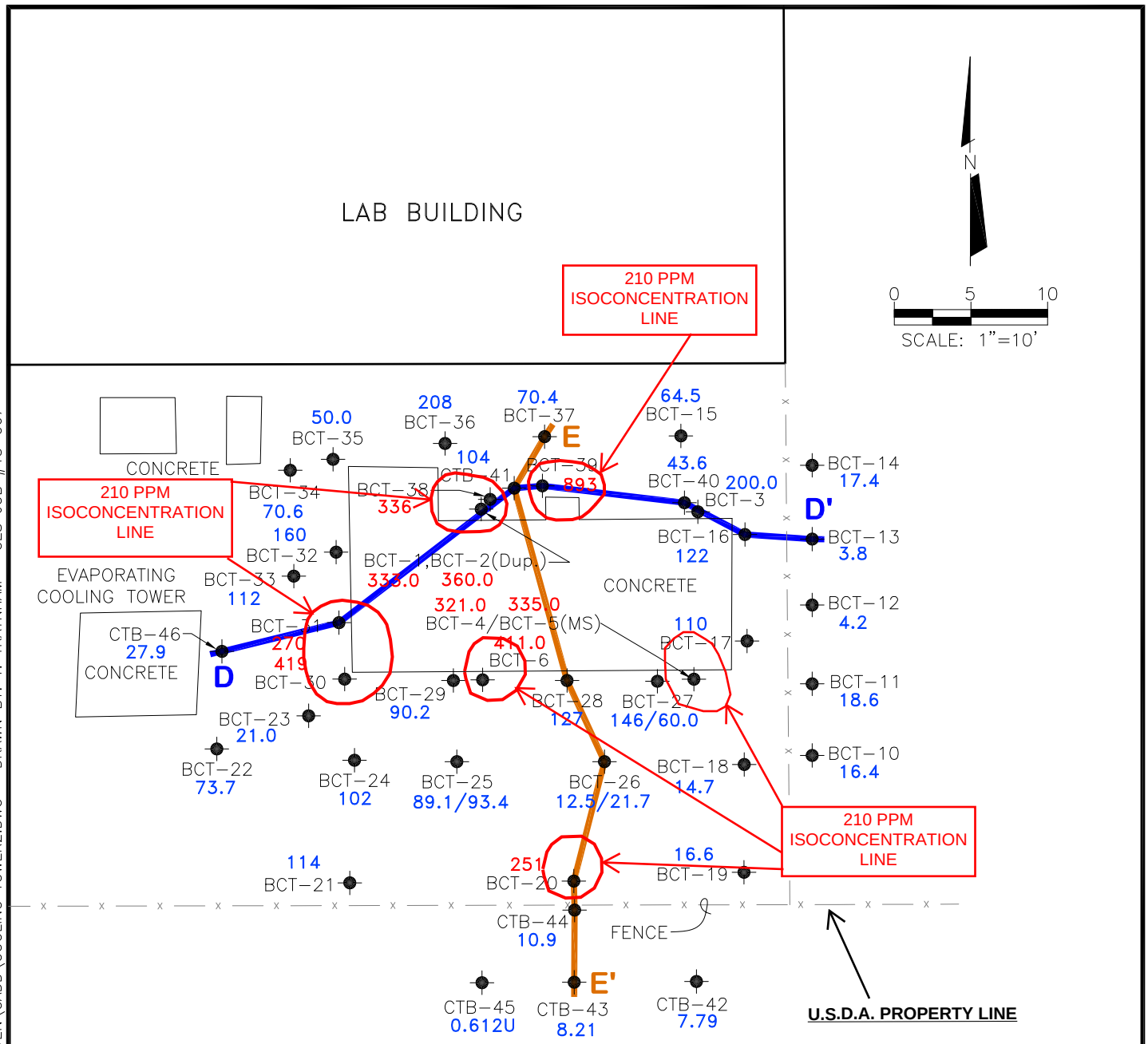
FORMER COOLING TOWER



SALVATION ARMY PROPERTY

TOTAL CHROMIUM SOIL CLEANUP TARGET LEVEL
RESIDENTIAL: 210 ppm
COMMERCIAL: 470 ppm
LEACHABILITY TO GROUNDWATER: 38 ppm

LEGEND

- ✦ – SOIL BORING LOCATION
- 333.0 – CHROMIUM CONCENTRATION IN mg/kg
- U – NOT DTECTED
- E-E' – GEOLOGIC CROSS-SECTION LOCATION

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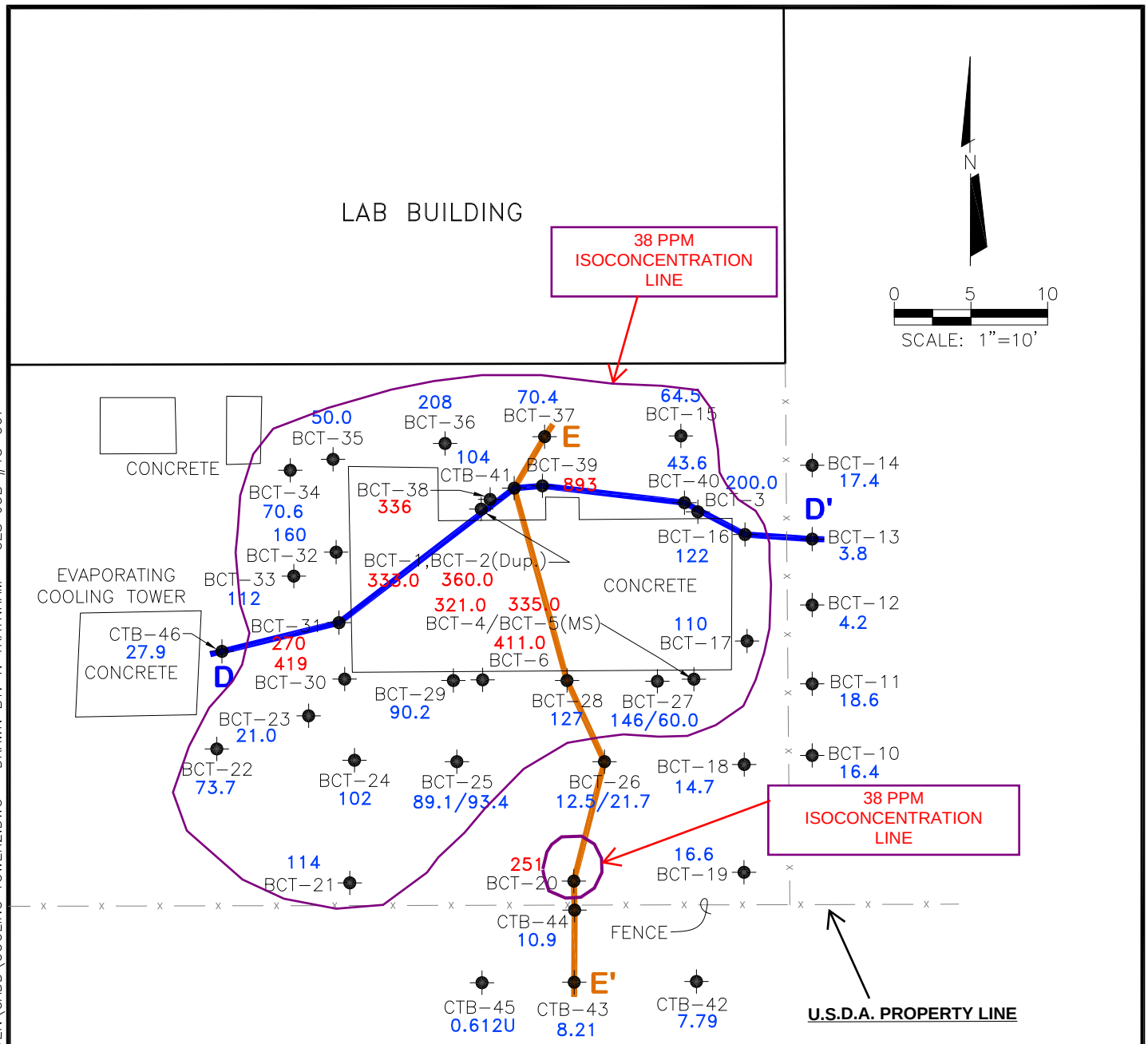
FIGURE 20
SOIL CHROMIUM CONCENTRATION MAP
(0'-0.5' BLS)
COOLING TOWER
USDA-U.S CITRUS & SUBTROPICAL
PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

Z:\GOOGLE DRIVE\PROJECTS\BADGER TECH\USDA WINTER HAVEN\CADD\COOLING TOWER2.DWG DRAWN BY: T. TRAYNHAM CES JOB #15-067



SALVATION ARMY PROPERTY

TOTAL CHROMIUM SOIL CLEANUP TARGET LEVEL
RESIDENTIAL: 210 ppm
COMMERCIAL: 470 ppm
LEACHABILITY TO GROUNDWATER: 38 ppm

LEGEND
- ✦ – SOIL BORING LOCATION
- 333.0 – CHROMIUM CONCENTRATION IN mg/kg
- U – NOT DTECTED
- E-E' – GEOLOGIC CROSS-SECTION LOCATION

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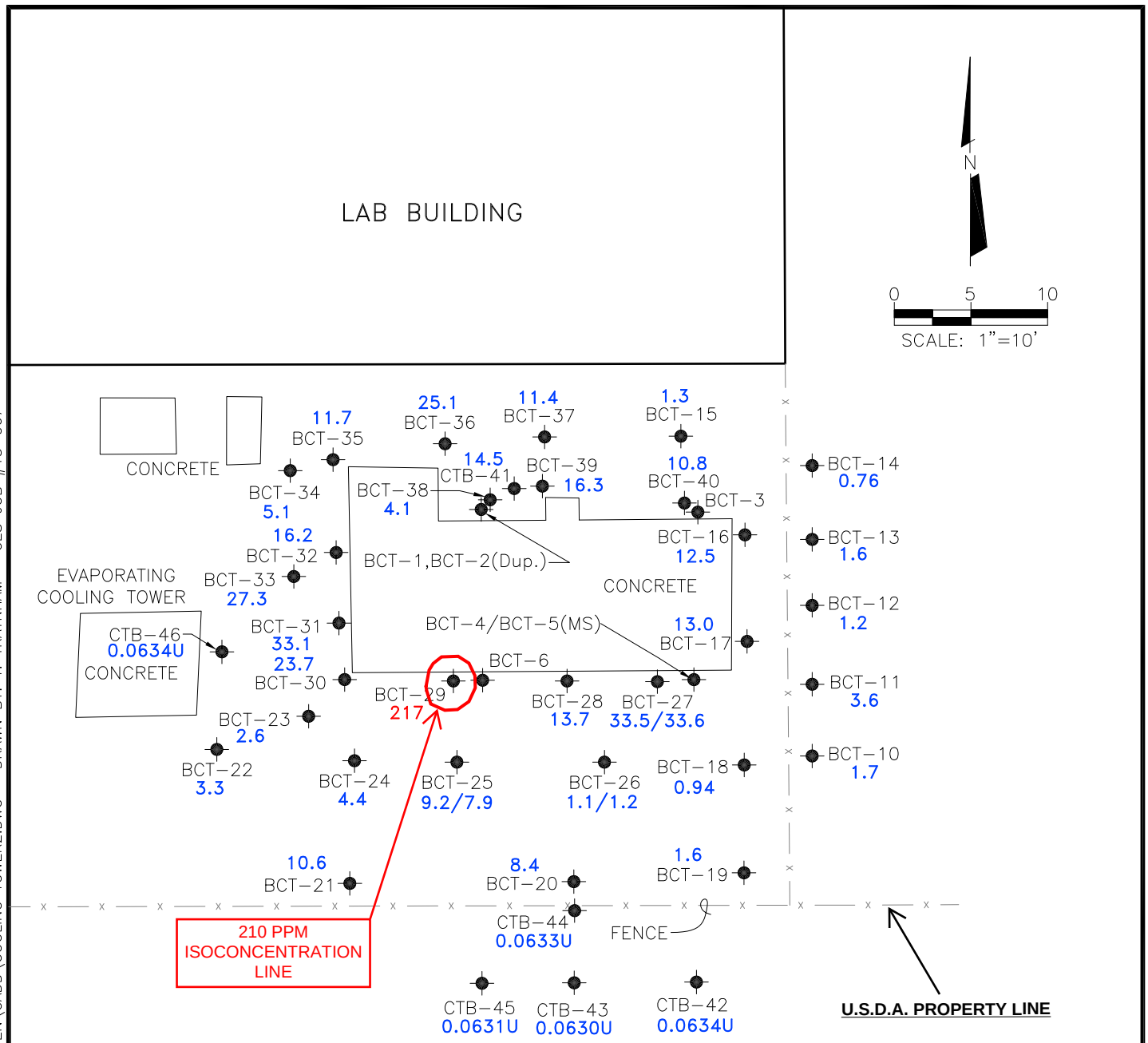
FIGURE 21
SOIL CHROMIUM CONCENTRATION MAP
(0'-0.5' BLS)
COOLING TOWER
USDA-U.S CITRUS & SUBTROPICAL
PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

Z:\GOOGLE DRIVE\PROJECTS\BADGER TECH\USDA WINTER HAVEN\CADD\COOLING TOWER2.DWG DRAWN BY: T. TRAYNHAM CES JOB #15-067



SALVATION ARMY PROPERTY

TOTAL CHROMIUM SOIL CLEANUP TARGET LEVEL
RESIDENTIAL: 210 ppm
COMMERCIAL: 470 ppm
LEACHABILITY TO GROUNDWATER: 38 ppm

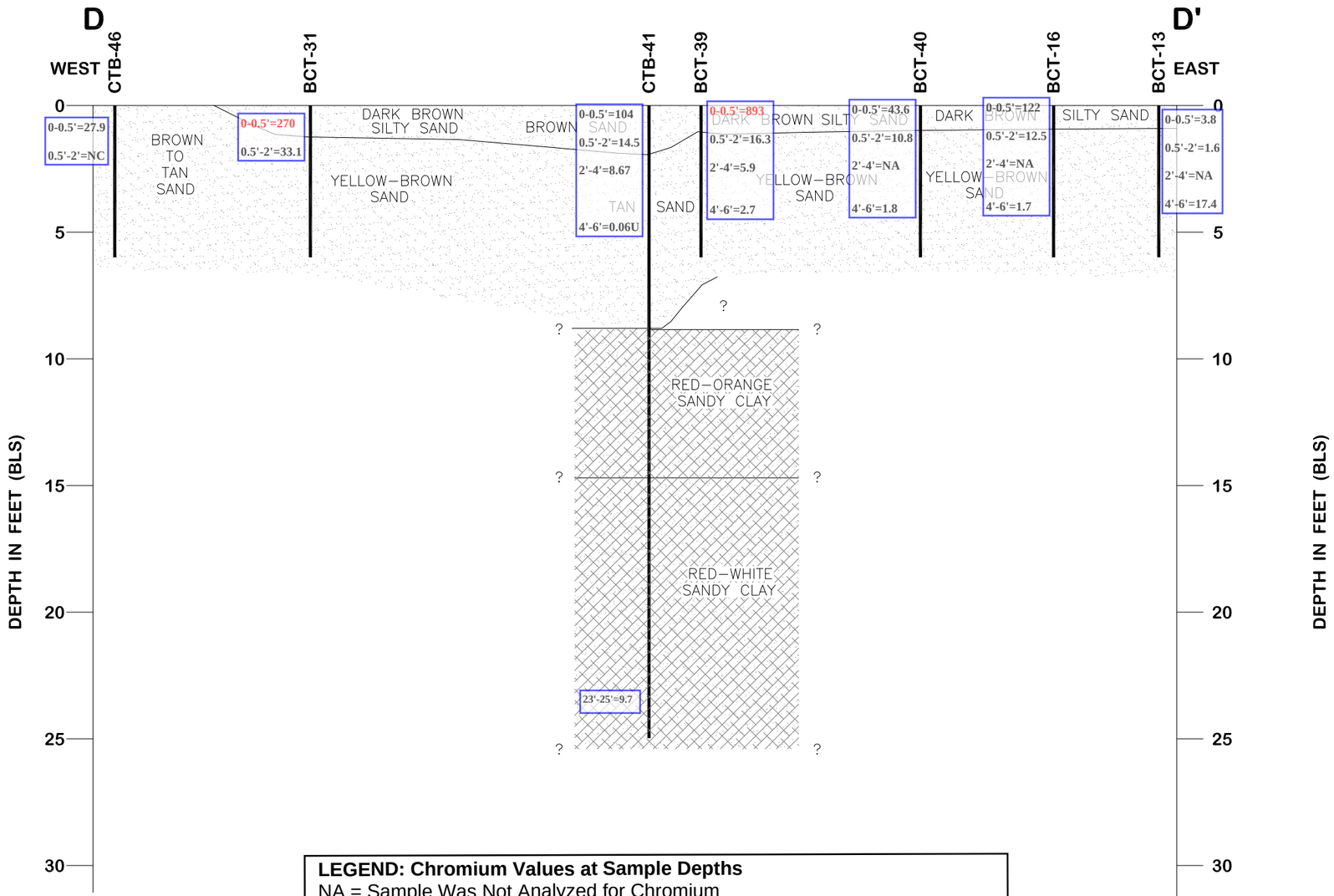
LEGEND

- ● – SOIL BORING LOCATION
- 217 – CHROMIUM CONCENTRATION IN mg/kg
- U – NOT DTECTED

United States Department of Agriculture

FIGURE 22
SOIL CHROMIUM CONCENTRATION MAP
(0.5'-2' BLS)
COOLING TOWER
USDA-U.S CITRUS & SUBTROPICAL
PRODUCTS RESEARCH LABORATORY
WINTE HAVEN, POLK COUNTY, FLORIDA

Z:\GOOGLE DRIVE\PROJECTS\BADGER TECH\USDA WINTER HAVEN\CADD\COOLING TOWER2.DWG DRAWN BY: T. TRAYNHAM CES JOB #15-067



LEGEND: Chromium Values at Sample Depths
NA = Sample Was Not Analyzed for Chromium
210 mg/Kg = Chromium Residential Soil Cleanup Target Level
470 mg/Kg = Chromium Commercial/Industrial Soil Cleanup Target Level

0 1/2" 1"
HORIZONTAL SCALE: 1"=5'
VERTICAL SCALE: 1"=5'

FIGURE 21D

GEOLOGIC CROSS-SECTION D-D'
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

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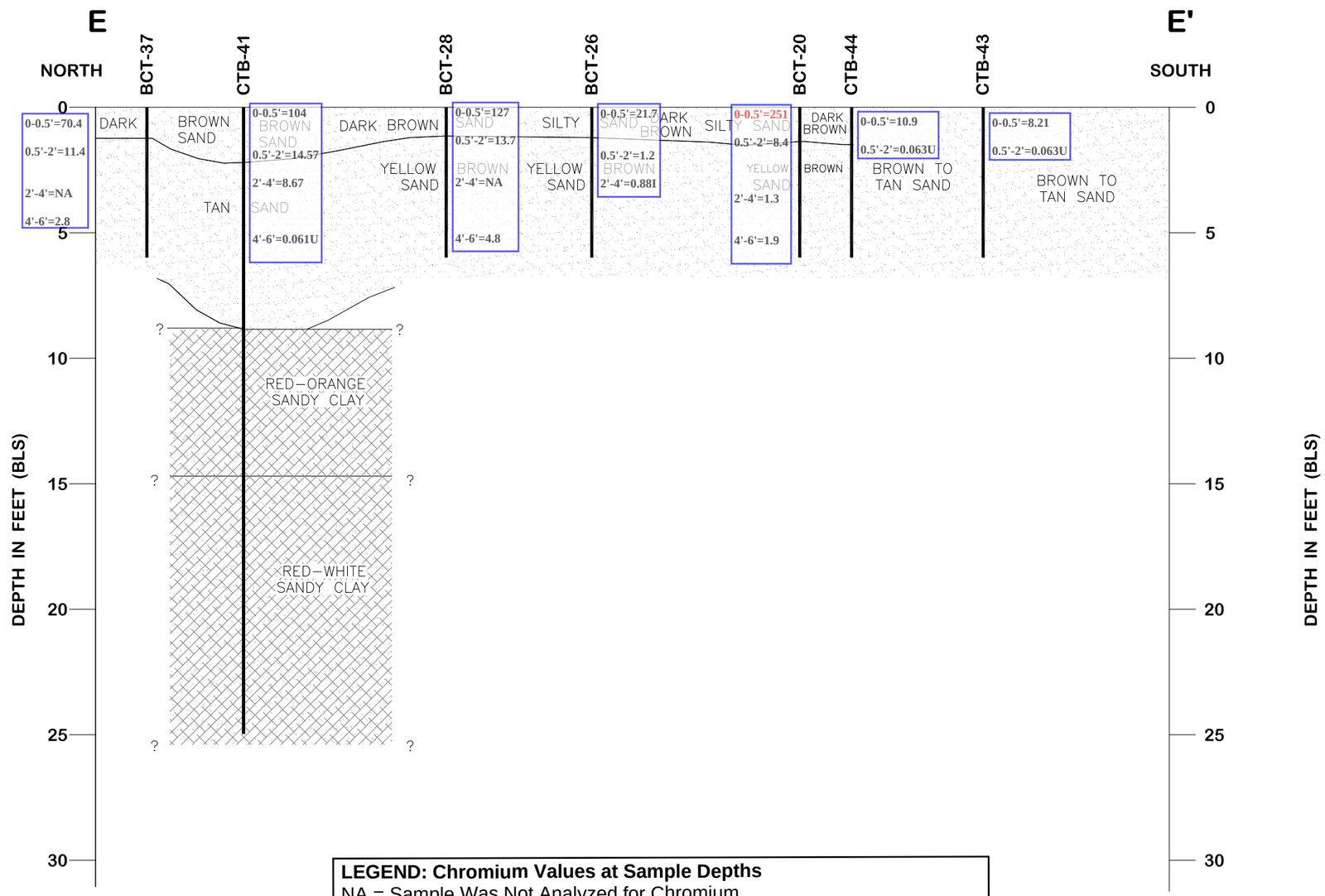

LEGEND: Chromium Values at Sample Depths
NA = Sample Was Not Analyzed for Chromium
210 mg/Kg = Chromium Residential Soil Cleanup Target Level
470 mg/Kg = Chromium Commercial/Industrial Soil Cleanup Target Level

0 1/2" 1"
HORIZONTAL SCALE: 1"=5'
VERTICAL SCALE: 1"=5'

FIGURE 21E
GEOLOGIC CROSS-SECTION E-E'
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

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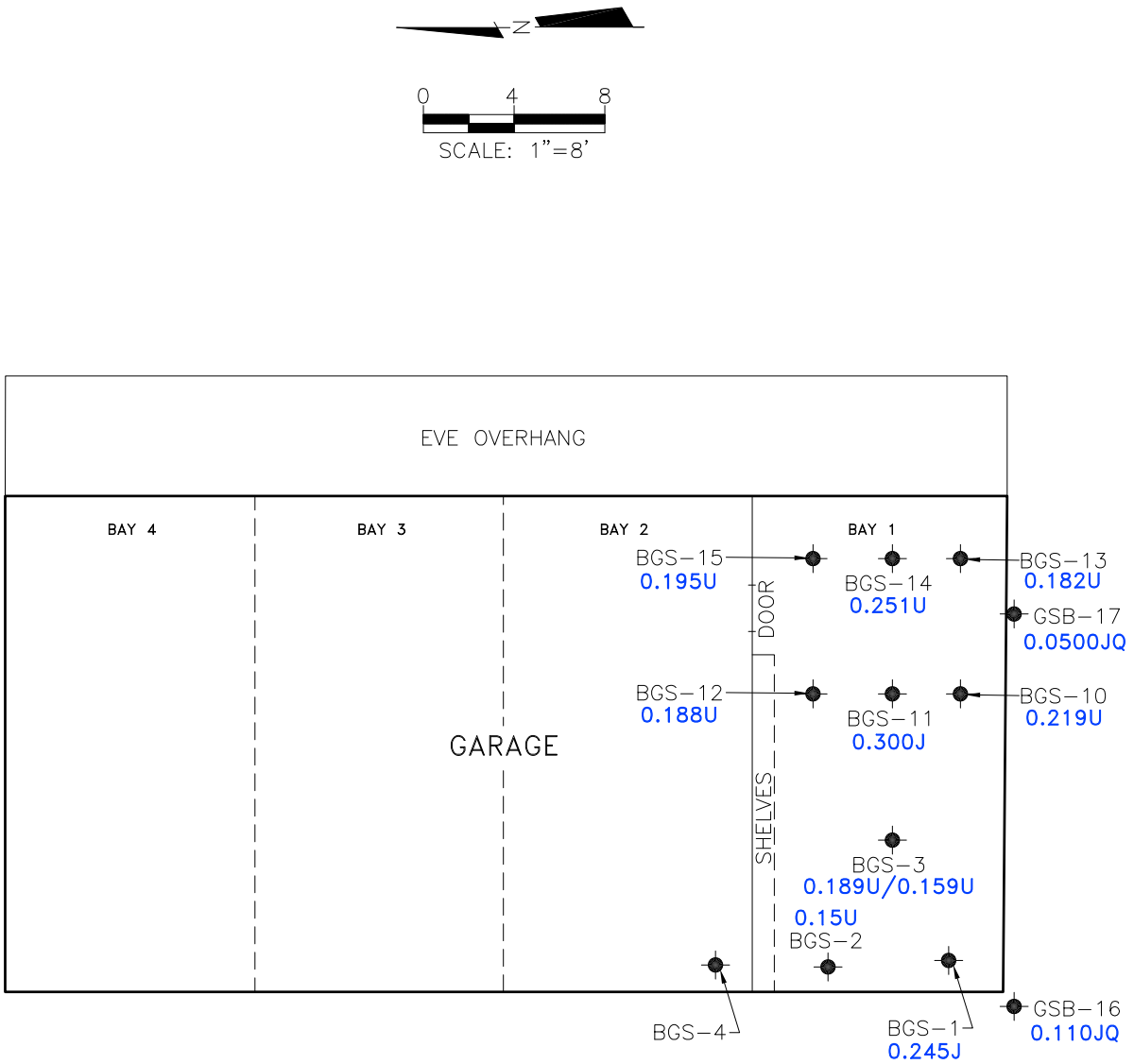
GARAGE
SOIL & CONCRETE



LEGEND

- ✦ – SOIL BORING LOCATION
- 0.15U – 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN CONCENTRATION IN PARTS PER TRILLION
- U – NOT DETECTED
- J – ESTIMATED CONCENTRATION BETWEEN ESTIMATED DETECTED LIMIT AND MINIMUM REPORTING LEVEL
- Q – ESTIMATED MAXIMUM POSSIBLE CONCENTRATION

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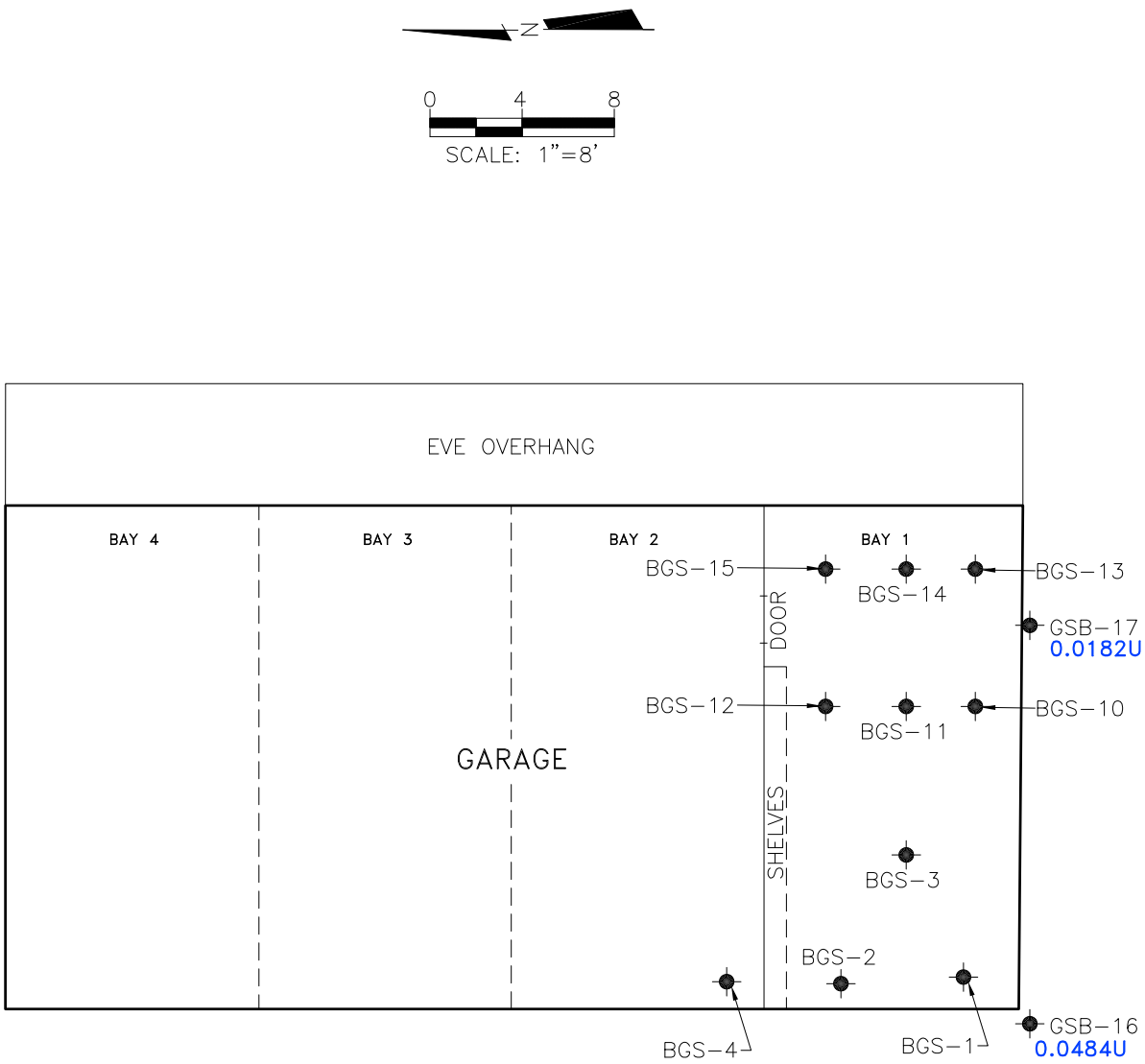
FIGURE 30
SOIL 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN CONCENTRATION MAP
(0'-0.5' BLS)
GARAGE BAY SLAB
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

Z:\GOOGLE DRIVE\PROJECTS\BADGER TECH\USDA WINTER HAVEN\CADD\GARAGE.DWG DRAWN BY: T. TRAYNHAM CES JOB #15-067



LEGEND

- ✦ – SOIL BORING LOCATION
- 0.0484U – 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN CONCENTRATION IN PARTS PER TRILLION
- U – NOT DETECTED

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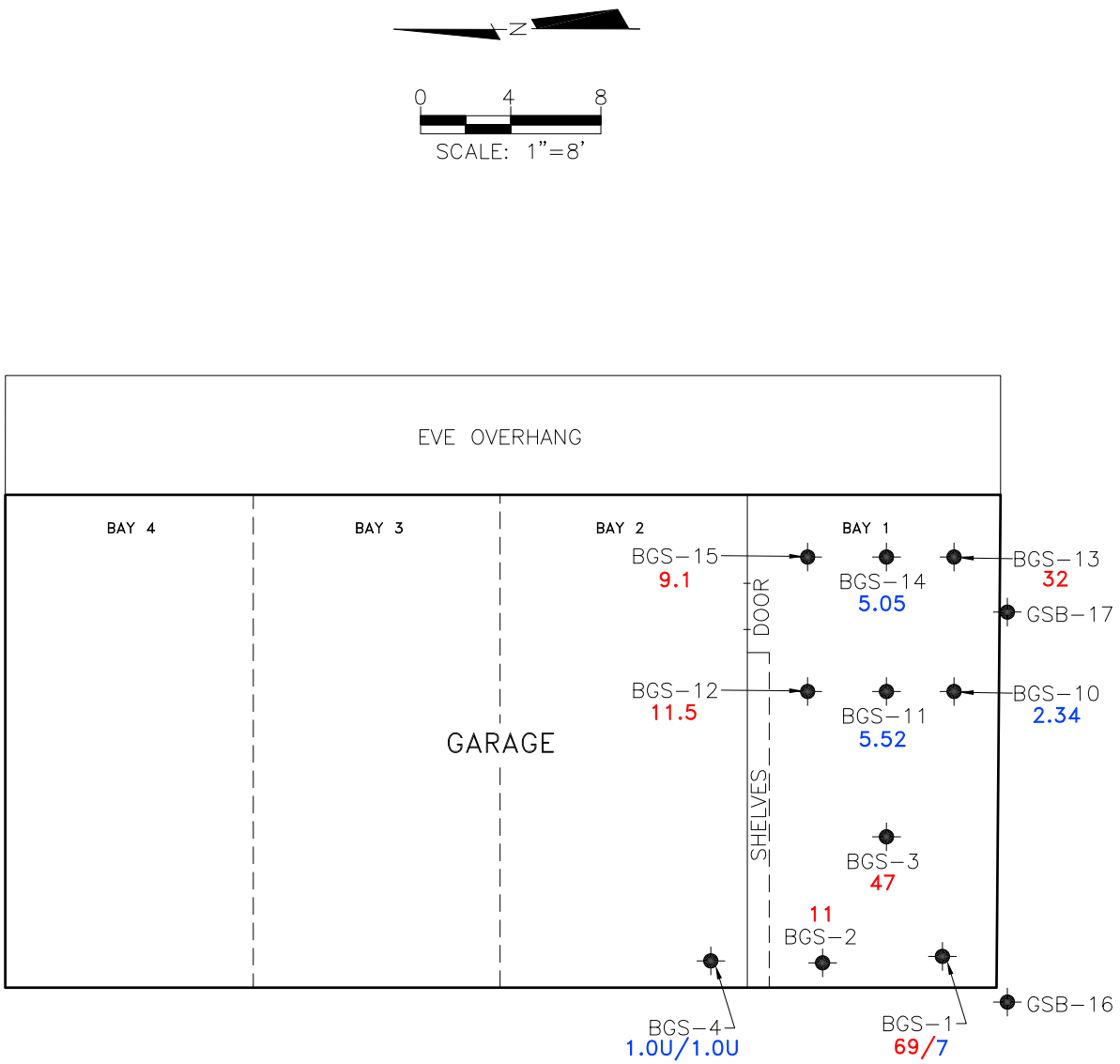
FIGURE 31
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN CONCENTRATION MAP
(0.5'-2' BLS)
GARAGE BAY SLAB
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

Z:\GOOGLE DRIVE\PROJECTS\BADGER TECH\USDA WINTER HAVEN\CADD\GARAGE2.DWG DRAWN BY: T. TRAYNHAM CES JOB #15-067



LEGEND

- ✦ – SOIL BORING LOCATION
- 47 – 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN CONCENTRATION IN PARTS PER TRILLION
- U – NOT DETECTED
- J – ESTIMATED CONCENTRATION BETWEEN ESTIMATED DETECTED LIMIT AND MINIMUM REPORTING LEVEL
- Q – ESTIMATED MAXIMUM POSSIBLE CONCENTRATION

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FIGURE 32
CONCRETE 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN CONCENTRATION MAP
GARAGE BAY SLAB
USDA-U.S CITRUS & SUBTROPICAL PRODUCTS RESEARCH LABORATORY
WINTER HAVEN, POLK COUNTY, FLORIDA

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APPENDIX II

TABLES SUMMARIZING LABORATORY DATA

TABLE 1: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory** **FDEP Project #346171**

Sample				OVA	Laboratory Analyses								
Boring Well No.	**Date Collected**	**Depth to Water (ft)**	**Sample Interval (fbls)**	**Net OVA Reading (ppm)**	**Benzo (a) pyrene (mg/kg)**	**Benzo (a) anthra-cene (mg/kg)**	**Benzo (b) fluoran-thene (mg/kg)**	**Benzo (k) fluoran-thene (mg/kg)**	**Chrysene (mg/kg)**	**Dibenz (a,h) anthra-cene (mg/kg)**	**Indeno (1,2,3-cd) pyrene (mg/kg)**	**Benzo (a) pyrene equivalent (mg/kg)**	**Comments**
BFL-10	9/14/2015	NA	0.0 - 0.5	NM	0.848	**0.898**	1.29	0.474	0.935	0.124	0.640	**1.3**	
BFL-10	9/14/2015	NA	0.5 - 2	NM	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	NC	
BFL-10	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-11	9/11/2015	NA	0.0 - 0.5	NM	0.66	0.735	1.07	0.359	0.758	0.106	0.546	**1.02**	
BFL-11	9/11/2015	NA	0.5 - 2	NM	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	NC	
BFL-11	9/11/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-12	9/11/2015	NA	0.0 - 0.5	NM	0.292	0.224	0.527	0.185	0.350	0.0433	0.230	0.44	
BFL-12	9/11/2015	NA	0.5 - 2	NM	0.0112 I	0.0128 I	0.0191 I	0.0070 U	0.0131 I	0.0070 U	0.0085 I	0.019	
BFL-12	9/11/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-13	9/11/2015	NA	0.0 - 0.5	NM	0.0351 I	0.0308 I	0.0605	0.0208 I	0.0393	0.0092 U	0.0259 I	0.052	
BFL-13	9/11/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-13	9/11/2015	NA	2 - 4	NM	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	NC	
BFL-14	9/11/2015	NA	0.0 - 0.5	NM	0.577	0.506	0.896	0.315	0.667	0.0871	0.466	0.85	
BFL-14	9/11/2015	NA	0.5 - 2	NM	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	NC	
BFL-14	9/11/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-15	9/11/2015	NA	0.0 - 0.5	NM	**1.57**	**1.40**	2.34	0.891	1.85	0.231	1.24	**2.3**	
BFL-15	9/11/2015	NA	0.5 - 2	NM	0.0219 I	0.0224 I	0.0400	0.0132 I	0.0317 I	0.0079 U	0.0168 I	0.034	
BFL-15	9/11/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-16	9/11/2015	NA	0.0 - 0.5	NM	0.188	0.169	0.341	0.115	0.248	0.0276 I	0.148	0.28	
BFL-16	9/11/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-16	9/11/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-17	9/11/2015	NA	0.0 - 0.5	NM	0.388	0.310	0.618	0.217	0.484	0.0631	0.342	0.58	
BFL-17	9/11/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-17	9/11/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-18	9/14/2015	NA	0.0 - 0.5	NM	**3.68**	**3.61**	**6.43**	2.22	5.08	0.444	2.31	**5.4**	
BFL-18	9/14/2015	NA	0.5 - 2	NM	0.0067 U	0.0067 U	0.0097	0.0067 U	0.0075	0.0067 U	0.0067 U	0.0084	
BFL-18	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-19	9/14/2015	NA	0.0 - 0.5	NM	0.597	0.706	1.35	0.457	1.62	0.0797	0.419	0.93	
BFL-19	9/14/2015	NA	0.0 - 0.5	NM	0.946	0.946	1.61	0.495	1.40	0.122	0.751	**1.4**	Dup-15
BFL-19	9/14/2015	NA	0.5 - 2	NM	0.139	0.133	0.243	0.0927	0.203	0.0227	0.105	0.21	
BFL-19	9/14/2015	NA	0.5 - 2	NM	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	NC	Dup-16
BFL-19	9/14/2015	NA	2 - 4	NM	0.0737	0.0657	0.133	0.0440	0.102	0.0093	0.0499	0.11	
BFL-19	9/14/2015	NA	2 - 4	NM	0.0403	0.0413	0.0737	0.0252 I	0.0629	0.0068 U	0.0390	0.059	Dup-17
BFL-19	9/14/2015	NA	4 - 6	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-19	9/14/2015	NA	4 - 6	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	Dup-18
BFL-20	9/14/2015	NA	0.0 - 0.5	NM	**2.52**	**2.62**	**4.56**	1.62	4.51	0.343	1.69	**3.8**	
BFL-20	9/14/2015	NA	0.0 - 0.5	NM	**2.50**	**2.35**	**4.27**	1.26	3.60	0.313	2.07	**3.7**	Dup-19
BFL-20	9/14/2015	NA	0.5 - 2	NM	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	NC	
BFL-20	9/14/2015	NA	0.5 - 2	NM	0.0068	0.0068	0.0075 I	0.0068	0.0078 I	0.0068	0.0068	0.0083	Dup-20
BFL-20	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-20	9/14/2015	NA	2 - 4	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	Dup-21
BFL-21	9/14/2015	NA	0.0 - 0.5	NM	0.768	**1.05**	2.06	0.683	2.73	0.083	0.474	1.2	

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
BFL-21	9/14/2015	NA	0.0 - 0.5	NM	0.375	0.350	0.628	0.193	0.530	0.0479 I	0.327	0.56	Dup-23
BFL-21	9/14/2015	NA	0.5 - 2	NM	0.0079	0.0083	0.0159	0.0072 U	0.0132	0.0072 U	0.0072 U	0.014	
BFL-21	9/14/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0082 I	0.0068 U	0.0076 I	0.0068 U	0.0068 U	0.0083	Dup-24
BFL-21	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-21	9/14/2015	NA	2 - 4	NM	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	NC	Dup-25
BFL-22	9/14/2015	NA	0.0 - 0.5	NM	**3.30**	**3.18**	**6.45**	1.95	5.83	0.456	2.42	**5.0**	
BFL-22	9/14/2015	NA	0.0 - 0.5	NM	**3.43**	**3.15**	**5.97**	1.62	5.08	0.440	2.85	**5.1**	Dup-27
BFL-22	9/14/2015	NA	0.5 - 2	NM	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	NC	
BFL-22	9/14/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	Dup-28
BFL-22	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-22	9/14/2015	NA	4 - 6	NM	0.0068 U	0.0068 U	0.0086 I	0.0068 U	0.0174 I	0.0068 U	0.0068 U	0.0084	Dup-30
BFL-23	9/15/2015	NA	0.0 - 0.5	NM	0.575	0.602	0.984	0.343	0.863	0.0806	0.436	0.86	
BFL-23	9/15/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-23	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-24	9/14/2015	NA	0.0 - 0.5	NM	**3.98**	**3.63**	**7.44**	2.30	5.33	0.503	2.63	**5.9**	
BFL-24	9/14/2015	NA	0.0 - 0.5	NM	**5.28**	**5.15**	**8.98**	2.71	6.67	0.674	4.01	**7.8**	Dup-31
BFL-24	9/14/2015	NA	0.5 - 2	NM	0.0536	0.0492	0.0981	0.0319	0.0719	0.0071 U	0.0371	0.076	
BFL-24	9/14/2015	NA	0.5 - 2	NM	0.0397	0.0358	0.0753	0.0233 I	0.0554	0.0071	0.0359	0.058	Dup-32
BFL-24	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-24	9/14/2015	NA	2 - 4	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	Dup-33
BFL-25	9/14/2015	NA	0.0 - 0.5	NM	0.416	0.422	0.730	0.234	0.547	0.0508	0.267	0.61	
BFL-25	9/14/2015	NA	0.0 - 0.5	NM	0.386	0.403	0.632	0.188	0.457	0.0513	0.290	0.57	Dup-35
BFL-25	9/14/2015	NA	0.5 - 2	NM	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	NC	
BFL-25	9/14/2015	NA	0.5 - 2	NM	0.0432	0.0427	0.0723	0.0228	0.0563	0.0072 U	0.0370	0.062	Dup-36
BFL-25	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-25	9/14/2015	NA	2 - 4	NM	0.237	0.221	0.383	0.121	.0303	0.0320	0.201	0.35	Dup-37
BFL-25	9/14/2015	NA	4 - 6	NM	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	NC	Dup-38
BFL-26	9/14/2015	NA	0.0 - 0.5	NM	**1.36**	**1.57**	2.19	0.744	1.76	0.167	0.895	**2.0**	
BFL-26	9/14/2015	NA	0.0 - 0.5	NM	**1.08**	**1.21**	1.67	0.494	1.22	0.136	0.851	**1.6**	Dup-39
BFL-26	9/14/2015	NA	0.5 - 2	NM	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	NC	
BFL-26	9/14/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	Dup-40
BFL-26	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	NA
BFL-26	9/14/2015	NA	2 - 4	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	Dup-41
BFL-27	9/14/2015	NA	0.0 - 0.5	NM	**2.41**	**2.87**	**3.71**	1.26	3.03	0.389	1.73	**3.6**	
BFL-27	9/14/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-27	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-28	9/14/2015	NA	0.0 - 0.5	NM	0.0958	0.0822	0.152	0.0481	0.108	0.0147	0.0816	0.14	
BFL-28	9/14/2015	NA	0.5 - 2	NM	0.823	**0.961**	1.25	0.447	0.944	0.118	0.676	**1.2**	
BFL-28	9/14/2015	NA	2 - 4	NM	**1.84**	**2.24**	2.76	0.890	2.10	0.228	1.16	**2.7**	
BFL-28	9/14/2015	NA	4 - 6	NM	0.169	0.207	0.272	0.0894	0.201	0.0207	0.114	0.25	
BFL-29	9/14/2015	NA	0.0 - 0.5	NM	0.717	0.559	1.11	0.357	0.814	0.0979	0.571	**1.04**	
BFL-29	9/14/2015	NA	0.5 - 2	NM	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	NC	
BFL-29	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-30	9/14/2015	NA	0.0 - 0.5	NM	0.236	0.199	0.412	0.143	0.293	0.0365	0.200	0.36	
BFL-30	9/14/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-30	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
BFL-31	9/14/2015	NA	0.0 - 0.5	NM	0.311	0.276	0.522	0.173	0.392	0.0447	0.245	0.46	
BFL-31	9/14/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-31	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-32	9/14/2015	NA	0.0 - 0.5	NM	0.138	0.119	0.220	0.0864	0.184	0.0217	0.114	0.21	
BFL-32	9/14/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-32	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-33	9/14/2015	NA	0.0 - 0.5	NM	**1.45**	**1.51**	**2.41**	0.787	2.01	0.218	1.10	**2.2**	
BFL-33	9/14/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-33	9/14/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-34	9/15/2015	NA	0.0 - 0.5	NM	0.0845	0.0782	0.146	0.0507	0.105	0.0128	0.0713	0.13	
BFL-34	9/15/2015	NA	0.5 - 2	NM	0.0323	0.0342	0.0571	0.0208	0.0489	0.0066 U	0.0269	0.048	
BFL-34	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-35	9/15/2015	NA	0.0 - 0.5	NM	0.287	0.270	0.519	0.160	0.435	0.0385 I	0.232	0.43	
BFL-35	9/15/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-35	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-36	9/15/2015	NA	0.0 - 0.5	NM	0.292	0.268	0.508	0.161	0.376	0.0397 I	0.294	0.44	
BFL-36	9/15/2015	NA	0.5 - 2	NM	0.0067 U	0.0067 U	0.0099	0.0067 U	0.0078	0.0067 U	0.0067 U	0.0084	
BFL-36	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-37	9/15/2015	NA	0.0 - 0.5	NM	0.178	0.181	0.295	0.0991	0.205	0.0245 I	0.144	0.27	
BFL-37	9/15/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-37	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-38	9/15/2015	NA	0.0 - 0.5	NM	**2.66**	**2.76**	**4.00**	1.20	3.03	0.346	2.43	**3.9**	
BFL-38	9/15/2015	NA	0.5 - 2	NM	**1.50**	**1.71**	2.26	0.662	1.67	0.209	1.39	**2.3**	
BFL-38	9/15/2015	NA	2 - 4	NM	0.0067 U	0.0070 I	0.0093 I	0.0067 U	0.0079	0.0067 U	0.0067 U	0.0087	
BFL-38	9/15/2015	NA	4 - 6	NM	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	NC	
BFL-39	9/15/2015	NA	0.0 - 0.5	NM	**2.22**	**2.34**	3.58	1.09	2.99	0.298	1.98	**3.3**	
BFL-39	9/15/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-39	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-40	9/15/2015	NA	0.0 - 0.5	NM	0.650	0.695	1.17	0.360	1.09	0.0945	0.610	1.00	
BFL-40	9/15/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-40	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-41	9/15/2015	NA	0.0 - 0.5	NM	0.154	0.127	0.272	0.0842	0.205	0.0229 I	0.160	0.23	
BFL-41	9/15/2015	NA	0.5 - 2	NM	0.0067 U	0.0067 U	0.0090	0.0067 U	0.0070	0.0067 U	0.0067 U	0.0083	
BFL-41	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-42	9/15/2015	NA	0.0 - 0.5	NM	0.0754	0.0762	0.125	0.0377 I	0.0930	0.017	0.0745	0.11	
BFL-42	9/15/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-42	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-43	9/15/2015	NA	0.0 - 0.5	NM	0.351	0.332	0.596	0.1890	0.474	0.0487 I	0.336	0.53	
BFL-43	9/15/2015	NA	0.5 - 2	NM	0.0094	0.0085	0.0184	0.0068 U	0.0144	0.0068 U	0.0086	0.016	
BFL-43	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-44	9/15/2015	NA	0.0 - 0.5	NM	0.461	0.418	0.736	0.229	0.575	0.0639 I	0.439	0.69	
BFL-44	9/15/2015	NA	0.5 - 2	NM	0.0258	0.0244	0.0453	0.0154	0.0361	0.0068 U	0.0188	0.038	
BFL-44	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-45	9/15/2015	NA	0.0 - 0.5	NM	0.622	0.676	0.953	0.285	0.694	0.0862	0.531	0.93	
BFL-45	9/15/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-45	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
BFL-46	9/15/2015	NA	0.0 - 0.5	NM	0.107	0.103	0.175	0.0508	0.121	0.0161 I	0.0979	0.16	
BFL-46	9/15/2015	NA	0.5 - 2	NM	0.0206	0.0269	0.0495	0.0197	0.0301	0.0069 U	0.0083	0.033	
BFL-46	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-47	9/15/2015	NA	0.0 - 0.5	NM	0.0190 I	0.0154 I	0.0306	0.0095 I	0.0172 I	0.0072	0.0189 I	0.029	
BFL-47	9/15/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-47	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-48	9/15/2015	NA	0.0 - 0.5	NM	0.108	0.127	0.167	0.0517	0.122	0.0159 I	0.0968	0.16	
BFL-48	9/15/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-48	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-49	9/15/2015	NA	0.0 - 0.5	NM	0.0120 I	0.0114 I	0.0197 I	0.0072 U	0.0130 I	0.0072 U	0.0113 I	0.020	
BFL-49	9/15/2015	NA	0.5 - 2	NM	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	NC	
BFL-49	9/15/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-50	9/16/2015	NA	0.0 - 0.5	NM	0.0163 I	0.0165 I	0.0206 I	0.0195 I	0.0210 I	0.0069 U	0.0139 I	0.025	
BFL-50	9/16/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-50	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-51	9/16/2015	NA	0.0 - 0.5	NM	0.0181 I	0.0185 I	0.0220 I	0.0217 I	0.0248 I	0.0070 U	0.0133 I	0.027	
BFL-51	9/16/2015	NA	0.5 - 2	NM	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	NC	
BFL-51	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-52	9/16/2015	NA	0.0 - 0.5	NM	0.0829	0.0716	0.0998	0.0918	0.0948	0.0074 U	0.0684	0.11	
BFL-52	9/16/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-52	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-53	9/16/2015	NA	0.0 - 0.5	NM	0.0736	0.0772	0.0821	0.077	0.0906	0.0173 I	0.0524	0.11	
BFL-53	9/16/2015	NA	0.5 - 2	NM	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	NC	
BFL-53	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-54	9/16/2015	NA	0.0 - 0.5	NM	0.0221 I	0.0219 I	0.027 I	0.0248 I	0.0286 I	0.0087 U	0.0165 I	0.03	
BFL-54	9/16/2015	NA	0.5 - 2	NM	0.0085 U	0.0085 U	0.0085 U	0.0085 U	0.0085 U	0.0085 U	0.0085 U	NC	
BFL-54	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-55	9/16/2015	NA	0.0 - 0.5	NM	0.108	0.0986	0.132	0.113	0.129	0.0209 I	0.0823	0.16	
BFL-55	9/16/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-55	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-56	9/16/2015	NA	0.0 - 0.5	NM	0.029	0.0279 I	0.0366	0.0252 I	0.033	0.007 U	0.0221 I	0.04	
BFL-56	9/16/2015	NA	0.5 - 2	NM	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	NC	
BFL-56	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-57	9/16/2015	NA	0.0 - 0.5	NM	0.608	0.531	0.669	0.532	0.57	0.141	0.443	0.92	
BFL-57	9/16/2015	NA	0.5 - 2	NM	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	NC	
BFL-57	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-59	9/16/2015	NA	0.0 - 0.5	NM	0.628	0.667	0.692	0.574	0.681	0.122	0.415	0.93	
BFL-59	9/16/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-59	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-60	9/16/2015	NA	0.0 - 0.5	NM	**2.6**	**2.95**	**2.72**	2.33	2.77	0.506	1.58	**3.90**	
BFL-60	9/16/2015	NA	0.5 - 2	NM	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	NC	
BFL-60	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-61	9/16/2015	NA	0.0 - 0.5	NM	**13.3**	**16.4**	**20.5**	6.36	15.1	**1.48**	**8.5**	**19.00**	
BFL-61	9/16/2015	NA	0.5 - 2	NM	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	NC	
BFL-61	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-62	9/16/2015	NA	0.0 - 0.5	NM	0.229	0.233	0.247	0.214	0.26	0.0473	0.163	0.34	

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
BFL-62	9/16/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-62	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-63	9/16/2015	NA	0.0 - 0.5	NM	0.237	0.26	0.258	0.227	0.276	0.0569	0.161	0.36	
BFL-63	9/16/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-63	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-64	9/16/2015	NA	0.0 - 0.5	NM	0.285	0.287	0.308	0.277	0.312	0.0646	0.218	0.43	
BFL-64	9/16/2015	NA	0.5 - 2	NM	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	NC	
BFL-64	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-65	9/16/2015	NA	0.0 - 0.5	NM	0.0727	0.0515	0.0767	0.0571	0.0651	0.0141 I	0.0559	0.11	
BFL-65	9/16/2015	NA	0.5 - 2	NM	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	NC	
BFL-65	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-66	9/16/2015	NA	0.0 - 0.5	NM	0.0315	0.0249 I	0.0377	0.034	0.0354	0.0069 U	0.0264 I	0.04	
BFL-66	9/16/2015	NA	0.5 - 2	NM	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	NC	
BFL-66	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-67	9/16/2015	NA	0.0 - 0.5	NM	0.174	0.181	0.203	0.161	0.201	0.0382	0.125	0.26	
BFL-67	9/16/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-67	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-68	9/16/2015	NA	0.0 - 0.5	NM	**4.64**	**5.56**	**7.29**	2.24	5.13	**1.01**	3.01	**7.3**	
BFL-68	9/16/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	
BFL-68	9/16/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-69	9/17/2015	NA	0.0 - 0.5	NM	0.0731	0.0658	0.0841	0.0769	0.0833	0.0072 U	0.0571	0.10	
BFL-69	9/17/2015	NA	0.5 - 2	NM	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	NC	
BFL-69	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-70	9/17/2015	NA	0.0 - 0.5	NM	0.934	0.881	1.07	0.794	0.974	0.234	0.713	**1.40**	
BFL-70	9/17/2015	NA	0.5 - 2	NM	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	NC	
BFL-70	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-71	9/17/2015	NA	0.0 - 0.5	NM	**3.96**	**4.67**	**5.96**	1.6	4.71	0.488	2.68	**5.8**	
BFL-71	9/17/2015	NA	0.5 - 2	NM	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	NC	
BFL-71	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-72	9/17/2015	NA	0.0 - 0.5	NM	0.180	0.192	0.270	0.0925	0.205	0.0282	0.144	0.27	
BFL-72	9/17/2015	NA	0.5 - 2	NM	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	NC	
BFL-72	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-73	9/17/2015	NA	0.0 - 0.5	NM	0.147	0.139	0.223	0.0819	0.152	0.0224	0.116	0.22	
BFL-73	9/17/2015	NA	0.5 - 2	NM	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U	NC	
BFL-73	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-74	9/17/2015	NA	0.0 - 0.5	NM	0.0586	0.0554	0.0978	0.0342	0.0670	0.0077 I	0.0427	0.086	
BFL-74	9/17/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-74	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-75	9/17/2015	NA	0.0 - 0.5	NM	0.0329 I	0.0330 I	0.0506	0.0174	0.0354	0.0088 U	0.0306 I	0.049	
BFL-75	9/17/2015	NA	0.5 - 2	NM	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U	NC	
BFL-75	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-76	9/17/2015	NA	0.0 - 0.5	NM	0.0252 I	0.0204 I	0.0418	0.0148 I	0.0258 I	0.0069 U	0.0230 I	0.037	
BFL-76	9/17/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-76	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-77	9/17/2015	NA	0.0 - 0.5	NM	0.107	0.0965	0.168	0.0575	0.107	0.0150 I	0.0882	0.16	
BFL-77	9/17/2015	NA	0.5 - 2	NM	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	NC	

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
BFL-77	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-78	9/17/2015	NA	0.0 - 0.5	NM	0.0308 I	0.0296 I	0.0545	0.0210 I	0.0347	0.0079 U	0.0229 I	0.046	
BFL-78	9/17/2015	NA	0.5 - 2	NM	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	NC	
BFL-78	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
BFL-79	9/17/2015	NA	0.0 - 0.5	NM	0.306	0.311	0.468	0.146	0.316	0.0441	0.253	0.46	
BFL-79	9/17/2015	NA	0.5 - 2	NM	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	NC	
BFL-79	9/17/2015	NA	2 - 4	NM	NA	NA	NA	NA	NA	NA	NA	NC	
FLB-80	3/27/2017	NA	0.0 - 0.5	NM	0.193	0.148	0.247	0.188	0.185	0.0548	0.126	0.3	2' W. of Fence Corner
FLB-80	3/27/2017	NA	0.5 - 2	NM	0.218	0.217	0.144	0.197	0.218	0.0606	0.125	0.3	2' W. of Fence Corner
FLB-80	3/27/2017	NA	2 - 4	NM	0.0188U	0.0111U	0.0177U	0.0137U	0.00940U	0.0176U	0.0193U	NC	2' W. of Fence Corner
FLB-80	3/27/2017	NA	4 - 6	NM	0.0184U	0.0159I	0.0206I	0.0190I	0.0159I	0.0173U	0.0189U	0.02	2' W. of Fence Corner
FLB-81	3/27/2017	NA	0.0 - 0.5	NM	0.215	0.164	0.266	0.192	0.205	0.0452	0.135	0.3	5' S. of Fence Corner
FLB-81	3/27/2017	NA	0.5 - 2	NM	0.0199I	0.0196I	0.0148U	0.0199I	0.0209I	0.0147U	0.0161U	0.02	5' S. of Fence Corner
FLB-81	3/27/2017	NA	2 - 4	NM	0.0162U	0.00956U	0.0153U	0.0118U	0.00812U	0.0152U	0.0166U	NC	5' S. of Fence Corner
FLB-82	3/27/2017	NA	0.0 - 0.5	NM	**6.10**	**7.21**	**7.60**	4.32	6.72	**2.20**	4.61	**10.3**	5' S. of Fence
FLB-82	3/27/2017	NA	0.5 - 2	NM	0.0160U	0.00944U	0.0151U	0.0117U	0.00802U	0.0150U	0.0164U	NC	5' S. of Fence
FLB-82	3/27/2017	NA	2 - 4	NM	0.0164U	0.0966U	0.0155U	0.0119U	0.00821U	0.0154U	0.0168U	NC	5' S. of Fence
FLB-83	3/27/2017	NA	0.0 - 0.5	NM	0.772	0.703	0.963	0.666	0.724	0.188	0.485	**1.2**	5' S. of Fence
FLB-83	3/27/2017	NA	0.5 - 2	NM	0.0163U	0.0127I	0.0154U	0.0119U	0.0099I	0.0153U	0.0167U	0.02	5' S. of Fence
FLB-83	3/27/2017	NA	2 - 4	NM	0.0160U	0.00943U	0.0151U	0.0117U	0.00801U	0.0150U	0.0164U	NC	5' S. of Fence
FLB-84	3/27/2017	NA	0.0 - 0.5	NM	0.315	0.270	0.375	0.289	0.310	0.0920	0.206	0.5	5' S. of Fence
FLB-84	3/27/2017	NA	0.5 - 2	NM	0.0159U	0.00937U	0.0150U	0.0116U	0.0101I	0.0149U	0.0163U	0.02	5' S. of Fence
FLB-84	3/27/2017	NA	2 - 4	NM	0.0160U	0.00942U	0.0151U	0.0116U	0.00800U	0.0150U	0.0164U	NC	5' S. of Fence
FLB-85	3/27/2017	NA	0.0 - 0.5	NM	0.248	0.167	0.249	0.189	0.277	0.0585	0.145	0.4	5' S. & W. of Fence Corner
FLB-85	3/27/2017	NA	0.5 - 2	NM	0.0279I	0.0221I	0.0228I	0.0279I	0.0319I	0.0161U	0.0210I	0.04	5' S. & W. of Fence Corner
FLB-85	3/27/2017	NA	2 - 4	NM	0.0163U	0.00957U	0.0153U	0.0118U	0.0106I	0.0152U	0.0167U	NC	5' S. & W. of Fence Corner
FLB-86	3/27/2017	NA	0.0 - 0.5	NM	0.0156U	0.00918U	0.0147U	0.0114U	0.0078U	0.0146U	0.0160U	NC	5' W. of Fence Corner
FLB-86	3/27/2017	NA	0.5 - 2	NM	0.0161U	0.00949U	0.0152U	0.0117U	0.00807U	0.0151U	0.0165U	NC	5' W. of Fence Corner
FLB-87	3/27/2017	NA	0.0 - 0.5	NM	0.0157U	0.00923U	0.0148U	0.0114U	0.00784U	0.0147U	0.0161U	NC	5' S. of Fence Corner
FLB-87	3/27/2017	NA	0.5 - 2	NM	0.0155U	0.00911U	0.0146U	0.0113U	0.00774U	0.0145U	0.0159U	NC	5' S. of Fence Corner
FLB-88	3/27/2017	NA	0.0 - 0.5	NM	0.0155U	0.00914U	0.0146U	0.0113U	0.00777U	0.0145U	0.0159U	NC	5' S. of Fence
FLB-88	3/27/2017	NA	0.5 - 2	NM	0.0159U	0.00935U	0.0150U	0.0116U	0.00795U	0.0149U	0.0163U	NC	5' S. of Fence
FLB-89	3/27/2017	NA	0.0 - 0.5	NM	0.0158U	0.00932U	0.0149U	0.0115U	0.00792U	0.0148U	0.0162U	NC	2' S. of Fence
FLB-89	3/27/2017	NA	0.5 - 2	NM	0.0160U	0.00939U	0.0151U	0.0116U	0.00798U	0.0150U	0.0164U	NC	2' S. of Fence
FLB-90	3/27/2017	NA	0.0 - 0.5	NM	0.0156U	0.00918U	0.0147U	0.0114U	0.0078U	0.0146U	0.0160U	NC	5' S. of Fence
FLB-90	3/27/2017	NA	0.5 - 2	NM	0.0160U	0.00943U	0.0151U	0.0117U	0.00801U	0.0150U	0.0164U	NC	5' S. of Fence
FLB-91	3/27/2017	NA	0.0 - 0.5	NM	0.0160U	.000944U	0.0151U	0.0117U	0.00802U	0.0150U	0.0164U	NC	5' S. of Fence
FLB-91	3/27/2017	NA	0.5 - 2	NM	0.0161U	0.00946U	0.0151U	0.0117U	0.00803U	0.0150U	0.0165U	NC	5' S. of Fence
FLB-92	3/27/2017	NA	0.0 - 0.5	NM	0.184	0.160	0.139	0.163	0.213	0.0489	0.117	0.3	5' E & N of Fence Corner
FLB-92	3/27/2017	NA	0.5 - 2	NM	0.0160U	0.00942U	0.0151U	0.0117U	0.0080U	0.0150U	0.0164U	NC	5' E & N of Fence Corner
FLB-93	3/28/2017	NA	0.0 - 0.5	NM	0.373	0.399	0.288	0.319	0.397	0.106	0.219	0.6	At Fence Line - Inside
FLB-93	3/28/2017	NA	0.5 - 2	NM	0.0160U	0.00943U	0.0151U	0.0117U	0.00801U	0.0150U	0.0164U	NC	At Fence Line - Inside
FLB-94	3/28/2017	NA	0.0 - 0.5	NM	0.0973	0.0776	0.122	0.108	0.111	0.0231I	0.0714	0.1	2' E & N of Fence/FLB-93
FLB-94	3/28/2017	NA	0.5 - 2	NM	0.0161U	0.0102I	0.0170I	0.0126I	0.0143I	0.0151U	0.0165U	0.02	2' E & N of Fence/FLB-93
FLB-95	3/28/2017	NA	0.0 - 0.5	NM	0.0326I	0.0261I	0.0376	0.0363	0.0424	0.0151U	0.0234I	0.1	5' E & N of Fence/FLB-93
FLB-95	3/28/2017	NA	0.5 - 2	NM	0.0159U	0.00936U	0.0150U	0.0116U	0.00795U	0.0149U	0.0163U	NC	5' E & N of Fence/FLB-93

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
FLB-96	3/28/2017	NA	0.0 - 0.5	NM	0.0160U	0.00944U	0.0151U	0.0117U	0.0105I	0.0150U	0.0164U	0.02	2' W & N of Fence/FLB-93
FLB-96	3/28/2017	NA	0.5 - 2	NM	0.0160U	0.00940U	0.0151U	0.0116U	0.00798U	0.0150U	0.0164U	NC	2' W & N of Fence/FLB-93
FLB-97	3/28/2017	NA	0.0 - 0.5	NM	0.590	0.637	0.696	0.497	0.614	0.156	0.342	0.9	5' W & N of Fence/FLB-93
FLB-97	3/28/2017	NA	0.5 - 2	NM	0.0164U	0.00966U	0.0155U	0.0119U	0.00821U	0.0154U	0.0168U	NC	5' W & N of Fence/FLB-93
FLB-98	3/28/2017	NA	0.0 - 0.5	NM	0.0163U	0.0162I	0.0203I	0.0148I	0.0175I	0.0153U	0.0167U	0.02	On Property Line
FLB-98	3/28/2017	NA	0.5 - 2	NM	0.0163U	0.00959U	0.0154U	0.0119U	0.00815U	0.0153U	0.0167U	NC	On Property Line
FLB-99	3/28/2017	NA	0.0 - 0.5	NM	0.0159U	0.0158I	0.0195I	0.0138I	0.0161I	0.0149U	0.0163U	0.02	2' E of Property Line
FLB-99	3/28/2017	NA	0.5 - 2	NM	0.0160U	0.00943U	0.0151U	0.0117U	0.00801U	0.0150U	0.0164U	NC	2' E of Property Line
FLB-100	3/28/2017	NA	0.0 - 0.5	NM	0.380	0.387	0.280	0.300	0.392	0.0752	0.217	0.5	5' E of Property Line
FLB-100	3/28/2017	NA	0.5 - 2	NM	0.0160U	0.00945U	0.0151U	0.0117U	0.00802U	0.0150U	0.0165U	NC	5' E of Property Line
FLB-101	3/28/2017	NA	0.0 - 0.5	NM	0.103	0.0984	0.120	0.102	0.108	0.0150U	0.0600	0.1	2' W of Property Line
FLB-101	3/28/2017	NA	0.5 - 2	NM	0.0163U	0.00960U	0.0154U	0.0119U	0.00816U	0.0153U	0.0167U	NC	2' W of Property Line
FLB-102	3/28/2017	NA	0.0 - 0.5	NM	0.0160U	0.00941U	0.0151U	0.0116U	0.00799U	0.0150U	0.0164U	NC	5' W of Property Line
FLB-102	3/28/2017	NA	0.5 - 2	NM	0.0159U	0.00938U	0.0150U	0.0116U	0.00797U	0.0149U	0.0163U	NC	5' W of Property Line
FLB-103	3/28/2017	NA	0.0 - 0.5	NM	0.228	0.224	0.240	0.170	0.237	0.0503	0.141	0.3	On Property Line
FLB-103	3/28/2017	NA	0.5 - 2	NM	0.0160U	0.00940U	0.0151U	0.0116U	0.00799U	0.0150U	0.0164U	NC	On Property Line
FLB-104	3/28/2017	NA	0.0 - 0.5	NM	0.182	0.179	0.199	0.171	0.189	0.0149U	0.112	0.2	2' E of Property Line
FLB-104	3/28/2017	NA	0.5 - 2	NM	0.0159U	0.00935U	0.0150U	0.0116U	0.00794U	0.0149U	0.0163U	NC	2' E of Property Line
FLB-105	3/28/2017	NA	0.0 - 0.5	NM	0.701	0.702	0.480	0.681	0.729	0.171	0.525	1.1	5' E of Property Line
FLB-105	3/28/2017	NA	0.5 - 2	NM	0.0160U	0.00943U	0.0151U	0.0117U	0.00801U	0.0150U	0.0164U	NC	5' E of Property Line
FLB-106	3/28/2017	NA	0.0 - 0.5	NM	0.0460	0.0436	0.0565	0.0412	0.0504	0.0150U	0.0311I	0.1	2' W of Property Line
FLB-106	3/28/2017	NA	0.5 - 2	NM	0.0160U	0.00943U	0.0151U	0.0117U	0.00801U	0.0150U	0.0164U	NC	2' W of Property Line
FLB-107	3/29/2017	NA	0.0 - 0.5	NM	0.557	0.502	0.768	0.465	0.551	0.108	0.315	0.8	5' W of Property Line
FLB-107	3/29/2017	NA	0.5 - 2	NM	0.0161U	0.00947U	0.0152U	0.0117U	0.00805U	0.0151U	0.0165U	NC	5' W of Property Line
FLB-108	3/29/2017	NA	0.0 - 0.5	NM	**4.00**	**3.95**	**4.13**	2.87	3.91	**0.942**	2.34	**6.0**	At Property Corner-Inside
FLB-108	3/29/2017	NA	0.5 - 2	NM	0.0161U	0.00948U	0.0152U	0.0117U	0.00806U	0.0151U	0.0165U	NC	At Property Corner-Inside
FLB-109	3/29/2017	NA	0.0 - 0.5	NM	0.326	0.330	0.292	0.248	0.318	0.0663	0.180	0.5	2' E & S Property/Fence Corner
FLB-109	3/29/2017	NA	0.5 - 2	NM	0.0161U	0.00947U	0.0152U	0.0117U	0.00805U	0.0151U	0.0165U	NC	2' E & S Property/Fence Corner
FLB-110	3/29/2017	NA	0.0 - 0.5	NM	0.165	0.144	0.206	0.170	0.161	0.0424	0.0990	0.3	2' S & 5' E of Property Corner
FLB-110	3/29/2017	NA	0.5 - 2	NM	0.0160U	0.00944U	0.0151U	0.0117U	0.00802U	0.0150U	0.0164U	NC	2' S & 5' E of Property Corner
FLB-111	3/29/2017	NA	0.0 - 0.5	NM	0.113	0.0758	0.158	0.0989	0.0934	0.0210	0.0710	0.2	2' S. & W. of Property Corner
FLB-111	3/29/2017	NA	0.5 - 2	NM	0.0159U	0.00937U	0.0150U	0.0116U	0.00796U	0.0149U	0.0163U	NC	2' S. & W. of Property Corner
FLB-112	3/29/2017	NA	0.0 - 0.5	NM	0.500	0.494	0.483	0.346	0.509	0.110	0.305	0.7	5' S. & W. of Property Corner
FLB-112	3/29/2017	NA	0.5 - 2	NM	0.0161U	0.00950U	0.0152U	0.0117U	0.00807U	0.0151U	0.0165U	NC	5' S. & W. of Property Corner
FLB-113	3/29/2017	NA	0.0 - 0.5	NM	0.731	0.490	0.809	0.639	0.531	0.152	0.409	**1.1**	2' N & W of Property Corner
FLB-113	3/29/2017	NA	0.5 - 2	NM	0.0162U	0.00955U	0.0153U	0.0118U	0.00811U	0.0152U	0.0166U	NC	2' N & W of Property Corner
FLB-114	3/29/2017	NA	0.0 - 0.5	NM	0.701	0.572	0.854	0.648	0.574	0.129	0.392	**1.0**	5' N & W of Property Corner
FLB-114	3/29/2017	NA	0.5 - 2	NM	0.0162U	0.00956U	0.0153U	0.0118U	0.00812U	0.0152U	0.0167U	NC	5' N & W of Property Corner
FLB-115	3/29/2017	NA	0.0 - 0.5	NM	**3.48**	**2.59**	**5.22**	2.93	3.40	**0.849**	2.04	**5.2**	5' N. & W. of Fence Corner
FLB-115	3/29/2017	NA	0.5 - 2	NM	0.0556	0.0413	0.0647	0.0552	0.0566	0.0150U	0.0325I	0.1	5' N. & W. of Fence Corner
FLB-116	3/29/2017	NA	0.0 - 0.5	NM	0.0397	0.0642	0.0544	0.0497	0.0635	0.0149U	0.0163U	0.1	5' N. & E of Fence Corner
FLB-116	3/29/2017	NA	0.5 - 2	NM	0.0160U	0.00939U	0.0150U	0.0119U	0.00798U	0.0149U	0.0164U	NC	5' N. & E of Fence Corner
FLB-117	3/29/2017	NA	0.0 - 0.5	NM	0.123	0.0857	0.114	0.0960	0.106	0.0276	0.0740	0.2	5' N. of Property
FLB-117	3/29/2017	NA	0.5 - 2	NM	0.0159U	0.00938U	0.0150U	0.0116U	0.00797U	0.0149U	0.0163U	NC	5' N. of Property
FLB-118	3/29/2017	NA	0.0 - 0.5	NM	0.680	0.721	0.816	0.612	0.696	0.153	0.407	**1.0**	5' N. of Property
FLB-118	3/29/2017	NA	0.5 - 2	NM	0.0164U	0.00964U	0.0154U	0.0119U	0.00819U	0.0153U	0.0168U	NC	5' N. of Property

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
FLB-119	3/29/2017	NA	0.0 - 0.5	NM	**2.17**	**2.36**	1.94	1.51	2.26	0.616	1.37	**3.4**	5' N. of Property
FLB-119	3/29/2017	NA	0.5 - 2	NM	0.203	.216	0.166	0.163	0.207	0.0442	0.121	0.3	5' N. of Property
FLB-120	3/29/2017	NA	0.0 - 0.5	NM	0.0253I	0.0280I	0.0239I	0.0229I	0.0277I	0.0152U	0.0174I	0.0	5' N. & E. of Corner
FLB-120	3/29/2017	NA	0.5 - 2	NM	0.0160U	0.00944U	0.0151U	0.0117U	0.00802U	0.0150U	0.0164U	NC	5' N. & E. of Corner
FLB-200	2/5/2018	NA	0.0 - 0.5	NM	0.104	0.103	0.103	0.0869	0.111	0.0167U	0.0602	0.140	8' N. of Fence
FLB-200	2/5/2018	NA	0.5 - 2	NM	0.0167U	0.00298U	0.0157U	0.0121U	0.00833U	0.0156U	0.0171U	NC	8' N. of Fence
FLB-201	2/5/2018	NA	0.0 - 0.5	NM	**26.2**	26.2	32.5	13.1	25.5	8.08	17.8	**42.187**	8' N. of Fence & 5' E. of FLB-200
FLB-201	2/5/2018	NA	0.5 - 2	NM	0.0164U	0.00968U	0.0155U	0.0120U	0.00822U	0.0154U	0.0169U	NC	8' N. of Fence & 5' E. of FLB-200
FLB-202	2/5/2018	NA	0.0 - 0.5	NM	0.177	0.126	0.210	0.157	0.185	0.0560	0.128	0.281	8' S. of Fence
FLB-202	2/5/2018	NA	0.5 - 2	NM	0.226	0.187	0.264	0.203	0.262	0.0571	0.146	0.345	8' S. of Fence
FLB-203	2/5/2018	NA	0.0 - 0.5	NM	0.137	0.0954	0.161	0.120	0.149	0.0412	0.0988	0.215	8' S. of Fence & 5' E. of FLB-202
FLB-203	2/5/2018	NA	0.5 - 2	NM	0.0163U	0.00958U	0.0154U	0.0118U	0.00814U	0.0152U	0.0167U	NC	8' S. of Fence & 5' E. of FLB-202
FLB-204	2/5/2018	NA	0.0 - 0.5	NM	0.0162U	0.00956U	0.0153U	0.0118U	0.00812U	0.0152U	0.0167U	NC	5' W. of BFL-18 (Fence) & 1' S. of Fence
FLB-204	2/5/2018	NA	0.5 - 2	NM	0.0160U	0.00944U	0.0151U	0.0117U	0.00802U	0.0150U	0.0164U	NC	5' W. of BFL-18 (Fence) & 1' S. of Fence
FLB-205	2/5/2018	NA	0.0 - 0.5	NM	0.0157U	0.00925U	0.0148U	0.0114U	0.00786U	0.0147U	0.0161U	NC	5' W. of Fence & 5' S. FLB-204
FLB-205	2/5/2018	NA	0.5 - 2	NM	0.0161U	0.00949U	0.0152U	0.0117U	0.00807U	0.0151U	0.0165U	NC	5' W. of Fence & 5' S. FLB-204
FLB-206	2/6/2018	NA	0.0 - 0.5	NM	0.0404	0.00979U	0.0512	0.0404	0.0505	0.0156U	0.0171U	0.055	7' E. of Fence Corner
FLB-206	2/6/2018	NA	0.5 - 2	NM	0.0517	0.00974U	0.0485	0.0417	0.0614	0.0155U	0.0398	0.069	7' E. of Fence Corner
FLB-207	2/6/2018	NA	0.0 - 0.5	NM	0.0167U	0.00983U	0.0157U	0.0122U	0.00835U	0.0156U	0.0171U	NC	5' S. of Fence Corner & 7' E. of Fence
FLB-207	2/6/2018	NA	0.5 - 2	NM	0.0166U	0.00978U	0.0157U	0.0121U	0.00831U	0.0156U	0.0170U	NC	5' S. of Fence Corner & 7' E. of Fence
FLB-208	2/5/2018	NA	0.0 - 0.5	NM	0.0165U	0.00969U	0.0155U	0.0120U	0.00824U	0.0154U	0.0169U	NC	7' W. of Fence
FLB-208	2/5/2018	NA	0.5 - 2	NM	0.0161U	0.00949U	0.0152U	0.0117U	0.00806U	0.0151U	0.0165U	NC	7' W. of Fence
FLB-209	2/7/2018	NA	0.0 - 0.5	NM	0.0167U	0.00985U	0.0158U	0.0122U	0.0420	0.0157U	0.0172U	0.018	7' W. of Fence
FLB-209	2/7/2018	NA	0.5 - 2	NM	0.0167U	0.00984U	0.0158U	0.0122U	0.00836U	0.0157U	0.0171U	NC	7' W. of Fence
FLB-210	2/6/2018	NA	0.0 - 0.5	NM	0.0167U	0.00983U	0.0158U	0.0122U	0.00835U	0.0156U	0.0171U	NC	7' W. of Fence
FLB-210	2/6/2018	NA	0.5 - 2	NM	0.0163U	0.00962U	0.0154U	0.0119U	0.0082	0.0153U	0.0168U	NC	7' W. of Fence
FLB-211	2/6/2018	NA	0.0 - 0.5	NM	0.919	0.0914	0.940	0.747	0.933	0.0216	0.600	**1.112**	7' E. of Fence & E. of BFL-38
FLB-211	2/6/2018	NA	0.5 - 2	NM	0.0164U	0.00968U	0.0155U	0.0120U	0.00822U	0.0154U	0.0169U	NC	7' E. of Fence & E. of BFL-38
FLB-211	2/6/2018	NA	2 - 4	NM	0.0163U	0.00956U	0.0154U	0.0119U	0.00814U	0.0153U	0.0167U	NC	7' E. of Fence & E. of BFL-38
FLB-211	2/6/2018	NA	4 - 6	NM	0.0163U	0.00960U	0.0154U	0.00119U	0.00815U	0.0153U	0.0167U	NC	7' E. of Fence & E. of BFL-38
FLB-212	2/6/2018	NA	0.0 - 0.5	NM	0.145	0.106	0.162	0.134	0.167	0.0372	0.108	0.221	7' E. of Fence & 5' N. of FLB-211
FLB-212	2/6/2018	NA	0.5 - 2	NM	0.0165U	0.00969U	0.0155U	0.0120U	0.00824U	0.0154U	0.0169U	NC	7' E. of Fence & 5' N. of FLB-211
FLB-212	2/6/2018	NA	2 - 4	NM	0.0171U	0.0101U	0.0162U	0.0125U	0.00856U	0.0160U	0.0176U	NC	7' E. of Fence & 5' N. of FLB-211
FLB-212	2/6/2018	NA	4 - 6	NM	0.0176U	0.0105U	0.0168U	0.0130U	0.00891U	0.0167U	0.0183U	NC	7' E. of Fence & 5' N. of FLB-211
FLB-213	2/6/2018	NA	0.0 - 0.5	NM	0.0619	0.0499	0.0749	0.0520	0.0671	0.0156U	0.0436	0.087	7' E. of Fence & 5' S of FLB-211
FLB-213	2/6/2018	NA	0.5 - 2	NM	0.0167U	0.00980U	0.0157U	0.0121U	0.00833U	0.0156U	0.0171U	NC	7' E. of Fence & 5' S. of FLB-211
FLB-213	2/6/2018	NA	2 - 4	NM	0.0159U	0.00938U	0.0150U	0.0116U	0.00797U	0.0149U	0.0163U	NC	7' E. of Fence & 5' S of FLB-211
FLB-213	2/6/2018	NA	4 - 6	NM	0.0164U	0.00968U	0.0155U	0.0120U	0.00822U	0.0154U	0.0169U	NC	7' E. of Fence & 5' S. of FLB-211
FLB-214	2/6/2018	NA	0.0 - 0.5	NM	0.0179U	0.0106U	0.0169U	0.0131U	0.00897U	0.0168U	0.0184	NC	7' W. of Fence
FLB-214	2/6/2018	NA	0.5 - 2	NM	0.00976U	0.00923U	0.0156U	0.0121U	0.00829U	0.0155U	0.0170U	NC	7' W. of Fence
FLB-215	2/6/2018	NA	0.0 - 0.5	NM	0.0173U	0.0102U	0.0163U	0.0126U	0.00866U	0.0162U	0.0178U	NC	3' N. of Fence & 8' W. of Fence
FLB-215	2/6/2018	NA	0.5 - 2	NM	0.0162U	0.00955U	0.0153U	0.0118U	0.00811U	0.0152U	0.0166U	NC	3' N. of Fence & 8' W. of Fence
FLB-216	2/6/2018	NA	0.0 - 0.5	NM	0.0165U	0.00974U	0.0156U	0.0120U	0.00827U	0.0155U	0.0170U	NC	3' W. of Fence & 8' N. of Fence
FLB-216	2/6/2018	NA	0.5 - 2	NM	0.0163U	0.00957U	0.0153U	0.0118U	0.00813U	0.0152U	0.0167U	NC	3' W. of Fence & 8' N. of Fence
FLB-217	2/6/2018	NA	0.0 - 0.5	NM	0.0161U	0.00950U	0.0152U	0.0117U	0.0081	0.0151U	0.0165U	NC	8' W. of Fence & 8' N. of Fence

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
FLB-217	2/6/2018	NA	0.5 - 2	NM	0.0160U	0.00941U	0.0151U	0.0116U	0.00799U	0.0150U	0.0164U	NC	8' W. of Fence & 8' N. of Fence
FLB-218	2/6/2018	NA	0.0 - 0.5	NM	0.217Q	0.0739Q	0.198Q	0.177Q	0.219Q	0.0478Q	0.139Q	0.308	5' N. of Property Corner
FLB-218	2/6/2018	NA	0.5 - 2	NM	0.0159UQ	0.00934UQ	0.0150UQ	0.0116UQ	0.00794UQ	0.0149UQ	0.0163UQ	NC	5' N. of Property Corner
FLB-219	2/6/2018	NA	0.0 - 0.5	NM	0.157Q	0.129Q	0.202Q	0.132Q	0.155Q	0.0491Q	0.0999Q	0.251	5' N. & 5' E. of Property Corner
FLB-219	2/6/2018	NA	0.5 - 2	NM	0.0158UQ	0.00928UQ	0.0149UQ	0.0115UQ	0.00788UQ	0.0148UQ	0.0162UQ	NC	5' N. & 5' E. of Property Corner
FLB-220	2/7/2018	NA	0.0 - 0.5	NM	**1.2200**	1.1600	1.2000	0.8070	1.1300	0.3240	0.7930	**1.869**	3' S. of Fence & 10' E. of BFL-71
FLB-220	2/7/2018	NA	0.5 - 2	NM	0.2780	0.00991U	0.1840	0.1660	0.00842U	0.1060	0.2800	0.433	3' S. of Fence & 10' E. of BFL-71
FLB-221	2/7/2018	NA	0.0 - 0.5	NM	**235.0000**	248.0000	270.0000	37.2000	236.0000	69.9000	161.0000	**373.408**	3' S. of Fence & 10' W. of BFL-71
FLB-221	2/7/2018	NA	0.5 - 2	NM	0.0161U	0.00945U	0.0151U	0.0117U	0.00803U	0.0150U	0.0165U	NC	3' S. of Fence & 10' W. of BFL-71
FLB-222	2/7/2018	NA	0.0 - 0.5	NM	0.8830	0.8550	0.9070	0.6730	0.8710	0.2190	0.5800	**1.344**	3 Inches S. of Fence & 10' E. of BFL-60
FLB-222	2/7/2018	NA	0.5 - 2	NM	0.0169U	0.00997U	0.0160U	0.0123U	0.00847U	0.0159U	0.0174U	NC	3 Inches S. of Fence & 10' E. of BFL-60
FLB-223	2/7/2018	NA	0.0 - 0.5	NM	0.0166U	0.00976U	0.0156U	0.0121U	0.00829U	0.0155U	0.0170U	NC	5' S. of Fence & 10' E. of BFL-60
FLB-223	2/7/2018	NA	0.5 - 2	NM	**1.9200**	1.9200	1.9200	1.5700	1.9700	0.6110	1.2900	**3.062**	5' S. of Fence & 10' E. of BFL-60
FLB-223	2/7/2018	NA	2 - 4	NM	0.0116U	0.00974U	0.0156U	0.0120U	0.00828U	0.0155U	0.0170U	NC	5' S. of Fence & 10' E. of BFL-60
FLB-223	2/7/2018	NA	4 - 6	NM	0.0164U	0.00913U	0.0155U	0.0119U	0.00819U	0.0153U	0.0168U	NC	5' S. of Fence & 10' E. of BFL-60
FLB-224	2/7/2018	NA	0.0 - 0.5	NM	**5.5100**	5.1500	5.6600	4.2100	5.5300	1.3100	3.4800	**8.297**	10' S. of Fence & 10' E. of BFL-60
FLB-224	2/7/2018	NA	0.5 - 2	NM	0.0166U	0.00976U	0.0156U	0.0121U	0.00829U	0.0155U	0.0170U	NC	10' S. of Fence & 10' E. of BFL-60
FLB-225	2/7/2018	NA	0.0 - 0.5	NM	0.0423	0.0376	0.0160U	0.0365	0.0408	0.0159U	0.0174U	0.056	3 Inches S. of Fence & 10' W. of BFL-60
FLB-225	2/7/2018	NA	0.5 - 2	NM	0.0166U	0.00979U	0.0157U	0.0121U	0.00832U	0.0156U	0.0171U	NC	3 Inches S. of Fence & 10' W. of BFL-60
FLB-226	2/7/2018	NA	0.0 - 0.5	NM	**1.1000**	1.1200	1.1300	0.7470	1.1000	0.2980	0.7480	**1.706**	5' S. of Fence & 10' W. of BFL-60
FLB-226	2/7/2018	NA	0.5 - 2	NM	0.0163U	0.00961U	0.0154U	0.0119U	0.00817U	0.0153U	0.0167U	NC	5' S. of Fence & 10' W. of BFL-60
FLB-227	2/7/2018	NA	0.0 - 0.5	NM	**4.5900**	4.7000	4.4500	3.5700	4.7200	1.4300	0.4830	**7.024**	10' S. of Fence & 10' W. of BFL-60
FLB-227	2/7/2018	NA	0.5 - 2	NM	0.0161U	0.00946U	0.0152U	0.0117U	0.00804U	0.0151U	0.0165U	NC	10' S. of Fence & 10' W. of BFL-60
FLB-228	2/8/2018	NA	0.0 - 0.5	NM	0.0539	0.0521	0.0539	0.0406	0.0547	0.0160U	0.0410	0.077	6' N. of Fence & 10' E. of BFL-60
FLB-228	2/8/2018	NA	0.5 - 2	NM	0.0166U	0.00926U	0.0157U	0.0121U	0.00831U	0.0156U	0.0170U	NC	6' N. of Fence & 10' E. of BFL-60
FLB-229	2/8/2018	NA	0.0 - 0.5	NM	0.0863	0.0739	0.0873	0.0728	0.0813	0.0157U	0.0633	0.117	11' N. of Fence & 10' E. of BFL-60
FLB-229	2/8/2018	NA	0.5 - 2	NM	0.0166U	0.00979U	0.0157U	0.0121U	0.0083	0.0156U	0.0171U	NC	11' N. of Fence & 10' E. of BFL-60
FLB-230	2/8/2018	NA	0.0 - 0.5	NM	0.0168U	0.00986U	0.0158U	0.0122U	0.00838U	0.0157U	0.0172U	NC	5' N. of Fence & 10' W. of BFL-60
FLB-230	2/8/2018	NA	0.5 - 2	NM	0.0166U	0.00979U	0.0157U	0.0121U	0.00831U	0.0156U	0.0170U	NC	5' N. of Fence & 10' W. of BFL-60
FLB-231	2/8/2018	NA	0.0 - 0.5	NM	0.0166U	0.00978U	0.0157U	0.0121U	0.00831U	0.0156U	0.0170U	NC	2' W. of SW Corner of Slab
FLB-231	2/8/2018	NA	0.5 - 2	NM	0.0167U	0.00982U	0.0157U	0.0121U	0.00834U	0.0156U	0.0171U	NC	2' W. of SW Corner of Slab
FLB-232	2/8/2018	NA	0.0 - 0.5	NM	0.0167U	0.00982U	0.0157U	0.0121U	0.00834U	0.0156U	0.0171U	NC	2' W. of Center of Slab
FLB-232	2/8/2018	NA	0.5 - 2	NM	0.0166U	0.00975U	0.0156U	0.0121U	0.00828U	0.0155U	0.0170U	NC	2' W. of Center of Slab
FLB-233	2/8/2018	NA	0.0 - 0.5	NM	0.0166U	0.00977U	0.0157U	0.0121U	0.00830U	0.0156U	0.0170U	NC	7' W. of Center of Slab
FLB-233	2/8/2018	NA	0.5 - 2	NM	0.0166U	0.00976U	0.0156U	0.0121U	0.00829U	0.0155U	0.0170U	NC	7' W. of Center of Slab
FLB-234	2/8/2018	NA	0.0 - 0.5	NM	**9.5600**	9.9800	10.7000	6.4200	9.4800	2.5700	6.4300	**14.915**	2' W. of NW Corner of Slab
FLB-234	2/8/2018	NA	0.5 - 2	NM	0.7060	0.6270	0.6930	0.5990	0.6780	0.1840	0.4970	**1.078**	2' W. of NW Corner of Slab
FLB-234	2/8/2018	NA	2 - 4	NM	0.0161U	0.00946U	0.0152U	0.0117U	0.00803U	0.09151U	0.0165U	NC	2' W. of NW Corner of Slab
FLB-234	2/8/2018	NA	4 - 6	NM	0.0159U	0.00934U	0.0150U	0.0115U	0.00793U	0.0149U	0.0163U	NC	2' W. of NW Corner of Slab
FLB-235	2/8/2018	NA	0.0 - 0.5	NM	0.0586	0.0484	0.0642	0.0481	0.0551	0.0156U	0.0418	0.082	7' W. of NW Corner of Slab
FLB-235	2/8/2018	NA	0.5 - 2	NM	0.0955	0.0866	0.0891	0.0795	0.0937	0.0158U	0.0671	0.129	7' W. of NW Corner of Slab
FLB-236	2/8/2018	NA	0.0 - 0.5	NM	0.0165U	0.00974U	0.0156U	0.0120U	0.00827U	0.0155U	0.0170U	NC	2' N. of Center of Slab
FLB-236	2/8/2018	NA	0.5 - 2	NM	0.0163U	0.00962U	0.0154U	0.0119U	0.00817U	0.0153U	0.0168U	NC	2' N. of Center of Slab
FLB-237	2/8/2018	NA	0.0 - 0.5	NM	0.0165U	0.00972U	0.0156U	0.0120U	0.00826U	0.0155U	0.0169U	NC	7' N. of Center of Slab
FLB-237	2/8/2018	NA	0.5 - 2	NM	0.0163U	0.00961U	0.0154U	0.0119U	0.00816U	0.0153U	0.0167U	NC	7' N. of Center of Slab
FLB-238	2/8/2018	NA	0.0 - 0.5	NM	**4.4900**	4.2700	5.1900	2.4000	4.3800	1.1700	2.9800	**6.932**	2' E. of NE Corner of Slab

Sample				OVA	Laboratory Analyses								
Boring Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
FLB-238	2/8/2018	NA	0.5 - 2	NM	0.2350	0.2270	0.2390	0.1870	0.2420	0.0655	0.1770	0.367	2' E. of NE Corner of Slab
FLB-239	2/8/2018	NA	0.0 - 0.5	NM	0.0484	0.0429	0.0560	0.0401	0.0505	0.0153U	0.0422	0.071	7' E. of NE Corner of Slab
FLB-239	2/8/2018	NA	0.5 - 2	NM	0.8980	0.8960	0.9790	0.6780	0.8960	0.2290	0.5950	**1.352**	7' E. of NE Corner of Slab
FLB-239	2/8/2018	NA	2 - 4	NM	0.0160U	0.00943U	0.0151U	0.0117U	0.00801U	0.0150U	0.0164U	NC	7' E. of NE Corner of Slab
FLB-239	2/8/2018	NA	4 - 6	NM	0.0159U	0.00935U	0.0150U	0.0116U	0.00794U	0.0149U	0.0163U	NC	7' E. of NE Corner of Slab
FLB-240	2/8/2018	NA	0.0 - 0.5	NM	0.1310	0.1110	0.1420	0.1100	0.1210	0.0433	0.0936	0.210	2' E. of Center of Slab
FLB-240	2/8/2018	NA	0.5 - 2	NM	0.0166U	0.00974U	0.0156U	0.0120U	0.00828U	0.0155U	0.0170U	NC	2' E. of Center of Slab
FLB-240	2/8/2018	NA	2 - 4	NM	0.0176U	0.0103U	0.0166U	0.0128U	0.00878U	0.0165U	0.0180U	NC	2' E. of Center of Slab
FLB-240	2/8/2018	NA	4 - 6	NM	0.0166U	0.00978U	0.0157U	0.0121U	0.00831U	0.0156U	0.0170U	NC	2' E. of Center of Slab
FLB-241	2/7/2018	NA	0.0 - 0.5	NM	**1.8600**	1.8600	1.7800	1.5600	1.9700	0.6330	1.2900	**3.004**	10' S. of BFL-60 (Fence)
FLB-241	2/7/2018	NA	0.5 - 2	NM	0.0164U	0.00966U	0.0155U	0.0119U	0.00821U	0.0154U	0.0168U	NC	10' S. of BFL-60 (Fence)
FLB-242	2/5/2018	NA	0.0 - 0.5	NM	**2.96**	3.00	2.93	2.21	3.12	0.742	1.98	**4.518**	Geoprobe- 2' N. of Fence & 1' E. of BFL-61
FLB-242	2/5/2018	NA	0.5 - 2	NM	0.0175U	0.0103U	0.0165U	0.0127U	0.00874U	0.0164U	0.0179U	NC	Geoprobe- 2' N. of Fence & 1' E. of BFL-61
FLB-242	2/5/2018	NA	2 - 4	NM	0.0163U	0.00957U	0.0153U	0.0118U	0.00813U	0.0152U	0.0167U	NC	Geoprobe- 2' N. of Fence & 1' E. of BFL-61
FLB-242	2/5/2018	NA	4 - 6	NM	0.0163U	0.00958U	0.0154U	0.0119U	0.00814U	0.0153U	0.0167U	NC	Geoprobe- 2' N. of Fence & 1' E. of BFL-61
FLB-242	2/5/2018	NA	23 - 25	NM	0.0164U	0.00963U	0.0154U	0.0119U	0.00818U	0.0153U	0.0168U	NC	Geoprobe- 2' N. of Fence & 1' E. of BFL-61
FLB-243	2/5/2018	NA	0.0 - 0.5	NM	0.0170U	0.0100U	0.0395	0.0124U	0.00852U	0.0160U	0.0175U	0.022	8' N. of BFL-12 (Fence)
FLB-243	2/5/2018	NA	0.5 - 2	NM	0.0177U	0.0104U	0.0167U	0.0129U	0.00883U	0.0165U	0.0181U	NC	8' N. of BFL-12 (Fence)
FLB-243	2/5/2018	NA	2 - 4	NM	0.0158U	0.00933U	0.0149U	0.0115U	0.00792U	0.0148U	0.0162U	NC	8' N. of BFL-12 (Fence)
FLB-243	2/5/2018	NA	4 - 6	NM	0.0156U	0.00918U	0.0147U	0.0114U	0.00780U	0.0146U	0.0160U	NC	8' N. of BFL-12 (Fence)
FLB-244	2/5/2018	NA	0.0 - 0.5	NM	0.0167U	0.00984U	0.0158U	0.0122U	0.00836U	0.0157U	0.0171U	NC	5' E. of BFL-12 & 8' N. of Fence
FLB-244	2/5/2018	NA	0.5 - 2	NM	0.0160U	0.00941U	0.0151U	0.0116U	0.00799U	0.0150U	0.0164U	NC	5' E. of BFL-12 & 8' N. of Fence
FLB-244	2/5/2018	NA	2 - 4	NM	0.0158U	0.00933U	0.0149U	0.0115U	0.00792U	0.0148U	0.0162U	NC	5' E. of BFL-12 & 8' N. of Fence
FLB-244	2/5/2018	NA	4 - 6	NM	0.0162U	0.00953U	0.0153U	0.0118U	0.00810U	0.0152U	0.0166U	NC	5' E. of BFL-12 & 8' N. of Fence
FLB-245	2/5/2018	NA	0.0 - 0.5	NM	0.0170U	0.0100U	0.0160U	0.0124U	0.00850	0.0159U	0.0174U	0.019	5' W. of BFL-12 & 8' N. of Fence
FLB-245	2/5/2018	NA	0.5 - 2	NM	0.0361	0.00969U	0.0155U	0.0120U	0.00823U	0.0154U	0.0169U	0.046	5' W. of BFL-12 & 8' N. of Fence
FLB-245	2/5/2018	NA	2 - 4	NM	0.163	0.156	0.157	0.134	0.162	0.0356	0.106	0.242	5' W. of BFL-12 & 8' N. of Fence
FLB-245	2/5/2018	NA	4 - 6	NM	0.0160U	0.00944U	0.0151U	0.0117U	0.00802U	0.0150U	0.0164U	NC	5' W. of BFL-12 & 8' N. of Fence
FLB-246	2/9/2018	NA	0.0 - 0.5	NM	0.0158U	0.00933U	0.0149U	0.0115U	0.00792U	0.0148U	0.0162U	NC	10' E. of Property Line & 40' S. of Property Corner
FLB-246	2/9/2018	NA	0.5 - 2	NM	0.2040	0.2000	0.1850	0.1600	0.2050	0.0491	0.1260	.306	10' E. of Property Line & 40' S. of Property Corner
FLB-246	2/9/2018	NA	2 - 4	NM	0.0157U	0.00925U	0.0148U	0.0114U	0.00786U	0.0147U	0.0161U	NC	10' E. of Property Line & 40' S. of Property Corner
FLB-246	2/9/2018	NA	4 - 6	NM	0.0964	0.0815	0.1070	0.0791	0.1060	0.0148U	0.0688	.130	10' E. of Property Line & 40' S. of Property Corner
FLB-247	2/7/2018	NA	0.0 - 0.5	NM	0.7440	0.7060	0.0760	0.5960	0.7290	0.2300	0.5050	**1.109**	10' S. of BFL-57 (Fence)
FLB-247	2/7/2018	NA	0.5 - 2	NM	0.1180	0.1130	0.1080	0.0952	0.1190	0.150U	0.0830	0.224	10' S. of BFL-57 (Fence)
FLB-248	2/7/2018	NA	0.0 - 0.5	NM	**2.2300**	2.2400	2.1800	1.7700	2.3400	0.7660	1.5300	**3.611**	10' S. of BFL-57 (Fence) & 10' E. of FLB-247
FLB-248	2/7/2018	NA	0.5 - 2	NM	0.0406	0.0480	0.0389	0.0120U	0.0434	0.0154U	0.0169U	0.058	10' S. of BFL-57 (Fence) & 10' E. of FLB-247
FLB-248	2/7/2018	NA	2 - 4	NM	0.0162U	0.00952U	0.0153U	0.0118U	0.00809U	0.0152U	0.0166U	NC	10' S. of BFL-57 (Fence) & 10' E. of FLB-247
FLB-248	2/7/2018	NA	4 - 6	NM	0.0163U	0.00958U	0.0153U	0.0118U	0.00814U	0.0152U	0.0167U	NC	10' S. of BFL-57 (Fence) & 10' E. of FLB-247
FLB-249	2/7/2018	NA	0.0 - 0.5	NM	**3.3700**	3.5000	3.3900	2.6800	3.5100	1.0200	2.1900	**5.328**	10' S. of BFL-57 (Fence) & 10' W. of FLB-247
FLB-249	2/7/2018	NA	0.5 - 2	NM	0.5410	0.5360	0.5240	0.4320	0.5380	0.1640	0.3600	0.852	10' S. of BFL-57 (Fence) & 10' W. of FLB-247
FLB-249	2/7/2018	NA	2 - 4	NM	0.0169U	0.00994U	0.0159U	0.0123U	0.00845U	0.0158U	0.0173U	NC	10' S. of BFL-57 (Fence) & 10' W. of FLB-247
FLB-249	2/7/2018	NA	4 - 6	NM	0.0163U	0.00961U	0.0154U	0.0119U	0.00817U	0.0153U	0.0167U	NC	10' S. of BFL-57 (Fence) & 10' W. of FLB-247
FLB-250	2/7/2018	NA	0.0 - 0.5	NM	0.6670	0.5510	0.6630	0.5490	0.6110	0.2220	0.5070	**1.067**	8' W. of Fence & 5' W. of BFL-70
FLB-250	2/7/2018	NA	0.5 - 2	NM	0.0166U	0.00976U	0.0156U	0.0121U	0.00829U	0.0155U	0.0170U	NC	8' W. of Fence & 5' W. of BFL-70
Alternate Direct Exposure Residential (mg/kg)					**1.0**	#	#	#	#	#	#	**1.0**	
Alternate Direct Exposure Commercial/Industrial (mg/kg)					**3.1**	#	#	#	#	#	#	**3.1**	

Sample				OVA	Laboratory Analyses								
Boring Well No.	**Date Collected**	**Depth to Water (ft)**	**Sample Interval (fbls)**	**Net OVA Reading (ppm)**	**Benzo (a) pyrene (mg/kg)**	**Benzo (a) anthra-cene (mg/kg)**	**Benzo (b) fluoran-thene (mg/kg)**	**Benzo (k) fluoran-thene (mg/kg)**	**Chrysene (mg/kg)**	**Dibenz (a,h) anthra-cene (mg/kg)**	**Indeno (1,2,3-cd) pyrene (mg/kg)**	**Benzo (a) pyrene equivalent (mg/kg)**	**Comments**
Leachability Based on Groundwater Criteria (mg/kg)					**8**	0.8	2.4	24	77	0.7	6.6	#	

Notes: NC = Value Not Calculated NA = Sample Not Analyzed NM = Not Measured
I = Value estimated to be between the laboratory detection and response limit
U = Compound was not detected Q = Hold time exceeded
If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 2: SOIL & DEBRIS ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory** **FDEP Project #346171**

Sample			Laboratory Analyses								
Boring Well No.	**Date Collected**	**Sample Interval (fbls)**	**Benzo (a) pyrene (mg/kg)**	**Benzo (a) anthra-cene (mg/kg)**	**Benzo (b) fluoran-thene (mg/kg)**	**Benzo (k) fluoran-thene (mg/kg)**	**Chrysene (mg/kg)**	**Dibenz (a,h) anthra-cene (mg/kg)**	**Indeno (1,2,3-cd) pyrene (mg/kg)**	**Benzo (a) pyrene equivalent (mg/kg)**	**Comments**
FLB-201	2/5/2018	0.0 - 0.5	**26.2**	26.2	32.5	13.1	25.5	8.08	17.8	**42.187**	8' N. of Fence & 5' E. of FLB-200
FLB-201	2/5/2018	0.5 - 2	0.0164U	0.00968U	0.0155U	0.0120U	0.00822U	0.0154U	0.0169U	NC	8' N. of Fence & 5' E. of FLB-200
FLB-201	2/5/2018	**0.0 - 0.5 Black Debris**	167	204	196	139	194	48	116	NC	8' N. of Fence & 5' E. of FLB-200
FLB-221	2/7/2018	0.0 - 0.5	**235.0000**	248.0000	270.0000	37.2000	236.0000	69.9000	161.0000	**373.408**	3 S. of Fence & 10' W. of BFL-71
FLB-221	2/7/2018	0.5 - 2	0.0161U	0.00945U	0.0151U	0.0117U	0.00803U	0.0150U	0.0165U	NC	3 S. of Fence & 10' W. of BFL-71
FLB-221	2/7/2018	**0.0 - 0.5 Black Debris**	3360	4010	3950	2860	3990	875	1950	NC	3 S. of Fence & 10' W. of BFL-71
FLB-223	2/7/2018	0.0 - 0.5	0.0166U	0.00976U	0.0156U	0.0121U	0.00829U	0.0155U	0.0170U	NC	5' S. of Fence & 10' E. of BFL-60
FLB-223	2/7/2018	0.5 - 2	**1.9200**	1.9200	1.9200	1.5700	1.9700	0.6110	1.2900	**3.062**	5' S. of Fence & 10' E. of BFL-60
FLB-223	2/7/2018	2 - 4	0.0116U	0.00974U	0.0156U	0.0120U	0.00828U	0.0155U	0.0170U	NC	5' S. of Fence & 10' E. of BFL-60
FLB-223	2/7/2018	**0.0 - 0.5 Black Debris**	ND	ND	ND	ND	ND	ND	ND	NC	5' S. of Fence & 10' E. of BFL-60
FLB-224	2/7/2018	0.0 - 0.5	**5.5100**	5.1500	5.6600	4.2100	5.5300	1.3100	3.4800	**8.297**	10' S. of Fence & 10' E. of BFL-60
FLB-224	2/7/2018	0.5 - 2	0.0166U	0.00976U	0.0156U	0.0121U	0.00829U	0.0155U	0.0170U	NC	10' S. of Fence & 10' E. of BFL-60
FLB-224	2/7/2018	**0.0 - 0.5 Black Debris**	244U	289	230U	186	273	229U	251U	NC	10' S. of Fence & 10' E. of BFL-60
FLB-227	2/7/2018	0.0 - 0.5	**4.5900**	4.7000	4.4500	3.5700	4.7200	1.4300	0.4830	**7.024**	10' S. of Fence & 10' W. of BFL-60
FLB-227	2/7/2018	0.5 - 2	0.0161U	0.00946U	0.0152U	0.0117U	0.00804U	0.0151U	0.0165U	NC	10' S. of Fence & 10' W. of BFL-60
FLB-227	2/7/2018	**0.0 - 0.5 Black Debris**	1780	2060	2260	1470	1870	553	1220	NC	10' S. of Fence & 10' W. of BFL-60
FLB-241	2/7/2018	0.0 - 0.5	**1.8600**	1.8600	1.7800	1.5600	1.9700	0.6330	1.2900	**3.004**	10' S. of BFL-60 (Fence)
FLB-241	2/7/2018	0.5 - 2	0.0164U	0.00966U	0.0155U	0.0119U	0.00821U	0.0154U	0.0168U	NC	10' S. of BFL-60 (Fence)
FLB-241	2/7/2018	**0.0 - 0.5 Black Debris**	73.0	86.8	78.4	63.4	85.7	23.2	49.3	NC	10' S. of BFL-60 (Fence)

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: USDA-U.S Citrus & Subtropical Products Research Laboratory **FDEP Project #346171**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
BFL-10	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.180 I	0.14 U	0.323 I	0.565	2.00	0.142 I	1.38	1.54	
BFL-10	9/14/2015	NA	0.5 - 2	NM	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.033 U	0.0066 U	0.033 U	0.053 U	0.033 U	0.033 U	
BFL-11	9/11/2015	NA	0.0 - 0.5	NM	0.075 U	0.075 U	0.075 U	0.104 I	0.075U	0.219	0.480	1.71	0.0830 I	0.952	1.22	
BFL-11	9/11/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0070 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-12	9/11/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0070 U	0.622	0.056 U	0.150	0.508	
BFL-12	9/11/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0070 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-13	9/11/2015	NA	0.0 - 0.5	NM	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.046 U	0.0231 I	0.0798 I	0.074 U	0.046 U	0.0594 I	
BFL-13	9/11/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0068 U	0.034 U	0.055 U	0.035 U	0.035U	
BFL-13	9/11/2015	NA	2 - 4	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.035 U	0.0071 U	0.035 U	0.057 U	0.035 U	0.035 U	
BFL-13	9/11/2015	NA	4 - 6	NM	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.043 U	0.0086 U	0.043 U	0.069 U	0.043 U	0.043 U	
BFL-14	9/11/2015	NA	0.0 - 0.5	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.0599 I	0.415	1.11	0.058 U	0.343	0.892	
BFL-14	9/11/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0070 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-15	9/11/2015	NA	0.0 - 0.5	NM	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	0.141 I	1.13	2.67	0.062 U	0.724	2.17	
BFL-15	9/11/2015	NA	0.5 - 2	NM	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.040 U	0.0148 I	0.040 U	0.063 U	0.040 U	0.040 U	
BFL-16	9/11/2015	NA	0.0 - 0.5	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.118	0.437	0.058 U	0.101 I	0.355	
BFL-16	9/11/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-17	9/11/2015	NA	0.0 - 0.5	NM	0.059 U	0.059 U	0.059 U	0.059 U	0.059 U	0.037 U	0.317	0.705	0.059 U	0.153	0.545	
BFL-17	9/11/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-18	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.911	1.72	1.92	8.13	0.14 U	2.34	6.62	
BFL-18	9/14/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.033 U	0.0067 U	0.033 U	0.054 U	0.033 U	0.033 U	
BFL-19	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.250 I	0.320 I	0.351	5.23	0.14 U	2.73	3.70	
BFL-19	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.252 I	0.544	3.56	0.14 U	1.43	2.38	Dup-15
BFL-19	9/14/2015	NA	0.5 - 2	NM	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.033 U	0.0883	0.400	0.053 U	0.128 I	0.291	
BFL-19	9/14/2015	NA	0.5 - 2	NM	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.033 U	0.0067 U	0.033 U	0.053 U	0.033 U	0.033 U	Dup-16
BFL-19	9/14/2015	NA	2 - 4	NM	0.055U	0.055U	0.055U	0.055U	0.055U	0.034U	0.0424	0.174	0.055U	0.0423 I	0.146	
BFL-19	9/14/2015	NA	4 - 6	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-20	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.254 I	0.465	0.829	1.40	11.0	0.229	8.11	8.03	
BFL-20	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.250 I	0.513	1.51	8.99	0.145 U	2.92	6.11	Dup-19
BFL-20	9/14/2015	NA	0.5 - 2	NM	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.033 U	0.0066 U	0.033 U	0.053 U	0.033 U	0.033 U	
BFL-20	9/14/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.068 U	0.034 U	0.054 U	0.034 U	0.034 U	Dup-20
BFL-21	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.491	0.583	0.397	9.73	0.14 U	2.46	6.47	
BFL-21	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.491	0.087 U	0.254	1.23	0.14 U	0.285 I	0.872	Dup-23
BFL-21	9/14/2015	NA	0.5 - 2	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.0072 U	0.036 U	0.058 U	0.036 U	0.036 U	
BFL-21	9/14/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.068 U	0.034 U	0.055 U	0.034 U	0.034 U	Dup-24
BFL-22	9/14/2015	NA	0.0 - 0.5	NM	0.184 I	0.143 I	0.148 I	0.372	0.542	1.13	1.95	16.6	0.306 I	10.9	10.6	
BFL-22	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.145 I	0.341 I	0.749	2.08	13.3	0.14 U	7.90	8.47	Dup-27
BFL-22	9/14/2015	NA	0.5 - 2	NM	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.038 U	0.061 U	0.038 U	0.038 U	
BFL-22	9/14/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	Dup-28
BFL-23	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.104 I	0.372	1.61	0.14 U	0.646	1.25	
BFL-23	9/15/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.035 U	0.0069 U	0.035 U	0.055 U	0.035 U	0.035 U	
BFL-24	9/14/2015	NA	0.0 - 0.5	NM	0.13 U	0.13 U	0.13 U	0.13 U	0.308	0.829	2.03	7.93	0.13 U	2.37	6.70	
BFL-24	9/14/2015	NA	0.0 - 0.5	NM	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.945	3.02	12.0	0.36 U	2.79	9.62	Dup-31

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: USDA-U.S Citrus & Subtropical Products Research Laboratory **FDEP Project #346171**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
BFL-24	9/14/2015	NA	0.5 - 2	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.035 U	0.0318	0.123	0.057 U	0.035 U	0.106	
BFL-24	9/14/2015	NA	0.5 - 2	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.035 U	0.0270 I	0.0844 I	0.057 U	0.035 U	0.0727 I	Dup-32
BFL-25	9/14/2015	NA	0.0 - 0.5	NM	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.166	0.226	1.09	0.15 U	0.440	0.825	
BFL-25	9/14/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.136 I	0.221	0.942	0.056 U	0.424	0.703	Dup-35
BFL-25	9/14/2015	NA	0.5 - 2	NM	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.037 U	0.0075 U	0.037 U	0.060 U	0.037 U	0.037 U	
BFL-25	9/14/2015	NA	0.5 - 2	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.036 U	0.0276 I	0.103 I	0.057 U	0.14 I	0.14 I	Dup-36
BFL-26	9/14/2015	NA	0.0 - 0.5	NM	0.13 U	0.13 U	0.13 U	0.261 I	0.13 U	0.623	0.723	3.85	0.255 I	2.43	2.90	
BFL-26	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.201 I	0.14 U	0.450	0.613	3.09	0.182 I	1.93	2.08	Dup-39
BFL-26	9/14/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0070 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-26	9/14/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.340 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	Dup-40
BFL-27	9/14/2015	NA	0.0 - 0.5	NM	0.200 I	0.15 U	0.167 I	0.673	0.15 U	1.12	1.50	7.15	0.570	5.66	5.19	
BFL-27	9/14/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.340 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-28	9/14/2015	NA	0.0 - 0.5	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.0774	0.182	0.058 U	0.0720 I	0.143	
BFL-28	9/14/2015	NA	0.5 - 2	NM	0.057 U	0.057 U	0.057 U	0.207	0.057 U	0.441	0.558	2.35	0.201	1.81	1.58	
BFL-28	9/14/2015	NA	2 - 4	NM	0.057 U	0.057 U	0.057 U	0.331	0.057 U	0.752	0.888	4.11	0.305	2.79	3.37	
BFL-28	9/14/2015	NA	4 - 6	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.0882 I	0.0880	0.472	0.056 U	0.357	0.368	
BFL-29	9/14/2015	NA	0.0 - 0.5	NM	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.091 U	0.493	1.31	0.15 U	0.297	0.993	
BFL-29	9/14/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0070 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-30	9/14/2015	NA	0.0 - 0.5	NM	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.038 U	0.182	0.409	0.060 U	0.0739 U	0.338	
BFL-30	9/14/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-31	9/14/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.0689 I	0.226	0.673	0.055 U	0.201	0.508	
BFL-31	9/14/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0068 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-32	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.086 U	0.113	0.306 I	0.14 U	0.086 U	0.235 I	
BFL-32	9/14/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-33	9/14/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.342 I	0.899	3.86	0.14 U	1.59	2.86	
BFL-33	9/14/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-34	9/15/2015	NA	0.0 - 0.5	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0620 U	0.211	0.054 U	0.080 I	0.147	
BFL-34	9/15/2015	NA	0.5 - 2	NM	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.033 U	0.0261 I	0.0976 I	0.053 U	0.033 U	0.0710	
BFL-35	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.086 U	0.200	0.907	0.14 U	0.219 I	0.679	
BFL-35	9/15/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-36	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.086 U	0.241	0.644	0.14 U	0.155 I	0.512	
BFL-36	9/15/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0067 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-37	9/15/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.0528 I	0.124	0.448	0.056 U	0.240	0.329	
BFL-37	9/15/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-38	9/15/2015	NA	0.0 - 0.5	NM	0.13 U	0.13 U	0.13 U	0.326 I	0.13 U	0.750	1.86	6.75	0.305 I	3.46	4.73	
BFL-38	9/15/2015	NA	0.5 - 2	NM	0.138	0.13 U	0.13 U	0.337	0.13 U	0.693	1.08	4.18	0.337 I	2.99	2.88	
BFL-38	9/15/2015	NA	2 - 4	RUN	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0067 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-38	9/15/2015	NA	4 - 6	RUN	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.033 U	0.0066 U	0.033 U	0.052 U	0.033 U	0.033 U	
BFL-39	9/15/2015	NA	0.0 - 0.5	NM	0.13 U	0.13 U	0.13 U	0.328 I	0.144	0.804	1.49	7.70	0.313 I	3.78	5.25	
BFL-39	9/15/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-40	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.176	0.470	2.81	0.14 U	0.696	1.97	
BFL-40	9/15/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.035 U	0.0069 U	0.035 U	0.055 U	0.035 U	0.035 U	

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: USDA-U.S Citrus & Subtropical Products Research Laboratory **FDEP Project #346171**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
BFL-41	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.085 U	0.127	0.428	0.14 U	0.158	0.312	
BFL-41	9/15/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0067 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-42	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.085 U	0.0592 I	0.180 I	0.14 U	0.085 U	0.135	
BFL-42	9/15/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-43	9/15/2015	NA	0.0 - 0.5	NM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.084 U	0.265	0.973	0.13 U	0.251 I	0.711	
BFL-43	9/15/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0071 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-44	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.086 U	0.347	1.12	0.14 U	0.304	0.834	
BFL-44	9/15/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0187 I	0.0619 I	0.055 U	0.034 U	0.0507 I	
BFL-45	9/15/2015	NA	0.0 - 0.5	NM	0.14 U	0.14 U	0.14 U	0.171 I	0.14 U	0.247 I	0.406	1.64	0.14 U	1.04	1.17	
BFL-45	9/15/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0068 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-46	9/15/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.035 U	0.0759	0.242	0.055 U	0.15	0.181	
BFL-46	9/15/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0071 I	0.0451 I	0.055 U	0.034 U	0.114	
BFL-47	9/15/2015	NA	0.0 - 0.5	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.036 U	0.0149 I	0.036 U	0.057 U	0.036 U	0.036 U	
BFL-47	9/15/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-48	9/15/2015	NA	0.0 - 0.5	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.0378 I	0.0745	0.293	0.057 U	0.199	0.203	
BFL-48	9/15/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-49	9/15/2015	NA	0.0 - 0.5	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.0093 I	0.036 U	0.058 U	0.036 U	0.036 U	
BFL-49	9/15/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0070 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-50	9/16/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0162 I	0.0403 I	0.055 U	0.034 U	0.034 U	
BFL-50	9/16/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.035 U	0.0069 U	0.035 U	0.055 U	0.035 U	0.035 U	
BFL-51	9/16/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.017 I	0.0435 I	0.056 U	0.035 U	0.035 U	
BFL-51	9/16/2015	NA	0.5 - 2	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.0072 U	0.036 U	0.058 U	0.036 U	0.036 U	
BFL-52	9/16/2015	NA	0.0 - 0.5	NM	0.059 U	0.059 U	0.059 U	0.059 U	0.059 U	0.037 U	0.076	0.163	0.059 U	0.0647 I	0.125 I	
BFL-52	9/16/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-53	9/16/2015	NA	0.0 - 0.5	NM	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.042 U	0.059	0.180	0.067 U	0.11 I	0.134 I	
BFL-53	9/16/2015	NA	0.5 - 2	NM	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.041 U	0.0081 U	0.041 U	0.065 U	0.041 U	0.041 U	
BFL-54	9/16/2015	NA	0.0 - 0.5	NM	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.043 U	0.0197 I	0.0502 I	0.069 U	0.043 U	0.043 U	
BFL-54	9/16/2015	NA	0.5 - 2	NM	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.042 U	0.0085 U	0.042 U	0.068 U	0.042 U	0.042 U	
BFL-55	9/16/2015	NA	0.0 - 0.5	NM	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.037 U	0.093	0.215	0.06 U	0.0841 I	0.167	
BFL-55	9/16/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-56	9/16/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0252 I	0.0573 I	0.056 U	0.035 U	0.0453 I	
BFL-56	9/16/2015	NA	0.5 - 2	NM	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.041 U	0.0082 U	0.041 U	0.066 U	0.041 U	0.041 U	
BFL-57	9/16/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.045 I	0.481	0.859	0.055 U	0.178	0.620	
BFL-57	9/16/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.007 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-59	9/16/2015	NA	0.0 - 0.5	NM	0.057 U	0.057 U	0.057 U	0.122 I	0.057 U	0.215	0.435	1.610	0.0902 I	1.000	1.110	
BFL-59	9/16/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-60	9/16/2015	NA	0.0 - 0.5	NM	0.198	0.0553 I	0.0678 I	0.658	0.055 U	1.010	1.620	7.060	0.507	5.350	4.940	
BFL-60	9/16/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.007 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-61	9/16/2015	NA	0.0 - 0.5	NM	2.680	0.554	0.830	5.010	0.0819 I	7.620	5.830	40.900	3.970	35.300	28.400	
BFL-61	9/16/2015	NA	0.5 - 2	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.035 U	0.0071 U	0.035 U	0.057 U	0.035 U	0.035 U	
BFL-62	9/16/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.0603 I	0.183	0.553	0.056 U	0.305	0.399	
BFL-62	9/16/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: USDA-U.S Citrus & Subtropical Products Research Laboratory **FDEP Project #346171**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
BFL-63	9/16/2015	NA	0.0 - 0.5	NM	0.059 U	0.059 U	0.059 U	0.0697 I	0.059 U	0.117 I	0.174	0.666	0.059 U	0.493	0.461	
BFL-63	9/16/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0068 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-64	9/16/2015	NA	0.0 - 0.5	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.103 I	0.298	0.659	0.058 U	0.405	0.476	
BFL-64	9/16/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.007 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-65	9/16/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.066	0.107 I	0.056 U	0.0441 I	0.085 I	
BFL-65	9/16/2015	NA	0.5 - 2	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.036 U	0.0072 U	0.036 U	0.057 U	0.036 U	0.036 U	
BFL-66	9/16/2015	NA	0.0 - 0.5	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.032	0.0563 I	0.056 U	0.035 U	0.0446 I	
BFL-66	9/16/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.007 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-67	9/16/2015	NA	0.0 - 0.5	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.0552 I	0.135	0.433	0.057 U	0.255	0.313	
BFL-67	9/16/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.0069 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-68	9/16/2015	NA	0.0 - 0.5	NM	0.714	0.164	0.226	1.600	0.056 U	2.210	2.070	13.700	1.200	11.100	9.540	
BFL-68	9/16/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-69	9/17/2015	NA	0.0 - 0.5	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.065	0.148	0.058 U	0.0581 I	0.116 I	
BFL-69	9/17/2015	NA	0.5 - 2	NM	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.0073 U	0.036 U	0.058 U	0.036 U	0.036 U	
BFL-70	9/17/2015	NA	0.0 - 0.5	NM	0.057 U	0.057 U	0.057 U	0.0695 I	0.057 U	0.210	0.760	2.040	0.057 U	0.977	1.460	
BFL-70	9/17/2015	NA	0.5 - 2	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.036 U	0.0071 U	0.036 U	0.057 U	0.036 U	0.036 U	
BFL-71	9/17/2015	NA	0.0 - 0.5	NM	0.339	0.113 I	0.129 I	1.070	0.065 U	1.490	2.220	10.400	0.818	6.010	5.920	
BFL-71	9/17/2015	NA	0.5 - 2	NM	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.037 U	0.0075 U	0.037 U	0.06 U	0.037 U	0.037 U	
BFL-72	9/17/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.0669 I	0.128	0.428	0.055 U	0.295	0.331	
BFL-72	9/17/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.007 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-73	9/17/2015	NA	0.0 - 0.5	NM	0.059 U	0.059 U	0.059 U	0.059 U	0.059 U	0.037 U	0.106	0.261	0.059 U	0.111 I	0.221	
BFL-73	9/17/2015	NA	0.5 - 2	NM	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.042 U	0.0083 U	0.042 U	0.067 U	0.042 U	0.042 U	
BFL-74	9/17/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.038	0.129 I	0.055 U	0.0557 I	0.102 I	
BFL-74	9/17/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-75	9/17/2015	NA	0.0 - 0.5	NM	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.044 U	0.0261 I	0.0667 I	0.07 U	0.044 U	0.0552 I	
BFL-75	9/17/2015	NA	0.5 - 2	NM	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.035 U	0.007 U	0.035 U	0.056 U	0.035 U	0.035 U	
BFL-76	9/17/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.035 U	0.0216 I	0.035 U	0.055 U	0.035 U	0.035 U	
BFL-76	9/17/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-77	9/17/2015	NA	0.0 - 0.5	NM	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.036 U	0.075	0.119 I	0.057 U	0.0462 I	0.105 I	
BFL-77	9/17/2015	NA	0.5 - 2	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.034 U	0.0069 U	0.034 U	0.055 U	0.034 U	0.034 U	
BFL-78	9/17/2015	NA	0.0 - 0.5	NM	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.039 U	0.0226 I	0.039 U	0.063 U	0.039 U	0.039 U	
BFL-78	9/17/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0067 U	0.034 U	0.054 U	0.034 U	0.034 U	
BFL-79	9/17/2015	NA	0.0 - 0.5	NM	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.0655 I	0.206	0.703	0.055 U	0.316	0.530	
BFL-79	9/17/2015	NA	0.5 - 2	NM	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.034 U	0.0068 U	0.034 U	0.054 U	0.034 U	0.034 U	
FLB-80	3/27/2017	NA	0.0 - 0.5	NM	0.0117U	0.0113U	0.0137U	0.0174I	0.0113U	0.033I	0.015	0.309	0.0112I	0.162	0.283	
FLB-80	3/27/2017	NA	0.5 - 2	NM	0.0278I	0.0112U	0.0135U	0.058	0.0112U	0.096	0.143	0.491	0.048	0.430	0.521	
FLB-80	3/27/2017	NA	4 - 6	NM	0.0134U	0.0129U	0.0156U	0.0153U	0.0129U	0.0103U	0.0190I	0.018	0.0125U	0.0109I	0.0144I	
FLB-81	3/27/2017	NA	0.0 - 0.5	NM	0.0120U	0.0116U	0.0140U	0.0181I	0.0116U	0.0338I	0.153	0.348	0.0122I	0.158	0.312	
FLB-81	3/27/2017	NA	0.5 - 2	NM	0.0114U	0.0110U	0.0133U	0.0130U	0.0110U	0.00875U	0.0156I	0.0315I	0.0106U	0.0172I	0.0282I	
FLB-82	3/27/2017	NA	0.0 - 0.5	NM	0.635	0.160	0.220	2.030	0.0116U	2.650	5.090	13.300	1.460	11.700	14.600	
FLB-82	3/27/2017	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.00893U	0.0157U	0.0101U	0.0109U	0.0068U	0.0108U	
FLB-83	3/27/2017	NA	0.0 - 0.5	NM	0.0121U	0.0117U	0.0141U	0.106	0.0117U	0.172	0.537	1.370	0.070	0.824	1.170	

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: USDA-U.S Citrus & Subtropical Products Research Laboratory **FDEP Project #346171**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
FLB-83	3/27/2017	NA	0.5 - 2	NM	0.0119U	0.0115U	0.0138U	0.0135U	0.0115U	0.00909U	0.0160U	0.0207I	0.0111U	0.0183I	0.0186I	
FLB-84	3/27/2017	NA	0.0 - 0.5	NM	0.0121U	0.0117U	0.0141U	0.041	0.0117U	0.061	0.235	0.568	0.0281I	0.339	0.425	
FLB-84	3/27/2017	NA	0.5 - 2	NM	0.0116U	0.0112U	0.0135U	0.0132U	0.0112U	0.00887U	0.0156U	0.00998U	0.0108U	0.00675U	0.0138I	
FLB-85	3/27/2017	NA	0.0 - 0.5	NM	0.0119U	0.0115U	0.0139U	0.0136U	0.0115U	0.0253I	0.174	0.280	0.0111U	0.108	0.323	
FLB-85	3/27/2017	NA	0.5 - 2	NM	0.0125U	0.0121U	0.0146U	0.0142U	0.0121U	0.00956U	0.0232I	0.044	0.0116U	0.0163I	0.036	
FLB-85	3/27/2017	NA	2 - 4	NM	0.018U	0.0114U	0,0138U	0.0135U	0.0114U	0.00906U	0.0160U	0.0151I	0.0110U	0.00690U	0.0120I	
FLB-86	3/27/2017	NA	0.0 - 0.5	NM	0.0114U	0.0110U	0.0132U	0.0129U	0.0110U	0.00869U	0.0153U	0.00978U	0.0160U	0.00662U	0.0105U	
FLB-86	3/27/2017	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0137U	0.0134U	0.0113U	0.00898U	0.0158U	0.0101U	0.0109U	0.00684U	0.0108U	
FLB-87	3/27/2017	NA	0.0 - 0.5	NM	0.0114U	0.0110U	0.0133U	0.0130U	0.0110U	0.00874U	0.0154U	0.00983U	0.0106U	0.00665U	0.0105U	
FLB-87	3/27/2017	NA	0.5 - 2	NM	0.0113U	0.0109U	0.0131U	0.0128U	0.0109U	0.00862U	0.0152U	0.0097U	0.0105U	0.00657U	0.0104U	
FLB-88	3/27/2017	NA	0.0 - 0.5	NM	0.0113U	0.0109U	0.0132U	0.0129U	0.0109U	0.00865U	0.0152U	0.00973U	0.0105U	0.00659U	0.0104U	
FLB-88	3/27/2017	NA	0.5 - 2	NM	0.0116U	0.0112U	0.0135U	0.0132U	0.0112U	0.00885U	0.0156U	0.00996U	0.0108U	0.00674U	0.0107U	
FLB-89	3/27/2017	NA	0.0 - 0.5	NM	0.0115U	0.0111U	0.0134U	0.0131U	0.0111U	0.00882U	0.0155U	0.00992U	0.0107U	0.00672U	0.0106U	
FLB-89	3/27/2017	NA	0.5 - 2	NM	0.0116U	0.0112U	0.0135U	0.0132U	0.0112U	0.00889U	0.0157U	0.0100U	0.0108U	0.00677U	0.0107U	
FLB-90	3/27/2017	NA	0.0 - 0.5	NM	0.0114U	0.0110U	0.0132U	0.0129U	0.0110U	0.00869U	0.0153U	0.00978U	0.0106U	0.00662U	0.0105U	
FLB-90	3/27/2017	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.00892U	0.0157U	0.0100U	0.0108U	0.00679U	0.0107U	
FLB-92	3/27/2017	NA	0.0 - 0.5	NM	0.0122U	0.0118U	0.0142U	0.0139U	0.0118U	0.0195I	0.133	0.358	0.0114U	0.089	0.261	
FLB-93	3/28/2017	NA	0.0 - 0.5	NM	0.0127I	0.0114U	0.0138U	0.076	0.0114U	0.139	0.249	0.970	0.053	0.631	0.649	
FLB-94	3/28/2017	NA	0.0 - 0.5	NM	0.0119U	0.0115U	0.0139U	0.0136U	0.0115U	0.0104I	0.081	0.153	0.0111U	0.0335I	0.117	
FLB-94	3/28/2017	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0137U	0/0134U	0.0113U	0.00897U	0.0158U	0.0173I	0.0109U	0.00683U	0.0139I	
FLB-95	3/28/2017	NA	0.0 - 0.5	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.00895U	0.0265I	0.073	0.0109U	0.0200I	0.051	
FLB-96	3/28/2017	NA	0.0 - 0.5	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.00893U	0.0157U	0.0125I	0.0109U	0.00680U	0.0108U	
FLB-97	3/28/2017	NA	0.0 - 0.5	NM	0.0249I	0.0115U	0.0139U	0.106	0.0115U	0.281	0.382	1.530	0.086	1.030	0.982	
FLB-98	3/28/2017	NA	0.0 - 0.5	NM	0.0119U	0.0114U	0.0138U	0.0135U	0.114U	0.00908U	0.0160U	0.251I	0.0110U	0.0117I	0.0203I	
FLB-99	3/28/2017	NA	0.0 - 0.5	NM	0.0116U	0.112U	0.0135U	0.0132U	0.0112U	0.00887U	0.0156U	0.0239I	0.0108U	0.0124I	0.0188I	
FLB-100	3/28/2017	NA	0.0 - 0.5	NM	0.0118U	0.0114U	0.0137U	0.082	0.0114U	0.147	0.243	0.929	0.052	0.590	0.639	
FLB-101	3/28/2017	NA	0.0 - 0.5	NM	0.0116U	0.0112U	0.0135U	0.0132U	0.0112U	0.0236I	0.067	0.214	0.0108U	0.100	0.159	
FLB-103	3/28/2017	NA	0.0 - 0.5	NM	0.0116U	0.0112U	0.0136U	0.0155I	0.0112U	0.059	0.162	0.516	0.0118i	0.209	0.334	
FLB-104	3/28/2017	NA	0.0 - 0.5	NM	0.0116U	0.0112U	0.0135U	0.0189I	0.0112U	0.056	0.128	0.429	0.0168I	0.227	0.281	
FLB-105	3/28/2017	NA	0.0 - 0.5	NM	0.0118U	0.0114U	0.0137U	0.064	0.0114U	0.195	0.654	1.510	0.057	0.743	1.090	
FLB-106	3/28/2017	NA	0.0 - 0.5	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.00893U	0.035	0.095	0.0109U	0.035	0.067	
FLB-107	3/29/2017	NA	0.0 - 0.5	NM	0.0118U	0.0114U	0.0137U	0.041	0.0114U	0.121	0.343	1.140	0.0338I	0.505	0.813	
FLB-107	3/29/2017	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.013U	0.00896U	0.0158U	0.0112I	0.0109U	0.00682U	0.0108U	
FLB-108	3/29/2017	NA	0.0 - 0.5	NM	0.094	0.095	0.139	0.502	0.056	1.140	2.560	9.600	0.391	4.800	5.960	
FLB-109	3/29/2017	NA	0.0 - 0.5	NM	0.0137I	0.114U	0.0137U	0.052	0.0114U	0.110	0.199	0.751	0.044	0.445	0.523	
FLB-110	3/29/2017	NA	0.0 - 0.5	NM	0.117U	0.0113U	0.0136U	0.0133U	0.0113U	0.0315I	0.109	0.330	0.109U	0.137	0.226	
FLB-111	3/29/2017	NA	0.0 - 0.5	NM	0.0119U	0.0115U	0.0138U	0.0135U	0.0115U	0.0158I	0.080	0.166	0.0111U	0.060	0.129	
FLB-112	3/29/2017	NA	0.0 - 0.5	NM	0.0277I	0.0294I	0.045	0.096	0.015U	0.194	0.035	1.080	0.068	0.765	0.864	
FLB-113	3/29/2017	NA	0.0 - 0.5	NM	0.0122U	0.0117U	0.0142U	0.0173I	0.0155I	0.069	0.445	0.806	0.0148I	0.238	0.673	
FLB-114	3/29/2017	NA	0.0 - 0.5	NM	0.0230I	0.0198I	0.0275I	0.093	0.0116U	0.200	0.429	1.250	0.078	0.753	0.902	
FLB-115	3/29/2017	NA	0.0 - 0.5	NM	0.0117U	0.0113U	0.0137U	0.051	0.122	0.458	2.310	6.610	0.059	1.850	4.970	
FLB-115	3/29/2017	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.0112I	0.036	0.118	0.0109U	0.0335I	0.080	

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: USDA-U.S Citrus & Subtropical Products Research Laboratory **FDEP Project #346171**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
FLB-116	3/29/2017	NA	0.0 - 0.5	NM	0.0116U	0.0112U	0.0135U	0.0132U	0.0205I	0.0309I	0.0158I	0.126	0.0108U	0.0108I	0.116	
FLB-117	3/29/2017	NA	0.0 - 0.5	NM	0.0122U	0.0118U	0.0142U	0.0139U	0.0118U	0.0174I	0.086	0.182	0.0114U	0.065	0.141	
FLB-118	3/29/2017	NA	0.0 - 0.5	NM	0.041	0.0146I	0.0184I	0.153	0.0113U	0.262	0.461	1.670	0.110	1.260	1.260	
FLB-119	3/29/2017	NA	0.0 - 0.5	NM	0.108	0.043	0.051	0.467	0.0114U	0.702	1.530	4.780	0.322	3.500	3.850	
FLB-119	3/29/2017	NA	0.5 - 2	NM	0.0120U	0.0116U	0.0140U	0.037	0.0116U	0.067	0.136	0.484	0.0240I	0.317	0.372	
FLB-120	3/29/2017	NA	0.0 - 0.5	NM	0.0118U	0.0114U	0.0137U	0.0134U	0.0114U	0.00902U	0.0202I	0.053	0.0110U	0.0284I	0.042	
FLB-200	2/5/2018	NA	0.0 - 0.5	NM	0.0130U	0.0125U	0.0151U	0.0148U	0.0125U	0.0384	0.0655	0.2220	0.0121U	0.1610	0.1850	
FLB-201	2/5/2018	NA	0.0 - 0.5	NM	2.9200	0.7470	1.2300	5.5900	0.0615U	12.6000	19.7000	57.7000	5.4500	51.5000	47.7000	
FLB-202	2/5/2018	NA	0.0 - 0.5	NM	0.0124U	0.0120U	0.0144U	0.0141U	0.0120U	0.00948U	0.1500	0.2320	0.0115U	0.0556	0.2190	
FLB-202	2/5/2018	NA	0.5 - 2	NM	0.0121U	0.0117U	0.0141U	0.0138U	0.0117U	0.00925U	0.1840	0.3750	0.0112U	0.0988	0.3460	
FLB-203	2/5/2018	NA	0.0 - 0.5	NM	0.0125U	0.0120U	0.0145U	0.0142U	0.0120U	0.00954U	0.1200	0.1800	0.0116U	0.0398	0.1770	
FLB-206	2/6/2018	NA	0.0 - 0.5	NM	0.0121U	0.0117U	0.0141U	0.0138U	0.0117U	0.00926U	0.0383	0.0565	0.0113U	0.00705U	0.0540	
FLB-206	2/6/2018	NA	0.5 - 2	NM	0.0120U	0.0116U	0.0140U	0.0137U	0.0116U	0.00922U	0.0478	0.0733	0.0112U	0.00702U	0.0730	
FLB-209	2/7/2018	NA	0.0 - 0.5	NM	0.0122U	0.0118U	0.0142U	0.0139U	0.0118U	0.00932U	0.0164U	0.0512	0.0113U	0.00710U	0.0477	
FLB-211	2/6/2018	NA	0.0 - 0.5	NM	0.0125U	0.0121U	0.0146U	0.1170	0.0121U	0.3220	0.6800	1.9200	0.1060	1.3200	1.2900	
FLB-212	2/6/2018	NA	0.0 - 0.5	NM	0.122U	0.0118U	0.0142U	0.0139U	0.0118U	0.00936U	0.1310	0.2500	0.0114U	0.0528	0.2270	
FLB-213	2/6/2018	NA	0.0 - 0.5	NM	0.0121U	0.0117U	0.0141U	0.0138U	0.0117U	0.00928U	0.0464	0.1000	0.0113U	0.0418	0.0942	
FLB-218	2/6/2018	NA	0.0 - 0.5	NM	0.123UQ	0.0119UQ	0.0143UQ	0.0271IQ	0.0119UQ	0.0739Q	0.142Q	0.429Q	0.025IQ	0.289Q	0.334Q	
FLB-219	2/6/2018	NA	0.0 - 0.5	NM	0.0127UQ	0.0123UQ	0.0148UQ	0.0177IQ	0.0123UQ	0.0509Q	0.115Q	0.243Q	0.0155IQ	0.171Q	0.226Q	
FLB-220	2/7/2018	NA	0.0 - 0.5	NM	0.0132U	0.0127U	0.0154U	0.1710	0.0127U	0.3480	0.8780	2.4300	0.0124	1.5800	2.0900	
FLB-220	2/7/2018	NA	0.5 - 2	NM	0.0123U	0.0118U	0.0143U	0.0140U	0.0118U	0.00938U	0.3060	0.0106U	0.0114U	0.00714U	0.0113U	
FLB-221	2/7/2018	NA	0.0 - 0.5	NM	48.8000	7.9100	14.6000	89.0000	1.5600	130.0000	178.0000	525.0000	63.0000	546.0000	469.0000	
FLB-222	2/7/2018	NA	0.0 - 0.5	NM	0.0528	0.0120U	0.0144U	0.1670	0.0120U	0.3000	0.6250	1.8400	0.1210	1.3800	1.5200	
FLB-223	2/7/2018	NA	0.5 - 2	NM	0.0641U	0.0619U	0.0747U	0.3600	0.0619U	0.6670	1.4700	4.1000	0.2550	3.1600	3.4200	
FLB-224	2/7/2018	NA	0.0 - 0.5	NM	0.9950	0.0623U	0.2920	1.7400	0.0623U	2.8400	3.8800	12.8000	1.3900	12.1000	10.2000	
FLB-225	2/7/2018	NA	0.0 - 0.5	NM	0.0124U	0.0119U	0.0144U	0.0141U	0.0119U	0.00945U	0.0167U	0.0602	0.0115U	0.0072U	0.0562	
FLB-226	2/7/2018	NA	0.0 - 0.5	NM	0.0466	0.0117U	0.0141U	0.2620	0.0117U	0.4640	0.8330	2.5600	0.175U	2.0200	1.9600	
FLB-227	2/7/2018	NA	0.0 - 0.5	NM	0.4830	0.0616U	0.0744U	1.1400	0.0616U	2.0900	3.5100	10.3000	0.9120	9.3200	8.4900	
FLB-228	2/8/2018	NA	0.0 - 0.5	NM	0.0124U	0.0120U	0.0145U	0.0141U	0.0120U	0.00949U	0.0428	0.1000	0.0115U	0.0600	0.0805	
FLB-229	2/8/2018	NA	0.0 - 0.5	NM	0.0122U	0.018U	0.0142U	0.0139U	0.0118U	0.00933U	0.0746	0.1290	0.0113U	0.0806	0.1300	
FLB-234	2/8/2018	NA	0.0 - 0.5	NM	1.5100	0.2650	0.4480	3.1000	0.0587U	5.1400	7.1500	23.4000	2.4200	21.4000	17.1000	
FLB-234	2/8/2018	NA	0.5 - 2	NM	0.0125U	0.0120U	0.0145U	0.0142U	0.0120U	0.0986	0.5610	1.0900	0.0116U	0.3370	0.9250	
FLB-235	2/8/2018	NA	0.0 - 0.5	NM	0.0121U	0.0117U	0.0141U	0.0138U	0.0117U	0.00926U	0.0498	0.0888	0.0113U	0.00705U	0.0754	
FLB-235	2/8/2018	NA	0.5 - 2	NM	0.0123U	0.0118U	0.0143U	0.0140U	0.0118U	0.00937U	0.0763	0.1700	0.0114U	0.0845	0.1490	
FLB-238	2/8/2018	NA	0.0 - 0.5	NM	0.1170	0.0397	0.0456	0.5170	0.0115U	1.3100	3.3400	10.7000	0.3480	5.7700	6.7500	
FLB-238	2/8/2018	NA	0.5 - 2	NM	0.0121U	0.0117U	0.0141U	0.0138U	0.0117U	0.0536	0.2050	0.5090	0.0112U	0.2550	0.3640	
FLB-239	2/8/2018	NA	0.0 - 0.5	NM	0.0119U	0.0115U	0.0139U	0.0136U	0.0115U	0.00913U	0.0477	0.0795	0.0111U	0.00695U	0.0622	
FLB-239	2/8/2018	NA	0.5 - 2	NM	0.0120U	0.0116U	0.0139U	0.1330	0.0116U	0.3010	0.6770	1.8800	0.0992	1.3800	1.5900	
FLB-240	2/8/2018	NA	0.0 - 0.5	NM	0.0121U	0.0117U	0.0142U	0.0138U	0.0117U	0.00929U	0.1140	0.2010	0.0113U	0.1090	0.1840	
FLB-241	2/7/2018	NA	0.0 - 0.5	NM	0.0646U	0.0623U	0.0753U	0.4680	0.0623U	0.8200	1.3700	4.1600	0.3160	3.5300	3.4500	
FLB-242	2/5/2018	NA	0.0 - 0.5	NM	0.2550	0.0598U	0.0722U	0.7690	0.0598U	1.1500	2.2300	6.5900	0.5140	5.4700	5.5800	
FLB-243	2/5/2018	NA	0.0 - 0.5	NM	0.0124U	0.0120U	0.0145U	0.0141U	0.0120U	0.00949U	0.0167U	0.0421	0.0115U	0.00723U	0.0395	

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory** **FDEP Project #346171**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
FLB-245	2/5/2018	NA	0.5 - 2	NM	0.0120U	0.0116U	0.0140U	0.0136U	0.0116U	0.00916U	0.0161U	0.0573	0.0111U	0.00698U	0.0493	
FLB-245	2/5/2018	NA	2 - 4	NM	0.0116U	0.0112U	0.0135U	0.0132U	0.0112U	0.0531	0.1200	0.3240	0.0108U	0.2180	0.2810	
FLB-246	2/9/2018	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.0722	0.1380	0.4640	0.0109U	0.2810	0.3030	
FLB-246	2/9/2018	NA	4 - 6	NM	0.0115U	0.0111U	0.0134U	0.0131U	0.0111U	0.00878U	0.0751	0.2280	0.0107U	0.1240	0.1430	
FLB-247	2/7/2018	NA	0.0 - 0.5	NM	0.0128U	0.0124U	0.0149U	0.1170	0.0124U	0.2340	0.5690	1.5000	0.0842	1.0300	1.2200	
FLB-247	2/7/2018	NA	0.5 - 2	NM	0.0117U	0.0113U	0.0136U	0.0133U	0.0113U	0.00895U	0.0908	0.1800	0.0109U	0.0871	0.1640	
FLB-248	2/7/2018	NA	0.0 - 0.5	NM	0.0705U	0.0680U	0.0821U	0.5660	0.0680U	0.8560	1.7300	4.9700	0.3920	4.1400	3.9900	
FLB-248	2/7/2018	NA	0.5 - 2	NM	0.0120U	0.0116U	0.0140U	0.0136U	0.0116U	0.00916U	0.0161U	0.0916	0.0111U	0.0809	0.0732	
FLB-249	2/7/2018	NA	0.0 - 0.5	NM	0.4230	0.0667U	0.0806U	0.9500	0.0667U	1.5500	2.5200	7.8500	0.7340	7.3000	6.7400	
FLB-249	2/7/2018	NA	0.5 - 2	NM	0.0122U	0.0118U	0.0142U	0.0548	0.0118U	0.1690	0.4130	1.1200	0.0484	0.7670	0.9660	
FLB-250	2/7/2018	NA	0.0 - 0.5	NM	0.0120U	0.0116U	0.0140U	0.0137U	0.0116U	0.1120	0.5970	0.9870	0.0112U	0.4730	0.9510	
Direct Exposure Residential (mg/kg)					55	200	210	2400	1800	21000	2500	3200	2600	2200	2400	
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2500	32000	1200	160	250	880	

Notes: NA = Not Available. NS = Not Sampled. NM = Not Measured

I = Value estimated to be between the laboratory detection and response limit

U = Compound was not detected Q = Hold time exceeded

If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 4: SOIL ANALYTICAL SUMMARY - Metals

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory - FDEP Project #346171**

Sample				OVA	LABORATORY ANALYSIS	
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Chromium (mg/kg)	Comments
BCT-1	03/05/2013	NA	0.0 - 0.5	NM	**333.0**	
BCT-1	03/05/2013	NA	0.0 - 0.5	NM	**360.0**	Duplicate-BCT-2
BCT-3	03/05/2013	NA	0.0 - 0.5	NM	200.0	
BCT-4	03/05/2013	NA	0.0 - 0.5	NM	**321.0**	
BCT-4	03/05/2013	NA	0.0 - 0.5	NM	**335.0**	Duplicate-BCT-5
BCT-6	03/05/2013	NA	0.0 - 0.5	NM	**411.0**	
BCT-10	09/09/2015	NA	0.0 - 0.5	NM	16.4	
BCT-10	09/09/2015	NA	0.5 - 2	NM	1.7	
BCT-10	09/09/2015	NA	2 - 4	NM	NM	
BCT-11	09/09/2015	NA	0.0 - 0.5	NM	18.6	
BCT-11	09/09/2015	NA	0.5 - 2	NM	3.6	
BCT-11	09/09/2015	NA	2 - 4	NM	NM	
BCT-12	09/09/2015	NA	0.0 - 0.5	NM	4.2	
BCT-12	09/09/2015	NA	0.5 - 2	NM	1.2	
BCT-12	09/09/2015	NA	2 - 4	NM	NM	
BCT-13	09/09/2015	NA	0.0 - 0.5	NM	3.8	
BCT-13	09/09/2015	NA	0.5 - 2	NM	1.6	
BCT-13	09/09/2015	NA	2 - 4	NM	NM	
BCT-14	09/09/2015	NA	0.0 - 0.5	NM	17.4	
BCT-14	09/09/2015	NA	0.5 - 2	NM	0.76	
BCT-14	09/09/2015	NA	2 - 4	NM	NM	
BCT-15	09/09/2015	NA	0.0 - 0.5	NM	64.5	
BCT-15	09/09/2015	NA	0.5 - 2	NM	1.3	
BCT-15	09/09/2015	NA	2 - 4	NM	NM	
BCT-15	09/09/2015	NA	4 - 6	NM	7.3	
BCT-16	09/09/2015	NA	0.0 - 0.5	NM	122	
BCT-16	09/09/2015	NA	0.5 - 2	NM	12.5	
BCT-16	09/09/2015	NA	2 - 4	NM	NM	
BCT-16	09/09/2015	NA	4 - 6	NM	1.7	
BCT-17	09/09/2015	NA	0.0 - 0.5	NM	110	
BCT-17	09/09/2015	NA	0.5 - 2	NM	13.0	
BCT-17	09/09/2015	NA	2 - 4	NM	NM	

TABLE 4: SOIL ANALYTICAL SUMMARY - Metals

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory - FDEP Project #346171**

Sample				OVA	LABORATORY ANALYSIS	
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Chromium (mg/kg)	Comments
BCT-17	09/09/2015	NA	4 - 6	NM	2.0	
BCT-18	09/09/2015	NA	0.0 - 0.5	NM	14.7	
BCT-18	09/09/2015	NA	0.5 - 2	NM	0.94	
BCT-18	09/09/2015	NA	2 - 4	NM	NM	
BCT-19	09/09/2015	NA	0.0 - 0.5	NM	16.6	
BCT-19	09/09/2015	NA	0.5 - 2	NM	1.6	
BCT-19	09/09/2015	NA	2 - 4	NM	NM	
BCT-20	09/09/2015	NA	0.0 - 0.5	NM	**251**	
BCT-20	09/09/2015	NA	0.5 - 2	NM	8.4	
BCT-20	09/09/2015	NA	2 - 4	NM	1.3	
BCT-20	09/09/2015	NA	4 - 6	NM	1.9	
BCT-21	09/09/2015	NA	0.0 - 0.5	NM	114	
BCT-21	09/09/2015	NA	0.5 - 2	NM	10.6	
BCT-21	09/09/2015	NA	2 - 4	NM	NM	
BCT-21	09/09/2015	NA	4 - 6	NM	2.1	
BCT-22	09/09/2015	NA	0.0 - 0.5	NM	73.7	
BCT-22	09/09/2015	NA	0.5 - 2	NM	3.3	
BCT-22	09/09/2015	NA	2 - 4	NM	NM	
BCT-22	09/09/2015	NA	4 - 6	NM	1.1	
BCT-23	09/09/2015	NA	0.0 - 0.5	NM	21.0	
BCT-23	09/09/2015	NA	0.5 - 2	NM	2.6	
BCT-23	09/09/2015	NA	2 - 4	NM	NM	
BCT-24	09/09/2015	NA	0.0 - 0.5	NM	102	
BCT-24	09/09/2015	NA	0.5 - 2	NM	4.4	
BCT-24	09/09/2015	NA	2 - 4	NM	NM	
BCT-24	09/09/2015	NA	4 - 6	NM	2.4	
BCT-25	09/10/2015	NA	0.0 - 0.5	NM	89.1	
BCT-25	09/10/2015	NA	0.0 - 0.5	NM	93.4	Dup-1
BCT-25	09/10/2015	NA	0.5 - 2	NM	9.2	
BCT-25	09/10/2015	NA	0.5 - 2	NM	7.9	Dup-2
BCT-25	09/10/2015	NA	2 - 4	NM	NM	

TABLE 4: SOIL ANALYTICAL SUMMARY - Metals

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory - FDEP Project #346171**

Sample				OVA	LABORATORY ANALYSIS	
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Chromium (mg/kg)	Comments
BCT-25	09/10/2015	NA	2 - 4	NM	3.5	Dup-3
BCT-25	09/10/2015	NA	4 - 6	NM	1.6	
BCT-25	09/10/2015	NA	4 - 6	NM	4.0	Dup-4
BCT-26	09/10/2015	NA	0.0 - 0.5	NM	12.5	
BCT-26	09/10/2015	NA	0.0 - 0.5	NM	21.7	Dup-5
BCT-26	09/10/2015	NA	0.5 - 2	NM	1.1	
BCT-26	09/10/2015	NA	0.5 - 2	NM	1.2	Dup-6
BCT-26	09/10/2015	NA	2 - 4	NM	NM	
BCT-26	09/10/2015	NA	2 - 4	NM	0.88 I	Dup-7
BCT-27	09/10/2015	NA	0.0 - 0.5	NM	146	
BCT-27	09/10/2015	NA	0.0 - 0.5	NM	60.0	Dup-9
BCT-27	09/10/2015	NA	0.5 - 2	NM	33.5	
BCT-27	09/10/2015	NA	0.5 - 2	NM	33.6	Dup-10
BCT-27	09/10/2015	NA	2 - 4	NM	NM	
BCT-27	09/10/2015	NA	2 - 4	NM	5.1	Dup-11
BCT-27	09/10/2015	NA	4 - 6	NM	3.0	
BCT-27	09/10/2015	NA	4 - 6	NM	12.4	Dup-12
BCT-28	09/10/2015	NA	0.0 - 0.5	NM	127	
BCT-28	09/10/2015	NA	0.5 - 2	NM	13.7	
BCT-28	09/10/2015	NA	2 - 4	NM	NM	
BCT-28	09/10/2015	NA	4 - 6	NM	4.8	
BCT-29	09/10/2015	NA	0.0 - 0.5	NM	90.2	
BCT-29	09/10/2015	NA	0.5 - 2	NM	**217**	
BCT-29	09/10/2015	NA	2 - 4	NM	13.7	
BCT-29	09/10/2015	NA	4 - 6	NM	39.9	
BCT-30	09/10/2015	NA	0.0 - 0.5	NM	**419**	
BCT-30	09/10/2015	NA	0.5 - 2	NM	23.7	
BCT-30	09/10/2015	NA	2 - 4	NM	7.9	
BCT-30	09/10/2015	NA	4 - 6	NM	9.8	
BCT-31	09/10/2015	NA	0.0 - 0.5	NM	**270**	
BCT-31	09/10/2015	NA	0.5 - 2	NM	33.1	

TABLE 4: SOIL ANALYTICAL SUMMARY - Metals

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory - FDEP Project #346171**

Sample				OVA	LABORATORY ANALYSIS	
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Chromium (mg/kg)	Comments
BCT-31	09/10/2015	NA	2 - 4	NM	NM	
BCT-32	09/10/2015	NA	0.0 - 0.5	NM	160	
BCT-32	09/10/2015	NA	0.5 - 2	NM	16.2	
BCT-32	09/10/2015	NA	2 - 4	NM	17.4	
BCT-32	09/10/2015	NA	4 - 6	NM	NM	
BCT-33	09/10/2015	NA	0.0 - 0.5	NM	112	
BCT-33	09/10/2015	NA	0.5 - 2	NM	27.3	
BCT-33	09/10/2015	NA	2 - 4	NM	NM	
BCT-33	09/10/2015	NA	4 - 6	NM	3.3	
BCT-34	09/10/2015	NA	0.0 - 0.5	NM	70.6	
BCT-34	09/10/2015	NA	0.5 - 2	NM	5.1	
BCT-34	09/10/2015	NA	2 - 4	NM	NM	
BCT-34	09/10/2015	NA	4 - 6	NM	1.5	
BCT-35	09/10/2015	NA	0.0 - 0.5	NM	50.0	
BCT-35	09/10/2015	NA	0.5 - 2	NM	11.7	
BCT-35	09/10/2015	NA	2 - 4	NM	NM	
BCT-35	09/10/2015	NA	4 - 6	NM	2.5	
BCT-36	09/10/2015	NA	0.0 - 0.5	NM	208	
BCT-36	09/10/2015	NA	0.5 - 2	NM	25.1	
BCT-36	09/10/2015	NA	2 - 4	NM	NM	
BCT-36	09/10/2015	NA	4 - 6	NM	3.7	
BCT-37	09/10/2015	NA	0.0 - 0.5	NM	70.4	
BCT-37	09/10/2015	NA	0.5 - 2	NM	11.4	
BCT-37	09/10/2015	NA	2 - 4	NM	NM	
BCT-37	09/10/2015	NA	4 - 6	NM	2.8	
BCT-38	09/10/2015	NA	0.0 - 0.5	NM	**336**	
BCT-38	09/10/2015	NA	0.5 - 2	NM	4.1	
BCT-38	09/10/2015	NA	2 - 4	NM	3.5	
BCT-38	09/10/2015	NA	4 - 6	NM	4.5	
BCT-39	09/10/2015	NA	0.0 - 0.5	NM	**893**	
BCT-39	09/10/2015	NA	0.5 - 2	NM	16.3	

TABLE 4: SOIL ANALYTICAL SUMMARY - Metals

Facility Name: **USDA-U.S Citrus & Subtropical Products Research Laboratory - FDEP Project #346171**

Sample				OVA	LABORATORY ANALYSIS	
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Chromium (mg/kg)	Comments
BCT-39	09/10/2015	NA	2 - 4	NM	5.9	
BCT-39	09/10/2015	NA	4 - 6	NM	2.7	
CTB-40	09/10/2015	NA	0.0 - 0.5	NM	43.6	
CTB-40	09/10/2015	NA	0.5 - 2	NM	10.8	
CTB-40	09/10/2015	NA	2 - 4	NM	NM	
CTB-40	09/10/2015	NA	4 - 6	NM	1.8	
CTB-41	02/05/2018	NA	0.0 - 0.5	NM	104	Between BCT-38 & BCT-39 - Sand Lithology
CTB-41	02/05/2018	NA	0.5 - 2	NM	14.5	Between BCT-38 & BCT-39 - Sand Lithology
CTB-41	02/05/2018	NA	2 - 4	NM	8.67	Between BCT-38 & BCT-39 - Sand Lithology
CTB-41	02/05/2018	NA	4 - 6	NM	0.0615U	Between BCT-38 & BCT-39 - Sand Lithology
CTB-41	02/05/2018	NA	23 - 25	NM	9.70	Between BCT-38 & BCT-39 - ClayLithology
CTB-42	02/06/2018	NA	0.0 - 0.5	NM	7.79	5' S. of Fence & 8' E. BCT-20
CTB-42	02/06/2018	NA	0.5 - 2	NM	0.0634U	5' S. of Fence & 8' E. BCT-20
CTB-43	02/06/2018	NA	0.0 - 0.5	NM	8.21	5' S. of Fence & S. of BCT-20
CTB-43	02/06/2018	NA	0.5 - 2	NM	0.0630U	5' S. of Fence & S. of BCT-20
CTB-44	02/06/2018	NA	0.0 - 0.5	NM	10.9	3" S. of Fence & S. of BCT-20
CTB-44	02/06/2018	NA	0.5 - 2	NM	0.0633U	3" S. of Fence & S. of BCT-20
CTB-45	02/06/2018	NA	0.0 - 0.5	NM	0.0612U	5' S. of Fence & 6' W. BCT-20
CTB-45	02/06/2018	NA	0.5 - 2	NM	0.0631U	5' S. of Fence & 6' W. BCT-20
CTB-46	02/06/2018	NA	0.0 - 0.5	NM	27.9	8' W.of BCT-30 & BCT-31
CTB-46	02/06/2018	NA	0.5 - 2	NM	0.0634U	8' W.of BCT-30 & BCT-31
Leachability Based on Groundwater Criteria (mg/kg)					**38**	
Direct Exposure Residential (mg/kg)					**210**	
Direct Exposure Commercial/Industrial (mg/kg)					**470**	

NOTES: NA = Not Available; NM = Not Measured

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 5: SOIL ANALYTICAL SUMMARY - 2,3,7,8-Tetrachlorodibezo-p-dioxin

Facility Name: USDA-U.S Citrus & Subtropical Products Research Laboratory **FDEP Project #346171**

Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Laboratory Analyses 2,3,7,8-TCDD (ppt)	Comments
BGS-1	9/11/2015	NA	0.0 - 0.5	NM	0.245 J	Soil
BGS-1	3/06/2013	NA	Slab 0-0.1'	NM	**69**	**Concrete-Sample GS-1**
BGS-1	3/06/2013	NA	Slab 0-0.1'	NM	**7**	**Concrete-Sample GS-5**
BGS-2	9/11/2015	NA	0.0 - 0.5	NM	0.15 U	Soil
BGS-2	3/06/2013	NA	Slab 0-0.1'	NM	**11**	**Concrete-Sample GS-2**
BGS-3	9/11/2015	NA	0.0 - 0.5	NM	0.189 U	Soil
BGS-3	9/11/2015	NA	0.0 - 0.5	NM	0.159 U	Soil - DUP-13
BGS-3	9/11/2015	NA	0.5 - 2	NM	0.188 U	Soil - DUP-14
BGS-3	3/06/2013	NA	Slab 0-0.1'	NM	**47**	**Concrete-Sample GS-3**
BGS-4	3/06/2013	NA	Slab 0-0.1'	NM	1.0 U	Concrete-Sample GS-4
BGS-4	3/06/2013	NA	Slab 0-0.1'	NM	1.0 U	Concrete-Sample GS-6
BGS-10	9/11/2015	NA	0.0 - 0.5	NM	0.219 U	Soil
BGS-10	9/11/2015	NA	Slab 0-0.1'	NM	2.34	Concrete
BGS-11	9/11/2015	NA	0.0 - 0.5	NM	0.300 J	Soil
BGS-11	9/11/2015	NA	Slab 0-0.1'	NM	5.52	Concrete
BGS-12	9/11/2015	NA	0.0 - 0.5	NM	0.188 U	Soil
BGS-12	9/11/2015	NA	Slab 0-0.1'	NM	**11.5**	**Concrete**
BGS-13	9/11/2015	NA	0.0 - 0.5	NM	0.182 U	Soil
BGS-13	9/11/2015	NA	Slab 0-0.1'	NM	**32**	**Concrete**
BGS-14	9/11/2015	NA	0.0 - 0.5	NM	0.251 U	Soil
BGS-14	9/11/2015	NA	Slab 0-0.1'	NM	5.05	Concrete
BGS-15	9/11/2015	NA	0.0 - 0.5	NM	0.195 U	Soil

Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Laboratory Analyses 2,3,7,8-TCDD (ppt)	Comments
GSB-16	2/05/2018	NA	0.0 - 0.5	NM	0.110JQ	Soil - @ SW Corner of Garage
GSB-16	2/05/2018	NA	0.5 - 2	NM	0.0484 U	Soil - @ SW Corner of Garage
GSB-16	2/05/2018	NA	2 - 4	NM	0.0227U	Soil - @ SW Corner of Garage
GSB-16	2/05/2018	NA	4 - 6	NM	0.0285U	Soil - @ SW Corner of Garage
GSB-16	2/05/2018	NA	23 - 25	NM	0.0484U	Soil - @ SW Corner of Garage
GSB-17	2/09/2018	NA	0.0 - 0.5	NM	0.0500JQ	Soil - 6' W. of SE Corner of Garage
GSB-17	2/09/2018	NA	0.5 - 2	NM	0.0182U	Soil - 6' W. of SE Corner of Garage
GSB-17	2/09/2018	NA	2 - 4	NM	0.0110U	Soil - 6' W. of SE Corner of Garage
GSB-17	2/09/2018	NA	4 - 6	NM	0.0201U	Soil - 6' W. of SE Corner of Garage
Leachability Based on Groundwater Criteria (ppt)					**3000**	
Direct Exposure Residential (ppt)					**7**	
Direct Exposure: Commercial/Industrial (ppt)					**30**	

Notes:
ppt = parts per trillion
NA = Not Available.
J = Value is estimated
NM= Not Measured
U = Not Detected
J = Estinated concentration between Estimated Detected Limit and Minimum Reporting Level
Q = (EMPC) Estimated Maximum Possible Concentration

APPENDIX III

PHOTOGRAPHS OF SAMPLES

1) View of sample from FLB-201 @ 0.0’-0.5’. Note pieces of black material that was removed from jar and analyzed separately.

2) View of the black material separated from the soil sample collected from FLB-201 @ 0.0’-0.5’.

3). View of sample from FLB-221 @ 0.0’-0.5’.

4). View of the black material separated from the soil sample collected from FLB-221 @ 0.0’-0.5’.

5). View of the soil sample collected from FLB-223 @ 0.0’-0.5’.

6). View of the black material separated from the soil sample collected from FLB-223 @ 0.0’-0.5’.

7). View of the black material separated from the soil sample collected from FLB-224 @ 0.0’-0.5’.

APPENDIX IV

LABORATORY REPORTS

LAB REPORT
FENCE LINE SAMPLES & CHROMIUM SAMPLES
AND 2-3-7-8 TCDD SAMPLES

Analytical Report

L8B0040

Project

Winter Haven

Project Number

Winter Haven

February 27, 2018

SpecPro Professional Services

12500 San Pedro Avenue, Suite 670

San Antonio, TX 78216

Minority Women Business Enterprise

Small Disadvantaged Business Enterprise

Minority Women Business Enterprise
Small Disadvantaged Business Enterprise

1412 Tech Blvd
Tampa, FL 33619

Phone #: 813-620-2000
Website: www.ftsanalytical.com

February 27, 2018

Richard Houde
SpecPro Professional Services
12500 San Pedro Avenue, Suite 670
San Antonio, TX 78216

RE: Winter Haven

We are reporting the results of the analyses performed on the samples recieved on 2/5/2018 under the project name referenced above and identified as the lab Work Order L8B0040. All results being reported under this Report apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontracted lab, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reporting using all other available quality control methods.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by FTS Analytical Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise agreed upon. The samples received, and described as recorded in Work Order L8B0040 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise agreed upon. We reserve the right to return to you any unused samples, extracts, or solutions if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding standard practices, controlled/regulated substances, etc.)

We thank you for selecting FTS Analytical to serve your analytical needs. If you have any questions concerning this report, please do not hesitate to contact us at any time. We will be happy to help.

Sincerely,

Chad A. Bechtold

Chad Bechtold
VP of Client Services

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0040-01	CTB-41 @ 0'-0.5'	Solid	05-Feb-2018 09:32	05-Feb-2018 16:15
L8B0040-02	CTB-41 @ 0.5'-2'	Solid	05-Feb-2018 09:35	05-Feb-2018 16:15
L8B0040-03	CTB-41 @ 2'-4'	Solid	05-Feb-2018 09:37	05-Feb-2018 16:15
L8B0040-04	CTB-41 @ 4'-6'	Solid	05-Feb-2018 09:48	05-Feb-2018 16:15
L8B0040-11	FLB-200 @ 0.0-0.5'	Solid	05-Feb-2018 12:41	05-Feb-2018 16:15
L8B0040-12	FLB-200 @ 0.5-2.0'	Solid	05-Feb-2018 12:42	05-Feb-2018 16:15
L8B0040-15	FLB-201 @ 0.0-0.5'	Solid	05-Feb-2018 12:52	05-Feb-2018 16:15
L8B0040-16	FLB-201 @ 0.5-2.0'	Solid	05-Feb-2018 12:54	05-Feb-2018 16:15
L8B0040-19	FLB-202 @ 0.0-0.5'	Solid	05-Feb-2018 13:42	05-Feb-2018 16:15
L8B0040-20	FLB-202 @ 0.5-2.0'	Solid	05-Feb-2018 13:45	05-Feb-2018 16:15
L8B0040-23	FLB-203 @ 0.0-0.5'	Solid	05-Feb-2018 13:56	05-Feb-2018 16:15
L8B0040-24	FLB-203 @ 0.5-2.0'	Solid	05-Feb-2018 13:58	05-Feb-2018 16:15
L8B0040-27	FLB-204 @ 0.0-0.5'	Solid	05-Feb-2018 14:22	05-Feb-2018 16:15
L8B0040-28	FLB-204 @ 0.5-2.0'	Solid	05-Feb-2018 14:27	05-Feb-2018 16:15
L8B0040-31	FLB-205 @ 0.0-0.5'	Solid	05-Feb-2018 14:38	05-Feb-2018 16:15
L8B0040-32	FLB-205 @ 0.5-2.0'	Solid	05-Feb-2018 14:39	05-Feb-2018 16:15
L8B0040-35	FLB-208 @ 0.0-0.5'	Solid	05-Feb-2018 14:57	05-Feb-2018 16:15
L8B0040-36	FLB-208 @ 0.5-2.0'	Solid	05-Feb-2018 14:59	05-Feb-2018 16:15
L8B0040-44	FLB-242 @ 23'-25'	Solid	05-Feb-2018 09:18	05-Feb-2018 16:15
L8B0040-45	FLB-243 @ 0'-0.5'	Solid	05-Feb-2018 13:04	05-Feb-2018 16:15
L8B0040-46	FLB-243 @ 0.5'-2'	Solid	05-Feb-2018 13:07	05-Feb-2018 16:15
L8B0040-47	FLB-243 @ 2'-4'	Solid	05-Feb-2018 13:09	05-Feb-2018 16:15
L8B0040-48	FLB-243 @ 4'-6'	Solid	05-Feb-2018 13:13	05-Feb-2018 16:15
L8B0040-49	FLB-244 @ 0'-0.5'	Solid	05-Feb-2018 13:29	05-Feb-2018 16:15
L8B0040-50	FLB-244 @ 0.5'-2'	Solid	05-Feb-2018 13:32	05-Feb-2018 16:15
L8B0040-51	FLB-244 @ 2'-4'	Solid	05-Feb-2018 13:34	05-Feb-2018 16:15
L8B0040-52	FLB-244 @ 4'-6'	Solid	05-Feb-2018 13:37	05-Feb-2018 16:15
L8B0040-53	FLB-245 @ 0'-0.5'	Solid	05-Feb-2018 13:18	05-Feb-2018 16:15
L8B0040-54	FLB-245 @ 0.5'-2'	Solid	05-Feb-2018 13:20	05-Feb-2018 16:15
L8B0040-55	FLB-245 @ 2'-4'	Solid	05-Feb-2018 13:22	05-Feb-2018 16:15
L8B0040-56	FLB-245 @ 4'-6'	Solid	05-Feb-2018 13:25	05-Feb-2018 16:15
L8B0040-58	CTB-41 @ 23'-25'	Solid	05-Feb-2018 10:00	05-Feb-2018 16:15
L8B0040-59	GSB-16 @ 0'-0.5'	Solid	05-Feb-2018 10:23	05-Feb-2018 16:15
L8B0040-60	GSB-16 @ 0.5'-2'	Solid	05-Feb-2018 10:24	05-Feb-2018 16:15
L8B0040-61	GSB-16 @ 2'-4'	Solid	05-Feb-2018 10:25	05-Feb-2018 16:15
L8B0040-62	GSB-16 @ 4'-6'	Solid	05-Feb-2018 10:35	05-Feb-2018 16:15
L8B0040-70	GSB-16 @ 23'-25'	Solid	05-Feb-2018 10:49	05-Feb-2018 16:15
L8B0040-71	FLB-242 @ 0'-0.5'	Solid	05-Feb-2018 08:47	05-Feb-2018 16:15

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Samples in this Report
(Continued)

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0040-72	FLB-242 @ 0.5'-2'	Solid	05-Feb-2018 08:49	05-Feb-2018 16:15
L8B0040-73	FLB-242 @ 2'-4'	Solid	05-Feb-2018 08:51	05-Feb-2018 16:15
L8B0040-74	FLB-242 @ 4'-6'	Solid	05-Feb-2018 09:02	05-Feb-2018 16:15

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Analysis Case Narrative

Method 8270D LL PAHs
Batch: B8B0100

The sample L8B0040-71 was analyzed at a dilution due to physical characteristics and/or high levels of non-target compounds.

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Hits Summary

(Not Including Subcontracted Analysis)

Sample: CTB-41 @ 0'-0.5'

Lab ID: L8B0040-01

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**85.6**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Chromium	**104**	JV	5.73	0.0687	mg/Kg dry	1	2/8/18 11:02	7440-47-3	EPA 6010C
Percent Moisture	**14.4**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: CTB-41 @ 0.5'-2'

Lab ID: L8B0040-02

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.7**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Chromium	**14.5**	V	5.23	0.0627	mg/Kg dry	1	2/8/18 11:16	7440-47-3	EPA 6010C
Percent Moisture	**4.33**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: CTB-41 @ 2'-4'

Lab ID: L8B0040-03

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.6**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Chromium	**8.67**	V	5.24	0.0629	mg/Kg dry	1	2/8/18 11:18	7440-47-3	EPA 6010C
Percent Moisture	**6.44**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: CTB-41 @ 4'-6'

Lab ID: L8B0040-04

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.7**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Chromium	**3.37**	IV	5.12	0.0615	mg/Kg dry	1	2/8/18 11:19	7440-47-3	EPA 6010C
Percent Moisture	**4.35**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

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Sample: FLB-200 @ 0.0-0.5'

Lab ID: L8B0040-11

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**87.3**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Acenaphthene	**0.0154**	I	0.0376	0.0148	mg/Kg dry	1	2/8/18 22:58	83-32-9	EPA 8270D PAH
Anthracene	**0.0384**		0.0376	0.00993	mg/Kg dry	1	2/8/18 22:58	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.103**		0.0376	0.0105	mg/Kg dry	1	2/8/18 22:58	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.104**		0.0376	0.0178	mg/Kg dry	1	2/8/18 22:58	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.103**		0.0376	0.0168	mg/Kg dry	1	2/8/18 22:58	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0655**		0.0376	0.0175	mg/Kg dry	1	2/8/18 22:58	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0869**		0.0376	0.0130	mg/Kg dry	1	2/8/18 22:58	207-08-9	EPA 8270D PAH
Chrysene	**0.111**		0.0376	0.00892	mg/Kg dry	1	2/8/18 22:58	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0327**	I	0.0376	0.0167	mg/Kg dry	1	2/8/18 22:58	53-70-3	EPA 8270D PAH
Fluoranthene	**0.222**		0.0376	0.0112	mg/Kg dry	1	2/8/18 22:58	206-44-0	EPA 8270D PAH
Fluorene	**0.0128**	I	0.0376	0.0121	mg/Kg dry	1	2/8/18 22:58	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0602**		0.0376	0.0183	mg/Kg dry	1	2/8/18 22:58	193-39-5	EPA 8270D PAH
Phenanthrene	**0.161**		0.0376	0.00756	mg/Kg dry	1	2/8/18 22:58	85-01-8	EPA 8270D PAH
Pyrene	**0.185**		0.0376	0.0120	mg/Kg dry	1	2/8/18 22:58	129-00-0	EPA 8270D PAH
Percent Moisture	**12.7**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-200 @ 0.5-2.0'

Lab ID: L8B0040-12

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.2**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**5.77**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

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Sample: FLB-201 @ 0.0-0.5'

Lab ID: L8B0040-15

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.1**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
1-Methylnaphthalene	**0.747**		0.185	0.0615	mg/Kg dry	5	2/8/18 23:39	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**1.23**		0.185	0.0743	mg/Kg dry	5	2/8/18 23:39	91-57-6	EPA 8270D PAH
Acenaphthene	**5.59**		0.185	0.0726	mg/Kg dry	5	2/8/18 23:39	83-32-9	EPA 8270D PAH
Anthracene	**12.6**		0.185	0.0488	mg/Kg dry	5	2/8/18 23:39	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**26.2**		0.185	0.0516	mg/Kg dry	5	2/8/18 23:39	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**26.2**		0.185	0.0876	mg/Kg dry	5	2/8/18 23:39	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**32.5**		0.185	0.0826	mg/Kg dry	5	2/8/18 23:39	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**19.7**		0.185	0.0859	mg/Kg dry	5	2/8/18 23:39	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**13.1**		0.185	0.0638	mg/Kg dry	5	2/8/18 23:39	207-08-9	EPA 8270D PAH
Chrysene	**25.5**		0.185	0.0438	mg/Kg dry	5	2/8/18 23:39	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**8.08**		0.185	0.0821	mg/Kg dry	5	2/8/18 23:39	53-70-3	EPA 8270D PAH
Fluoranthene	**57.7**		0.739	0.220	mg/Kg dry	20	2/9/18 13:01	206-44-0	EPA 8270D PAH
Fluorene	**5.45**		0.185	0.0593	mg/Kg dry	5	2/8/18 23:39	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**17.8**		0.185	0.0898	mg/Kg dry	5	2/8/18 23:39	193-39-5	EPA 8270D PAH
Naphthalene	**2.92**		0.185	0.0638	mg/Kg dry	5	2/8/18 23:39	91-20-3	EPA 8270D PAH
Phenanthrene	**51.5**		0.739	0.149	mg/Kg dry	20	2/9/18 13:01	85-01-8	EPA 8270D PAH
Pyrene	**47.7**		0.739	0.235	mg/Kg dry	20	2/9/18 13:01	129-00-0	EPA 8270D PAH
Percent Moisture	**10.9**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-201 @ 0.5-2.0'

Lab ID: L8B0040-16

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.0**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**6.03**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

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(Continued)

Sample: FLB-202 @ 0.0-0.5'

Lab ID: L8B0040-19

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**91.4**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Anthracene	**0.0208**	I	0.0359	0.00948	mg/Kg dry	1	2/9/18 0:20	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.126**		0.0359	0.0100	mg/Kg dry	1	2/9/18 0:20	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.177**		0.0359	0.0170	mg/Kg dry	1	2/9/18 0:20	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.210**		0.0359	0.0160	mg/Kg dry	1	2/9/18 0:20	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.150**		0.0359	0.0167	mg/Kg dry	1	2/9/18 0:20	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.157**		0.0359	0.0124	mg/Kg dry	1	2/9/18 0:20	207-08-9	EPA 8270D PAH
Chrysene	**0.185**		0.0359	0.00851	mg/Kg dry	1	2/9/18 0:20	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0560**		0.0359	0.0159	mg/Kg dry	1	2/9/18 0:20	53-70-3	EPA 8270D PAH
Fluoranthene	**0.232**		0.0359	0.0107	mg/Kg dry	1	2/9/18 0:20	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.128**		0.0359	0.0174	mg/Kg dry	1	2/9/18 0:20	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0556**		0.0359	0.00722	mg/Kg dry	1	2/9/18 0:20	85-01-8	EPA 8270D PAH
Pyrene	**0.219**		0.0359	0.0114	mg/Kg dry	1	2/9/18 0:20	129-00-0	EPA 8270D PAH
Percent Moisture	**8.64**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-202 @ 0.5-2.0'

Lab ID: L8B0040-20

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.3**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Anthracene	**0.0280**	I	0.0350	0.00925	mg/Kg dry	1	2/9/18 0:40	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.187**		0.0350	0.00978	mg/Kg dry	1	2/9/18 0:40	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.226**		0.0350	0.0166	mg/Kg dry	1	2/9/18 0:40	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.264**		0.0350	0.0157	mg/Kg dry	1	2/9/18 0:40	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.184**		0.0350	0.0163	mg/Kg dry	1	2/9/18 0:40	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.203**		0.0350	0.0121	mg/Kg dry	1	2/9/18 0:40	207-08-9	EPA 8270D PAH
Chrysene	**0.262**		0.0350	0.00831	mg/Kg dry	1	2/9/18 0:40	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0571**		0.0350	0.0156	mg/Kg dry	1	2/9/18 0:40	53-70-3	EPA 8270D PAH
Fluoranthene	**0.375**		0.0350	0.0104	mg/Kg dry	1	2/9/18 0:40	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.146**		0.0350	0.0170	mg/Kg dry	1	2/9/18 0:40	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0988**		0.0350	0.00704	mg/Kg dry	1	2/9/18 0:40	85-01-8	EPA 8270D PAH
Pyrene	**0.346**		0.0350	0.0111	mg/Kg dry	1	2/9/18 0:40	129-00-0	EPA 8270D PAH
Percent Moisture	**5.70**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

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Sample: FLB-203 @ 0.0-0.5'

Lab ID: L8B0040-23

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**90.9**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Benzo(a)anthracene	**0.0954**		0.0361	0.0101	mg/Kg dry	1	2/9/18 1:01	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.137**		0.0361	0.0171	mg/Kg dry	1	2/9/18 1:01	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.161**		0.0361	0.0162	mg/Kg dry	1	2/9/18 1:01	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.120**		0.0361	0.0168	mg/Kg dry	1	2/9/18 1:01	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.120**		0.0361	0.0125	mg/Kg dry	1	2/9/18 1:01	207-08-9	EPA 8270D PAH
Chrysene	**0.149**		0.0361	0.00857	mg/Kg dry	1	2/9/18 1:01	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0412**		0.0361	0.0160	mg/Kg dry	1	2/9/18 1:01	53-70-3	EPA 8270D PAH
Fluoranthene	**0.180**		0.0361	0.0107	mg/Kg dry	1	2/9/18 1:01	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0998**		0.0361	0.0176	mg/Kg dry	1	2/9/18 1:01	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0398**		0.0361	0.00726	mg/Kg dry	1	2/9/18 1:01	85-01-8	EPA 8270D PAH
Pyrene	**0.177**		0.0361	0.0115	mg/Kg dry	1	2/9/18 1:01	129-00-0	EPA 8270D PAH
Percent Moisture	**9.14**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-203 @ 0.5-2.0'

Lab ID: L8B0040-24

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**4.92**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-204 @ 0.0-0.5'

Lab ID: L8B0040-27

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**4.94**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-204 @ 0.5-2.0'

Lab ID: L8B0040-28

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.2**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**1.77**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

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Sample: FLB-205 @ 0.0-0.5'

Lab ID: L8B0040-31

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.7**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**2.27**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-205 @ 0.5-2.0'

Lab ID: L8B0040-32

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.1**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**2.86**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-208 @ 0.0-0.5'

Lab ID: L8B0040-35

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**4.86**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-208 @ 0.5-2.0'

Lab ID: L8B0040-36

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.0**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**4.05**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-242 @ 23'-25'

Lab ID: L8B0040-44

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.3**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**4.67**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

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Hits Summary

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Sample: FLB-243 @ 0'-0.5'

Lab ID: L8B0040-45

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.3**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Benzo(a)anthracene	**0.0252**	I	0.0359	0.0100	mg/Kg dry	1	2/9/18 4:05	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0359**		0.0359	0.0170	mg/Kg dry	1	2/9/18 4:05	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0395**		0.0359	0.0161	mg/Kg dry	1	2/9/18 4:05	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0334**	I	0.0359	0.0167	mg/Kg dry	1	2/9/18 4:05	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0302**	I	0.0359	0.0124	mg/Kg dry	1	2/9/18 4:05	207-08-9	EPA 8270D PAH
Chrysene	**0.0302**	I	0.0359	0.00852	mg/Kg dry	1	2/9/18 4:05	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0421**		0.0359	0.0107	mg/Kg dry	1	2/9/18 4:05	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0280**	I	0.0359	0.0175	mg/Kg dry	1	2/9/18 4:05	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0183**	I	0.0359	0.00723	mg/Kg dry	1	2/9/18 4:05	85-01-8	EPA 8270D PAH
Pyrene	**0.0395**		0.0359	0.0114	mg/Kg dry	1	2/9/18 4:05	129-00-0	EPA 8270D PAH
Percent Moisture	**7.73**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-243 @ 0.5'-2'

Lab ID: L8B0040-46

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.0**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G
Percent Moisture	**11.0**		0.100	0.100	%	1	2/10/18 16:30		SM 2540G

Sample: FLB-243 @ 2'-4'

Lab ID: L8B0040-47

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**99.0**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Percent Moisture	**1.03**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

Sample: FLB-243 @ 4'-6'

Lab ID: L8B0040-48

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.2**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Percent Moisture	**1.80**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

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Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-244 @ 0'-0.5'

Lab ID: L8B0040-49

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.1**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Percent Moisture	**5.87**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

Sample: FLB-244 @ 0.5'-2'

Lab ID: L8B0040-50

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.5**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Phenanthrene	**0.00708**	I	0.0337	0.00678	mg/Kg dry	1	2/9/18 17:22	85-01-8	EPA 8270D PAH
Percent Moisture	**3.54**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

Sample: FLB-244 @ 2'-4'

Lab ID: L8B0040-51

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.3**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Percent Moisture	**2.69**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

Sample: FLB-244 @ 4'-6'

Lab ID: L8B0040-52

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.4**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Percent Moisture	**2.59**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

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Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-245 @ 0'-0.5'

Lab ID: L8B0040-53

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.3**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Benzo(a)anthracene	**0.0183**	I	0.0359	0.0100	mg/Kg dry	1	2/9/18 18:22	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0219**	I	0.0359	0.0170	mg/Kg dry	1	2/9/18 18:22	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0176**	I	0.0359	0.0160	mg/Kg dry	1	2/9/18 18:22	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0201**	I	0.0359	0.0167	mg/Kg dry	1	2/9/18 18:22	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0194**	I	0.0359	0.0124	mg/Kg dry	1	2/9/18 18:22	207-08-9	EPA 8270D PAH
Chrysene	**0.0212**	I	0.0359	0.00850	mg/Kg dry	1	2/9/18 18:22	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0309**	I	0.0359	0.0107	mg/Kg dry	1	2/9/18 18:22	206-44-0	EPA 8270D PAH
Phenanthrene	**0.0122**	I	0.0359	0.00721	mg/Kg dry	1	2/9/18 18:22	85-01-8	EPA 8270D PAH
Pyrene	**0.0273**	I	0.0359	0.0114	mg/Kg dry	1	2/9/18 18:22	129-00-0	EPA 8270D PAH
Percent Moisture	**7.75**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

Sample: FLB-245 @ 0.5'-2'

Lab ID: L8B0040-54

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.1**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Benzo(a)anthracene	**0.0323**	I	0.0347	0.00969	mg/Kg dry	1	2/9/18 18:42	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0361**		0.0347	0.0165	mg/Kg dry	1	2/9/18 18:42	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0333**	I	0.0347	0.0155	mg/Kg dry	1	2/9/18 18:42	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0326**	I	0.0347	0.0161	mg/Kg dry	1	2/9/18 18:42	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0302**	I	0.0347	0.0120	mg/Kg dry	1	2/9/18 18:42	207-08-9	EPA 8270D PAH
Chrysene	**0.0344**	I	0.0347	0.00823	mg/Kg dry	1	2/9/18 18:42	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0573**		0.0347	0.0103	mg/Kg dry	1	2/9/18 18:42	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0229**	I	0.0347	0.0169	mg/Kg dry	1	2/9/18 18:42	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0288**	I	0.0347	0.00698	mg/Kg dry	1	2/9/18 18:42	85-01-8	EPA 8270D PAH
Pyrene	**0.0493**		0.0347	0.0110	mg/Kg dry	1	2/9/18 18:42	129-00-0	EPA 8270D PAH
Percent Moisture	**5.86**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

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Hits Summary

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(Continued)

Sample: FLB-245 @ 2'-4'

Lab ID: L8B0040-55

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.5**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Acenaphthene	**0.0222**	I	0.0336	0.0132	mg/Kg dry	1	2/9/18 19:02	83-32-9	EPA 8270D PAH
Anthracene	**0.0531**		0.0336	0.00887	mg/Kg dry	1	2/9/18 19:02	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.156**		0.0336	0.00938	mg/Kg dry	1	2/9/18 19:02	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.163**		0.0336	0.0159	mg/Kg dry	1	2/9/18 19:02	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.157**		0.0336	0.0150	mg/Kg dry	1	2/9/18 19:02	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.120**		0.0336	0.0156	mg/Kg dry	1	2/9/18 19:02	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.134**		0.0336	0.0116	mg/Kg dry	1	2/9/18 19:02	207-08-9	EPA 8270D PAH
Chrysene	**0.162**		0.0336	0.00797	mg/Kg dry	1	2/9/18 19:02	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0356**		0.0336	0.0149	mg/Kg dry	1	2/9/18 19:02	53-70-3	EPA 8270D PAH
Fluoranthene	**0.324**		0.0336	0.00998	mg/Kg dry	1	2/9/18 19:02	206-44-0	EPA 8270D PAH
Fluorene	**0.0161**	I	0.0336	0.0108	mg/Kg dry	1	2/9/18 19:02	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.106**		0.0336	0.0163	mg/Kg dry	1	2/9/18 19:02	193-39-5	EPA 8270D PAH
Phenanthrene	**0.218**		0.0336	0.00676	mg/Kg dry	1	2/9/18 19:02	85-01-8	EPA 8270D PAH
Pyrene	**0.281**		0.0336	0.0107	mg/Kg dry	1	2/9/18 19:02	129-00-0	EPA 8270D PAH
Percent Moisture	**1.53**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

Sample: FLB-245 @ 4'-6'

Lab ID: L8B0040-56

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.3**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Percent Moisture	**1.67**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

Sample: CTB-41 @ 23'-25'

Lab ID: L8B0040-58

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**86.9**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G
Chromium	**9.70**	V	5.75	0.0690	mg/Kg dry	1	2/8/18 11:21	7440-47-3	EPA 6010C
Percent Moisture	**13.1**		0.100	0.100	%	1	2/6/18 13:20		SM 2540G

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Hits Summary

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(Continued)

Sample: FLB-242 @ 0'-0.5'

Lab ID: L8B0040-71

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**91.3**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G
1-Methylnaphthalene	**0.0665**	I	0.180	0.0598	mg/Kg dry	5	2/9/18 19:43	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.0809**	I	0.180	0.0722	mg/Kg dry	5	2/9/18 19:43	91-57-6	EPA 8270D PAH
Acenaphthene	**0.769**		0.180	0.0706	mg/Kg dry	5	2/9/18 19:43	83-32-9	EPA 8270D PAH
Anthracene	**1.15**		0.180	0.0474	mg/Kg dry	5	2/9/18 19:43	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**3.00**		0.180	0.0501	mg/Kg dry	5	2/9/18 19:43	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**2.96**		0.180	0.0852	mg/Kg dry	5	2/9/18 19:43	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**2.93**		0.180	0.0803	mg/Kg dry	5	2/9/18 19:43	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**2.23**		0.180	0.0836	mg/Kg dry	5	2/9/18 19:43	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**2.21**		0.180	0.0620	mg/Kg dry	5	2/9/18 19:43	207-08-9	EPA 8270D PAH
Chrysene	**3.12**		0.180	0.0426	mg/Kg dry	5	2/9/18 19:43	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.742**		0.180	0.0798	mg/Kg dry	5	2/9/18 19:43	53-70-3	EPA 8270D PAH
Fluoranthene	**6.59**		0.180	0.0534	mg/Kg dry	5	2/9/18 19:43	206-44-0	EPA 8270D PAH
Fluorene	**0.514**		0.180	0.0577	mg/Kg dry	5	2/9/18 19:43	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**1.98**		0.180	0.0873	mg/Kg dry	5	2/9/18 19:43	193-39-5	EPA 8270D PAH
Naphthalene	**0.255**		0.180	0.0620	mg/Kg dry	5	2/9/18 19:43	91-20-3	EPA 8270D PAH
Phenanthrene	**5.47**		0.180	0.0361	mg/Kg dry	5	2/9/18 19:43	85-01-8	EPA 8270D PAH
Pyrene	**5.58**		0.180	0.0571	mg/Kg dry	5	2/9/18 19:43	129-00-0	EPA 8270D PAH
Percent Moisture	**8.70**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G

Sample: FLB-242 @ 0.5'-2'

Lab ID: L8B0040-72

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.7**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G
Percent Moisture	**10.3**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G

Sample: FLB-242 @ 2'-4'

Lab ID: L8B0040-73

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G
Percent Moisture	**4.93**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G

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Hits Summary

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(Continued)

Sample: FLB-242 @ 4'-6'

Lab ID: L8B0040-74

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.8**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G
Percent Moisture	**4.23**		0.100	0.100	%	1	2/7/18 10:00		SM 2540G

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Sample Results

Client Sample ID: CTB-41 @ 0'-0.5'
Lab Sample ID: L8B0040-01 (Solid) **Sampled:2/5/18 9:32**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**85.6**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**14.4**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**104**	JV	5.73	0.0687	mg/Kg dry	1	2/7/18 14:30	2/8/18 11:02	7440-47-3

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Sample Results
(Continued)

Client Sample ID: CTB-41 @ 0.5'-2'
Lab Sample ID: L8B0040-02 (Solid) **Sampled:2/5/18 9:35**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.7**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**4.33**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**14.5**	V	5.23	0.0627	mg/Kg dry	1	2/7/18 14:30	2/8/18 11:16	7440-47-3

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Sample Results
(Continued)

Client Sample ID: CTB-41 @ 2'-4'
Lab Sample ID: L8B0040-03 (Solid) **Sampled:2/5/18 9:37**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**93.6**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**6.44**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**8.67**	V	5.24	0.0629	mg/Kg dry	1	2/7/18 14:30	2/8/18 11:18	7440-47-3

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Sample Results
(Continued)

Client Sample ID: CTB-41 @ 4'-6'
Lab Sample ID: L8B0040-04 (Solid) **Sampled:2/5/18 9:48**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.7**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**4.35**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**3.37**	IV	5.12	0.0615	mg/Kg dry	1	2/7/18 14:30	2/8/18 11:19	7440-47-3

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Sample Results
(Continued)

Client Sample ID: FLB-200 @ 0.0-0.5'
Lab Sample ID: L8B0040-11 (Solid) **Sampled:2/5/18 12:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0125	U	0.0376	0.0125	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	90-12-0
2-Methylnaphthalene	0.0151	U	0.0376	0.0151	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	91-57-6
Acenaphthene	**0.0154**	I	0.0376	0.0148	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	83-32-9
Acenaphthylene	0.0125	U	0.0376	0.0125	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	208-96-8
Anthracene	**0.0384**		0.0376	0.00993	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	120-12-7
Benzo(a)anthracene	**0.103**		0.0376	0.0105	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	56-55-3
Benzo(a)pyrene	**0.104**		0.0376	0.0178	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	50-32-8
Benzo(b)fluoranthene	**0.103**		0.0376	0.0168	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	205-99-2
Benzo(g,h,i)perylene	**0.0655**		0.0376	0.0175	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	191-24-2
Benzo(k)fluoranthene	**0.0869**		0.0376	0.0130	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	207-08-9
Chrysene	**0.111**		0.0376	0.00892	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	218-01-9
Dibenz(a,h)Anthracene	**0.0327**	I	0.0376	0.0167	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	53-70-3
Fluoranthene	**0.222**		0.0376	0.0112	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	206-44-0
Fluorene	**0.0128**	I	0.0376	0.0121	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0602**		0.0376	0.0183	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	193-39-5
Naphthalene	0.0130	U	0.0376	0.0130	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	91-20-3
Phenanthrene	**0.161**		0.0376	0.00756	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	85-01-8
Pyrene	**0.185**		0.0376	0.0120	mg/Kg dry	1	2/7/18 17:09	2/8/18 22:58	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*38%*	*16-110*				2/8/18 22:58	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*31%*	*19-105*				2/8/18 22:58	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*68%*	*20-137*				2/8/18 22:58	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**87.3**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**12.7**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Sample Results
(Continued)

Client Sample ID: FLB-200 @ 0.5-2.0'
Lab Sample ID: L8B0040-12 (Solid) **Sampled:2/5/18 12:42**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	208-96-8
Anthracene	0.00928	U	0.0351	0.00928	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	120-12-7
Benzo(a)anthracene	0.00981	U	0.0351	0.00981	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	56-55-3
Benzo(a)pyrene	0.0167	U	0.0351	0.0167	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	207-08-9
Chrysene	0.00833	U	0.0351	0.00833	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0351	0.0171	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	91-20-3
Phenanthrene	0.00707	U	0.0351	0.00707	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:18	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*43%*	*16-110*				2/8/18 23:18	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*38%*	*19-105*				2/8/18 23:18	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*79%*	*20-137*				2/8/18 23:18	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.2**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**5.77**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-201 @ 0.0-0.5'
Lab Sample ID: L8B0040-15 (Solid) **Sampled:2/5/18 12:52**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.747**		0.185	0.0615	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	90-12-0
2-Methylnaphthalene	**1.23**		0.185	0.0743	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	91-57-6
Acenaphthene	**5.59**		0.185	0.0726	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	83-32-9
Acenaphthylene	0.0615	U	0.185	0.0615	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	208-96-8
Anthracene	**12.6**		0.185	0.0488	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	120-12-7
Benzo(a)anthracene	**26.2**		0.185	0.0516	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	56-55-3
Benzo(a)pyrene	**26.2**		0.185	0.0876	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	50-32-8
Benzo(b)fluoranthene	**32.5**		0.185	0.0826	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	205-99-2
Benzo(g,h,i)perylene	**19.7**		0.185	0.0859	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	191-24-2
Benzo(k)fluoranthene	**13.1**		0.185	0.0638	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	207-08-9
Chrysene	**25.5**		0.185	0.0438	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	218-01-9
Dibenz(a,h)Anthracene	**8.08**		0.185	0.0821	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	53-70-3
Fluoranthene	**57.7**		0.739	0.220	mg/Kg dry	20	2/7/18 17:09	2/9/18 13:01	206-44-0
Fluorene	**5.45**		0.185	0.0593	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	86-73-7
Indeno(1,2,3-cd)pyrene	**17.8**		0.185	0.0898	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	193-39-5
Naphthalene	**2.92**		0.185	0.0638	mg/Kg dry	5	2/7/18 17:09	2/8/18 23:39	91-20-3
Phenanthrene	**51.5**		0.739	0.149	mg/Kg dry	20	2/7/18 17:09	2/9/18 13:01	85-01-8
Pyrene	**47.7**		0.739	0.235	mg/Kg dry	20	2/7/18 17:09	2/9/18 13:01	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*55%*	*16-110*				2/8/18 23:39	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/8/18 23:39	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*66%*	*20-137*				2/8/18 23:39	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**89.1**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**10.9**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-201 @ 0.5-2.0'
Lab Sample ID: L8B0040-16 (Solid) **Sampled:2/5/18 12:54**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	90-12-0
2-Methylnaphthalene	0.0139	U	0.0347	0.0139	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	91-57-6
Acenaphthene	0.0136	U	0.0347	0.0136	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	208-96-8
Anthracene	0.00916	U	0.0347	0.00916	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	120-12-7
Benzo(a)anthracene	0.00968	U	0.0347	0.00968	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	56-55-3
Benzo(a)pyrene	0.0164	U	0.0347	0.0164	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	50-32-8
Benzo(b)fluoranthene	0.0155	U	0.0347	0.0155	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	205-99-2
Benzo(g,h,i)perylene	0.0161	U	0.0347	0.0161	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	207-08-9
Chrysene	0.00822	U	0.0347	0.00822	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0347	0.0154	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	53-70-3
Fluoranthene	0.0103	U	0.0347	0.0103	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	206-44-0
Fluorene	0.0111	U	0.0347	0.0111	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	86-73-7
Indeno(1,2,3-cd)pyrene	0.0169	U	0.0347	0.0169	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	91-20-3
Phenanthrene	0.00697	U	0.0347	0.00697	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	85-01-8
Pyrene	0.0110	U	0.0347	0.0110	mg/Kg dry	1	2/7/18 17:09	2/8/18 23:59	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*38%*	*16-110*				2/8/18 23:59	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*32%*	*19-105*				2/8/18 23:59	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/8/18 23:59	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.0**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**6.03**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-202 @ 0.0-0.5'
Lab Sample ID: L8B0040-19 (Solid) **Sampled:2/5/18 13:42**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0120	U	0.0359	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	90-12-0
2-Methylnaphthalene	0.0144	U	0.0359	0.0144	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	91-57-6
Acenaphthene	0.0141	U	0.0359	0.0141	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	83-32-9
Acenaphthylene	0.0120	U	0.0359	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	208-96-8
Anthracene	**0.0208**	I	0.0359	0.00948	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	120-12-7
Benzo(a)anthracene	**0.126**		0.0359	0.0100	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	56-55-3
Benzo(a)pyrene	**0.177**		0.0359	0.0170	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	50-32-8
Benzo(b)fluoranthene	**0.210**		0.0359	0.0160	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	205-99-2
Benzo(g,h,i)perylene	**0.150**		0.0359	0.0167	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	191-24-2
Benzo(k)fluoranthene	**0.157**		0.0359	0.0124	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	207-08-9
Chrysene	**0.185**		0.0359	0.00851	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	218-01-9
Dibenz(a,h)Anthracene	**0.0560**		0.0359	0.0159	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	53-70-3
Fluoranthene	**0.232**		0.0359	0.0107	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	206-44-0
Fluorene	0.0115	U	0.0359	0.0115	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	86-73-7
Indeno(1,2,3-cd)pyrene	**0.128**		0.0359	0.0174	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	193-39-5
Naphthalene	0.0124	U	0.0359	0.0124	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	91-20-3
Phenanthrene	**0.0556**		0.0359	0.00722	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	85-01-8
Pyrene	**0.219**		0.0359	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:20	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*50%*	*16-110*				2/9/18 0:20	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*41%*	*19-105*				2/9/18 0:20	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*69%*	*20-137*				2/9/18 0:20	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**91.4**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**8.64**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Sample Results
(Continued)

Client Sample ID: FLB-202 @ 0.5-2.0'
Lab Sample ID: L8B0040-20 (Solid) **Sampled:2/5/18 13:45**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	208-96-8
Anthracene	**0.0280**	I	0.0350	0.00925	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	120-12-7
Benzo(a)anthracene	**0.187**		0.0350	0.00978	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	56-55-3
Benzo(a)pyrene	**0.226**		0.0350	0.0166	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	50-32-8
Benzo(b)fluoranthene	**0.264**		0.0350	0.0157	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	205-99-2
Benzo(g,h,i)perylene	**0.184**		0.0350	0.0163	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	191-24-2
Benzo(k)fluoranthene	**0.203**		0.0350	0.0121	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	207-08-9
Chrysene	**0.262**		0.0350	0.00831	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	218-01-9
Dibenz(a,h)Anthracene	**0.0571**		0.0350	0.0156	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	53-70-3
Fluoranthene	**0.375**		0.0350	0.0104	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	86-73-7
Indeno(1,2,3-cd)pyrene	**0.146**		0.0350	0.0170	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	91-20-3
Phenanthrene	**0.0988**		0.0350	0.00704	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	85-01-8
Pyrene	**0.346**		0.0350	0.0111	mg/Kg dry	1	2/7/18 17:09	2/9/18 0:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*55%*	*16-110*				2/9/18 0:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*47%*	*19-105*				2/9/18 0:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*76%*	*20-137*				2/9/18 0:40	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.3**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**5.70**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-203 @ 0.0-0.5'
Lab Sample ID: L8B0040-23 (Solid) **Sampled:2/5/18 13:56**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	90-12-0
2-Methylnaphthalene	0.0145	U	0.0361	0.0145	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	91-57-6
Acenaphthene	0.0142	U	0.0361	0.0142	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	83-32-9
Acenaphthylene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	208-96-8
Anthracene	0.00954	U	0.0361	0.00954	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	120-12-7
Benzo(a)anthracene	**0.0954**		0.0361	0.0101	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	56-55-3
Benzo(a)pyrene	**0.137**		0.0361	0.0171	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	50-32-8
Benzo(b)fluoranthene	**0.161**		0.0361	0.0162	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	205-99-2
Benzo(g,h,i)perylene	**0.120**		0.0361	0.0168	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	191-24-2
Benzo(k)fluoranthene	**0.120**		0.0361	0.0125	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	207-08-9
Chrysene	**0.149**		0.0361	0.00857	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	218-01-9
Dibenz(a,h)Anthracene	**0.0412**		0.0361	0.0160	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	53-70-3
Fluoranthene	**0.180**		0.0361	0.0107	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	206-44-0
Fluorene	0.0116	U	0.0361	0.0116	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0998**		0.0361	0.0176	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	193-39-5
Naphthalene	0.0125	U	0.0361	0.0125	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	91-20-3
Phenanthrene	**0.0398**		0.0361	0.00726	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	85-01-8
Pyrene	**0.177**		0.0361	0.0115	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:01	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*41%*	*16-110*				2/9/18 1:01	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*32%*	*19-105*				2/9/18 1:01	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/9/18 1:01	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**90.9**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**9.14**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Sample Results
(Continued)

Client Sample ID: FLB-203 @ 0.5-2.0'
Lab Sample ID: L8B0040-24 (Solid) **Sampled:2/5/18 13:58**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	90-12-0
2-Methylnaphthalene	0.0138	U	0.0343	0.0138	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	91-57-6
Acenaphthene	0.0135	U	0.0343	0.0135	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	83-32-9
Acenaphthylene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	208-96-8
Anthracene	0.00907	U	0.0343	0.00907	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	120-12-7
Benzo(a)anthracene	0.00958	U	0.0343	0.00958	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	56-55-3
Benzo(a)pyrene	0.0163	U	0.0343	0.0163	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0343	0.0154	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0343	0.0160	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	191-24-2
Benzo(k)fluoranthene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	207-08-9
Chrysene	0.00814	U	0.0343	0.00814	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0343	0.0152	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	53-70-3
Fluoranthene	0.0102	U	0.0343	0.0102	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	206-44-0
Fluorene	0.0110	U	0.0343	0.0110	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0343	0.0167	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	193-39-5
Naphthalene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	91-20-3
Phenanthrene	0.00690	U	0.0343	0.00690	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	85-01-8
Pyrene	0.0109	U	0.0343	0.0109	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:21	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*67%*	*16-110*				2/9/18 1:21	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*57%*	*19-105*				2/9/18 1:21	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*91%*	*20-137*				2/9/18 1:21	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**4.92**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-204 @ 0.0-0.5'
Lab Sample ID: L8B0040-27 (Solid) **Sampled:2/5/18 14:22**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	90-12-0
2-Methylnaphthalene	0.0138	U	0.0343	0.0138	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	91-57-6
Acenaphthene	0.0135	U	0.0343	0.0135	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	83-32-9
Acenaphthylene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	208-96-8
Anthracene	0.00905	U	0.0343	0.00905	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	120-12-7
Benzo(a)anthracene	0.00956	U	0.0343	0.00956	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	56-55-3
Benzo(a)pyrene	0.0162	U	0.0343	0.0162	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	50-32-8
Benzo(b)fluoranthene	0.0153	U	0.0343	0.0153	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	205-99-2
Benzo(g,h,i)perylene	0.0159	U	0.0343	0.0159	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	191-24-2
Benzo(k)fluoranthene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	207-08-9
Chrysene	0.00812	U	0.0343	0.00812	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0343	0.0152	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	53-70-3
Fluoranthene	0.0102	U	0.0343	0.0102	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	206-44-0
Fluorene	0.0110	U	0.0343	0.0110	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0343	0.0167	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	193-39-5
Naphthalene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	91-20-3
Phenanthrene	0.00689	U	0.0343	0.00689	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	85-01-8
Pyrene	0.0109	U	0.0343	0.0109	mg/Kg dry	1	2/7/18 17:09	2/9/18 1:42	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*70%*	*16-110*				2/9/18 1:42	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*51%*	*19-105*				2/9/18 1:42	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*97%*	*20-137*				2/9/18 1:42	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**4.94**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-204 @ 0.5-2.0'
Lab Sample ID: L8B0040-28 (Solid) **Sampled:2/5/18 14:27**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	90-12-0
2-Methylnaphthalene	0.0136	U	0.0338	0.0136	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	91-57-6
Acenaphthene	0.0133	U	0.0338	0.0133	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	83-32-9
Acenaphthylene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	208-96-8
Anthracene	0.00893	U	0.0338	0.00893	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	120-12-7
Benzo(a)anthracene	0.00944	U	0.0338	0.00944	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	56-55-3
Benzo(a)pyrene	0.0160	U	0.0338	0.0160	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	50-32-8
Benzo(b)fluoranthene	0.0151	U	0.0338	0.0151	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	205-99-2
Benzo(g,h,i)perylene	0.0157	U	0.0338	0.0157	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	207-08-9
Chrysene	0.00802	U	0.0338	0.00802	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	218-01-9
Dibenz(a,h)Anthracene	0.0150	U	0.0338	0.0150	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	53-70-3
Fluoranthene	0.0100	U	0.0338	0.0100	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	206-44-0
Fluorene	0.0109	U	0.0338	0.0109	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	86-73-7
Indeno(1,2,3-cd)pyrene	0.0164	U	0.0338	0.0164	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	193-39-5
Naphthalene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	91-20-3
Phenanthrene	0.00680	U	0.0338	0.00680	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	85-01-8
Pyrene	0.0108	U	0.0338	0.0108	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:02	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*61%*	*16-110*				2/9/18 2:02	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/9/18 2:02	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/9/18 2:02	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**98.2**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**1.77**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-205 @ 0.0-0.5'
Lab Sample ID: L8B0040-31 (Solid) **Sampled:2/5/18 14:38**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0110	U	0.0332	0.0110	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	90-12-0
2-Methylnaphthalene	0.0133	U	0.0332	0.0133	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	91-57-6
Acenaphthene	0.0130	U	0.0332	0.0130	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	83-32-9
Acenaphthylene	0.0110	U	0.0332	0.0110	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	208-96-8
Anthracene	0.00876	U	0.0332	0.00876	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	120-12-7
Benzo(a)anthracene	0.00925	U	0.0332	0.00925	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	56-55-3
Benzo(a)pyrene	0.0157	U	0.0332	0.0157	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	50-32-8
Benzo(b)fluoranthene	0.0148	U	0.0332	0.0148	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	205-99-2
Benzo(g,h,i)perylene	0.0154	U	0.0332	0.0154	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	191-24-2
Benzo(k)fluoranthene	0.0114	U	0.0332	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	207-08-9
Chrysene	0.00786	U	0.0332	0.00786	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	218-01-9
Dibenz(a,h)Anthracene	0.0147	U	0.0332	0.0147	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	53-70-3
Fluoranthene	0.00985	U	0.0332	0.00985	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	206-44-0
Fluorene	0.0106	U	0.0332	0.0106	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	86-73-7
Indeno(1,2,3-cd)pyrene	0.0161	U	0.0332	0.0161	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	193-39-5
Naphthalene	0.0114	U	0.0332	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	91-20-3
Phenanthrene	0.00667	U	0.0332	0.00667	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	85-01-8
Pyrene	0.0105	U	0.0332	0.0105	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:22	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*83%*	*16-110*				2/9/18 2:22	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*73%*	*19-105*				2/9/18 2:22	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*104%*	*20-137*				2/9/18 2:22	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**97.7**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**2.27**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Sample Results
(Continued)

Client Sample ID: FLB-205 @ 0.5-2.0'
Lab Sample ID: L8B0040-32 (Solid) **Sampled:2/5/18 14:39**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0340	0.0113	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	90-12-0
2-Methylnaphthalene	0.0137	U	0.0340	0.0137	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	91-57-6
Acenaphthene	0.0134	U	0.0340	0.0134	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	83-32-9
Acenaphthylene	0.0113	U	0.0340	0.0113	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	208-96-8
Anthracene	0.00898	U	0.0340	0.00898	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	120-12-7
Benzo(a)anthracene	0.00949	U	0.0340	0.00949	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	56-55-3
Benzo(a)pyrene	0.0161	U	0.0340	0.0161	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	50-32-8
Benzo(b)fluoranthene	0.0152	U	0.0340	0.0152	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	205-99-2
Benzo(g,h,i)perylene	0.0158	U	0.0340	0.0158	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0340	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	207-08-9
Chrysene	0.00807	U	0.0340	0.00807	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	218-01-9
Dibenz(a,h)Anthracene	0.0151	U	0.0340	0.0151	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	53-70-3
Fluoranthene	0.0101	U	0.0340	0.0101	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	206-44-0
Fluorene	0.0109	U	0.0340	0.0109	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	86-73-7
Indeno(1,2,3-cd)pyrene	0.0165	U	0.0340	0.0165	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	193-39-5
Naphthalene	0.0117	U	0.0340	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	91-20-3
Phenanthrene	0.00684	U	0.0340	0.00684	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	85-01-8
Pyrene	0.0108	U	0.0340	0.0108	mg/Kg dry	1	2/7/18 17:09	2/9/18 2:43	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*62%*	*16-110*				2/9/18 2:43	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/9/18 2:43	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/9/18 2:43	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**97.1**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**2.86**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-208 @ 0.0-0.5'
Lab Sample ID: L8B0040-35 (Solid) **Sampled:2/5/18 14:57**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	90-12-0
2-Methylnaphthalene	0.0140	U	0.0347	0.0140	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	91-57-6
Acenaphthene	0.0137	U	0.0347	0.0137	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	208-96-8
Anthracene	0.00917	U	0.0347	0.00917	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	120-12-7
Benzo(a)anthracene	0.00969	U	0.0347	0.00969	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	56-55-3
Benzo(a)pyrene	0.0165	U	0.0347	0.0165	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	50-32-8
Benzo(b)fluoranthene	0.0155	U	0.0347	0.0155	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0347	0.0162	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	207-08-9
Chrysene	0.00824	U	0.0347	0.00824	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0347	0.0154	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	53-70-3
Fluoranthene	0.0103	U	0.0347	0.0103	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	206-44-0
Fluorene	0.0112	U	0.0347	0.0112	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	86-73-7
Indeno(1,2,3-cd)pyrene	0.0169	U	0.0347	0.0169	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	91-20-3
Phenanthrene	0.00698	U	0.0347	0.00698	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	85-01-8
Pyrene	0.0110	U	0.0347	0.0110	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:03	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*67%*	*16-110*				2/9/18 3:03	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*56%*	*19-105*				2/9/18 3:03	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*85%*	*20-137*				2/9/18 3:03	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**4.86**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-208 @ 0.5-2.0'
Lab Sample ID: L8B0040-36 (Solid) **Sampled:2/5/18 14:59**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0340	0.0113	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	90-12-0
2-Methylnaphthalene	0.0137	U	0.0340	0.0137	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	91-57-6
Acenaphthene	0.0134	U	0.0340	0.0134	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	83-32-9
Acenaphthylene	0.0113	U	0.0340	0.0113	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	208-96-8
Anthracene	0.00898	U	0.0340	0.00898	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	120-12-7
Benzo(a)anthracene	0.00949	U	0.0340	0.00949	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	56-55-3
Benzo(a)pyrene	0.0161	U	0.0340	0.0161	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	50-32-8
Benzo(b)fluoranthene	0.0152	U	0.0340	0.0152	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	205-99-2
Benzo(g,h,i)perylene	0.0158	U	0.0340	0.0158	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0340	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	207-08-9
Chrysene	0.00806	U	0.0340	0.00806	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	218-01-9
Dibenz(a,h)Anthracene	0.0151	U	0.0340	0.0151	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	53-70-3
Fluoranthene	0.0101	U	0.0340	0.0101	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	206-44-0
Fluorene	0.0109	U	0.0340	0.0109	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	86-73-7
Indeno(1,2,3-cd)pyrene	0.0165	U	0.0340	0.0165	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	193-39-5
Naphthalene	0.0117	U	0.0340	0.0117	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	91-20-3
Phenanthrene	0.00684	U	0.0340	0.00684	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	85-01-8
Pyrene	0.0108	U	0.0340	0.0108	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:24	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*63%*	*16-110*				2/9/18 3:24	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/9/18 3:24	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*81%*	*20-137*				2/9/18 3:24	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**96.0**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**4.05**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-242 @ 23'-25'
Lab Sample ID: L8B0040-44 (Solid) **Sampled:2/5/18 9:18**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	90-12-0
2-Methylnaphthalene	0.0139	U	0.0345	0.0139	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	91-57-6
Acenaphthene	0.0136	U	0.0345	0.0136	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	208-96-8
Anthracene	0.00911	U	0.0345	0.00911	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	120-12-7
Benzo(a)anthracene	0.00963	U	0.0345	0.00963	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	56-55-3
Benzo(a)pyrene	0.0164	U	0.0345	0.0164	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0345	0.0154	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0345	0.0160	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	207-08-9
Chrysene	0.00818	U	0.0345	0.00818	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0345	0.0153	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	53-70-3
Fluoranthene	0.0102	U	0.0345	0.0102	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	206-44-0
Fluorene	0.0111	U	0.0345	0.0111	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	86-73-7
Indeno(1,2,3-cd)pyrene	0.0168	U	0.0345	0.0168	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	193-39-5
Naphthalene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	91-20-3
Phenanthrene	0.00694	U	0.0345	0.00694	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	85-01-8
Pyrene	0.0110	U	0.0345	0.0110	mg/Kg dry	1	2/7/18 17:09	2/9/18 3:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*53%*	*16-110*				2/9/18 3:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/9/18 3:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*76%*	*20-137*				2/9/18 3:44	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.3**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**4.67**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-243 @ 0'-0.5'
Lab Sample ID: L8B0040-45 (Solid) **Sampled:2/5/18 13:04**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0120	U	0.0359	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	90-12-0
2-Methylnaphthalene	0.0145	U	0.0359	0.0145	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	91-57-6
Acenaphthene	0.0141	U	0.0359	0.0141	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	83-32-9
Acenaphthylene	0.0120	U	0.0359	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	208-96-8
Anthracene	0.00949	U	0.0359	0.00949	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	120-12-7
Benzo(a)anthracene	**0.0252**	I	0.0359	0.0100	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	56-55-3
Benzo(a)pyrene	**0.0359**		0.0359	0.0170	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	50-32-8
Benzo(b)fluoranthene	**0.0395**		0.0359	0.0161	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	205-99-2
Benzo(g,h,i)perylene	**0.0334**	I	0.0359	0.0167	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	191-24-2
Benzo(k)fluoranthene	**0.0302**	I	0.0359	0.0124	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	207-08-9
Chrysene	**0.0302**	I	0.0359	0.00852	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	218-01-9
Dibenz(a,h)Anthracene	0.0160	U	0.0359	0.0160	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	53-70-3
Fluoranthene	**0.0421**		0.0359	0.0107	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	206-44-0
Fluorene	0.0115	U	0.0359	0.0115	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0280**	I	0.0359	0.0175	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	193-39-5
Naphthalene	0.0124	U	0.0359	0.0124	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	91-20-3
Phenanthrene	**0.0183**	I	0.0359	0.00723	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	85-01-8
Pyrene	**0.0395**		0.0359	0.0114	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:05	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*51%*	*16-110*				2/9/18 4:05	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*41%*	*19-105*				2/9/18 4:05	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*75%*	*20-137*				2/9/18 4:05	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**92.3**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**7.73**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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Sample Results
(Continued)

Client Sample ID: FLB-243 @ 0.5'-2'
Lab Sample ID: L8B0040-46 (Solid) **Sampled:2/5/18 13:07**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0124	U	0.0373	0.0124	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	90-12-0
2-Methylnaphthalene	0.0150	U	0.0373	0.0150	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	91-57-6
Acenaphthene	0.0146	U	0.0373	0.0146	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	83-32-9
Acenaphthylene	0.0124	U	0.0373	0.0124	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	208-96-8
Anthracene	0.00984	U	0.0373	0.00984	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	120-12-7
Benzo(a)anthracene	0.0104	U	0.0373	0.0104	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	56-55-3
Benzo(a)pyrene	0.0177	U	0.0373	0.0177	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	50-32-8
Benzo(b)fluoranthene	0.0167	U	0.0373	0.0167	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	205-99-2
Benzo(g,h,i)perylene	0.0173	U	0.0373	0.0173	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	191-24-2
Benzo(k)fluoranthene	0.0129	U	0.0373	0.0129	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	207-08-9
Chrysene	0.00883	U	0.0373	0.00883	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	218-01-9
Dibenz(a,h)Anthracene	0.0165	U	0.0373	0.0165	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	53-70-3
Fluoranthene	0.0111	U	0.0373	0.0111	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	206-44-0
Fluorene	0.0120	U	0.0373	0.0120	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	86-73-7
Indeno(1,2,3-cd)pyrene	0.0181	U	0.0373	0.0181	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	193-39-5
Naphthalene	0.0129	U	0.0373	0.0129	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	91-20-3
Phenanthrene	0.00749	U	0.0373	0.00749	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	85-01-8
Pyrene	0.0119	U	0.0373	0.0119	mg/Kg dry	1	2/7/18 17:09	2/9/18 4:25	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*55%*	*16-110*				2/9/18 4:25	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*48%*	*19-105*				2/9/18 4:25	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*74%*	*20-137*				2/9/18 4:25	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**89.0**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	
Percent Moisture	**11.0**		0.100	0.100	%	1	2/6/18 13:20	2/10/18 16:30	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Sample Results
(Continued)

Client Sample ID: FLB-243 @ 2'-4'
Lab Sample ID: L8B0040-47 (Solid) **Sampled:2/5/18 13:09**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0111	U	0.0334	0.0111	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	90-12-0
2-Methylnaphthalene	0.0134	U	0.0334	0.0134	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	91-57-6
Acenaphthene	0.0131	U	0.0334	0.0131	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	83-32-9
Acenaphthylene	0.0111	U	0.0334	0.0111	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	208-96-8
Anthracene	0.00883	U	0.0334	0.00883	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	120-12-7
Benzo(a)anthracene	0.00933	U	0.0334	0.00933	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	56-55-3
Benzo(a)pyrene	0.0158	U	0.0334	0.0158	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	50-32-8
Benzo(b)fluoranthene	0.0149	U	0.0334	0.0149	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	205-99-2
Benzo(g,h,i)perylene	0.0155	U	0.0334	0.0155	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	191-24-2
Benzo(k)fluoranthene	0.0115	U	0.0334	0.0115	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	207-08-9
Chrysene	0.00792	U	0.0334	0.00792	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	218-01-9
Dibenz(a,h)Anthracene	0.0148	U	0.0334	0.0148	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	53-70-3
Fluoranthene	0.00993	U	0.0334	0.00993	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	206-44-0
Fluorene	0.0107	U	0.0334	0.0107	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	86-73-7
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0334	0.0162	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	193-39-5
Naphthalene	0.0115	U	0.0334	0.0115	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	91-20-3
Phenanthrene	0.00672	U	0.0334	0.00672	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	85-01-8
Pyrene	0.0106	U	0.0334	0.0106	mg/Kg dry	1	2/7/18 17:09	2/8/18 21:56	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*59%*	*16-110*				2/8/18 21:56	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*49%*	*19-105*				2/8/18 21:56	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/8/18 21:56	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**99.0**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**1.03**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-243 @ 4'-6'
Lab Sample ID: L8B0040-48 (Solid) **Sampled:2/5/18 13:13**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0110	U	0.0329	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	90-12-0
2-Methylnaphthalene	0.0132	U	0.0329	0.0132	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	91-57-6
Acenaphthene	0.0129	U	0.0329	0.0129	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	83-32-9
Acenaphthylene	0.0110	U	0.0329	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	208-96-8
Anthracene	0.00869	U	0.0329	0.00869	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	120-12-7
Benzo(a)anthracene	0.00918	U	0.0329	0.00918	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	56-55-3
Benzo(a)pyrene	0.0156	U	0.0329	0.0156	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	50-32-8
Benzo(b)fluoranthene	0.0147	U	0.0329	0.0147	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	205-99-2
Benzo(g,h,i)perylene	0.0153	U	0.0329	0.0153	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	191-24-2
Benzo(k)fluoranthene	0.0114	U	0.0329	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	207-08-9
Chrysene	0.00780	U	0.0329	0.00780	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	218-01-9
Dibenz(a,h)Anthracene	0.0146	U	0.0329	0.0146	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	53-70-3
Fluoranthene	0.00977	U	0.0329	0.00977	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	206-44-0
Fluorene	0.0106	U	0.0329	0.0106	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	86-73-7
Indeno(1,2,3-cd)pyrene	0.0160	U	0.0329	0.0160	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	193-39-5
Naphthalene	0.0114	U	0.0329	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	91-20-3
Phenanthrene	0.00661	U	0.0329	0.00661	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	85-01-8
Pyrene	0.0105	U	0.0329	0.0105	mg/Kg dry	1	2/8/18 14:42	2/9/18 16:41	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*77%*	*16-110*				2/9/18 16:41	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*64%*	*19-105*				2/9/18 16:41	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*91%*	*20-137*				2/9/18 16:41	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**98.2**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**1.80**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-244 @ 0'-0.5'
Lab Sample ID: L8B0040-49 (Solid) **Sampled:2/5/18 13:29**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0353	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	90-12-0
2-Methylnaphthalene	0.0142	U	0.0353	0.0142	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	91-57-6
Acenaphthene	0.0139	U	0.0353	0.0139	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	83-32-9
Acenaphthylene	0.0117	U	0.0353	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	208-96-8
Anthracene	0.00931	U	0.0353	0.00931	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	120-12-7
Benzo(a)anthracene	0.00984	U	0.0353	0.00984	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	56-55-3
Benzo(a)pyrene	0.0167	U	0.0353	0.0167	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	50-32-8
Benzo(b)fluoranthene	0.0158	U	0.0353	0.0158	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0353	0.0164	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	191-24-2
Benzo(k)fluoranthene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	207-08-9
Chrysene	0.00836	U	0.0353	0.00836	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	218-01-9
Dibenz(a,h)Anthracene	0.0157	U	0.0353	0.0157	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	53-70-3
Fluoranthene	0.0105	U	0.0353	0.0105	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	206-44-0
Fluorene	0.0113	U	0.0353	0.0113	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0353	0.0171	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	193-39-5
Naphthalene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	91-20-3
Phenanthrene	0.00709	U	0.0353	0.00709	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	85-01-8
Pyrene	0.0112	U	0.0353	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:01	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*48%*	*16-110*				2/9/18 17:01	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/9/18 17:01	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*58%*	*20-137*				2/9/18 17:01	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.1**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**5.87**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-244 @ 0.5'-2'
Lab Sample ID: L8B0040-50 (Solid) **Sampled:2/5/18 13:32**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0112	U	0.0337	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	90-12-0
2-Methylnaphthalene	0.0136	U	0.0337	0.0136	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	91-57-6
Acenaphthene	0.0133	U	0.0337	0.0133	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	83-32-9
Acenaphthylene	0.0112	U	0.0337	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	208-96-8
Anthracene	0.00890	U	0.0337	0.00890	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	120-12-7
Benzo(a)anthracene	0.00941	U	0.0337	0.00941	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	56-55-3
Benzo(a)pyrene	0.0160	U	0.0337	0.0160	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	50-32-8
Benzo(b)fluoranthene	0.0151	U	0.0337	0.0151	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	205-99-2
Benzo(g,h,i)perylene	0.0157	U	0.0337	0.0157	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	191-24-2
Benzo(k)fluoranthene	0.0116	U	0.0337	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	207-08-9
Chrysene	0.00799	U	0.0337	0.00799	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	218-01-9
Dibenz(a,h)Anthracene	0.0150	U	0.0337	0.0150	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	53-70-3
Fluoranthene	0.0100	U	0.0337	0.0100	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	206-44-0
Fluorene	0.0108	U	0.0337	0.0108	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	86-73-7
Indeno(1,2,3-cd)pyrene	0.0164	U	0.0337	0.0164	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	193-39-5
Naphthalene	0.0116	U	0.0337	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	91-20-3
Phenanthrene	**0.00708**	I	0.0337	0.00678	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	85-01-8
Pyrene	0.0107	U	0.0337	0.0107	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:22	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*52%*	*16-110*				2/9/18 17:22	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/9/18 17:22	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*70%*	*20-137*				2/9/18 17:22	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**96.5**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**3.54**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-244 @ 2'-4'
Lab Sample ID: L8B0040-51 (Solid) **Sampled:2/5/18 13:34**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0111	U	0.0334	0.0111	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	90-12-0
2-Methylnaphthalene	0.0134	U	0.0334	0.0134	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	91-57-6
Acenaphthene	0.0131	U	0.0334	0.0131	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	83-32-9
Acenaphthylene	0.0111	U	0.0334	0.0111	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	208-96-8
Anthracene	0.00883	U	0.0334	0.00883	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	120-12-7
Benzo(a)anthracene	0.00933	U	0.0334	0.00933	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	56-55-3
Benzo(a)pyrene	0.0158	U	0.0334	0.0158	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	50-32-8
Benzo(b)fluoranthene	0.0149	U	0.0334	0.0149	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	205-99-2
Benzo(g,h,i)perylene	0.0155	U	0.0334	0.0155	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	191-24-2
Benzo(k)fluoranthene	0.0115	U	0.0334	0.0115	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	207-08-9
Chrysene	0.00792	U	0.0334	0.00792	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	218-01-9
Dibenz(a,h)Anthracene	0.0148	U	0.0334	0.0148	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	53-70-3
Fluoranthene	0.00993	U	0.0334	0.00993	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	206-44-0
Fluorene	0.0107	U	0.0334	0.0107	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	86-73-7
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0334	0.0162	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	193-39-5
Naphthalene	0.0115	U	0.0334	0.0115	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	91-20-3
Phenanthrene	0.00672	U	0.0334	0.00672	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	85-01-8
Pyrene	0.0106	U	0.0334	0.0106	mg/Kg dry	1	2/8/18 14:42	2/9/18 17:42	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*68%*	*16-110*				2/9/18 17:42	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*58%*	*19-105*				2/9/18 17:42	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*81%*	*20-137*				2/9/18 17:42	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**97.3**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**2.69**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-244 @ 4'-6'
Lab Sample ID: L8B0040-52 (Solid) **Sampled:2/5/18 13:37**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0342	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	90-12-0
2-Methylnaphthalene	0.0137	U	0.0342	0.0137	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	91-57-6
Acenaphthene	0.0134	U	0.0342	0.0134	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	83-32-9
Acenaphthylene	0.0114	U	0.0342	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	208-96-8
Anthracene	0.00902	U	0.0342	0.00902	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	120-12-7
Benzo(a)anthracene	0.00953	U	0.0342	0.00953	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	56-55-3
Benzo(a)pyrene	0.0162	U	0.0342	0.0162	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	50-32-8
Benzo(b)fluoranthene	0.0153	U	0.0342	0.0153	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	205-99-2
Benzo(g,h,i)perylene	0.0159	U	0.0342	0.0159	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	191-24-2
Benzo(k)fluoranthene	0.0118	U	0.0342	0.0118	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	207-08-9
Chrysene	0.00810	U	0.0342	0.00810	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0342	0.0152	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	53-70-3
Fluoranthene	0.0101	U	0.0342	0.0101	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	206-44-0
Fluorene	0.0110	U	0.0342	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	86-73-7
Indeno(1,2,3-cd)pyrene	0.0166	U	0.0342	0.0166	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	193-39-5
Naphthalene	0.0118	U	0.0342	0.0118	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	91-20-3
Phenanthrene	0.00687	U	0.0342	0.00687	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	85-01-8
Pyrene	0.0109	U	0.0342	0.0109	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:02	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*54%*	*16-110*				2/9/18 18:02	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*47%*	*19-105*				2/9/18 18:02	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*95%*	*20-137*				2/9/18 18:02	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**97.4**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**2.59**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-245 @ 0'-0.5'
Lab Sample ID: L8B0040-53 (Solid) **Sampled:2/5/18 13:18**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0119	U	0.0359	0.0119	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	90-12-0
2-Methylnaphthalene	0.0144	U	0.0359	0.0144	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	91-57-6
Acenaphthene	0.0141	U	0.0359	0.0141	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	83-32-9
Acenaphthylene	0.0119	U	0.0359	0.0119	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	208-96-8
Anthracene	0.00947	U	0.0359	0.00947	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	120-12-7
Benzo(a)anthracene	**0.0183**	I	0.0359	0.0100	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	56-55-3
Benzo(a)pyrene	**0.0219**	I	0.0359	0.0170	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	50-32-8
Benzo(b)fluoranthene	**0.0176**	I	0.0359	0.0160	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	205-99-2
Benzo(g,h,i)perylene	**0.0201**	I	0.0359	0.0167	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	191-24-2
Benzo(k)fluoranthene	**0.0194**	I	0.0359	0.0124	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	207-08-9
Chrysene	**0.0212**	I	0.0359	0.00850	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	218-01-9
Dibenz(a,h)Anthracene	0.0159	U	0.0359	0.0159	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	53-70-3
Fluoranthene	**0.0309**	I	0.0359	0.0107	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	206-44-0
Fluorene	0.0115	U	0.0359	0.0115	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	86-73-7
Indeno(1,2,3-cd)pyrene	0.0174	U	0.0359	0.0174	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	193-39-5
Naphthalene	0.0124	U	0.0359	0.0124	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	91-20-3
Phenanthrene	**0.0122**	I	0.0359	0.00721	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	85-01-8
Pyrene	**0.0273**	I	0.0359	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:22	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/9/18 18:22	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/9/18 18:22	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*90%*	*20-137*				2/9/18 18:22	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**92.3**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**7.75**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-245 @ 0.5'-2'
Lab Sample ID: L8B0040-54 (Solid) **Sampled:2/5/18 13:20**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	90-12-0
2-Methylnaphthalene	0.0140	U	0.0347	0.0140	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	91-57-6
Acenaphthene	0.0136	U	0.0347	0.0136	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	208-96-8
Anthracene	0.00916	U	0.0347	0.00916	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	120-12-7
Benzo(a)anthracene	**0.0323**	I	0.0347	0.00969	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	56-55-3
Benzo(a)pyrene	**0.0361**		0.0347	0.0165	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	50-32-8
Benzo(b)fluoranthene	**0.0333**	I	0.0347	0.0155	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	205-99-2
Benzo(g,h,i)perylene	**0.0326**	I	0.0347	0.0161	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	191-24-2
Benzo(k)fluoranthene	**0.0302**	I	0.0347	0.0120	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	207-08-9
Chrysene	**0.0344**	I	0.0347	0.00823	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0347	0.0154	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	53-70-3
Fluoranthene	**0.0573**		0.0347	0.0103	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	206-44-0
Fluorene	0.0111	U	0.0347	0.0111	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0229**	I	0.0347	0.0169	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	91-20-3
Phenanthrene	**0.0288**	I	0.0347	0.00698	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	85-01-8
Pyrene	**0.0493**		0.0347	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 18:42	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*72%*	*16-110*				2/9/18 18:42	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*59%*	*19-105*				2/9/18 18:42	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*89%*	*20-137*				2/9/18 18:42	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.1**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**5.86**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-245 @ 2'-4'
Lab Sample ID: L8B0040-55 (Solid) **Sampled:2/5/18 13:22**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0112	U	0.0336	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	90-12-0
2-Methylnaphthalene	0.0135	U	0.0336	0.0135	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	91-57-6
Acenaphthene	**0.0222**	I	0.0336	0.0132	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	83-32-9
Acenaphthylene	0.0112	U	0.0336	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	208-96-8
Anthracene	**0.0531**		0.0336	0.00887	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	120-12-7
Benzo(a)anthracene	**0.156**		0.0336	0.00938	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	56-55-3
Benzo(a)pyrene	**0.163**		0.0336	0.0159	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	50-32-8
Benzo(b)fluoranthene	**0.157**		0.0336	0.0150	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	205-99-2
Benzo(g,h,i)perylene	**0.120**		0.0336	0.0156	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	191-24-2
Benzo(k)fluoranthene	**0.134**		0.0336	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	207-08-9
Chrysene	**0.162**		0.0336	0.00797	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	218-01-9
Dibenz(a,h)Anthracene	**0.0356**		0.0336	0.0149	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	53-70-3
Fluoranthene	**0.324**		0.0336	0.00998	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	206-44-0
Fluorene	**0.0161**	I	0.0336	0.0108	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	86-73-7
Indeno(1,2,3-cd)pyrene	**0.106**		0.0336	0.0163	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	193-39-5
Naphthalene	0.0116	U	0.0336	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	91-20-3
Phenanthrene	**0.218**		0.0336	0.00676	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	85-01-8
Pyrene	**0.281**		0.0336	0.0107	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:02	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*74%*	*16-110*				2/9/18 19:02	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*61%*	*19-105*				2/9/18 19:02	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*89%*	*20-137*				2/9/18 19:02	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**98.5**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**1.53**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: FLB-245 @ 4'-6'
Lab Sample ID: L8B0040-56 (Solid) **Sampled:2/5/18 13:25**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	90-12-0
2-Methylnaphthalene	0.0136	U	0.0338	0.0136	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	91-57-6
Acenaphthene	0.0133	U	0.0338	0.0133	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	83-32-9
Acenaphthylene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	208-96-8
Anthracene	0.00893	U	0.0338	0.00893	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	120-12-7
Benzo(a)anthracene	0.00944	U	0.0338	0.00944	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	56-55-3
Benzo(a)pyrene	0.0160	U	0.0338	0.0160	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	50-32-8
Benzo(b)fluoranthene	0.0151	U	0.0338	0.0151	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	205-99-2
Benzo(g,h,i)perylene	0.0157	U	0.0338	0.0157	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	207-08-9
Chrysene	0.00802	U	0.0338	0.00802	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	218-01-9
Dibenz(a,h)Anthracene	0.0150	U	0.0338	0.0150	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	53-70-3
Fluoranthene	0.0100	U	0.0338	0.0100	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	206-44-0
Fluorene	0.0109	U	0.0338	0.0109	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	86-73-7
Indeno(1,2,3-cd)pyrene	0.0164	U	0.0338	0.0164	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	193-39-5
Naphthalene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	91-20-3
Phenanthrene	0.00680	U	0.0338	0.00680	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	85-01-8
Pyrene	0.0108	U	0.0338	0.0108	mg/Kg dry	1	2/8/18 14:42	2/9/18 19:23	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*52%*	*16-110*				2/9/18 19:23	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/9/18 19:23	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*72%*	*20-137*				2/9/18 19:23	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**98.3**	0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**1.67**	0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	

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Sample Results
(Continued)

Client Sample ID: CTB-41 @ 23'-25'
Lab Sample ID: L8B0040-58 (Solid) **Sampled:2/5/18 10:00**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**86.9**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Percent Moisture	**13.1**		0.100	0.100	%	1	2/6/18 13:20	2/6/18 13:20	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**9.70**	V	5.75	0.0690	mg/Kg dry	1	2/7/18 14:30	2/8/18 11:21	7440-47-3

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Sample Results
(Continued)

Client Sample ID: FLB-242 @ 0'-0.5'
Lab Sample ID: L8B0040-71 (Solid) **Sampled:2/5/18 8:47**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.0665**	I	0.180	0.0598	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	90-12-0
2-Methylnaphthalene	**0.0809**	I	0.180	0.0722	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	91-57-6
Acenaphthene	**0.769**		0.180	0.0706	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	83-32-9
Acenaphthylene	0.0598	U	0.180	0.0598	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	208-96-8
Anthracene	**1.15**		0.180	0.0474	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	120-12-7
Benzo(a)anthracene	**3.00**		0.180	0.0501	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	56-55-3
Benzo(a)pyrene	**2.96**		0.180	0.0852	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	50-32-8
Benzo(b)fluoranthene	**2.93**		0.180	0.0803	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	205-99-2
Benzo(g,h,i)perylene	**2.23**		0.180	0.0836	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	191-24-2
Benzo(k)fluoranthene	**2.21**		0.180	0.0620	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	207-08-9
Chrysene	**3.12**		0.180	0.0426	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	218-01-9
Dibenz(a,h)Anthracene	**0.742**		0.180	0.0798	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	53-70-3
Fluoranthene	**6.59**		0.180	0.0534	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	206-44-0
Fluorene	**0.514**		0.180	0.0577	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	86-73-7
Indeno(1,2,3-cd)pyrene	**1.98**		0.180	0.0873	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	193-39-5
Naphthalene	**0.255**		0.180	0.0620	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	91-20-3
Phenanthrene	**5.47**		0.180	0.0361	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	85-01-8
Pyrene	**5.58**		0.180	0.0571	mg/Kg dry	5	2/8/18 14:42	2/9/18 19:43	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*40%*	*16-110*				2/9/18 19:43	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*33%*	*19-105*				2/9/18 19:43	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*44%*	*20-137*				2/9/18 19:43	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**91.3**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	
Percent Moisture	**8.70**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Sample Results
(Continued)

Client Sample ID: FLB-242 @ 0.5'-2'
Lab Sample ID: L8B0040-72 (Solid) **Sampled:2/5/18 8:49**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0123	U	0.0369	0.0123	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	90-12-0
2-Methylnaphthalene	0.0148	U	0.0369	0.0148	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	91-57-6
Acenaphthene	0.0145	U	0.0369	0.0145	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	83-32-9
Acenaphthylene	0.0123	U	0.0369	0.0123	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	208-96-8
Anthracene	0.00973	U	0.0369	0.00973	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	120-12-7
Benzo(a)anthracene	0.0103	U	0.0369	0.0103	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	56-55-3
Benzo(a)pyrene	0.0175	U	0.0369	0.0175	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	50-32-8
Benzo(b)fluoranthene	0.0165	U	0.0369	0.0165	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	205-99-2
Benzo(g,h,i)perylene	0.0171	U	0.0369	0.0171	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	191-24-2
Benzo(k)fluoranthene	0.0127	U	0.0369	0.0127	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	207-08-9
Chrysene	0.00874	U	0.0369	0.00874	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	218-01-9
Dibenz(a,h)Anthracene	0.0164	U	0.0369	0.0164	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	53-70-3
Fluoranthene	0.0109	U	0.0369	0.0109	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	206-44-0
Fluorene	0.0118	U	0.0369	0.0118	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	86-73-7
Indeno(1,2,3-cd)pyrene	0.0179	U	0.0369	0.0179	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	193-39-5
Naphthalene	0.0127	U	0.0369	0.0127	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	91-20-3
Phenanthrene	0.00741	U	0.0369	0.00741	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	85-01-8
Pyrene	0.0117	U	0.0369	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*77%*	*16-110*				2/9/18 20:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*63%*	*19-105*				2/9/18 20:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*100%*	*20-137*				2/9/18 20:04	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**89.7**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	
Percent Moisture	**10.3**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	

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Sample Results
(Continued)

Client Sample ID: FLB-242 @ 2'-4'
Lab Sample ID: L8B0040-73 (Solid) **Sampled:2/5/18 8:51**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	90-12-0
2-Methylnaphthalene	0.0138	U	0.0343	0.0138	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	91-57-6
Acenaphthene	0.0135	U	0.0343	0.0135	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	83-32-9
Acenaphthylene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	208-96-8
Anthracene	0.00905	U	0.0343	0.00905	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	120-12-7
Benzo(a)anthracene	0.00957	U	0.0343	0.00957	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	56-55-3
Benzo(a)pyrene	0.0163	U	0.0343	0.0163	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	50-32-8
Benzo(b)fluoranthene	0.0153	U	0.0343	0.0153	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	205-99-2
Benzo(g,h,i)perylene	0.0159	U	0.0343	0.0159	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	191-24-2
Benzo(k)fluoranthene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	207-08-9
Chrysene	0.00813	U	0.0343	0.00813	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0343	0.0152	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	53-70-3
Fluoranthene	0.0102	U	0.0343	0.0102	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	206-44-0
Fluorene	0.0110	U	0.0343	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0343	0.0167	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	193-39-5
Naphthalene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	91-20-3
Phenanthrene	0.00689	U	0.0343	0.00689	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	85-01-8
Pyrene	0.0109	U	0.0343	0.0109	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:24	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*65%*	*16-110*				2/9/18 20:24	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*56%*	*19-105*				2/9/18 20:24	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/9/18 20:24	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	
Percent Moisture	**4.93**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Sample Results
(Continued)

Client Sample ID: FLB-242 @ 4'-6'
Lab Sample ID: L8B0040-74 (Solid) **Sampled:2/5/18 9:02**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	90-12-0
2-Methylnaphthalene	0.0138	U	0.0343	0.0138	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	91-57-6
Acenaphthene	0.0135	U	0.0343	0.0135	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	83-32-9
Acenaphthylene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	208-96-8
Anthracene	0.00907	U	0.0343	0.00907	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	120-12-7
Benzo(a)anthracene	0.00958	U	0.0343	0.00958	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	56-55-3
Benzo(a)pyrene	0.0163	U	0.0343	0.0163	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0343	0.0154	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0343	0.0160	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0343	0.0119	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	207-08-9
Chrysene	0.00814	U	0.0343	0.00814	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0343	0.0153	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	53-70-3
Fluoranthene	0.0102	U	0.0343	0.0102	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	206-44-0
Fluorene	0.0110	U	0.0343	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0343	0.0167	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	193-39-5
Naphthalene	0.0119	U	0.0343	0.0119	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	91-20-3
Phenanthrene	0.00690	U	0.0343	0.00690	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	85-01-8
Pyrene	0.0109	U	0.0343	0.0109	mg/Kg dry	1	2/8/18 14:42	2/9/18 20:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*46%*	*16-110*				2/9/18 20:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/9/18 20:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*68%*	*20-137*				2/9/18 20:44	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.8**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	
Percent Moisture	**4.23**		0.100	0.100	%	1	2/7/18 10:00	2/7/18 10:00	

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control

PAHs (SVOCs) by Method 8270D

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0078											
Blank (B8B0078-BLK1)					Prepared: 2/7/2018 Analyzed: 2/8/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.939*		*mg/Kg wet*	*1.67*		*56*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.837*		*mg/Kg wet*	*1.67*		*50*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.03*		*mg/Kg wet*	*1.67*		*62*	*20-137*		
Matrix Spike (B8B0078-MS1)		**Source: L8B0040-47**			Prepared: 2/7/2018 Analyzed: 2/8/2018						
1-Methylnaphthalene	1.04		0.0335	0.0111	mg/Kg dry	1.67	ND	62	39-116		
2-Methylnaphthalene	1.03		0.0335	0.0135	mg/Kg dry	1.67	ND	62	37-112		
Acenaphthene	1.11		0.0335	0.0132	mg/Kg dry	1.67	ND	67	41-116		
Acenaphthylene	1.09		0.0335	0.0111	mg/Kg dry	1.67	ND	65	41-118		
Anthracene	1.24		0.0335	0.00884	mg/Kg dry	1.67	ND	74	39-127		
Benzo(a)anthracene	1.22		0.0335	0.00934	mg/Kg dry	1.67	ND	73	40-129		
Benzo(a)pyrene	1.34		0.0335	0.0159	mg/Kg dry	1.67	ND	80	36-141		
Benzo(b)fluoranthene	1.28		0.0335	0.0150	mg/Kg dry	1.67	ND	77	34-139		
Benzo(g,h,i)perylene	1.45		0.0335	0.0156	mg/Kg dry	1.67	ND	86	32-141		
Benzo(k)fluoranthene	1.36		0.0335	0.0115	mg/Kg dry	1.67	ND	81	31-139		
Chrysene	1.29		0.0335	0.00793	mg/Kg dry	1.67	ND	77	41-124		
Dibenz(a,h)Anthracene	1.41		0.0335	0.0149	mg/Kg dry	1.67	ND	84	35-143		
Fluoranthene	1.12		0.0335	0.00994	mg/Kg dry	1.67	ND	67	38-132		
Fluorene	1.12		0.0335	0.0107	mg/Kg dry	1.67	ND	67	41-121		
Indeno(1,2,3-cd)pyrene	1.38		0.0335	0.0163	mg/Kg dry	1.67	ND	83	27-160		
Naphthalene	1.02		0.0335	0.0115	mg/Kg dry	1.67	ND	61	37-113		
Phenanthrene	1.23		0.0335	0.00673	mg/Kg dry	1.67	ND	73	50-115		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0078 (Continued)											
Matrix Spike (B8B0078-MS1)		**Source: L8B0040-47**			Prepared: 2/7/2018 Analyzed: 2/8/2018						
Pyrene	1.37		0.0335	0.0106	mg/Kg dry	1.67	ND	82	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.09*		*mg/Kg dry*	*1.67*		*65*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.921*		*mg/Kg dry*	*1.67*		*55*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg dry*	*1.67*		*76*	*20-137*		
Matrix Spike Dup (B8B0078-MSD1)		**Source: L8B0040-47**			Prepared: 2/7/2018 Analyzed: 2/8/2018						
1-Methylnaphthalene	0.975		0.0334	0.0111	mg/Kg dry	1.67	ND	58	39-116	7	30
2-Methylnaphthalene	0.943		0.0334	0.0134	mg/Kg dry	1.67	ND	56	37-112	9	30
Acenaphthene	1.09		0.0334	0.0131	mg/Kg dry	1.67	ND	65	41-116	3	30
Acenaphthylene	1.05		0.0334	0.0111	mg/Kg dry	1.67	ND	63	41-118	3	30
Anthracene	1.31		0.0334	0.00883	mg/Kg dry	1.67	ND	78	39-127	5	30
Benzo(a)anthracene	1.33		0.0334	0.00933	mg/Kg dry	1.67	ND	79	40-129	8	30
Benzo(a)pyrene	1.50		0.0334	0.0159	mg/Kg dry	1.67	ND	90	36-141	12	30
Benzo(b)fluoranthene	1.43		0.0334	0.0149	mg/Kg dry	1.67	ND	86	34-139	11	30
Benzo(g,h,i)perylene	1.60		0.0334	0.0156	mg/Kg dry	1.67	ND	96	32-141	10	30
Benzo(k)fluoranthene	1.48		0.0334	0.0115	mg/Kg dry	1.67	ND	89	31-139	8	30
Chrysene	1.40		0.0334	0.00793	mg/Kg dry	1.67	ND	84	41-124	8	30
Dibenz(a,h)Anthracene	1.57		0.0334	0.0148	mg/Kg dry	1.67	ND	94	35-143	11	30
Fluoranthene	1.22		0.0334	0.00993	mg/Kg dry	1.67	ND	73	38-132	8	30
Fluorene	1.12		0.0334	0.0107	mg/Kg dry	1.67	ND	67	41-121	0.1	30
Indeno(1,2,3-cd)pyrene	1.54		0.0334	0.0163	mg/Kg dry	1.67	ND	92	27-160	11	30
Naphthalene	0.952		0.0334	0.0115	mg/Kg dry	1.67	ND	57	37-113	7	30
Phenanthrene	1.27		0.0334	0.00672	mg/Kg dry	1.67	ND	76	50-115	4	30
Pyrene	1.43		0.0334	0.0106	mg/Kg dry	1.67	ND	85	42-138	4	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.03*		*mg/Kg dry*	*1.67*		*62*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.854*		*mg/Kg dry*	*1.67*		*51*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.38*		*mg/Kg dry*	*1.67*		*82*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100											
Blank (B8B0100-BLK1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.989*		*mg/Kg wet*	*1.67*		*59*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.831*		*mg/Kg wet*	*1.67*		*50*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.58*		*mg/Kg wet*	*1.67*		*95*	*20-137*		
LCS (B8B0100-BS1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	1.23		0.0333	0.0111	mg/Kg wet	1.67		74	39-116		
2-Methylnaphthalene	1.21		0.0333	0.0134	mg/Kg wet	1.67		73	37-112		
Acenaphthene	1.29		0.0333	0.0131	mg/Kg wet	1.67		77	41-116		
Acenaphthylene	1.29		0.0333	0.0111	mg/Kg wet	1.67		77	42-126		
Anthracene	1.44		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.45		0.0333	0.00930	mg/Kg wet	1.67		87	40-129		
Benzo(a)pyrene	1.56		0.0333	0.0158	mg/Kg wet	1.67		94	36-141		
Benzo(b)fluoranthene	1.52		0.0333	0.0149	mg/Kg wet	1.67		91	34-139		
Benzo(g,h,i)perylene	1.66		0.0333	0.0155	mg/Kg wet	1.67		100	32-141		
Benzo(k)fluoranthene	1.54		0.0333	0.0115	mg/Kg wet	1.67		92	31-139		
Chrysene	1.52		0.0333	0.00790	mg/Kg wet	1.67		91	41-124		
Dibenz(a,h)Anthracene	1.64		0.0333	0.0148	mg/Kg wet	1.67		98	35-143		
Fluoranthene	1.32		0.0333	0.00990	mg/Kg wet	1.67		79	38-132		
Fluorene	1.28		0.0333	0.0107	mg/Kg wet	1.67		77	41-121		
Indeno(1,2,3-cd)pyrene	1.61		0.0333	0.0162	mg/Kg wet	1.67		97	27-160		
Naphthalene	1.22		0.0333	0.0115	mg/Kg wet	1.67		73	37-113		
Phenanthrene	1.39		0.0333	0.00670	mg/Kg wet	1.67		83	50-115		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100 (Continued)											
LCS (B8B0100-BS1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
Pyrene	1.56		0.0333	0.0106	mg/Kg wet	1.67		94	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.34*		*mg/Kg wet*	*1.67*		*80*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.13*		*mg/Kg wet*	*1.67*		*68*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.54*		*mg/Kg wet*	*1.67*		*92*	*20-137*		
LCS Dup (B8B0100-BSD1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.909		0.0333	0.0111	mg/Kg wet	1.67		55	39-116	30	30
2-Methylnaphthalene	0.911		0.0333	0.0134	mg/Kg wet	1.67		55	37-112	28	30
Acenaphthene	0.969		0.0333	0.0131	mg/Kg wet	1.67		58	41-116	28	30
Acenaphthylene	0.967		0.0333	0.0111	mg/Kg wet	1.67		58	42-126	29	30
Anthracene	1.21		0.0333	0.00880	mg/Kg wet	1.67		73	39-127	17	30
Benzo(a)anthracene	1.24		0.0333	0.00930	mg/Kg wet	1.67		74	40-129	16	30
Benzo(a)pyrene	1.34		0.0333	0.0158	mg/Kg wet	1.67		80	36-141	15	30
Benzo(b)fluoranthene	1.28		0.0333	0.0149	mg/Kg wet	1.67		77	34-139	17	30
Benzo(g,h,i)perylene	1.38		0.0333	0.0155	mg/Kg wet	1.67		83	32-141	19	30
Benzo(k)fluoranthene	1.32		0.0333	0.0115	mg/Kg wet	1.67		79	31-139	16	30
Chrysene	1.29		0.0333	0.00790	mg/Kg wet	1.67		77	41-124	17	30
Dibenz(a,h)Anthracene	1.37		0.0333	0.0148	mg/Kg wet	1.67		82	35-143	18	30
Fluoranthene	1.12		0.0333	0.00990	mg/Kg wet	1.67		67	38-132	17	30
Fluorene	1.01		0.0333	0.0107	mg/Kg wet	1.67		60	41-121	24	30
Indeno(1,2,3-cd)pyrene	1.35		0.0333	0.0162	mg/Kg wet	1.67		81	27-160	18	30
Naphthalene	0.903		0.0333	0.0115	mg/Kg wet	1.67		54	37-113	30	30
Phenanthrene	1.17		0.0333	0.00670	mg/Kg wet	1.67		70	50-115	17	30
Pyrene	1.35		0.0333	0.0106	mg/Kg wet	1.67		81	42-138	15	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.978*		*mg/Kg wet*	*1.67*		*59*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.827*		*mg/Kg wet*	*1.67*		*50*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg wet*	*1.67*		*77*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100 (Continued)											
Matrix Spike (B8B0100-MS1)		**Source: L8B0057-14**			Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.631	J	0.0350	0.0117	mg/Kg dry	1.75	ND	36	39-116		
2-Methylnaphthalene	0.614	J	0.0350	0.0141	mg/Kg dry	1.75	ND	35	37-112		
Acenaphthene	0.705	J	0.0350	0.0138	mg/Kg dry	1.75	ND	40	41-116		
Acenaphthylene	0.684	J	0.0350	0.0117	mg/Kg dry	1.75	ND	39	41-118		
Anthracene	1.11		0.0350	0.00925	mg/Kg dry	1.75	ND	64	39-127		
Benzo(a)anthracene	1.21		0.0350	0.00978	mg/Kg dry	1.75	ND	69	40-129		
Benzo(a)pyrene	1.33		0.0350	0.0166	mg/Kg dry	1.75	ND	76	36-141		
Benzo(b)fluoranthene	1.29		0.0350	0.0157	mg/Kg dry	1.75	ND	74	34-139		
Benzo(g,h,i)perylene	1.36		0.0350	0.0163	mg/Kg dry	1.75	ND	78	32-141		
Benzo(k)fluoranthene	1.33		0.0350	0.0121	mg/Kg dry	1.75	ND	76	31-139		
Chrysene	1.28		0.0350	0.00831	mg/Kg dry	1.75	ND	73	41-124		
Dibenz(a,h)Anthracene	1.36		0.0350	0.0156	mg/Kg dry	1.75	ND	78	35-143		
Fluoranthene	1.09		0.0350	0.0104	mg/Kg dry	1.75	ND	62	38-132		
Fluorene	0.777		0.0350	0.0112	mg/Kg dry	1.75	ND	44	41-121		
Indeno(1,2,3-cd)pyrene	1.33		0.0350	0.0170	mg/Kg dry	1.75	ND	76	27-160		
Naphthalene	0.619	J	0.0350	0.0121	mg/Kg dry	1.75	ND	35	37-113		
Phenanthrene	1.03		0.0350	0.00704	mg/Kg dry	1.75	ND	59	50-115		
Pyrene	1.30		0.0350	0.0111	mg/Kg dry	1.75	ND	74	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.657*		*mg/Kg dry*	*1.75*		*38*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.545*		*mg/Kg dry*	*1.75*		*31*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg dry*	*1.75*		*73*	*20-137*		
Matrix Spike Dup (B8B0100-MSD1)		**Source: L8B0057-14**			Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.779		0.0352	0.0117	mg/Kg dry	1.76	ND	44	39-116	21	30
2-Methylnaphthalene	0.768		0.0352	0.0142	mg/Kg dry	1.76	ND	44	37-112	22	30
Acenaphthene	0.858		0.0352	0.0139	mg/Kg dry	1.76	ND	49	41-116	20	30
Acenaphthylene	0.832		0.0352	0.0117	mg/Kg dry	1.76	ND	47	41-118	20	30
Anthracene	1.18		0.0352	0.00930	mg/Kg dry	1.76	ND	67	39-127	6	30
Benzo(a)anthracene	1.29		0.0352	0.00983	mg/Kg dry	1.76	ND	73	40-129	6	30
Benzo(a)pyrene	1.40		0.0352	0.0167	mg/Kg dry	1.76	ND	79	36-141	5	30
Benzo(b)fluoranthene	1.36		0.0352	0.0158	mg/Kg dry	1.76	ND	77	34-139	5	30
Benzo(g,h,i)perylene	1.51		0.0352	0.0164	mg/Kg dry	1.76	ND	85	32-141	10	30
Benzo(k)fluoranthene	1.40		0.0352	0.0122	mg/Kg dry	1.76	ND	80	31-139	5	30
Chrysene	1.37		0.0352	0.00835	mg/Kg dry	1.76	ND	78	41-124	7	30
Dibenz(a,h)Anthracene	1.46		0.0352	0.0156	mg/Kg dry	1.76	ND	83	35-143	7	30
Fluoranthene	1.16		0.0352	0.0105	mg/Kg dry	1.76	ND	66	38-132	6	30
Fluorene	0.903		0.0352	0.0113	mg/Kg dry	1.76	ND	51	41-121	15	30
Indeno(1,2,3-cd)pyrene	1.43		0.0352	0.0171	mg/Kg dry	1.76	ND	81	27-160	8	30
Naphthalene	0.774		0.0352	0.0122	mg/Kg dry	1.76	ND	44	37-113	22	30
Phenanthrene	1.14		0.0352	0.00708	mg/Kg dry	1.76	ND	64	50-115	10	30

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Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100 (Continued)											
Matrix Spike Dup (B8B0100-MSD1)			**Source: L8B0057-14**		Prepared: 2/8/2018 Analyzed: 2/9/2018						
Pyrene	1.40		0.0352	0.0112	mg/Kg dry	1.76	ND	80	42-138	8	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.816*		*mg/Kg dry*	*1.76*		*46*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.704*		*mg/Kg dry*	*1.76*		*40*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.35*		*mg/Kg dry*	*1.76*		*77*	*20-137*		
Batch: B8B0193											
Blank (B8B0193-BLK1)					Prepared: 2/18/2018 Analyzed: 2/20/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.791*		*mg/Kg wet*	*1.67*		*47*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.739*		*mg/Kg wet*	*1.67*		*44*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.56*		*mg/Kg wet*	*1.67*		*93*	*20-137*		

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Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0193 (Continued)											
LCS (B8B0193-BS1)					Prepared: 2/18/2018 Analyzed: 2/20/2018						
1-Methylnaphthalene	1.17		0.0333	0.0111	mg/Kg wet	1.67		70	39-116		
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112		
Acenaphthene	1.22		0.0333	0.0131	mg/Kg wet	1.67		73	41-116		
Acenaphthylene	1.19		0.0333	0.0111	mg/Kg wet	1.67		72	42-126		
Anthracene	1.43		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.45		0.0333	0.00930	mg/Kg wet	1.67		87	40-129		
Benzo(a)pyrene	1.58		0.0333	0.0158	mg/Kg wet	1.67		95	36-141		
Benzo(b)fluoranthene	1.56		0.0333	0.0149	mg/Kg wet	1.67		93	34-139		
Benzo(g,h,i)perylene	1.57		0.0333	0.0155	mg/Kg wet	1.67		94	32-141		
Benzo(k)fluoranthene	1.51		0.0333	0.0115	mg/Kg wet	1.67		91	31-139		
Chrysene	1.52		0.0333	0.00790	mg/Kg wet	1.67		91	41-124		
Dibenz(a,h)Anthracene	1.58		0.0333	0.0148	mg/Kg wet	1.67		95	35-143		
Fluoranthene	1.35		0.0333	0.00990	mg/Kg wet	1.67		81	38-132		
Fluorene	1.21		0.0333	0.0107	mg/Kg wet	1.67		73	41-121		
Indeno(1,2,3-cd)pyrene	1.55		0.0333	0.0162	mg/Kg wet	1.67		93	27-160		
Naphthalene	1.16		0.0333	0.0115	mg/Kg wet	1.67		70	37-113		
Phenanthrene	1.35		0.0333	0.00670	mg/Kg wet	1.67		81	50-115		
Pyrene	1.55		0.0333	0.0106	mg/Kg wet	1.67		93	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.17*		*mg/Kg wet*	*1.67*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.07*		*mg/Kg wet*	*1.67*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.48*		*mg/Kg wet*	*1.67*		*89*	*20-137*		
LCS Dup (B8B0193-BSD1)					Prepared: 2/18/2018 Analyzed: 2/20/2018						
1-Methylnaphthalene	1.16		0.0333	0.0111	mg/Kg wet	1.67		69	39-116	1	30
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112	0.4	30
Acenaphthene	1.25		0.0333	0.0131	mg/Kg wet	1.67		75	41-116	3	30
Acenaphthylene	1.22		0.0333	0.0111	mg/Kg wet	1.67		73	42-126	2	30
Anthracene	1.46		0.0333	0.00880	mg/Kg wet	1.67		88	39-127	2	30
Benzo(a)anthracene	1.47		0.0333	0.00930	mg/Kg wet	1.67		88	40-129	1	30
Benzo(a)pyrene	1.63		0.0333	0.0158	mg/Kg wet	1.67		98	36-141	3	30
Benzo(b)fluoranthene	1.61		0.0333	0.0149	mg/Kg wet	1.67		97	34-139	4	30
Benzo(g,h,i)perylene	1.60		0.0333	0.0155	mg/Kg wet	1.67		96	32-141	2	30
Benzo(k)fluoranthene	1.59		0.0333	0.0115	mg/Kg wet	1.67		96	31-139	5	30
Chrysene	1.54		0.0333	0.00790	mg/Kg wet	1.67		92	41-124	1	30
Dibenz(a,h)Anthracene	1.62		0.0333	0.0148	mg/Kg wet	1.67		97	35-143	3	30
Fluoranthene	1.36		0.0333	0.00990	mg/Kg wet	1.67		82	38-132	0.8	30
Fluorene	1.28		0.0333	0.0107	mg/Kg wet	1.67		77	41-121	5	30
Indeno(1,2,3-cd)pyrene	1.60		0.0333	0.0162	mg/Kg wet	1.67		96	27-160	3	30
Naphthalene	1.13		0.0333	0.0115	mg/Kg wet	1.67		68	37-113	3	30
Phenanthrene	1.41		0.0333	0.00670	mg/Kg wet	1.67		85	50-115	4	30

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0193 (Continued)											
LCS Dup (B8B0193-BSD1)					Prepared: 2/18/2018 Analyzed: 2/20/2018						
Pyrene	1.59		0.0333	0.0106	mg/Kg wet	1.67		95	42-138	2	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.17*		*mg/Kg wet*	*1.67*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.02*		*mg/Kg wet*	*1.67*		*61*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.48*		*mg/Kg wet*	*1.67*		*89*	*20-137*		
Matrix Spike (B8B0193-MS1)		**Source: L8B0120-07**			Prepared: 2/18/2018 Analyzed: 2/20/2018						
1-Methylnaphthalene	0.942		0.0376	0.0125	mg/Kg dry	1.88	ND	50	39-116		
2-Methylnaphthalene	0.921		0.0376	0.0151	mg/Kg dry	1.88	ND	49	37-112		
Acenaphthene	1.13		0.0376	0.0148	mg/Kg dry	1.88	ND	60	41-116		
Acenaphthylene	1.10		0.0376	0.0125	mg/Kg dry	1.88	ND	59	41-118		
Anthracene	1.53		0.0376	0.00992	mg/Kg dry	1.88	ND	81	39-127		
Benzo(a)anthracene	1.63		0.0376	0.0105	mg/Kg dry	1.88	ND	87	40-129		
Benzo(a)pyrene	1.77		0.0376	0.0178	mg/Kg dry	1.88	ND	94	36-141		
Benzo(b)fluoranthene	1.76		0.0376	0.0168	mg/Kg dry	1.88	ND	94	34-139		
Benzo(g,h,i)perylene	1.73		0.0376	0.0175	mg/Kg dry	1.88	ND	92	32-141		
Benzo(k)fluoranthene	1.67		0.0376	0.0130	mg/Kg dry	1.88	ND	89	31-139		
Chrysene	1.64		0.0376	0.00890	mg/Kg dry	1.88	ND	87	41-124		
Dibenz(a,h)Anthracene	1.71		0.0376	0.0167	mg/Kg dry	1.88	ND	91	35-143		
Fluoranthene	1.41		0.0376	0.0112	mg/Kg dry	1.88	ND	75	38-132		
Fluorene	1.25		0.0376	0.0121	mg/Kg dry	1.88	ND	66	41-121		
Indeno(1,2,3-cd)pyrene	1.70		0.0376	0.0183	mg/Kg dry	1.88	ND	90	27-160		
Naphthalene	0.912		0.0376	0.0130	mg/Kg dry	1.88	ND	49	37-113		
Phenanthrene	1.51		0.0376	0.00755	mg/Kg dry	1.88	ND	80	50-115		
Pyrene	1.91		0.0376	0.0119	mg/Kg dry	1.88	ND	102	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.976*		*mg/Kg dry*	*1.88*		*52*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.825*		*mg/Kg dry*	*1.88*		*44*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.79*		*mg/Kg dry*	*1.88*		*95*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0193 (Continued)											
Matrix Spike Dup (B8B0193-MSD1)		**Source: L8B0120-07**			Prepared: 2/18/2018 Analyzed: 2/20/2018						
1-Methylnaphthalene	0.935		0.0384	0.0128	mg/Kg dry	1.92	ND	49	39-116	0.7	30
2-Methylnaphthalene	0.906		0.0384	0.0154	mg/Kg dry	1.92	ND	47	37-112	2	30
Acenaphthene	1.09		0.0384	0.0151	mg/Kg dry	1.92	ND	57	41-116	3	30
Acenaphthylene	1.06		0.0384	0.0128	mg/Kg dry	1.92	ND	55	41-118	4	30
Anthracene	1.40		0.0384	0.0101	mg/Kg dry	1.92	ND	73	39-127	9	30
Benzo(a)anthracene	1.46		0.0384	0.0107	mg/Kg dry	1.92	ND	76	40-129	11	30
Benzo(a)pyrene	1.57		0.0384	0.0182	mg/Kg dry	1.92	ND	82	36-141	12	30
Benzo(b)fluoranthene	1.57		0.0384	0.0172	mg/Kg dry	1.92	ND	82	34-139	11	30
Benzo(g,h,i)perylene	1.52		0.0384	0.0179	mg/Kg dry	1.92	ND	79	32-141	13	30
Benzo(k)fluoranthene	1.48		0.0384	0.0133	mg/Kg dry	1.92	ND	77	31-139	12	30
Chrysene	1.46		0.0384	0.00910	mg/Kg dry	1.92	ND	76	41-124	12	30
Dibenz(a,h)Anthracene	1.51		0.0384	0.0171	mg/Kg dry	1.92	ND	78	35-143	13	30
Fluoranthene	1.25		0.0384	0.0114	mg/Kg dry	1.92	ND	65	38-132	11	30
Fluorene	1.16		0.0384	0.0123	mg/Kg dry	1.92	ND	61	41-121	7	30
Indeno(1,2,3-cd)pyrene	1.49		0.0384	0.0187	mg/Kg dry	1.92	ND	78	27-160	13	30
Naphthalene	0.873		0.0384	0.0133	mg/Kg dry	1.92	ND	45	37-113	4	30
Phenanthrene	1.36		0.0384	0.00772	mg/Kg dry	1.92	ND	71	50-115	10	30
Pyrene	1.70		0.0384	0.0122	mg/Kg dry	1.92	ND	88	42-138	12	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.02*		*mg/Kg dry*	*1.92*		*53*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.827*		*mg/Kg dry*	*1.92*		*43*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.70*		*mg/Kg dry*	*1.92*		*89*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

Total Metal Analysis by Method 6010C

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0071											
Blank (B8B0071-BLK1)						Prepared: 2/7/2018	Analyzed: 2/8/2018				
Chromium	0.107	I	5.00	0.0600	mg/Kg wet						
LCS (B8B0071-BS1)						Prepared: 2/7/2018	Analyzed: 2/8/2018				
Chromium	89.5		5.00	0.0600	mg/Kg wet	100		89	80-120		
LCS Dup (B8B0071-BSD1)						Prepared: 2/7/2018	Analyzed: 2/8/2018				
Chromium	90.1		5.00	0.0600	mg/Kg wet	100		90	80-120	0.8	20
Duplicate (B8B0071-DUP1)		**Source: L8B0040-01**				Prepared: 2/7/2018	Analyzed: 2/8/2018				
Chromium	99.9		5.51	0.0661	mg/Kg dry		104			4	30
Matrix Spike (B8B0071-MS1)		**Source: L8B0040-01**				Prepared: 2/7/2018	Analyzed: 2/8/2018				
Chromium	173	J	5.84	0.0701	mg/Kg dry	117	104	59	80-120		
Matrix Spike Dup (B8B0071-MSD1)		**Source: L8B0040-01**				Prepared: 2/7/2018	Analyzed: 2/8/2018				
Chromium	166	J	5.73	0.0687	mg/Kg dry	115	104	54	80-120	4	20

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

Percent Moisture by Method 2540G

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0111											
Duplicate (B8B0111-DUP1)		**Source: L8B0046-01**			Prepared: 2/6/2018		Analyzed: 2/10/2018				
% Solids	83.1		0.100	0.100	%		82.5			0.7	20
Percent Moisture	16.9		0.100	0.100	%		17.5			3	20
Duplicate (B8B0111-DUP2)		**Source: L8B0040-15**			Prepared: 2/6/2018		Analyzed: 2/10/2018				
% Solids	89.1		0.100	0.100	%		89.1			0.02	20
Percent Moisture	10.9		0.100	0.100	%		10.9			0.2	20
Duplicate (B8B0111-DUP3)		**Source: L8B0040-35**			Prepared: 2/6/2018		Analyzed: 2/10/2018				
% Solids	94.7		0.100	0.100	%		95.1			0.4	20
Percent Moisture	5.26		0.100	0.100	%		4.86			8	20
Duplicate (B8B0111-DUP4)		**Source: L8B0040-52**			Prepared: 2/6/2018		Analyzed: 2/10/2018				
% Solids	97.7		0.100	0.100	%		97.4			0.3	20
Percent Moisture	2.27		0.100	0.100	%		2.59			13	20
Batch: B8B0112											
Duplicate (B8B0112-DUP1)		**Source: L8B0040-70**			Prepared & Analyzed: 2/7/2018						
% Solids	92.0		0.100	0.100	%		92.1			0.1	20
Percent Moisture	8.02		0.100	0.100	%		7.93			1	20
Batch: B8B0217											
Duplicate (B8B0217-DUP1)		**Source: L8B0186-02**			Prepared & Analyzed: 2/20/2018						
% Solids	77.9		0.100	0.100	%		77.2			0.9	20
Percent Moisture	22.1		0.100	0.100	%		22.8			3	20

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

Quality Control
(Continued)

Percent Moisture by Method 2540G (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0217 (Continued)											
Duplicate (B8B0217-DUP2)		**Source: L8B0040-21**			Prepared & Analyzed: 2/20/2018						
% Solids	84.7		0.100	0.100	%		85.4			0.8	20
Percent Moisture	15.3		0.100	0.100	%		14.6			5	20

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MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/27/18 17:02

List of Certifications for XENCO Laboratories - Tampa formerly FTS Analytical

Number	Description	Code	Facility	Expires
	Kentucky UST CERTIFICATION	UST KY	FTSL	06/30/2018
E84098	FL MICROBIOLOGY Lakeland CERT	LFLNELAC	FTSL	06/30/2018
E871002	Xenco FL CERT	FLNELAC	FTSL	06/30/2018
E87429	FL NELAC CERT Tampa	AFLNELAC	FTSL	06/30/2018
LI0-135	DoD CERTIFICATE	DOD	FTSL	12/11/2019
P330-07-00105	USDA CERTIFICATE	USDA	FTSL	

Notes and Definitions

Item	Definition
U	Compound was not detected.
Dry	Sample results reported on a dry weight basis.
I	Value estimated to be between the Laboratory Detection and Reporting Limit
J	QC Failure see Case Narrative
L	Concentration exceeds calibration range
N	Tentatively Identified Compound
Q	Hold time exceeded
V	Analyte equal to or above detection limit in the method blank
TNTC	Bacteria is present but Too Numerous To Count

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

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FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: ~~CED~~ Spec-Pro Professional Services
Address: ~~700 DeSoto Ave., Bradenville, FL~~ 7967 Old Madison Pike, Ste #107 Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: ~~badger-tech@~~ richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CC / 2.9 R-1
Custody Seal(s): Y N Lab Work Order # L8B0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Chromium	Container Type / Preservation Code
								6C / 9	
1	CTB-41 @ 0'-0.5'	0-0.5	2-5-18 / 09:32	S		✓	1	✓	
2	CTB-41 @ 0.5'-2'	0.5-2	/ 09:35	S		✓	1	✓	
3	CTB-41 @ 2'-4'	2-4	/ 09:37	S		✓	1	✓	
4	CTB-41 @ 4'-6'	4-6	/ 09:48	S		✓	1	✓	
5	CTB-41 @ 6'-8'	6-8	/ 09:50	S		✓	1	✓	Hold
6	CTB-41 @ 8'-10'	8-10	/ 09:52	S		✓	1	✓	Hold
7	CTB-41 @ 10'-12'	10-12	/ 09:54	S		✓	1	✓	Hold
8	CTB-41 @ 13'-15'	13-15	/ 09:55	S		✓	1	✓	Hold
9	CTB-41 @ 15'-17'	15-17	/ 09:56	S		✓	1	✓	Hold
10	CTB-41 @ 18'-20'	18-20	/ 09:56	S		✓	1	✓	Hold

1) Relinquished By: [signature] / Rich Houde Date / Time 2-5-18 / 16:15
2) Received By: [signature] Date / Time 2-5-18 / 16:15
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 OLD Madison Pike #107, Huntsville, AL
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): US DA - Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CC / 2.9 IR1
Custody Seal(s): Y N Lab Work Order # L8B0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC	9	PAH	Container Type / Preservation Code
1	FLB-200C 0.0-0.5	0.0-0.5	2/5/18-1241	S		X	1			X	
2	FLB-200C 0.5-2.0	0.5-2.0	2/5/18-1242	S		X	1			X	
3	FLB-200C 2-4	2-4	2/5/18-1246	S		X	1			X	HOLD
4	FLB-200C 4-6	4-6	2/5/18-1248	S		X	1			X	HOLD
5	FLB-201C 0.0-0.5	0.0-0.5	2/5/18-1252	S		X	1			X	
6	FLB-201C 0.5-2.0	0.5-2.0	2/5/18-1254	S		X	1			X	
7	FLB-201C 2-4	2-4	2/5/18-1256	S		X	1			X	Hold
8	FLB-201C 4-6	4-6	2/5/18-1259	S		X	1			X	Hold
9	FLB-202C 0.0-0.5	0.0-0.5	2/5/18-1242	S		X	1			X	
10	FLB-202C 0.5-2	0.5-2	2/5/18-1345	S		X	1			X	

1) Relinquished By: Richard Houde Date / Time 2/5/18 1615
2) Received By: Date / Time 2-5-18 1615
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / (Lab Pickup) / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
(STD TAT) 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SPEC-Pro Professional Services
Address: 7067 OLD MADISON PIKE, #107, Huntsville AL 35806
Results Sent to: Richard Houde
Email address: Richard.houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Receiver's Initials/Temp: CC / 2.9 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0040
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type / Preservation Code
								GC / 9	
1	FLB-202@2-4	2-4	2/5/18-1347	S		X	1	X	Hold
2	FLB-202@4-6	4-6	2/15/18-1350	S		X	1	X	Hold
3	FLB-203@0.0-0.5	0.0-0.5	2/15/18-1356	S		X	1	X	
4	FLB-203@0.5-2	0.5-2	2/15/18-1358	S		X	1	X	
5	FLB-203@2-4	2-4	2/15/18-1401	S		X	1	X	Hold
6	FLB-203@4-6	4-6	2/15/18-1404	S		X	1	X	Hold
7	FLB-204@0.0-0.5	0.0-0.5	2/15/18-1422	S		X	1	X	
8	FLB-204@0.5-2.0	0.5-2.0	2/15/18-1427	S		X	1	X	
9	FLB-204@2-4	2-4	2/15/18-1428	S		X	1	X	Hold
10	FLB-204@4-6	4-6	2/15/18-1431	S		X	1	X	Hold

1) Relinquished By: Richard Houde Date / Time 2/5/18 1615
2) Received By: Date / Time 2-5-18 1615
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SPECPRO - Professional Services
Address: 7067 OLD Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CC / 2.9 IR-1
Custody Seal(s): Y N Lab Work Order # L880040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH												Container Type	Preservation Code
								GC													
								9													
1	FLB-205@ 0.0-0.5	0.0-0.5	2/5/18-1438	S		X	1	X													
2	FLB-205@ 0.5-2.0	0.5-2.0	2/5/18-1439	S		X	1	X													
3	FLB-205@ 2-4	2-4	2/5/18-1441	X		X	1	X													Hold
4	FLB-205@ 4-6	4-6	2/5/18-1443	X		X	1	X													Hold
5	FLB-208@ 0.0-0.5	0.0-0.5	2/5/18-1457	X		X	1	X													
6	FLB-208@ 0.5-2	0.5-2	2/5/18-1459	X		X	X	X													
7	FLB-208@ 2-4	2-4	2/5/18-1501	X		X	X	X													Hold
8	FLB-208@ 4-6	4-6	2/5/18-1504	X		X	X	X													Hold
9																					
10																					

1) Relinquished By: Richard Houde Date / Time 2/5/18-1615
2) Received By: [signature] Date / Time 2-5-18 1615
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / (Lab Pickup) / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
(STD TAT) 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA=Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CL / 2.9 IR1
Custody Seal(s): Y N Lab Work Order # L8B0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs												Container Type	Preservation Code
								GC													
								9													
1	FLB-242 @ 10'-12'	10-12	2-5-18 / 09:07	S		✓	1	✓												Hold	
2	FLB-242 @ 13'-15'	13-15	/ 09:09	S		✓	1	✓												Hold	
3	FLB-242 @ 15'-17'	15-17	/ 09:12	S		✓	1	✓												Hold	
4	FLB-242 @ 18'-20'	18-20	/ 09:13	S		✓	1	✓												Hold	
5	FLB-242 @ 20'-22'	20-22	/ 09:16	S		✓	1	✓												Hold	
6	FLB-242 @ 23'-25'	23-25	/ 09:18	S		✓	1	✓													
7	FLB-243 @ 0'-0.5'	0-0.5	/ 13:04	S		✓	1	✓													
8	FLB-243 @ 0.5'-2'	0.5-2	/ 13:07	S		✓	1	✓													
9	FLB-243 @ 2'-4'	2-4	/ 13:09	S		✓	1	✓													
10	FLB-243 @ 4'-6'	4-6	/ 13:12	S		✓	1	✓													

1) Relinquished By: Richard Houde Date / Time 2/5/18 - 1615
2) Received By: Date / Time 2-5-18 16:15
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
3) Relinquished By: Date / Time
4) Received By: Date / Time
MSA or FTS terms and conditions apply
5) Relinquished By: Date / Time
6) Received By: Date / Time
Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: CC / 2.9 IR.1
Custody Seal(s): Y N Lab Work Order # L8B 0040
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs													Container Type
								6C													Preservation Code
								9													
1	FLB-244@0'-0.5'	0-0.5	2-5-18 / 13:29	S		✓	1	✓													
2	FLB-244@0.5'-2'	0.5-2	/ 13:32	S		✓	1	✓													
3	FLB-244@2'-4'	2-4	/ 13:34	S		✓	1	✓													
4	FLB-244@4'-6'	4-6	/ 13:37	S		✓	1	✓													
5	FLB-245@0'-0.5'	0-0.5	/ 13:18	S		✓	1	✓													
6	FLB-245@0.5'-2'	0.5-2	/ 13:20	S		✓	1	✓													
7	FLB-245@2'-4'	2-4	/ 13:22	S		✓	1	✓													
8	FLB-245@4'-6'	4-6	/ 13:25	S		✓	1	✓													
9																					
10																					

1) Relinquished By:	Date / Time	2) Received By:	Date / Time	Delivered by: (Circle One)
Richard Houde	2/5/18 - 1615	[signature]	2-5-18 1615	Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
Relinquished By:	Date / Time	4) Received By:	Date / Time	MSA or FTS terms and conditions apply
Relinquished By:	Date / Time	6) Received By:	Date / Time	Circle a Turnaround Time (business days) STD TAT 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

trix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
servation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: 29 / CC IAT
Custody Seal(s): Y N Lab Work Order # LBB0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Chromium	2378-TCDD	Container Type	Preservation Code
								GC	GC		
								9	9		
1	CTB-41 @ 20'-22'	20'-22	2-5-18 / 09:58	S		✓	1	✓			Hold
2	CTB-41 @ 23'-25	23-25	/ 10:00	S		✓	1	✓			
3	GSB-16 @ 0'-0.5'	0-0.5	/ 10:23	S		✓	1		✓		
4	GSB-16 @ 0.5'-2'	0.5-2	/ 10:24	S		✓	1		✓		
5	GSB-16 @ 2'-4'	2-4	/ 10:25	S		✓	1		✓		
6	GSB-16 @ 4'-6'	4-6	/ 10:35	S		✓	1		✓		
7	GSB-16 @ 6'-8'	6-8	/ 10:36	S		✓	1		✓		Hold
8	GSB-16 @ 8'-10'	8-10	/ 10:37	S		✓	1		✓		Hold
9	GSB-16 @ 10'-12'	10-12	/ 10:41	S		✓	1		✓		Hold
10	GSB-16 @ 13'-15'	13-15	✓✓ 10:42	S		✓	1		✓		Hold

1) Relinquished By: Richard Houde Date / Time 2/5/18-1615
2) Received By: [signature] Date / Time 2-5-18 1615
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

3) Relinquished By: Date / Time
4) Received By: Date / Time

5) Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@ledger-tech.com
Contact Phone #: 210-415-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CC / 2.9 , K-
Custody Seal(s): Y N Lab Work Order # LBB0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	2,3,7,8-TCDD	PAHs	Container Type	Preservation Code
								GC	GC		
								9	9		
1	GSB-16 @ 15'-17	15-17	2-5-18 / 10:44	S		✓	1	✓			Hold
2	GSB-16 @ 18'-20'	18-20	/ 10:45	S		✓	1	✓			Hold
3	GSB-16 @ 20'-22'	20-22	/ 10:48	S		✓	1	✓			Hold
4	GSB-16 @ 23'-25'	23-25	/ 10:49	S		✓	1	✓			
5	FLB-242 @ 0'-0.5	0-0.5	/ 08:47	S		✓	1		✓		
6	FLB-242 @ 0.5'-2'	0.5-2	/ 08:48	S		✓	1		✓		
7	FLB-242 @ 2'-4'	2-4	/ 08:51	S		✓	1		✓		
8	FLB-242 @ 4'-6'	4-6	/ 09:02	S		✓	1		✓		
9	FLB-242 @ 6'-8'	6-8	/ 09:04	S		✓	1		✓		Hold
10	FLB-242 @ 8'-10'	8-10	↓ / 09:05	S		✓	1		✓		Hold

1) Relinquished By: Richard Houde Date / Time 2/5/18 - 1615
2) Received By: [signature] Date / Time 2-5-18 1615
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

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STD TAT 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: ~~CED~~ Spec-Pro Professional Services
Address: ~~700 DeSoto Ave., Bradenville, FL~~ 7967 Old Madison Pike, Ste #107 Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: ~~badger-tech@~~ richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CC / 2.9 R-1
Custody Seal(s): Y N Lab Work Order # L8B0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Chromium	Container Type / Preservation Code
								6C / 9	
1	CTB-41 @ 0'-0.5'	0-0.5	2-5-18 / 09:32	S		✓	1	✓	
2	CTB-41 @ 0.5'-2'	0.5-2	/ 09:35	S		✓	1	✓	
3	CTB-41 @ 2'-4'	2-4	/ 09:37	S		✓	1	✓	
4	CTB-41 @ 4'-6'	4-6	/ 09:48	S		✓	1	✓	
5	CTB-41 @ 6'-8'	6-8	/ 09:50	S		✓	1	✓	Hold
6	CTB-41 @ 8'-10'	8-10	/ 09:52	S		✓	1	✓	Hold
7	CTB-41 @ 10'-12'	10-12	/ 09:54	S		✓	1	✓	Hold
8	CTB-41 @ 13'-15'	13-15	/ 09:55	S		✓	1	✓	Hold
9	CTB-41 @ 15'-17'	15-17	/ 09:56	S		✓	1	✓	Hold
10	CTB-41 @ 18'-20'	18-20	/ 09:56	S		✓	1	✓	Hold

1) Relinquished By: [signature] / Rich Houde Date / Time 2-5-18 / 16:15
2) Received By: [signature] Date / Time 2-5-18 / 16:15
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 OLD Madison Pike #107, Huntsville, AL
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): US DA- Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CC / 2.9 IR1
Custody Seal(s): Y N Lab Work Order # L8B0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC	9	PAH	Container Type / Preservation Code
1	FLB-200C 0.0-0.5	0.0-0.5	2/5/18-1241	S		X	1			X	
2	FLB-200C 0.5-2.0	0.5-2.0	2/5/18-1242	S		X	1			X	
3	FLB-200C 2-4	2-4	2/5/18-1246	S		X	1			X	HOLD
4	FLB-200C 4-6	4-6	2/5/18-1248	S		X	1			X	HOLD
5	FLB-201C 0.0-0.5	0.0-0.5	2/5/18-1252	S		X	1			X	
6	FLB-201C 0.5-2.0	0.5-2.0	2/5/18-1254	S		X	1			X	
7	FLB-201C 2-4	2-4	2/5/18-1256	S		X	1			X	Hold
8	FLB-201C 4-6	4-6	2/5/18-1259	S		X	1			X	Hold
9	FLB-202C 0.0-0.5	0.0-0.5	2/5/18-1242	S		X	1			X	
10	FLB-202C 0.5-2	0.5-2	2/5/18-1345	S		X	1			X	

1) Relinquished By: Richard Houde Date / Time 2/5/18 1615
2) Received By: Date / Time 2-5-18 1615
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / (Lab Pickup) / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
(STD TAT) 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SPEC-Pro Professional Services
Address: 7067 OLD MADISON PIKE, #107, Huntsville AL 35806
Results Sent to: Richard Houde
Email address: Richard.houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Receiver's Initials/Temp: CC / 2.9 IR-1
Custody Seal(s): Y N Lab Work Order # L860040
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type / Preservation Code
								GC / 9	
1	FLB-202@2-4	2-4	2/5/18-1347	S		X	1	X	Hold
2	FLB-202@4-6	4-6	2/15/18-1350	S		X	1	X	Hold
3	FLB-203@0.0-0.5	0.0-0.5	2/15/18-1356	S		X	1	X	
4	FLB-203@0.5-2	0.5-2	2/15/18-1358	S		X	1	X	
5	FLB-203@2-4	2-4	2/15/18-1401	S		X	1	X	Hold
6	FLB-203@4-6	4-6	2/15/18-1404	S		X	1	X	Hold
7	FLB-204@0.0-0.5	0.0-0.5	2/15/18-1422	S		X	1	X	
8	FLB-204@0.5-2.0	0.5-2.0	2/15/18-1427	S		X	1	X	
9	FLB-204@2-4	2-4	2/15/18-1428	S		X	1	X	Hold
10	FLB-204@4-6	4-6	2/15/18-1431	S		X	1	X	Hold

1) Relinquished By: Richard Houde Date / Time 2/5/18 1615
2) Received By: [signature] Date / Time 2-5-18 1615
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SPECPRO - Professional Services
Address: 7067 OLD Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CC / 2.9 IR-1
Custody Seal(s): Y N Lab Work Order # L880040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type	Preservation Code
									GC	
									9	
1	FLB-205@ 0.0-0.5	0.0-0.5	2/5/18-1438	S		X	1	X		
2	FLB-205@ 0.5-2.0	0.5-2.0	2/5/18-1439	S		X	1	X		
3	FLB-205@ 2-4	2-4	2/5/18-1441	X		X	1	X		Hold
4	FLB-205@ 4-6	4-6	2/5/18-1443	X		X	1	X		Hold
5	FLB-208@ 0.0-0.5	0.0-0.5	2/5/18-1457	X		X	1	X		
6	FLB-208@ 0.5-2	0.5-2	2/5/18-1459	X		X	X	X		
7	FLB-208@ 2-4	2-4	2/5/18-1501	X		X	X	X		Hold
8	FLB-208@ 4-6	4-6	2/5/18-1504	X		X	X	X		Hold
9										
10										

1) Relinquished By: Richard Houde Date / Time 2/5/18-1615
2) Received By: [signature] Date / Time 2-5-18 1615
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

3) Relinquished By: Date / Time
4) Received By: Date / Time

5) Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA=Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: CL / 2.9 IR1
Custody Seal(s): Y N Lab Work Order # L8B0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs												Container Type / Preservation Code
								GC												
								9												
1	FLB-242 @ 10'-12'	10-12	2-5-18 / 09:07	S		✓	1	✓												Hold
2	FLB-242 @ 13'-15'	13-15	/ 09:09	S		✓	1	✓												Hold
3	FLB-242 @ 15'-17'	15-17	/ 09:12	S		✓	1	✓												Hold
4	FLB-242 @ 18'-20'	18-20	/ 09:13	S		✓	1	✓												Hold
5	FLB-242 @ 20'-22'	20-22	/ 09:16	S		✓	1	✓												Hold
6	FLB-242 @ 23'-25'	23-25	/ 09:18	S		✓	1	✓												
7	FLB-243 @ 0'-0.5'	0-0.5	/ 13:04	S		✓	1	✓												
8	FLB-243 @ 0.5'-2'	0.5-2	/ 13:07	S		✓	1	✓												
9	FLB-243 @ 2'-4'	2-4	/ 13:09	S		✓	1	✓												
10	FLB-243 @ 4'-6'	4-6	/ 13:12	S		✓	1	✓												

1) Relinquished By: Richard Houde Date / Time 2/5/18 - 1615
2) Received By: Date / Time 2-5-18 16:15
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

3) Relinquished By: Date / Time
4) Received By: Date / Time

5) Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaP SC NC DOD NPDES

Receiver's Initials/Temp: CC / 2.9 IR.1
Custody Seal(s): Y N Lab Work Order # L8B 0040
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs													Container Type
								6C													Preservation Code
								9													
1	FLB-244@0'-0.5'	0-0.5	2-5-18 / 13:29	S		✓	1	✓													
2	FLB-244@0.5'-2'	0.5-2	/ 13:32	S		✓	1	✓													
3	FLB-244@2'-4'	2-4	/ 13:34	S		✓	1	✓													
4	FLB-244@4'-6'	4-6	/ 13:37	S		✓	1	✓													
5	FLB-245@0'-0.5'	0-0.5	/ 13:18	S		✓	1	✓													
6	FLB-245@0.5'-2'	0.5-2	/ 13:20	S		✓	1	✓													
7	FLB-245@2'-4'	2-4	/ 13:22	S		✓	1	✓													
8	FLB-245@4'-6'	4-6	/ 13:25	S		✓	1	✓													
9																					
10																					

1) Relinquished By:	Date / Time	2) Received By:	Date / Time	Delivered by: (Circle One)
Richard Houde	2/5/18 - 1615	[signature]	2-5-18 1615	Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
Relinquished By:	Date / Time	4) Received By:	Date / Time	MSA or FTS terms and conditions apply
Relinquished By:	Date / Time	6) Received By:	Date / Time	Circle a Turnaround Time (business days) STD TAT 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

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servation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-225-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: 29 / CC IAT
Custody Seal(s): Y N Lab Work Order # LBB0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Chromium	2378-TCDD	Container Type	Preservation Code
								GC	GC		
								9	9		
1	CTB-41 @ 20'-22'	20'-22	2-5-18 / 09:58	S		✓	1	✓			Hold
2	CTB-41 @ 23'-25	23-25	/ 10:00	S		✓	1	✓			
3	GSB-16 @ 0'-0.5'	0-0.5	/ 10:23	S		✓	1		✓		
4	GSB-16 @ 0.5'-2'	0.5-2	/ 10:24	S		✓	1		✓		
5	GSB-16 @ 2'-4'	2-4	/ 10:25	S		✓	1		✓		
6	GSB-16 @ 4'-6'	4-6	/ 10:35	S		✓	1		✓		
7	GSB-16 @ 6'-8'	6-8	/ 10:36	S		✓	1		✓		Hold
8	GSB-16 @ 8'-10'	8-10	/ 10:37	S		✓	1		✓		Hold
9	GSB-16 @ 10'-12'	10-12	/ 10:41	S		✓	1		✓		Hold
10	GSB-16 @ 13'-15'	13-15	✓✓ 10:42	S		✓	1		✓		Hold

1) Relinquished By: Richard Houde Date / Time 2/5/18-1615
2) Received By: [signature] Date / Time 2-5-18 1615
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

3) Relinquished By: Date / Time
4) Received By: Date / Time

5) Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply

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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Receiver's Initials/Temp: CC / 2.9 , R-
Custody Seal(s): Y N Lab Work Order # LBB0040
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	2,3,7,8-TCDD (GC 9)	PAHs (GC 9)	Container Type / Preservation Code
1	GSB-16 @ 15'-17	15-17	2-5-18 / 10:44	S		✓	1	✓		Hold
2	GSB-16 @ 18'-20'	18-20	/ 10:45	S		✓	1	✓		Hold
3	GSB-16 @ 20'-22'	20-22	/ 10:48	S		✓	1	✓		Hold
4	GSB-16 @ 23'-25'	23-25	/ 10:49	S		✓	1	✓		
5	FLB-242 @ 0'-0.5	0-0.5	/ 08:47	S		✓	1		✓	
6	FLB-242 @ 0.5'-2'	0.5-2	/ 08:49	S		✓	1		✓	
7	FLB-242 @ 2'-4'	2-4	/ 08:51	S		✓	1		✓	
8	FLB-242 @ 4'-6'	4-6	/ 09:02	S		✓	1		✓	
9	FLB-242 @ 6'-8'	6-8	/ 09:04	S		✓	1		✓	Hold
10	FLB-242 @ 8'-10'	8-10	/ 09:05	S		✓	1		✓	Hold

1) Relinquished By: Richard Houde Date / Time 2/5/18-1615
2) Received By: [signature] Date / Time 2-5-18 16:15
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

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Circle a Turnaround Time (business days)
STD TAT 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

trix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
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Analytical Report 575636

for

Florida Testing Services

Project Manager: Chad Bechtold

L8B0040

23-FEB-18

Collected By: Client

4147 Greenbriar Dr.
Stafford, TX 77477

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

23-FEB-18

Project Manager: **Chad Bechtold**
Florida Testing Services
1412 Tech Blvd
Tampa, FL 33619

Reference: XENCO Report No(s): **575636**
L8B0040
Project Address:

Chad Bechtold:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 575636. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 575636 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Irene Vann
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

MWBE SDBE
NELAC DoD Accredited

SUBCONTRACT ORDER

Sending Laboratory:

FTS - Florida
1412 Tech Blvd
Tampa, FL 33619
Phone: 813-620-2000
Fax: NA

Project Manager: Chad Bechtold

Subcontracted Laboratory: 575636

XENCO Houston
4147 Greenbriar Dr.
Houston, TX 77477
Phone: (281) 240-4200
Fax:

Work Order: L8B0040

Analysis	Due	Expires	Comments
GSB-16 @ 0'-0.5' *Solid* *Sampled: 02/05/2018 10:23*			
SS 8290 Diox-Fur	02/12/2018	02/12/2018 10:23	2,3,7,8-TCDD
Containers Supplied:			
GSB-16 @ 0.5'-2' *Solid* *Sampled: 02/05/2018 10:24*			
SS 8290 Diox-Fur	02/12/2018	02/12/2018 10:24	2,3,7,8-TCDD
Containers Supplied:			
GSB-16 @ 2'-4' *Solid* *Sampled: 02/05/2018 10:25*			
SS 8290 Diox-Fur	02/12/2018	02/12/2018 10:25	2,3,7,8-TCDD
Containers Supplied:			
GSB-16 @ 4'-6' *Solid* *Sampled: 02/05/2018 10:35*			
SS 8290 Diox-Fur	02/12/2018	02/12/2018 10:35	2,3,7,8-TCDD
Containers Supplied:			
GSB-16 @ 23'-25' *Solid* *Sampled: 02/05/2018 10:49*			
SS 8290 Diox-Fur	02/12/2018	02/12/2018 10:49	2,3,7,8-TCDD
Containers Supplied:			

IR ID:HOU-068 C/F: 0.3
Temp: 3.8 Corrected: 4.1

Released By

2/6/18
Date

Rel FEDEX
Received By

02/07/18
Date 10:30

ORIGIN ID:MCFA (813) 620-2000
MARIA AREVALO
1412 TECH BLVD
TAMPA, FL 33619
UNITED STATES US

SHIP DATE: 06FEB18
ACTWGT: 24.00 LB
CAD: 110898449/INET3980
DIMS: 20x15x15 IN
BILL RECIPIENT

TO RECEIVING
XENCO - HOUSTON
10555 S. SAM HOUSTON PKWY WEST
HOUSTON TX 77071
(281) 240-4200 REF
INV:
PO: DEPT

552J1/122D/DCA5

FedEx Express

J181118012601uc

WED - 07 FEB 3:00P
STANDARD OVERNIGHT

TRK# 0201 7714 1965 4795

NH SGRA

77071
TX-US IAH

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
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Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Sample SUB-Contract#: 1055653

Date Printed: 02.07.2018 11:34

Date/Time: 02.07.2018 11:32

Created by: Maria Paula Guerra

Send report to: Irene Vann

Subcontractor: Eurofins - Lancaster Laboratories

Address: 4147 Greenbriar Dr.
Stafford, TX 77477

PO#: 575636

Phone:

Delivery Priority:

Air Bill No.:

E-Mail: irene.vann@xenco.com

Invoice To: apInvoices@xenco.com; subcontract@xenco.com; irene.vann@xenco.com

Due Date: **02.12.2018 17:00**

Sample Id	Client Sample Id	Cont #	Matrix	Sample Collection	Method	Method Name	Lab PM
575636-001	GSB-16 @0'-0.5'	6616	S	02/05/18 10:23	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-002	GSB-16 @0.5'-2'	6615	S	02/05/18 10:24	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-003	GSB-16 @2'-4'	6617	S	02/05/18 10:25	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-004	GSB-16 @4'-6'	6618	S	02/05/18 10:35	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-005	GSB-16 @23'-25'	6619	S	02/05/18 10:49	SW8290	Dioxins and Furans by EPA 8290	Irene Vann

SUB-Contracting Comments:

2,3,7,8-TCDD

Relinquished By: Maria Paula Guerra

Received By:

Date/ Time Relinquished: 02/07/2018

Date/ Time Received: _____

Relinquished By: _____

Received By: _____

Date/ Time Relinquished: _____

Date/ Time Received: _____

Cooler Temperature: _____

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Florida Testing Services

Date/ Time Received: 02/07/2018 10:30:00 AM

Work Order #: 575636

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR:HOU068

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	4.1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	EUROFINS LANCASTER
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Maria Paula Guerra Date: 02/07/2018

Checklist reviewed by: Irene Vann Date: 02/08/2018

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ANALYSIS REPORT

Prepared by:	Prepared for:
Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601	Xenco Laboratories 4147 Greenbriar Dr Stafford TX 77477

Report Date: February 23, 2018 15:01

Project: 575636

Account #: 38150
Group Number: 1906391
PO Number: 575636
State of Sample Origin: TX

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Xenco Laboratories	Attn: Irene Vann
Electronic Copy To	Xenco Laboratories	Attn: Subcontact Xenco

Respectfully Submitted,

Ana Spencer
Project Manager

(281) 967-8096

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
575636-001 GSB-16@0'-0.5' Soil	02/05/2018 10:23	9446669
575636-002 GSB-16@0.5'-2' Soil	02/05/2018 10:24	9446670
575636-003 GSB-16@2'-4' Soil	02/05/2018 10:25	9446671
575636-004 GSB-16@4'-6' Soil	02/05/2018 10:35	9446672
575636-005 GSB-16@23'-25' Soil	02/05/2018 10:49	9446673

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: **575636-001 GSB-16@0'-0.5' Soil Xenco**

Project Name: **575636**

Submittal Date/Time: 02/08/2018 10:15
Collection Date/Time: 02/05/2018 10:23

Xenco Laboratories
ELLE Sample #: SW 9446669
ELLE Group #: 1906391
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	0.110 JQ	0.0319	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	68	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/23/2018 06:29	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/12/2018 08:53	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **575636-002 GSB-16@0.5'-2' Soil Xenco**

Project Name: **575636**

Submittal Date/Time: 02/08/2018 10:15
Collection Date/Time: 02/05/2018 10:24

Xenco Laboratories
ELLE Sample #: SW 9446670
ELLE Group #: 1906391
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0484	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	48	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/23/2018 07:26	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/12/2018 08:53	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **575636-003 GSB-16@2'-4' Soil Xenco**

Project Name: **575636**

Submittal Date/Time: 02/08/2018 10:15
Collection Date/Time: 02/05/2018 10:25

Xenco Laboratories
ELLE Sample #: SW 9446671
ELLE Group #: 1906391
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0227	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	59	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/23/2018 08:23	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/12/2018 08:53	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **575636-004 GSB-16@4'-6' Soil Xenco**

Project Name: **575636**

Submittal Date/Time: 02/08/2018 10:15
Collection Date/Time: 02/05/2018 10:35

Xenco Laboratories
ELLE Sample #: SW 9446672
ELLE Group #: 1906391
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0285	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	62	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/23/2018 09:20	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/12/2018 08:53	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **575636-005 GSB-16@23'-25' Soil Xenco**

Project Name: **575636**

Submittal Date/Time: 02/08/2018 10:15
Collection Date/Time: 02/05/2018 10:49

Xenco Laboratories
ELLE Sample #: SW 9446673
ELLE Group #: 1906391
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0289	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	53	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/23/2018 10:16	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18043005	02/12/2018 08:53	Alex L Barton	1

EDL = Estimated Detection Limit

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Quality Control Summary

Client Name: Xenco Laboratories
Reported: 02/23/2018 15:01

Group Number: 1906391

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result ng/kg	EDL ng/kg
Batch number: 18043005	Sample number(s): 9446669-9446673	
2378-TCDD	N.D.	0.0399

OPR/OPRD

Analysis Name	OPR Spike Added ng/kg	OPR Conc ng/kg	OPRD Spike Added ng/kg	OPRD Conc ng/kg	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 18043005	Sample number(s): 9446669-9446673								
2378-TCDD	20	20.64			103		67-158		

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: Dioxins/Furans in Solids-8290
Batch number: 18043005

	13C12-2378-TCDD
9446669	68
9446670	48
9446671	59
9446672	62
9446673	53
Blank	62
OPR	64
Limits:	40-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the MRL.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

G:1906391 S:9446669 - 9446679 A:58150

XENCO LABORATORIES

Sample SUB-Contract#: 1055653

Date Printed: 02.07.2018 11:34

Date/Time: 02.07.2018 11:32

Created by: Maria Paula Guerra

Subcontractor: Eurofins - Lancaster Laboratories

PO#: **575636**

Delivery Priority:

Air Bill No.:

Invoice To: apInvoices@xenco.com; subcontract@xenco.com; irene.vann@xenco.com

Send report to: Irene Vann

Address: 4147 Greenbriar Dr.
Stafford, TX 77477

Phone:

E-Mail: irene.vann@xenco.com

Due Date: **02.12.2018 17:00**

Sample Id	Client Sample Id	Cont #	Matrix	Sample Collection	Method	Method Name	Lab PM
575636-001	GSB-16 @0'-0.5'	6616	S	02/05/18 10:23	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-002	GSB-16 @0.5'-2'	6615	S	02/05/18 10:24	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-003	GSB-16 @2'-4'	6617	S	02/05/18 10:25	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-004	GSB-16 @4'-6'	6618	S	02/05/18 10:35	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
575636-005	GSB-16 @23'-25'	6619	S	02/05/18 10:49	SW8290	Dioxins and Furans by EPA 8290	Irene Vann

SUB-Contracting Comments:

2,3,7,8-TCDD

Relinquished By: Maria Paula Guerra

Date/ Time Relinquished: 02/07/2018

Relinquished By:

Date/ Time Relinquished:

Received By:

Date/ Time Received:

Received By:

Date/ Time Received: 2/8/18 1315

Cooler Temperature: 1.6

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 207927

Group Number(s): 1906391

Client: XENCO

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	02/08/2018 10:15
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Wendy Wakeley (1669) at 12:54 on 02/08/2018

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-01	1.6	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	non-detect
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

LAB REPORT
FENCE LINE SAMPLES & CHROMIUM SAMPLES

Analytical Report

L8B0057

Project

Winter Haven

Project Number

Winter Haven

March 02, 2018

SpecPro Professional Services

12500 San Pedro Avenue, Suite 670

San Antonio, TX 78216

Minority Women Business Enterprise

Small Disadvantaged Business Enterprise

Minority Women Business Enterprise
Small Disadvantaged Business Enterprise

1412 Tech Blvd
Tampa, FL 33619

Phone #: 813-620-2000
Website: www.ftsanalytical.com

March 02, 2018

Richard Houde
SpecPro Professional Services
12500 San Pedro Avenue, Suite 670
San Antonio, TX 78216

RE: Winter Haven

We are reporting the results of the analyses performed on the samples recieved on 2/6/2018 under the project name referenced above and identified as the lab Work Order L8B0057. All results being reported under this Report apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontracted lab, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reporting using all other available quality control methods.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by FTS Analytical Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise agreed upon. The samples received, and described as recorded in Work Order L8B0057 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise agreed upon. We reserve the right to return to you any unused samples, extracts, or solutions if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding standard practices, controlled/regulated substances, etc.)

We thank you for selecting FTS Analytical to serve your analytical needs. If you have any questions concerning this report, please do not hesitate to contact us at any time. We will be happy to help.

Sincerely,

Chad A. Bechtold

Chad Bechtold
VP of Client Services

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0057-01	FLB-207 @ 0'-0.5'	Solid	06-Feb-2018 08:29	06-Feb-2018 15:25
L8B0057-02	FLB-207 @ 0.5'-2'	Solid	06-Feb-2018 08:30	06-Feb-2018 15:25
L8B0057-05	FLB-206 @ 0'-0.5'	Solid	06-Feb-2018 08:17	06-Feb-2018 15:25
L8B0057-06	FLB-206 @ 0.5'-2'	Solid	06-Feb-2018 08:18	06-Feb-2018 15:25
L8B0057-09	FLB-210 @ 0'-0.5'	Solid	06-Feb-2018 09:40	06-Feb-2018 15:25
L8B0057-10	FLB-210 @ 0.5'-2'	Solid	06-Feb-2018 09:41	06-Feb-2018 15:25
L8B0057-13	FLB-211 @ 0'-0.5'	Solid	06-Feb-2018 08:52	06-Feb-2018 15:25
L8B0057-14	FLB-211 @ 0.5'-2'	Solid	06-Feb-2018 08:54	06-Feb-2018 15:25
L8B0057-15	FLB-211 @ 2'-4'	Solid	06-Feb-2018 08:56	06-Feb-2018 15:25
L8B0057-16	FLB-211 @ 4'-6'	Solid	06-Feb-2018 08:57	06-Feb-2018 15:25
L8B0057-17	FLB-212 @ 0'-0.5'	Solid	06-Feb-2018 09:02	06-Feb-2018 15:25
L8B0057-18	FLB-212 @ 0.5'-2'	Solid	06-Feb-2018 09:03	06-Feb-2018 15:25
L8B0057-19	FLB-212 @ 2'-4'	Solid	06-Feb-2018 09:05	06-Feb-2018 15:25
L8B0057-20	FLB-212 @ 4'-6'	Solid	06-Feb-2018 09:06	06-Feb-2018 15:25
L8B0057-21	FLB-213 @ 0'-0.5'	Solid	06-Feb-2018 09:11	06-Feb-2018 15:25
L8B0057-22	FLB-213 @ 0.5'-2'	Solid	06-Feb-2018 09:12	06-Feb-2018 15:25
L8B0057-23	FLB-213 @ 2'-4'	Solid	06-Feb-2018 09:15	06-Feb-2018 15:25
L8B0057-24	FLB-213 @ 4'-6'	Solid	06-Feb-2018 09:17	06-Feb-2018 15:25
L8B0057-25	FLB-214 @ 0'-0.5'	Solid	06-Feb-2018 09:55	06-Feb-2018 15:25
L8B0057-26	FLB-214 @ 0.5'-2'	Solid	06-Feb-2018 09:56	06-Feb-2018 15:25
L8B0057-29	FLB-215 @ 0'-0.5'	Solid	06-Feb-2018 10:11	06-Feb-2018 15:25
L8B0057-30	FLB-215 @ 0.5'-2'	Solid	06-Feb-2018 10:13	06-Feb-2018 15:25
L8B0057-33	FLB-216 @ 0'-0.5'	Solid	06-Feb-2018 10:38	06-Feb-2018 15:25
L8B0057-34	FLB-216 @ 0.5'-2'	Solid	06-Feb-2018 10:40	06-Feb-2018 15:25
L8B0057-37	FLB-217 @ 0'-0.5'	Solid	06-Feb-2018 10:47	06-Feb-2018 15:25
L8B0057-38	FLB-217 @ 0.5'-2'	Solid	06-Feb-2018 10:49	06-Feb-2018 15:25
L8B0057-39	FLB-219 @ 0.0-0.5	Solid	06-Feb-2018 12:21	06-Feb-2018 15:25
L8B0057-40	FLB-219 @ 0.5-2	Solid	06-Feb-2018 12:23	06-Feb-2018 15:25
L8B0057-43	FLB-218 @ 0.0-0.5	Solid	06-Feb-2018 12:10	06-Feb-2018 15:25
L8B0057-44	FLB-218 @ 0.5-2	Solid	06-Feb-2018 12:13	06-Feb-2018 15:25
L8B0057-49	CBT-42 @ 0.0-0.5	Solid	06-Feb-2018 13:30	06-Feb-2018 15:25
L8B0057-50	CBT-42 @ 0.5-2	Solid	06-Feb-2018 13:31	06-Feb-2018 15:25
L8B0057-53	CBT-43 @ 0.0-0.5	Solid	06-Feb-2018 13:12	06-Feb-2018 15:25
L8B0057-54	CBT-43 @ 0.5-2	Solid	06-Feb-2018 13:15	06-Feb-2018 15:25
L8B0057-57	CBT-44 @ 0.0-0.5	Solid	06-Feb-2018 13:01	06-Feb-2018 15:25
L8B0057-58	CBT-44 @ 0.5-2	Solid	06-Feb-2018 13:02	06-Feb-2018 15:25
L8B0057-61	CBT-45 @ 0.0-0.5	Solid	06-Feb-2018 13:22	06-Feb-2018 15:25
L8B0057-62	CBT-45 @ 0.5-2	Solid	06-Feb-2018 13:23	06-Feb-2018 15:25

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Samples in this Report
(Continued)

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0057-65	CBT-46 @ 0.0-0.5	Solid	06-Feb-2018 12:43	06-Feb-2018 15:25
L8B0057-66	CBT-46 @ 0.5-2	Solid	06-Feb-2018 12:44	06-Feb-2018 15:25

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Analysis Case Narrative

Method: 8270 LL PAHs
Batch: B8B0238

The PAH extraction was requested by the client after the holding time expired for the samples FLB -219@ 0-0.5, FLB-219 @ 0.5-2, FLB-218 @ 0-0.5, and FLB-218 @ 0.5-2. The results were qualified with a "Q".

The precision (RPD) of the batch Matrix Spike and Matrix Spike Duplicate exceeed control limits for Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene and Fluorene. However, the MS and MSD recoveries met acceptance criteria.

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

Sample: FLB-207 @ 0'-0.5'

Lab ID: L8B0057-01

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.3**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**5.70**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-207 @ 0.5'-2'

Lab ID: L8B0057-02

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.6**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**5.41**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-206 @ 0'-0.5'

Lab ID: L8B0057-05

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Benzo(a)anthracene	**0.0288**	I	0.0351	0.00979	mg/Kg dry	1	2/13/18 0:00	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0404**		0.0351	0.0166	mg/Kg dry	1	2/13/18 0:00	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0512**		0.0351	0.0157	mg/Kg dry	1	2/13/18 0:00	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0383**		0.0351	0.0163	mg/Kg dry	1	2/13/18 0:00	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0404**		0.0351	0.0121	mg/Kg dry	1	2/13/18 0:00	207-08-9	EPA 8270D PAH
Chrysene	**0.0505**		0.0351	0.00832	mg/Kg dry	1	2/13/18 0:00	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0565**		0.0351	0.0104	mg/Kg dry	1	2/13/18 0:00	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0319**	I	0.0351	0.0171	mg/Kg dry	1	2/13/18 0:00	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0123**	I	0.0351	0.00705	mg/Kg dry	1	2/13/18 0:00	85-01-8	EPA 8270D PAH
Pyrene	**0.0540**		0.0351	0.0112	mg/Kg dry	1	2/13/18 0:00	129-00-0	EPA 8270D PAH
Percent Moisture	**5.93**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-206 @ 0.5'-2'

Lab ID: L8B0057-06

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.4**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Benzo(a)anthracene	**0.0332**	I	0.0349	0.00974	mg/Kg dry	1	2/9/18 21:45	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0517**		0.0349	0.0165	mg/Kg dry	1	2/9/18 21:45	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0485**		0.0349	0.0156	mg/Kg dry	1	2/9/18 21:45	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0478**		0.0349	0.0162	mg/Kg dry	1	2/9/18 21:45	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0517**		0.0349	0.0120	mg/Kg dry	1	2/9/18 21:45	207-08-9	EPA 8270D PAH
Chrysene	**0.0614**		0.0349	0.00827	mg/Kg dry	1	2/9/18 21:45	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0189**	I	0.0349	0.0155	mg/Kg dry	1	2/9/18 21:45	53-70-3	EPA 8270D PAH
Fluoranthene	**0.0733**		0.0349	0.0104	mg/Kg dry	1	2/9/18 21:45	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0398**		0.0349	0.0170	mg/Kg dry	1	2/9/18 21:45	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0182**	I	0.0349	0.00702	mg/Kg dry	1	2/9/18 21:45	85-01-8	EPA 8270D PAH
Pyrene	**0.0730**		0.0349	0.0111	mg/Kg dry	1	2/9/18 21:45	129-00-0	EPA 8270D PAH
Percent Moisture	**5.62**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-210 @ 0'-0.5'

Lab ID: L8B0057-09

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Benzo(a)anthracene	**0.0169**	I	0.0352	0.00983	mg/Kg dry	1	2/9/18 22:06	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0187**	I	0.0352	0.0167	mg/Kg dry	1	2/9/18 22:06	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0204**	I	0.0352	0.0158	mg/Kg dry	1	2/9/18 22:06	205-99-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0166**	I	0.0352	0.0122	mg/Kg dry	1	2/9/18 22:06	207-08-9	EPA 8270D PAH
Chrysene	**0.0162**	I	0.0352	0.00835	mg/Kg dry	1	2/9/18 22:06	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0222**	I	0.0352	0.0105	mg/Kg dry	1	2/9/18 22:06	206-44-0	EPA 8270D PAH
Phenanthrene	**0.00810**	I	0.0352	0.00708	mg/Kg dry	1	2/9/18 22:06	85-01-8	EPA 8270D PAH
Pyrene	**0.0222**	I	0.0352	0.0112	mg/Kg dry	1	2/9/18 22:06	129-00-0	EPA 8270D PAH
Percent Moisture	**5.88**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-210 @ 0.5'-2'

Lab ID: L8B0057-10

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.8**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**5.24**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-211 @ 0'-0.5'

Lab ID: L8B0057-13

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**91.8**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
1-Methylnaphthalene	**0.0124**	I	0.0364	0.0121	mg/Kg dry	1	2/12/18 11:41	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.0149**	I	0.0364	0.0146	mg/Kg dry	1	2/12/18 11:41	91-57-6	EPA 8270D PAH
Acenaphthene	**0.117**		0.0364	0.0143	mg/Kg dry	1	2/12/18 11:41	83-32-9	EPA 8270D PAH
Anthracene	**0.322**		0.0364	0.00960	mg/Kg dry	1	2/12/18 11:41	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.914**	J	0.0364	0.0101	mg/Kg dry	1	2/12/18 11:41	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.919**		0.0364	0.0172	mg/Kg dry	1	2/12/18 11:41	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.940**		0.0364	0.0163	mg/Kg dry	1	2/12/18 11:41	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.680**		0.0364	0.0169	mg/Kg dry	1	2/12/18 11:41	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.747**		0.0364	0.0125	mg/Kg dry	1	2/12/18 11:41	207-08-9	EPA 8270D PAH
Chrysene	**0.933**	J	0.0364	0.00862	mg/Kg dry	1	2/12/18 11:41	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.216**		0.0364	0.0161	mg/Kg dry	1	2/12/18 11:41	53-70-3	EPA 8270D PAH
Fluoranthene	**1.92**	J	0.0364	0.0108	mg/Kg dry	1	2/12/18 11:41	206-44-0	EPA 8270D PAH
Fluorene	**0.106**		0.0364	0.0117	mg/Kg dry	1	2/12/18 11:41	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.600**		0.0364	0.0177	mg/Kg dry	1	2/12/18 11:41	193-39-5	EPA 8270D PAH
Naphthalene	**0.0211**	I	0.0364	0.0125	mg/Kg dry	1	2/12/18 11:41	91-20-3	EPA 8270D PAH
Phenanthrene	**1.32**	J	0.0364	0.00731	mg/Kg dry	1	2/12/18 11:41	85-01-8	EPA 8270D PAH
Pyrene	**1.59**	J	0.0364	0.0116	mg/Kg dry	1	2/12/18 11:41	129-00-0	EPA 8270D PAH
Percent Moisture	**8.20**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-211 @ 0.5'-2'

Lab ID: L8B0057-14

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.3**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**5.67**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-211 @ 2'-4'

Lab ID: L8B0057-15

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**2.85**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-211 @ 4'-6'

Lab ID: L8B0057-16

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.3**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**3.74**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-212 @ 0'-0.5'

Lab ID: L8B0057-17

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Anthracene	**0.0138**	I	0.0354	0.00936	mg/Kg dry	1	2/12/18 14:04	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.106**		0.0354	0.00989	mg/Kg dry	1	2/12/18 14:04	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.145**		0.0354	0.0168	mg/Kg dry	1	2/12/18 14:04	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.162**		0.0354	0.0158	mg/Kg dry	1	2/12/18 14:04	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.131**		0.0354	0.0165	mg/Kg dry	1	2/12/18 14:04	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.134**		0.0354	0.0122	mg/Kg dry	1	2/12/18 14:04	207-08-9	EPA 8270D PAH
Chrysene	**0.167**		0.0354	0.00840	mg/Kg dry	1	2/12/18 14:04	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0372**		0.0354	0.0157	mg/Kg dry	1	2/12/18 14:04	53-70-3	EPA 8270D PAH
Fluoranthene	**0.250**		0.0354	0.0105	mg/Kg dry	1	2/12/18 14:04	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.108**		0.0354	0.0172	mg/Kg dry	1	2/12/18 14:04	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0528**		0.0354	0.00712	mg/Kg dry	1	2/12/18 14:04	85-01-8	EPA 8270D PAH
Pyrene	**0.227**		0.0354	0.0113	mg/Kg dry	1	2/12/18 14:04	129-00-0	EPA 8270D PAH
Percent Moisture	**5.94**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-212 @ 0.5'-2'

Lab ID: L8B0057-18

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.6**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**5.43**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-212 @ 2'-4'

Lab ID: L8B0057-19

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.5**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**7.55**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-212 @ 4'-6'

Lab ID: L8B0057-20

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**88.3**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Benzo(a)anthracene	**0.0218**	I	0.0376	0.0105	mg/Kg dry	1	2/12/18 17:55	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0248**	I	0.0376	0.0178	mg/Kg dry	1	2/12/18 17:55	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0316**	I	0.0376	0.0168	mg/Kg dry	1	2/12/18 17:55	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0214**	I	0.0376	0.0175	mg/Kg dry	1	2/12/18 17:55	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0226**	I	0.0376	0.0130	mg/Kg dry	1	2/12/18 17:55	207-08-9	EPA 8270D PAH
Chrysene	**0.0301**	I	0.0376	0.00891	mg/Kg dry	1	2/12/18 17:55	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0402**		0.0376	0.0112	mg/Kg dry	1	2/12/18 17:55	206-44-0	EPA 8270D PAH
Phenanthrene	**0.0162**	I	0.0376	0.00756	mg/Kg dry	1	2/12/18 17:55	85-01-8	EPA 8270D PAH
Pyrene	**0.0369**	I	0.0376	0.0120	mg/Kg dry	1	2/12/18 17:55	129-00-0	EPA 8270D PAH
Percent Moisture	**11.7**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-213 @ 0'-0.5'

Lab ID: L8B0057-21

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Benzo(a)anthracene	**0.0499**		0.0352	0.00981	mg/Kg dry	1	2/12/18 18:16	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0619**		0.0352	0.0167	mg/Kg dry	1	2/12/18 18:16	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0749**		0.0352	0.0157	mg/Kg dry	1	2/12/18 18:16	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0464**		0.0352	0.0163	mg/Kg dry	1	2/12/18 18:16	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0520**		0.0352	0.0121	mg/Kg dry	1	2/12/18 18:16	207-08-9	EPA 8270D PAH
Chrysene	**0.0671**		0.0352	0.00833	mg/Kg dry	1	2/12/18 18:16	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0207**	I	0.0352	0.0156	mg/Kg dry	1	2/12/18 18:16	53-70-3	EPA 8270D PAH
Fluoranthene	**0.100**		0.0352	0.0104	mg/Kg dry	1	2/12/18 18:16	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0436**		0.0352	0.0171	mg/Kg dry	1	2/12/18 18:16	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0418**		0.0352	0.00707	mg/Kg dry	1	2/12/18 18:16	85-01-8	EPA 8270D PAH
Pyrene	**0.0942**		0.0352	0.0112	mg/Kg dry	1	2/12/18 18:16	129-00-0	EPA 8270D PAH
Percent Moisture	**5.03**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-213 @ 0.5'-2'

Lab ID: L8B0057-22

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**4.12**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-213 @ 2'-4'

Lab ID: L8B0057-23

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**1.89**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-213 @ 4'-6'

Lab ID: L8B0057-24

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**2.05**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-214 @ 0'-0.5'

Lab ID: L8B0057-25

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**85.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**14.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-214 @ 0.5'-2'

Lab ID: L8B0057-26

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**3.94**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-215 @ 0'-0.5'

Lab ID: L8B0057-29

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.2**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Benzo(g,h,i)perylene	**0.0175**	I	0.0365	0.0170	mg/Kg dry	1	2/12/18 20:58	191-24-2	EPA 8270D PAH
Percent Moisture	**7.78**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-215 @ 0.5'-2'

Lab ID: L8B0057-30

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**99.0**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**0.973**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-216 @ 0'-0.5'

Lab ID: L8B0057-33

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.6**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**1.43**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-216 @ 0.5'-2'

Lab ID: L8B0057-34

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.8**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**1.23**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-217 @ 0'-0.5'

Lab ID: L8B0057-37

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.8**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**2.21**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-217 @ 0.5'-2'

Lab ID: L8B0057-38

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.8**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Percent Moisture	**1.21**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-219 @ 0.0-0.5

Lab ID: L8B0057-39

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Acenaphthene	**0.0177**	IQ	0.0369	0.0145	mg/Kg dry	1	2/22/18 22:37	83-32-9	EPA 8270D PAH
Anthracene	**0.0509**	Q	0.0369	0.00974	mg/Kg dry	1	2/22/18 22:37	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.129**	Q	0.0369	0.0103	mg/Kg dry	1	2/22/18 22:37	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.157**	Q	0.0369	0.0175	mg/Kg dry	1	2/22/18 22:37	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.202**	Q	0.0369	0.0165	mg/Kg dry	1	2/22/18 22:37	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.115**	Q	0.0369	0.0171	mg/Kg dry	1	2/22/18 22:37	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.132**	Q	0.0369	0.0127	mg/Kg dry	1	2/22/18 22:37	207-08-9	EPA 8270D PAH
Chrysene	**0.155**	Q	0.0369	0.00874	mg/Kg dry	1	2/22/18 22:37	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0491**	Q	0.0369	0.0164	mg/Kg dry	1	2/22/18 22:37	53-70-3	EPA 8270D PAH
Fluoranthene	**0.243**	Q	0.0369	0.0110	mg/Kg dry	1	2/22/18 22:37	206-44-0	EPA 8270D PAH
Fluorene	**0.0155**	IQ	0.0369	0.0118	mg/Kg dry	1	2/22/18 22:37	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0999**	Q	0.0369	0.0179	mg/Kg dry	1	2/22/18 22:37	193-39-5	EPA 8270D PAH
Phenanthrene	**0.171**	Q	0.0369	0.00741	mg/Kg dry	1	2/22/18 22:37	85-01-8	EPA 8270D PAH
Pyrene	**0.226**	Q	0.0369	0.0117	mg/Kg dry	1	2/22/18 22:37	129-00-0	EPA 8270D PAH
Chromium	**12.6**		5.61	0.0674	mg/Kg dry	1	2/9/18 12:12	7440-47-3	EPA 6010C
Percent Moisture	**10.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-219 @ 0.5-2

Lab ID: L8B0057-40

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**0.767**	I	5.11	0.0613	mg/Kg dry	1	2/9/18 12:23	7440-47-3	EPA 6010C
Percent Moisture	**2.06**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-218 @ 0.0-0.5

Lab ID: L8B0057-43

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Acenaphthene	**0.0271**	IQ	0.0357	0.0140	mg/Kg dry	1	2/22/18 23:18	83-32-9	EPA 8270D PAH
Anthracene	**0.0739**	Q	0.0357	0.00942	mg/Kg dry	1	2/22/18 23:18	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.208**	Q	0.0357	0.00996	mg/Kg dry	1	2/22/18 23:18	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.217**	Q	0.0357	0.0169	mg/Kg dry	1	2/22/18 23:18	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.198**	Q	0.0357	0.0160	mg/Kg dry	1	2/22/18 23:18	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.142**	Q	0.0357	0.0166	mg/Kg dry	1	2/22/18 23:18	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.177**	Q	0.0357	0.0123	mg/Kg dry	1	2/22/18 23:18	207-08-9	EPA 8270D PAH
Chrysene	**0.219**	Q	0.0357	0.00846	mg/Kg dry	1	2/22/18 23:18	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0478**	Q	0.0357	0.0158	mg/Kg dry	1	2/22/18 23:18	53-70-3	EPA 8270D PAH
Fluoranthene	**0.429**	Q	0.0357	0.0106	mg/Kg dry	1	2/22/18 23:18	206-44-0	EPA 8270D PAH
Fluorene	**0.0250**	IQ	0.0357	0.0115	mg/Kg dry	1	2/22/18 23:18	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.139**	Q	0.0357	0.0173	mg/Kg dry	1	2/22/18 23:18	193-39-5	EPA 8270D PAH
Phenanthrene	**0.289**	Q	0.0357	0.00717	mg/Kg dry	1	2/22/18 23:18	85-01-8	EPA 8270D PAH
Pyrene	**0.334**	Q	0.0357	0.0114	mg/Kg dry	1	2/22/18 23:18	129-00-0	EPA 8270D PAH
Chromium	**12.0**		5.27	0.0633	mg/Kg dry	1	2/9/18 12:25	7440-47-3	EPA 6010C
Percent Moisture	**7.05**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: FLB-218 @ 0.5-2

Lab ID: L8B0057-44

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**0.853**	I	5.11	0.0613	mg/Kg dry	1	2/9/18 12:27	7440-47-3	EPA 6010C
Percent Moisture	**2.08**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: CBT-42 @ 0.0-0.5

Lab ID: L8B0057-49

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.8**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**7.79**		5.39	0.0647	mg/Kg dry	1	2/9/18 12:29	7440-47-3	EPA 6010C
Percent Moisture	**7.22**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: CBT-42 @ 0.5-2

Lab ID: L8B0057-50

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**0.965**	I	5.28	0.0634	mg/Kg dry	1	2/9/18 12:31	7440-47-3	EPA 6010C
Percent Moisture	**5.32**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: CBT-43 @ 0.0-0.5

Lab ID: L8B0057-53

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.0**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**8.21**		5.27	0.0633	mg/Kg dry	1	2/9/18 12:33	7440-47-3	EPA 6010C
Percent Moisture	**7.05**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: CBT-43 @ 0.5-2

Lab ID: L8B0057-54

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.2**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**1.01**	I	5.25	0.0630	mg/Kg dry	1	2/9/18 12:40	7440-47-3	EPA 6010C
Percent Moisture	**4.82**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: CBT-44 @ 0.0-0.5

Lab ID: L8B0057-57

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.1**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**10.9**		5.37	0.0645	mg/Kg dry	1	2/9/18 12:42	7440-47-3	EPA 6010C
Percent Moisture	**6.94**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

Sample: CBT-44 @ 0.5-2

Lab ID: L8B0057-58

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G
Chromium	**1.78**	I	5.27	0.0633	mg/Kg dry	1	2/9/18 12:44	7440-47-3	EPA 6010C
Percent Moisture	**5.15**		0.100	0.100	%	1	2/10/18 17:59		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: CBT-45 @ 0.0-0.5

Lab ID: L8B0057-61

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.2**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G
Chromium	**3.27**	I	5.10	0.0612	mg/Kg dry	1	2/9/18 12:46	7440-47-3	EPA 6010C
Percent Moisture	**5.81**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G

Sample: CBT-45 @ 0.5-2

Lab ID: L8B0057-62

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G
Chromium	**0.945**	I	5.26	0.0631	mg/Kg dry	1	2/9/18 12:48	7440-47-3	EPA 6010C
Percent Moisture	**4.88**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G

Sample: CBT-46 @ 0.0-0.5

Lab ID: L8B0057-65

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**77.3**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G
Chromium	**27.9**		6.34	0.0761	mg/Kg dry	1	2/9/18 12:50	7440-47-3	EPA 6010C
Percent Moisture	**22.7**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G

Sample: CBT-46 @ 0.5-2

Lab ID: L8B0057-66

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.6**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G
Chromium	**0.995**	I	5.29	0.0634	mg/Kg dry	1	2/9/18 13:04	7440-47-3	EPA 6010C
Percent Moisture	**5.39**		0.100	0.100	%	1	2/7/18 16:45		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results

Client Sample ID: FLB-207 @ 0'-0.5'
Lab Sample ID: L8B0057-01 (Solid) **Sampled:2/6/18 8:29**

PAHs (SVOCs) by Method 8270D

Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	90-12-0
2-Methylnaphthalene	0.0142	U	0.0352	0.0142	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	208-96-8
Anthracene	0.00930	U	0.0352	0.00930	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	120-12-7
Benzo(a)anthracene	0.00983	U	0.0352	0.00983	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	56-55-3
Benzo(a)pyrene	0.0167	U	0.0352	0.0167	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0352	0.0157	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0352	0.0164	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	191-24-2
Benzo(k)fluoranthene	0.0122	U	0.0352	0.0122	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	207-08-9
Chrysene	0.00835	U	0.0352	0.00835	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0352	0.0156	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	53-70-3
Fluoranthene	0.0105	U	0.0352	0.0105	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0352	0.0171	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	193-39-5
Naphthalene	0.0122	U	0.0352	0.0122	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	91-20-3
Phenanthrene	0.00708	U	0.0352	0.00708	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	85-01-8
Pyrene	0.0112	U	0.0352	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*60%*	*16-110*				2/9/18 21:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*50%*	*19-105*				2/9/18 21:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*82%*	*20-137*				2/9/18 21:04	1718-51-0

Percent Moisture by Method 2540G

Laboratory:XENCO Labora Analyst:LA

% Solids	**94.3**	0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59
Percent Moisture	**5.70**	0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-207 @ 0.5'-2'
Lab Sample ID: L8B0057-02 (Solid) **Sampled:2/6/18 8:30**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	120-12-7
Benzo(a)anthracene	0.00978	U	0.0351	0.00978	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	207-08-9
Chrysene	0.00831	U	0.0351	0.00831	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0351	0.0170	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:25	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*47%*	*16-110*				2/9/18 21:25	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*39%*	*19-105*				2/9/18 21:25	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*72%*	*20-137*				2/9/18 21:25	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:LA

% Solids	**94.6**	0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.41**	0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-206 @ 0'-0.5'
Lab Sample ID: L8B0057-05 (Solid) **Sampled:2/6/18 8:17**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	120-12-7
Benzo(a)anthracene	**0.0288**	I	0.0351	0.00979	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	56-55-3
Benzo(a)pyrene	**0.0404**		0.0351	0.0166	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	50-32-8
Benzo(b)fluoranthene	**0.0512**		0.0351	0.0157	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	205-99-2
Benzo(g,h,i)perylene	**0.0383**		0.0351	0.0163	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	191-24-2
Benzo(k)fluoranthene	**0.0404**		0.0351	0.0121	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	207-08-9
Chrysene	**0.0505**		0.0351	0.00832	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	53-70-3
Fluoranthene	**0.0565**		0.0351	0.0104	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0319**	I	0.0351	0.0171	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	91-20-3
Phenanthrene	**0.0123**	I	0.0351	0.00705	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	85-01-8
Pyrene	**0.0540**		0.0351	0.0112	mg/Kg dry	1	2/12/18 10:00	2/13/18 0:00	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*53%*	*16-110*				2/13/18 0:00	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/13/18 0:00	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*69%*	*20-137*				2/13/18 0:00	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.93**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-206 @ 0.5'-2'
Lab Sample ID: L8B0057-06 (Solid) **Sampled:2/6/18 8:18**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	208-96-8
Anthracene	0.00922	U	0.0349	0.00922	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	120-12-7
Benzo(a)anthracene	**0.0332**	I	0.0349	0.00974	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	56-55-3
Benzo(a)pyrene	**0.0517**		0.0349	0.0165	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	50-32-8
Benzo(b)fluoranthene	**0.0485**		0.0349	0.0156	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	205-99-2
Benzo(g,h,i)perylene	**0.0478**		0.0349	0.0162	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	191-24-2
Benzo(k)fluoranthene	**0.0517**		0.0349	0.0120	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	207-08-9
Chrysene	**0.0614**		0.0349	0.00827	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	218-01-9
Dibenz(a,h)Anthracene	**0.0189**	I	0.0349	0.0155	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	53-70-3
Fluoranthene	**0.0733**		0.0349	0.0104	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0398**		0.0349	0.0170	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	193-39-5
Naphthalene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	91-20-3
Phenanthrene	**0.0182**	I	0.0349	0.00702	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	85-01-8
Pyrene	**0.0730**		0.0349	0.0111	mg/Kg dry	1	2/8/18 14:42	2/9/18 21:45	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*43%*	*16-110*				2/9/18 21:45	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*35%*	*19-105*				2/9/18 21:45	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*64%*	*20-137*				2/9/18 21:45	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:LA

% Solids	**94.4**	0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.62**	0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-210 @ 0'-0.5'
Lab Sample ID: L8B0057-09 (Solid) **Sampled:2/6/18 9:40**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	90-12-0
2-Methylnaphthalene	0.0142	U	0.0352	0.0142	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	208-96-8
Anthracene	0.00930	U	0.0352	0.00930	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	120-12-7
Benzo(a)anthracene	**0.0169**	I	0.0352	0.00983	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	56-55-3
Benzo(a)pyrene	**0.0187**	I	0.0352	0.0167	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	50-32-8
Benzo(b)fluoranthene	**0.0204**	I	0.0352	0.0158	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0352	0.0164	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	191-24-2
Benzo(k)fluoranthene	**0.0166**	I	0.0352	0.0122	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	207-08-9
Chrysene	**0.0162**	I	0.0352	0.00835	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0352	0.0156	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	53-70-3
Fluoranthene	**0.0222**	I	0.0352	0.0105	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0352	0.0171	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	193-39-5
Naphthalene	0.0122	U	0.0352	0.0122	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	91-20-3
Phenanthrene	**0.00810**	I	0.0352	0.00708	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	85-01-8
Pyrene	**0.0222**	I	0.0352	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:06	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*49%*	*16-110*				2/9/18 22:06	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*41%*	*19-105*				2/9/18 22:06	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*76%*	*20-137*				2/9/18 22:06	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.88**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-210 @ 0.5'-2'
Lab Sample ID: L8B0057-10 (Solid) **Sampled:2/6/18 9:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	90-12-0
2-Methylnaphthalene	0.0139	U	0.0345	0.0139	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	91-57-6
Acenaphthene	0.0136	U	0.0345	0.0136	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	208-96-8
Anthracene	0.00910	U	0.0345	0.00910	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	120-12-7
Benzo(a)anthracene	0.00962	U	0.0345	0.00962	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	56-55-3
Benzo(a)pyrene	0.0163	U	0.0345	0.0163	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0345	0.0154	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0345	0.0160	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	207-08-9
Chrysene	0.00817	U	0.0345	0.00817	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0345	0.0153	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	53-70-3
Fluoranthene	0.0102	U	0.0345	0.0102	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	206-44-0
Fluorene	0.0111	U	0.0345	0.0111	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	86-73-7
Indeno(1,2,3-cd)pyrene	0.0168	U	0.0345	0.0168	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	193-39-5
Naphthalene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	91-20-3
Phenanthrene	0.00693	U	0.0345	0.00693	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	85-01-8
Pyrene	0.0110	U	0.0345	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:26	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*44%*	*16-110*				2/9/18 22:26	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*36%*	*19-105*				2/9/18 22:26	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*73%*	*20-137*				2/9/18 22:26	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.8**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.24**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-211 @ 0'-0.5'
Lab Sample ID: L8B0057-13 (Solid) **Sampled:2/6/18 8:52**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.0124**	I	0.0364	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	90-12-0
2-Methylnaphthalene	**0.0149**	I	0.0364	0.0146	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	91-57-6
Acenaphthene	**0.117**		0.0364	0.0143	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	83-32-9
Acenaphthylene	0.0121	U	0.0364	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	208-96-8
Anthracene	**0.322**		0.0364	0.00960	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	120-12-7
Benzo(a)anthracene	**0.914**	J	0.0364	0.0101	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	56-55-3
Benzo(a)pyrene	**0.919**		0.0364	0.0172	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	50-32-8
Benzo(b)fluoranthene	**0.940**		0.0364	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	205-99-2
Benzo(g,h,i)perylene	**0.680**		0.0364	0.0169	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	191-24-2
Benzo(k)fluoranthene	**0.747**		0.0364	0.0125	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	207-08-9
Chrysene	**0.933**	J	0.0364	0.00862	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	218-01-9
Dibenz(a,h)Anthracene	**0.216**		0.0364	0.0161	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	53-70-3
Fluoranthene	**1.92**	J	0.0364	0.0108	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	206-44-0
Fluorene	**0.106**		0.0364	0.0117	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	86-73-7
Indeno(1,2,3-cd)pyrene	**0.600**		0.0364	0.0177	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	193-39-5
Naphthalene	**0.0211**	I	0.0364	0.0125	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	91-20-3
Phenanthrene	**1.32**	J	0.0364	0.00731	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	85-01-8
Pyrene	**1.59**	J	0.0364	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 11:41	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*64%*	*16-110*				2/12/18 11:41	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/12/18 11:41	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*88%*	*20-137*				2/12/18 11:41	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**91.8**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**8.20**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-211 @ 0.5'-2'
Lab Sample ID: L8B0057-14 (Solid) **Sampled:2/6/18 8:54**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	JU	0.0347	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	90-12-0
2-Methylnaphthalene	0.0139	JU	0.0347	0.0139	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	91-57-6
Acenaphthene	0.0136	JU	0.0347	0.0136	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	83-32-9
Acenaphthylene	0.0116	JU	0.0347	0.0116	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	208-96-8
Anthracene	0.00916	U	0.0347	0.00916	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	120-12-7
Benzo(a)anthracene	0.00968	U	0.0347	0.00968	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	56-55-3
Benzo(a)pyrene	0.0164	U	0.0347	0.0164	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	50-32-8
Benzo(b)fluoranthene	0.0155	U	0.0347	0.0155	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	205-99-2
Benzo(g,h,i)perylene	0.0161	U	0.0347	0.0161	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	207-08-9
Chrysene	0.00822	U	0.0347	0.00822	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0347	0.0154	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	53-70-3
Fluoranthene	0.0103	U	0.0347	0.0103	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	206-44-0
Fluorene	0.0111	U	0.0347	0.0111	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	86-73-7
Indeno(1,2,3-cd)pyrene	0.0169	U	0.0347	0.0169	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	193-39-5
Naphthalene	0.0120	JU	0.0347	0.0120	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	91-20-3
Phenanthrene	0.00697	U	0.0347	0.00697	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	85-01-8
Pyrene	0.0110	U	0.0347	0.0110	mg/Kg dry	1	2/8/18 14:42	2/9/18 15:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*41%*	*16-110*				2/9/18 15:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*36%*	*19-105*				2/9/18 15:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*72%*	*20-137*				2/9/18 15:40	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.3**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.67**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-211 @ 2'-4'
Lab Sample ID: L8B0057-15 (Solid) **Sampled:2/6/18 8:56**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0344	0.0114	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	90-12-0
2-Methylnaphthalene	0.0138	U	0.0344	0.0138	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	91-57-6
Acenaphthene	0.0135	U	0.0344	0.0135	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	83-32-9
Acenaphthylene	0.0114	U	0.0344	0.0114	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	208-96-8
Anthracene	0.00907	U	0.0344	0.00907	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	120-12-7
Benzo(a)anthracene	0.00959	U	0.0344	0.00959	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	56-55-3
Benzo(a)pyrene	0.0163	U	0.0344	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0344	0.0154	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0344	0.0160	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	207-08-9
Chrysene	0.00814	U	0.0344	0.00814	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0344	0.0153	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	53-70-3
Fluoranthene	0.0102	U	0.0344	0.0102	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	206-44-0
Fluorene	0.0110	U	0.0344	0.0110	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0344	0.0167	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	193-39-5
Naphthalene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	91-20-3
Phenanthrene	0.00691	U	0.0344	0.00691	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	85-01-8
Pyrene	0.0109	U	0.0344	0.0109	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:23	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/12/18 13:23	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*60%*	*19-105*				2/12/18 13:23	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/12/18 13:23	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**97.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**2.85**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-211 @ 4'-6'
Lab Sample ID: L8B0057-16 (Solid) **Sampled:2/6/18 8:57**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0344	0.0115	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	90-12-0
2-Methylnaphthalene	0.0138	U	0.0344	0.0138	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	91-57-6
Acenaphthene	0.0135	U	0.0344	0.0135	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	83-32-9
Acenaphthylene	0.0115	U	0.0344	0.0115	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	208-96-8
Anthracene	0.00908	U	0.0344	0.00908	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	120-12-7
Benzo(a)anthracene	0.00960	U	0.0344	0.00960	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	56-55-3
Benzo(a)pyrene	0.0163	U	0.0344	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0344	0.0154	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0344	0.0160	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	207-08-9
Chrysene	0.00815	U	0.0344	0.00815	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0344	0.0153	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	53-70-3
Fluoranthene	0.0102	U	0.0344	0.0102	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	206-44-0
Fluorene	0.0110	U	0.0344	0.0110	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0344	0.0167	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	193-39-5
Naphthalene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	91-20-3
Phenanthrene	0.00691	U	0.0344	0.00691	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	85-01-8
Pyrene	0.0109	U	0.0344	0.0109	mg/Kg dry	1	2/9/18 12:00	2/12/18 13:43	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*80%*	*16-110*				2/12/18 13:43	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*70%*	*19-105*				2/12/18 13:43	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*91%*	*20-137*				2/12/18 13:43	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**96.3**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**3.74**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-212 @ 0'-0.5'
Lab Sample ID: L8B0057-17 (Solid) **Sampled:2/6/18 9:02**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	U	0.0354	0.0118	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	90-12-0
2-Methylnaphthalene	0.0142	U	0.0354	0.0142	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	91-57-6
Acenaphthene	0.0139	U	0.0354	0.0139	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	83-32-9
Acenaphthylene	0.0118	U	0.0354	0.0118	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	208-96-8
Anthracene	**0.0138**	I	0.0354	0.00936	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	120-12-7
Benzo(a)anthracene	**0.106**		0.0354	0.00989	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	56-55-3
Benzo(a)pyrene	**0.145**		0.0354	0.0168	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	50-32-8
Benzo(b)fluoranthene	**0.162**		0.0354	0.0158	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	205-99-2
Benzo(g,h,i)perylene	**0.131**		0.0354	0.0165	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	191-24-2
Benzo(k)fluoranthene	**0.134**		0.0354	0.0122	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	207-08-9
Chrysene	**0.167**		0.0354	0.00840	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	218-01-9
Dibenz(a,h)Anthracene	**0.0372**		0.0354	0.0157	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	53-70-3
Fluoranthene	**0.250**		0.0354	0.0105	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	206-44-0
Fluorene	0.0114	U	0.0354	0.0114	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	86-73-7
Indeno(1,2,3-cd)pyrene	**0.108**		0.0354	0.0172	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	193-39-5
Naphthalene	0.0122	U	0.0354	0.0122	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	91-20-3
Phenanthrene	**0.0528**		0.0354	0.00712	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	85-01-8
Pyrene	**0.227**		0.0354	0.0113	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*63%*	*16-110*				2/12/18 14:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/12/18 14:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*91%*	*20-137*				2/12/18 14:04	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.94**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-212 @ 0.5'-2'
Lab Sample ID: L8B0057-18 (Solid) **Sampled:2/6/18 9:03**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	90-12-0
2-Methylnaphthalene	0.0140	U	0.0347	0.0140	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	91-57-6
Acenaphthene	0.0137	U	0.0347	0.0137	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	208-96-8
Anthracene	0.00917	U	0.0347	0.00917	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	120-12-7
Benzo(a)anthracene	0.00969	U	0.0347	0.00969	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	56-55-3
Benzo(a)pyrene	0.0165	U	0.0347	0.0165	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	50-32-8
Benzo(b)fluoranthene	0.0155	U	0.0347	0.0155	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0347	0.0162	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	207-08-9
Chrysene	0.00824	U	0.0347	0.00824	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0347	0.0154	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	53-70-3
Fluoranthene	0.0103	U	0.0347	0.0103	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	206-44-0
Fluorene	0.0112	U	0.0347	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	86-73-7
Indeno(1,2,3-cd)pyrene	0.0169	U	0.0347	0.0169	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	91-20-3
Phenanthrene	0.00698	U	0.0347	0.00698	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	85-01-8
Pyrene	0.0111	U	0.0347	0.0111	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:24	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*64%*	*16-110*				2/12/18 14:24	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/12/18 14:24	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*95%*	*20-137*				2/12/18 14:24	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.6**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.43**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-212 @ 2'-4'
Lab Sample ID: L8B0057-19 (Solid) **Sampled:2/6/18 9:05**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	90-12-0
2-Methylnaphthalene	0.0145	U	0.0361	0.0145	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	91-57-6
Acenaphthene	0.0142	U	0.0361	0.0142	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	83-32-9
Acenaphthylene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	208-96-8
Anthracene	0.00954	U	0.0361	0.00954	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	120-12-7
Benzo(a)anthracene	0.0101	U	0.0361	0.0101	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	56-55-3
Benzo(a)pyrene	0.0171	U	0.0361	0.0171	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	50-32-8
Benzo(b)fluoranthene	0.0162	U	0.0361	0.0162	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	205-99-2
Benzo(g,h,i)perylene	0.0168	U	0.0361	0.0168	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	191-24-2
Benzo(k)fluoranthene	0.0125	U	0.0361	0.0125	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	207-08-9
Chrysene	0.00856	U	0.0361	0.00856	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	218-01-9
Dibenz(a,h)Anthracene	0.0160	U	0.0361	0.0160	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	53-70-3
Fluoranthene	0.0107	U	0.0361	0.0107	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	206-44-0
Fluorene	0.0116	U	0.0361	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	86-73-7
Indeno(1,2,3-cd)pyrene	0.0176	U	0.0361	0.0176	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	193-39-5
Naphthalene	0.0125	U	0.0361	0.0125	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	91-20-3
Phenanthrene	0.00726	U	0.0361	0.00726	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	85-01-8
Pyrene	0.0115	U	0.0361	0.0115	mg/Kg dry	1	2/9/18 12:00	2/12/18 14:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*78%*	*16-110*				2/12/18 14:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*67%*	*19-105*				2/12/18 14:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/12/18 14:44	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**92.5**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**7.55**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-212 @ 4'-6'
Lab Sample ID: L8B0057-20 (Solid) **Sampled:2/6/18 9:06**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0125	U	0.0376	0.0125	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	90-12-0
2-Methylnaphthalene	0.0151	U	0.0376	0.0151	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	91-57-6
Acenaphthene	0.0148	U	0.0376	0.0148	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	83-32-9
Acenaphthylene	0.0125	U	0.0376	0.0125	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	208-96-8
Anthracene	0.00993	U	0.0376	0.00993	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	120-12-7
Benzo(a)anthracene	**0.0218**	I	0.0376	0.0105	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	56-55-3
Benzo(a)pyrene	**0.0248**	I	0.0376	0.0178	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	50-32-8
Benzo(b)fluoranthene	**0.0316**	I	0.0376	0.0168	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	205-99-2
Benzo(g,h,i)perylene	**0.0214**	I	0.0376	0.0175	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	191-24-2
Benzo(k)fluoranthene	**0.0226**	I	0.0376	0.0130	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	207-08-9
Chrysene	**0.0301**	I	0.0376	0.00891	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	218-01-9
Dibenz(a,h)Anthracene	0.0167	U	0.0376	0.0167	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	53-70-3
Fluoranthene	**0.0402**		0.0376	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	206-44-0
Fluorene	0.0121	U	0.0376	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	86-73-7
Indeno(1,2,3-cd)pyrene	0.0183	U	0.0376	0.0183	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	193-39-5
Naphthalene	0.0130	U	0.0376	0.0130	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	91-20-3
Phenanthrene	**0.0162**	I	0.0376	0.00756	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	85-01-8
Pyrene	**0.0369**	I	0.0376	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 17:55	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*57%*	*16-110*				2/12/18 17:55	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*48%*	*19-105*				2/12/18 17:55	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*70%*	*20-137*				2/12/18 17:55	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**88.3**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**11.7**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-213 @ 0'-0.5'
Lab Sample ID: L8B0057-21 (Solid) **Sampled:2/6/18 9:11**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	90-12-0
2-Methylnaphthalene	0.0141	U	0.0352	0.0141	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	208-96-8
Anthracene	0.00928	U	0.0352	0.00928	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	120-12-7
Benzo(a)anthracene	**0.0499**		0.0352	0.00981	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	56-55-3
Benzo(a)pyrene	**0.0619**		0.0352	0.0167	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	50-32-8
Benzo(b)fluoranthene	**0.0749**		0.0352	0.0157	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	205-99-2
Benzo(g,h,i)perylene	**0.0464**		0.0352	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	191-24-2
Benzo(k)fluoranthene	**0.0520**		0.0352	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	207-08-9
Chrysene	**0.0671**		0.0352	0.00833	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	218-01-9
Dibenz(a,h)Anthracene	**0.0207**	I	0.0352	0.0156	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	53-70-3
Fluoranthene	**0.100**		0.0352	0.0104	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0436**		0.0352	0.0171	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	193-39-5
Naphthalene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	91-20-3
Phenanthrene	**0.0418**		0.0352	0.00707	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	85-01-8
Pyrene	**0.0942**		0.0352	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:16	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*66%*	*16-110*				2/12/18 18:16	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*54%*	*19-105*				2/12/18 18:16	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*95%*	*20-137*				2/12/18 18:16	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**95.0**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.03**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-213 @ 0.5'-2'
Lab Sample ID: L8B0057-22 (Solid) **Sampled:2/6/18 9:12**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	208-96-8
Anthracene	0.00928	U	0.0351	0.00928	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	120-12-7
Benzo(a)anthracene	0.00980	U	0.0351	0.00980	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	56-55-3
Benzo(a)pyrene	0.0167	U	0.0351	0.0167	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	207-08-9
Chrysene	0.00833	U	0.0351	0.00833	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0351	0.0171	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	91-20-3
Phenanthrene	0.00706	U	0.0351	0.00706	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/8/18 14:42	2/9/18 22:46	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*53%*	*16-110*				2/9/18 22:46	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/9/18 22:46	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*72%*	*20-137*				2/9/18 22:46	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**95.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**4.12**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-213 @ 2'-4'
Lab Sample ID: L8B0057-23 (Solid) **Sampled:2/6/18 9:15**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0112	U	0.0336	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	90-12-0
2-Methylnaphthalene	0.0135	U	0.0336	0.0135	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	91-57-6
Acenaphthene	0.0132	U	0.0336	0.0132	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	83-32-9
Acenaphthylene	0.0112	U	0.0336	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	208-96-8
Anthracene	0.00888	U	0.0336	0.00888	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	120-12-7
Benzo(a)anthracene	0.00938	U	0.0336	0.00938	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	56-55-3
Benzo(a)pyrene	0.0159	U	0.0336	0.0159	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	50-32-8
Benzo(b)fluoranthene	0.0150	U	0.0336	0.0150	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	205-99-2
Benzo(g,h,i)perylene	0.0156	U	0.0336	0.0156	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	191-24-2
Benzo(k)fluoranthene	0.0116	U	0.0336	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	207-08-9
Chrysene	0.00797	U	0.0336	0.00797	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	218-01-9
Dibenz(a,h)Anthracene	0.0149	U	0.0336	0.0149	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	53-70-3
Fluoranthene	0.00998	U	0.0336	0.00998	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	206-44-0
Fluorene	0.0108	U	0.0336	0.0108	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	86-73-7
Indeno(1,2,3-cd)pyrene	0.0163	U	0.0336	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	193-39-5
Naphthalene	0.0116	U	0.0336	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	91-20-3
Phenanthrene	0.00676	U	0.0336	0.00676	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	85-01-8
Pyrene	0.0107	U	0.0336	0.0107	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:36	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*80%*	*16-110*				2/12/18 18:36	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*68%*	*19-105*				2/12/18 18:36	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*92%*	*20-137*				2/12/18 18:36	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**98.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**1.89**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-213 @ 4'-6'
Lab Sample ID: L8B0057-24 (Solid) **Sampled:2/6/18 9:17**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	90-12-0
2-Methylnaphthalene	0.0139	U	0.0347	0.0139	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	91-57-6
Acenaphthene	0.0136	U	0.0347	0.0136	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	208-96-8
Anthracene	0.00916	U	0.0347	0.00916	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	120-12-7
Benzo(a)anthracene	0.00968	U	0.0347	0.00968	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	56-55-3
Benzo(a)pyrene	0.0164	U	0.0347	0.0164	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	50-32-8
Benzo(b)fluoranthene	0.0155	U	0.0347	0.0155	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	205-99-2
Benzo(g,h,i)perylene	0.0161	U	0.0347	0.0161	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	207-08-9
Chrysene	0.00822	U	0.0347	0.00822	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0347	0.0154	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	53-70-3
Fluoranthene	0.0103	U	0.0347	0.0103	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	206-44-0
Fluorene	0.0111	U	0.0347	0.0111	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	86-73-7
Indeno(1,2,3-cd)pyrene	0.0169	U	0.0347	0.0169	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	91-20-3
Phenanthrene	0.00697	U	0.0347	0.00697	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	85-01-8
Pyrene	0.0110	U	0.0347	0.0110	mg/Kg dry	1	2/9/18 12:00	2/12/18 18:57	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*73%*	*16-110*				2/12/18 18:57	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*63%*	*19-105*				2/12/18 18:57	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*89%*	*20-137*				2/12/18 18:57	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**97.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**2.05**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-214 @ 0'-0.5'
Lab Sample ID: L8B0057-25 (Solid) **Sampled:2/6/18 9:55**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0126	U	0.0378	0.0126	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	90-12-0
2-Methylnaphthalene	0.0152	U	0.0378	0.0152	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	91-57-6
Acenaphthene	0.0149	U	0.0378	0.0149	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	83-32-9
Acenaphthylene	0.0126	U	0.0378	0.0126	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	208-96-8
Anthracene	0.00999	U	0.0378	0.00999	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	120-12-7
Benzo(a)anthracene	0.0106	U	0.0378	0.0106	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	56-55-3
Benzo(a)pyrene	0.0179	U	0.0378	0.0179	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	50-32-8
Benzo(b)fluoranthene	0.0169	U	0.0378	0.0169	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	205-99-2
Benzo(g,h,i)perylene	0.0176	U	0.0378	0.0176	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	191-24-2
Benzo(k)fluoranthene	0.0131	U	0.0378	0.0131	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	207-08-9
Chrysene	0.00897	U	0.0378	0.00897	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	218-01-9
Dibenz(a,h)Anthracene	0.0168	U	0.0378	0.0168	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	53-70-3
Fluoranthene	0.0112	U	0.0378	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	206-44-0
Fluorene	0.0121	U	0.0378	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	86-73-7
Indeno(1,2,3-cd)pyrene	0.0184	U	0.0378	0.0184	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	193-39-5
Naphthalene	0.0131	U	0.0378	0.0131	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	91-20-3
Phenanthrene	0.00760	U	0.0378	0.00760	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	85-01-8
Pyrene	0.0120	U	0.0378	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:17	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*65%*	*16-110*				2/12/18 19:17	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/12/18 19:17	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*83%*	*20-137*				2/12/18 19:17	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**85.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**14.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-214 @ 0.5'-2'
Lab Sample ID: L8B0057-26 (Solid) **Sampled:2/6/18 9:56**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	91-57-6
Acenaphthene	0.0137	U	0.0350	0.0137	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	83-32-9
Acenaphthylene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	208-96-8
Anthracene	0.00923	U	0.0350	0.00923	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	120-12-7
Benzo(a)anthracene	0.00976	U	0.0350	0.00976	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	207-08-9
Chrysene	0.00829	U	0.0350	0.00829	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0350	0.0155	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	91-20-3
Phenanthrene	0.00703	U	0.0350	0.00703	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:38	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*66%*	*16-110*				2/12/18 20:38	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*57%*	*19-105*				2/12/18 20:38	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/12/18 20:38	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**96.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**3.94**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-215 @ 0'-0.5'
Lab Sample ID: L8B0057-29 (Solid) **Sampled:2/6/18 10:11**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0122	U	0.0365	0.0122	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	90-12-0
2-Methylnaphthalene	0.0147	U	0.0365	0.0147	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	91-57-6
Acenaphthene	0.0144	U	0.0365	0.0144	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	83-32-9
Acenaphthylene	0.0122	U	0.0365	0.0122	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	208-96-8
Anthracene	0.00965	U	0.0365	0.00965	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	120-12-7
Benzo(a)anthracene	0.0102	U	0.0365	0.0102	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	56-55-3
Benzo(a)pyrene	0.0173	U	0.0365	0.0173	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	50-32-8
Benzo(b)fluoranthene	0.0163	U	0.0365	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	205-99-2
Benzo(g,h,i)perylene	**0.0175**	I	0.0365	0.0170	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	191-24-2
Benzo(k)fluoranthene	0.0126	U	0.0365	0.0126	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	207-08-9
Chrysene	0.00866	U	0.0365	0.00866	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	218-01-9
Dibenz(a,h)Anthracene	0.0162	U	0.0365	0.0162	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	53-70-3
Fluoranthene	0.0109	U	0.0365	0.0109	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	206-44-0
Fluorene	0.0117	U	0.0365	0.0117	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	86-73-7
Indeno(1,2,3-cd)pyrene	0.0178	U	0.0365	0.0178	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	193-39-5
Naphthalene	0.0126	U	0.0365	0.0126	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	91-20-3
Phenanthrene	0.00735	U	0.0365	0.00735	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	85-01-8
Pyrene	0.0116	U	0.0365	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:58	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/12/18 20:58	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*58%*	*19-105*				2/12/18 20:58	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*94%*	*20-137*				2/12/18 20:58	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**92.2**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**7.78**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-215 @ 0.5'-2'
Lab Sample ID: L8B0057-30 (Solid) **Sampled:2/6/18 10:13**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0342	0.0114	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	90-12-0
2-Methylnaphthalene	0.0138	U	0.0342	0.0138	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	91-57-6
Acenaphthene	0.0134	U	0.0342	0.0134	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	83-32-9
Acenaphthylene	0.0114	U	0.0342	0.0114	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	208-96-8
Anthracene	0.00903	U	0.0342	0.00903	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	120-12-7
Benzo(a)anthracene	0.00955	U	0.0342	0.00955	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	56-55-3
Benzo(a)pyrene	0.0162	U	0.0342	0.0162	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	50-32-8
Benzo(b)fluoranthene	0.0153	U	0.0342	0.0153	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	205-99-2
Benzo(g,h,i)perylene	0.0159	U	0.0342	0.0159	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	191-24-2
Benzo(k)fluoranthene	0.0118	U	0.0342	0.0118	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	207-08-9
Chrysene	0.00811	U	0.0342	0.00811	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0342	0.0152	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	53-70-3
Fluoranthene	0.0102	U	0.0342	0.0102	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	206-44-0
Fluorene	0.0110	U	0.0342	0.0110	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	86-73-7
Indeno(1,2,3-cd)pyrene	0.0166	U	0.0342	0.0166	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	193-39-5
Naphthalene	0.0118	U	0.0342	0.0118	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	91-20-3
Phenanthrene	0.00688	U	0.0342	0.00688	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	85-01-8
Pyrene	0.0109	U	0.0342	0.0109	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:18	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*78%*	*16-110*				2/12/18 21:18	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*65%*	*19-105*				2/12/18 21:18	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*97%*	*20-137*				2/12/18 21:18	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**99.0**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**0.973**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-216 @ 0'-0.5'
Lab Sample ID: L8B0057-33 (Solid) **Sampled:2/6/18 10:38**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	208-96-8
Anthracene	0.00922	U	0.0349	0.00922	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	120-12-7
Benzo(a)anthracene	0.00974	U	0.0349	0.00974	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	56-55-3
Benzo(a)pyrene	0.0165	U	0.0349	0.0165	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	207-08-9
Chrysene	0.00827	U	0.0349	0.00827	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	193-39-5
Naphthalene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	91-20-3
Phenanthrene	0.00702	U	0.0349	0.00702	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/9/18 12:00	2/12/18 21:39	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*68%*	*16-110*				2/12/18 21:39	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*59%*	*19-105*				2/12/18 21:39	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*89%*	*20-137*				2/12/18 21:39	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**98.6**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**1.43**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-216 @ 0.5'-2'
Lab Sample ID: L8B0057-34 (Solid) **Sampled:2/6/18 10:40**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	90-12-0
2-Methylnaphthalene	0.0138	U	0.0343	0.0138	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	91-57-6
Acenaphthene	0.0135	U	0.0343	0.0135	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	83-32-9
Acenaphthylene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	208-96-8
Anthracene	0.00905	U	0.0343	0.00905	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	120-12-7
Benzo(a)anthracene	0.00957	U	0.0343	0.00957	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	56-55-3
Benzo(a)pyrene	0.0163	U	0.0343	0.0163	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	50-32-8
Benzo(b)fluoranthene	0.0153	U	0.0343	0.0153	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	205-99-2
Benzo(g,h,i)perylene	0.0159	U	0.0343	0.0159	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	191-24-2
Benzo(k)fluoranthene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	207-08-9
Chrysene	0.00813	U	0.0343	0.00813	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0343	0.0152	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	53-70-3
Fluoranthene	0.0102	U	0.0343	0.0102	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	206-44-0
Fluorene	0.0110	U	0.0343	0.0110	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0343	0.0167	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	193-39-5
Naphthalene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	91-20-3
Phenanthrene	0.00689	U	0.0343	0.00689	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	85-01-8
Pyrene	0.0109	U	0.0343	0.0109	mg/Kg dry	1	2/9/18 12:00	2/12/18 20:17	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*75%*	*16-110*				2/12/18 20:17	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*65%*	*19-105*				2/12/18 20:17	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*90%*	*20-137*				2/12/18 20:17	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**98.8**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**1.23**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-217 @ 0'-0.5'
Lab Sample ID: L8B0057-37 (Solid) **Sampled:2/6/18 10:47**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0340	0.0113	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	90-12-0
2-Methylnaphthalene	0.0137	U	0.0340	0.0137	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	91-57-6
Acenaphthene	0.0134	U	0.0340	0.0134	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	83-32-9
Acenaphthylene	0.0113	U	0.0340	0.0113	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	208-96-8
Anthracene	0.00899	U	0.0340	0.00899	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	120-12-7
Benzo(a)anthracene	0.00950	U	0.0340	0.00950	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	56-55-3
Benzo(a)pyrene	0.0161	U	0.0340	0.0161	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	50-32-8
Benzo(b)fluoranthene	0.0152	U	0.0340	0.0152	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	205-99-2
Benzo(g,h,i)perylene	0.0158	U	0.0340	0.0158	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0340	0.0117	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	207-08-9
Chrysene	0.00807	U	0.0340	0.00807	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	218-01-9
Dibenz(a,h)Anthracene	0.0151	U	0.0340	0.0151	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	53-70-3
Fluoranthene	0.0101	U	0.0340	0.0101	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	206-44-0
Fluorene	0.0109	U	0.0340	0.0109	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	86-73-7
Indeno(1,2,3-cd)pyrene	0.0165	U	0.0340	0.0165	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	193-39-5
Naphthalene	0.0117	U	0.0340	0.0117	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	91-20-3
Phenanthrene	0.00684	U	0.0340	0.00684	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	85-01-8
Pyrene	0.0108	U	0.0340	0.0108	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:57	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*49%*	*16-110*				2/12/18 19:57	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/12/18 19:57	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*89%*	*20-137*				2/12/18 19:57	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**97.8**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**2.21**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-217 @ 0.5'-2'
Lab Sample ID: L8B0057-38 (Solid) **Sampled:2/6/18 10:49**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0112	U	0.0337	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	90-12-0
2-Methylnaphthalene	0.0136	U	0.0337	0.0136	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	91-57-6
Acenaphthene	0.0133	U	0.0337	0.0133	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	83-32-9
Acenaphthylene	0.0112	U	0.0337	0.0112	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	208-96-8
Anthracene	0.00890	U	0.0337	0.00890	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	120-12-7
Benzo(a)anthracene	0.00941	U	0.0337	0.00941	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	56-55-3
Benzo(a)pyrene	0.0160	U	0.0337	0.0160	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	50-32-8
Benzo(b)fluoranthene	0.0151	U	0.0337	0.0151	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	205-99-2
Benzo(g,h,i)perylene	0.0157	U	0.0337	0.0157	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	191-24-2
Benzo(k)fluoranthene	0.0116	U	0.0337	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	207-08-9
Chrysene	0.00799	U	0.0337	0.00799	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	218-01-9
Dibenz(a,h)Anthracene	0.0150	U	0.0337	0.0150	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	53-70-3
Fluoranthene	0.0100	U	0.0337	0.0100	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	206-44-0
Fluorene	0.0108	U	0.0337	0.0108	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	86-73-7
Indeno(1,2,3-cd)pyrene	0.0164	U	0.0337	0.0164	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	193-39-5
Naphthalene	0.0116	U	0.0337	0.0116	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	91-20-3
Phenanthrene	0.00678	U	0.0337	0.00678	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	85-01-8
Pyrene	0.0107	U	0.0337	0.0107	mg/Kg dry	1	2/9/18 12:00	2/12/18 19:37	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*88%*	*16-110*				2/12/18 19:37	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*75%*	*19-105*				2/12/18 19:37	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*103%*	*20-137*				2/12/18 19:37	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**98.8**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**1.21**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-219 @ 0.0-0.5
Lab Sample ID: L8B0057-39 (Solid) **Sampled:2/6/18 12:21**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0123	UQ	0.0369	0.0123	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	90-12-0
2-Methylnaphthalene	0.0148	UQ	0.0369	0.0148	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	91-57-6
Acenaphthene	**0.0177**	IQ	0.0369	0.0145	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	83-32-9
Acenaphthylene	0.0123	UQ	0.0369	0.0123	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	208-96-8
Anthracene	**0.0509**	Q	0.0369	0.00974	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	120-12-7
Benzo(a)anthracene	**0.129**	Q	0.0369	0.0103	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	56-55-3
Benzo(a)pyrene	**0.157**	Q	0.0369	0.0175	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	50-32-8
Benzo(b)fluoranthene	**0.202**	Q	0.0369	0.0165	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	205-99-2
Benzo(g,h,i)perylene	**0.115**	Q	0.0369	0.0171	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	191-24-2
Benzo(k)fluoranthene	**0.132**	Q	0.0369	0.0127	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	207-08-9
Chrysene	**0.155**	Q	0.0369	0.00874	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	218-01-9
Dibenz(a,h)Anthracene	**0.0491**	Q	0.0369	0.0164	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	53-70-3
Fluoranthene	**0.243**	Q	0.0369	0.0110	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	206-44-0
Fluorene	**0.0155**	IQ	0.0369	0.0118	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0999**	Q	0.0369	0.0179	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	193-39-5
Naphthalene	0.0127	UQ	0.0369	0.0127	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	91-20-3
Phenanthrene	**0.171**	Q	0.0369	0.00741	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	85-01-8
Pyrene	**0.226**	Q	0.0369	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:37	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*56%*	*16-110*				2/22/18 22:37	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*46%*	*19-105*				2/22/18 22:37	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*73%*	*20-137*				2/22/18 22:37	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**89.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**10.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**12.6**		5.61	0.0674	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:12	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-219 @ 0.5-2
Lab Sample ID: L8B0057-40 (Solid) **Sampled:2/6/18 12:23**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0111	UQ	0.0333	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	90-12-0
2-Methylnaphthalene	0.0134	UQ	0.0333	0.0134	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	91-57-6
Acenaphthene	0.0131	UQ	0.0333	0.0131	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	83-32-9
Acenaphthylene	0.0111	UQ	0.0333	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	208-96-8
Anthracene	0.00878	UQ	0.0333	0.00878	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	120-12-7
Benzo(a)anthracene	0.00928	UQ	0.0333	0.00928	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	56-55-3
Benzo(a)pyrene	0.0158	UQ	0.0333	0.0158	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	50-32-8
Benzo(b)fluoranthene	0.0149	UQ	0.0333	0.0149	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	205-99-2
Benzo(g,h,i)perylene	0.0155	UQ	0.0333	0.0155	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	191-24-2
Benzo(k)fluoranthene	0.0115	UQ	0.0333	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	207-08-9
Chrysene	0.00788	UQ	0.0333	0.00788	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	218-01-9
Dibenz(a,h)Anthracene	0.0148	UQ	0.0333	0.0148	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	53-70-3
Fluoranthene	0.00988	UQ	0.0333	0.00988	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	206-44-0
Fluorene	0.0107	UQ	0.0333	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	86-73-7
Indeno(1,2,3-cd)pyrene	0.0162	UQ	0.0333	0.0162	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	193-39-5
Naphthalene	0.0115	UQ	0.0333	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	91-20-3
Phenanthrene	0.00669	UQ	0.0333	0.00669	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	85-01-8
Pyrene	0.0106	UQ	0.0333	0.0106	mg/Kg dry	1	2/21/18 13:00	2/22/18 22:57	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*68%*	*16-110*				2/22/18 22:57	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*61%*	*19-105*				2/22/18 22:57	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*90%*	*20-137*				2/22/18 22:57	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**97.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**2.06**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**0.767**	I	5.11	0.0613	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:23	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-218 @ 0.0-0.5
Lab Sample ID: L8B0057-43 (Solid) **Sampled:2/6/18 12:10**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0119	UQ	0.0357	0.0119	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	90-12-0
2-Methylnaphthalene	0.0143	UQ	0.0357	0.0143	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	91-57-6
Acenaphthene	**0.0271**	IQ	0.0357	0.0140	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	83-32-9
Acenaphthylene	0.0119	UQ	0.0357	0.0119	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	208-96-8
Anthracene	**0.0739**	Q	0.0357	0.00942	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	120-12-7
Benzo(a)anthracene	**0.208**	Q	0.0357	0.00996	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	56-55-3
Benzo(a)pyrene	**0.217**	Q	0.0357	0.0169	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	50-32-8
Benzo(b)fluoranthene	**0.198**	Q	0.0357	0.0160	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	205-99-2
Benzo(g,h,i)perylene	**0.142**	Q	0.0357	0.0166	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	191-24-2
Benzo(k)fluoranthene	**0.177**	Q	0.0357	0.0123	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	207-08-9
Chrysene	**0.219**	Q	0.0357	0.00846	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	218-01-9
Dibenz(a,h)Anthracene	**0.0478**	Q	0.0357	0.0158	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	53-70-3
Fluoranthene	**0.429**	Q	0.0357	0.0106	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	206-44-0
Fluorene	**0.0250**	IQ	0.0357	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	86-73-7
Indeno(1,2,3-cd)pyrene	**0.139**	Q	0.0357	0.0173	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	193-39-5
Naphthalene	0.0123	UQ	0.0357	0.0123	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	91-20-3
Phenanthrene	**0.289**	Q	0.0357	0.00717	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	85-01-8
Pyrene	**0.334**	Q	0.0357	0.0114	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:18	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*71%*	*16-110*				2/22/18 23:18	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*63%*	*19-105*				2/22/18 23:18	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*77%*	*20-137*				2/22/18 23:18	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**92.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**7.05**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**12.0**		5.27	0.0633	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:25	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: FLB-218 @ 0.5-2
Lab Sample ID: L8B0057-44 (Solid) **Sampled:2/6/18 12:13**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0112	UQ	0.0335	0.0112	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	90-12-0
2-Methylnaphthalene	0.0135	UQ	0.0335	0.0135	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	91-57-6
Acenaphthene	0.0132	UQ	0.0335	0.0132	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	83-32-9
Acenaphthylene	0.0112	UQ	0.0335	0.0112	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	208-96-8
Anthracene	0.00884	UQ	0.0335	0.00884	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	120-12-7
Benzo(a)anthracene	0.00934	UQ	0.0335	0.00934	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	56-55-3
Benzo(a)pyrene	0.0159	UQ	0.0335	0.0159	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	50-32-8
Benzo(b)fluoranthene	0.0150	UQ	0.0335	0.0150	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	205-99-2
Benzo(g,h,i)perylene	0.0156	UQ	0.0335	0.0156	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	191-24-2
Benzo(k)fluoranthene	0.0116	UQ	0.0335	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	207-08-9
Chrysene	0.00794	UQ	0.0335	0.00794	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	218-01-9
Dibenz(a,h)Anthracene	0.0149	UQ	0.0335	0.0149	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	53-70-3
Fluoranthene	0.00994	UQ	0.0335	0.00994	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	206-44-0
Fluorene	0.0107	UQ	0.0335	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	86-73-7
Indeno(1,2,3-cd)pyrene	0.0163	UQ	0.0335	0.0163	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	193-39-5
Naphthalene	0.0116	UQ	0.0335	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	91-20-3
Phenanthrene	0.00673	UQ	0.0335	0.00673	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	85-01-8
Pyrene	0.0106	UQ	0.0335	0.0106	mg/Kg dry	1	2/21/18 13:00	2/22/18 23:38	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*44%*	*16-110*				2/22/18 23:38	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*40%*	*19-105*				2/22/18 23:38	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*73%*	*20-137*				2/22/18 23:38	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**97.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**2.08**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**0.853**	I	5.11	0.0613	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:27	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-42 @ 0.0-0.5
Lab Sample ID: L8B0057-49 (Solid) **Sampled:2/6/18 13:30**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**92.8**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**7.22**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**7.79**		5.39	0.0647	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:29	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-42 @ 0.5-2
Lab Sample ID: L8B0057-50 (Solid) **Sampled:2/6/18 13:31**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.7**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.32**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**0.965**	I	5.28	0.0634	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:31	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-43 @ 0.0-0.5
Lab Sample ID: L8B0057-53 (Solid) **Sampled:2/6/18 13:12**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**93.0**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**7.05**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**8.21**		5.27	0.0633	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:33	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-43 @ 0.5-2
Lab Sample ID: L8B0057-54 (Solid) **Sampled:2/6/18 13:15**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**95.2**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**4.82**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**1.01**	I	5.25	0.0630	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:40	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-44 @ 0.0-0.5
Lab Sample ID: L8B0057-57 (Solid) **Sampled:2/6/18 13:01**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**93.1**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**6.94**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**10.9**		5.37	0.0645	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:42	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-44 @ 0.5-2
Lab Sample ID: L8B0057-58 (Solid) **Sampled:2/6/18 13:02**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.9**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Percent Moisture	**5.15**		0.100	0.100	%	1	2/7/18 16:45	2/10/18 17:59	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**1.78**	I	5.27	0.0633	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:44	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-45 @ 0.0-0.5
Lab Sample ID: L8B0057-61 (Solid) **Sampled:2/6/18 13:22**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:LA
% Solids	**94.2**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Percent Moisture	**5.81**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**3.27**	I	5.10	0.0612	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:46	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-45 @ 0.5-2
Lab Sample ID: L8B0057-62 (Solid) **Sampled:2/6/18 13:23**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Percent Moisture	**4.88**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**0.945**	I	5.26	0.0631	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:48	7440-47-3

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-46 @ 0.0-0.5
Lab Sample ID: L8B0057-65 (Solid) **Sampled:2/6/18 12:43**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**77.3**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Percent Moisture	**22.7**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**27.9**		6.34	0.0761	mg/Kg dry	1	2/8/18 13:00	2/9/18 12:50	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Sample Results
(Continued)

Client Sample ID: CBT-46 @ 0.5-2
Lab Sample ID: L8B0057-66 (Solid) **Sampled:2/6/18 12:44**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.6**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Percent Moisture	**5.39**		0.100	0.100	%	1	2/7/18 16:45	2/7/18 16:45	
Total Metal Analysis by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Chromium	**0.995**	I	5.29	0.0634	mg/Kg dry	1	2/8/18 13:00	2/9/18 13:04	7440-47-3

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control

PAHs (SVOCs) by Method 8270D

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100											
Blank (B8B0100-BLK1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.989*		*mg/Kg wet*	*1.67*		*59*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.831*		*mg/Kg wet*	*1.67*		*50*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.58*		*mg/Kg wet*	*1.67*		*95*	*20-137*		
LCS (B8B0100-BS1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	1.23		0.0333	0.0111	mg/Kg wet	1.67		74	39-116		
2-Methylnaphthalene	1.21		0.0333	0.0134	mg/Kg wet	1.67		73	37-112		
Acenaphthene	1.29		0.0333	0.0131	mg/Kg wet	1.67		77	41-116		
Acenaphthylene	1.29		0.0333	0.0111	mg/Kg wet	1.67		77	42-126		
Anthracene	1.44		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.45		0.0333	0.00930	mg/Kg wet	1.67		87	40-129		
Benzo(a)pyrene	1.56		0.0333	0.0158	mg/Kg wet	1.67		94	36-141		
Benzo(b)fluoranthene	1.52		0.0333	0.0149	mg/Kg wet	1.67		91	34-139		
Benzo(g,h,i)perylene	1.66		0.0333	0.0155	mg/Kg wet	1.67		100	32-141		
Benzo(k)fluoranthene	1.54		0.0333	0.0115	mg/Kg wet	1.67		92	31-139		
Chrysene	1.52		0.0333	0.00790	mg/Kg wet	1.67		91	41-124		
Dibenz(a,h)Anthracene	1.64		0.0333	0.0148	mg/Kg wet	1.67		98	35-143		
Fluoranthene	1.32		0.0333	0.00990	mg/Kg wet	1.67		79	38-132		
Fluorene	1.28		0.0333	0.0107	mg/Kg wet	1.67		77	41-121		
Indeno(1,2,3-cd)pyrene	1.61		0.0333	0.0162	mg/Kg wet	1.67		97	27-160		
Naphthalene	1.22		0.0333	0.0115	mg/Kg wet	1.67		73	37-113		
Phenanthrene	1.39		0.0333	0.00670	mg/Kg wet	1.67		83	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100 (Continued)											
LCS (B8B0100-BS1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
Pyrene	1.56		0.0333	0.0106	mg/Kg wet	1.67		94	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.34*		*mg/Kg wet*	*1.67*		*80*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.13*		*mg/Kg wet*	*1.67*		*68*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.54*		*mg/Kg wet*	*1.67*		*92*	*20-137*		
LCS Dup (B8B0100-BSD1)					Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.909		0.0333	0.0111	mg/Kg wet	1.67		55	39-116	30	30
2-Methylnaphthalene	0.911		0.0333	0.0134	mg/Kg wet	1.67		55	37-112	28	30
Acenaphthene	0.969		0.0333	0.0131	mg/Kg wet	1.67		58	41-116	28	30
Acenaphthylene	0.967		0.0333	0.0111	mg/Kg wet	1.67		58	42-126	29	30
Anthracene	1.21		0.0333	0.00880	mg/Kg wet	1.67		73	39-127	17	30
Benzo(a)anthracene	1.24		0.0333	0.00930	mg/Kg wet	1.67		74	40-129	16	30
Benzo(a)pyrene	1.34		0.0333	0.0158	mg/Kg wet	1.67		80	36-141	15	30
Benzo(b)fluoranthene	1.28		0.0333	0.0149	mg/Kg wet	1.67		77	34-139	17	30
Benzo(g,h,i)perylene	1.38		0.0333	0.0155	mg/Kg wet	1.67		83	32-141	19	30
Benzo(k)fluoranthene	1.32		0.0333	0.0115	mg/Kg wet	1.67		79	31-139	16	30
Chrysene	1.29		0.0333	0.00790	mg/Kg wet	1.67		77	41-124	17	30
Dibenz(a,h)Anthracene	1.37		0.0333	0.0148	mg/Kg wet	1.67		82	35-143	18	30
Fluoranthene	1.12		0.0333	0.00990	mg/Kg wet	1.67		67	38-132	17	30
Fluorene	1.01		0.0333	0.0107	mg/Kg wet	1.67		60	41-121	24	30
Indeno(1,2,3-cd)pyrene	1.35		0.0333	0.0162	mg/Kg wet	1.67		81	27-160	18	30
Naphthalene	0.903		0.0333	0.0115	mg/Kg wet	1.67		54	37-113	30	30
Phenanthrene	1.17		0.0333	0.00670	mg/Kg wet	1.67		70	50-115	17	30
Pyrene	1.35		0.0333	0.0106	mg/Kg wet	1.67		81	42-138	15	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.978*		*mg/Kg wet*	*1.67*		*59*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.827*		*mg/Kg wet*	*1.67*		*50*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg wet*	*1.67*		*77*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100 (Continued)											
Matrix Spike (B8B0100-MS1)		**Source: L8B0057-14**			Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.631	J	0.0350	0.0117	mg/Kg dry	1.75	ND	36	39-116		
2-Methylnaphthalene	0.614	J	0.0350	0.0141	mg/Kg dry	1.75	ND	35	37-112		
Acenaphthene	0.705	J	0.0350	0.0138	mg/Kg dry	1.75	ND	40	41-116		
Acenaphthylene	0.684	J	0.0350	0.0117	mg/Kg dry	1.75	ND	39	41-118		
Anthracene	1.11		0.0350	0.00925	mg/Kg dry	1.75	ND	64	39-127		
Benzo(a)anthracene	1.21		0.0350	0.00978	mg/Kg dry	1.75	ND	69	40-129		
Benzo(a)pyrene	1.33		0.0350	0.0166	mg/Kg dry	1.75	ND	76	36-141		
Benzo(b)fluoranthene	1.29		0.0350	0.0157	mg/Kg dry	1.75	ND	74	34-139		
Benzo(g,h,i)perylene	1.36		0.0350	0.0163	mg/Kg dry	1.75	ND	78	32-141		
Benzo(k)fluoranthene	1.33		0.0350	0.0121	mg/Kg dry	1.75	ND	76	31-139		
Chrysene	1.28		0.0350	0.00831	mg/Kg dry	1.75	ND	73	41-124		
Dibenz(a,h)Anthracene	1.36		0.0350	0.0156	mg/Kg dry	1.75	ND	78	35-143		
Fluoranthene	1.09		0.0350	0.0104	mg/Kg dry	1.75	ND	62	38-132		
Fluorene	0.777		0.0350	0.0112	mg/Kg dry	1.75	ND	44	41-121		
Indeno(1,2,3-cd)pyrene	1.33		0.0350	0.0170	mg/Kg dry	1.75	ND	76	27-160		
Naphthalene	0.619	J	0.0350	0.0121	mg/Kg dry	1.75	ND	35	37-113		
Phenanthrene	1.03		0.0350	0.00704	mg/Kg dry	1.75	ND	59	50-115		
Pyrene	1.30		0.0350	0.0111	mg/Kg dry	1.75	ND	74	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.657*		*mg/Kg dry*	*1.75*		*38*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.545*		*mg/Kg dry*	*1.75*		*31*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg dry*	*1.75*		*73*	*20-137*		
Matrix Spike Dup (B8B0100-MSD1)		**Source: L8B0057-14**			Prepared: 2/8/2018 Analyzed: 2/9/2018						
1-Methylnaphthalene	0.779		0.0352	0.0117	mg/Kg dry	1.76	ND	44	39-116	21	30
2-Methylnaphthalene	0.768		0.0352	0.0142	mg/Kg dry	1.76	ND	44	37-112	22	30
Acenaphthene	0.858		0.0352	0.0139	mg/Kg dry	1.76	ND	49	41-116	20	30
Acenaphthylene	0.832		0.0352	0.0117	mg/Kg dry	1.76	ND	47	41-118	20	30
Anthracene	1.18		0.0352	0.00930	mg/Kg dry	1.76	ND	67	39-127	6	30
Benzo(a)anthracene	1.29		0.0352	0.00983	mg/Kg dry	1.76	ND	73	40-129	6	30
Benzo(a)pyrene	1.40		0.0352	0.0167	mg/Kg dry	1.76	ND	79	36-141	5	30
Benzo(b)fluoranthene	1.36		0.0352	0.0158	mg/Kg dry	1.76	ND	77	34-139	5	30
Benzo(g,h,i)perylene	1.51		0.0352	0.0164	mg/Kg dry	1.76	ND	85	32-141	10	30
Benzo(k)fluoranthene	1.40		0.0352	0.0122	mg/Kg dry	1.76	ND	80	31-139	5	30
Chrysene	1.37		0.0352	0.00835	mg/Kg dry	1.76	ND	78	41-124	7	30
Dibenz(a,h)Anthracene	1.46		0.0352	0.0156	mg/Kg dry	1.76	ND	83	35-143	7	30
Fluoranthene	1.16		0.0352	0.0105	mg/Kg dry	1.76	ND	66	38-132	6	30
Fluorene	0.903		0.0352	0.0113	mg/Kg dry	1.76	ND	51	41-121	15	30
Indeno(1,2,3-cd)pyrene	1.43		0.0352	0.0171	mg/Kg dry	1.76	ND	81	27-160	8	30
Naphthalene	0.774		0.0352	0.0122	mg/Kg dry	1.76	ND	44	37-113	22	30
Phenanthrene	1.14		0.0352	0.00708	mg/Kg dry	1.76	ND	64	50-115	10	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0100 (Continued)											
Matrix Spike Dup (B8B0100-MSD1)			**Source: L8B0057-14**		Prepared: 2/8/2018 Analyzed: 2/9/2018						
Pyrene	1.40		0.0352	0.0112	mg/Kg dry	1.76	ND	80	42-138	8	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.816*		*mg/Kg dry*	*1.76*		*46*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.704*		*mg/Kg dry*	*1.76*		*40*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.35*		*mg/Kg dry*	*1.76*		*77*	*20-137*		
Batch: B8B0103											
Blank (B8B0103-BLK1)					Prepared: 2/9/2018 Analyzed: 2/12/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.43*		*mg/Kg wet*	*1.67*		*86*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*74*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.71*		*mg/Kg wet*	*1.67*		*102*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0103 (Continued)											
LCS (B8B0103-BS1)					Prepared: 2/9/2018 Analyzed: 2/12/2018						
1-Methylnaphthalene	1.15		0.0333	0.0111	mg/Kg wet	1.67		69	39-116		
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112		
Acenaphthene	1.22		0.0333	0.0131	mg/Kg wet	1.67		73	41-116		
Acenaphthylene	1.22		0.0333	0.0111	mg/Kg wet	1.67		73	42-126		
Anthracene	1.44		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.51		0.0333	0.00930	mg/Kg wet	1.67		90	40-129		
Benzo(a)pyrene	1.65		0.0333	0.0158	mg/Kg wet	1.67		99	36-141		
Benzo(b)fluoranthene	1.59		0.0333	0.0149	mg/Kg wet	1.67		95	34-139		
Benzo(g,h,i)perylene	1.68		0.0333	0.0155	mg/Kg wet	1.67		101	32-141		
Benzo(k)fluoranthene	1.61		0.0333	0.0115	mg/Kg wet	1.67		96	31-139		
Chrysene	1.56		0.0333	0.00790	mg/Kg wet	1.67		94	41-124		
Dibenz(a,h)Anthracene	1.66		0.0333	0.0148	mg/Kg wet	1.67		100	35-143		
Fluoranthene	1.36		0.0333	0.00990	mg/Kg wet	1.67		82	38-132		
Fluorene	1.23		0.0333	0.0107	mg/Kg wet	1.67		74	41-121		
Indeno(1,2,3-cd)pyrene	1.66		0.0333	0.0162	mg/Kg wet	1.67		99	27-160		
Naphthalene	1.15		0.0333	0.0115	mg/Kg wet	1.67		69	37-113		
Phenanthrene	1.38		0.0333	0.00670	mg/Kg wet	1.67		83	50-115		
Pyrene	1.60		0.0333	0.0106	mg/Kg wet	1.67		96	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.48*		*mg/Kg wet*	*1.67*		*89*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.27*		*mg/Kg wet*	*1.67*		*76*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.92*		*mg/Kg wet*	*1.67*		*115*	*20-137*		
LCS Dup (B8B0103-BSD1)					Prepared: 2/9/2018 Analyzed: 2/12/2018						
1-Methylnaphthalene	1.11		0.0333	0.0111	mg/Kg wet	1.67		67	39-116	4	30
2-Methylnaphthalene	1.09		0.0333	0.0134	mg/Kg wet	1.67		65	37-112	5	30
Acenaphthene	1.24		0.0333	0.0131	mg/Kg wet	1.67		74	41-116	0.9	30
Acenaphthylene	1.21		0.0333	0.0111	mg/Kg wet	1.67		73	42-126	0.2	30
Anthracene	1.42		0.0333	0.00880	mg/Kg wet	1.67		85	39-127	1	30
Benzo(a)anthracene	1.46		0.0333	0.00930	mg/Kg wet	1.67		87	40-129	4	30
Benzo(a)pyrene	1.59		0.0333	0.0158	mg/Kg wet	1.67		96	36-141	3	30
Benzo(b)fluoranthene	1.52		0.0333	0.0149	mg/Kg wet	1.67		91	34-139	4	30
Benzo(g,h,i)perylene	1.66		0.0333	0.0155	mg/Kg wet	1.67		100	32-141	1	30
Benzo(k)fluoranthene	1.53		0.0333	0.0115	mg/Kg wet	1.67		92	31-139	5	30
Chrysene	1.52		0.0333	0.00790	mg/Kg wet	1.67		91	41-124	2	30
Dibenz(a,h)Anthracene	1.63		0.0333	0.0148	mg/Kg wet	1.67		98	35-143	2	30
Fluoranthene	1.32		0.0333	0.00990	mg/Kg wet	1.67		79	38-132	3	30
Fluorene	1.24		0.0333	0.0107	mg/Kg wet	1.67		74	41-121	0.3	30
Indeno(1,2,3-cd)pyrene	1.60		0.0333	0.0162	mg/Kg wet	1.67		96	27-160	4	30
Naphthalene	1.11		0.0333	0.0115	mg/Kg wet	1.67		66	37-113	3	30
Phenanthrene	1.35		0.0333	0.00670	mg/Kg wet	1.67		81	50-115	2	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0103 (Continued)											
LCS Dup (B8B0103-BSD1)					Prepared: 2/9/2018 Analyzed: 2/12/2018						
Pyrene	1.56		0.0333	0.0106	mg/Kg wet	1.67		94	42-138	2	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.37*		*mg/Kg wet*	*1.67*		*82*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.10*		*mg/Kg wet*	*1.67*		*66*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.73*		*mg/Kg wet*	*1.67*		*104*	*20-137*		
Matrix Spike (B8B0103-MS1)		**Source: L8B0057-13**			Prepared: 2/9/2018 Analyzed: 2/12/2018						
1-Methylnaphthalene	1.17		0.0365	0.0122	mg/Kg dry	1.83	0.0124	63	39-116		
2-Methylnaphthalene	1.15		0.0365	0.0147	mg/Kg dry	1.83	0.0149	62	37-112		
Acenaphthene	1.29		0.0365	0.0144	mg/Kg dry	1.83	0.117	64	41-116		
Acenaphthylene	1.26		0.0365	0.0122	mg/Kg dry	1.83	ND	69	41-118		
Anthracene	1.54		0.0365	0.00964	mg/Kg dry	1.83	0.322	67	39-127		
Benzo(a)anthracene	1.71		0.0365	0.0102	mg/Kg dry	1.83	0.914	43	40-129		
Benzo(a)pyrene	1.84		0.0365	0.0173	mg/Kg dry	1.83	0.919	50	36-141		
Benzo(b)fluoranthene	1.84		0.0365	0.0163	mg/Kg dry	1.83	0.940	49	34-139		
Benzo(g,h,i)perylene	1.82		0.0365	0.0170	mg/Kg dry	1.83	0.680	63	32-141		
Benzo(k)fluoranthene	1.73		0.0365	0.0126	mg/Kg dry	1.83	0.747	54	31-139		
Chrysene	1.76		0.0365	0.00865	mg/Kg dry	1.83	0.933	45	41-124		
Dibenz(a,h)Anthracene	1.70		0.0365	0.0162	mg/Kg dry	1.83	0.216	81	35-143		
Fluoranthene	1.75	J	0.0365	0.0108	mg/Kg dry	1.83	1.92	NR	38-132		
Fluorene	1.33		0.0365	0.0117	mg/Kg dry	1.83	0.106	67	41-121		
Indeno(1,2,3-cd)pyrene	1.80		0.0365	0.0177	mg/Kg dry	1.83	0.600	65	27-160		
Naphthalene	1.14		0.0365	0.0126	mg/Kg dry	1.83	0.0211	61	37-113		
Phenanthrene	1.65	J	0.0365	0.00734	mg/Kg dry	1.83	1.32	18	50-115		
Pyrene	1.95	J	0.0365	0.0116	mg/Kg dry	1.83	1.59	20	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.39*		*mg/Kg dry*	*1.83*		*76*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.16*		*mg/Kg dry*	*1.83*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.81*		*mg/Kg dry*	*1.83*		*99*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0103 (Continued)											
Matrix Spike Dup (B8B0103-MSD1)		**Source: L8B0057-13**			Prepared: 2/9/2018 Analyzed: 2/12/2018						
1-Methylnaphthalene	0.955		0.0361	0.0120	mg/Kg dry	1.81	0.0124	52	39-116	20	30
2-Methylnaphthalene	0.936		0.0361	0.0145	mg/Kg dry	1.81	0.0149	51	37-112	21	30
Acenaphthene	1.05		0.0361	0.0142	mg/Kg dry	1.81	0.117	52	41-116	21	30
Acenaphthylene	1.02		0.0361	0.0120	mg/Kg dry	1.81	ND	57	41-118	21	30
Anthracene	1.31		0.0361	0.00954	mg/Kg dry	1.81	0.322	55	39-127	17	30
Benzo(a)anthracene	1.48	J	0.0361	0.0101	mg/Kg dry	1.81	0.914	31	40-129	14	30
Benzo(a)pyrene	1.61		0.0361	0.0171	mg/Kg dry	1.81	0.919	38	36-141	13	30
Benzo(b)fluoranthene	1.60		0.0361	0.0162	mg/Kg dry	1.81	0.940	37	34-139	14	30
Benzo(g,h,i)perylene	1.61		0.0361	0.0168	mg/Kg dry	1.81	0.680	52	32-141	12	30
Benzo(k)fluoranthene	1.54		0.0361	0.0125	mg/Kg dry	1.81	0.747	44	31-139	12	30
Chrysene	1.52	J	0.0361	0.00857	mg/Kg dry	1.81	0.933	32	41-124	15	30
Dibenz(a,h)Anthracene	1.50		0.0361	0.0161	mg/Kg dry	1.81	0.216	71	35-143	13	30
Fluoranthene	1.52	J	0.0361	0.0107	mg/Kg dry	1.81	1.92	NR	38-132	15	30
Fluorene	1.08		0.0361	0.0116	mg/Kg dry	1.81	0.106	54	41-121	20	30
Indeno(1,2,3-cd)pyrene	1.58		0.0361	0.0176	mg/Kg dry	1.81	0.600	54	27-160	13	30
Naphthalene	0.950		0.0361	0.0125	mg/Kg dry	1.81	0.0211	51	37-113	18	30
Phenanthrene	1.40	J	0.0361	0.00727	mg/Kg dry	1.81	1.32	4	50-115	16	30
Pyrene	1.67	J	0.0361	0.0115	mg/Kg dry	1.81	1.59	4	42-138	15	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.16*		*mg/Kg dry*	*1.81*		*64*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.01*		*mg/Kg dry*	*1.81*		*56*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.60*		*mg/Kg dry*	*1.81*		*88*	*20-137*		
Batch: B8B0129											
Blank (B8B0129-BLK1)					Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0129 (Continued)											
Blank (B8B0129-BLK1)						Prepared & Analyzed: 2/12/2018					
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.16*		*mg/Kg wet*	*1.67*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.01*		*mg/Kg wet*	*1.67*		*60*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.52*		*mg/Kg wet*	*1.67*		*91*	*20-137*		
LCS (B8B0129-BS1)						Prepared & Analyzed: 2/12/2018					
1-Methylnaphthalene	0.100		0.0333	0.0111	mg/Kg wet	0.167		60	39-116		
2-Methylnaphthalene	0.0980		0.0333	0.0134	mg/Kg wet	0.167		59	37-112		
Acenaphthene	0.107		0.0333	0.0131	mg/Kg wet	0.167		64	41-116		
Acenaphthylene	0.104		0.0333	0.0111	mg/Kg wet	0.167		63	42-126		
Anthracene	0.118		0.0333	0.00880	mg/Kg wet	0.167		71	39-127		
Benzo(a)anthracene	0.138		0.0333	0.00930	mg/Kg wet	0.167		83	40-129		
Benzo(a)pyrene	0.142		0.0333	0.0158	mg/Kg wet	0.167		85	36-141		
Benzo(b)fluoranthene	0.135		0.0333	0.0149	mg/Kg wet	0.167		81	34-139		
Benzo(g,h,i)perylene	0.162		0.0333	0.0155	mg/Kg wet	0.167		97	32-141		
Benzo(k)fluoranthene	0.145		0.0333	0.0115	mg/Kg wet	0.167		87	31-139		
Chrysene	0.144		0.0333	0.00790	mg/Kg wet	0.167		86	41-124		
Dibenz(a,h)Anthracene	0.156		0.0333	0.0148	mg/Kg wet	0.167		94	35-143		
Fluoranthene	0.113		0.0333	0.00990	mg/Kg wet	0.167		68	38-132		
Fluorene	0.101		0.0333	0.0107	mg/Kg wet	0.167		61	41-121		
Indeno(1,2,3-cd)pyrene	0.154		0.0333	0.0162	mg/Kg wet	0.167		92	27-160		
Naphthalene	0.103		0.0333	0.0115	mg/Kg wet	0.167		62	37-113		
Phenanthrene	0.116		0.0333	0.00670	mg/Kg wet	0.167		70	50-115		
Pyrene	0.143		0.0333	0.0106	mg/Kg wet	0.167		86	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.07*		*mg/Kg wet*	*1.67*		*64*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.904*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.49*		*mg/Kg wet*	*1.67*		*90*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0129 (Continued)											
LCS Dup (B8B0129-BSD1)					Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.0957		0.0333	0.0111	mg/Kg wet	0.167		57	39-116	4	30
2-Methylnaphthalene	0.0920		0.0333	0.0134	mg/Kg wet	0.167		55	37-112	6	30
Acenaphthene	0.101		0.0333	0.0131	mg/Kg wet	0.167		61	41-116	5	30
Acenaphthylene	0.0963		0.0333	0.0111	mg/Kg wet	0.167		58	42-126	8	30
Anthracene	0.120		0.0333	0.00880	mg/Kg wet	0.167		72	39-127	2	30
Benzo(a)anthracene	0.141		0.0333	0.00930	mg/Kg wet	0.167		84	40-129	2	30
Benzo(a)pyrene	0.146		0.0333	0.0158	mg/Kg wet	0.167		88	36-141	3	30
Benzo(b)fluoranthene	0.138		0.0333	0.0149	mg/Kg wet	0.167		83	34-139	2	30
Benzo(g,h,i)perylene	0.158		0.0333	0.0155	mg/Kg wet	0.167		95	32-141	3	30
Benzo(k)fluoranthene	0.148		0.0333	0.0115	mg/Kg wet	0.167		89	31-139	2	30
Chrysene	0.148		0.0333	0.00790	mg/Kg wet	0.167		89	41-124	3	30
Dibenz(a,h)Anthracene	0.154		0.0333	0.0148	mg/Kg wet	0.167		92	35-143	1	30
Fluoranthene	0.115		0.0333	0.00990	mg/Kg wet	0.167		69	38-132	2	30
Fluorene	0.0937		0.0333	0.0107	mg/Kg wet	0.167		56	41-121	8	30
Indeno(1,2,3-cd)pyrene	0.146		0.0333	0.0162	mg/Kg wet	0.167		87	27-160	5	30
Naphthalene	0.0943		0.0333	0.0115	mg/Kg wet	0.167		57	37-113	9	30
Phenanthrene	0.110		0.0333	0.00670	mg/Kg wet	0.167		66	50-115	6	30
Pyrene	0.139		0.0333	0.0106	mg/Kg wet	0.167		84	42-138	2	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.999*		*mg/Kg wet*	*1.67*		*60*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.853*		*mg/Kg wet*	*1.67*		*51*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.50*		*mg/Kg wet*	*1.67*		*90*	*20-137*		
Matrix Spike (B8B0129-MS1)		**Source: L8B0082-25**			Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.968		0.0361	0.0120	mg/Kg dry	1.81	ND	54	39-116		
2-Methylnaphthalene	0.975		0.0361	0.0145	mg/Kg dry	1.81	ND	54	37-112		
Acenaphthene	1.08		0.0361	0.0142	mg/Kg dry	1.81	ND	60	41-116		
Acenaphthylene	1.03		0.0361	0.0120	mg/Kg dry	1.81	ND	57	41-118		
Anthracene	1.26		0.0361	0.00953	mg/Kg dry	1.81	ND	70	39-127		
Benzo(a)anthracene	1.44		0.0361	0.0101	mg/Kg dry	1.81	0.0376	77	40-129		
Benzo(a)pyrene	1.54		0.0361	0.0171	mg/Kg dry	1.81	0.0423	83	36-141		
Benzo(b)fluoranthene	1.51		0.0361	0.0161	mg/Kg dry	1.81	0.0355	81	34-139		
Benzo(g,h,i)perylene	1.53		0.0361	0.0168	mg/Kg dry	1.81	0.0355	83	32-141		
Benzo(k)fluoranthene	1.43		0.0361	0.0125	mg/Kg dry	1.81	0.0365	77	31-139		
Chrysene	1.49		0.0361	0.00856	mg/Kg dry	1.81	0.0408	80	41-124		
Dibenz(a,h)Anthracene	1.36		0.0361	0.0160	mg/Kg dry	1.81	ND	75	35-143		
Fluoranthene	1.66		0.0361	0.0107	mg/Kg dry	1.81	0.0602	89	38-132		
Fluorene	1.05		0.0361	0.0116	mg/Kg dry	1.81	ND	58	41-121		
Indeno(1,2,3-cd)pyrene	1.47		0.0361	0.0176	mg/Kg dry	1.81	0.0283	80	27-160		
Naphthalene	0.996		0.0361	0.0125	mg/Kg dry	1.81	ND	55	37-113		
Phenanthrene	1.57		0.0361	0.00726	mg/Kg dry	1.81	0.0290	85	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0129 (Continued)											
Matrix Spike (B8B0129-MS1)		**Source: L8B0082-25**			Prepared & Analyzed: 2/12/2018						
Pyrene	1.77		0.0361	0.0115	mg/Kg dry	1.81	0.0562	95	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.02*		*mg/Kg dry*	*1.81*		*56*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.881*		*mg/Kg dry*	*1.81*		*49*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.18*		*mg/Kg dry*	*1.81*		*65*	*20-137*		
Matrix Spike Dup (B8B0129-MSD1)		**Source: L8B0082-25**			Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.878		0.0361	0.0120	mg/Kg dry	1.81	ND	49	39-116	10	30
2-Methylnaphthalene	0.868		0.0361	0.0145	mg/Kg dry	1.81	ND	48	37-112	12	30
Acenaphthene	1.02		0.0361	0.0142	mg/Kg dry	1.81	ND	56	41-116	6	30
Acenaphthylene	0.989		0.0361	0.0120	mg/Kg dry	1.81	ND	55	41-118	4	30
Anthracene	1.31		0.0361	0.00953	mg/Kg dry	1.81	ND	72	39-127	4	30
Benzo(a)anthracene	1.45		0.0361	0.0101	mg/Kg dry	1.81	0.0376	78	40-129	0.9	30
Benzo(a)pyrene	1.54		0.0361	0.0171	mg/Kg dry	1.81	0.0423	83	36-141	0.5	30
Benzo(b)fluoranthene	1.51		0.0361	0.0161	mg/Kg dry	1.81	0.0355	82	34-139	0.2	30
Benzo(g,h,i)perylene	1.60		0.0361	0.0168	mg/Kg dry	1.81	0.0355	86	32-141	4	30
Benzo(k)fluoranthene	1.48		0.0361	0.0125	mg/Kg dry	1.81	0.0365	80	31-139	4	30
Chrysene	1.50		0.0361	0.00856	mg/Kg dry	1.81	0.0408	81	41-124	1	30
Dibenz(a,h)Anthracene	1.51		0.0361	0.0160	mg/Kg dry	1.81	ND	84	35-143	11	30
Fluoranthene	1.42		0.0361	0.0107	mg/Kg dry	1.81	0.0602	75	38-132	16	30
Fluorene	1.07		0.0361	0.0116	mg/Kg dry	1.81	ND	59	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.55		0.0361	0.0175	mg/Kg dry	1.81	0.0283	84	27-160	5	30
Naphthalene	0.875		0.0361	0.0125	mg/Kg dry	1.81	ND	48	37-113	13	30
Phenanthrene	1.39		0.0361	0.00726	mg/Kg dry	1.81	0.0290	75	50-115	12	30
Pyrene	1.63		0.0361	0.0115	mg/Kg dry	1.81	0.0562	87	42-138	8	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.940*		*mg/Kg dry*	*1.81*		*52*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.783*		*mg/Kg dry*	*1.81*		*43*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.37*		*mg/Kg dry*	*1.81*		*76*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238											
Blank (B8B0238-BLK1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.18*		*mg/Kg wet*	*1.67*		*71*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.04*		*mg/Kg wet*	*1.67*		*63*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.47*		*mg/Kg wet*	*1.67*		*88*	*20-137*		
LCS (B8B0238-BS1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.17		0.0333	0.0111	mg/Kg wet	1.67		70	39-116		
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112		
Acenaphthene	1.24		0.0333	0.0131	mg/Kg wet	1.67		74	41-116		
Acenaphthylene	1.21		0.0333	0.0111	mg/Kg wet	1.67		73	42-126		
Anthracene	1.43		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.48		0.0333	0.00930	mg/Kg wet	1.67		89	40-129		
Benzo(a)pyrene	1.66		0.0333	0.0158	mg/Kg wet	1.67		100	36-141		
Benzo(b)fluoranthene	1.59		0.0333	0.0149	mg/Kg wet	1.67		95	34-139		
Benzo(g,h,i)perylene	1.64		0.0333	0.0155	mg/Kg wet	1.67		99	32-141		
Benzo(k)fluoranthene	1.61		0.0333	0.0115	mg/Kg wet	1.67		96	31-139		
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124		
Dibenz(a,h)Anthracene	1.66		0.0333	0.0148	mg/Kg wet	1.67		99	35-143		
Fluoranthene	1.37		0.0333	0.00990	mg/Kg wet	1.67		82	38-132		
Fluorene	1.23		0.0333	0.0107	mg/Kg wet	1.67		74	41-121		
Indeno(1,2,3-cd)pyrene	1.63		0.0333	0.0162	mg/Kg wet	1.67		98	27-160		
Naphthalene	1.16		0.0333	0.0115	mg/Kg wet	1.67		69	37-113		
Phenanthrene	1.36		0.0333	0.00670	mg/Kg wet	1.67		81	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
LCS (B8B0238-BS1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
Pyrene	1.53		0.0333	0.0106	mg/Kg wet	1.67		92	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*74*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.08*		*mg/Kg wet*	*1.67*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.51*		*mg/Kg wet*	*1.67*		*91*	*20-137*		
LCS Dup (B8B0238-BSD1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.19		0.0333	0.0111	mg/Kg wet	1.67		71	39-116	1	30
2-Methylnaphthalene	1.16		0.0333	0.0134	mg/Kg wet	1.67		69	37-112	1	30
Acenaphthene	1.25		0.0333	0.0131	mg/Kg wet	1.67		75	41-116	1	30
Acenaphthylene	1.23		0.0333	0.0111	mg/Kg wet	1.67		74	42-126	1	30
Anthracene	1.45		0.0333	0.00880	mg/Kg wet	1.67		87	39-127	1	30
Benzo(a)anthracene	1.47		0.0333	0.00930	mg/Kg wet	1.67		88	40-129	0.7	30
Benzo(a)pyrene	1.64		0.0333	0.0158	mg/Kg wet	1.67		98	36-141	1	30
Benzo(b)fluoranthene	1.56		0.0333	0.0149	mg/Kg wet	1.67		94	34-139	2	30
Benzo(g,h,i)perylene	1.63		0.0333	0.0155	mg/Kg wet	1.67		98	32-141	0.9	30
Benzo(k)fluoranthene	1.58		0.0333	0.0115	mg/Kg wet	1.67		95	31-139	2	30
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124	0.06	30
Dibenz(a,h)Anthracene	1.64		0.0333	0.0148	mg/Kg wet	1.67		99	35-143	0.8	30
Fluoranthene	1.40		0.0333	0.00990	mg/Kg wet	1.67		84	38-132	2	30
Fluorene	1.25		0.0333	0.0107	mg/Kg wet	1.67		75	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.62		0.0333	0.0162	mg/Kg wet	1.67		97	27-160	0.6	30
Naphthalene	1.17		0.0333	0.0115	mg/Kg wet	1.67		70	37-113	1	30
Phenanthrene	1.40		0.0333	0.00670	mg/Kg wet	1.67		84	50-115	3	30
Pyrene	1.52		0.0333	0.0106	mg/Kg wet	1.67		91	42-138	0.5	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*75*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.10*		*mg/Kg wet*	*1.67*		*66*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.46*		*mg/Kg wet*	*1.67*		*88*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Matrix Spike (B8B0238-MS1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
1-Methylnaphthalene	0.775		0.0329	0.0110	mg/Kg dry	1.65	ND	47	39-116		
2-Methylnaphthalene	0.775		0.0329	0.0132	mg/Kg dry	1.65	ND	47	37-112		
Acenaphthene	0.828		0.0329	0.0129	mg/Kg dry	1.65	ND	50	41-116		
Acenaphthylene	0.811		0.0329	0.0110	mg/Kg dry	1.65	ND	49	41-118		
Anthracene	1.18		0.0329	0.00869	mg/Kg dry	1.65	ND	71	39-127		
Benzo(a)anthracene	1.31		0.0329	0.00918	mg/Kg dry	1.65	ND	79	40-129		
Benzo(a)pyrene	1.45		0.0329	0.0156	mg/Kg dry	1.65	ND	88	36-141		
Benzo(b)fluoranthene	1.37		0.0329	0.0147	mg/Kg dry	1.65	ND	83	34-139		
Benzo(g,h,i)perylene	1.44		0.0329	0.0153	mg/Kg dry	1.65	ND	87	32-141		
Benzo(k)fluoranthene	1.39		0.0329	0.0114	mg/Kg dry	1.65	ND	84	31-139		
Chrysene	1.40		0.0329	0.00780	mg/Kg dry	1.65	ND	85	41-124		
Dibenz(a,h)Anthracene	1.46		0.0329	0.0146	mg/Kg dry	1.65	ND	89	35-143		
Fluoranthene	1.23		0.0329	0.00978	mg/Kg dry	1.65	ND	75	38-132		
Fluorene	0.824		0.0329	0.0106	mg/Kg dry	1.65	ND	50	41-121		
Indeno(1,2,3-cd)pyrene	1.43		0.0329	0.0160	mg/Kg dry	1.65	ND	87	27-160		
Naphthalene	0.774		0.0329	0.0114	mg/Kg dry	1.65	ND	47	37-113		
Phenanthrene	1.04		0.0329	0.00662	mg/Kg dry	1.65	ND	63	50-115		
Pyrene	1.32		0.0329	0.0105	mg/Kg dry	1.65	ND	80	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.816*		*mg/Kg dry*	*1.65*		*50*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.722*		*mg/Kg dry*	*1.65*		*44*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg dry*	*1.65*		*78*	*20-137*		
Matrix Spike Dup (B8B0238-MSD1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
1-Methylnaphthalene	1.11	J	0.0329	0.0110	mg/Kg dry	1.64	ND	68	39-116	36	30
2-Methylnaphthalene	1.10	J	0.0329	0.0132	mg/Kg dry	1.64	ND	67	37-112	35	30
Acenaphthene	1.17	J	0.0329	0.0129	mg/Kg dry	1.64	ND	71	41-116	34	30
Acenaphthylene	1.16	J	0.0329	0.0110	mg/Kg dry	1.64	ND	70	41-118	35	30
Anthracene	1.39		0.0329	0.00868	mg/Kg dry	1.64	ND	85	39-127	17	30
Benzo(a)anthracene	1.39		0.0329	0.00917	mg/Kg dry	1.64	ND	84	40-129	6	30
Benzo(a)pyrene	1.54		0.0329	0.0156	mg/Kg dry	1.64	ND	93	36-141	6	30
Benzo(b)fluoranthene	1.46		0.0329	0.0147	mg/Kg dry	1.64	ND	88	34-139	6	30
Benzo(g,h,i)perylene	1.52		0.0329	0.0153	mg/Kg dry	1.64	ND	92	32-141	5	30
Benzo(k)fluoranthene	1.46		0.0329	0.0113	mg/Kg dry	1.64	ND	89	31-139	6	30
Chrysene	1.47		0.0329	0.00779	mg/Kg dry	1.64	ND	89	41-124	5	30
Dibenz(a,h)Anthracene	1.52		0.0329	0.0146	mg/Kg dry	1.64	ND	93	35-143	4	30
Fluoranthene	1.34		0.0329	0.00977	mg/Kg dry	1.64	ND	81	38-132	8	30
Fluorene	1.18	J	0.0329	0.0106	mg/Kg dry	1.64	ND	72	41-121	35	30
Indeno(1,2,3-cd)pyrene	1.51		0.0329	0.0160	mg/Kg dry	1.64	ND	92	27-160	5	30
Naphthalene	1.11	J	0.0329	0.0113	mg/Kg dry	1.64	ND	67	37-113	35	30
Phenanthrene	1.33		0.0329	0.00661	mg/Kg dry	1.64	ND	81	50-115	25	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Matrix Spike Dup (B8B0238-MSD1)			**Source: L8B0099-48**		Prepared: 2/21/2018	Analyzed: 2/22/2018					
Pyrene	1.46		0.0329	0.0105	mg/Kg dry	1.64	ND	89	42-138	10	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.16*		*mg/Kg dry*	*1.64*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.05*		*mg/Kg dry*	*1.64*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.39*		*mg/Kg dry*	*1.64*		*84*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

Quality Control
(Continued)

Total Metal Analysis by Method 6010C

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0090											
Blank (B8B0090-BLK1)						Prepared: 2/8/2018	Analyzed: 2/9/2018				
Chromium	0.0600	U	5.00	0.0600	mg/Kg wet						
LCS (B8B0090-BS1)						Prepared: 2/8/2018	Analyzed: 2/9/2018				
Chromium	102		5.00	0.0600	mg/Kg wet	100		102	80-120		
LCS Dup (B8B0090-BSD1)						Prepared: 2/8/2018	Analyzed: 2/9/2018				
Chromium	95.8		5.00	0.0600	mg/Kg wet	100		96	80-120	6	20
Duplicate (B8B0090-DUP1)		**Source: L8B0057-66**				Prepared: 2/8/2018	Analyzed: 2/9/2018				
Chromium	0.993	I	5.29	0.0634	mg/Kg dry		0.995			0.3	30
Matrix Spike (B8B0090-MS1)		**Source: L8B0057-66**				Prepared: 2/8/2018	Analyzed: 2/9/2018				
Chromium	92.7		5.29	0.0634	mg/Kg dry	106	0.995	87	80-120		
Matrix Spike Dup (B8B0090-MSD1)		**Source: L8B0057-66**				Prepared: 2/8/2018	Analyzed: 2/9/2018				
Chromium	91.4		5.29	0.0634	mg/Kg dry	106	0.995	85	80-120	1	20

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:49

Quality Control
(Continued)

Percent Moisture by Method 2540G

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0113											
Duplicate (B8B0113-DUP1)		**Source: L8B0058-01**			Prepared: 2/7/2018		Analyzed: 2/10/2018				
% Solids	77.1		0.100	0.100	%		77.1			0	20
Percent Moisture	22.9		0.100	0.100	%		22.9			0	20
Duplicate (B8B0113-DUP2)		**Source: L8B0060-08**			Prepared: 2/7/2018		Analyzed: 2/10/2018				
% Solids	72.7		0.100	0.100	%		73.3			0.9	20
Percent Moisture	27.3		0.100	0.100	%		26.7			2	20
Duplicate (B8B0113-DUP3)		**Source: L8B0057-09**			Prepared: 2/7/2018		Analyzed: 2/10/2018				
% Solids	93.9		0.100	0.100	%		94.1			0.2	20
Percent Moisture	6.11		0.100	0.100	%		5.88			4	20
Duplicate (B8B0113-DUP4)		**Source: L8B0057-20**			Prepared: 2/7/2018		Analyzed: 2/10/2018				
% Solids	87.9		0.100	0.100	%		88.3			0.5	20
Percent Moisture	12.1		0.100	0.100	%		11.7			4	20
Duplicate (B8B0113-DUP5)		**Source: L8B0057-37**			Prepared: 2/7/2018		Analyzed: 2/10/2018				
% Solids	97.9		0.100	0.100	%		97.8			0.07	20
Percent Moisture	2.15		0.100	0.100	%		2.21			3	20
Duplicate (B8B0113-DUP6)		**Source: L8B0057-57**			Prepared: 2/7/2018		Analyzed: 2/10/2018				
% Solids	93.5		0.100	0.100	%		93.1			0.5	20
Percent Moisture	6.48		0.100	0.100	%		6.94			7	20

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:49

List of Certifications for XENCO Laboratories - Tampa formerly FTS Analytical

Number	Description	Code	Facility	Expires
123066	Kentucky UST CERTIFICATION	UST KY	FTSL	06/30/2018
E84098	FL MICROBIOLOGY Lakeland CERT	LFLNELAC	FTSL	06/30/2018
E871002	Xenco FL CERT	FLNELAC	FTSL	06/30/2018
E87429	FL NELAC CERT Tampa	AFLNELAC	FTSL	06/30/2018
LI0-135	DoD CERTIFICATE	DOD	FTSL	12/11/2019
P330-07-00105	USDA CERTIFICATE	USDA	FTSL	

Notes and Definitions

Item	Definition
U	Compound was not detected.
Dry	Sample results reported on a dry weight basis.
I	Value estimated to be between the Laboratory Detection and Reporting Limit
J	QC Failure see Case Narrative
L	Concentration exceeds calibration range
N	Tentatively Identified Compound
Q	Hold time exceeded
V	Analyte equal to or above detection limit in the method blank
TNTC	Bacteria is present but Too Numerous To Count

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: L.R. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs												Container Type / Preservation Code
								GC												Container Type
								9												Preservation Code
1	FLB-207@0'-0.5'	0-0.5	2-6-18 / 08:29	S		✓	1	✓												
2	FLB-207@0.5'-2'	0.5-2	/ 08:30	S		✓	1	✓												
3	FLB-207@2'-4'	2-4	/ 08:32	S		✓	1	✓												Hold
4	FLB-207@4'-6'	4-6	/ 08:42	S		✓	1	✓												Hold
5	FLB-206@0'-0.5'	0-0.5	/ 08:17	S		✓	1	✓												
6	FLB-206@0.5'-2'	0.5-2	/ 08:18	S		✓	1	✓												
7	FLB-206@2'-4'	2-4	/ 08:21	S		✓	1	✓												Hold
8	FLB-206@4'-6'	4-6	/ 08:23	S		✓	1	✓												Hold
9	FLB-210@0'-0.5'	0-0.5	/ 09:40	S		✓	1	✓												
10	FLB-210@0.5'-2'	0.5-2	/ 09:41	S		✓	1	✓												

1) Relinquished By: Richard Houde — Date / Time 2/6/18 - 1525
2) Received By: [signature] — Date / Time 2-6-18 ~~1325~~
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

Relinquished By: — Date / Time
4) Received By: — Date / Time 1525

MSA or FTS terms and conditions apply

Relinquished By: — Date / Time
6) Received By: — Date / Time

Circle a Turnaround Time (business days)
STD TAT 10 Days ; 5-7 Days; 3 Days 2 Days ; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #167, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USOA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs (GC, 9)	Container Type / Preservation Code
1	FLB-210@2'-4'	2-4	2-6-18 / 09:42	S		✓	1	✓	Hold
2	FLB-210@4'-6'	4-6	/ 09:43	S		✓	1	✓	Hold
3	FLB-211@0'-0.5'	0-0.5	/ 08:52	S		✓	1	✓	
4	FLB-211@0.5'-2'	0.5-2	/ 08:54	S		✓	1	✓	
5	FLB-211@2'-4'	2'-4'	/ 08:56	S		✓	1	✓	
6	FLB-211@4'-6'	4'-6'	/ 08:57	S		✓	1	✓	
7	FLB-212@0'-0.5'	0-0.5	/ 09:02	S		✓	1	✓	
8	FLB-212@0.5'-2'	0.5-2	/ 09:03	S		✓	1	✓	
9	FLB-212@2'-4'	2-4	/ 09:05	S		✓	1	✓	
10	FLB-212@4'-6'	4-6	/ 09:06	S		✓	1	✓	

1) Relinquished By: Richard Houde Date / Time 2/6/18 - 1525
2) Received By: [signature] Date / Time 2-6-18 1525
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days; 2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaP SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L9B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs												Container Type / Preservation Code
								GC												Container Type
								9												Preservation Code
1	FLB-213@ 0'-0.5'	0-0.5	2-6-18 / 09:11	S		✓	1	✓												
2	FLB-213@ 0.5'-2'	0.5-2	/ 09:12	S		✓	1	✓												
3	FLB-213@ 2'-4'	2-4	/ 09:15	S		✓	1	✓												
4	FLB-213@ 4'-6'	4-6	/ 09:17	S		✓	1	✓												
5	FLB-214@ 0'-0.5'	0-0.5	/ 09:55	S		✓	1	✓												
6	FLB-214@ 0.5'-2'	0.5-2	/ 09:56	S		✓	1	✓												
7	FLB-214@ 2'-4'	2-4	/ 09:58	S		✓	1	✓												Hold
8	FLB-214@ 4'-6'	4-6	/ 09:59	S		✓	1	✓												Hold
9	FLB-215@ 0'-0.5'	0-0.5	/ 10:11	S		✓	1	✓												
10	FLB-215@ 0.5-2'	0.5-2	/ 10:13	S		✓	1	✓												

1) Relinquished By: Richard Houde — Date / Time 2/6/18 - 1525	2) Received By: [signature] — Date / Time 2-6-18 1525	Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
3) Relinquished By: — Date / Time	4) Received By: — Date / Time	MSA or FTS terms and conditions apply
5) Relinquished By: — Date / Time	6) Received By: — Date / Time	Circle a Turnaround Time (business days): STD TAT: 10 Days; 5-7 Days; 3 Days; 2 Days; 1 Day; Same Day

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Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

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CHAIN OF CUSTODY

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard-houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL NRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde.

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs (GC 9)	Container Type / Preservation Code
1	FLB-215@2'-4'	2-4	2-6-18 / 10:15	S		✓	1	✓	Hold
2	FLB-215@4'-6'	4-6	/ 10:20	S		✓	1	✓	Hold
3	FLB-216@0'-0.5'	0-0.5	/ 10:38	S		✓	1	✓	
4	FLB-216@0.5'-2'	0.5-2	/ 10:40	S		✓	1	✓	
5	FLB-216@2'-4'	2-4	/ 10:41	S		✓	1	✓	Hold
6	FLB-216@4'-6'	4-6	/ 10:42	S		✓	1	✓	Hold
7	FLB-217@0'-0.5'	0-0.5	/ 10:47	S		✓	1	✓	
8	FLB-217@0.5'-2'	0.5-2	/ 10:49	S		✓	1	✓	
9			/	S		✓	1		
10			/	S		✓	1		

1) Relinquished By: Richard Houde Date / Time 2/6/18 - 1525
2) Received By: [signature] Date / Time 2-6-18 1525
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
3) Relinquished By: Date / Time
4) Received By: Date / Time
MSA or FTS terms and conditions apply
Relinquished By: Date / Time
6) Received By: Date / Time
Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SPECPRO Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): US DA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested: GC 9 Total Cr

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Cr	Container Type / Preservation Code
1	FLB-219-@0.0-0.5	0.0-0.5	2/6/18-1221	S		X	1	X	
2	FLB-219@0.5-2	0.5-2	-1223	S		X	1	X	
3	FLB-219@2-4	2-4	-1225	S		X	1	X	Hold
4	FLB-219@4-6	4-6	-1226	S		X	1	X	Hold
5	FLB-218@0.0-0.5	0.0-0.5	-1210	S		X	1	X	
6	FLB-218@0.5-2	0.5-2	-1213	S		X	1	X	
7	FLB-218@2-4	2-4	-1215	S		X	1	X	Hold
8	FLB-218@4-6	4-6	-1216	S		X	1	X	Hold
9	FLB-217@2-4	2-4	-1252	S		X	1	X	Hold
10	FLB-217@4-6	4-6	-1255	S		X	1	X	Hold

1) Relinquished By: Richard Houde Date / Time 2/6/18-1525
2) Received By: [signature] Date / Time 2-6-18 1525
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

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STD TAT: 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: L.L. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total GC	Container Type / Preservation Code
								GC	Container Type
								9	Preservation Code
1	CBT-42C 0.0-0.5	0.0-0.5	2/6/18 - 1330	S		X	1	X	
2	CBT-42C 0.5-2	0.5-2	- 1331	S		X	1	X	
3	CBT-42C 2-4	2-4	- 1333	S		X	1	X	Hold
4	CBT-42C 4-6	4-6	- 1335	S		X	1	X	Hold
5	CBT-43C 0.0-0.5	0.0-0.5	- 1312	S		X	1	X	
6	CBT-43C 0.5-2	0.5-2	- 1315	S		X	1	X	
7	CBT-43C 2-4	2-4	- 1316	S		X	1	X	Hold
8	CBT-43C 4-6	4-6	- 1317	S		X	1	X	Hold
9	CBT-44C 0.0-0.5	0.0-0.5	- 1301	S		X	1	X	
10	CBT-44C 0.5-2	0.5-2	- 1302	S		X	1	X	

1) Relinquished By: Richard Houde Date / Time 2/6/18 - 1525
2) Received By: [signature] Date / Time 2-6-18 1525
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

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Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, Al 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP ~~Lrs Clk~~ ADaPT SC NC DOD NPDES

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Receiver's Initials/Temp: C.L / 33 2R-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Cr	Container Type / Preservation Code
1	CBT-44@ 2-4	2-4	2/6/18 - 1304	S		X	1		Hold
2	CBT-44 @ 4-6	4-6	- 1305	S		X	1		Hold
3	CBT-45@0.0-0.5	0.0-0.5	- 1322	S		X	1		
4	CBT-45@0.5-2	0.5-2	- 1323	S		X	1		
5	CBT-45 @ 2-4	2-4	- 1324	S		X	1		Hold
6	CBT-45 @ 4-6	4-6	- 1325	S		X	1		Hold
7	CBT-46@0.0-0.5	0.0-0.5	- 1243	S		X	1		
8	CBT-46@0.5-2	0.5-2	- 1244	S		X	1		
9	CBT-46 @ 2-4	2-4	- 1245	S		X	1		Hold
10	CBT-46 @ 4-6	4-6	- 1247	S		X	1		Hold

1) Relinquished By:	Date / Time	2) Received By:	Date / Time
Richard Houde	2/6/18-1525	[signature]	2-6-18 1525
Relinquished By:	Date / Time	4) Received By:	Date / Time
Relinquished By:	Date / Time	6) Received By:	Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

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Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

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Company Name: SPec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.K. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs	Container Type / Preservation Code
								GC	Container Type
								9	Preservation Code
1	FLB-207@0'-0.5'	0-0.5	2-6-18 / 08:29	S		✓	1	✓	
2	FLB-207@0.5'-2'	0.5-2	/ 08:30	S		✓	1	✓	
3	FLB-207@2'-4'	2-4	/ 08:32	S		✓	1	✓	Hold
4	FLB-207@4'-6'	4-6	/ 08:42	S		✓	1	✓	Hold
5	FLB-206@0'-0.5'	0-0.5	/ 08:17	S		✓	1	✓	
6	FLB-206@0.5'-2'	0.5-2	/ 08:18	S		✓	1	✓	
7	FLB-206@2'-4'	2-4	/ 08:21	S		✓	1	✓	Hold
8	FLB-206@4'-6'	4-6	/ 08:23	S		✓	1	✓	Hold
9	FLB-210@0'-0.5'	0-0.5	/ 09:40	S		✓	1	✓	
10	FLB-210@0.5'-2'	0.5-2	/ 09:41	S		✓	1	✓	

1) Relinquished By: Richard Houde Date / Time 2/6/18 - 1525
2) Received By: [signature] Date / Time 2-6-18 ~~1325~~ 1525
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply
Circle a Turnaround Time (business days)
STD TAT 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #167, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USOA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs (GC)	Container Type / Preservation Code
1	FLB-210@2'-4'	2-4	2-6-18 / 09:42	S		✓	1	✓	Hold
2	FLB-210@4'-6'	4-6	/ 09:43	S		✓	1	✓	Hold
3	FLB-211@0'-0.5'	0-0.5	/ 08:52	S		✓	1	✓	
4	FLB-211@0.5'-2'	0.5-2	/ 08:54	S		✓	1	✓	
5	FLB-211@2'-4'	2'-4'	/ 08:56	S		✓	1	✓	
6	FLB-211@4'-6'	4'-6'	/ 08:57	S		✓	1	✓	
7	FLB-212@0'-0.5'	0-0.5	/ 09:02	S		✓	1	✓	
8	FLB-212@0.5'-2'	0.5-2	/ 09:03	S		✓	1	✓	
9	FLB-212@2'-4'	2-4	/ 09:05	S		✓	1	✓	
10	FLB-212@4'-6'	4-6	/ 09:06	S		✓	1	✓	

1) Relinquished By: Richard Houde Date / Time 2/6/18 - 1525
2) Received By: [signature] Date / Time 2-6-18 1525
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard.houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaP SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs													Container Type / Preservation Code
								GU													Container Type
								9													Preservation Code
1	FLB-213@ 0'-0.5'	0-0.5	2-6-18 / 09:11	S		✓	1	✓													
2	FLB-213@ 0.5'-2'	0.5-2	/ 09:12	S		✓	1	✓													
3	FLB-213@ 2'-4'	2-4	/ 09:15	S		✓	1	✓													
4	FLB-213@ 4'-6'	4-6	/ 09:17	S		✓	1	✓													
5	FLB-214@ 0'-0.5'	0-0.5	/ 09:55	S		✓	1	✓													
6	FLB-214@ 0.5'-2'	0.5-2	/ 09:56	S		✓	1	✓													
7	FLB-214@ 2'-4'	2-4	/ 09:58	S		✓	1	✓													Hold
8	FLB-214@ 4'-6'	4-6	/ 09:59	S		✓	1	✓													Hold
9	FLB-215@ 0'-0.5'	0-0.5	/ 10:11	S		✓	1	✓													
10	FLB-215@ 0.5-2'	0.5-2	/ 10:13	S		✓	1	✓													

1) Relinquished By: Richard Houde	Date / Time 2/6/18 - 1525	2) Received By:	Date / Time 2-6-18 1525
3) Relinquished By:	Date / Time	4) Received By:	Date / Time
5) Relinquished By:	Date / Time	6) Received By:	Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

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2 Days ; 1 Day; Same Day

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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec-Pro Professional Services
Address: 7067 Old Madison Pike, Suite #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: richard-houde@badger-tech.com
Contact Phone #: 210-215-9532 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL RRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde.

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAHs (GC 9)	Container Type / Preservation Code
1	FLB-215@2'-4'	2-4	2-6-18 / 10:15	S		✓	1	✓	Hold
2	FLB-215@4'-6'	4-6	/ 10:20	S		✓	1	✓	Hold
3	FLB-216@0'-0.5'	0-0.5	/ 10:38	S		✓	1	✓	
4	FLB-216@0.5'-2'	0.5-2	/ 10:40	S		✓	1	✓	
5	FLB-216@2'-4'	2-4	/ 10:41	S		✓	1	✓	Hold
6	FLB-216@4'-6'	4-6	/ 10:42	S		✓	1	✓	Hold
7	FLB-217@0'-0.5'	0-0.5	/ 10:47	S		✓	1	✓	
8	FLB-217@0.5'-2'	0.5-2	/ 10:49	S		✓	1	✓	
9			/	S		✓	1		
10			/	S		✓	1		

1) Relinquished By: Richard Houde Date / Time 2/6/18 - 1525
2) Received By: [signature] Date / Time 2-6-18 1525
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
3) Relinquished By: Date / Time
4) Received By: Date / Time
MSA or FTS terms and conditions apply
Relinquished By: Date / Time
6) Received By: Date / Time
Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SPECPRO Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): US DA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Cr												Container Type / Preservation Code
								GC												
								9												
1	FLB-219-@0.0-0.5	0.0-0.5	2/6/18-1221	S		X	1	X												
2	FLB-219@0.5-2	0.5-2	-1223	S		X	1	X												
3	FLB-219@2-4	2-4	-1225	S		X	1	X												Hold
4	FLB-219@4-6	4-6	-1226	S		X	1	X												Hold
5	FLB-218@0.0-0.5	0.0-0.5	-1210	S		X	1	X												
6	FLB-218@0.5-2	0.5-2	-1213	S		X	1	X												
7	FLB-218@2-4	2-4	-1215	S		X	1	X												Hold
8	FLB-218@4-6	4-6	-1216	S		X	1	X												Hold
9	FLB-217@2-4	2-4	-1252	S		X	1	X												Hold
10	FLB-217@4-6	4-6	-1255	S		X	1	X												Hold

1) Relinquished By: Richard Houde Date / Time 2/6/18-1525
2) Received By: [signature] Date / Time 2-6-18 1525
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

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Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: L.L. / 3.3 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total CR	Container Type / Preservation Code
								GC / 9	
1	CBT-42C 0.0-0.5	0.0-0.5	2/6/18 - 1330	S		X	1	X	
2	CBT-42C 0.5-2	0.5-2	- 1331	S		X	1	X	
3	CBT-42C 2-4	2-4	- 1333	S		X	1	X	Hold
4	CBT-42C 4-6	4-6	- 1335	S		X	1	X	Hold
5	CBT-43C 0.0-0.5	0.0-0.5	- 1312	S		X	1	X	
6	CBT-43C 0.5-2	0.5-2	- 1315	S		X	1	X	
7	CBT-43C 2-4	2-4	- 1316	S		X	1	X	Hold
8	CBT-43C 4-6	4-6	- 1317	S		X	1	X	Hold
9	CBT-44C 0.0-0.5	0.0-0.5	- 1301	S		X	1	X	
10	CBT-44C 0.5-2	0.5-2	- 1302	S		X	1	X	

1) Relinquished By: Richard Houde Date / Time 2/6/18 - 1525
2) Received By: [signature] Date / Time 2-6-18 1525
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
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Project Number (ID):
Regulations: FL PRP ~~Lpr Clb~~ ADaPT SC NC DOD NPDES

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Receiver's Initials/Temp: C.L / 33 2R-2
Custody Seal(s): Y N Lab Work Order # L8B0057
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	Total Cr	Container Type / Preservation Code
1	CBT-44@ 2-4	2-4	2/6/18 - 1304	S		X	1		Hold
2	CBT-44 @ 4-6	4-6	- 1305	S		X	1		Hold
3	CBT-45@0.0-0.5	0.0-0.5	- 1322	S		X	1		
4	CBT-45@0.5-2	0.5-2	- 1323	S		X	1		
5	CBT-45 @ 2-4	2-4	- 1324	S		X	1		Hold
6	CBT-45 @ 4-6	4-6	- 1325	S		X	1		Hold
7	CBT-46@0.0-0.5	0.0-0.5	- 1243	S		X	1		
8	CBT-46@0.5-2	0.5-2	- 1244	S		X	1		
9	CBT-46 @ 2-4	2-4	- 1245	S		X	1		Hold
10	CBT-46 @ 4-6	4-6	- 1247	S		X	1		Hold

1) Relinquished By:	Date / Time	2) Received By:	Date / Time
Richard Houde	2/6/18-1525	[signature]	2-6-18 1525
Relinquished By:	Date / Time	4) Received By:	Date / Time
Relinquished By:	Date / Time	6) Received By:	Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

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LAB REPORT
FENCE LINE SAMPLES

Analytical Report

L8B0082

Project

Winter Haven

Project Number

Winter Haven

February 28, 2018

SpecPro Professional Services

12500 San Pedro Avenue, Suite 670

San Antonio, TX 78216

Minority Women Business Enterprise

Small Disadvantaged Business Enterprise

Minority Women Business Enterprise
Small Disadvantaged Business Enterprise

1412 Tech Blvd
Tampa, FL 33619

Phone #: 813-620-2000
Website: www.ftsanalytical.com

February 28, 2018

Richard Houde
SpecPro Professional Services
12500 San Pedro Avenue, Suite 670
San Antonio, TX 78216

RE: Winter Haven

We are reporting the results of the analyses performed on the samples recieved on 2/7/2018 under the project name referenced above and identified as the lab Work Order L8B0082. All results being reported under this Report apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontracted lab, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reporting using all other available quality control methods.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by FTS Analytical Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise agreed upon. The samples received, and described as recorded in Work Order L8B0082 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise agreed upon. We reserve the right to return to you any unused samples, extracts, or solutions if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding standard practices, controlled/regulated substances, etc.)

We thank you for selecting FTS Analytical to serve your analytical needs. If you have any questions concerning this report, please do not hesitate to contact us at any time. We will be happy to help.

Sincerely,

Chad A. Bechtold

Chad Bechtold
VP of Client Services

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0082-01	FLB-209 @ 0.0-0.5	Solid	07-Feb-2018 13:58	07-Feb-2018 15:33
L8B0082-02	FLB-209 @ 0.5-2	Solid	07-Feb-2018 14:00	07-Feb-2018 15:33
L8B0082-05	FLB-220 @ 0.0-0.5	Solid	07-Feb-2018 08:26	07-Feb-2018 15:33
L8B0082-06	FLB-220 @ 0.5-2	Solid	07-Feb-2018 08:34	07-Feb-2018 15:33
L8B0082-09	FLB-221 @ 0.0-0.5	Solid	07-Feb-2018 08:45	07-Feb-2018 15:33
L8B0082-10	FLB-221 @ 0.5-2	Solid	07-Feb-2018 08:51	07-Feb-2018 15:33
L8B0082-13	FLB-222 @ 0.0-0.5	Solid	07-Feb-2018 09:50	07-Feb-2018 15:33
L8B0082-14	FLB-222 @ 0.5-2	Solid	07-Feb-2018 09:53	07-Feb-2018 15:33
L8B0082-17	FLB-223 @ 0.0-0.5	Solid	07-Feb-2018 10:10	07-Feb-2018 15:33
L8B0082-18	FLB-223 @ 0.5-2	Solid	07-Feb-2018 10:14	07-Feb-2018 15:33
L8B0082-19	FLB-223 @ 2-4	Solid	07-Feb-2018 10:16	07-Feb-2018 15:33
L8B0082-20	FLB-223 @ 4-6	Solid	07-Feb-2018 10:19	07-Feb-2018 15:33
L8B0082-21	FLB-224 @ 0.0-0.5	Solid	07-Feb-2018 10:25	07-Feb-2018 15:33
L8B0082-22	FLB-224 @ 0.5-2	Solid	07-Feb-2018 10:31	07-Feb-2018 15:33
L8B0082-23	FLB-224 @ 2-4	Solid	07-Feb-2018 10:33	07-Feb-2018 15:33
L8B0082-24	FLB-224 @ 4-6	Solid	07-Feb-2018 10:35	07-Feb-2018 15:33
L8B0082-25	FLB-225 @ 0.0-0.5	Solid	07-Feb-2018 11:05	07-Feb-2018 15:33
L8B0082-26	FLB-225 @ 0.5-2	Solid	07-Feb-2018 11:07	07-Feb-2018 15:33
L8B0082-27	FLB-225 @ 2-4	Solid	07-Feb-2018 11:09	07-Feb-2018 15:33
L8B0082-28	FLB-225 @ 4-6	Solid	07-Feb-2018 11:11	07-Feb-2018 15:33
L8B0082-29	FLB-226 @ 0.0-0.5	Solid	07-Feb-2018 12:56	07-Feb-2018 15:33
L8B0082-30	FLB-226 @ 0.5-2	Solid	07-Feb-2018 12:58	07-Feb-2018 15:33
L8B0082-31	FLB-226 @ 2-4	Solid	07-Feb-2018 13:00	07-Feb-2018 15:33
L8B0082-32	FLB-226 @ 4-6	Solid	07-Feb-2018 13:02	07-Feb-2018 15:33
L8B0082-33	FLB-227 @ 0.0-0.5	Solid	07-Feb-2018 13:07	07-Feb-2018 15:33
L8B0082-34	FLB-227 @ 0.5-2	Solid	07-Feb-2018 13:10	07-Feb-2018 15:33
L8B0082-35	FLB-227 @ 2-4	Solid	07-Feb-2018 13:13	07-Feb-2018 15:33
L8B0082-36	FLB-227 @ 4-6	Solid	07-Feb-2018 13:15	07-Feb-2018 15:33
L8B0082-37	FLB-247 @ 0.0-0.5	Solid	07-Feb-2018 09:02	07-Feb-2018 15:33
L8B0082-38	FLB-247 @ 0.5-2	Solid	07-Feb-2018 09:07	07-Feb-2018 15:33
L8B0082-41	FLB-248 @ 0.0-0.5	Solid	07-Feb-2018 09:18	07-Feb-2018 15:33
L8B0082-42	FLB-248 @ 0.5-2	Solid	07-Feb-2018 09:25	07-Feb-2018 15:33
L8B0082-43	FLB-248 @ 2-4	Solid	07-Feb-2018 09:27	07-Feb-2018 15:33
L8B0082-44	FLB-248 @ 4-6	Solid	07-Feb-2018 09:30	07-Feb-2018 15:33
L8B0082-45	FLB-249 @ 0.0-0.5	Solid	07-Feb-2018 09:37	07-Feb-2018 15:33
L8B0082-46	FLB-249 @ 0.5-2	Solid	07-Feb-2018 09:40	07-Feb-2018 15:33
L8B0082-47	FLB-249 @ 2-4	Solid	07-Feb-2018 09:43	07-Feb-2018 15:33
L8B0082-48	FLB-249 @ 4-6	Solid	07-Feb-2018 09:45	07-Feb-2018 15:33

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Samples in this Report
(Continued)

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0082-49	FLB-250 @ 0.0-0.5	Solid	07-Feb-2018 13:27	07-Feb-2018 15:33
L8B0082-50	FLB-250 @ 0.5-2	Solid	07-Feb-2018 13:29	07-Feb-2018 15:33
L8B0082-53	FLB-241 @ 0.0-0.5	Solid	07-Feb-2018 10:49	07-Feb-2018 15:33
L8B0082-54	FLB-241 @ 0.5-2	Solid	07-Feb-2018 10:51	07-Feb-2018 15:33

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Analysis Case Narrative

Per client request on 2/22/18 the laboratory proceeded with the PAH analysis for the following samples outside the method holding time for extraction: FLB-224 @ 2-4, FLB-224 @ 4-6, FLB-225 @ 2-4, FLB-225 @ 4-6, FLB-226 @ 2-4, FLB-226 @ 4-6, and FLB-227 @ 2-4, FLB-227 @ 4-6. The results were qualified with a "Q".

Method 8270D LL PAHs
Batch: B8B0129
The samples L8B0082-09, -18 and -21 were analyzed at a dilution due to physical characteristics and/or high levels of non-target compounds.

Method 8270D LL PAHs
Batch: B8B0145
The samples L8B0082-33, -41, -45 and -53 were analyzed at a dilution due to physical characteristics and/or high levels of non-target compounds.

Method 8270D LL PAHs
Batch: B8B0238
The precision (RPD) of the batch Matrix Spike and Matrix Spike Duplicate exceeded control limits for Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene and Fluorene. However, the recoveries were within acceptable limits.

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

Sample: FLB-209 @ 0.0-0.5

Lab ID: L8B0082-01

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.6**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Benzo(a)anthracene	**0.0293**	I	0.0353	0.00985	mg/Kg dry	1	2/13/18 2:02	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0343**	I	0.0353	0.0167	mg/Kg dry	1	2/13/18 2:02	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0350**	I	0.0353	0.0158	mg/Kg dry	1	2/13/18 2:02	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0304**	I	0.0353	0.0164	mg/Kg dry	1	2/13/18 2:02	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0300**	I	0.0353	0.0122	mg/Kg dry	1	2/13/18 2:02	207-08-9	EPA 8270D PAH
Chrysene	**0.0420**		0.0353	0.00837	mg/Kg dry	1	2/13/18 2:02	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0512**		0.0353	0.0105	mg/Kg dry	1	2/13/18 2:02	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0261**	I	0.0353	0.0172	mg/Kg dry	1	2/13/18 2:02	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0184**	I	0.0353	0.00710	mg/Kg dry	1	2/13/18 2:02	85-01-8	EPA 8270D PAH
Pyrene	**0.0477**		0.0353	0.0112	mg/Kg dry	1	2/13/18 2:02	129-00-0	EPA 8270D PAH
Percent Moisture	**4.40**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-209 @ 0.5-2

Lab ID: L8B0082-02

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.6**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Percent Moisture	**5.41**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-220 @ 0.0-0.5

Lab ID: L8B0082-05

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**87.2**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Acenaphthene	**0.171**		0.0382	0.0150	mg/Kg dry	1	2/15/18 12:26	83-32-9	EPA 8270D PAH
Anthracene	**0.348**		0.0382	0.0101	mg/Kg dry	1	2/15/18 12:26	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**1.16**		0.0382	0.0107	mg/Kg dry	1	2/15/18 12:26	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**1.22**		0.0382	0.0181	mg/Kg dry	1	2/15/18 12:26	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**1.20**		0.0382	0.0171	mg/Kg dry	1	2/15/18 12:26	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.878**		0.0382	0.0178	mg/Kg dry	1	2/15/18 12:26	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.807**		0.0382	0.0132	mg/Kg dry	1	2/15/18 12:26	207-08-9	EPA 8270D PAH
Chrysene	**1.13**		0.0382	0.00905	mg/Kg dry	1	2/15/18 12:26	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.324**		0.0382	0.0170	mg/Kg dry	1	2/15/18 12:26	53-70-3	EPA 8270D PAH
Fluoranthene	**2.43**		0.0382	0.0113	mg/Kg dry	1	2/15/18 12:26	206-44-0	EPA 8270D PAH
Fluorene	**0.124**		0.0382	0.0123	mg/Kg dry	1	2/15/18 12:26	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.793**		0.0382	0.0186	mg/Kg dry	1	2/15/18 12:26	193-39-5	EPA 8270D PAH
Naphthalene	**0.0210**	I	0.0382	0.0132	mg/Kg dry	1	2/15/18 12:26	91-20-3	EPA 8270D PAH
Phenanthrene	**1.58**		0.0382	0.00768	mg/Kg dry	1	2/15/18 12:26	85-01-8	EPA 8270D PAH
Pyrene	**2.09**		0.0382	0.0121	mg/Kg dry	1	2/15/18 12:26	129-00-0	EPA 8270D PAH
Percent Moisture	**12.8**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-220 @ 0.5-2

Lab ID: L8B0082-06

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.5**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Benzo(a)anthracene	**0.0263**	I	0.0355	0.00991	mg/Kg dry	1	2/13/18 22:43	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.278**		0.0355	0.0168	mg/Kg dry	1	2/13/18 22:43	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.184**		0.0355	0.0159	mg/Kg dry	1	2/13/18 22:43	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.306**		0.0355	0.0165	mg/Kg dry	1	2/13/18 22:43	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.166**		0.0355	0.0123	mg/Kg dry	1	2/13/18 22:43	207-08-9	EPA 8270D PAH
Chrysene	**0.0313**	I	0.0355	0.00842	mg/Kg dry	1	2/13/18 22:43	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.106**		0.0355	0.0158	mg/Kg dry	1	2/13/18 22:43	53-70-3	EPA 8270D PAH
Fluoranthene	**0.0195**	I	0.0355	0.0106	mg/Kg dry	1	2/13/18 22:43	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.280**		0.0355	0.0173	mg/Kg dry	1	2/13/18 22:43	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0160**	I	0.0355	0.00714	mg/Kg dry	1	2/13/18 22:43	85-01-8	EPA 8270D PAH
Pyrene	**0.0174**	I	0.0355	0.0113	mg/Kg dry	1	2/13/18 22:43	129-00-0	EPA 8270D PAH
Percent Moisture	**6.48**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-221 @ 0.0-0.5

Lab ID: L8B0082-09

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**90.4**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
1-Methylnaphthalene	**7.91**		0.376	0.125	mg/Kg dry	10	2/13/18 2:43	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**14.6**		0.376	0.151	mg/Kg dry	10	2/13/18 2:43	91-57-6	EPA 8270D PAH
Acenaphthene	**89.0**		3.76	1.48	mg/Kg dry	100	2/13/18 13:33	83-32-9	EPA 8270D PAH
Acenaphthylene	**1.56**		0.376	0.125	mg/Kg dry	10	2/13/18 2:43	208-96-8	EPA 8270D PAH
Anthracene	**130**		3.76	0.992	mg/Kg dry	100	2/13/18 13:33	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**248**		3.76	1.05	mg/Kg dry	100	2/13/18 13:33	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**235**		3.76	1.78	mg/Kg dry	100	2/13/18 13:33	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**270**		3.76	1.68	mg/Kg dry	100	2/13/18 13:33	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**178**		3.76	1.75	mg/Kg dry	100	2/13/18 13:33	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**37.2**		0.376	0.130	mg/Kg dry	10	2/13/18 2:43	207-08-9	EPA 8270D PAH
Chrysene	**236**		3.76	0.891	mg/Kg dry	100	2/13/18 13:33	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**69.9**		0.376	0.167	mg/Kg dry	10	2/13/18 2:43	53-70-3	EPA 8270D PAH
Fluoranthene	**525**		3.76	1.12	mg/Kg dry	100	2/13/18 13:33	206-44-0	EPA 8270D PAH
Fluorene	**63.0**		0.376	0.121	mg/Kg dry	10	2/13/18 2:43	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**161**		3.76	1.83	mg/Kg dry	100	2/13/18 13:33	193-39-5	EPA 8270D PAH
Naphthalene	**48.8**		0.376	0.130	mg/Kg dry	10	2/13/18 2:43	91-20-3	EPA 8270D PAH
Phenanthrene	**546**		3.76	0.755	mg/Kg dry	100	2/13/18 13:33	85-01-8	EPA 8270D PAH
Pyrene	**469**		3.76	1.19	mg/Kg dry	100	2/13/18 13:33	129-00-0	EPA 8270D PAH
Percent Moisture	**9.64**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-221 @ 0.5-2

Lab ID: L8B0082-10

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.7**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
2-Methylnaphthalene	**0.0169**	I	0.0339	0.0136	mg/Kg dry	1	2/13/18 3:03	91-57-6	EPA 8270D PAH
Naphthalene	**0.0132**	I	0.0339	0.0117	mg/Kg dry	1	2/13/18 3:03	91-20-3	EPA 8270D PAH
Percent Moisture	**4.26**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

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(Continued)

Sample: FLB-222 @ 0.0-0.5

Lab ID: L8B0082-13

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.8**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
1-Methylnaphthalene	**0.0140**	I	0.0359	0.0120	mg/Kg dry	1	2/13/18 3:23	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.0201**	I	0.0359	0.0144	mg/Kg dry	1	2/13/18 3:23	91-57-6	EPA 8270D PAH
Acenaphthene	**0.167**		0.0359	0.0141	mg/Kg dry	1	2/13/18 3:23	83-32-9	EPA 8270D PAH
Anthracene	**0.300**		0.0359	0.00949	mg/Kg dry	1	2/13/18 3:23	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.855**		0.0359	0.0100	mg/Kg dry	1	2/13/18 3:23	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.883**		0.0359	0.0170	mg/Kg dry	1	2/13/18 3:23	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.907**		0.0359	0.0161	mg/Kg dry	1	2/13/18 3:23	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.625**		0.0359	0.0167	mg/Kg dry	1	2/13/18 3:23	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.673**		0.0359	0.0124	mg/Kg dry	1	2/13/18 3:23	207-08-9	EPA 8270D PAH
Chrysene	**0.871**		0.0359	0.00852	mg/Kg dry	1	2/13/18 3:23	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.219**		0.0359	0.0160	mg/Kg dry	1	2/13/18 3:23	53-70-3	EPA 8270D PAH
Fluoranthene	**1.84**		0.0359	0.0107	mg/Kg dry	1	2/13/18 3:23	206-44-0	EPA 8270D PAH
Fluorene	**0.121**		0.0359	0.0115	mg/Kg dry	1	2/13/18 3:23	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.580**		0.0359	0.0175	mg/Kg dry	1	2/13/18 3:23	193-39-5	EPA 8270D PAH
Naphthalene	**0.0528**		0.0359	0.0124	mg/Kg dry	1	2/13/18 3:23	91-20-3	EPA 8270D PAH
Phenanthrene	**1.38**		0.0359	0.00722	mg/Kg dry	1	2/13/18 3:23	85-01-8	EPA 8270D PAH
Pyrene	**1.52**		0.0359	0.0114	mg/Kg dry	1	2/13/18 3:23	129-00-0	EPA 8270D PAH
Percent Moisture	**5.18**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-222 @ 0.5-2

Lab ID: L8B0082-14

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Naphthalene	**0.0139**	I	0.0357	0.0123	mg/Kg dry	1	2/13/18 3:44	91-20-3	EPA 8270D PAH
Percent Moisture	**5.02**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-223 @ 0.0-0.5

Lab ID: L8B0082-17

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Percent Moisture	**5.08**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-223 @ 0.5-2

Lab ID: L8B0082-18

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**90.9**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Acenaphthene	**0.360**		0.186	0.0730	mg/Kg dry	5	2/13/18 4:24	83-32-9	EPA 8270D PAH
Anthracene	**0.667**		0.186	0.0490	mg/Kg dry	5	2/13/18 4:24	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**1.92**		0.186	0.0518	mg/Kg dry	5	2/13/18 4:24	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**1.92**		0.186	0.0881	mg/Kg dry	5	2/13/18 4:24	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**1.92**		0.186	0.0830	mg/Kg dry	5	2/13/18 4:24	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**1.47**		0.186	0.0864	mg/Kg dry	5	2/13/18 4:24	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**1.57**		0.186	0.0641	mg/Kg dry	5	2/13/18 4:24	207-08-9	EPA 8270D PAH
Chrysene	**1.97**		0.186	0.0440	mg/Kg dry	5	2/13/18 4:24	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.611**		0.186	0.0825	mg/Kg dry	5	2/13/18 4:24	53-70-3	EPA 8270D PAH
Fluoranthene	**4.10**		0.186	0.0552	mg/Kg dry	5	2/13/18 4:24	206-44-0	EPA 8270D PAH
Fluorene	**0.255**		0.186	0.0596	mg/Kg dry	5	2/13/18 4:24	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**1.29**		0.186	0.0903	mg/Kg dry	5	2/13/18 4:24	193-39-5	EPA 8270D PAH
Naphthalene	**0.0650**	I	0.186	0.0641	mg/Kg dry	5	2/13/18 4:24	91-20-3	EPA 8270D PAH
Phenanthrene	**3.16**		0.186	0.0373	mg/Kg dry	5	2/13/18 4:24	85-01-8	EPA 8270D PAH
Pyrene	**3.42**		0.186	0.0591	mg/Kg dry	5	2/13/18 4:24	129-00-0	EPA 8270D PAH
Percent Moisture	**9.08**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-223 @ 2-4

Lab ID: L8B0082-19

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**4.88**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

Sample: FLB-223 @ 4-6

Lab ID: L8B0082-20

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**5.10**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-224 @ 0.0-0.5

Lab ID: L8B0082-21

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.4**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
1-Methylnaphthalene	**0.168**	I	0.187	0.0623	mg/Kg dry	5	2/13/18 4:45	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.292**		0.187	0.0752	mg/Kg dry	5	2/13/18 4:45	91-57-6	EPA 8270D PAH
Acenaphthene	**1.74**		0.187	0.0735	mg/Kg dry	5	2/13/18 4:45	83-32-9	EPA 8270D PAH
Anthracene	**2.84**		0.187	0.0494	mg/Kg dry	5	2/13/18 4:45	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**5.15**		0.187	0.0522	mg/Kg dry	5	2/13/18 4:45	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**5.51**		0.187	0.0887	mg/Kg dry	5	2/13/18 4:45	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**5.66**		0.187	0.0836	mg/Kg dry	5	2/13/18 4:45	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**3.88**		0.187	0.0870	mg/Kg dry	5	2/13/18 4:45	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**4.21**		0.187	0.0646	mg/Kg dry	5	2/13/18 4:45	207-08-9	EPA 8270D PAH
Chrysene	**5.53**		0.187	0.0443	mg/Kg dry	5	2/13/18 4:45	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**1.31**		0.187	0.0831	mg/Kg dry	5	2/13/18 4:45	53-70-3	EPA 8270D PAH
Fluoranthene	**12.8**		0.187	0.0556	mg/Kg dry	5	2/13/18 4:45	206-44-0	EPA 8270D PAH
Fluorene	**1.39**		0.187	0.0601	mg/Kg dry	5	2/13/18 4:45	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**3.48**		0.187	0.0909	mg/Kg dry	5	2/13/18 4:45	193-39-5	EPA 8270D PAH
Naphthalene	**0.995**		0.187	0.0646	mg/Kg dry	5	2/13/18 4:45	91-20-3	EPA 8270D PAH
Phenanthrene	**12.1**		0.187	0.0376	mg/Kg dry	5	2/13/18 4:45	85-01-8	EPA 8270D PAH
Pyrene	**10.2**		0.187	0.0595	mg/Kg dry	5	2/13/18 4:45	129-00-0	EPA 8270D PAH
Percent Moisture	**10.6**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-224 @ 0.5-2

Lab ID: L8B0082-22

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.5**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Percent Moisture	**7.48**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-224 @ 2-4

Lab ID: L8B0082-23

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.8**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**4.17**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-224 @ 4-6

Lab ID: L8B0082-24

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.8**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**4.17**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

Sample: FLB-225 @ 0.0-0.5

Lab ID: L8B0082-25

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.5**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Benzo(a)anthracene	**0.0376**		0.0358	0.00999	mg/Kg dry	1	2/12/18 22:19	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0423**		0.0358	0.0170	mg/Kg dry	1	2/12/18 22:19	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0355**	I	0.0358	0.0160	mg/Kg dry	1	2/12/18 22:19	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0355**	I	0.0358	0.0167	mg/Kg dry	1	2/12/18 22:19	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0365**		0.0358	0.0124	mg/Kg dry	1	2/12/18 22:19	207-08-9	EPA 8270D PAH
Chrysene	**0.0408**		0.0358	0.00849	mg/Kg dry	1	2/12/18 22:19	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0602**		0.0358	0.0106	mg/Kg dry	1	2/12/18 22:19	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0283**	I	0.0358	0.0174	mg/Kg dry	1	2/12/18 22:19	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0290**	I	0.0358	0.00720	mg/Kg dry	1	2/12/18 22:19	85-01-8	EPA 8270D PAH
Pyrene	**0.0562**		0.0358	0.0114	mg/Kg dry	1	2/12/18 22:19	129-00-0	EPA 8270D PAH
Percent Moisture	**6.52**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-225 @ 0.5-2

Lab ID: L8B0082-26

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Percent Moisture	**5.32**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-225 @ 2-4

Lab ID: L8B0082-27

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**5.10**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-225 @ 4-6

Lab ID: L8B0082-28

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**4.94**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

Sample: FLB-226 @ 0.0-0.5

Lab ID: L8B0082-29

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.4**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
1-Methylnaphthalene	**0.0196**	I	0.0350	0.0117	mg/Kg dry	1	2/14/18 13:04	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.0210**	I	0.0350	0.0141	mg/Kg dry	1	2/14/18 13:04	91-57-6	EPA 8270D PAH
Acenaphthene	**0.262**		0.0350	0.0138	mg/Kg dry	1	2/14/18 13:04	83-32-9	EPA 8270D PAH
Anthracene	**0.464**		0.0350	0.00925	mg/Kg dry	1	2/14/18 13:04	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**1.12**		0.0350	0.00977	mg/Kg dry	1	2/14/18 13:04	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**1.10**		0.0350	0.0166	mg/Kg dry	1	2/14/18 13:04	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**1.13**		0.0350	0.0157	mg/Kg dry	1	2/14/18 13:04	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.833**		0.0350	0.0163	mg/Kg dry	1	2/14/18 13:04	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.747**		0.0350	0.0121	mg/Kg dry	1	2/14/18 13:04	207-08-9	EPA 8270D PAH
Chrysene	**1.10**		0.0350	0.00830	mg/Kg dry	1	2/14/18 13:04	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.298**		0.0350	0.0155	mg/Kg dry	1	2/14/18 13:04	53-70-3	EPA 8270D PAH
Fluoranthene	**2.56**		0.0350	0.0104	mg/Kg dry	1	2/14/18 13:04	206-44-0	EPA 8270D PAH
Fluorene	**0.175**		0.0350	0.0112	mg/Kg dry	1	2/14/18 13:04	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.748**		0.0350	0.0170	mg/Kg dry	1	2/14/18 13:04	193-39-5	EPA 8270D PAH
Naphthalene	**0.0466**		0.0350	0.0121	mg/Kg dry	1	2/14/18 13:04	91-20-3	EPA 8270D PAH
Phenanthrene	**2.02**		0.0350	0.00704	mg/Kg dry	1	2/14/18 13:04	85-01-8	EPA 8270D PAH
Pyrene	**1.96**		0.0350	0.0111	mg/Kg dry	1	2/14/18 13:04	129-00-0	EPA 8270D PAH
Percent Moisture	**6.62**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

Sample: FLB-226 @ 0.5-2

Lab ID: L8B0082-30

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.5**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G
Percent Moisture	**4.50**		0.100	0.100	%	1	2/12/18 9:36		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-226 @ 2-4

Lab ID: L8B0082-31

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**5.10**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

Sample: FLB-226 @ 4-6

Lab ID: L8B0082-32

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.8**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**5.25**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

Sample: FLB-227 @ 0.0-0.5

Lab ID: L8B0082-33

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.4**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
1-Methylnaphthalene	**0.107**	I	0.185	0.0616	mg/Kg dry	5	2/14/18 0:05	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.155**	I	0.185	0.0744	mg/Kg dry	5	2/14/18 0:05	91-57-6	EPA 8270D PAH
Acenaphthene	**1.14**		0.185	0.0727	mg/Kg dry	5	2/14/18 0:05	83-32-9	EPA 8270D PAH
Anthracene	**2.09**		0.185	0.0489	mg/Kg dry	5	2/14/18 0:05	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**4.70**		0.185	0.0516	mg/Kg dry	5	2/14/18 0:05	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**4.59**		0.185	0.0877	mg/Kg dry	5	2/14/18 0:05	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**4.45**		0.185	0.0827	mg/Kg dry	5	2/14/18 0:05	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**3.51**		0.185	0.0860	mg/Kg dry	5	2/14/18 0:05	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**3.57**		0.185	0.0638	mg/Kg dry	5	2/14/18 0:05	207-08-9	EPA 8270D PAH
Chrysene	**4.72**		0.185	0.0439	mg/Kg dry	5	2/14/18 0:05	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**1.43**		0.185	0.0822	mg/Kg dry	5	2/14/18 0:05	53-70-3	EPA 8270D PAH
Fluoranthene	**10.3**		0.185	0.0550	mg/Kg dry	5	2/14/18 0:05	206-44-0	EPA 8270D PAH
Fluorene	**0.912**		0.185	0.0594	mg/Kg dry	5	2/14/18 0:05	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**3.10**		0.185	0.0899	mg/Kg dry	5	2/14/18 0:05	193-39-5	EPA 8270D PAH
Naphthalene	**0.483**		0.185	0.0638	mg/Kg dry	5	2/14/18 0:05	91-20-3	EPA 8270D PAH
Phenanthrene	**9.32**		0.185	0.0372	mg/Kg dry	5	2/14/18 0:05	85-01-8	EPA 8270D PAH
Pyrene	**8.49**		0.185	0.0588	mg/Kg dry	5	2/14/18 0:05	129-00-0	EPA 8270D PAH
Percent Moisture	**10.6**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-227 @ 0.5-2

Lab ID: L8B0082-34

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.6**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Percent Moisture	**4.36**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-227 @ 2-4

Lab ID: L8B0082-35

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.9**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**4.14**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

Sample: FLB-227 @ 4-6

Lab ID: L8B0082-36

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.2**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G
Percent Moisture	**4.84**		0.100	0.100	%	1	2/22/18 10:42		SM 2540G

Sample: FLB-247 @ 0.0-0.5

Lab ID: L8B0082-37

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**88.3**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Acenaphthene	**0.117**		0.0371	0.0146	mg/Kg dry	1	2/14/18 0:46	83-32-9	EPA 8270D PAH
Anthracene	**0.234**		0.0371	0.00980	mg/Kg dry	1	2/14/18 0:46	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.706**		0.0371	0.0104	mg/Kg dry	1	2/14/18 0:46	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.744**		0.0371	0.0176	mg/Kg dry	1	2/14/18 0:46	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.760**		0.0371	0.0166	mg/Kg dry	1	2/14/18 0:46	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.569**		0.0371	0.0173	mg/Kg dry	1	2/14/18 0:46	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.596**		0.0371	0.0128	mg/Kg dry	1	2/14/18 0:46	207-08-9	EPA 8270D PAH
Chrysene	**0.729**		0.0371	0.00879	mg/Kg dry	1	2/14/18 0:46	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.230**		0.0371	0.0165	mg/Kg dry	1	2/14/18 0:46	53-70-3	EPA 8270D PAH
Fluoranthene	**1.50**		0.0371	0.0110	mg/Kg dry	1	2/14/18 0:46	206-44-0	EPA 8270D PAH
Fluorene	**0.0842**		0.0371	0.0119	mg/Kg dry	1	2/14/18 0:46	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.505**		0.0371	0.0180	mg/Kg dry	1	2/14/18 0:46	193-39-5	EPA 8270D PAH
Naphthalene	**0.0174**	I	0.0371	0.0128	mg/Kg dry	1	2/14/18 0:46	91-20-3	EPA 8270D PAH
Phenanthrene	**1.03**		0.0371	0.00746	mg/Kg dry	1	2/14/18 0:46	85-01-8	EPA 8270D PAH
Pyrene	**1.22**		0.0371	0.0118	mg/Kg dry	1	2/14/18 0:46	129-00-0	EPA 8270D PAH
Percent Moisture	**11.7**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-247 @ 0.5-2

Lab ID: L8B0082-38

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.6**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Anthracene	**0.0224**	I	0.0339	0.00895	mg/Kg dry	1	2/14/18 1:06	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.113**		0.0339	0.00946	mg/Kg dry	1	2/14/18 1:06	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.118**		0.0339	0.0161	mg/Kg dry	1	2/14/18 1:06	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.108**		0.0339	0.0152	mg/Kg dry	1	2/14/18 1:06	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0908**		0.0339	0.0158	mg/Kg dry	1	2/14/18 1:06	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0952**		0.0339	0.0117	mg/Kg dry	1	2/14/18 1:06	207-08-9	EPA 8270D PAH
Chrysene	**0.119**		0.0339	0.00803	mg/Kg dry	1	2/14/18 1:06	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0315**	I	0.0339	0.0150	mg/Kg dry	1	2/14/18 1:06	53-70-3	EPA 8270D PAH
Fluoranthene	**0.180**		0.0339	0.0101	mg/Kg dry	1	2/14/18 1:06	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0830**		0.0339	0.0165	mg/Kg dry	1	2/14/18 1:06	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0871**		0.0339	0.00681	mg/Kg dry	1	2/14/18 1:06	85-01-8	EPA 8270D PAH
Pyrene	**0.164**		0.0339	0.0108	mg/Kg dry	1	2/14/18 1:06	129-00-0	EPA 8270D PAH
Percent Moisture	**4.37**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-248 @ 0.0-0.5

Lab ID: L8B0082-41

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**80.7**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Acenaphthene	**0.566**		0.204	0.0803	mg/Kg dry	5	2/14/18 1:26	83-32-9	EPA 8270D PAH
Anthracene	**0.856**		0.204	0.0539	mg/Kg dry	5	2/14/18 1:26	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**2.24**		0.204	0.0570	mg/Kg dry	5	2/14/18 1:26	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**2.23**		0.204	0.0968	mg/Kg dry	5	2/14/18 1:26	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**2.18**		0.204	0.0913	mg/Kg dry	5	2/14/18 1:26	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**1.73**		0.204	0.0950	mg/Kg dry	5	2/14/18 1:26	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**1.77**		0.204	0.0705	mg/Kg dry	5	2/14/18 1:26	207-08-9	EPA 8270D PAH
Chrysene	**2.34**		0.204	0.0484	mg/Kg dry	5	2/14/18 1:26	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.766**		0.204	0.0907	mg/Kg dry	5	2/14/18 1:26	53-70-3	EPA 8270D PAH
Fluoranthene	**4.97**		0.204	0.0607	mg/Kg dry	5	2/14/18 1:26	206-44-0	EPA 8270D PAH
Fluorene	**0.392**		0.204	0.0656	mg/Kg dry	5	2/14/18 1:26	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**1.53**		0.204	0.0993	mg/Kg dry	5	2/14/18 1:26	193-39-5	EPA 8270D PAH
Naphthalene	**0.194**	I	0.204	0.0705	mg/Kg dry	5	2/14/18 1:26	91-20-3	EPA 8270D PAH
Phenanthrene	**4.14**		0.204	0.0411	mg/Kg dry	5	2/14/18 1:26	85-01-8	EPA 8270D PAH
Pyrene	**3.99**		0.204	0.0650	mg/Kg dry	5	2/14/18 1:26	129-00-0	EPA 8270D PAH
Percent Moisture	**19.3**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-248 @ 0.5-2

Lab ID: L8B0082-42

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Anthracene	**0.0208**	I	0.0347	0.00916	mg/Kg dry	1	2/14/18 1:47	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.0448**		0.0347	0.00968	mg/Kg dry	1	2/14/18 1:47	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0406**		0.0347	0.0165	mg/Kg dry	1	2/14/18 1:47	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0389**		0.0347	0.0155	mg/Kg dry	1	2/14/18 1:47	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0316**	I	0.0347	0.0161	mg/Kg dry	1	2/14/18 1:47	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0323**	I	0.0347	0.0120	mg/Kg dry	1	2/14/18 1:47	207-08-9	EPA 8270D PAH
Chrysene	**0.0434**		0.0347	0.00823	mg/Kg dry	1	2/14/18 1:47	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0916**		0.0347	0.0103	mg/Kg dry	1	2/14/18 1:47	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0281**	I	0.0347	0.0169	mg/Kg dry	1	2/14/18 1:47	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0809**		0.0347	0.00698	mg/Kg dry	1	2/14/18 1:47	85-01-8	EPA 8270D PAH
Pyrene	**0.0732**		0.0347	0.0110	mg/Kg dry	1	2/14/18 1:47	129-00-0	EPA 8270D PAH
Percent Moisture	**4.98**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-248 @ 2-4

Lab ID: L8B0082-43

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.6**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Benzo(a)anthracene	**0.0181**	I	0.0341	0.00952	mg/Kg dry	1	2/13/18 19:20	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0164**	I	0.0341	0.0162	mg/Kg dry	1	2/13/18 19:20	50-32-8	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0133**	I	0.0341	0.0118	mg/Kg dry	1	2/13/18 19:20	207-08-9	EPA 8270D PAH
Chrysene	**0.0188**	I	0.0341	0.00809	mg/Kg dry	1	2/13/18 19:20	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0335**	I	0.0341	0.0101	mg/Kg dry	1	2/13/18 19:20	206-44-0	EPA 8270D PAH
Phenanthrene	**0.0239**	I	0.0341	0.00686	mg/Kg dry	1	2/13/18 19:20	85-01-8	EPA 8270D PAH
Pyrene	**0.0304**	I	0.0341	0.0109	mg/Kg dry	1	2/13/18 19:20	129-00-0	EPA 8270D PAH
Percent Moisture	**2.42**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-248 @ 4-6

Lab ID: L8B0082-44

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Percent Moisture	**5.29**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-249 @ 0.0-0.5

Lab ID: L8B0082-45

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**81.9**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
1-Methylnaphthalene	**0.0842**	I	0.200	0.0667	mg/Kg dry	5	2/13/18 20:00	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.134**	I	0.200	0.0806	mg/Kg dry	5	2/13/18 20:00	91-57-6	EPA 8270D PAH
Acenaphthene	**0.950**		0.200	0.0788	mg/Kg dry	5	2/13/18 20:00	83-32-9	EPA 8270D PAH
Anthracene	**1.55**		0.200	0.0529	mg/Kg dry	5	2/13/18 20:00	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**3.50**		0.200	0.0559	mg/Kg dry	5	2/13/18 20:00	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**3.37**		0.200	0.0950	mg/Kg dry	5	2/13/18 20:00	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**3.39**		0.200	0.0896	mg/Kg dry	5	2/13/18 20:00	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**2.52**		0.200	0.0932	mg/Kg dry	5	2/13/18 20:00	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**2.68**		0.200	0.0691	mg/Kg dry	5	2/13/18 20:00	207-08-9	EPA 8270D PAH
Chrysene	**3.51**		0.200	0.0475	mg/Kg dry	5	2/13/18 20:00	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**1.02**		0.200	0.0890	mg/Kg dry	5	2/13/18 20:00	53-70-3	EPA 8270D PAH
Fluoranthene	**7.85**		0.200	0.0595	mg/Kg dry	5	2/13/18 20:00	206-44-0	EPA 8270D PAH
Fluorene	**0.734**		0.200	0.0643	mg/Kg dry	5	2/13/18 20:00	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**2.19**		0.200	0.0974	mg/Kg dry	5	2/13/18 20:00	193-39-5	EPA 8270D PAH
Naphthalene	**0.423**		0.200	0.0691	mg/Kg dry	5	2/13/18 20:00	91-20-3	EPA 8270D PAH
Phenanthrene	**7.30**		0.200	0.0403	mg/Kg dry	5	2/13/18 20:00	85-01-8	EPA 8270D PAH
Pyrene	**6.74**		0.200	0.0637	mg/Kg dry	5	2/13/18 20:00	129-00-0	EPA 8270D PAH
Percent Moisture	**18.1**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-249 @ 0.5-2

Lab ID: L8B0082-46

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.8**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Acenaphthene	**0.0548**		0.0354	0.0139	mg/Kg dry	1	2/13/18 20:21	83-32-9	EPA 8270D PAH
Anthracene	**0.169**		0.0354	0.00934	mg/Kg dry	1	2/13/18 20:21	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.536**		0.0354	0.00987	mg/Kg dry	1	2/13/18 20:21	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.541**		0.0354	0.0168	mg/Kg dry	1	2/13/18 20:21	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.524**		0.0354	0.0158	mg/Kg dry	1	2/13/18 20:21	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.413**		0.0354	0.0164	mg/Kg dry	1	2/13/18 20:21	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.432**		0.0354	0.0122	mg/Kg dry	1	2/13/18 20:21	207-08-9	EPA 8270D PAH
Chrysene	**0.538**		0.0354	0.00838	mg/Kg dry	1	2/13/18 20:21	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.164**		0.0354	0.0157	mg/Kg dry	1	2/13/18 20:21	53-70-3	EPA 8270D PAH
Fluoranthene	**1.12**		0.0354	0.0105	mg/Kg dry	1	2/13/18 20:21	206-44-0	EPA 8270D PAH
Fluorene	**0.0484**		0.0354	0.0114	mg/Kg dry	1	2/13/18 20:21	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.360**		0.0354	0.0172	mg/Kg dry	1	2/13/18 20:21	193-39-5	EPA 8270D PAH
Phenanthrene	**0.767**		0.0354	0.00711	mg/Kg dry	1	2/13/18 20:21	85-01-8	EPA 8270D PAH
Pyrene	**0.969**		0.0354	0.0112	mg/Kg dry	1	2/13/18 20:21	129-00-0	EPA 8270D PAH
Percent Moisture	**6.24**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-249 @ 2-4

Lab ID: L8B0082-47

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**91.8**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Percent Moisture	**8.16**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-249 @ 4-6

Lab ID: L8B0082-48

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.1**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Percent Moisture	**5.90**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-250 @ 0.0-0.5

Lab ID: L8B0082-49

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.5**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Acenaphthene	**0.0289**	I	0.0348	0.0137	mg/Kg dry	1	2/13/18 21:01	83-32-9	EPA 8270D PAH
Anthracene	**0.112**		0.0348	0.00919	mg/Kg dry	1	2/13/18 21:01	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.551**		0.0348	0.00971	mg/Kg dry	1	2/13/18 21:01	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.667**		0.0348	0.0165	mg/Kg dry	1	2/13/18 21:01	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.663**		0.0348	0.0156	mg/Kg dry	1	2/13/18 21:01	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.597**		0.0348	0.0162	mg/Kg dry	1	2/13/18 21:01	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.549**		0.0348	0.0120	mg/Kg dry	1	2/13/18 21:01	207-08-9	EPA 8270D PAH
Chrysene	**0.611**		0.0348	0.00825	mg/Kg dry	1	2/13/18 21:01	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.222**		0.0348	0.0155	mg/Kg dry	1	2/13/18 21:01	53-70-3	EPA 8270D PAH
Fluoranthene	**0.987**		0.0348	0.0103	mg/Kg dry	1	2/13/18 21:01	206-44-0	EPA 8270D PAH
Fluorene	**0.0184**	I	0.0348	0.0112	mg/Kg dry	1	2/13/18 21:01	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.507**		0.0348	0.0169	mg/Kg dry	1	2/13/18 21:01	193-39-5	EPA 8270D PAH
Phenanthrene	**0.473**		0.0348	0.00700	mg/Kg dry	1	2/13/18 21:01	85-01-8	EPA 8270D PAH
Pyrene	**0.951**		0.0348	0.0111	mg/Kg dry	1	2/13/18 21:01	129-00-0	EPA 8270D PAH
Percent Moisture	**5.46**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-250 @ 0.5-2

Lab ID: L8B0082-50

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Percent Moisture	**5.15**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-241 @ 0.0-0.5

Lab ID: L8B0082-53

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**87.1**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Acenaphthene	**0.468**		0.187	0.0736	mg/Kg dry	5	2/13/18 21:42	83-32-9	EPA 8270D PAH
Anthracene	**0.820**		0.187	0.0494	mg/Kg dry	5	2/13/18 21:42	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**1.86**		0.187	0.0522	mg/Kg dry	5	2/13/18 21:42	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**1.86**		0.187	0.0887	mg/Kg dry	5	2/13/18 21:42	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**1.78**		0.187	0.0837	mg/Kg dry	5	2/13/18 21:42	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**1.37**		0.187	0.0871	mg/Kg dry	5	2/13/18 21:42	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**1.56**		0.187	0.0646	mg/Kg dry	5	2/13/18 21:42	207-08-9	EPA 8270D PAH
Chrysene	**1.97**		0.187	0.0444	mg/Kg dry	5	2/13/18 21:42	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.633**		0.187	0.0831	mg/Kg dry	5	2/13/18 21:42	53-70-3	EPA 8270D PAH
Fluoranthene	**4.16**		0.187	0.0556	mg/Kg dry	5	2/13/18 21:42	206-44-0	EPA 8270D PAH
Fluorene	**0.316**		0.187	0.0601	mg/Kg dry	5	2/13/18 21:42	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**1.29**		0.187	0.0910	mg/Kg dry	5	2/13/18 21:42	193-39-5	EPA 8270D PAH
Naphthalene	**0.107**	I	0.187	0.0646	mg/Kg dry	5	2/13/18 21:42	91-20-3	EPA 8270D PAH
Phenanthrene	**3.53**		0.187	0.0376	mg/Kg dry	5	2/13/18 21:42	85-01-8	EPA 8270D PAH
Pyrene	**3.45**		0.187	0.0595	mg/Kg dry	5	2/13/18 21:42	129-00-0	EPA 8270D PAH
Percent Moisture	**12.9**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

Sample: FLB-241 @ 0.5-2

Lab ID: L8B0082-54

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G
Phenanthrene	**0.00762**	I	0.0346	0.00696	mg/Kg dry	1	2/14/18 11:58	85-01-8	EPA 8270D PAH
Percent Moisture	**5.02**		0.100	0.100	%	1	2/8/18 13:00		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results

Client Sample ID: FLB-209 @ 0.0-0.5
Lab Sample ID: L8B0082-01 (Solid) **Sampled:2/7/18 13:58**

PAHs (SVOCs) by Method 8270D

Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	90-12-0
2-Methylnaphthalene	0.0142	U	0.0353	0.0142	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	91-57-6
Acenaphthene	0.0139	U	0.0353	0.0139	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	83-32-9
Acenaphthylene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	208-96-8
Anthracene	0.00932	U	0.0353	0.00932	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	120-12-7
Benzo(a)anthracene	**0.0293**	I	0.0353	0.00985	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	56-55-3
Benzo(a)pyrene	**0.0343**	I	0.0353	0.0167	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	50-32-8
Benzo(b)fluoranthene	**0.0350**	I	0.0353	0.0158	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	205-99-2
Benzo(g,h,i)perylene	**0.0304**	I	0.0353	0.0164	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	191-24-2
Benzo(k)fluoranthene	**0.0300**	I	0.0353	0.0122	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	207-08-9
Chrysene	**0.0420**		0.0353	0.00837	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	218-01-9
Dibenz(a,h)Anthracene	0.0157	U	0.0353	0.0157	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	53-70-3
Fluoranthene	**0.0512**		0.0353	0.0105	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	206-44-0
Fluorene	0.0113	U	0.0353	0.0113	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0261**	I	0.0353	0.0172	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	193-39-5
Naphthalene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	91-20-3
Phenanthrene	**0.0184**	I	0.0353	0.00710	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	85-01-8
Pyrene	**0.0477**		0.0353	0.0112	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:02	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*52%*	*16-110*				2/13/18 2:02	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/13/18 2:02	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*72%*	*20-137*				2/13/18 2:02	1718-51-0

Percent Moisture by Method 2540G

Laboratory:XENCO Labora Analyst:MAB

% Solids	**95.6**	0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**4.40**	0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-209 @ 0.5-2
Lab Sample ID: L8B0082-02 (Solid) **Sampled:2/7/18 14:00**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0353	0.0117	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	90-12-0
2-Methylnaphthalene	0.0142	U	0.0353	0.0142	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	91-57-6
Acenaphthene	0.0139	U	0.0353	0.0139	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	83-32-9
Acenaphthylene	0.0117	U	0.0353	0.0117	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	208-96-8
Anthracene	0.00931	U	0.0353	0.00931	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	120-12-7
Benzo(a)anthracene	0.00984	U	0.0353	0.00984	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	56-55-3
Benzo(a)pyrene	0.0167	U	0.0353	0.0167	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	50-32-8
Benzo(b)fluoranthene	0.0158	U	0.0353	0.0158	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0353	0.0164	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	191-24-2
Benzo(k)fluoranthene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	207-08-9
Chrysene	0.00836	U	0.0353	0.00836	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	218-01-9
Dibenz(a,h)Anthracene	0.0157	U	0.0353	0.0157	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	53-70-3
Fluoranthene	0.0105	U	0.0353	0.0105	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	206-44-0
Fluorene	0.0113	U	0.0353	0.0113	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0353	0.0171	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	193-39-5
Naphthalene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	91-20-3
Phenanthrene	0.00709	U	0.0353	0.00709	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	85-01-8
Pyrene	0.0112	U	0.0353	0.0112	mg/Kg dry	1	2/12/18 10:00	2/13/18 2:22	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*62%*	*16-110*				2/13/18 2:22	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/13/18 2:22	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*76%*	*20-137*				2/13/18 2:22	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.6**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**5.41**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-220 @ 0.0-0.5
Lab Sample ID: L8B0082-05 (Solid) **Sampled:2/7/18 8:26**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0127	U	0.0382	0.0127	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	90-12-0
2-Methylnaphthalene	0.0154	U	0.0382	0.0154	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	91-57-6
Acenaphthene	**0.171**		0.0382	0.0150	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	83-32-9
Acenaphthylene	0.0127	U	0.0382	0.0127	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	208-96-8
Anthracene	**0.348**		0.0382	0.0101	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	120-12-7
Benzo(a)anthracene	**1.16**		0.0382	0.0107	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	56-55-3
Benzo(a)pyrene	**1.22**		0.0382	0.0181	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	50-32-8
Benzo(b)fluoranthene	**1.20**		0.0382	0.0171	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	205-99-2
Benzo(g,h,i)perylene	**0.878**		0.0382	0.0178	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	191-24-2
Benzo(k)fluoranthene	**0.807**		0.0382	0.0132	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	207-08-9
Chrysene	**1.13**		0.0382	0.00905	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	218-01-9
Dibenz(a,h)Anthracene	**0.324**		0.0382	0.0170	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	53-70-3
Fluoranthene	**2.43**		0.0382	0.0113	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	206-44-0
Fluorene	**0.124**		0.0382	0.0123	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	86-73-7
Indeno(1,2,3-cd)pyrene	**0.793**		0.0382	0.0186	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	193-39-5
Naphthalene	**0.0210**	I	0.0382	0.0132	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	91-20-3
Phenanthrene	**1.58**		0.0382	0.00768	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	85-01-8
Pyrene	**2.09**		0.0382	0.0121	mg/Kg dry	1	2/14/18 15:49	2/15/18 12:26	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*48%*	*16-110*				2/15/18 12:26	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*41%*	*19-105*				2/15/18 12:26	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*76%*	*20-137*				2/15/18 12:26	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**87.2**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**12.8**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-220 @ 0.5-2
Lab Sample ID: L8B0082-06 (Solid) **Sampled:2/7/18 8:34**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora — Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0118	U	0.0355	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	90-12-0
2-Methylnaphthalene	0.0143	U	0.0355	0.0143	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	91-57-6
Acenaphthene	0.0140	U	0.0355	0.0140	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	83-32-9
Acenaphthylene	0.0118	U	0.0355	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	208-96-8
Anthracene	0.00938	U	0.0355	0.00938	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	120-12-7
Benzo(a)anthracene	**0.0263**	I	0.0355	0.00991	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	56-55-3
Benzo(a)pyrene	**0.278**		0.0355	0.0168	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	50-32-8
Benzo(b)fluoranthene	**0.184**		0.0355	0.0159	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	205-99-2
Benzo(g,h,i)perylene	**0.306**		0.0355	0.0165	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	191-24-2
Benzo(k)fluoranthene	**0.166**		0.0355	0.0123	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	207-08-9
Chrysene	**0.0313**	I	0.0355	0.00842	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	218-01-9
Dibenz(a,h)Anthracene	**0.106**		0.0355	0.0158	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	53-70-3
Fluoranthene	**0.0195**	I	0.0355	0.0106	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	206-44-0
Fluorene	0.0114	U	0.0355	0.0114	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	86-73-7
Indeno(1,2,3-cd)pyrene	**0.280**		0.0355	0.0173	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	193-39-5
Naphthalene	0.0123	U	0.0355	0.0123	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	91-20-3
Phenanthrene	**0.0160**	I	0.0355	0.00714	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	85-01-8
Pyrene	**0.0174**	I	0.0355	0.0113	mg/Kg dry	1	2/13/18 11:00	2/13/18 22:43	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*62%*	*16-110*				2/13/18 22:43	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/13/18 22:43	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/13/18 22:43	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora — Analyst:MAB

% Solids	**93.5**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36
Percent Moisture	**6.48**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-221 @ 0.0-0.5
Lab Sample ID: L8B0082-09 (Solid) **Sampled:2/7/18 8:45**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**7.91**		0.376	0.125	mg/Kg dry	10	2/12/18 10:00	2/13/18 2:43	90-12-0
2-Methylnaphthalene	**14.6**		0.376	0.151	mg/Kg dry	10	2/12/18 10:00	2/13/18 2:43	91-57-6
Acenaphthene	**89.0**		3.76	1.48	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	83-32-9
Acenaphthylene	**1.56**		0.376	0.125	mg/Kg dry	10	2/12/18 10:00	2/13/18 2:43	208-96-8
Anthracene	**130**		3.76	0.992	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	120-12-7
Benzo(a)anthracene	**248**		3.76	1.05	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	56-55-3
Benzo(a)pyrene	**235**		3.76	1.78	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	50-32-8
Benzo(b)fluoranthene	**270**		3.76	1.68	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	205-99-2
Benzo(g,h,i)perylene	**178**		3.76	1.75	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	191-24-2
Benzo(k)fluoranthene	**37.2**		0.376	0.130	mg/Kg dry	10	2/12/18 10:00	2/13/18 2:43	207-08-9
Chrysene	**236**		3.76	0.891	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	218-01-9
Dibenz(a,h)Anthracene	**69.9**		0.376	0.167	mg/Kg dry	10	2/12/18 10:00	2/13/18 2:43	53-70-3
Fluoranthene	**525**		3.76	1.12	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	206-44-0
Fluorene	**63.0**		0.376	0.121	mg/Kg dry	10	2/12/18 10:00	2/13/18 2:43	86-73-7
Indeno(1,2,3-cd)pyrene	**161**		3.76	1.83	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	193-39-5
Naphthalene	**48.8**		0.376	0.130	mg/Kg dry	10	2/12/18 10:00	2/13/18 2:43	91-20-3
Phenanthrene	**546**		3.76	0.755	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	85-01-8
Pyrene	**469**		3.76	1.19	mg/Kg dry	100	2/12/18 10:00	2/13/18 13:33	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*58%*	*16-110*				2/13/18 2:43	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/13/18 2:43	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/13/18 2:43	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**90.4**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**9.64**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-221 @ 0.5-2
Lab Sample ID: L8B0082-10 (Solid) **Sampled:2/7/18 8:51**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	90-12-0
2-Methylnaphthalene	**0.0169**	I	0.0339	0.0136	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	91-57-6
Acenaphthene	0.0133	U	0.0339	0.0133	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	83-32-9
Acenaphthylene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	208-96-8
Anthracene	0.00894	U	0.0339	0.00894	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	120-12-7
Benzo(a)anthracene	0.00945	U	0.0339	0.00945	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	56-55-3
Benzo(a)pyrene	0.0161	U	0.0339	0.0161	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	50-32-8
Benzo(b)fluoranthene	0.0151	U	0.0339	0.0151	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	205-99-2
Benzo(g,h,i)perylene	0.0158	U	0.0339	0.0158	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	207-08-9
Chrysene	0.00803	U	0.0339	0.00803	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	218-01-9
Dibenz(a,h)Anthracene	0.0150	U	0.0339	0.0150	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	53-70-3
Fluoranthene	0.0101	U	0.0339	0.0101	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	206-44-0
Fluorene	0.0109	U	0.0339	0.0109	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	86-73-7
Indeno(1,2,3-cd)pyrene	0.0165	U	0.0339	0.0165	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	193-39-5
Naphthalene	**0.0132**	I	0.0339	0.0117	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	91-20-3
Phenanthrene	0.00681	U	0.0339	0.00681	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	85-01-8
Pyrene	0.0108	U	0.0339	0.0108	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:03	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*50%*	*16-110*				2/13/18 3:03	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*42%*	*19-105*				2/13/18 3:03	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*65%*	*20-137*				2/13/18 3:03	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.7**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**4.26**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-222 @ 0.0-0.5
Lab Sample ID: L8B0082-13 (Solid) **Sampled:2/7/18 9:50**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.0140**	I	0.0359	0.0120	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	90-12-0
2-Methylnaphthalene	**0.0201**	I	0.0359	0.0144	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	91-57-6
Acenaphthene	**0.167**		0.0359	0.0141	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	83-32-9
Acenaphthylene	0.0120	U	0.0359	0.0120	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	208-96-8
Anthracene	**0.300**		0.0359	0.00949	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	120-12-7
Benzo(a)anthracene	**0.855**		0.0359	0.0100	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	56-55-3
Benzo(a)pyrene	**0.883**		0.0359	0.0170	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	50-32-8
Benzo(b)fluoranthene	**0.907**		0.0359	0.0161	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	205-99-2
Benzo(g,h,i)perylene	**0.625**		0.0359	0.0167	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	191-24-2
Benzo(k)fluoranthene	**0.673**		0.0359	0.0124	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	207-08-9
Chrysene	**0.871**		0.0359	0.00852	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	218-01-9
Dibenz(a,h)Anthracene	**0.219**		0.0359	0.0160	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	53-70-3
Fluoranthene	**1.84**		0.0359	0.0107	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	206-44-0
Fluorene	**0.121**		0.0359	0.0115	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	86-73-7
Indeno(1,2,3-cd)pyrene	**0.580**		0.0359	0.0175	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	193-39-5
Naphthalene	**0.0528**		0.0359	0.0124	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	91-20-3
Phenanthrene	**1.38**		0.0359	0.00722	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	85-01-8
Pyrene	**1.52**		0.0359	0.0114	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:23	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*54%*	*16-110*				2/13/18 3:23	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/13/18 3:23	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*75%*	*20-137*				2/13/18 3:23	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.8**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**5.18**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-222 @ 0.5-2
Lab Sample ID: L8B0082-14 (Solid) **Sampled:2/7/18 9:53**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0119	U	0.0357	0.0119	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	90-12-0
2-Methylnaphthalene	0.0144	U	0.0357	0.0144	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	91-57-6
Acenaphthene	0.0140	U	0.0357	0.0140	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	83-32-9
Acenaphthylene	0.0119	U	0.0357	0.0119	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	208-96-8
Anthracene	0.00943	U	0.0357	0.00943	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	120-12-7
Benzo(a)anthracene	0.00997	U	0.0357	0.00997	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	56-55-3
Benzo(a)pyrene	0.0169	U	0.0357	0.0169	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	50-32-8
Benzo(b)fluoranthene	0.0160	U	0.0357	0.0160	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	205-99-2
Benzo(g,h,i)perylene	0.0166	U	0.0357	0.0166	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	191-24-2
Benzo(k)fluoranthene	0.0123	U	0.0357	0.0123	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	207-08-9
Chrysene	0.00847	U	0.0357	0.00847	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	218-01-9
Dibenz(a,h)Anthracene	0.0159	U	0.0357	0.0159	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	53-70-3
Fluoranthene	0.0106	U	0.0357	0.0106	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	206-44-0
Fluorene	0.0115	U	0.0357	0.0115	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	86-73-7
Indeno(1,2,3-cd)pyrene	0.0174	U	0.0357	0.0174	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	193-39-5
Naphthalene	**0.0139**	I	0.0357	0.0123	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	91-20-3
Phenanthrene	0.00718	U	0.0357	0.00718	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	85-01-8
Pyrene	0.0114	U	0.0357	0.0114	mg/Kg dry	1	2/12/18 10:00	2/13/18 3:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*71%*	*16-110*				2/13/18 3:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*61%*	*19-105*				2/13/18 3:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*102%*	*20-137*				2/13/18 3:44	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**5.02**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-223 @ 0.0-0.5
Lab Sample ID: L8B0082-17 (Solid) **Sampled:2/7/18 10:10**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	91-57-6
Acenaphthene	0.0137	U	0.0350	0.0137	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	83-32-9
Acenaphthylene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	208-96-8
Anthracene	0.00923	U	0.0350	0.00923	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	120-12-7
Benzo(a)anthracene	0.00976	U	0.0350	0.00976	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	207-08-9
Chrysene	0.00829	U	0.0350	0.00829	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0350	0.0155	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	91-20-3
Phenanthrene	0.00703	U	0.0350	0.00703	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/12/18 10:00	2/13/18 4:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*47%*	*16-110*				2/13/18 4:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/13/18 4:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*61%*	*20-137*				2/13/18 4:04	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.9**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**5.08**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-223 @ 0.5-2
Lab Sample ID: L8B0082-18 (Solid) **Sampled:2/7/18 10:14**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0619	U	0.186	0.0619	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	90-12-0
2-Methylnaphthalene	0.0747	U	0.186	0.0747	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	91-57-6
Acenaphthene	**0.360**		0.186	0.0730	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	83-32-9
Acenaphthylene	0.0619	U	0.186	0.0619	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	208-96-8
Anthracene	**0.667**		0.186	0.0490	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	120-12-7
Benzo(a)anthracene	**1.92**		0.186	0.0518	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	56-55-3
Benzo(a)pyrene	**1.92**		0.186	0.0881	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	50-32-8
Benzo(b)fluoranthene	**1.92**		0.186	0.0830	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	205-99-2
Benzo(g,h,i)perylene	**1.47**		0.186	0.0864	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	191-24-2
Benzo(k)fluoranthene	**1.57**		0.186	0.0641	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	207-08-9
Chrysene	**1.97**		0.186	0.0440	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	218-01-9
Dibenz(a,h)Anthracene	**0.611**		0.186	0.0825	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	53-70-3
Fluoranthene	**4.10**		0.186	0.0552	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	206-44-0
Fluorene	**0.255**		0.186	0.0596	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	86-73-7
Indeno(1,2,3-cd)pyrene	**1.29**		0.186	0.0903	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	193-39-5
Naphthalene	**0.0650**	I	0.186	0.0641	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	91-20-3
Phenanthrene	**3.16**		0.186	0.0373	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	85-01-8
Pyrene	**3.42**		0.186	0.0591	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:24	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*36%*	*16-110*				2/13/18 4:24	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*31%*	*19-105*				2/13/18 4:24	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*56%*	*20-137*				2/13/18 4:24	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**90.9**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**9.08**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-223 @ 2-4
Lab Sample ID: L8B0082-19 (Solid) **Sampled:2/7/18 10:16**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	208-96-8
Anthracene	0.00922	U	0.0349	0.00922	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	120-12-7
Benzo(a)anthracene	0.00974	U	0.0349	0.00974	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	56-55-3
Benzo(a)pyrene	0.0166	U	0.0349	0.0166	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	207-08-9
Chrysene	0.00828	U	0.0349	0.00828	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	193-39-5
Naphthalene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	91-20-3
Phenanthrene	0.00702	U	0.0349	0.00702	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 19:53	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*35%*	*16-110*				2/22/18 19:53	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*32%*	*19-105*				2/22/18 19:53	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*62%*	*20-137*				2/22/18 19:53	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**95.1**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**4.88**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-223 @ 4-6
Lab Sample ID: L8B0082-20 (Solid) **Sampled:2/7/18 10:19**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	90-12-0
2-Methylnaphthalene	0.0139	U	0.0346	0.0139	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	91-57-6
Acenaphthene	0.0136	U	0.0346	0.0136	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	83-32-9
Acenaphthylene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	208-96-8
Anthracene	0.00913	U	0.0346	0.00913	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	120-12-7
Benzo(a)anthracene	0.00965	U	0.0346	0.00965	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	56-55-3
Benzo(a)pyrene	0.0164	U	0.0346	0.0164	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	50-32-8
Benzo(b)fluoranthene	0.0155	U	0.0346	0.0155	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	205-99-2
Benzo(g,h,i)perylene	0.0161	U	0.0346	0.0161	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0346	0.0119	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	207-08-9
Chrysene	0.00819	U	0.0346	0.00819	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0346	0.0153	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	53-70-3
Fluoranthene	0.0103	U	0.0346	0.0103	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	206-44-0
Fluorene	0.0111	U	0.0346	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	86-73-7
Indeno(1,2,3-cd)pyrene	0.0168	U	0.0346	0.0168	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	193-39-5
Naphthalene	0.0119	U	0.0346	0.0119	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	91-20-3
Phenanthrene	0.00695	U	0.0346	0.00695	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	85-01-8
Pyrene	0.0110	U	0.0346	0.0110	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:14	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/22/18 20:14	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*61%*	*19-105*				2/22/18 20:14	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*85%*	*20-137*				2/22/18 20:14	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**94.9**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**5.10**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-224 @ 0.0-0.5
Lab Sample ID: L8B0082-21 (Solid) **Sampled:2/7/18 10:25**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.168**	I	0.187	0.0623	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	90-12-0
2-Methylnaphthalene	**0.292**		0.187	0.0752	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	91-57-6
Acenaphthene	**1.74**		0.187	0.0735	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	83-32-9
Acenaphthylene	0.0623	U	0.187	0.0623	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	208-96-8
Anthracene	**2.84**		0.187	0.0494	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	120-12-7
Benzo(a)anthracene	**5.15**		0.187	0.0522	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	56-55-3
Benzo(a)pyrene	**5.51**		0.187	0.0887	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	50-32-8
Benzo(b)fluoranthene	**5.66**		0.187	0.0836	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	205-99-2
Benzo(g,h,i)perylene	**3.88**		0.187	0.0870	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	191-24-2
Benzo(k)fluoranthene	**4.21**		0.187	0.0646	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	207-08-9
Chrysene	**5.53**		0.187	0.0443	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	218-01-9
Dibenz(a,h)Anthracene	**1.31**		0.187	0.0831	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	53-70-3
Fluoranthene	**12.8**		0.187	0.0556	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	206-44-0
Fluorene	**1.39**		0.187	0.0601	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	86-73-7
Indeno(1,2,3-cd)pyrene	**3.48**		0.187	0.0909	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	193-39-5
Naphthalene	**0.995**		0.187	0.0646	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	91-20-3
Phenanthrene	**12.1**		0.187	0.0376	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	85-01-8
Pyrene	**10.2**		0.187	0.0595	mg/Kg dry	5	2/12/18 10:00	2/13/18 4:45	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*55%*	*16-110*				2/13/18 4:45	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*42%*	*19-105*				2/13/18 4:45	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*74%*	*20-137*				2/13/18 4:45	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**89.4**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**10.6**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-224 @ 0.5-2
Lab Sample ID: L8B0082-22 (Solid) **Sampled:2/7/18 10:31**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	91-57-6
Acenaphthene	0.0137	U	0.0350	0.0137	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	83-32-9
Acenaphthylene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	208-96-8
Anthracene	0.00923	U	0.0350	0.00923	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	120-12-7
Benzo(a)anthracene	0.00976	U	0.0350	0.00976	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	207-08-9
Chrysene	0.00829	U	0.0350	0.00829	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0350	0.0155	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	91-20-3
Phenanthrene	0.00703	U	0.0350	0.00703	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/12/18 10:00	2/13/18 5:05	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*51%*	*16-110*				2/13/18 5:05	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*43%*	*19-105*				2/13/18 5:05	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*68%*	*20-137*				2/13/18 5:05	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**92.5**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**7.48**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-224 @ 2-4
Lab Sample ID: L8B0082-23 (Solid) **Sampled:2/7/18 10:33**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	UQ	0.0346	0.0115	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	90-12-0
2-Methylnaphthalene	0.0139	UQ	0.0346	0.0139	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	91-57-6
Acenaphthene	0.0136	UQ	0.0346	0.0136	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	83-32-9
Acenaphthylene	0.0115	UQ	0.0346	0.0115	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	208-96-8
Anthracene	0.00913	UQ	0.0346	0.00913	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	120-12-7
Benzo(a)anthracene	0.00965	UQ	0.0346	0.00965	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	56-55-3
Benzo(a)pyrene	0.0164	UQ	0.0346	0.0164	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	50-32-8
Benzo(b)fluoranthene	0.0155	UQ	0.0346	0.0155	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	205-99-2
Benzo(g,h,i)perylene	0.0161	UQ	0.0346	0.0161	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	191-24-2
Benzo(k)fluoranthene	0.0119	UQ	0.0346	0.0119	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	207-08-9
Chrysene	0.00820	UQ	0.0346	0.00820	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	218-01-9
Dibenz(a,h)Anthracene	0.0154	UQ	0.0346	0.0154	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	53-70-3
Fluoranthene	0.0103	UQ	0.0346	0.0103	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	206-44-0
Fluorene	0.0111	UQ	0.0346	0.0111	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	86-73-7
Indeno(1,2,3-cd)pyrene	0.0168	UQ	0.0346	0.0168	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	193-39-5
Naphthalene	0.0119	UQ	0.0346	0.0119	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	91-20-3
Phenanthrene	0.00695	UQ	0.0346	0.00695	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	85-01-8
Pyrene	0.0110	UQ	0.0346	0.0110	mg/Kg dry	1	2/27/18 16:38	2/28/18 8:46	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*45%*	*16-110*				2/28/18 8:46	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*51%*	*19-105*				2/28/18 8:46	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*100%*	*20-137*				2/28/18 8:46	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.8**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**4.17**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-224 @ 4-6
Lab Sample ID: L8B0082-24 (Solid) **Sampled:2/7/18 10:35**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0120	UQ	0.0360	0.0120	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	90-12-0
2-Methylnaphthalene	0.0145	UQ	0.0360	0.0145	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	91-57-6
Acenaphthene	0.0141	UQ	0.0360	0.0141	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	83-32-9
Acenaphthylene	0.0120	UQ	0.0360	0.0120	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	208-96-8
Anthracene	0.00950	UQ	0.0360	0.00950	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	120-12-7
Benzo(a)anthracene	0.0100	UQ	0.0360	0.0100	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	56-55-3
Benzo(a)pyrene	0.0170	UQ	0.0360	0.0170	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	50-32-8
Benzo(b)fluoranthene	0.0161	UQ	0.0360	0.0161	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	205-99-2
Benzo(g,h,i)perylene	0.0167	UQ	0.0360	0.0167	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	191-24-2
Benzo(k)fluoranthene	0.0124	UQ	0.0360	0.0124	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	207-08-9
Chrysene	0.00852	UQ	0.0360	0.00852	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	218-01-9
Dibenz(a,h)Anthracene	0.0160	UQ	0.0360	0.0160	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	53-70-3
Fluoranthene	0.0107	UQ	0.0360	0.0107	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	206-44-0
Fluorene	0.0115	UQ	0.0360	0.0115	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	86-73-7
Indeno(1,2,3-cd)pyrene	0.0175	UQ	0.0360	0.0175	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	193-39-5
Naphthalene	0.0124	UQ	0.0360	0.0124	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	91-20-3
Phenanthrene	0.00723	UQ	0.0360	0.00723	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	85-01-8
Pyrene	0.0114	UQ	0.0360	0.0114	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:07	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*48%*	*16-110*				2/28/18 9:07	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*55%*	*19-105*				2/28/18 9:07	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*96%*	*20-137*				2/28/18 9:07	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.8**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**4.17**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-225 @ 0.0-0.5
Lab Sample ID: L8B0082-25 (Solid) **Sampled:2/7/18 11:05**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0119	U	0.0358	0.0119	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	90-12-0
2-Methylnaphthalene	0.0144	U	0.0358	0.0144	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	91-57-6
Acenaphthene	0.0141	U	0.0358	0.0141	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	83-32-9
Acenaphthylene	0.0119	U	0.0358	0.0119	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	208-96-8
Anthracene	0.00945	U	0.0358	0.00945	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	120-12-7
Benzo(a)anthracene	**0.0376**		0.0358	0.00999	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	56-55-3
Benzo(a)pyrene	**0.0423**		0.0358	0.0170	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	50-32-8
Benzo(b)fluoranthene	**0.0355**	I	0.0358	0.0160	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	205-99-2
Benzo(g,h,i)perylene	**0.0355**	I	0.0358	0.0167	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	191-24-2
Benzo(k)fluoranthene	**0.0365**		0.0358	0.0124	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	207-08-9
Chrysene	**0.0408**		0.0358	0.00849	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	218-01-9
Dibenz(a,h)Anthracene	0.0159	U	0.0358	0.0159	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	53-70-3
Fluoranthene	**0.0602**		0.0358	0.0106	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	206-44-0
Fluorene	0.0115	U	0.0358	0.0115	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0283**	I	0.0358	0.0174	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	193-39-5
Naphthalene	0.0124	U	0.0358	0.0124	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	91-20-3
Phenanthrene	**0.0290**	I	0.0358	0.00720	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	85-01-8
Pyrene	**0.0562**		0.0358	0.0114	mg/Kg dry	1	2/12/18 10:00	2/12/18 22:19	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*58%*	*16-110*				2/12/18 22:19	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/12/18 22:19	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*83%*	*20-137*				2/12/18 22:19	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**93.5**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**6.52**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-225 @ 0.5-2
Lab Sample ID: L8B0082-26 (Solid) **Sampled:2/7/18 11:07**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	120-12-7
Benzo(a)anthracene	0.00979	U	0.0351	0.00979	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	207-08-9
Chrysene	0.00832	U	0.0351	0.00832	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0351	0.0171	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*51%*	*16-110*				2/13/18 23:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/13/18 23:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*88%*	*20-137*				2/13/18 23:04	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.7**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**5.32**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-225 @ 2-4
Lab Sample ID: L8B0082-27 (Solid) **Sampled:2/7/18 11:09**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	UQ	0.0343	0.0114	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	90-12-0
2-Methylnaphthalene	0.0138	UQ	0.0343	0.0138	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	91-57-6
Acenaphthene	0.0135	UQ	0.0343	0.0135	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	83-32-9
Acenaphthylene	0.0114	UQ	0.0343	0.0114	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	208-96-8
Anthracene	0.00906	UQ	0.0343	0.00906	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	120-12-7
Benzo(a)anthracene	0.00957	UQ	0.0343	0.00957	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	56-55-3
Benzo(a)pyrene	0.0163	UQ	0.0343	0.0163	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	50-32-8
Benzo(b)fluoranthene	0.0153	UQ	0.0343	0.0153	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	205-99-2
Benzo(g,h,i)perylene	0.0160	UQ	0.0343	0.0160	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	191-24-2
Benzo(k)fluoranthene	0.0118	UQ	0.0343	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	207-08-9
Chrysene	0.00813	UQ	0.0343	0.00813	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	218-01-9
Dibenz(a,h)Anthracene	0.0152	UQ	0.0343	0.0152	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	53-70-3
Fluoranthene	0.0102	UQ	0.0343	0.0102	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	206-44-0
Fluorene	0.0110	UQ	0.0343	0.0110	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	UQ	0.0343	0.0167	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	193-39-5
Naphthalene	0.0118	UQ	0.0343	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	91-20-3
Phenanthrene	0.00690	UQ	0.0343	0.00690	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	85-01-8
Pyrene	0.0109	UQ	0.0343	0.0109	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:27	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)	*Q*		*43%*	*16-110*				2/28/18 9:27	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)	*Q*		*49%*	*19-105*				2/28/18 9:27	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)	*Q*		*96%*	*20-137*				2/28/18 9:27	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.9**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**5.10**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-225 @ 4-6
Lab Sample ID: L8B0082-28 (Solid) **Sampled:2/7/18 11:11**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	UQ	0.0349	0.0116	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	90-12-0
2-Methylnaphthalene	0.0140	UQ	0.0349	0.0140	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	91-57-6
Acenaphthene	0.0137	UQ	0.0349	0.0137	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	83-32-9
Acenaphthylene	0.0116	UQ	0.0349	0.0116	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	208-96-8
Anthracene	0.00922	UQ	0.0349	0.00922	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	120-12-7
Benzo(a)anthracene	0.00974	UQ	0.0349	0.00974	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	56-55-3
Benzo(a)pyrene	0.0166	UQ	0.0349	0.0166	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	50-32-8
Benzo(b)fluoranthene	0.0156	UQ	0.0349	0.0156	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	205-99-2
Benzo(g,h,i)perylene	0.0162	UQ	0.0349	0.0162	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	191-24-2
Benzo(k)fluoranthene	0.0120	UQ	0.0349	0.0120	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	207-08-9
Chrysene	0.00828	UQ	0.0349	0.00828	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	218-01-9
Dibenz(a,h)Anthracene	0.0155	UQ	0.0349	0.0155	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	53-70-3
Fluoranthene	0.0104	UQ	0.0349	0.0104	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	206-44-0
Fluorene	0.0112	UQ	0.0349	0.0112	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	UQ	0.0349	0.0170	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	193-39-5
Naphthalene	0.0120	UQ	0.0349	0.0120	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	91-20-3
Phenanthrene	0.00702	UQ	0.0349	0.00702	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	85-01-8
Pyrene	0.0111	UQ	0.0349	0.0111	mg/Kg dry	1	2/27/18 16:38	2/28/18 9:47	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*50%*	*16-110*				2/28/18 9:47	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*56%*	*19-105*				2/28/18 9:47	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*92%*	*20-137*				2/28/18 9:47	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**4.94**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-226 @ 0.0-0.5
Lab Sample ID: L8B0082-29 (Solid) **Sampled:2/7/18 12:56**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.0196**	I	0.0350	0.0117	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	90-12-0
2-Methylnaphthalene	**0.0210**	I	0.0350	0.0141	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	91-57-6
Acenaphthene	**0.262**		0.0350	0.0138	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	208-96-8
Anthracene	**0.464**		0.0350	0.00925	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	120-12-7
Benzo(a)anthracene	**1.12**		0.0350	0.00977	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	56-55-3
Benzo(a)pyrene	**1.10**		0.0350	0.0166	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	50-32-8
Benzo(b)fluoranthene	**1.13**		0.0350	0.0157	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	205-99-2
Benzo(g,h,i)perylene	**0.833**		0.0350	0.0163	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	191-24-2
Benzo(k)fluoranthene	**0.747**		0.0350	0.0121	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	207-08-9
Chrysene	**1.10**		0.0350	0.00830	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	218-01-9
Dibenz(a,h)Anthracene	**0.298**		0.0350	0.0155	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	53-70-3
Fluoranthene	**2.56**		0.0350	0.0104	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	206-44-0
Fluorene	**0.175**		0.0350	0.0112	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	86-73-7
Indeno(1,2,3-cd)pyrene	**0.748**		0.0350	0.0170	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	193-39-5
Naphthalene	**0.0466**		0.0350	0.0121	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	91-20-3
Phenanthrene	**2.02**		0.0350	0.00704	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	85-01-8
Pyrene	**1.96**		0.0350	0.0111	mg/Kg dry	1	2/13/18 11:00	2/14/18 13:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*56%*	*16-110*				2/14/18 13:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*47%*	*19-105*				2/14/18 13:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*71%*	*20-137*				2/14/18 13:04	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**93.4**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**6.62**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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No duplication of this report is allowed, except in its entirety.

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-226 @ 0.5-2
Lab Sample ID: L8B0082-30 (Solid) **Sampled:2/7/18 12:58**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	90-12-0
2-Methylnaphthalene	0.0139	U	0.0345	0.0139	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	91-57-6
Acenaphthene	0.0135	U	0.0345	0.0135	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	208-96-8
Anthracene	0.00910	U	0.0345	0.00910	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	120-12-7
Benzo(a)anthracene	0.00961	U	0.0345	0.00961	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	56-55-3
Benzo(a)pyrene	0.0163	U	0.0345	0.0163	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0345	0.0154	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0345	0.0160	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	207-08-9
Chrysene	0.00817	U	0.0345	0.00817	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0345	0.0153	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	53-70-3
Fluoranthene	0.0102	U	0.0345	0.0102	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	206-44-0
Fluorene	0.0111	U	0.0345	0.0111	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0345	0.0167	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	193-39-5
Naphthalene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	91-20-3
Phenanthrene	0.00693	U	0.0345	0.00693	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	85-01-8
Pyrene	0.0110	U	0.0345	0.0110	mg/Kg dry	1	2/13/18 11:00	2/13/18 23:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*72%*	*16-110*				2/13/18 23:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*62%*	*19-105*				2/13/18 23:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*83%*	*20-137*				2/13/18 23:44	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.5**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	
Percent Moisture	**4.50**		0.100	0.100	%	1	2/8/18 13:00	2/12/18 9:36	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-226 @ 2-4
Lab Sample ID: L8B0082-31 (Solid) **Sampled:2/7/18 13:00**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	UQ	0.0353	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	90-12-0
2-Methylnaphthalene	0.0142	UQ	0.0353	0.0142	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	91-57-6
Acenaphthene	0.0139	UQ	0.0353	0.0139	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	83-32-9
Acenaphthylene	0.0118	UQ	0.0353	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	208-96-8
Anthracene	0.00932	UQ	0.0353	0.00932	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	120-12-7
Benzo(a)anthracene	0.00985	UQ	0.0353	0.00985	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	56-55-3
Benzo(a)pyrene	0.0167	UQ	0.0353	0.0167	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	50-32-8
Benzo(b)fluoranthene	0.0158	UQ	0.0353	0.0158	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	205-99-2
Benzo(g,h,i)perylene	0.0164	UQ	0.0353	0.0164	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	191-24-2
Benzo(k)fluoranthene	0.0122	UQ	0.0353	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	207-08-9
Chrysene	0.00836	UQ	0.0353	0.00836	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	218-01-9
Dibenz(a,h)Anthracene	0.0157	UQ	0.0353	0.0157	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	53-70-3
Fluoranthene	0.0105	UQ	0.0353	0.0105	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	206-44-0
Fluorene	0.0113	UQ	0.0353	0.0113	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	86-73-7
Indeno(1,2,3-cd)pyrene	0.0172	UQ	0.0353	0.0172	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	193-39-5
Naphthalene	0.0122	UQ	0.0353	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	91-20-3
Phenanthrene	0.00709	UQ	0.0353	0.00709	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	85-01-8
Pyrene	0.0112	UQ	0.0353	0.0112	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:08	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*47%*	*16-110*				2/28/18 10:08	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*52%*	*19-105*				2/28/18 10:08	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*90%*	*20-137*				2/28/18 10:08	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.9**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**5.10**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-226 @ 4-6
Lab Sample ID: L8B0082-32 (Solid) **Sampled:2/7/18 13:02**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	UQ	0.0354	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	90-12-0
2-Methylnaphthalene	0.0142	UQ	0.0354	0.0142	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	91-57-6
Acenaphthene	0.0139	UQ	0.0354	0.0139	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	83-32-9
Acenaphthylene	0.0118	UQ	0.0354	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	208-96-8
Anthracene	0.00933	UQ	0.0354	0.00933	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	120-12-7
Benzo(a)anthracene	0.00986	UQ	0.0354	0.00986	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	56-55-3
Benzo(a)pyrene	0.0168	UQ	0.0354	0.0168	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	50-32-8
Benzo(b)fluoranthene	0.0158	UQ	0.0354	0.0158	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	205-99-2
Benzo(g,h,i)perylene	0.0164	UQ	0.0354	0.0164	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	191-24-2
Benzo(k)fluoranthene	0.0122	UQ	0.0354	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	207-08-9
Chrysene	0.00838	UQ	0.0354	0.00838	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	218-01-9
Dibenz(a,h)Anthracene	0.0157	UQ	0.0354	0.0157	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	53-70-3
Fluoranthene	0.0105	UQ	0.0354	0.0105	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	206-44-0
Fluorene	0.0113	UQ	0.0354	0.0113	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	86-73-7
Indeno(1,2,3-cd)pyrene	0.0172	UQ	0.0354	0.0172	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	193-39-5
Naphthalene	0.0122	UQ	0.0354	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	91-20-3
Phenanthrene	0.00711	UQ	0.0354	0.00711	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	85-01-8
Pyrene	0.0112	UQ	0.0354	0.0112	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:29	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*51%*	*16-110*				2/28/18 10:29	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*58%*	*19-105*				2/28/18 10:29	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*73%*	*20-137*				2/28/18 10:29	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.8**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**5.25**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-227 @ 0.0-0.5
Lab Sample ID: L8B0082-33 (Solid) **Sampled:2/7/18 13:07**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	**0.107**	I	0.185	0.0616	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	90-12-0
2-Methylnaphthalene	**0.155**	I	0.185	0.0744	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	91-57-6
Acenaphthene	**1.14**		0.185	0.0727	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	83-32-9
Acenaphthylene	0.0616	U	0.185	0.0616	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	208-96-8
Anthracene	**2.09**		0.185	0.0489	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	120-12-7
Benzo(a)anthracene	**4.70**		0.185	0.0516	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	56-55-3
Benzo(a)pyrene	**4.59**		0.185	0.0877	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	50-32-8
Benzo(b)fluoranthene	**4.45**		0.185	0.0827	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	205-99-2
Benzo(g,h,i)perylene	**3.51**		0.185	0.0860	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	191-24-2
Benzo(k)fluoranthene	**3.57**		0.185	0.0638	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	207-08-9
Chrysene	**4.72**		0.185	0.0439	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	218-01-9
Dibenz(a,h)Anthracene	**1.43**		0.185	0.0822	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	53-70-3
Fluoranthene	**10.3**		0.185	0.0550	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	206-44-0
Fluorene	**0.912**		0.185	0.0594	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	86-73-7
Indeno(1,2,3-cd)pyrene	**3.10**		0.185	0.0899	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	193-39-5
Naphthalene	**0.483**		0.185	0.0638	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	91-20-3
Phenanthrene	**9.32**		0.185	0.0372	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	85-01-8
Pyrene	**8.49**		0.185	0.0588	mg/Kg dry	5	2/13/18 11:00	2/14/18 0:05	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*47%*	*16-110*				2/14/18 0:05	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*41%*	*19-105*				2/14/18 0:05	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*72%*	*20-137*				2/14/18 0:05	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**89.4**	0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00
Percent Moisture	**10.6**	0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-227 @ 0.5-2
Lab Sample ID: L8B0082-34 (Solid) **Sampled:2/7/18 13:10**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	90-12-0
2-Methylnaphthalene	0.0136	U	0.0339	0.0136	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	91-57-6
Acenaphthene	0.0133	U	0.0339	0.0133	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	83-32-9
Acenaphthylene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	208-96-8
Anthracene	0.00895	U	0.0339	0.00895	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	120-12-7
Benzo(a)anthracene	0.00946	U	0.0339	0.00946	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	56-55-3
Benzo(a)pyrene	0.0161	U	0.0339	0.0161	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	50-32-8
Benzo(b)fluoranthene	0.0152	U	0.0339	0.0152	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	205-99-2
Benzo(g,h,i)perylene	0.0158	U	0.0339	0.0158	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	207-08-9
Chrysene	0.00804	U	0.0339	0.00804	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	218-01-9
Dibenz(a,h)Anthracene	0.0151	U	0.0339	0.0151	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	53-70-3
Fluoranthene	0.0101	U	0.0339	0.0101	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	206-44-0
Fluorene	0.0109	U	0.0339	0.0109	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	86-73-7
Indeno(1,2,3-cd)pyrene	0.0165	U	0.0339	0.0165	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	193-39-5
Naphthalene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	91-20-3
Phenanthrene	0.00682	U	0.0339	0.00682	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	85-01-8
Pyrene	0.0108	U	0.0339	0.0108	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:25	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*61%*	*16-110*				2/14/18 0:25	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*51%*	*19-105*				2/14/18 0:25	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*98%*	*20-137*				2/14/18 0:25	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.6**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**4.36**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-227 @ 2-4
Lab Sample ID: L8B0082-35 (Solid) **Sampled:2/7/18 13:13**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	UQ	0.0352	0.0117	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	90-12-0
2-Methylnaphthalene	0.0142	UQ	0.0352	0.0142	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	91-57-6
Acenaphthene	0.0139	UQ	0.0352	0.0139	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	83-32-9
Acenaphthylene	0.0117	UQ	0.0352	0.0117	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	208-96-8
Anthracene	0.00930	UQ	0.0352	0.00930	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	120-12-7
Benzo(a)anthracene	0.00983	UQ	0.0352	0.00983	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	56-55-3
Benzo(a)pyrene	0.0167	UQ	0.0352	0.0167	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	50-32-8
Benzo(b)fluoranthene	0.0158	UQ	0.0352	0.0158	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	205-99-2
Benzo(g,h,i)perylene	0.0164	UQ	0.0352	0.0164	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	191-24-2
Benzo(k)fluoranthene	0.0122	UQ	0.0352	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	207-08-9
Chrysene	0.00835	UQ	0.0352	0.00835	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	218-01-9
Dibenz(a,h)Anthracene	0.0156	UQ	0.0352	0.0156	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	53-70-3
Fluoranthene	0.0105	UQ	0.0352	0.0105	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	206-44-0
Fluorene	0.0113	UQ	0.0352	0.0113	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	UQ	0.0352	0.0171	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	193-39-5
Naphthalene	0.0122	UQ	0.0352	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	91-20-3
Phenanthrene	0.00708	UQ	0.0352	0.00708	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	85-01-8
Pyrene	0.0112	UQ	0.0352	0.0112	mg/Kg dry	1	2/27/18 16:38	2/28/18 10:49	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*49%*	*16-110*				2/28/18 10:49	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*56%*	*19-105*				2/28/18 10:49	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*99%*	*20-137*				2/28/18 10:49	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.9**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**4.14**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-227 @ 4-6
Lab Sample ID: L8B0082-36 (Solid) **Sampled:2/7/18 13:15**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	UQ	0.0354	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	90-12-0
2-Methylnaphthalene	0.0142	UQ	0.0354	0.0142	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	91-57-6
Acenaphthene	0.0139	UQ	0.0354	0.0139	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	83-32-9
Acenaphthylene	0.0118	UQ	0.0354	0.0118	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	208-96-8
Anthracene	0.00934	UQ	0.0354	0.00934	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	120-12-7
Benzo(a)anthracene	0.00987	UQ	0.0354	0.00987	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	56-55-3
Benzo(a)pyrene	0.0168	UQ	0.0354	0.0168	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	50-32-8
Benzo(b)fluoranthene	0.0158	UQ	0.0354	0.0158	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	205-99-2
Benzo(g,h,i)perylene	0.0165	UQ	0.0354	0.0165	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	191-24-2
Benzo(k)fluoranthene	0.0122	UQ	0.0354	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	207-08-9
Chrysene	0.00839	UQ	0.0354	0.00839	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	218-01-9
Dibenz(a,h)Anthracene	0.0157	UQ	0.0354	0.0157	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	53-70-3
Fluoranthene	0.0105	UQ	0.0354	0.0105	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	206-44-0
Fluorene	0.0114	UQ	0.0354	0.0114	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	86-73-7
Indeno(1,2,3-cd)pyrene	0.0172	UQ	0.0354	0.0172	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	193-39-5
Naphthalene	0.0122	UQ	0.0354	0.0122	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	91-20-3
Phenanthrene	0.00711	UQ	0.0354	0.00711	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	85-01-8
Pyrene	0.0113	UQ	0.0354	0.0113	mg/Kg dry	1	2/27/18 16:38	2/28/18 11:09	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*61%*	*16-110*				2/28/18 11:09	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*68%*	*19-105*				2/28/18 11:09	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*91%*	*20-137*				2/28/18 11:09	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.2**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	
Percent Moisture	**4.84**		0.100	0.100	%	1	2/22/18 10:42	2/22/18 10:42	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-247 @ 0.0-0.5
Lab Sample ID: L8B0082-37 (Solid) **Sampled:2/7/18 9:02**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0124	U	0.0371	0.0124	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	90-12-0
2-Methylnaphthalene	0.0149	U	0.0371	0.0149	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	91-57-6
Acenaphthene	**0.117**		0.0371	0.0146	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	83-32-9
Acenaphthylene	0.0124	U	0.0371	0.0124	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	208-96-8
Anthracene	**0.234**		0.0371	0.00980	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	120-12-7
Benzo(a)anthracene	**0.706**		0.0371	0.0104	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	56-55-3
Benzo(a)pyrene	**0.744**		0.0371	0.0176	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	50-32-8
Benzo(b)fluoranthene	**0.760**		0.0371	0.0166	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	205-99-2
Benzo(g,h,i)perylene	**0.569**		0.0371	0.0173	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	191-24-2
Benzo(k)fluoranthene	**0.596**		0.0371	0.0128	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	207-08-9
Chrysene	**0.729**		0.0371	0.00879	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	218-01-9
Dibenz(a,h)Anthracene	**0.230**		0.0371	0.0165	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	53-70-3
Fluoranthene	**1.50**		0.0371	0.0110	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	206-44-0
Fluorene	**0.0842**		0.0371	0.0119	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	86-73-7
Indeno(1,2,3-cd)pyrene	**0.505**		0.0371	0.0180	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	193-39-5
Naphthalene	**0.0174**	I	0.0371	0.0128	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	91-20-3
Phenanthrene	**1.03**		0.0371	0.00746	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	85-01-8
Pyrene	**1.22**		0.0371	0.0118	mg/Kg dry	1	2/13/18 11:00	2/14/18 0:46	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*52%*	*16-110*				2/14/18 0:46	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/14/18 0:46	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*75%*	*20-137*				2/14/18 0:46	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**88.3**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**11.7**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-247 @ 0.5-2
Lab Sample ID: L8B0082-38 (Solid) **Sampled:2/7/18 9:07**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	90-12-0
2-Methylnaphthalene	0.0136	U	0.0339	0.0136	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	91-57-6
Acenaphthene	0.0133	U	0.0339	0.0133	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	83-32-9
Acenaphthylene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	208-96-8
Anthracene	**0.0224**	I	0.0339	0.00895	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	120-12-7
Benzo(a)anthracene	**0.113**		0.0339	0.00946	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	56-55-3
Benzo(a)pyrene	**0.118**		0.0339	0.0161	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	50-32-8
Benzo(b)fluoranthene	**0.108**		0.0339	0.0152	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	205-99-2
Benzo(g,h,i)perylene	**0.0908**		0.0339	0.0158	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	191-24-2
Benzo(k)fluoranthene	**0.0952**		0.0339	0.0117	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	207-08-9
Chrysene	**0.119**		0.0339	0.00803	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	218-01-9
Dibenz(a,h)Anthracene	**0.0315**	I	0.0339	0.0150	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	53-70-3
Fluoranthene	**0.180**		0.0339	0.0101	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	206-44-0
Fluorene	0.0109	U	0.0339	0.0109	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0830**		0.0339	0.0165	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	193-39-5
Naphthalene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	91-20-3
Phenanthrene	**0.0871**		0.0339	0.00681	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	85-01-8
Pyrene	**0.164**		0.0339	0.0108	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:06	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*57%*	*16-110*				2/14/18 1:06	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*47%*	*19-105*				2/14/18 1:06	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*85%*	*20-137*				2/14/18 1:06	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.6**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**4.37**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-248 @ 0.0-0.5
Lab Sample ID: L8B0082-41 (Solid) **Sampled:2/7/18 9:18**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0680	U	0.204	0.0680	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	90-12-0
2-Methylnaphthalene	0.0821	U	0.204	0.0821	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	91-57-6
Acenaphthene	**0.566**		0.204	0.0803	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	83-32-9
Acenaphthylene	0.0680	U	0.204	0.0680	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	208-96-8
Anthracene	**0.856**		0.204	0.0539	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	120-12-7
Benzo(a)anthracene	**2.24**		0.204	0.0570	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	56-55-3
Benzo(a)pyrene	**2.23**		0.204	0.0968	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	50-32-8
Benzo(b)fluoranthene	**2.18**		0.204	0.0913	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	205-99-2
Benzo(g,h,i)perylene	**1.73**		0.204	0.0950	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	191-24-2
Benzo(k)fluoranthene	**1.77**		0.204	0.0705	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	207-08-9
Chrysene	**2.34**		0.204	0.0484	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	218-01-9
Dibenz(a,h)Anthracene	**0.766**		0.204	0.0907	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	53-70-3
Fluoranthene	**4.97**		0.204	0.0607	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	206-44-0
Fluorene	**0.392**		0.204	0.0656	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	86-73-7
Indeno(1,2,3-cd)pyrene	**1.53**		0.204	0.0993	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	193-39-5
Naphthalene	**0.194**	I	0.204	0.0705	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	91-20-3
Phenanthrene	**4.14**		0.204	0.0411	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	85-01-8
Pyrene	**3.99**		0.204	0.0650	mg/Kg dry	5	2/13/18 11:00	2/14/18 1:26	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*56%*	*16-110*				2/14/18 1:26	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/14/18 1:26	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*66%*	*20-137*				2/14/18 1:26	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**80.7**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**19.3**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-248 @ 0.5-2
Lab Sample ID: L8B0082-42 (Solid) **Sampled:2/7/18 9:25**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	90-12-0
2-Methylnaphthalene	0.0140	U	0.0347	0.0140	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	91-57-6
Acenaphthene	0.0136	U	0.0347	0.0136	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	208-96-8
Anthracene	**0.0208**	I	0.0347	0.00916	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	120-12-7
Benzo(a)anthracene	**0.0448**		0.0347	0.00968	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	56-55-3
Benzo(a)pyrene	**0.0406**		0.0347	0.0165	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	50-32-8
Benzo(b)fluoranthene	**0.0389**		0.0347	0.0155	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	205-99-2
Benzo(g,h,i)perylene	**0.0316**	I	0.0347	0.0161	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	191-24-2
Benzo(k)fluoranthene	**0.0323**	I	0.0347	0.0120	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	207-08-9
Chrysene	**0.0434**		0.0347	0.00823	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0347	0.0154	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	53-70-3
Fluoranthene	**0.0916**		0.0347	0.0103	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	206-44-0
Fluorene	0.0111	U	0.0347	0.0111	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0281**	I	0.0347	0.0169	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	91-20-3
Phenanthrene	**0.0809**		0.0347	0.00698	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	85-01-8
Pyrene	**0.0732**		0.0347	0.0110	mg/Kg dry	1	2/13/18 11:00	2/14/18 1:47	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*60%*	*16-110*				2/14/18 1:47	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/14/18 1:47	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/14/18 1:47	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**4.98**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-248 @ 2-4
Lab Sample ID: L8B0082-43 (Solid) **Sampled:2/7/18 9:27**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0341	0.0114	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	90-12-0
2-Methylnaphthalene	0.0137	U	0.0341	0.0137	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	91-57-6
Acenaphthene	0.0134	U	0.0341	0.0134	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	83-32-9
Acenaphthylene	0.0114	U	0.0341	0.0114	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	208-96-8
Anthracene	0.00901	U	0.0341	0.00901	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	120-12-7
Benzo(a)anthracene	**0.0181**	I	0.0341	0.00952	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	56-55-3
Benzo(a)pyrene	**0.0164**	I	0.0341	0.0162	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	50-32-8
Benzo(b)fluoranthene	0.0153	U	0.0341	0.0153	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	205-99-2
Benzo(g,h,i)perylene	0.0159	U	0.0341	0.0159	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	191-24-2
Benzo(k)fluoranthene	**0.0133**	I	0.0341	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	207-08-9
Chrysene	**0.0188**	I	0.0341	0.00809	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0341	0.0152	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	53-70-3
Fluoranthene	**0.0335**	I	0.0341	0.0101	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	206-44-0
Fluorene	0.0110	U	0.0341	0.0110	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	86-73-7
Indeno(1,2,3-cd)pyrene	0.0166	U	0.0341	0.0166	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	193-39-5
Naphthalene	0.0118	U	0.0341	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	91-20-3
Phenanthrene	**0.0239**	I	0.0341	0.00686	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	85-01-8
Pyrene	**0.0304**	I	0.0341	0.0109	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:20	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*63%*	*16-110*				2/13/18 19:20	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/13/18 19:20	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*91%*	*20-137*				2/13/18 19:20	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**97.6**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**2.42**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-248 @ 4-6
Lab Sample ID: L8B0082-44 (Solid) **Sampled:2/7/18 9:30**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	90-12-0
2-Methylnaphthalene	0.0138	U	0.0343	0.0138	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	91-57-6
Acenaphthene	0.0135	U	0.0343	0.0135	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	83-32-9
Acenaphthylene	0.0114	U	0.0343	0.0114	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	208-96-8
Anthracene	0.00906	U	0.0343	0.00906	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	120-12-7
Benzo(a)anthracene	0.00958	U	0.0343	0.00958	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	56-55-3
Benzo(a)pyrene	0.0163	U	0.0343	0.0163	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	50-32-8
Benzo(b)fluoranthene	0.0153	U	0.0343	0.0153	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0343	0.0160	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	191-24-2
Benzo(k)fluoranthene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	207-08-9
Chrysene	0.00814	U	0.0343	0.00814	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	218-01-9
Dibenz(a,h)Anthracene	0.0152	U	0.0343	0.0152	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	53-70-3
Fluoranthene	0.0102	U	0.0343	0.0102	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	206-44-0
Fluorene	0.0110	U	0.0343	0.0110	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0343	0.0167	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	193-39-5
Naphthalene	0.0118	U	0.0343	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	91-20-3
Phenanthrene	0.00690	U	0.0343	0.00690	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	85-01-8
Pyrene	0.0109	U	0.0343	0.0109	mg/Kg dry	1	2/13/18 11:00	2/13/18 19:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*66%*	*16-110*				2/13/18 19:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/13/18 19:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/13/18 19:40	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.7**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**5.29**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-249 @ 0.0-0.5
Lab Sample ID: L8B0082-45 (Solid) **Sampled:2/7/18 9:37**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.0842**	I	0.200	0.0667	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	90-12-0
2-Methylnaphthalene	**0.134**	I	0.200	0.0806	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	91-57-6
Acenaphthene	**0.950**		0.200	0.0788	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	83-32-9
Acenaphthylene	0.0667	U	0.200	0.0667	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	208-96-8
Anthracene	**1.55**		0.200	0.0529	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	120-12-7
Benzo(a)anthracene	**3.50**		0.200	0.0559	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	56-55-3
Benzo(a)pyrene	**3.37**		0.200	0.0950	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	50-32-8
Benzo(b)fluoranthene	**3.39**		0.200	0.0896	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	205-99-2
Benzo(g,h,i)perylene	**2.52**		0.200	0.0932	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	191-24-2
Benzo(k)fluoranthene	**2.68**		0.200	0.0691	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	207-08-9
Chrysene	**3.51**		0.200	0.0475	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	218-01-9
Dibenz(a,h)Anthracene	**1.02**		0.200	0.0890	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	53-70-3
Fluoranthene	**7.85**		0.200	0.0595	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	206-44-0
Fluorene	**0.734**		0.200	0.0643	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	86-73-7
Indeno(1,2,3-cd)pyrene	**2.19**		0.200	0.0974	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	193-39-5
Naphthalene	**0.423**		0.200	0.0691	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	91-20-3
Phenanthrene	**7.30**		0.200	0.0403	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	85-01-8
Pyrene	**6.74**		0.200	0.0637	mg/Kg dry	5	2/13/18 11:00	2/13/18 20:00	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*46%*	*16-110*				2/13/18 20:00	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/13/18 20:00	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*63%*	*20-137*				2/13/18 20:00	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**81.9**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**18.1**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-249 @ 0.5-2
Lab Sample ID: L8B0082-46 (Solid) **Sampled:2/7/18 9:40**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora — Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0118	U	0.0354	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	90-12-0
2-Methylnaphthalene	0.0142	U	0.0354	0.0142	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	91-57-6
Acenaphthene	**0.0548**		0.0354	0.0139	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	83-32-9
Acenaphthylene	0.0118	U	0.0354	0.0118	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	208-96-8
Anthracene	**0.169**		0.0354	0.00934	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	120-12-7
Benzo(a)anthracene	**0.536**		0.0354	0.00987	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	56-55-3
Benzo(a)pyrene	**0.541**		0.0354	0.0168	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	50-32-8
Benzo(b)fluoranthene	**0.524**		0.0354	0.0158	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	205-99-2
Benzo(g,h,i)perylene	**0.413**		0.0354	0.0164	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	191-24-2
Benzo(k)fluoranthene	**0.432**		0.0354	0.0122	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	207-08-9
Chrysene	**0.538**		0.0354	0.00838	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	218-01-9
Dibenz(a,h)Anthracene	**0.164**		0.0354	0.0157	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	53-70-3
Fluoranthene	**1.12**		0.0354	0.0105	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	206-44-0
Fluorene	**0.0484**		0.0354	0.0114	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	86-73-7
Indeno(1,2,3-cd)pyrene	**0.360**		0.0354	0.0172	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	193-39-5
Naphthalene	0.0122	U	0.0354	0.0122	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	91-20-3
Phenanthrene	**0.767**		0.0354	0.00711	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	85-01-8
Pyrene	**0.969**		0.0354	0.0112	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:21	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*32%*	*16-110*				2/13/18 20:21	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*26%*	*19-105*				2/13/18 20:21	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*88%*	*20-137*				2/13/18 20:21	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora — Analyst:MAB

% Solids	**93.8**	0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00
Percent Moisture	**6.24**	0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-249 @ 2-4
Lab Sample ID: L8B0082-47 (Solid) **Sampled:2/7/18 9:43**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0119	U	0.0356	0.0119	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	90-12-0
2-Methylnaphthalene	0.0143	U	0.0356	0.0143	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	91-57-6
Acenaphthene	0.0140	U	0.0356	0.0140	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	83-32-9
Acenaphthylene	0.0119	U	0.0356	0.0119	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	208-96-8
Anthracene	0.00941	U	0.0356	0.00941	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	120-12-7
Benzo(a)anthracene	0.00994	U	0.0356	0.00994	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	56-55-3
Benzo(a)pyrene	0.0169	U	0.0356	0.0169	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	50-32-8
Benzo(b)fluoranthene	0.0159	U	0.0356	0.0159	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	205-99-2
Benzo(g,h,i)perylene	0.0166	U	0.0356	0.0166	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	191-24-2
Benzo(k)fluoranthene	0.0123	U	0.0356	0.0123	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	207-08-9
Chrysene	0.00845	U	0.0356	0.00845	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	218-01-9
Dibenz(a,h)Anthracene	0.0158	U	0.0356	0.0158	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	53-70-3
Fluoranthene	0.0106	U	0.0356	0.0106	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	206-44-0
Fluorene	0.0114	U	0.0356	0.0114	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	86-73-7
Indeno(1,2,3-cd)pyrene	0.0173	U	0.0356	0.0173	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	193-39-5
Naphthalene	0.0123	U	0.0356	0.0123	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	91-20-3
Phenanthrene	0.00716	U	0.0356	0.00716	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	85-01-8
Pyrene	0.0113	U	0.0356	0.0113	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:38	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*74%*	*16-110*				2/14/18 11:38	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*62%*	*19-105*				2/14/18 11:38	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*90%*	*20-137*				2/14/18 11:38	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**91.8**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**8.16**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-249 @ 4-6
Lab Sample ID: L8B0082-48 (Solid) **Sampled:2/7/18 9:45**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	90-12-0
2-Methylnaphthalene	0.0139	U	0.0345	0.0139	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	91-57-6
Acenaphthene	0.0135	U	0.0345	0.0135	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	208-96-8
Anthracene	0.00910	U	0.0345	0.00910	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	120-12-7
Benzo(a)anthracene	0.00961	U	0.0345	0.00961	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	56-55-3
Benzo(a)pyrene	0.0163	U	0.0345	0.0163	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0345	0.0154	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0345	0.0160	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	207-08-9
Chrysene	0.00817	U	0.0345	0.00817	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0345	0.0153	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	53-70-3
Fluoranthene	0.0102	U	0.0345	0.0102	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	206-44-0
Fluorene	0.0111	U	0.0345	0.0111	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0345	0.0167	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	193-39-5
Naphthalene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	91-20-3
Phenanthrene	0.00693	U	0.0345	0.00693	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	85-01-8
Pyrene	0.0110	U	0.0345	0.0110	mg/Kg dry	1	2/13/18 11:00	2/13/18 20:41	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*59%*	*16-110*				2/13/18 20:41	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*50%*	*19-105*				2/13/18 20:41	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*78%*	*20-137*				2/13/18 20:41	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.1**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**5.90**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-250 @ 0.0-0.5
Lab Sample ID: L8B0082-49 (Solid) **Sampled:2/7/18 13:27**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0348	0.0116	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	90-12-0
2-Methylnaphthalene	0.0140	U	0.0348	0.0140	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	91-57-6
Acenaphthene	**0.0289**	I	0.0348	0.0137	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	83-32-9
Acenaphthylene	0.0116	U	0.0348	0.0116	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	208-96-8
Anthracene	**0.112**		0.0348	0.00919	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	120-12-7
Benzo(a)anthracene	**0.551**		0.0348	0.00971	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	56-55-3
Benzo(a)pyrene	**0.667**		0.0348	0.0165	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	50-32-8
Benzo(b)fluoranthene	**0.663**		0.0348	0.0156	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	205-99-2
Benzo(g,h,i)perylene	**0.597**		0.0348	0.0162	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	191-24-2
Benzo(k)fluoranthene	**0.549**		0.0348	0.0120	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	207-08-9
Chrysene	**0.611**		0.0348	0.00825	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	218-01-9
Dibenz(a,h)Anthracene	**0.222**		0.0348	0.0155	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	53-70-3
Fluoranthene	**0.987**		0.0348	0.0103	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	206-44-0
Fluorene	**0.0184**	I	0.0348	0.0112	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	86-73-7
Indeno(1,2,3-cd)pyrene	**0.507**		0.0348	0.0169	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	193-39-5
Naphthalene	0.0120	U	0.0348	0.0120	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	91-20-3
Phenanthrene	**0.473**		0.0348	0.00700	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	85-01-8
Pyrene	**0.951**		0.0348	0.0111	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:01	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*57%*	*16-110*				2/13/18 21:01	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*42%*	*19-105*				2/13/18 21:01	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*90%*	*20-137*				2/13/18 21:01	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.5**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**5.46**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-250 @ 0.5-2
Lab Sample ID: L8B0082-50 (Solid) **Sampled:2/7/18 13:29**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	208-96-8
Anthracene	0.00924	U	0.0350	0.00924	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	120-12-7
Benzo(a)anthracene	0.00976	U	0.0350	0.00976	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	207-08-9
Chrysene	0.00829	U	0.0350	0.00829	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0350	0.0155	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	91-20-3
Phenanthrene	0.00703	U	0.0350	0.00703	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/13/18 11:00	2/13/18 21:21	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*58%*	*16-110*				2/13/18 21:21	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*47%*	*19-105*				2/13/18 21:21	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/13/18 21:21	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.9**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**5.15**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-241 @ 0.0-0.5
Lab Sample ID: L8B0082-53 (Solid) **Sampled:2/7/18 10:49**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0623	U	0.187	0.0623	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	90-12-0
2-Methylnaphthalene	0.0753	U	0.187	0.0753	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	91-57-6
Acenaphthene	**0.468**		0.187	0.0736	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	83-32-9
Acenaphthylene	0.0623	U	0.187	0.0623	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	208-96-8
Anthracene	**0.820**		0.187	0.0494	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	120-12-7
Benzo(a)anthracene	**1.86**		0.187	0.0522	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	56-55-3
Benzo(a)pyrene	**1.86**		0.187	0.0887	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	50-32-8
Benzo(b)fluoranthene	**1.78**		0.187	0.0837	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	205-99-2
Benzo(g,h,i)perylene	**1.37**		0.187	0.0871	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	191-24-2
Benzo(k)fluoranthene	**1.56**		0.187	0.0646	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	207-08-9
Chrysene	**1.97**		0.187	0.0444	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	218-01-9
Dibenz(a,h)Anthracene	**0.633**		0.187	0.0831	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	53-70-3
Fluoranthene	**4.16**		0.187	0.0556	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	206-44-0
Fluorene	**0.316**		0.187	0.0601	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	86-73-7
Indeno(1,2,3-cd)pyrene	**1.29**		0.187	0.0910	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	193-39-5
Naphthalene	**0.107**	I	0.187	0.0646	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	91-20-3
Phenanthrene	**3.53**		0.187	0.0376	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	85-01-8
Pyrene	**3.45**		0.187	0.0595	mg/Kg dry	5	2/13/18 11:00	2/13/18 21:42	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*55%*	*16-110*				2/13/18 21:42	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/13/18 21:42	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*71%*	*20-137*				2/13/18 21:42	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**87.1**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	
Percent Moisture	**12.9**		0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Sample Results
(Continued)

Client Sample ID: FLB-241 @ 0.5-2
Lab Sample ID: L8B0082-54 (Solid) **Sampled:2/7/18 10:51**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	90-12-0
2-Methylnaphthalene	0.0139	U	0.0346	0.0139	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	91-57-6
Acenaphthene	0.0136	U	0.0346	0.0136	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	83-32-9
Acenaphthylene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	208-96-8
Anthracene	0.00914	U	0.0346	0.00914	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	120-12-7
Benzo(a)anthracene	0.00966	U	0.0346	0.00966	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	56-55-3
Benzo(a)pyrene	0.0164	U	0.0346	0.0164	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	50-32-8
Benzo(b)fluoranthene	0.0155	U	0.0346	0.0155	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	205-99-2
Benzo(g,h,i)perylene	0.0161	U	0.0346	0.0161	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0346	0.0119	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	207-08-9
Chrysene	0.00821	U	0.0346	0.00821	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	218-01-9
Dibenz(a,h)Anthracene	0.0154	U	0.0346	0.0154	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	53-70-3
Fluoranthene	0.0103	U	0.0346	0.0103	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	206-44-0
Fluorene	0.0111	U	0.0346	0.0111	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	86-73-7
Indeno(1,2,3-cd)pyrene	0.0168	U	0.0346	0.0168	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	193-39-5
Naphthalene	0.0119	U	0.0346	0.0119	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	91-20-3
Phenanthrene	**0.00762**	I	0.0346	0.00696	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	85-01-8
Pyrene	0.0110	U	0.0346	0.0110	mg/Kg dry	1	2/13/18 11:00	2/14/18 11:58	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/14/18 11:58	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*57%*	*19-105*				2/14/18 11:58	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/14/18 11:58	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**95.0**	0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00
Percent Moisture	**5.02**	0.100	0.100	%	1	2/8/18 13:00	2/8/18 13:00

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control

PAHs (SVOCs) by Method 8270D

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0129											
Blank (B8B0129-BLK1)					Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.16*		*mg/Kg wet*	*1.67*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.01*		*mg/Kg wet*	*1.67*		*60*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.52*		*mg/Kg wet*	*1.67*		*91*	*20-137*		
LCS (B8B0129-BS1)					Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.100		0.0333	0.0111	mg/Kg wet	0.167		60	39-116		
2-Methylnaphthalene	0.0980		0.0333	0.0134	mg/Kg wet	0.167		59	37-112		
Acenaphthene	0.107		0.0333	0.0131	mg/Kg wet	0.167		64	41-116		
Acenaphthylene	0.104		0.0333	0.0111	mg/Kg wet	0.167		63	42-126		
Anthracene	0.118		0.0333	0.00880	mg/Kg wet	0.167		71	39-127		
Benzo(a)anthracene	0.138		0.0333	0.00930	mg/Kg wet	0.167		83	40-129		
Benzo(a)pyrene	0.142		0.0333	0.0158	mg/Kg wet	0.167		85	36-141		
Benzo(b)fluoranthene	0.135		0.0333	0.0149	mg/Kg wet	0.167		81	34-139		
Benzo(g,h,i)perylene	0.162		0.0333	0.0155	mg/Kg wet	0.167		97	32-141		
Benzo(k)fluoranthene	0.145		0.0333	0.0115	mg/Kg wet	0.167		87	31-139		
Chrysene	0.144		0.0333	0.00790	mg/Kg wet	0.167		86	41-124		
Dibenz(a,h)Anthracene	0.156		0.0333	0.0148	mg/Kg wet	0.167		94	35-143		
Fluoranthene	0.113		0.0333	0.00990	mg/Kg wet	0.167		68	38-132		
Fluorene	0.101		0.0333	0.0107	mg/Kg wet	0.167		61	41-121		
Indeno(1,2,3-cd)pyrene	0.154		0.0333	0.0162	mg/Kg wet	0.167		92	27-160		
Naphthalene	0.103		0.0333	0.0115	mg/Kg wet	0.167		62	37-113		
Phenanthrene	0.116		0.0333	0.00670	mg/Kg wet	0.167		70	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0129 (Continued)											
LCS (B8B0129-BS1)					Prepared & Analyzed: 2/12/2018						
Pyrene	0.143		0.0333	0.0106	mg/Kg wet	0.167		86	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.07*		*mg/Kg wet*	*1.67*		*64*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.904*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.49*		*mg/Kg wet*	*1.67*		*90*	*20-137*		
LCS Dup (B8B0129-BSD1)					Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.0957		0.0333	0.0111	mg/Kg wet	0.167		57	39-116	4	30
2-Methylnaphthalene	0.0920		0.0333	0.0134	mg/Kg wet	0.167		55	37-112	6	30
Acenaphthene	0.101		0.0333	0.0131	mg/Kg wet	0.167		61	41-116	5	30
Acenaphthylene	0.0963		0.0333	0.0111	mg/Kg wet	0.167		58	42-126	8	30
Anthracene	0.120		0.0333	0.00880	mg/Kg wet	0.167		72	39-127	2	30
Benzo(a)anthracene	0.141		0.0333	0.00930	mg/Kg wet	0.167		84	40-129	2	30
Benzo(a)pyrene	0.146		0.0333	0.0158	mg/Kg wet	0.167		88	36-141	3	30
Benzo(b)fluoranthene	0.138		0.0333	0.0149	mg/Kg wet	0.167		83	34-139	2	30
Benzo(g,h,i)perylene	0.158		0.0333	0.0155	mg/Kg wet	0.167		95	32-141	3	30
Benzo(k)fluoranthene	0.148		0.0333	0.0115	mg/Kg wet	0.167		89	31-139	2	30
Chrysene	0.148		0.0333	0.00790	mg/Kg wet	0.167		89	41-124	3	30
Dibenz(a,h)Anthracene	0.154		0.0333	0.0148	mg/Kg wet	0.167		92	35-143	1	30
Fluoranthene	0.115		0.0333	0.00990	mg/Kg wet	0.167		69	38-132	2	30
Fluorene	0.0937		0.0333	0.0107	mg/Kg wet	0.167		56	41-121	8	30
Indeno(1,2,3-cd)pyrene	0.146		0.0333	0.0162	mg/Kg wet	0.167		87	27-160	5	30
Naphthalene	0.0943		0.0333	0.0115	mg/Kg wet	0.167		57	37-113	9	30
Phenanthrene	0.110		0.0333	0.00670	mg/Kg wet	0.167		66	50-115	6	30
Pyrene	0.139		0.0333	0.0106	mg/Kg wet	0.167		84	42-138	2	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.999*		*mg/Kg wet*	*1.67*		*60*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.853*		*mg/Kg wet*	*1.67*		*51*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.50*		*mg/Kg wet*	*1.67*		*90*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0129 (Continued)											
Matrix Spike (B8B0129-MS1)		**Source: L8B0082-25**			Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.968		0.0361	0.0120	mg/Kg dry	1.81	ND	54	39-116		
2-Methylnaphthalene	0.975		0.0361	0.0145	mg/Kg dry	1.81	ND	54	37-112		
Acenaphthene	1.08		0.0361	0.0142	mg/Kg dry	1.81	ND	60	41-116		
Acenaphthylene	1.03		0.0361	0.0120	mg/Kg dry	1.81	ND	57	41-118		
Anthracene	1.26		0.0361	0.00953	mg/Kg dry	1.81	ND	70	39-127		
Benzo(a)anthracene	1.44		0.0361	0.0101	mg/Kg dry	1.81	0.0376	77	40-129		
Benzo(a)pyrene	1.54		0.0361	0.0171	mg/Kg dry	1.81	0.0423	83	36-141		
Benzo(b)fluoranthene	1.51		0.0361	0.0161	mg/Kg dry	1.81	0.0355	81	34-139		
Benzo(g,h,i)perylene	1.53		0.0361	0.0168	mg/Kg dry	1.81	0.0355	83	32-141		
Benzo(k)fluoranthene	1.43		0.0361	0.0125	mg/Kg dry	1.81	0.0365	77	31-139		
Chrysene	1.49		0.0361	0.00856	mg/Kg dry	1.81	0.0408	80	41-124		
Dibenz(a,h)Anthracene	1.36		0.0361	0.0160	mg/Kg dry	1.81	ND	75	35-143		
Fluoranthene	1.66		0.0361	0.0107	mg/Kg dry	1.81	0.0602	89	38-132		
Fluorene	1.05		0.0361	0.0116	mg/Kg dry	1.81	ND	58	41-121		
Indeno(1,2,3-cd)pyrene	1.47		0.0361	0.0176	mg/Kg dry	1.81	0.0283	80	27-160		
Naphthalene	0.996		0.0361	0.0125	mg/Kg dry	1.81	ND	55	37-113		
Phenanthrene	1.57		0.0361	0.00726	mg/Kg dry	1.81	0.0290	85	50-115		
Pyrene	1.77		0.0361	0.0115	mg/Kg dry	1.81	0.0562	95	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.02*		*mg/Kg dry*	*1.81*		*56*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.881*		*mg/Kg dry*	*1.81*		*49*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.18*		*mg/Kg dry*	*1.81*		*65*	*20-137*		
Matrix Spike Dup (B8B0129-MSD1)		**Source: L8B0082-25**			Prepared & Analyzed: 2/12/2018						
1-Methylnaphthalene	0.878		0.0361	0.0120	mg/Kg dry	1.81	ND	49	39-116	10	30
2-Methylnaphthalene	0.868		0.0361	0.0145	mg/Kg dry	1.81	ND	48	37-112	12	30
Acenaphthene	1.02		0.0361	0.0142	mg/Kg dry	1.81	ND	56	41-116	6	30
Acenaphthylene	0.989		0.0361	0.0120	mg/Kg dry	1.81	ND	55	41-118	4	30
Anthracene	1.31		0.0361	0.00953	mg/Kg dry	1.81	ND	72	39-127	4	30
Benzo(a)anthracene	1.45		0.0361	0.0101	mg/Kg dry	1.81	0.0376	78	40-129	0.9	30
Benzo(a)pyrene	1.54		0.0361	0.0171	mg/Kg dry	1.81	0.0423	83	36-141	0.5	30
Benzo(b)fluoranthene	1.51		0.0361	0.0161	mg/Kg dry	1.81	0.0355	82	34-139	0.2	30
Benzo(g,h,i)perylene	1.60		0.0361	0.0168	mg/Kg dry	1.81	0.0355	86	32-141	4	30
Benzo(k)fluoranthene	1.48		0.0361	0.0125	mg/Kg dry	1.81	0.0365	80	31-139	4	30
Chrysene	1.50		0.0361	0.00856	mg/Kg dry	1.81	0.0408	81	41-124	1	30
Dibenz(a,h)Anthracene	1.51		0.0361	0.0160	mg/Kg dry	1.81	ND	84	35-143	11	30
Fluoranthene	1.42		0.0361	0.0107	mg/Kg dry	1.81	0.0602	75	38-132	16	30
Fluorene	1.07		0.0361	0.0116	mg/Kg dry	1.81	ND	59	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.55		0.0361	0.0175	mg/Kg dry	1.81	0.0283	84	27-160	5	30
Naphthalene	0.875		0.0361	0.0125	mg/Kg dry	1.81	ND	48	37-113	13	30
Phenanthrene	1.39		0.0361	0.00726	mg/Kg dry	1.81	0.0290	75	50-115	12	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0129 (Continued)											
Matrix Spike Dup (B8B0129-MSD1)			**Source: L8B0082-25**		Prepared & Analyzed: 2/12/2018						
Pyrene	1.63		0.0361	0.0115	mg/Kg dry	1.81	0.0562	87	42-138	8	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.940*		*mg/Kg dry*	*1.81*		*52*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.783*		*mg/Kg dry*	*1.81*		*43*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.37*		*mg/Kg dry*	*1.81*		*76*	*20-137*		
Batch: B8B0145											
Blank (B8B0145-BLK1)					Prepared: 2/13/2018 Analyzed: 2/14/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.05*		*mg/Kg wet*	*1.67*		*63*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.847*		*mg/Kg wet*	*1.67*		*51*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.42*		*mg/Kg wet*	*1.67*		*85*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0145 (Continued)											
LCS (B8B0145-BS1)					Prepared & Analyzed: 2/13/2018						
1-Methylnaphthalene	1.17		0.0333	0.0111	mg/Kg wet	1.67		70	39-116		
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112		
Acenaphthene	1.27		0.0333	0.0131	mg/Kg wet	1.67		76	41-116		
Acenaphthylene	1.27		0.0333	0.0111	mg/Kg wet	1.67		76	42-126		
Anthracene	1.49		0.0333	0.00880	mg/Kg wet	1.67		89	39-127		
Benzo(a)anthracene	1.53		0.0333	0.00930	mg/Kg wet	1.67		92	40-129		
Benzo(a)pyrene	1.71		0.0333	0.0158	mg/Kg wet	1.67		103	36-141		
Benzo(b)fluoranthene	1.66		0.0333	0.0149	mg/Kg wet	1.67		100	34-139		
Benzo(g,h,i)perylene	1.74		0.0333	0.0155	mg/Kg wet	1.67		104	32-141		
Benzo(k)fluoranthene	1.68		0.0333	0.0115	mg/Kg wet	1.67		101	31-139		
Chrysene	1.59		0.0333	0.00790	mg/Kg wet	1.67		95	41-124		
Dibenz(a,h)Anthracene	1.74		0.0333	0.0148	mg/Kg wet	1.67		104	35-143		
Fluoranthene	1.35		0.0333	0.00990	mg/Kg wet	1.67		81	38-132		
Fluorene	1.29		0.0333	0.0107	mg/Kg wet	1.67		78	41-121		
Indeno(1,2,3-cd)pyrene	1.71		0.0333	0.0162	mg/Kg wet	1.67		103	27-160		
Naphthalene	1.13		0.0333	0.0115	mg/Kg wet	1.67		68	37-113		
Phenanthrene	1.44		0.0333	0.00670	mg/Kg wet	1.67		87	50-115		
Pyrene	1.71		0.0333	0.0106	mg/Kg wet	1.67		103	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*74*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.983*		*mg/Kg wet*	*1.67*		*59*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.61*		*mg/Kg wet*	*1.67*		*97*	*20-137*		
LCS Dup (B8B0145-BSD1)					Prepared & Analyzed: 2/13/2018						
1-Methylnaphthalene	1.12		0.0333	0.0111	mg/Kg wet	1.67		67	39-116	4	30
2-Methylnaphthalene	1.11		0.0333	0.0134	mg/Kg wet	1.67		67	37-112	4	30
Acenaphthene	1.22		0.0333	0.0131	mg/Kg wet	1.67		73	41-116	4	30
Acenaphthylene	1.21		0.0333	0.0111	mg/Kg wet	1.67		73	42-126	5	30
Anthracene	1.43		0.0333	0.00880	mg/Kg wet	1.67		86	39-127	4	30
Benzo(a)anthracene	1.45		0.0333	0.00930	mg/Kg wet	1.67		87	40-129	6	30
Benzo(a)pyrene	1.60		0.0333	0.0158	mg/Kg wet	1.67		96	36-141	7	30
Benzo(b)fluoranthene	1.55		0.0333	0.0149	mg/Kg wet	1.67		93	34-139	7	30
Benzo(g,h,i)perylene	1.65		0.0333	0.0155	mg/Kg wet	1.67		99	32-141	5	30
Benzo(k)fluoranthene	1.56		0.0333	0.0115	mg/Kg wet	1.67		94	31-139	7	30
Chrysene	1.51		0.0333	0.00790	mg/Kg wet	1.67		90	41-124	5	30
Dibenz(a,h)Anthracene	1.63		0.0333	0.0148	mg/Kg wet	1.67		98	35-143	6	30
Fluoranthene	1.29		0.0333	0.00990	mg/Kg wet	1.67		77	38-132	5	30
Fluorene	1.22		0.0333	0.0107	mg/Kg wet	1.67		73	41-121	6	30
Indeno(1,2,3-cd)pyrene	1.60		0.0333	0.0162	mg/Kg wet	1.67		96	27-160	7	30
Naphthalene	1.07		0.0333	0.0115	mg/Kg wet	1.67		64	37-113	5	30
Phenanthrene	1.37		0.0333	0.00670	mg/Kg wet	1.67		82	50-115	5	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0145 (Continued)											
LCS Dup (B8B0145-BSD1)					Prepared & Analyzed: 2/13/2018						
Pyrene	1.62		0.0333	0.0106	mg/Kg wet	1.67		97	42-138	6	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.19*		*mg/Kg wet*	*1.67*		*71*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.931*		*mg/Kg wet*	*1.67*		*56*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.55*		*mg/Kg wet*	*1.67*		*93*	*20-137*		
Matrix Spike (B8B0145-MS1)		**Source: L8B0082-54**			Prepared & Analyzed: 2/13/2018						
1-Methylnaphthalene	0.985		0.0346	0.0115	mg/Kg dry	1.73	ND	57	39-116		
2-Methylnaphthalene	0.964		0.0346	0.0139	mg/Kg dry	1.73	ND	56	37-112		
Acenaphthene	1.12		0.0346	0.0136	mg/Kg dry	1.73	ND	65	41-116		
Acenaphthylene	1.11		0.0346	0.0115	mg/Kg dry	1.73	ND	64	41-118		
Anthracene	1.31		0.0346	0.00913	mg/Kg dry	1.73	ND	76	39-127		
Benzo(a)anthracene	1.32		0.0346	0.00965	mg/Kg dry	1.73	ND	76	40-129		
Benzo(a)pyrene	1.45		0.0346	0.0164	mg/Kg dry	1.73	ND	84	36-141		
Benzo(b)fluoranthene	1.36		0.0346	0.0155	mg/Kg dry	1.73	ND	79	34-139		
Benzo(g,h,i)perylene	1.60		0.0346	0.0161	mg/Kg dry	1.73	ND	92	32-141		
Benzo(k)fluoranthene	1.39		0.0346	0.0119	mg/Kg dry	1.73	ND	80	31-139		
Chrysene	1.37		0.0346	0.00819	mg/Kg dry	1.73	ND	79	41-124		
Dibenz(a,h)Anthracene	1.55		0.0346	0.0154	mg/Kg dry	1.73	ND	90	35-143		
Fluoranthene	1.17		0.0346	0.0103	mg/Kg dry	1.73	ND	68	38-132		
Fluorene	1.12		0.0346	0.0111	mg/Kg dry	1.73	ND	65	41-121		
Indeno(1,2,3-cd)pyrene	1.54		0.0346	0.0168	mg/Kg dry	1.73	ND	89	27-160		
Naphthalene	0.941		0.0346	0.0119	mg/Kg dry	1.73	ND	54	37-113		
Phenanthrene	1.28		0.0346	0.00695	mg/Kg dry	1.73	0.00762	74	50-115		
Pyrene	1.47		0.0346	0.0110	mg/Kg dry	1.73	ND	85	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.08*		*mg/Kg dry*	*1.73*		*62*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.849*		*mg/Kg dry*	*1.73*		*49*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.39*		*mg/Kg dry*	*1.73*		*80*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0145 (Continued)											
Matrix Spike Dup (B8B0145-MSD1)		**Source: L8B0082-54**			Prepared & Analyzed: 2/13/2018						
1-Methylnaphthalene	0.893		0.0344	0.0115	mg/Kg dry	1.72	ND	52	39-116	10	30
2-Methylnaphthalene	0.889		0.0344	0.0138	mg/Kg dry	1.72	ND	52	37-112	8	30
Acenaphthene	1.03		0.0344	0.0135	mg/Kg dry	1.72	ND	60	41-116	8	30
Acenaphthylene	1.01		0.0344	0.0115	mg/Kg dry	1.72	ND	59	41-118	9	30
Anthracene	1.35		0.0344	0.00908	mg/Kg dry	1.72	ND	78	39-127	3	30
Benzo(a)anthracene	1.40		0.0344	0.00960	mg/Kg dry	1.72	ND	81	40-129	6	30
Benzo(a)pyrene	1.50		0.0344	0.0163	mg/Kg dry	1.72	ND	87	36-141	4	30
Benzo(b)fluoranthene	1.45		0.0344	0.0154	mg/Kg dry	1.72	ND	84	34-139	6	30
Benzo(g,h,i)perylene	1.68		0.0344	0.0160	mg/Kg dry	1.72	ND	97	32-141	5	30
Benzo(k)fluoranthene	1.47		0.0344	0.0119	mg/Kg dry	1.72	ND	86	31-139	6	30
Chrysene	1.46		0.0344	0.00815	mg/Kg dry	1.72	ND	85	41-124	6	30
Dibenz(a,h)Anthracene	1.64		0.0344	0.0153	mg/Kg dry	1.72	ND	95	35-143	6	30
Fluoranthene	1.22		0.0344	0.0102	mg/Kg dry	1.72	ND	71	38-132	4	30
Fluorene	1.05		0.0344	0.0110	mg/Kg dry	1.72	ND	61	41-121	6	30
Indeno(1,2,3-cd)pyrene	1.62		0.0344	0.0167	mg/Kg dry	1.72	ND	94	27-160	5	30
Naphthalene	0.874		0.0344	0.0119	mg/Kg dry	1.72	ND	51	37-113	7	30
Phenanthrene	1.28		0.0344	0.00692	mg/Kg dry	1.72	0.00762	74	50-115	0.1	30
Pyrene	1.55		0.0344	0.0109	mg/Kg dry	1.72	ND	90	42-138	6	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.977*		*mg/Kg dry*	*1.72*		*57*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.777*		*mg/Kg dry*	*1.72*		*45*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.48*		*mg/Kg dry*	*1.72*		*86*	*20-137*		
Batch: B8B0167											
Blank (B8B0167-BLK1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
Blank (B8B0167-BLK1)					Prepared & Analyzed: 2/14/2018						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.945*		*mg/Kg wet*	*1.67*		*57*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.801*		*mg/Kg wet*	*1.67*		*48*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.16*		*mg/Kg wet*	*1.67*		*70*	*20-137*		
LCS (B8B0167-BS1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.887		0.0333	0.0111	mg/Kg wet	1.67		53	39-116		
2-Methylnaphthalene	0.877		0.0333	0.0134	mg/Kg wet	1.67		53	37-112		
Acenaphthene	0.944		0.0333	0.0131	mg/Kg wet	1.67		57	41-116		
Acenaphthylene	0.927		0.0333	0.0111	mg/Kg wet	1.67		56	42-126		
Anthracene	1.29		0.0333	0.00880	mg/Kg wet	1.67		77	39-127		
Benzo(a)anthracene	1.35		0.0333	0.00930	mg/Kg wet	1.67		81	40-129		
Benzo(a)pyrene	1.52		0.0333	0.0158	mg/Kg wet	1.67		91	36-141		
Benzo(b)fluoranthene	1.46		0.0333	0.0149	mg/Kg wet	1.67		87	34-139		
Benzo(g,h,i)perylene	1.58		0.0333	0.0155	mg/Kg wet	1.67		94	32-141		
Benzo(k)fluoranthene	1.46		0.0333	0.0115	mg/Kg wet	1.67		88	31-139		
Chrysene	1.40		0.0333	0.00790	mg/Kg wet	1.67		84	41-124		
Dibenz(a,h)Anthracene	1.56		0.0333	0.0148	mg/Kg wet	1.67		94	35-143		
Fluoranthene	1.26		0.0333	0.00990	mg/Kg wet	1.67		75	38-132		
Fluorene	0.987		0.0333	0.0107	mg/Kg wet	1.67		59	41-121		
Indeno(1,2,3-cd)pyrene	1.55		0.0333	0.0162	mg/Kg wet	1.67		93	27-160		
Naphthalene	0.884		0.0333	0.0115	mg/Kg wet	1.67		53	37-113		
Phenanthrene	1.20		0.0333	0.00670	mg/Kg wet	1.67		72	50-115		
Pyrene	1.38		0.0333	0.0106	mg/Kg wet	1.67		83	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.768*		*mg/Kg wet*	*1.67*		*46*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.36*		*mg/Kg wet*	*1.67*		*81*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
LCS Dup (B8B0167-BSD1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.898		0.0333	0.0111	mg/Kg wet	1.67		54	39-116	1	30
2-Methylnaphthalene	0.888		0.0333	0.0134	mg/Kg wet	1.67		53	37-112	1	30
Acenaphthene	0.922		0.0333	0.0131	mg/Kg wet	1.67		55	41-116	2	30
Acenaphthylene	0.907		0.0333	0.0111	mg/Kg wet	1.67		54	42-126	2	30
Anthracene	1.32		0.0333	0.00880	mg/Kg wet	1.67		79	39-127	2	30
Benzo(a)anthracene	1.36		0.0333	0.00930	mg/Kg wet	1.67		82	40-129	0.7	30
Benzo(a)pyrene	1.49		0.0333	0.0158	mg/Kg wet	1.67		90	36-141	2	30
Benzo(b)fluoranthene	1.43		0.0333	0.0149	mg/Kg wet	1.67		86	34-139	1	30
Benzo(g,h,i)perylene	1.58		0.0333	0.0155	mg/Kg wet	1.67		95	32-141	0.5	30
Benzo(k)fluoranthene	1.45		0.0333	0.0115	mg/Kg wet	1.67		87	31-139	0.6	30
Chrysene	1.42		0.0333	0.00790	mg/Kg wet	1.67		85	41-124	1	30
Dibenz(a,h)Anthracene	1.57		0.0333	0.0148	mg/Kg wet	1.67		94	35-143	0.4	30
Fluoranthene	1.27		0.0333	0.00990	mg/Kg wet	1.67		76	38-132	0.7	30
Fluorene	0.950		0.0333	0.0107	mg/Kg wet	1.67		57	41-121	4	30
Indeno(1,2,3-cd)pyrene	1.56		0.0333	0.0162	mg/Kg wet	1.67		93	27-160	0.4	30
Naphthalene	0.896		0.0333	0.0115	mg/Kg wet	1.67		54	37-113	1	30
Phenanthrene	1.19		0.0333	0.00670	mg/Kg wet	1.67		71	50-115	1	30
Pyrene	1.41		0.0333	0.0106	mg/Kg wet	1.67		84	42-138	2	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.775*		*mg/Kg wet*	*1.67*		*47*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.36*		*mg/Kg wet*	*1.67*		*81*	*20-137*		
Matrix Spike (B8B0167-MS1)		**Source: L8B0099-33**			Prepared: 2/14/2018 Analyzed: 2/15/2018						
1-Methylnaphthalene	0.921		0.0356	0.0118	mg/Kg dry	1.78	ND	52	39-116		
2-Methylnaphthalene	0.917		0.0356	0.0143	mg/Kg dry	1.78	ND	52	37-112		
Acenaphthene	0.988		0.0356	0.0140	mg/Kg dry	1.78	ND	56	41-116		
Acenaphthylene	0.981		0.0356	0.0118	mg/Kg dry	1.78	ND	55	41-118		
Anthracene	1.09		0.0356	0.00939	mg/Kg dry	1.78	ND	61	39-127		
Benzo(a)anthracene	1.13		0.0356	0.00992	mg/Kg dry	1.78	0.0199	62	40-129		
Benzo(a)pyrene	1.22		0.0356	0.0169	mg/Kg dry	1.78	0.0181	68	36-141		
Benzo(b)fluoranthene	1.20		0.0356	0.0159	mg/Kg dry	1.78	0.0202	66	34-139		
Benzo(g,h,i)perylene	1.22		0.0356	0.0165	mg/Kg dry	1.78	0.0181	68	32-141		
Benzo(k)fluoranthene	1.18		0.0356	0.0123	mg/Kg dry	1.78	0.0161	66	31-139		
Chrysene	1.15		0.0356	0.00843	mg/Kg dry	1.78	0.0192	64	41-124		
Dibenz(a,h)Anthracene	1.21		0.0356	0.0158	mg/Kg dry	1.78	ND	68	35-143		
Fluoranthene	1.06		0.0356	0.0106	mg/Kg dry	1.78	0.0328	58	38-132		
Fluorene	0.997		0.0356	0.0114	mg/Kg dry	1.78	ND	56	41-121		
Indeno(1,2,3-cd)pyrene	1.21		0.0356	0.0173	mg/Kg dry	1.78	ND	68	27-160		
Naphthalene	0.900		0.0356	0.0123	mg/Kg dry	1.78	ND	51	37-113		
Phenanthrene	1.09		0.0356	0.00715	mg/Kg dry	1.78	0.0206	60	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
Matrix Spike (B8B0167-MS1)		**Source: L8B0099-33**			Prepared: 2/14/2018	Analyzed: 2/15/2018					
Pyrene	1.19		0.0356	0.0113	mg/Kg dry	1.78	0.0269	66	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.27*		*mg/Kg dry*	*1.78*		*72*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.08*		*mg/Kg dry*	*1.78*		*61*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.49*		*mg/Kg dry*	*1.78*		*84*	*20-137*		
Matrix Spike Dup (B8B0167-MSD1)		**Source: L8B0099-33**			Prepared: 2/14/2018	Analyzed: 2/15/2018					
1-Methylnaphthalene	1.13		0.0356	0.0118	mg/Kg dry	1.78	ND	63	39-116	20	30
2-Methylnaphthalene	1.11		0.0356	0.0143	mg/Kg dry	1.78	ND	62	37-112	19	30
Acenaphthene	1.23		0.0356	0.0140	mg/Kg dry	1.78	ND	69	41-116	22	30
Acenaphthylene	1.23		0.0356	0.0118	mg/Kg dry	1.78	ND	69	41-118	22	30
Anthracene	1.45		0.0356	0.00939	mg/Kg dry	1.78	ND	81	39-127	29	30
Benzo(a)anthracene	1.53	J	0.0356	0.00992	mg/Kg dry	1.78	0.0199	85	40-129	31	30
Benzo(a)pyrene	1.70	J	0.0356	0.0169	mg/Kg dry	1.78	0.0181	94	36-141	33	30
Benzo(b)fluoranthene	1.61		0.0356	0.0159	mg/Kg dry	1.78	0.0202	90	34-139	29	30
Benzo(g,h,i)perylene	1.74	J	0.0356	0.0165	mg/Kg dry	1.78	0.0181	97	32-141	35	30
Benzo(k)fluoranthene	1.45		0.0356	0.0123	mg/Kg dry	1.78	0.0161	81	31-139	20	30
Chrysene	1.57	J	0.0356	0.00843	mg/Kg dry	1.78	0.0192	87	41-124	31	30
Dibenz(a,h)Anthracene	1.71	J	0.0356	0.0158	mg/Kg dry	1.78	ND	96	35-143	34	30
Fluoranthene	1.28		0.0356	0.0106	mg/Kg dry	1.78	0.0328	70	38-132	19	30
Fluorene	1.27		0.0356	0.0114	mg/Kg dry	1.78	ND	72	41-121	24	30
Indeno(1,2,3-cd)pyrene	1.70	J	0.0356	0.0173	mg/Kg dry	1.78	ND	96	27-160	34	30
Naphthalene	1.07		0.0356	0.0123	mg/Kg dry	1.78	ND	60	37-113	17	30
Phenanthrene	1.45		0.0356	0.00715	mg/Kg dry	1.78	0.0206	80	50-115	28	30
Pyrene	1.72	J	0.0356	0.0113	mg/Kg dry	1.78	0.0269	95	42-138	36	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.19*		*mg/Kg dry*	*1.78*		*67*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.975*		*mg/Kg dry*	*1.78*		*55*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.63*		*mg/Kg dry*	*1.78*		*91*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238											
Blank (B8B0238-BLK1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.18*		*mg/Kg wet*	*1.67*		*71*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.04*		*mg/Kg wet*	*1.67*		*63*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.47*		*mg/Kg wet*	*1.67*		*88*	*20-137*		
LCS (B8B0238-BS1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.17		0.0333	0.0111	mg/Kg wet	1.67		70	39-116		
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112		
Acenaphthene	1.24		0.0333	0.0131	mg/Kg wet	1.67		74	41-116		
Acenaphthylene	1.21		0.0333	0.0111	mg/Kg wet	1.67		73	42-126		
Anthracene	1.43		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.48		0.0333	0.00930	mg/Kg wet	1.67		89	40-129		
Benzo(a)pyrene	1.66		0.0333	0.0158	mg/Kg wet	1.67		100	36-141		
Benzo(b)fluoranthene	1.59		0.0333	0.0149	mg/Kg wet	1.67		95	34-139		
Benzo(g,h,i)perylene	1.64		0.0333	0.0155	mg/Kg wet	1.67		99	32-141		
Benzo(k)fluoranthene	1.61		0.0333	0.0115	mg/Kg wet	1.67		96	31-139		
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124		
Dibenz(a,h)Anthracene	1.66		0.0333	0.0148	mg/Kg wet	1.67		99	35-143		
Fluoranthene	1.37		0.0333	0.00990	mg/Kg wet	1.67		82	38-132		
Fluorene	1.23		0.0333	0.0107	mg/Kg wet	1.67		74	41-121		
Indeno(1,2,3-cd)pyrene	1.63		0.0333	0.0162	mg/Kg wet	1.67		98	27-160		
Naphthalene	1.16		0.0333	0.0115	mg/Kg wet	1.67		69	37-113		
Phenanthrene	1.36		0.0333	0.00670	mg/Kg wet	1.67		81	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
LCS (B8B0238-BS1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
Pyrene	1.53		0.0333	0.0106	mg/Kg wet	1.67		92	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*74*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.08*		*mg/Kg wet*	*1.67*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.51*		*mg/Kg wet*	*1.67*		*91*	*20-137*		
LCS Dup (B8B0238-BSD1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.19		0.0333	0.0111	mg/Kg wet	1.67		71	39-116	1	30
2-Methylnaphthalene	1.16		0.0333	0.0134	mg/Kg wet	1.67		69	37-112	1	30
Acenaphthene	1.25		0.0333	0.0131	mg/Kg wet	1.67		75	41-116	1	30
Acenaphthylene	1.23		0.0333	0.0111	mg/Kg wet	1.67		74	42-126	1	30
Anthracene	1.45		0.0333	0.00880	mg/Kg wet	1.67		87	39-127	1	30
Benzo(a)anthracene	1.47		0.0333	0.00930	mg/Kg wet	1.67		88	40-129	0.7	30
Benzo(a)pyrene	1.64		0.0333	0.0158	mg/Kg wet	1.67		98	36-141	1	30
Benzo(b)fluoranthene	1.56		0.0333	0.0149	mg/Kg wet	1.67		94	34-139	2	30
Benzo(g,h,i)perylene	1.63		0.0333	0.0155	mg/Kg wet	1.67		98	32-141	0.9	30
Benzo(k)fluoranthene	1.58		0.0333	0.0115	mg/Kg wet	1.67		95	31-139	2	30
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124	0.06	30
Dibenz(a,h)Anthracene	1.64		0.0333	0.0148	mg/Kg wet	1.67		99	35-143	0.8	30
Fluoranthene	1.40		0.0333	0.00990	mg/Kg wet	1.67		84	38-132	2	30
Fluorene	1.25		0.0333	0.0107	mg/Kg wet	1.67		75	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.62		0.0333	0.0162	mg/Kg wet	1.67		97	27-160	0.6	30
Naphthalene	1.17		0.0333	0.0115	mg/Kg wet	1.67		70	37-113	1	30
Phenanthrene	1.40		0.0333	0.00670	mg/Kg wet	1.67		84	50-115	3	30
Pyrene	1.52		0.0333	0.0106	mg/Kg wet	1.67		91	42-138	0.5	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*75*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.10*		*mg/Kg wet*	*1.67*		*66*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.46*		*mg/Kg wet*	*1.67*		*88*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Matrix Spike (B8B0238-MS1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
1-Methylnaphthalene	0.775		0.0329	0.0110	mg/Kg dry	1.65	ND	47	39-116		
2-Methylnaphthalene	0.775		0.0329	0.0132	mg/Kg dry	1.65	ND	47	37-112		
Acenaphthene	0.828		0.0329	0.0129	mg/Kg dry	1.65	ND	50	41-116		
Acenaphthylene	0.811		0.0329	0.0110	mg/Kg dry	1.65	ND	49	41-118		
Anthracene	1.18		0.0329	0.00869	mg/Kg dry	1.65	ND	71	39-127		
Benzo(a)anthracene	1.31		0.0329	0.00918	mg/Kg dry	1.65	ND	79	40-129		
Benzo(a)pyrene	1.45		0.0329	0.0156	mg/Kg dry	1.65	ND	88	36-141		
Benzo(b)fluoranthene	1.37		0.0329	0.0147	mg/Kg dry	1.65	ND	83	34-139		
Benzo(g,h,i)perylene	1.44		0.0329	0.0153	mg/Kg dry	1.65	ND	87	32-141		
Benzo(k)fluoranthene	1.39		0.0329	0.0114	mg/Kg dry	1.65	ND	84	31-139		
Chrysene	1.40		0.0329	0.00780	mg/Kg dry	1.65	ND	85	41-124		
Dibenz(a,h)Anthracene	1.46		0.0329	0.0146	mg/Kg dry	1.65	ND	89	35-143		
Fluoranthene	1.23		0.0329	0.00978	mg/Kg dry	1.65	ND	75	38-132		
Fluorene	0.824		0.0329	0.0106	mg/Kg dry	1.65	ND	50	41-121		
Indeno(1,2,3-cd)pyrene	1.43		0.0329	0.0160	mg/Kg dry	1.65	ND	87	27-160		
Naphthalene	0.774		0.0329	0.0114	mg/Kg dry	1.65	ND	47	37-113		
Phenanthrene	1.04		0.0329	0.00662	mg/Kg dry	1.65	ND	63	50-115		
Pyrene	1.32		0.0329	0.0105	mg/Kg dry	1.65	ND	80	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.816*		*mg/Kg dry*	*1.65*		*50*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.722*		*mg/Kg dry*	*1.65*		*44*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg dry*	*1.65*		*78*	*20-137*		
Matrix Spike Dup (B8B0238-MSD1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
1-Methylnaphthalene	1.11	J	0.0329	0.0110	mg/Kg dry	1.64	ND	68	39-116	36	30
2-Methylnaphthalene	1.10	J	0.0329	0.0132	mg/Kg dry	1.64	ND	67	37-112	35	30
Acenaphthene	1.17	J	0.0329	0.0129	mg/Kg dry	1.64	ND	71	41-116	34	30
Acenaphthylene	1.16	J	0.0329	0.0110	mg/Kg dry	1.64	ND	70	41-118	35	30
Anthracene	1.39		0.0329	0.00868	mg/Kg dry	1.64	ND	85	39-127	17	30
Benzo(a)anthracene	1.39		0.0329	0.00917	mg/Kg dry	1.64	ND	84	40-129	6	30
Benzo(a)pyrene	1.54		0.0329	0.0156	mg/Kg dry	1.64	ND	93	36-141	6	30
Benzo(b)fluoranthene	1.46		0.0329	0.0147	mg/Kg dry	1.64	ND	88	34-139	6	30
Benzo(g,h,i)perylene	1.52		0.0329	0.0153	mg/Kg dry	1.64	ND	92	32-141	5	30
Benzo(k)fluoranthene	1.46		0.0329	0.0113	mg/Kg dry	1.64	ND	89	31-139	6	30
Chrysene	1.47		0.0329	0.00779	mg/Kg dry	1.64	ND	89	41-124	5	30
Dibenz(a,h)Anthracene	1.52		0.0329	0.0146	mg/Kg dry	1.64	ND	93	35-143	4	30
Fluoranthene	1.34		0.0329	0.00977	mg/Kg dry	1.64	ND	81	38-132	8	30
Fluorene	1.18	J	0.0329	0.0106	mg/Kg dry	1.64	ND	72	41-121	35	30
Indeno(1,2,3-cd)pyrene	1.51		0.0329	0.0160	mg/Kg dry	1.64	ND	92	27-160	5	30
Naphthalene	1.11	J	0.0329	0.0113	mg/Kg dry	1.64	ND	67	37-113	35	30
Phenanthrene	1.33		0.0329	0.00661	mg/Kg dry	1.64	ND	81	50-115	25	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Matrix Spike Dup (B8B0238-MSD1)			**Source: L8B0099-48**		Prepared: 2/21/2018 Analyzed: 2/22/2018						
Pyrene	1.46		0.0329	0.0105	mg/Kg dry	1.64	ND	89	42-138	10	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.16*		*mg/Kg dry*	*1.64*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.05*		*mg/Kg dry*	*1.64*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.39*		*mg/Kg dry*	*1.64*		*84*	*20-137*		
Batch: B8B0292											
Blank (B8B0292-BLK1)					Prepared: 2/27/2018 Analyzed: 2/28/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.04*		*mg/Kg wet*	*1.67*		*62*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.17*		*mg/Kg wet*	*1.67*		*70*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.52*		*mg/Kg wet*	*1.67*		*91*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0292 (Continued)											
LCS (B8B0292-BS1)					Prepared: 2/27/2018 Analyzed: 2/28/2018						
1-Methylnaphthalene	1.02		0.0333	0.0111	mg/Kg wet	1.67		61	39-116		
2-Methylnaphthalene	0.995		0.0333	0.0134	mg/Kg wet	1.67		60	37-112		
Acenaphthene	1.11		0.0333	0.0131	mg/Kg wet	1.67		67	41-116		
Acenaphthylene	1.12		0.0333	0.0111	mg/Kg wet	1.67		67	42-126		
Anthracene	1.31		0.0333	0.00880	mg/Kg wet	1.67		79	39-127		
Benzo(a)anthracene	1.33		0.0333	0.00930	mg/Kg wet	1.67		80	40-129		
Benzo(a)pyrene	1.51		0.0333	0.0158	mg/Kg wet	1.67		90	36-141		
Benzo(b)fluoranthene	1.45		0.0333	0.0149	mg/Kg wet	1.67		87	34-139		
Benzo(g,h,i)perylene	1.36		0.0333	0.0155	mg/Kg wet	1.67		82	32-141		
Benzo(k)fluoranthene	1.52		0.0333	0.0115	mg/Kg wet	1.67		91	31-139		
Chrysene	1.38		0.0333	0.00790	mg/Kg wet	1.67		83	41-124		
Dibenz(a,h)Anthracene	1.37		0.0333	0.0148	mg/Kg wet	1.67		82	35-143		
Fluoranthene	1.18		0.0333	0.00990	mg/Kg wet	1.67		71	38-132		
Fluorene	1.09		0.0333	0.0107	mg/Kg wet	1.67		65	41-121		
Indeno(1,2,3-cd)pyrene	1.39		0.0333	0.0162	mg/Kg wet	1.67		84	27-160		
Naphthalene	1.06		0.0333	0.0115	mg/Kg wet	1.67		63	37-113		
Phenanthrene	1.27		0.0333	0.00670	mg/Kg wet	1.67		76	50-115		
Pyrene	1.59		0.0333	0.0106	mg/Kg wet	1.67		95	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.06*		*mg/Kg wet*	*1.67*		*64*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.17*		*mg/Kg wet*	*1.67*		*70*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.34*		*mg/Kg wet*	*1.67*		*80*	*20-137*		
LCS Dup (B8B0292-BSD1)					Prepared: 2/27/2018 Analyzed: 2/28/2018						
1-Methylnaphthalene	1.08		0.0333	0.0111	mg/Kg wet	1.67		65	39-116	6	30
2-Methylnaphthalene	1.06		0.0333	0.0134	mg/Kg wet	1.67		64	37-112	7	30
Acenaphthene	1.17		0.0333	0.0131	mg/Kg wet	1.67		70	41-116	5	30
Acenaphthylene	1.19		0.0333	0.0111	mg/Kg wet	1.67		72	42-126	6	30
Anthracene	1.34		0.0333	0.00880	mg/Kg wet	1.67		81	39-127	2	30
Benzo(a)anthracene	1.41		0.0333	0.00930	mg/Kg wet	1.67		84	40-129	5	30
Benzo(a)pyrene	1.51		0.0333	0.0158	mg/Kg wet	1.67		90	36-141	0.04	30
Benzo(b)fluoranthene	1.51		0.0333	0.0149	mg/Kg wet	1.67		91	34-139	4	30
Benzo(g,h,i)perylene	1.42		0.0333	0.0155	mg/Kg wet	1.67		85	32-141	4	30
Benzo(k)fluoranthene	1.59		0.0333	0.0115	mg/Kg wet	1.67		96	31-139	4	30
Chrysene	1.44		0.0333	0.00790	mg/Kg wet	1.67		86	41-124	4	30
Dibenz(a,h)Anthracene	1.45		0.0333	0.0148	mg/Kg wet	1.67		87	35-143	5	30
Fluoranthene	1.22		0.0333	0.00990	mg/Kg wet	1.67		73	38-132	4	30
Fluorene	1.14		0.0333	0.0107	mg/Kg wet	1.67		68	41-121	4	30
Indeno(1,2,3-cd)pyrene	1.46		0.0333	0.0162	mg/Kg wet	1.67		88	27-160	5	30
Naphthalene	1.13		0.0333	0.0115	mg/Kg wet	1.67		68	37-113	7	30
Phenanthrene	1.30		0.0333	0.00670	mg/Kg wet	1.67		78	50-115	2	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0292 (Continued)											
LCS Dup (B8B0292-BSD1)					Prepared: 2/27/2018 Analyzed: 2/28/2018						
Pyrene	1.65		0.0333	0.0106	mg/Kg wet	1.67		99	42-138	4	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.14*		*mg/Kg wet*	*1.67*		*69*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.26*		*mg/Kg wet*	*1.67*		*76*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.41*		*mg/Kg wet*	*1.67*		*85*	*20-137*		
Matrix Spike (B8B0292-MS1)		**Source: L8B0214-01**			Prepared: 2/27/2018 Analyzed: 2/28/2018						
1-Methylnaphthalene	0.885		0.0332	0.0110	mg/Kg dry	1.66	ND	53	39-116		
2-Methylnaphthalene	0.860		0.0332	0.0133	mg/Kg dry	1.66	ND	52	37-112		
Acenaphthene	0.989		0.0332	0.0130	mg/Kg dry	1.66	ND	60	41-116		
Acenaphthylene	1.04		0.0332	0.0110	mg/Kg dry	1.66	0.0239	61	41-118		
Anthracene	1.19		0.0332	0.00876	mg/Kg dry	1.66	0.00943	71	39-127		
Benzo(a)anthracene	1.22		0.0332	0.00926	mg/Kg dry	1.66	ND	73	40-129		
Benzo(a)pyrene	1.32		0.0332	0.0157	mg/Kg dry	1.66	0.0199	79	36-141		
Benzo(b)fluoranthene	1.31		0.0332	0.0148	mg/Kg dry	1.66	ND	79	34-139		
Benzo(g,h,i)perylene	1.18		0.0332	0.0154	mg/Kg dry	1.66	0.0155	70	32-141		
Benzo(k)fluoranthene	1.32		0.0332	0.0114	mg/Kg dry	1.66	0.0148	79	31-139		
Chrysene	1.24		0.0332	0.00786	mg/Kg dry	1.66	0.0155	74	41-124		
Dibenz(a,h)Anthracene	1.18		0.0332	0.0147	mg/Kg dry	1.66	ND	71	35-143		
Fluoranthene	1.07		0.0332	0.00985	mg/Kg dry	1.66	ND	64	38-132		
Fluorene	0.998		0.0332	0.0107	mg/Kg dry	1.66	ND	60	41-121		
Indeno(1,2,3-cd)pyrene	1.20		0.0332	0.0161	mg/Kg dry	1.66	ND	72	27-160		
Naphthalene	0.903		0.0332	0.0114	mg/Kg dry	1.66	ND	54	37-113		
Phenanthrene	1.17		0.0332	0.00667	mg/Kg dry	1.66	ND	71	50-115		
Pyrene	1.47		0.0332	0.0106	mg/Kg dry	1.66	0.0185	87	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.922*		*mg/Kg dry*	*1.66*		*56*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.00*		*mg/Kg dry*	*1.66*		*61*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.20*		*mg/Kg dry*	*1.66*		*73*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0292 (Continued)											
Matrix Spike Dup (B8B0292-MSD1)		**Source: L8B0214-01**			Prepared: 2/27/2018 Analyzed: 2/28/2018						
1-Methylnaphthalene	0.859		0.0337	0.0112	mg/Kg dry	1.69	ND	51	39-116	3	30
2-Methylnaphthalene	0.842		0.0337	0.0136	mg/Kg dry	1.69	ND	50	37-112	2	30
Acenaphthene	1.01		0.0337	0.0132	mg/Kg dry	1.69	ND	60	41-116	2	30
Acenaphthylene	1.06		0.0337	0.0112	mg/Kg dry	1.69	0.0239	62	41-118	2	30
Anthracene	1.38		0.0337	0.00890	mg/Kg dry	1.69	0.00943	81	39-127	14	30
Benzo(a)anthracene	1.44		0.0337	0.00941	mg/Kg dry	1.69	ND	85	40-129	17	30
Benzo(a)pyrene	1.56		0.0337	0.0160	mg/Kg dry	1.69	0.0199	91	36-141	16	30
Benzo(b)fluoranthene	1.58		0.0337	0.0151	mg/Kg dry	1.69	ND	93	34-139	19	30
Benzo(g,h,i)perylene	1.42		0.0337	0.0157	mg/Kg dry	1.69	ND	84	32-141	19	30
Benzo(k)fluoranthene	1.59		0.0337	0.0116	mg/Kg dry	1.69	0.0148	94	31-139	18	30
Chrysene	1.46		0.0337	0.00799	mg/Kg dry	1.69	0.0155	86	41-124	17	30
Dibenz(a,h)Anthracene	1.43		0.0337	0.0150	mg/Kg dry	1.69	ND	85	35-143	19	30
Fluoranthene	1.26		0.0337	0.0100	mg/Kg dry	1.69	ND	74	38-132	16	30
Fluorene	1.05		0.0337	0.0108	mg/Kg dry	1.69	ND	62	41-121	5	30
Indeno(1,2,3-cd)pyrene	1.45		0.0337	0.0164	mg/Kg dry	1.69	ND	86	27-160	18	30
Naphthalene	0.875		0.0337	0.0116	mg/Kg dry	1.69	ND	52	37-113	3	30
Phenanthrene	1.36		0.0337	0.00678	mg/Kg dry	1.69	ND	80	50-115	14	30
Pyrene	1.75		0.0337	0.0107	mg/Kg dry	1.69	0.0185	102	42-138	17	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.905*		*mg/Kg dry*	*1.69*		*54*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.982*		*mg/Kg dry*	*1.69*		*58*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.43*		*mg/Kg dry*	*1.69*		*85*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/28/18 15:01

Quality Control
(Continued)

Percent Moisture by Method 2540G

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0117											
Duplicate (B8B0117-DUP1)		**Source: L8B0082-01**			Prepared: 2/8/2018		Analyzed: 2/12/2018				
% Solids	96.3		0.100	0.100	%		95.6			0.8	20
Percent Moisture	3.66		0.100	0.100	%		4.40			18	20
Duplicate (B8B0117-DUP2)		**Source: L8B0082-21**			Prepared: 2/8/2018		Analyzed: 2/12/2018				
% Solids	89.0		0.100	0.100	%		89.4			0.4	20
Percent Moisture	11.0		0.100	0.100	%		10.6			3	20
Duplicate (B8B0117-DUP3)		**Source: L8B0082-41**			Prepared: 2/8/2018		Analyzed: 2/12/2018				
% Solids	79.7		0.100	0.100	%		80.7			1	20
Percent Moisture	20.3		0.100	0.100	%		19.3			5	20
Duplicate (B8B0117-DUP4)		**Source: L8B0082-54**			Prepared: 2/8/2018		Analyzed: 2/12/2018				
% Solids	95.1		0.100	0.100	%		95.0			0.09	20
Percent Moisture	4.94		0.100	0.100	%		5.02			2	20
Batch: B8B0217											
Duplicate (B8B0217-DUP1)		**Source: L8B0186-02**			Prepared & Analyzed: 2/20/2018						
% Solids	77.9		0.100	0.100	%		77.2			0.9	20
Percent Moisture	22.1		0.100	0.100	%		22.8			3	20
Duplicate (B8B0217-DUP2)		**Source: L8B0040-21**			Prepared & Analyzed: 2/20/2018						
% Solids	84.7		0.100	0.100	%		85.4			0.8	20
Percent Moisture	15.3		0.100	0.100	%		14.6			5	20
Batch: B8B0256											
Duplicate (B8B0256-DUP1)		**Source: L8B0082-23**			Prepared & Analyzed: 2/22/2018						
% Solids	95.6		0.100	0.100	%		95.8			0.2	20
Percent Moisture	4.37		0.100	0.100	%		4.17			5	20

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MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/28/18 15:01

List of Certifications for XENCO Laboratories - Tampa formerly FTS Analytical

Number	Description	Code	Facility	Expires
123066	Kentucky UST CERTIFICATION	UST KY	FTSL	06/30/2018
E84098	FL MICROBIOLOGY Lakeland CERT	LFLNELAC	FTSL	06/30/2018
E871002	Xenco FL CERT	FLNELAC	FTSL	06/30/2018
E87429	FL NELAC CERT Tampa	AFLNELAC	FTSL	06/30/2018
LI0-135	DoD CERTIFICATE	DOD	FTSL	12/11/2019
P330-07-00105	USDA CERTIFICATE	USDA	FTSL	

Notes and Definitions

Item	Definition
U	Compound was not detected.
Dry	Sample results reported on a dry weight basis.
I	Value estimated to be between the Laboratory Detection and Reporting Limit
J	QC Failure see Case Narrative
L	Concentration exceeds calibration range
N	Tentatively Identified Compound
Q	Hold time exceeded
V	Analyte equal to or above detection limit in the method blank
TNTC	Bacteria is present but Too Numerous To Count

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

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FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA- Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 3.8 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0082
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type / Preservation Code
								GC / 9	Container Type / Preservation Code
1	FLB-209@ 0.0-0.5	0.0-0.5	2/7/18-1358	S		X	1	X	
2	FLB-209@0.5-2	0.5-2	-1400	S		X	1	X	
3	FLB-209@2-4	2-4	-1404	S		X	1	X	Hold
4	FLB-209@4-6	4-6	-1405	S		X	1	X	Hold
5	FLB-220@0.0-0.5	0.0-0.5	-0826	S		X	1	X	
6	FLB-220@0.5-2	0.5-2	0834	S		X	1	X	
7	FLB-220@2-4	2-4	0837	S		X	1	X	Hold
8	FLB-220@4-6	4-6	0840	S		X	1	X	Hold
9	FLB-221@0.0-0.5	0.0-0.5	0845	S		X	1	X	
10	FLB-221@0.5-2	0.5-2	0851	S		X	1	X	

1) Relinquished By: Richard Houde Date / Time 2/7/18-1533
2) Received By: [signature] Date / Time 2-7-18 1533
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 Old Madison Pike #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard Houde
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: EL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 3.8 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0082
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested: GC (Container Type), 4 (Preservation Code)

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH												Container Type / Preservation Code
1	FLB-221@ 2-4	2-4	2/7/18-0853	S		X	1	X												Hold
2	FLB221@ 4-6	4-6	-0855	S		X	1	X												Hold
3	FLB222@0.0-0.5	0.0-0.5	-0950	S		X	1	X												
4	FLB-222@0.5-2	0.5-2	0953	S		X	1	X												
5	FLB-222@2-4	2-4	0955	S		X	1	X												Hold
6	FLB-222@4-6	4-6	0957	S		X	1	X												Hold
7	FLB223@0.0-0.5	0.0-0.5	1010	S		X	1	X												
8	FLB223@0.5-2	0.5-2	1014	S		X	1	X												
9	FLB-223@2-4	2-4	1016	S		X	1	X												Hold
10	FLB-223@4-6	4-6	1019	S		X	1	X												Hold

1) Relinquished By: Richard Houde Date / Time 2/7/18-1533
2) Received By: Date / Time 2-7-18 15:
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

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STD TAT: 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

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Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

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Company Name: Spec Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.houde@Badger-Tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): US DA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.L. / 3.8 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0082
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC	9	PAH	Container Type / Preservation Code
1	FLB-224@0.0-0.5	0.0-0.5	2/7/18-1025	S		X	1			X	
2	FLB-224@0.5-2	0.5-2	-1031	S		X	1			X	
3	FLB-224@2-4	2-4	-1033	S		X	1			X	Hold
4	FLB-224@4-6	4-6	-1035	S		X	1			X	Hold
5	FLB-225@0.0-0.5	0.0-0.5	-1105	S		X	1			X	
6	FLB-225@0.5-2	0.5-2	-1107	S		X	1			X	
7	FLB-225@2-4	2-4	-1109	S		X	1			X	Hold
8	FLB-225@4-6	4-6	-1111	S		X	1			X	Hold
9	FLB-226-[illegible]@0.0-0.5	0.0-0.5	-1256	S		X	1			X	
10	FLB-226-@0.5-2	0.5-2	-1258	S		X	1			X	

1) Relinquished By: Richard Houde Date / Time 2/7/18-1533
2) Received By: [signature] Date / Time 2-7-18 1533
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

Relinquished By: Date / Time
4) Received By: Date / Time

Relinquished By: Date / Time
6) Received By: Date / Time

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Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA=Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

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Results Sent to: Richard Houde
Email address: Richard Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 3.8 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0082
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC 9 PAH	Container Type / Preservation Code
1	FLB-226 @ 2-4	2-4	2/7/18 - 1300	S		X	1	X	Hold
2	FLB-226 @ 4-6	4-6	- 1302	S		X	1	X	Hold
3	FLB-227 @ 0.0-0.5	0.0-0.5	- 1307	S		X	1	X	
4	FLB-227 @ 0.5-2	0.5-2	- 1310	S		X	1	X	
5	FLB-227 @ 2-4	2-4	- 1313	S		X	1	X	Hold
6	FLB-227 @ 4-6	4-6	- 1315	S		X	1	X	Hold
7	FLB-247 @ 0.0-0.5	0.0-0.5	- 0902	S		X	1	X	
8	FLB-247 @ 0.5-2	0.5-2	- 0907	S		X	1	X	-
9	FLB-247 @ 2-4	2-4	- 0909	S		X	1	X	Hold
10	FLB-247 @ 4-6	4-6	- 0911	S		X	1	X	Hold

1) Relinquished By: Richard Houde Date / Time 2/7/18 - 1533
2) Received By: [signature] Date / Time 2-7-18 1533
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

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Results Sent to: Richard Houde
Email address: Richard Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 3.8 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0082
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH												Container Type / Preservation Code
								GC												
								9												
1	FLB-248@0.0-0.5	0.0-0.5	2-7-18 / -0918	S		X	1	X												
2	FLB-248@0.5-2	0.5-2	-0925	S		X	1	X												
3	FLB-248 @ 2-4	2-4	-0927	S		X	1	X												
4	FLB-248 @ 4-6	4-6	-0930	S		X	1	X												
5	FLB-249@0.0-0.5	0.0-0.5	-0937	S		X	1	X												
6	FLB-249@0.5-2	0.5-2	0940	S		X	1	X												
7	FLB-249 @ 2-4	2-4	0943	S		X	1	X												
8	FLB-249 @ 4-6	4-6	0945	S		X	1	X												
9	FLB-250@0.0-0.5	0.0-0.5	1327	S		X	1	X												
10	FLB-250@0.5-2	0.5-2	1329	S		X	1	X												

1) Relinquished By: Richard Houde Date / Time 2/7/18-1533	2) Received By: [signature] Date / Time 2-7-18 1533	Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other
3) Relinquished By: Date / Time	4) Received By: Date / Time	MSA or FTS terms and conditions apply
5) Relinquished By: Date / Time	6) Received By: Date / Time	Circle a Turnaround Time (business days) STD TAT: 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.L. / 38 IR-1
Custody Seal(s): Y N Lab Work Order # L880082
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC	9	PAH	Container Type / Preservation Code
1	FLB-250@ 2-4	2-4	2/7/18-1331	S		X	1			X	Hold
2	FLB-250@ 4-6	4-6	2/7/18-1333	S		X	1			X	Hold
3	FLB-241@ 0.0-0.5	0.0-0.5	-1049	S		X	1			X	
4	FLB241@ 0.5-2	0.5-2	-1051	S		X	1			X	
5	FLB241@ 2-4	2-4	-1053	S		X	1			X	Hold
6	FLB-241@ 4-6	4-6	-1055	S		X	1			X	Hold
7											
8											
9											
10											

1) Relinquished By: Richard Houde Date / Time 2/7/18-1533
2) Received By: [signature] Date / Time 2-7-18 1533
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

Relinquished By: Date / Time
4) Received By: Date / Time

Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

Analytical Report

L8B0099

Project

Winter Haven

Project Number

Winter Haven

February 26, 2018

SpecPro Professional Services

12500 San Pedro Avenue, Suite 670

San Antonio, TX 78216

Minority Women Business Enterprise

Small Disadvantaged Business Enterprise

Minority Women Business Enterprise
Small Disadvantaged Business Enterprise

1412 Tech Blvd
Tampa, FL 33619

Phone #: 813-620-2000
Website: www.ftsanalytical.com

February 26, 2018

Richard Houde
SpecPro Professional Services
12500 San Pedro Avenue, Suite 670
San Antonio, TX 78216

RE: Winter Haven

We are reporting the results of the analyses performed on the samples recieved on 2/8/2018 under the project name referenced above and identified as the lab Work Order L8B0099. All results being reported under this Report apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontracted lab, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reporting using all other available quality control methods.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by FTS Analytical Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise agreed upon. The samples received, and described as recorded in Work Order L8B0099 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise agreed upon. We reserve the right to return to you any unused samples, extracts, or solutions if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding standard practices, controlled/regulated substances, etc.)

We thank you for selecting FTS Analytical to serve your analytical needs. If you have any questions concerning this report, please do not hesitate to contact us at any time. We will be happy to help.

Sincerely,

Chad A. Bechtold

Chad Bechtold
VP of Client Services

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0099-01	FLB-228 @ 0.0-0.5	Solid	08-Feb-2018 08:12	08-Feb-2018 15:17
L8B0099-02	FLB-228 @ 0.5-2	Solid	08-Feb-2018 08:14	08-Feb-2018 15:17
L8B0099-05	FLB-229 @ 0.0-0.5	Solid	08-Feb-2018 08:24	08-Feb-2018 15:17
L8B0099-06	FLB-229 @ 0.5-2	Solid	08-Feb-2018 08:26	08-Feb-2018 15:17
L8B0099-09	FLB-230 @ 0.0-0.5	Solid	08-Feb-2018 13:28	08-Feb-2018 15:17
L8B0099-10	FLB-230 @ 0.5-2	Solid	08-Feb-2018 13:31	08-Feb-2018 15:17
L8B0099-13	FLB-231 @ 0.0-0.5	Solid	08-Feb-2018 13:18	08-Feb-2018 15:17
L8B0099-14	FLB-231 @ 0.5-2	Solid	08-Feb-2018 13:21	08-Feb-2018 15:17
L8B0099-17	FLB-232 @ 0.0-0.5	Solid	08-Feb-2018 12:39	08-Feb-2018 15:17
L8B0099-18	FLB-232 @ 0.5-2	Solid	08-Feb-2018 12:41	08-Feb-2018 15:17
L8B0099-21	FLB-233 @ 0.0-0.5	Solid	08-Feb-2018 12:49	08-Feb-2018 15:17
L8B0099-22	FLB-233 @ 0.5-2	Solid	08-Feb-2018 12:51	08-Feb-2018 15:17
L8B0099-25	FLB-234 @ 0.0-0.5	Solid	08-Feb-2018 10:34	08-Feb-2018 15:17
L8B0099-26	FLB-234 @ 0.5-2	Solid	08-Feb-2018 10:36	08-Feb-2018 15:17
L8B0099-27	FLB-234 @ 2-4	Solid	08-Feb-2018 11:00	08-Feb-2018 15:17
L8B0099-28	FLB-234 @ 4-6	Solid	08-Feb-2018 11:03	08-Feb-2018 15:17
L8B0099-29	FLB-235 @ 0.0-0.5	Solid	08-Feb-2018 12:13	08-Feb-2018 15:17
L8B0099-30	FLB-235 @ 0.5-2	Solid	08-Feb-2018 12:15	08-Feb-2018 15:17
L8B0099-33	FLB-236 @ 0.0-0.5	Solid	08-Feb-2018 09:58	08-Feb-2018 15:17
L8B0099-34	FLB-236 @ 0.5-2	Solid	08-Feb-2018 10:00	08-Feb-2018 15:17
L8B0099-37	FLB-237 @ 0.0-0.5	Solid	08-Feb-2018 10:11	08-Feb-2018 15:17
L8B0099-38	FLB-237 @ 0.5-2	Solid	08-Feb-2018 10:14	08-Feb-2018 15:17
L8B0099-41	FLB-238 @ 0.0-0.5	Solid	08-Feb-2018 08:54	08-Feb-2018 15:17
L8B0099-42	FLB-238 @ 0.5-2	Solid	08-Feb-2018 08:57	08-Feb-2018 15:17
L8B0099-45	FLB-239 @ 0.0-0.5	Solid	08-Feb-2018 09:37	08-Feb-2018 15:17
L8B0099-46	FLB-239 @ 0.5-2	Solid	08-Feb-2018 09:41	08-Feb-2018 15:17
L8B0099-47	FLB-239 @ 2-4	Solid	08-Feb-2018 09:48	08-Feb-2018 15:17
L8B0099-48	FLB-239 @ 4-6	Solid	08-Feb-2018 09:51	08-Feb-2018 15:17
L8B0099-49	FLB-240 @ 0.0-0.5	Solid	08-Feb-2018 08:34	08-Feb-2018 15:17
L8B0099-50	FLB-240 @ 0.5-2	Solid	08-Feb-2018 08:37	08-Feb-2018 15:17
L8B0099-51	FLB-240 @ 2-4	Solid	08-Feb-2018 08:39	08-Feb-2018 15:17
L8B0099-52	FLB-240 @ 4-6	Solid	08-Feb-2018 08:41	08-Feb-2018 15:17

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Analysis Case Narrative

Method 8270D LL PAHs
Batch: B8B0167

The sample L8B0099-25 was analyzed at a dilution due to physical characteristics and/or high levels of non-target compounds.

Method 8270D LL PAHs
Batch: B8B0238

The precision (RPD) of the Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene and Fluorene exceeded control limits due to suspected matrix interference. However, the recoveries are within acceptable limits.
Sample affected: L8B0099-48.

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MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

Sample: FLB-228 @ 0.0-0.5

Lab ID: L8B0099-01

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0521**		0.0360	0.0100	mg/Kg dry	1	2/14/18 21:29	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0539**		0.0360	0.0170	mg/Kg dry	1	2/14/18 21:29	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0539**		0.0360	0.0161	mg/Kg dry	1	2/14/18 21:29	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0428**		0.0360	0.0167	mg/Kg dry	1	2/14/18 21:29	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0406**		0.0360	0.0124	mg/Kg dry	1	2/14/18 21:29	207-08-9	EPA 8270D PAH
Chrysene	**0.0547**		0.0360	0.00852	mg/Kg dry	1	2/14/18 21:29	218-01-9	EPA 8270D PAH
Fluoranthene	**0.100**		0.0360	0.0107	mg/Kg dry	1	2/14/18 21:29	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0410**		0.0360	0.0175	mg/Kg dry	1	2/14/18 21:29	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0600**		0.0360	0.00723	mg/Kg dry	1	2/14/18 21:29	85-01-8	EPA 8270D PAH
Pyrene	**0.0805**		0.0360	0.0114	mg/Kg dry	1	2/14/18 21:29	129-00-0	EPA 8270D PAH
Percent Moisture	**7.29**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-228 @ 0.5-2

Lab ID: L8B0099-02

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.99**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-229 @ 0.0-0.5

Lab ID: L8B0099-05

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0739**		0.0353	0.00986	mg/Kg dry	1	2/15/18 14:11	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0863**		0.0353	0.0168	mg/Kg dry	1	2/15/18 14:11	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0873**		0.0353	0.0158	mg/Kg dry	1	2/15/18 14:11	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0746**		0.0353	0.0164	mg/Kg dry	1	2/15/18 14:11	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0728**		0.0353	0.0122	mg/Kg dry	1	2/15/18 14:11	207-08-9	EPA 8270D PAH
Chrysene	**0.0813**		0.0353	0.00838	mg/Kg dry	1	2/15/18 14:11	218-01-9	EPA 8270D PAH
Fluoranthene	**0.129**		0.0353	0.0105	mg/Kg dry	1	2/15/18 14:11	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0633**		0.0353	0.0172	mg/Kg dry	1	2/15/18 14:11	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0806**		0.0353	0.00711	mg/Kg dry	1	2/15/18 14:11	85-01-8	EPA 8270D PAH
Pyrene	**0.130**		0.0353	0.0112	mg/Kg dry	1	2/15/18 14:11	129-00-0	EPA 8270D PAH
Percent Moisture	**5.71**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-229 @ 0.5-2

Lab ID: L8B0099-06

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.00**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-230 @ 0.0-0.5

Lab ID: L8B0099-09

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.72**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-230 @ 0.5-2

Lab ID: L8B0099-10

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.96**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-231 @ 0.0-0.5

Lab ID: L8B0099-13

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.94**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-231 @ 0.5-2

Lab ID: L8B0099-14

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Fluoranthene	**0.0518**		0.0352	0.0105	mg/Kg dry	1	2/14/18 21:49	206-44-0	EPA 8270D PAH
Pyrene	**0.0433**		0.0352	0.0112	mg/Kg dry	1	2/14/18 21:49	129-00-0	EPA 8270D PAH
Percent Moisture	**5.33**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-232 @ 0.0-0.5

Lab ID: L8B0099-17

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.32**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-232 @ 0.5-2

Lab ID: L8B0099-18

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.64**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-233 @ 0.0-0.5

Lab ID: L8B0099-21

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.85**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-233 @ 0.5-2

Lab ID: L8B0099-22

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.72**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-234 @ 0.0-0.5

Lab ID: L8B0099-25

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.5**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
1-Methylnaphthalene	**0.265**		0.176	0.0587	mg/Kg dry	5	2/14/18 20:48	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.448**		0.176	0.0709	mg/Kg dry	5	2/14/18 20:48	91-57-6	EPA 8270D PAH
Acenaphthene	**3.10**		0.176	0.0693	mg/Kg dry	5	2/14/18 20:48	83-32-9	EPA 8270D PAH
Anthracene	**5.14**		0.176	0.0466	mg/Kg dry	5	2/14/18 20:48	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**9.98**		0.176	0.0492	mg/Kg dry	5	2/14/18 20:48	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**9.56**		0.176	0.0836	mg/Kg dry	5	2/14/18 20:48	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**10.7**		0.176	0.0788	mg/Kg dry	5	2/14/18 20:48	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**7.15**		0.176	0.0820	mg/Kg dry	5	2/14/18 20:48	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**6.42**		0.176	0.0608	mg/Kg dry	5	2/14/18 20:48	207-08-9	EPA 8270D PAH
Chrysene	**9.48**		0.176	0.0418	mg/Kg dry	5	2/14/18 20:48	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**2.57**		0.176	0.0783	mg/Kg dry	5	2/14/18 20:48	53-70-3	EPA 8270D PAH
Fluoranthene	**23.4**		0.176	0.0524	mg/Kg dry	5	2/14/18 20:48	206-44-0	EPA 8270D PAH
Fluorene	**2.42**		0.176	0.0566	mg/Kg dry	5	2/14/18 20:48	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**6.43**		0.176	0.0857	mg/Kg dry	5	2/14/18 20:48	193-39-5	EPA 8270D PAH
Naphthalene	**1.51**		0.176	0.0608	mg/Kg dry	5	2/14/18 20:48	91-20-3	EPA 8270D PAH
Phenanthrene	**21.4**		0.176	0.0354	mg/Kg dry	5	2/14/18 20:48	85-01-8	EPA 8270D PAH
Pyrene	**17.1**		0.176	0.0561	mg/Kg dry	5	2/14/18 20:48	129-00-0	EPA 8270D PAH
Percent Moisture	**5.49**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-234 @ 0.5-2

Lab ID: L8B0099-26

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Anthracene	**0.0986**		0.0361	0.00954	mg/Kg dry	1	2/14/18 21:08	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.627**		0.0361	0.0101	mg/Kg dry	1	2/14/18 21:08	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.706**		0.0361	0.0171	mg/Kg dry	1	2/14/18 21:08	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.693**		0.0361	0.0161	mg/Kg dry	1	2/14/18 21:08	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.561**		0.0361	0.0168	mg/Kg dry	1	2/14/18 21:08	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.599**		0.0361	0.0125	mg/Kg dry	1	2/14/18 21:08	207-08-9	EPA 8270D PAH
Chrysene	**0.678**		0.0361	0.00856	mg/Kg dry	1	2/14/18 21:08	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.184**		0.0361	0.0160	mg/Kg dry	1	2/14/18 21:08	53-70-3	EPA 8270D PAH
Fluoranthene	**1.09**		0.0361	0.0107	mg/Kg dry	1	2/14/18 21:08	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.497**		0.0361	0.0176	mg/Kg dry	1	2/14/18 21:08	193-39-5	EPA 8270D PAH
Phenanthrene	**0.337**		0.0361	0.00726	mg/Kg dry	1	2/14/18 21:08	85-01-8	EPA 8270D PAH
Pyrene	**0.925**		0.0361	0.0115	mg/Kg dry	1	2/14/18 21:08	129-00-0	EPA 8270D PAH
Percent Moisture	**7.72**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-234 @ 2-4

Lab ID: L8B0099-27

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.9**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**3.06**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

Sample: FLB-234 @ 4-6

Lab ID: L8B0099-28

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.2**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**2.82**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

Sample: FLB-235 @ 0.0-0.5

Lab ID: L8B0099-29

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0484**		0.0351	0.00979	mg/Kg dry	1	2/15/18 15:33	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0586**		0.0351	0.0166	mg/Kg dry	1	2/15/18 15:33	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0642**		0.0351	0.0157	mg/Kg dry	1	2/15/18 15:33	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0498**		0.0351	0.0163	mg/Kg dry	1	2/15/18 15:33	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0481**		0.0351	0.0121	mg/Kg dry	1	2/15/18 15:33	207-08-9	EPA 8270D PAH
Chrysene	**0.0551**		0.0351	0.00832	mg/Kg dry	1	2/15/18 15:33	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0888**		0.0351	0.0104	mg/Kg dry	1	2/15/18 15:33	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0418**		0.0351	0.0171	mg/Kg dry	1	2/15/18 15:33	193-39-5	EPA 8270D PAH
Pyrene	**0.0754**		0.0351	0.0112	mg/Kg dry	1	2/15/18 15:33	129-00-0	EPA 8270D PAH
Percent Moisture	**5.07**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-235 @ 0.5-2

Lab ID: L8B0099-30

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.9**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0866**		0.0355	0.00991	mg/Kg dry	1	2/15/18 15:53	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0955**		0.0355	0.0168	mg/Kg dry	1	2/15/18 15:53	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0891**		0.0355	0.0159	mg/Kg dry	1	2/15/18 15:53	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0763**		0.0355	0.0165	mg/Kg dry	1	2/15/18 15:53	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0795**		0.0355	0.0123	mg/Kg dry	1	2/15/18 15:53	207-08-9	EPA 8270D PAH
Chrysene	**0.0937**		0.0355	0.00842	mg/Kg dry	1	2/15/18 15:53	218-01-9	EPA 8270D PAH
Fluoranthene	**0.170**		0.0355	0.0105	mg/Kg dry	1	2/15/18 15:53	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0671**		0.0355	0.0173	mg/Kg dry	1	2/15/18 15:53	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0845**		0.0355	0.00714	mg/Kg dry	1	2/15/18 15:53	85-01-8	EPA 8270D PAH
Pyrene	**0.149**		0.0355	0.0113	mg/Kg dry	1	2/15/18 15:53	129-00-0	EPA 8270D PAH
Percent Moisture	**6.13**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-236 @ 0.0-0.5

Lab ID: L8B0099-33

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**6.28**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-236 @ 0.5-2

Lab ID: L8B0099-34

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.87**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-237 @ 0.0-0.5

Lab ID: L8B0099-37

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Fluoranthene	**0.0387**		0.0348	0.0104	mg/Kg dry	1	2/15/18 18:40	206-44-0	EPA 8270D PAH
Pyrene	**0.0376**		0.0348	0.0111	mg/Kg dry	1	2/15/18 18:40	129-00-0	EPA 8270D PAH
Percent Moisture	**5.62**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-237 @ 0.5-2

Lab ID: L8B0099-38

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.94**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-238 @ 0.0-0.5

Lab ID: L8B0099-41

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.6**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
1-Methylnaphthalene	**0.0397**		0.0345	0.0115	mg/Kg dry	1	2/16/18 10:40	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.0456**		0.0345	0.0139	mg/Kg dry	1	2/16/18 10:40	91-57-6	EPA 8270D PAH
Acenaphthene	**0.517**		0.0345	0.0136	mg/Kg dry	1	2/16/18 10:40	83-32-9	EPA 8270D PAH
Anthracene	**1.31**		0.0345	0.00911	mg/Kg dry	1	2/16/18 10:40	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**4.27**		0.0345	0.00963	mg/Kg dry	1	2/16/18 10:40	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**4.49**		0.0345	0.0164	mg/Kg dry	1	2/16/18 10:40	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**5.19**		0.0345	0.0154	mg/Kg dry	1	2/16/18 10:40	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**3.34**		0.0345	0.0160	mg/Kg dry	1	2/16/18 10:40	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**2.40**		0.0345	0.0119	mg/Kg dry	1	2/16/18 10:40	207-08-9	EPA 8270D PAH
Chrysene	**4.38**		0.0345	0.00818	mg/Kg dry	1	2/16/18 10:40	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**1.17**		0.0345	0.0153	mg/Kg dry	1	2/16/18 10:40	53-70-3	EPA 8270D PAH
Fluoranthene	**10.7**		0.173	0.0513	mg/Kg dry	5	2/16/18 15:02	206-44-0	EPA 8270D PAH
Fluorene	**0.348**		0.0345	0.0111	mg/Kg dry	1	2/16/18 10:40	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**2.98**		0.0345	0.0168	mg/Kg dry	1	2/16/18 10:40	193-39-5	EPA 8270D PAH
Naphthalene	**0.117**		0.0345	0.0119	mg/Kg dry	1	2/16/18 10:40	91-20-3	EPA 8270D PAH
Phenanthrene	**5.77**		0.0345	0.00694	mg/Kg dry	1	2/16/18 10:40	85-01-8	EPA 8270D PAH
Pyrene	**6.75**		0.0345	0.0110	mg/Kg dry	1	2/16/18 10:40	129-00-0	EPA 8270D PAH
Percent Moisture	**5.41**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-238 @ 0.5-2

Lab ID: L8B0099-42

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.2**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Anthracene	**0.0536**		0.0350	0.00925	mg/Kg dry	1	2/16/18 11:00	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.227**		0.0350	0.00978	mg/Kg dry	1	2/16/18 11:00	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.235**		0.0350	0.0166	mg/Kg dry	1	2/16/18 11:00	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.239**		0.0350	0.0157	mg/Kg dry	1	2/16/18 11:00	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.205**		0.0350	0.0163	mg/Kg dry	1	2/16/18 11:00	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.187**		0.0350	0.0121	mg/Kg dry	1	2/16/18 11:00	207-08-9	EPA 8270D PAH
Chrysene	**0.242**		0.0350	0.00831	mg/Kg dry	1	2/16/18 11:00	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0655**		0.0350	0.0156	mg/Kg dry	1	2/16/18 11:00	53-70-3	EPA 8270D PAH
Fluoranthene	**0.509**		0.0350	0.0104	mg/Kg dry	1	2/16/18 11:00	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.177**		0.0350	0.0170	mg/Kg dry	1	2/16/18 11:00	193-39-5	EPA 8270D PAH
Phenanthrene	**0.255**		0.0350	0.00704	mg/Kg dry	1	2/16/18 11:00	85-01-8	EPA 8270D PAH
Pyrene	**0.364**		0.0350	0.0111	mg/Kg dry	1	2/16/18 11:00	129-00-0	EPA 8270D PAH
Percent Moisture	**5.82**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-239 @ 0.0-0.5

Lab ID: L8B0099-45

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0429**		0.0346	0.00965	mg/Kg dry	1	2/16/18 11:23	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0484**		0.0346	0.0164	mg/Kg dry	1	2/16/18 11:23	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0560**		0.0346	0.0155	mg/Kg dry	1	2/16/18 11:23	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0477**		0.0346	0.0161	mg/Kg dry	1	2/16/18 11:23	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0401**		0.0346	0.0119	mg/Kg dry	1	2/16/18 11:23	207-08-9	EPA 8270D PAH
Chrysene	**0.0505**		0.0346	0.00819	mg/Kg dry	1	2/16/18 11:23	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0795**		0.0346	0.0103	mg/Kg dry	1	2/16/18 11:23	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0422**		0.0346	0.0168	mg/Kg dry	1	2/16/18 11:23	193-39-5	EPA 8270D PAH
Pyrene	**0.0622**		0.0346	0.0110	mg/Kg dry	1	2/16/18 11:23	129-00-0	EPA 8270D PAH
Percent Moisture	**4.03**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-239 @ 0.5-2

Lab ID: L8B0099-46

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Acenaphthene	**0.133**		0.0347	0.0136	mg/Kg dry	1	2/15/18 19:20	83-32-9	EPA 8270D PAH
Anthracene	**0.301**		0.0347	0.00916	mg/Kg dry	1	2/15/18 19:20	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.896**		0.0347	0.00968	mg/Kg dry	1	2/15/18 19:20	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.898**		0.0347	0.0164	mg/Kg dry	1	2/15/18 19:20	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.979**		0.0347	0.0155	mg/Kg dry	1	2/15/18 19:20	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.677**		0.0347	0.0161	mg/Kg dry	1	2/15/18 19:20	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.678**		0.0347	0.0120	mg/Kg dry	1	2/15/18 19:20	207-08-9	EPA 8270D PAH
Chrysene	**0.896**		0.0347	0.00822	mg/Kg dry	1	2/15/18 19:20	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.229**		0.0347	0.0154	mg/Kg dry	1	2/15/18 19:20	53-70-3	EPA 8270D PAH
Fluoranthene	**1.88**		0.0347	0.0103	mg/Kg dry	1	2/15/18 19:20	206-44-0	EPA 8270D PAH
Fluorene	**0.0992**		0.0347	0.0111	mg/Kg dry	1	2/15/18 19:20	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.595**		0.0347	0.0169	mg/Kg dry	1	2/15/18 19:20	193-39-5	EPA 8270D PAH
Phenanthrene	**1.38**		0.0347	0.00697	mg/Kg dry	1	2/15/18 19:20	85-01-8	EPA 8270D PAH
Pyrene	**1.59**		0.0347	0.0110	mg/Kg dry	1	2/15/18 19:20	129-00-0	EPA 8270D PAH
Percent Moisture	**4.58**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-239 @ 2-4

Lab ID: L8B0099-47

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.8**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**3.20**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

Sample: FLB-239 @ 4-6

Lab ID: L8B0099-48

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**99.0**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**0.980**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-240 @ 0.0-0.5

Lab ID: L8B0099-49

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.111**		0.0352	0.00982	mg/Kg dry	1	2/15/18 19:40	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.131**		0.0352	0.0167	mg/Kg dry	1	2/15/18 19:40	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.142**		0.0352	0.0157	mg/Kg dry	1	2/15/18 19:40	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.114**		0.0352	0.0164	mg/Kg dry	1	2/15/18 19:40	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.110**		0.0352	0.0121	mg/Kg dry	1	2/15/18 19:40	207-08-9	EPA 8270D PAH
Chrysene	**0.121**		0.0352	0.00834	mg/Kg dry	1	2/15/18 19:40	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0433**		0.0352	0.0156	mg/Kg dry	1	2/15/18 19:40	53-70-3	EPA 8270D PAH
Fluoranthene	**0.201**		0.0352	0.0105	mg/Kg dry	1	2/15/18 19:40	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0936**		0.0352	0.0171	mg/Kg dry	1	2/15/18 19:40	193-39-5	EPA 8270D PAH
Phenanthrene	**0.109**		0.0352	0.00708	mg/Kg dry	1	2/15/18 19:40	85-01-8	EPA 8270D PAH
Pyrene	**0.184**		0.0352	0.0112	mg/Kg dry	1	2/15/18 19:40	129-00-0	EPA 8270D PAH
Percent Moisture	**5.62**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-240 @ 0.5-2

Lab ID: L8B0099-50

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.8**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.22**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-240 @ 2-4

Lab ID: L8B0099-51

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.5**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**10.5**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-240 @ 4-6

Lab ID: L8B0099-52

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.8**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.16**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results

Client Sample ID: FLB-228 @ 0.0-0.5
Lab Sample ID: L8B0099-01 (Solid) **Sampled:2/8/18 8:12**

PAHs (SVOCs) by Method 8270D

Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0120	U	0.0360	0.0120	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	90-12-0
2-Methylnaphthalene	0.0145	U	0.0360	0.0145	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	91-57-6
Acenaphthene	0.0141	U	0.0360	0.0141	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	83-32-9
Acenaphthylene	0.0120	U	0.0360	0.0120	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	208-96-8
Anthracene	0.00949	U	0.0360	0.00949	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	120-12-7
Benzo(a)anthracene	**0.0521**		0.0360	0.0100	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	56-55-3
Benzo(a)pyrene	**0.0539**		0.0360	0.0170	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	50-32-8
Benzo(b)fluoranthene	**0.0539**		0.0360	0.0161	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	205-99-2
Benzo(g,h,i)perylene	**0.0428**		0.0360	0.0167	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	191-24-2
Benzo(k)fluoranthene	**0.0406**		0.0360	0.0124	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	207-08-9
Chrysene	**0.0547**		0.0360	0.00852	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	218-01-9
Dibenz(a,h)Anthracene	0.0160	U	0.0360	0.0160	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	53-70-3
Fluoranthene	**0.100**		0.0360	0.0107	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	206-44-0
Fluorene	0.0115	U	0.0360	0.0115	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0410**		0.0360	0.0175	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	193-39-5
Naphthalene	0.0124	U	0.0360	0.0124	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	91-20-3
Phenanthrene	**0.0600**		0.0360	0.00723	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	85-01-8
Pyrene	**0.0805**		0.0360	0.0114	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*64%*	*16-110*				2/14/18 21:29	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*54%*	*19-105*				2/14/18 21:29	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*82%*	*20-137*				2/14/18 21:29	1718-51-0

Percent Moisture by Method 2540G

Laboratory:XENCO Labora Analyst:MAB

% Solids	**92.7**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**7.29**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-228 @ 0.5-2
Lab Sample ID: L8B0099-02 (Solid) **Sampled:2/8/18 8:14**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	120-12-7
Benzo(a)anthracene	0.00979	U	0.0351	0.00979	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	207-08-9
Chrysene	0.00831	U	0.0351	0.00831	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0351	0.0170	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*42%*	*16-110*				2/15/18 13:48	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*36%*	*19-105*				2/15/18 13:48	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*82%*	*20-137*				2/15/18 13:48	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.99**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-229 @ 0.0-0.5
Lab Sample ID: L8B0099-05 (Solid) **Sampled:2/8/18 8:24**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	90-12-0
2-Methylnaphthalene	0.0142	U	0.0353	0.0142	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	91-57-6
Acenaphthene	0.0139	U	0.0353	0.0139	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	83-32-9
Acenaphthylene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	208-96-8
Anthracene	0.00933	U	0.0353	0.00933	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	120-12-7
Benzo(a)anthracene	**0.0739**		0.0353	0.00986	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	56-55-3
Benzo(a)pyrene	**0.0863**		0.0353	0.0168	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	50-32-8
Benzo(b)fluoranthene	**0.0873**		0.0353	0.0158	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	205-99-2
Benzo(g,h,i)perylene	**0.0746**		0.0353	0.0164	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	191-24-2
Benzo(k)fluoranthene	**0.0728**		0.0353	0.0122	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	207-08-9
Chrysene	**0.0813**		0.0353	0.00838	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	218-01-9
Dibenz(a,h)Anthracene	0.0157	U	0.0353	0.0157	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	53-70-3
Fluoranthene	**0.129**		0.0353	0.0105	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	206-44-0
Fluorene	0.0113	U	0.0353	0.0113	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0633**		0.0353	0.0172	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	193-39-5
Naphthalene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	91-20-3
Phenanthrene	**0.0806**		0.0353	0.00711	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	85-01-8
Pyrene	**0.130**		0.0353	0.0112	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*67%*	*16-110*				2/15/18 14:11	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/15/18 14:11	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*95%*	*20-137*				2/15/18 14:11	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.71**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-229 @ 0.5-2
Lab Sample ID: L8B0099-06 (Solid) **Sampled:2/8/18 8:26**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	120-12-7
Benzo(a)anthracene	0.00979	U	0.0351	0.00979	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	207-08-9
Chrysene	0.00832	U	0.0351	0.00832	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0351	0.0171	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*54%*	*16-110*				2/14/18 18:46	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/14/18 18:46	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/14/18 18:46	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.00**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-230 @ 0.0-0.5
Lab Sample ID: L8B0099-09 (Solid) **Sampled:2/8/18 13:28**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	90-12-0
2-Methylnaphthalene	0.0142	U	0.0353	0.0142	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	91-57-6
Acenaphthene	0.0139	U	0.0353	0.0139	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	83-32-9
Acenaphthylene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	208-96-8
Anthracene	0.00933	U	0.0353	0.00933	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	120-12-7
Benzo(a)anthracene	0.00986	U	0.0353	0.00986	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	56-55-3
Benzo(a)pyrene	0.0168	U	0.0353	0.0168	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	50-32-8
Benzo(b)fluoranthene	0.0158	U	0.0353	0.0158	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0353	0.0164	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	191-24-2
Benzo(k)fluoranthene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	207-08-9
Chrysene	0.00838	U	0.0353	0.00838	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	218-01-9
Dibenz(a,h)Anthracene	0.0157	U	0.0353	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	53-70-3
Fluoranthene	0.0105	U	0.0353	0.0105	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	206-44-0
Fluorene	0.0113	U	0.0353	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	86-73-7
Indeno(1,2,3-cd)pyrene	0.0172	U	0.0353	0.0172	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	193-39-5
Naphthalene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	91-20-3
Phenanthrene	0.00710	U	0.0353	0.00710	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	85-01-8
Pyrene	0.0112	U	0.0353	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*51%*	*16-110*				2/14/18 19:06	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/14/18 19:06	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/14/18 19:06	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.72**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-230 @ 0.5-2
Lab Sample ID: L8B0099-10 (Solid) **Sampled:2/8/18 13:31**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	120-12-7
Benzo(a)anthracene	0.00979	U	0.0351	0.00979	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	207-08-9
Chrysene	0.00831	U	0.0351	0.00831	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0351	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*72%*	*16-110*				2/14/18 19:26	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*62%*	*19-105*				2/14/18 19:26	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/14/18 19:26	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.96**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-231 @ 0.0-0.5
Lab Sample ID: L8B0099-13 (Solid) **Sampled:2/8/18 13:18**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	120-12-7
Benzo(a)anthracene	0.00978	U	0.0351	0.00978	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	207-08-9
Chrysene	0.00831	U	0.0351	0.00831	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0351	0.0170	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*67%*	*16-110*				2/15/18 14:31	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/15/18 14:31	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*91%*	*20-137*				2/15/18 14:31	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.94**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-231 @ 0.5-2
Lab Sample ID: L8B0099-14 (Solid) **Sampled:2/8/18 13:21**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	90-12-0
2-Methylnaphthalene	0.0142	U	0.0352	0.0142	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	208-96-8
Anthracene	0.00930	U	0.0352	0.00930	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	120-12-7
Benzo(a)anthracene	0.00982	U	0.0352	0.00982	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	56-55-3
Benzo(a)pyrene	0.0167	U	0.0352	0.0167	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0352	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0352	0.0164	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	207-08-9
Chrysene	0.00834	U	0.0352	0.00834	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0352	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	53-70-3
Fluoranthene	**0.0518**		0.0352	0.0105	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0352	0.0171	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	193-39-5
Naphthalene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	91-20-3
Phenanthrene	0.00708	U	0.0352	0.00708	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	85-01-8
Pyrene	**0.0433**		0.0352	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*55%*	*16-110*				2/14/18 21:49	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/14/18 21:49	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/14/18 21:49	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.7**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.33**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-232 @ 0.0-0.5
Lab Sample ID: L8B0099-17 (Solid) **Sampled:2/8/18 12:39**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	90-12-0
2-Methylnaphthalene	0.0141	U	0.0352	0.0141	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	208-96-8
Anthracene	0.00929	U	0.0352	0.00929	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	120-12-7
Benzo(a)anthracene	0.00982	U	0.0352	0.00982	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	56-55-3
Benzo(a)pyrene	0.0167	U	0.0352	0.0167	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0352	0.0157	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0352	0.0164	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	207-08-9
Chrysene	0.00834	U	0.0352	0.00834	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0352	0.0156	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	53-70-3
Fluoranthene	0.0105	U	0.0352	0.0105	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0352	0.0171	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	193-39-5
Naphthalene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	91-20-3
Phenanthrene	0.00707	U	0.0352	0.00707	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	85-01-8
Pyrene	0.0112	U	0.0352	0.0112	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*71%*	*16-110*				2/15/18 15:13	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*59%*	*19-105*				2/15/18 15:13	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*106%*	*20-137*				2/15/18 15:13	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.7**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.32**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-232 @ 0.5-2
Lab Sample ID: L8B0099-18 (Solid) **Sampled:2/8/18 12:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	208-96-8
Anthracene	0.00923	U	0.0349	0.00923	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	120-12-7
Benzo(a)anthracene	0.00975	U	0.0349	0.00975	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	56-55-3
Benzo(a)pyrene	0.0166	U	0.0349	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0349	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	207-08-9
Chrysene	0.00828	U	0.0349	0.00828	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	193-39-5
Naphthalene	0.0121	U	0.0349	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	91-20-3
Phenanthrene	0.00702	U	0.0349	0.00702	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*52%*	*16-110*				2/14/18 19:47	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/14/18 19:47	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/14/18 19:47	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.64**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-233 @ 0.0-0.5
Lab Sample ID: L8B0099-21 (Solid) **Sampled:2/8/18 12:49**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	208-96-8
Anthracene	0.00925	U	0.0350	0.00925	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	120-12-7
Benzo(a)anthracene	0.00977	U	0.0350	0.00977	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0350	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	207-08-9
Chrysene	0.00830	U	0.0350	0.00830	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	91-20-3
Phenanthrene	0.00704	U	0.0350	0.00704	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*47%*	*16-110*				2/14/18 20:07	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*41%*	*19-105*				2/14/18 20:07	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/14/18 20:07	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.85**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-233 @ 0.5-2
Lab Sample ID: L8B0099-22 (Solid) **Sampled:2/8/18 12:51**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	91-57-6
Acenaphthene	0.0137	U	0.0350	0.0137	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	83-32-9
Acenaphthylene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	208-96-8
Anthracene	0.00923	U	0.0350	0.00923	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	120-12-7
Benzo(a)anthracene	0.00976	U	0.0350	0.00976	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	207-08-9
Chrysene	0.00829	U	0.0350	0.00829	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0350	0.0155	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	91-20-3
Phenanthrene	0.00703	U	0.0350	0.00703	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*56%*	*16-110*				2/14/18 20:27	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*48%*	*19-105*				2/14/18 20:27	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*85%*	*20-137*				2/14/18 20:27	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.72**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 0.0-0.5
Lab Sample ID: L8B0099-25 (Solid) **Sampled:2/8/18 10:34**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.265**		0.176	0.0587	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	90-12-0
2-Methylnaphthalene	**0.448**		0.176	0.0709	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	91-57-6
Acenaphthene	**3.10**		0.176	0.0693	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	83-32-9
Acenaphthylene	0.0587	U	0.176	0.0587	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	208-96-8
Anthracene	**5.14**		0.176	0.0466	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	120-12-7
Benzo(a)anthracene	**9.98**		0.176	0.0492	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	56-55-3
Benzo(a)pyrene	**9.56**		0.176	0.0836	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	50-32-8
Benzo(b)fluoranthene	**10.7**		0.176	0.0788	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	205-99-2
Benzo(g,h,i)perylene	**7.15**		0.176	0.0820	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	191-24-2
Benzo(k)fluoranthene	**6.42**		0.176	0.0608	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	207-08-9
Chrysene	**9.48**		0.176	0.0418	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	218-01-9
Dibenz(a,h)Anthracene	**2.57**		0.176	0.0783	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	53-70-3
Fluoranthene	**23.4**		0.176	0.0524	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	206-44-0
Fluorene	**2.42**		0.176	0.0566	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	86-73-7
Indeno(1,2,3-cd)pyrene	**6.43**		0.176	0.0857	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	193-39-5
Naphthalene	**1.51**		0.176	0.0608	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	91-20-3
Phenanthrene	**21.4**		0.176	0.0354	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	85-01-8
Pyrene	**17.1**		0.176	0.0561	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/14/18 20:48	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*57%*	*19-105*				2/14/18 20:48	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*79%*	*20-137*				2/14/18 20:48	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.5**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.49**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 0.5-2
Lab Sample ID: L8B0099-26 (Solid) **Sampled:2/8/18 10:36**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	90-12-0
2-Methylnaphthalene	0.0145	U	0.0361	0.0145	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	91-57-6
Acenaphthene	0.0142	U	0.0361	0.0142	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	83-32-9
Acenaphthylene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	208-96-8
Anthracene	**0.0986**		0.0361	0.00954	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	120-12-7
Benzo(a)anthracene	**0.627**		0.0361	0.0101	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	56-55-3
Benzo(a)pyrene	**0.706**		0.0361	0.0171	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	50-32-8
Benzo(b)fluoranthene	**0.693**		0.0361	0.0161	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	205-99-2
Benzo(g,h,i)perylene	**0.561**		0.0361	0.0168	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	191-24-2
Benzo(k)fluoranthene	**0.599**		0.0361	0.0125	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	207-08-9
Chrysene	**0.678**		0.0361	0.00856	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	218-01-9
Dibenz(a,h)Anthracene	**0.184**		0.0361	0.0160	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	53-70-3
Fluoranthene	**1.09**		0.0361	0.0107	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	206-44-0
Fluorene	0.0116	U	0.0361	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	86-73-7
Indeno(1,2,3-cd)pyrene	**0.497**		0.0361	0.0176	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	193-39-5
Naphthalene	0.0125	U	0.0361	0.0125	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	91-20-3
Phenanthrene	**0.337**		0.0361	0.00726	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	85-01-8
Pyrene	**0.925**		0.0361	0.0115	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*42%*	*16-110*				2/14/18 21:08	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*37%*	*19-105*				2/14/18 21:08	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/14/18 21:08	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**92.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**7.72**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 2-4
Lab Sample ID: L8B0099-27 (Solid) **Sampled:2/8/18 11:00**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	90-12-0
2-Methylnaphthalene	0.0136	U	0.0339	0.0136	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	91-57-6
Acenaphthene	0.0133	U	0.0339	0.0133	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	83-32-9
Acenaphthylene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	208-96-8
Anthracene	0.00895	U	0.0339	0.00895	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	120-12-7
Benzo(a)anthracene	0.00946	U	0.0339	0.00946	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	56-55-3
Benzo(a)pyrene	0.0161	U	0.0339	0.0161	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	50-32-8
Benzo(b)fluoranthene	0.0152	U	0.0339	0.0152	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	205-99-2
Benzo(g,h,i)perylene	0.0158	U	0.0339	0.0158	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	207-08-9
Chrysene	0.00803	U	0.0339	0.00803	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	218-01-9
Dibenz(a,h)Anthracene	0.0151	U	0.0339	0.0151	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	53-70-3
Fluoranthene	0.0101	U	0.0339	0.0101	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	206-44-0
Fluorene	0.0109	U	0.0339	0.0109	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	86-73-7
Indeno(1,2,3-cd)pyrene	0.0165	U	0.0339	0.0165	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	193-39-5
Naphthalene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	91-20-3
Phenanthrene	0.00681	U	0.0339	0.00681	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	85-01-8
Pyrene	0.0108	U	0.0339	0.0108	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/22/18 20:34	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*59%*	*19-105*				2/22/18 20:34	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*92%*	*20-137*				2/22/18 20:34	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**96.9**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**3.06**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 4-6
Lab Sample ID: L8B0099-28 (Solid) **Sampled:2/8/18 11:03**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0111	U	0.0335	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	90-12-0
2-Methylnaphthalene	0.0135	U	0.0335	0.0135	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	91-57-6
Acenaphthene	0.0132	U	0.0335	0.0132	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	83-32-9
Acenaphthylene	0.0111	U	0.0335	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	208-96-8
Anthracene	0.00883	U	0.0335	0.00883	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	120-12-7
Benzo(a)anthracene	0.00934	U	0.0335	0.00934	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	56-55-3
Benzo(a)pyrene	0.0159	U	0.0335	0.0159	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	50-32-8
Benzo(b)fluoranthene	0.0150	U	0.0335	0.0150	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	205-99-2
Benzo(g,h,i)perylene	0.0156	U	0.0335	0.0156	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	191-24-2
Benzo(k)fluoranthene	0.0115	U	0.0335	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	207-08-9
Chrysene	0.00793	U	0.0335	0.00793	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	218-01-9
Dibenz(a,h)Anthracene	0.0149	U	0.0335	0.0149	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	53-70-3
Fluoranthene	0.00994	U	0.0335	0.00994	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	206-44-0
Fluorene	0.0107	U	0.0335	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	86-73-7
Indeno(1,2,3-cd)pyrene	0.0163	U	0.0335	0.0163	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	193-39-5
Naphthalene	0.0115	U	0.0335	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	91-20-3
Phenanthrene	0.00673	U	0.0335	0.00673	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	85-01-8
Pyrene	0.0106	U	0.0335	0.0106	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*45%*	*16-110*				2/22/18 20:55	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*39%*	*19-105*				2/22/18 20:55	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/22/18 20:55	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**97.2**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**2.82**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-235 @ 0.0-0.5
Lab Sample ID: L8B0099-29 (Solid) **Sampled:2/8/18 12:13**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	120-12-7
Benzo(a)anthracene	**0.0484**		0.0351	0.00979	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	56-55-3
Benzo(a)pyrene	**0.0586**		0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	50-32-8
Benzo(b)fluoranthene	**0.0642**		0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	205-99-2
Benzo(g,h,i)perylene	**0.0498**		0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	191-24-2
Benzo(k)fluoranthene	**0.0481**		0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	207-08-9
Chrysene	**0.0551**		0.0351	0.00832	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	53-70-3
Fluoranthene	**0.0888**		0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0418**		0.0351	0.0171	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	85-01-8
Pyrene	**0.0754**		0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*57%*	*16-110*				2/15/18 15:33	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/15/18 15:33	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*89%*	*20-137*				2/15/18 15:33	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.9**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.07**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-235 @ 0.5-2
Lab Sample ID: L8B0099-30 (Solid) **Sampled:2/8/18 12:15**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	U	0.0355	0.0118	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	90-12-0
2-Methylnaphthalene	0.0143	U	0.0355	0.0143	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	91-57-6
Acenaphthene	0.0140	U	0.0355	0.0140	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	83-32-9
Acenaphthylene	0.0118	U	0.0355	0.0118	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	208-96-8
Anthracene	0.00937	U	0.0355	0.00937	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	120-12-7
Benzo(a)anthracene	**0.0866**		0.0355	0.00991	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	56-55-3
Benzo(a)pyrene	**0.0955**		0.0355	0.0168	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	50-32-8
Benzo(b)fluoranthene	**0.0891**		0.0355	0.0159	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	205-99-2
Benzo(g,h,i)perylene	**0.0763**		0.0355	0.0165	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	191-24-2
Benzo(k)fluoranthene	**0.0795**		0.0355	0.0123	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	207-08-9
Chrysene	**0.0937**		0.0355	0.00842	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	218-01-9
Dibenz(a,h)Anthracene	0.0158	U	0.0355	0.0158	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	53-70-3
Fluoranthene	**0.170**		0.0355	0.0105	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	206-44-0
Fluorene	0.0114	U	0.0355	0.0114	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0671**		0.0355	0.0173	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	193-39-5
Naphthalene	0.0123	U	0.0355	0.0123	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	91-20-3
Phenanthrene	**0.0845**		0.0355	0.00714	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	85-01-8
Pyrene	**0.149**		0.0355	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*54%*	*16-110*				2/15/18 15:53	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/15/18 15:53	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/15/18 15:53	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**93.9**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**6.13**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-236 @ 0.0-0.5
Lab Sample ID: L8B0099-33 (Solid) **Sampled:2/8/18 9:58**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	208-96-8
Anthracene	0.00921	U	0.0349	0.00921	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	120-12-7
Benzo(a)anthracene	0.00974	U	0.0349	0.00974	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	56-55-3
Benzo(a)pyrene	0.0165	U	0.0349	0.0165	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	207-08-9
Chrysene	0.00827	U	0.0349	0.00827	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	193-39-5
Naphthalene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	91-20-3
Phenanthrene	0.00701	U	0.0349	0.00701	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*59%*	*16-110*				2/16/18 10:19	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*51%*	*19-105*				2/16/18 10:19	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*67%*	*20-137*				2/16/18 10:19	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**93.7**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**6.28**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-236 @ 0.5-2
Lab Sample ID: L8B0099-34 (Solid) **Sampled:2/8/18 10:00**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	90-12-0
2-Methylnaphthalene	0.0139	U	0.0345	0.0139	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	91-57-6
Acenaphthene	0.0136	U	0.0345	0.0136	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	208-96-8
Anthracene	0.00910	U	0.0345	0.00910	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	120-12-7
Benzo(a)anthracene	0.00962	U	0.0345	0.00962	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	56-55-3
Benzo(a)pyrene	0.0163	U	0.0345	0.0163	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0345	0.0154	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0345	0.0160	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	207-08-9
Chrysene	0.00817	U	0.0345	0.00817	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0345	0.0153	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	53-70-3
Fluoranthene	0.0102	U	0.0345	0.0102	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	206-44-0
Fluorene	0.0111	U	0.0345	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	86-73-7
Indeno(1,2,3-cd)pyrene	0.0168	U	0.0345	0.0168	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	193-39-5
Naphthalene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	91-20-3
Phenanthrene	0.00693	U	0.0345	0.00693	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	85-01-8
Pyrene	0.0110	U	0.0345	0.0110	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*46%*	*16-110*				2/15/18 18:20	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*39%*	*19-105*				2/15/18 18:20	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/15/18 18:20	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**95.1**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.87**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-237 @ 0.0-0.5
Lab Sample ID: L8B0099-37 (Solid) **Sampled:2/8/18 10:11**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0116	U	0.0348	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	90-12-0
2-Methylnaphthalene	0.0140	U	0.0348	0.0140	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	91-57-6
Acenaphthene	0.0137	U	0.0348	0.0137	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	83-32-9
Acenaphthylene	0.0116	U	0.0348	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	208-96-8
Anthracene	0.00920	U	0.0348	0.00920	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	120-12-7
Benzo(a)anthracene	0.00972	U	0.0348	0.00972	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	56-55-3
Benzo(a)pyrene	0.0165	U	0.0348	0.0165	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0348	0.0156	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0348	0.0162	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0348	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	207-08-9
Chrysene	0.00826	U	0.0348	0.00826	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0348	0.0155	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	53-70-3
Fluoranthene	**0.0387**		0.0348	0.0104	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	206-44-0
Fluorene	0.0112	U	0.0348	0.0112	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	86-73-7
Indeno(1,2,3-cd)pyrene	0.0169	U	0.0348	0.0169	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	193-39-5
Naphthalene	0.0120	U	0.0348	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	91-20-3
Phenanthrene	0.00701	U	0.0348	0.00701	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	85-01-8
Pyrene	**0.0376**		0.0348	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*68%*	*16-110*				2/15/18 18:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*56%*	*19-105*				2/15/18 18:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/15/18 18:40	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**94.4**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.62**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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No duplication of this report is allowed, except in its entirety.

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-237 @ 0.5-2
Lab Sample ID: L8B0099-38 (Solid) **Sampled:2/8/18 10:14**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0344	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	90-12-0
2-Methylnaphthalene	0.0138	U	0.0344	0.0138	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	91-57-6
Acenaphthene	0.0135	U	0.0344	0.0135	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	83-32-9
Acenaphthylene	0.0115	U	0.0344	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	208-96-8
Anthracene	0.00909	U	0.0344	0.00909	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	120-12-7
Benzo(a)anthracene	0.00961	U	0.0344	0.00961	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	56-55-3
Benzo(a)pyrene	0.0163	U	0.0344	0.0163	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0344	0.0154	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0344	0.0160	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	207-08-9
Chrysene	0.00816	U	0.0344	0.00816	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0344	0.0153	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	53-70-3
Fluoranthene	0.0102	U	0.0344	0.0102	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	206-44-0
Fluorene	0.0111	U	0.0344	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0344	0.0167	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	193-39-5
Naphthalene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	91-20-3
Phenanthrene	0.00692	U	0.0344	0.00692	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	85-01-8
Pyrene	0.0109	U	0.0344	0.0109	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*68%*	*16-110*				2/15/18 19:00	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*57%*	*19-105*				2/15/18 19:00	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/15/18 19:00	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.94**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-238 @ 0.0-0.5
Lab Sample ID: L8B0099-41 (Solid) **Sampled:2/8/18 8:54**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.0397**		0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	90-12-0
2-Methylnaphthalene	**0.0456**		0.0345	0.0139	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	91-57-6
Acenaphthene	**0.517**		0.0345	0.0136	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	208-96-8
Anthracene	**1.31**		0.0345	0.00911	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	120-12-7
Benzo(a)anthracene	**4.27**		0.0345	0.00963	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	56-55-3
Benzo(a)pyrene	**4.49**		0.0345	0.0164	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	50-32-8
Benzo(b)fluoranthene	**5.19**		0.0345	0.0154	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	205-99-2
Benzo(g,h,i)perylene	**3.34**		0.0345	0.0160	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	191-24-2
Benzo(k)fluoranthene	**2.40**		0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	207-08-9
Chrysene	**4.38**		0.0345	0.00818	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	218-01-9
Dibenz(a,h)Anthracene	**1.17**		0.0345	0.0153	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	53-70-3
Fluoranthene	**10.7**		0.173	0.0513	mg/Kg dry	5	2/15/18 8:26	2/16/18 15:02	206-44-0
Fluorene	**0.348**		0.0345	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	86-73-7
Indeno(1,2,3-cd)pyrene	**2.98**		0.0345	0.0168	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	193-39-5
Naphthalene	**0.117**		0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	91-20-3
Phenanthrene	**5.77**		0.0345	0.00694	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	85-01-8
Pyrene	**6.75**		0.0345	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*57%*	*16-110*				2/16/18 10:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/16/18 10:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*68%*	*20-137*				2/16/18 10:40	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.6**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.41**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-238 @ 0.5-2
Lab Sample ID: L8B0099-42 (Solid) **Sampled:2/8/18 8:57**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	208-96-8
Anthracene	**0.0536**		0.0350	0.00925	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	120-12-7
Benzo(a)anthracene	**0.227**		0.0350	0.00978	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	56-55-3
Benzo(a)pyrene	**0.235**		0.0350	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	50-32-8
Benzo(b)fluoranthene	**0.239**		0.0350	0.0157	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	205-99-2
Benzo(g,h,i)perylene	**0.205**		0.0350	0.0163	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	191-24-2
Benzo(k)fluoranthene	**0.187**		0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	207-08-9
Chrysene	**0.242**		0.0350	0.00831	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	218-01-9
Dibenz(a,h)Anthracene	**0.0655**		0.0350	0.0156	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	53-70-3
Fluoranthene	**0.509**		0.0350	0.0104	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	86-73-7
Indeno(1,2,3-cd)pyrene	**0.177**		0.0350	0.0170	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	91-20-3
Phenanthrene	**0.255**		0.0350	0.00704	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	85-01-8
Pyrene	**0.364**		0.0350	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*44%*	*16-110*				2/16/18 11:00	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/16/18 11:00	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*74%*	*20-137*				2/16/18 11:00	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.2**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.82**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 0.0-0.5
Lab Sample ID: L8B0099-45 (Solid) **Sampled:2/8/18 9:37**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	90-12-0
2-Methylnaphthalene	0.0139	U	0.0346	0.0139	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	91-57-6
Acenaphthene	0.0136	U	0.0346	0.0136	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	83-32-9
Acenaphthylene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	208-96-8
Anthracene	0.00913	U	0.0346	0.00913	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	120-12-7
Benzo(a)anthracene	**0.0429**		0.0346	0.00965	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	56-55-3
Benzo(a)pyrene	**0.0484**		0.0346	0.0164	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	50-32-8
Benzo(b)fluoranthene	**0.0560**		0.0346	0.0155	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	205-99-2
Benzo(g,h,i)perylene	**0.0477**		0.0346	0.0161	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	191-24-2
Benzo(k)fluoranthene	**0.0401**		0.0346	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	207-08-9
Chrysene	**0.0505**		0.0346	0.00819	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0346	0.0153	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	53-70-3
Fluoranthene	**0.0795**		0.0346	0.0103	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	206-44-0
Fluorene	0.0111	U	0.0346	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0422**		0.0346	0.0168	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	193-39-5
Naphthalene	0.0119	U	0.0346	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	91-20-3
Phenanthrene	0.00695	U	0.0346	0.00695	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	85-01-8
Pyrene	**0.0622**		0.0346	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*36%*	*16-110*				2/16/18 11:23	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*31%*	*19-105*				2/16/18 11:23	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/16/18 11:23	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**96.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.03**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 0.5-2
Lab Sample ID: L8B0099-46 (Solid) **Sampled:2/8/18 9:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	90-12-0
2-Methylnaphthalene	0.0139	U	0.0347	0.0139	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	91-57-6
Acenaphthene	**0.133**		0.0347	0.0136	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	208-96-8
Anthracene	**0.301**		0.0347	0.00916	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	120-12-7
Benzo(a)anthracene	**0.896**		0.0347	0.00968	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	56-55-3
Benzo(a)pyrene	**0.898**		0.0347	0.0164	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	50-32-8
Benzo(b)fluoranthene	**0.979**		0.0347	0.0155	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	205-99-2
Benzo(g,h,i)perylene	**0.677**		0.0347	0.0161	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	191-24-2
Benzo(k)fluoranthene	**0.678**		0.0347	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	207-08-9
Chrysene	**0.896**		0.0347	0.00822	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	218-01-9
Dibenz(a,h)Anthracene	**0.229**		0.0347	0.0154	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	53-70-3
Fluoranthene	**1.88**		0.0347	0.0103	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	206-44-0
Fluorene	**0.0992**		0.0347	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	86-73-7
Indeno(1,2,3-cd)pyrene	**0.595**		0.0347	0.0169	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	91-20-3
Phenanthrene	**1.38**		0.0347	0.00697	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	85-01-8
Pyrene	**1.59**		0.0347	0.0110	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*58%*	*16-110*				2/15/18 19:20	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*43%*	*19-105*				2/15/18 19:20	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/15/18 19:20	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.58**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 2-4
Lab Sample ID: L8B0099-47 (Solid) **Sampled:2/8/18 9:48**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	90-12-0
2-Methylnaphthalene	0.0136	U	0.0338	0.0136	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	91-57-6
Acenaphthene	0.0133	U	0.0338	0.0133	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	83-32-9
Acenaphthylene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	208-96-8
Anthracene	0.00892	U	0.0338	0.00892	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	120-12-7
Benzo(a)anthracene	0.00943	U	0.0338	0.00943	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	56-55-3
Benzo(a)pyrene	0.0160	U	0.0338	0.0160	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	50-32-8
Benzo(b)fluoranthene	0.0151	U	0.0338	0.0151	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	205-99-2
Benzo(g,h,i)perylene	0.0157	U	0.0338	0.0157	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	207-08-9
Chrysene	0.00801	U	0.0338	0.00801	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	218-01-9
Dibenz(a,h)Anthracene	0.0150	U	0.0338	0.0150	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	53-70-3
Fluoranthene	0.0100	U	0.0338	0.0100	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	206-44-0
Fluorene	0.0108	U	0.0338	0.0108	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	86-73-7
Indeno(1,2,3-cd)pyrene	0.0164	U	0.0338	0.0164	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	193-39-5
Naphthalene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	91-20-3
Phenanthrene	0.00679	U	0.0338	0.00679	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	85-01-8
Pyrene	0.0107	U	0.0338	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*48%*	*16-110*				2/22/18 21:15	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*42%*	*19-105*				2/22/18 21:15	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/22/18 21:15	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**96.8**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**3.20**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 4-6
Lab Sample ID: L8B0099-48 (Solid) **Sampled:2/8/18 9:51**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0112	U	0.0335	0.0112	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	90-12-0
2-Methylnaphthalene	0.0135	U	0.0335	0.0135	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	91-57-6
Acenaphthene	0.0132	U	0.0335	0.0132	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	83-32-9
Acenaphthylene	0.0112	U	0.0335	0.0112	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	208-96-8
Anthracene	0.00885	U	0.0335	0.00885	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	120-12-7
Benzo(a)anthracene	0.00935	U	0.0335	0.00935	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	56-55-3
Benzo(a)pyrene	0.0159	U	0.0335	0.0159	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	50-32-8
Benzo(b)fluoranthene	0.0150	U	0.0335	0.0150	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	205-99-2
Benzo(g,h,i)perylene	0.0156	U	0.0335	0.0156	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	191-24-2
Benzo(k)fluoranthene	0.0116	U	0.0335	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	207-08-9
Chrysene	0.00794	U	0.0335	0.00794	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	218-01-9
Dibenz(a,h)Anthracene	0.0149	U	0.0335	0.0149	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	53-70-3
Fluoranthene	0.00995	U	0.0335	0.00995	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	206-44-0
Fluorene	0.0108	U	0.0335	0.0108	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	86-73-7
Indeno(1,2,3-cd)pyrene	0.0163	U	0.0335	0.0163	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	193-39-5
Naphthalene	0.0116	U	0.0335	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	91-20-3
Phenanthrene	0.00673	U	0.0335	0.00673	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	85-01-8
Pyrene	0.0107	U	0.0335	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*53%*	*16-110*				2/22/18 21:36	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/22/18 21:36	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/22/18 21:36	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**99.0**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**0.980**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 0.0-0.5
Lab Sample ID: L8B0099-49 (Solid) **Sampled:2/8/18 8:34**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	90-12-0
2-Methylnaphthalene	0.0142	U	0.0352	0.0142	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	208-96-8
Anthracene	0.00929	U	0.0352	0.00929	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	120-12-7
Benzo(a)anthracene	**0.111**		0.0352	0.00982	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	56-55-3
Benzo(a)pyrene	**0.131**		0.0352	0.0167	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	50-32-8
Benzo(b)fluoranthene	**0.142**		0.0352	0.0157	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	205-99-2
Benzo(g,h,i)perylene	**0.114**		0.0352	0.0164	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	191-24-2
Benzo(k)fluoranthene	**0.110**		0.0352	0.0121	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	207-08-9
Chrysene	**0.121**		0.0352	0.00834	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	218-01-9
Dibenz(a,h)Anthracene	**0.0433**		0.0352	0.0156	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	53-70-3
Fluoranthene	**0.201**		0.0352	0.0105	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0936**		0.0352	0.0171	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	193-39-5
Naphthalene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	91-20-3
Phenanthrene	**0.109**		0.0352	0.00708	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	85-01-8
Pyrene	**0.184**		0.0352	0.0112	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*64%*	*16-110*				2/15/18 19:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/15/18 19:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*79%*	*20-137*				2/15/18 19:40	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.4**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.62**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 0.5-2
Lab Sample ID: L8B0099-50 (Solid) **Sampled:2/8/18 8:37**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	208-96-8
Anthracene	0.00922	U	0.0349	0.00922	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	120-12-7
Benzo(a)anthracene	0.00974	U	0.0349	0.00974	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	56-55-3
Benzo(a)pyrene	0.0166	U	0.0349	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	207-08-9
Chrysene	0.00828	U	0.0349	0.00828	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	193-39-5
Naphthalene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	91-20-3
Phenanthrene	0.00702	U	0.0349	0.00702	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*63%*	*16-110*				2/16/18 11:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/16/18 11:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*73%*	*20-137*				2/16/18 11:44	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**94.8**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.22**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 2-4
Lab Sample ID: L8B0099-51 (Solid) **Sampled:2/8/18 8:39**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0123	U	0.0370	0.0123	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	90-12-0
2-Methylnaphthalene	0.0149	U	0.0370	0.0149	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	91-57-6
Acenaphthene	0.0146	U	0.0370	0.0146	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	83-32-9
Acenaphthylene	0.0123	U	0.0370	0.0123	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	208-96-8
Anthracene	0.00978	U	0.0370	0.00978	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	120-12-7
Benzo(a)anthracene	0.0103	U	0.0370	0.0103	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	56-55-3
Benzo(a)pyrene	0.0176	U	0.0370	0.0176	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	50-32-8
Benzo(b)fluoranthene	0.0166	U	0.0370	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	205-99-2
Benzo(g,h,i)perylene	0.0172	U	0.0370	0.0172	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	191-24-2
Benzo(k)fluoranthene	0.0128	U	0.0370	0.0128	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	207-08-9
Chrysene	0.00878	U	0.0370	0.00878	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	218-01-9
Dibenz(a,h)Anthracene	0.0165	U	0.0370	0.0165	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	53-70-3
Fluoranthene	0.0110	U	0.0370	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	206-44-0
Fluorene	0.0119	U	0.0370	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	86-73-7
Indeno(1,2,3-cd)pyrene	0.0180	U	0.0370	0.0180	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	193-39-5
Naphthalene	0.0128	U	0.0370	0.0128	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	91-20-3
Phenanthrene	0.00745	U	0.0370	0.00745	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	85-01-8
Pyrene	0.0118	U	0.0370	0.0118	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*61%*	*16-110*				2/16/18 12:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/16/18 12:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*75%*	*20-137*				2/16/18 12:04	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**89.5**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**10.5**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 4-6
Lab Sample ID: L8B0099-52 (Solid) **Sampled:2/8/18 8:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	208-96-8
Anthracene	0.00925	U	0.0350	0.00925	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	120-12-7
Benzo(a)anthracene	0.00978	U	0.0350	0.00978	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0350	0.0157	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	207-08-9
Chrysene	0.00831	U	0.0350	0.00831	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	206-44-0
Fluorene	0.0113	U	0.0350	0.0113	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	91-20-3
Phenanthrene	0.00705	U	0.0350	0.00705	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*39%*	*16-110*				2/16/18 12:24	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*34%*	*19-105*				2/16/18 12:24	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*69%*	*20-137*				2/16/18 12:24	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.8**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.16**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control

PAHs (SVOCs) by Method 8270D

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167											
Blank (B8B0167-BLK1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U,	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U,	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U,	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U,	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U,	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U,	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U,	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U,	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U,	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U,	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U,	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U,	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U,	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U,	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.945*		*mg/Kg wet*	*1.67*		*57*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.801*		*mg/Kg wet*	*1.67*		*48*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.16*		*mg/Kg wet*	*1.67*		*70*	*20-137*		
LCS (B8B0167-BS1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.887		0.0333	0.0111	mg/Kg wet	1.67		53	39-116		
2-Methylnaphthalene	0.877		0.0333	0.0134	mg/Kg wet	1.67		53	37-112		
Acenaphthene	0.944		0.0333	0.0131	mg/Kg wet	1.67		57	41-116		
Acenaphthylene	0.927		0.0333	0.0111	mg/Kg wet	1.67		56	42-126		
Anthracene	1.29		0.0333	0.00880	mg/Kg wet	1.67		77	39-127		
Benzo(a)anthracene	1.35		0.0333	0.00930	mg/Kg wet	1.67		81	40-129		
Benzo(a)pyrene	1.52		0.0333	0.0158	mg/Kg wet	1.67		91	36-141		
Benzo(b)fluoranthene	1.46		0.0333	0.0149	mg/Kg wet	1.67		87	34-139		
Benzo(g,h,i)perylene	1.58		0.0333	0.0155	mg/Kg wet	1.67		94	32-141		
Benzo(k)fluoranthene	1.46		0.0333	0.0115	mg/Kg wet	1.67		88	31-139		
Chrysene	1.40		0.0333	0.00790	mg/Kg wet	1.67		84	41-124		
Dibenz(a,h)Anthracene	1.56		0.0333	0.0148	mg/Kg wet	1.67		94	35-143		
Fluoranthene	1.26		0.0333	0.00990	mg/Kg wet	1.67		75	38-132		
Fluorene	0.987		0.0333	0.0107	mg/Kg wet	1.67		59	41-121		
Indeno(1,2,3-cd)pyrene	1.55		0.0333	0.0162	mg/Kg wet	1.67		93	27-160		
Naphthalene	0.884		0.0333	0.0115	mg/Kg wet	1.67		53	37-113		
Phenanthrene	1.20		0.0333	0.00670	mg/Kg wet	1.67		72	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
LCS (B8B0167-BS1)					Prepared & Analyzed: 2/14/2018						
Pyrene	1.38		0.0333	0.0106	mg/Kg wet	1.67		83	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.768*		*mg/Kg wet*	*1.67*		*46*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.36*		*mg/Kg wet*	*1.67*		*81*	*20-137*		
LCS Dup (B8B0167-BSD1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.898		0.0333	0.0111	mg/Kg wet	1.67		54	39-116	1	30
2-Methylnaphthalene	0.888		0.0333	0.0134	mg/Kg wet	1.67		53	37-112	1	30
Acenaphthene	0.922		0.0333	0.0131	mg/Kg wet	1.67		55	41-116	2	30
Acenaphthylene	0.907		0.0333	0.0111	mg/Kg wet	1.67		54	42-126	2	30
Anthracene	1.32		0.0333	0.00880	mg/Kg wet	1.67		79	39-127	2	30
Benzo(a)anthracene	1.36		0.0333	0.00930	mg/Kg wet	1.67		82	40-129	0.7	30
Benzo(a)pyrene	1.49		0.0333	0.0158	mg/Kg wet	1.67		90	36-141	2	30
Benzo(b)fluoranthene	1.43		0.0333	0.0149	mg/Kg wet	1.67		86	34-139	1	30
Benzo(g,h,i)perylene	1.58		0.0333	0.0155	mg/Kg wet	1.67		95	32-141	0.5	30
Benzo(k)fluoranthene	1.45		0.0333	0.0115	mg/Kg wet	1.67		87	31-139	0.6	30
Chrysene	1.42		0.0333	0.00790	mg/Kg wet	1.67		85	41-124	1	30
Dibenz(a,h)Anthracene	1.57		0.0333	0.0148	mg/Kg wet	1.67		94	35-143	0.4	30
Fluoranthene	1.27		0.0333	0.00990	mg/Kg wet	1.67		76	38-132	0.7	30
Fluorene	0.950		0.0333	0.0107	mg/Kg wet	1.67		57	41-121	4	30
Indeno(1,2,3-cd)pyrene	1.56		0.0333	0.0162	mg/Kg wet	1.67		93	27-160	0.4	30
Naphthalene	0.896		0.0333	0.0115	mg/Kg wet	1.67		54	37-113	1	30
Phenanthrene	1.19		0.0333	0.00670	mg/Kg wet	1.67		71	50-115	1	30
Pyrene	1.41		0.0333	0.0106	mg/Kg wet	1.67		84	42-138	2	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.775*		*mg/Kg wet*	*1.67*		*47*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.36*		*mg/Kg wet*	*1.67*		*81*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
Matrix Spike (B8B0167-MS1)		**Source: L8B0099-33**			Prepared: 2/14/2018	Analyzed: 2/15/2018					
1-Methylnaphthalene	0.921		0.0356	0.0118	mg/Kg dry	1.78	ND	52	39-116		
2-Methylnaphthalene	0.917		0.0356	0.0143	mg/Kg dry	1.78	ND	52	37-112		
Acenaphthene	0.988		0.0356	0.0140	mg/Kg dry	1.78	ND	56	41-116		
Acenaphthylene	0.981		0.0356	0.0118	mg/Kg dry	1.78	ND	55	41-118		
Anthracene	1.09		0.0356	0.00939	mg/Kg dry	1.78	ND	61	39-127		
Benzo(a)anthracene	1.13		0.0356	0.00992	mg/Kg dry	1.78	0.0199	62	40-129		
Benzo(a)pyrene	1.22		0.0356	0.0169	mg/Kg dry	1.78	0.0181	68	36-141		
Benzo(b)fluoranthene	1.20		0.0356	0.0159	mg/Kg dry	1.78	0.0202	66	34-139		
Benzo(g,h,i)perylene	1.22		0.0356	0.0165	mg/Kg dry	1.78	0.0181	68	32-141		
Benzo(k)fluoranthene	1.18		0.0356	0.0123	mg/Kg dry	1.78	0.0161	66	31-139		
Chrysene	1.15		0.0356	0.00843	mg/Kg dry	1.78	0.0192	64	41-124		
Dibenz(a,h)Anthracene	1.21		0.0356	0.0158	mg/Kg dry	1.78	ND	68	35-143		
Fluoranthene	1.06		0.0356	0.0106	mg/Kg dry	1.78	0.0328	58	38-132		
Fluorene	0.997		0.0356	0.0114	mg/Kg dry	1.78	ND	56	41-121		
Indeno(1,2,3-cd)pyrene	1.21		0.0356	0.0173	mg/Kg dry	1.78	ND	68	27-160		
Naphthalene	0.900		0.0356	0.0123	mg/Kg dry	1.78	ND	51	37-113		
Phenanthrene	1.09		0.0356	0.00715	mg/Kg dry	1.78	0.0206	60	50-115		
Pyrene	1.19		0.0356	0.0113	mg/Kg dry	1.78	0.0269	66	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.27*		*mg/Kg dry*	*1.78*		*72*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.08*		*mg/Kg dry*	*1.78*		*61*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.49*		*mg/Kg dry*	*1.78*		*84*	*20-137*		
Matrix Spike Dup (B8B0167-MSD1)		**Source: L8B0099-33**			Prepared: 2/14/2018	Analyzed: 2/15/2018					
1-Methylnaphthalene	1.13		0.0356	0.0118	mg/Kg dry	1.78	ND	63	39-116	20	30
2-Methylnaphthalene	1.11		0.0356	0.0143	mg/Kg dry	1.78	ND	62	37-112	19	30
Acenaphthene	1.23		0.0356	0.0140	mg/Kg dry	1.78	ND	69	41-116	22	30
Acenaphthylene	1.23		0.0356	0.0118	mg/Kg dry	1.78	ND	69	41-118	22	30
Anthracene	1.45		0.0356	0.00939	mg/Kg dry	1.78	ND	81	39-127	29	30
Benzo(a)anthracene	1.53		0.0356	0.00992	mg/Kg dry	1.78	0.0199	85	40-129	31	30
Benzo(a)pyrene	1.70		0.0356	0.0169	mg/Kg dry	1.78	0.0181	94	36-141	33	30
Benzo(b)fluoranthene	1.61		0.0356	0.0159	mg/Kg dry	1.78	0.0202	90	34-139	29	30
Benzo(g,h,i)perylene	1.74		0.0356	0.0165	mg/Kg dry	1.78	0.0181	97	32-141	35	30
Benzo(k)fluoranthene	1.45		0.0356	0.0123	mg/Kg dry	1.78	0.0161	81	31-139	20	30
Chrysene	1.57		0.0356	0.00843	mg/Kg dry	1.78	0.0192	87	41-124	31	30
Dibenz(a,h)Anthracene	1.71		0.0356	0.0158	mg/Kg dry	1.78	ND	96	35-143	34	30
Fluoranthene	1.28		0.0356	0.0106	mg/Kg dry	1.78	0.0328	70	38-132	19	30
Fluorene	1.27		0.0356	0.0114	mg/Kg dry	1.78	ND	72	41-121	24	30
Indeno(1,2,3-cd)pyrene	1.70		0.0356	0.0173	mg/Kg dry	1.78	ND	96	27-160	34	30
Naphthalene	1.07		0.0356	0.0123	mg/Kg dry	1.78	ND	60	37-113	17	30
Phenanthrene	1.45		0.0356	0.00715	mg/Kg dry	1.78	0.0206	80	50-115	28	30

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12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
Matrix Spike Dup (B8B0167-MSD1)			**Source: L8B0099-33**		Prepared: 2/14/2018 Analyzed: 2/15/2018						
Pyrene	1.72		0.0356	0.0113	mg/Kg dry	1.78	0.0269	95	42-138	36	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.19*		*mg/Kg dry*	*1.78*		*67*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.975*		*mg/Kg dry*	*1.78*		*55*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.63*		*mg/Kg dry*	*1.78*		*91*	*20-137*		
Batch: B8B0178											
Blank (B8B0178-BLK1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U,	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U,	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U,	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U,	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U,	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U,	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U,	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U,	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U,	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U,	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U,	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U,	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U,	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U,	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.926*		*mg/Kg wet*	*1.67*		*56*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.780*		*mg/Kg wet*	*1.67*		*47*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.65*		*mg/Kg wet*	*1.67*		*99*	*20-137*		

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12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
LCS (B8B0178-BS1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	1.08		0.0333	0.0111	mg/Kg wet	1.67		65	39-116		
2-Methylnaphthalene	1.06		0.0333	0.0134	mg/Kg wet	1.67		64	37-112		
Acenaphthene	1.13		0.0333	0.0131	mg/Kg wet	1.67		68	41-116		
Acenaphthylene	1.12		0.0333	0.0111	mg/Kg wet	1.67		67	42-126		
Anthracene	1.37		0.0333	0.00880	mg/Kg wet	1.67		82	39-127		
Benzo(a)anthracene	1.46		0.0333	0.00930	mg/Kg wet	1.67		88	40-129		
Benzo(a)pyrene	1.59		0.0333	0.0158	mg/Kg wet	1.67		95	36-141		
Benzo(b)fluoranthene	1.55		0.0333	0.0149	mg/Kg wet	1.67		93	34-139		
Benzo(g,h,i)perylene	1.64		0.0333	0.0155	mg/Kg wet	1.67		98	32-141		
Benzo(k)fluoranthene	1.56		0.0333	0.0115	mg/Kg wet	1.67		93	31-139		
Chrysene	1.52		0.0333	0.00790	mg/Kg wet	1.67		91	41-124		
Dibenz(a,h)Anthracene	1.63		0.0333	0.0148	mg/Kg wet	1.67		98	35-143		
Fluoranthene	1.30		0.0333	0.00990	mg/Kg wet	1.67		78	38-132		
Fluorene	1.13		0.0333	0.0107	mg/Kg wet	1.67		68	41-121		
Indeno(1,2,3-cd)pyrene	1.62		0.0333	0.0162	mg/Kg wet	1.67		97	27-160		
Naphthalene	1.05		0.0333	0.0115	mg/Kg wet	1.67		63	37-113		
Phenanthrene	1.28		0.0333	0.00670	mg/Kg wet	1.67		77	50-115		
Pyrene	1.54		0.0333	0.0106	mg/Kg wet	1.67		92	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.09*		*mg/Kg wet*	*1.67*		*66*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.43*		*mg/Kg wet*	*1.67*		*86*	*20-137*		
LCS Dup (B8B0178-BSD1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	1.06		0.0333	0.0111	mg/Kg wet	1.67		63	39-116	2	30
2-Methylnaphthalene	1.04		0.0333	0.0134	mg/Kg wet	1.67		63	37-112	2	30
Acenaphthene	1.12		0.0333	0.0131	mg/Kg wet	1.67		67	41-116	1	30
Acenaphthylene	1.10		0.0333	0.0111	mg/Kg wet	1.67		66	42-126	1	30
Anthracene	1.32		0.0333	0.00880	mg/Kg wet	1.67		79	39-127	3	30
Benzo(a)anthracene	1.32		0.0333	0.00930	mg/Kg wet	1.67		79	40-129	10	30
Benzo(a)pyrene	1.48		0.0333	0.0158	mg/Kg wet	1.67		89	36-141	7	30
Benzo(b)fluoranthene	1.39		0.0333	0.0149	mg/Kg wet	1.67		83	34-139	10	30
Benzo(g,h,i)perylene	1.52		0.0333	0.0155	mg/Kg wet	1.67		91	32-141	8	30
Benzo(k)fluoranthene	1.42		0.0333	0.0115	mg/Kg wet	1.67		85	31-139	9	30
Chrysene	1.38		0.0333	0.00790	mg/Kg wet	1.67		83	41-124	10	30
Dibenz(a,h)Anthracene	1.50		0.0333	0.0148	mg/Kg wet	1.67		90	35-143	8	30
Fluoranthene	1.18		0.0333	0.00990	mg/Kg wet	1.67		71	38-132	9	30
Fluorene	1.11		0.0333	0.0107	mg/Kg wet	1.67		67	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.48		0.0333	0.0162	mg/Kg wet	1.67		89	27-160	9	30
Naphthalene	1.04		0.0333	0.0115	mg/Kg wet	1.67		63	37-113	0.6	30
Phenanthrene	1.26		0.0333	0.00670	mg/Kg wet	1.67		76	50-115	2	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
LCS Dup (B8B0178-BSD1)					Prepared & Analyzed: 2/15/2018						
Pyrene	1.45		0.0333	0.0106	mg/Kg wet	1.67		87	42-138	6	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.07*		*mg/Kg wet*	*1.67*		*64*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.899*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.34*		*mg/Kg wet*	*1.67*		*80*	*20-137*		
Matrix Spike (B8B0178-MS1)		**Source: L8B0120-05**			Prepared: 2/15/2018 Analyzed: 2/16/2018						
1-Methylnaphthalene	0.971		0.0362	0.0120	mg/Kg dry	1.81	ND	54	39-116		
2-Methylnaphthalene	0.930		0.0362	0.0145	mg/Kg dry	1.81	ND	51	37-112		
Acenaphthene	1.14		0.0362	0.0142	mg/Kg dry	1.81	ND	63	41-116		
Acenaphthylene	1.08		0.0362	0.0120	mg/Kg dry	1.81	ND	60	41-118		
Anthracene	1.42		0.0362	0.00955	mg/Kg dry	1.81	ND	79	39-127		
Benzo(a)anthracene	1.46		0.0362	0.0101	mg/Kg dry	1.81	ND	81	40-129		
Benzo(a)pyrene	1.57		0.0362	0.0171	mg/Kg dry	1.81	ND	87	36-141		
Benzo(b)fluoranthene	1.56		0.0362	0.0162	mg/Kg dry	1.81	0.0220	85	34-139		
Benzo(g,h,i)perylene	1.47		0.0362	0.0168	mg/Kg dry	1.81	0.0346	79	32-141		
Benzo(k)fluoranthene	1.50		0.0362	0.0125	mg/Kg dry	1.81	ND	83	31-139		
Chrysene	1.49		0.0362	0.00857	mg/Kg dry	1.81	0.0162	81	41-124		
Dibenz(a,h)Anthracene	1.46		0.0362	0.0161	mg/Kg dry	1.81	ND	81	35-143		
Fluoranthene	1.51		0.0362	0.0107	mg/Kg dry	1.81	0.0155	83	38-132		
Fluorene	1.25		0.0362	0.0116	mg/Kg dry	1.81	ND	69	41-121		
Indeno(1,2,3-cd)pyrene	1.44		0.0362	0.0176	mg/Kg dry	1.81	ND	80	27-160		
Naphthalene	0.826		0.0362	0.0125	mg/Kg dry	1.81	ND	46	37-113		
Phenanthrene	1.38		0.0362	0.00727	mg/Kg dry	1.81	0.0137	76	50-115		
Pyrene	1.38		0.0362	0.0115	mg/Kg dry	1.81	0.0231	75	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.907*		*mg/Kg dry*	*1.81*		*50*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.718*		*mg/Kg dry*	*1.81*		*40*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.26*		*mg/Kg dry*	*1.81*		*70*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
Matrix Spike Dup (B8B0178-MSD1)		**Source: L8B0120-05**			Prepared: 2/15/2018 Analyzed: 2/16/2018						
1-Methylnaphthalene	1.17		0.0357	0.0119	mg/Kg dry	1.79	ND	65	39-116	18	30
2-Methylnaphthalene	1.11		0.0357	0.0144	mg/Kg dry	1.79	ND	62	37-112	18	30
Acenaphthene	1.23		0.0357	0.0140	mg/Kg dry	1.79	ND	69	41-116	8	30
Acenaphthylene	1.22		0.0357	0.0119	mg/Kg dry	1.79	ND	68	41-118	12	30
Anthracene	1.41		0.0357	0.00943	mg/Kg dry	1.79	ND	79	39-127	0.5	30
Benzo(a)anthracene	1.42		0.0357	0.00997	mg/Kg dry	1.79	ND	79	40-129	3	30
Benzo(a)pyrene	1.53		0.0357	0.0169	mg/Kg dry	1.79	ND	86	36-141	2	30
Benzo(b)fluoranthene	1.56		0.0357	0.0160	mg/Kg dry	1.79	0.0220	86	34-139	0.3	30
Benzo(g,h,i)perylene	1.47		0.0357	0.0166	mg/Kg dry	1.79	0.0346	81	32-141	0.6	30
Benzo(k)fluoranthene	1.51		0.0357	0.0123	mg/Kg dry	1.79	ND	85	31-139	0.4	30
Chrysene	1.45		0.0357	0.00847	mg/Kg dry	1.79	0.0162	80	41-124	2	30
Dibenz(a,h)Anthracene	1.42		0.0357	0.0159	mg/Kg dry	1.79	ND	80	35-143	2	30
Fluoranthene	1.55		0.0357	0.0106	mg/Kg dry	1.79	0.0155	86	38-132	2	30
Fluorene	1.33		0.0357	0.0115	mg/Kg dry	1.79	ND	74	41-121	6	30
Indeno(1,2,3-cd)pyrene	1.43		0.0357	0.0174	mg/Kg dry	1.79	ND	80	27-160	1	30
Naphthalene	1.00		0.0357	0.0123	mg/Kg dry	1.79	ND	56	37-113	19	30
Phenanthrene	1.37		0.0357	0.00718	mg/Kg dry	1.79	0.0137	76	50-115	0.7	30
Pyrene	1.36		0.0357	0.0114	mg/Kg dry	1.79	0.0231	75	42-138	1	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.03*		*mg/Kg dry*	*1.79*		*58*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.812*		*mg/Kg dry*	*1.79*		*45*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.20*		*mg/Kg dry*	*1.79*		*67*	*20-137*		
Batch: B8B0238											
Blank (B8B0238-BLK1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U,	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U,	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U,	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U,	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U,	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U,	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U,	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U,	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U,	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U,	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U,	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U,	0.0333	0.0162	mg/Kg wet						

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Blank (B8B0238-BLK1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
Naphthalene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U,	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U,	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.18*		*mg/Kg wet*	*1.67*		*71*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.04*		*mg/Kg wet*	*1.67*		*63*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.47*		*mg/Kg wet*	*1.67*		*88*	*20-137*		
LCS (B8B0238-BS1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.17		0.0333	0.0111	mg/Kg wet	1.67		70	39-116		
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112		
Acenaphthene	1.24		0.0333	0.0131	mg/Kg wet	1.67		74	41-116		
Acenaphthylene	1.21		0.0333	0.0111	mg/Kg wet	1.67		73	42-126		
Anthracene	1.43		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.48		0.0333	0.00930	mg/Kg wet	1.67		89	40-129		
Benzo(a)pyrene	1.66		0.0333	0.0158	mg/Kg wet	1.67		100	36-141		
Benzo(b)fluoranthene	1.59		0.0333	0.0149	mg/Kg wet	1.67		95	34-139		
Benzo(g,h,i)perylene	1.64		0.0333	0.0155	mg/Kg wet	1.67		99	32-141		
Benzo(k)fluoranthene	1.61		0.0333	0.0115	mg/Kg wet	1.67		96	31-139		
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124		
Dibenz(a,h)Anthracene	1.66		0.0333	0.0148	mg/Kg wet	1.67		99	35-143		
Fluoranthene	1.37		0.0333	0.00990	mg/Kg wet	1.67		82	38-132		
Fluorene	1.23		0.0333	0.0107	mg/Kg wet	1.67		74	41-121		
Indeno(1,2,3-cd)pyrene	1.63		0.0333	0.0162	mg/Kg wet	1.67		98	27-160		
Naphthalene	1.16		0.0333	0.0115	mg/Kg wet	1.67		69	37-113		
Phenanthrene	1.36		0.0333	0.00670	mg/Kg wet	1.67		81	50-115		
Pyrene	1.53		0.0333	0.0106	mg/Kg wet	1.67		92	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*74*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.08*		*mg/Kg wet*	*1.67*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.51*		*mg/Kg wet*	*1.67*		*91*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
LCS Dup (B8B0238-BSD1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.19		0.0333	0.0111	mg/Kg wet	1.67		71	39-116	1	30
2-Methylnaphthalene	1.16		0.0333	0.0134	mg/Kg wet	1.67		69	37-112	1	30
Acenaphthene	1.25		0.0333	0.0131	mg/Kg wet	1.67		75	41-116	1	30
Acenaphthylene	1.23		0.0333	0.0111	mg/Kg wet	1.67		74	42-126	1	30
Anthracene	1.45		0.0333	0.00880	mg/Kg wet	1.67		87	39-127	1	30
Benzo(a)anthracene	1.47		0.0333	0.00930	mg/Kg wet	1.67		88	40-129	0.7	30
Benzo(a)pyrene	1.64		0.0333	0.0158	mg/Kg wet	1.67		98	36-141	1	30
Benzo(b)fluoranthene	1.56		0.0333	0.0149	mg/Kg wet	1.67		94	34-139	2	30
Benzo(g,h,i)perylene	1.63		0.0333	0.0155	mg/Kg wet	1.67		98	32-141	0.9	30
Benzo(k)fluoranthene	1.58		0.0333	0.0115	mg/Kg wet	1.67		95	31-139	2	30
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124	0.06	30
Dibenz(a,h)Anthracene	1.64		0.0333	0.0148	mg/Kg wet	1.67		99	35-143	0.8	30
Fluoranthene	1.40		0.0333	0.00990	mg/Kg wet	1.67		84	38-132	2	30
Fluorene	1.25		0.0333	0.0107	mg/Kg wet	1.67		75	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.62		0.0333	0.0162	mg/Kg wet	1.67		97	27-160	0.6	30
Naphthalene	1.17		0.0333	0.0115	mg/Kg wet	1.67		70	37-113	1	30
Phenanthrene	1.40		0.0333	0.00670	mg/Kg wet	1.67		84	50-115	3	30
Pyrene	1.52		0.0333	0.0106	mg/Kg wet	1.67		91	42-138	0.5	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*75*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.10*		*mg/Kg wet*	*1.67*		*66*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.46*		*mg/Kg wet*	*1.67*		*88*	*20-137*		
Matrix Spike (B8B0238-MS1)		**Source: L8B0099-48**			Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	0.775		0.0329	0.0110	mg/Kg dry	1.65	ND	47	39-116		
2-Methylnaphthalene	0.775		0.0329	0.0132	mg/Kg dry	1.65	ND	47	37-112		
Acenaphthene	0.828		0.0329	0.0129	mg/Kg dry	1.65	ND	50	41-116		
Acenaphthylene	0.811		0.0329	0.0110	mg/Kg dry	1.65	ND	49	41-118		
Anthracene	1.18		0.0329	0.00869	mg/Kg dry	1.65	ND	71	39-127		
Benzo(a)anthracene	1.31		0.0329	0.00918	mg/Kg dry	1.65	ND	79	40-129		
Benzo(a)pyrene	1.45		0.0329	0.0156	mg/Kg dry	1.65	ND	88	36-141		
Benzo(b)fluoranthene	1.37		0.0329	0.0147	mg/Kg dry	1.65	ND	83	34-139		
Benzo(g,h,i)perylene	1.44		0.0329	0.0153	mg/Kg dry	1.65	ND	87	32-141		
Benzo(k)fluoranthene	1.39		0.0329	0.0114	mg/Kg dry	1.65	ND	84	31-139		
Chrysene	1.40		0.0329	0.00780	mg/Kg dry	1.65	ND	85	41-124		
Dibenz(a,h)Anthracene	1.46		0.0329	0.0146	mg/Kg dry	1.65	ND	89	35-143		
Fluoranthene	1.23		0.0329	0.00978	mg/Kg dry	1.65	ND	75	38-132		
Fluorene	0.824		0.0329	0.0106	mg/Kg dry	1.65	ND	50	41-121		
Indeno(1,2,3-cd)pyrene	1.43		0.0329	0.0160	mg/Kg dry	1.65	ND	87	27-160		
Naphthalene	0.774		0.0329	0.0114	mg/Kg dry	1.65	ND	47	37-113		
Phenanthrene	1.04		0.0329	0.00662	mg/Kg dry	1.65	ND	63	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Matrix Spike (B8B0238-MS1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
Pyrene	1.32		0.0329	0.0105	mg/Kg dry	1.65	ND	80	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.816*		*mg/Kg dry*	*1.65*		*50*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.722*		*mg/Kg dry*	*1.65*		*44*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg dry*	*1.65*		*78*	*20-137*		
Matrix Spike Dup (B8B0238-MSD1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
1-Methylnaphthalene	1.11		0.0329	0.0110	mg/Kg dry	1.64	ND	68	39-116	36	30
2-Methylnaphthalene	1.10		0.0329	0.0132	mg/Kg dry	1.64	ND	67	37-112	35	30
Acenaphthene	1.17		0.0329	0.0129	mg/Kg dry	1.64	ND	71	41-116	34	30
Acenaphthylene	1.16		0.0329	0.0110	mg/Kg dry	1.64	ND	70	41-118	35	30
Anthracene	1.39		0.0329	0.00868	mg/Kg dry	1.64	ND	85	39-127	17	30
Benzo(a)anthracene	1.39		0.0329	0.00917	mg/Kg dry	1.64	ND	84	40-129	6	30
Benzo(a)pyrene	1.54		0.0329	0.0156	mg/Kg dry	1.64	ND	93	36-141	6	30
Benzo(b)fluoranthene	1.46		0.0329	0.0147	mg/Kg dry	1.64	ND	88	34-139	6	30
Benzo(g,h,i)perylene	1.52		0.0329	0.0153	mg/Kg dry	1.64	ND	92	32-141	5	30
Benzo(k)fluoranthene	1.46		0.0329	0.0113	mg/Kg dry	1.64	ND	89	31-139	6	30
Chrysene	1.47		0.0329	0.00779	mg/Kg dry	1.64	ND	89	41-124	5	30
Dibenz(a,h)Anthracene	1.52		0.0329	0.0146	mg/Kg dry	1.64	ND	93	35-143	4	30
Fluoranthene	1.34		0.0329	0.00977	mg/Kg dry	1.64	ND	81	38-132	8	30
Fluorene	1.18		0.0329	0.0106	mg/Kg dry	1.64	ND	72	41-121	35	30
Indeno(1,2,3-cd)pyrene	1.51		0.0329	0.0160	mg/Kg dry	1.64	ND	92	27-160	5	30
Naphthalene	1.11		0.0329	0.0113	mg/Kg dry	1.64	ND	67	37-113	35	30
Phenanthrene	1.33		0.0329	0.00661	mg/Kg dry	1.64	ND	81	50-115	25	30
Pyrene	1.46		0.0329	0.0105	mg/Kg dry	1.64	ND	89	42-138	10	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.16*		*mg/Kg dry*	*1.64*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.05*		*mg/Kg dry*	*1.64*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.39*		*mg/Kg dry*	*1.64*		*84*	*20-137*		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

Percent Moisture by Method 2540G

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0142											
Duplicate (B8B0142-DUP1)		**Source: L8B0104-01**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	86.1		0.100	0.100	%		87.5			2	20
Percent Moisture	13.9		0.100	0.100	%		12.5			11	20
Duplicate (B8B0142-DUP2)		**Source: L8B0104-12**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	94.9		0.100	0.100	%		94.8			0.08	20
Percent Moisture	5.10		0.100	0.100	%		5.18			2	20
Duplicate (B8B0142-DUP3)		**Source: L8B0099-01**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	92.4		0.100	0.100	%		92.7			0.4	20
Percent Moisture	7.62		0.100	0.100	%		7.29			4	20
Duplicate (B8B0142-DUP4)		**Source: L8B0099-21**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	95.0		0.100	0.100	%		95.1			0.1	20
Percent Moisture	4.96		0.100	0.100	%		4.85			2	20
Duplicate (B8B0142-DUP5)		**Source: L8B0099-41**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	94.5		0.100	0.100	%		94.6			0.09	20
Percent Moisture	5.50		0.100	0.100	%		5.41			2	20
Duplicate (B8B0142-DUP6)		**Source: L8B0107-03**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	97.7		0.100	0.100	%		98.0			0.2	20
Percent Moisture	2.26		0.100	0.100	%		2.04			10	20
Batch: B8B0217											
Duplicate (B8B0217-DUP1)		**Source: L8B0186-02**			Prepared & Analyzed: 2/20/2018						
% Solids	77.9		0.100	0.100	%		77.2			0.9	20
Percent Moisture	22.1		0.100	0.100	%		22.8			3	20

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

Percent Moisture by Method 2540G (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0217 (Continued)											
Duplicate (B8B0217-DUP2)		**Source: L8B0040-21**			Prepared & Analyzed: 2/20/2018						
% Solids	84.7		0.100	0.100	%		85.4			0.8	20
Percent Moisture	15.3		0.100	0.100	%		14.6			5	20

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MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

List of Certifications for XENCO Laboratories - Tampa formerly FTS Analytical

Number	Description	Code	Facility	Expires
	Kentucky UST CERTIFICATION	UST KY	FTSL	06/30/2018
E84098	FL MICROBIOLOGY Lakeland CERT	LFLNELAC	FTSL	06/30/2018
E871002	Xenco FL CERT	FLNELAC	FTSL	06/30/2018
E87429	FL NELAC CERT Tampa	AFLNELAC	FTSL	06/30/2018
LI0-135	DoD CERTIFICATE	DOD	FTSL	12/11/2019
P330-07-00105	USDA CERTIFICATE	USDA	FTSL	

Notes and Definitions

Item	Definition
U	Compound was not detected.
Dry	Sample results reported on a dry weight basis.
I	Value estimated to be between the Laboratory Detection and Reporting Limit
J	QC Failure see Case Narrative
L	Concentration exceeds calibration range
N	Tentatively Identified Compound
Q	Hold time exceeded
V	Analyte equal to or above detection limit in the method blank
TNTC	Bacteria is present but Too Numerous To Count

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

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FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: [redacted] 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL) (PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 2.7 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type / Preservation Code
								8 / 9	
1	FLB-228C 0.0-0.5	0.0-0.5	2/8/18-0812	S		X	1	X	
2	FLB-228C 0.5-2	0.5-2	-0814	S		X	1	X	
3	FLB-228C 2-4	2-4	-0816	S		X	1	X	Hold
4	FLB-228C 4-6	4-6	-0818	S		X	1	X	Hold
5	FLB-229C 0.0-0.5	0.0-0.5	-0824	S		X	1	X	
6	FLB-229C 0.5-2	0.5-2	-0826	S		X	1	X	
7	FLB-229C 2-4	2-4	-0827	S		X	1	X	Hold
8	FLB-229C 4-6	4-6	-0829	S		X	1	X	Hold
9	FLB-230C 0.0-0.5	0.0-0.5	-1328	S		X	1	X	
10	FLB-230C 0.5-2	0.5-2	-1331	S		X	1	X	

1) Relinquished By: Richard Houde Date / Time 2/8/18-1517
2) Received By: [signature] Date / Time 2-8-18 1517
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / (Lab Pickup) / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
(STD TAT) 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5732 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.7 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type / Preservation Code
								GC / 9	
1	FLB-230C 2-4	2-4	2/8/18-1333	S		1	1	X	Hold
2	FLB-230C 4-6	4-6	-1335	S		1	1	X	Hold
3	FLB-231C 0.0-0.5	0.0-0.5	-1318	S		1	1	X	
4	FLB-231C 0.5-2	0.5-2	-1321	S		1	1	X	
5	FLB-231C 2-4	2-4	-1323	S		1	1	X	Hold
6	FLB-231C 4-6	4-6	-1325	S		1	1	X	Hold
7	FLB-232C 0.0-0.5	0.0-0.5	-1239	S		1	1	X	
8	FLB-232C 0.5-2	0.5-2	-1241	S		1	1	X	
9	FLB-232C 2-4	2-4	-1243	S		1	1	X	Hold
10	FLB-232C 4-6	4-6	-1245	S		1	1	X	Hold

1) Relinquished By: Richard Houde Date / Time 2/8/18-1517
2) Received By: [signature] Date / Time 2-8-18 1517
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

3) Relinquished By: Date / Time
4) Received By: Date / Time

5) Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-Tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.7 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH												Container Type / Preservation Code
								GC												Container Type
								9												Preservation Code
1	FLB-233@0.0-0.5	0.0-0.5	2/8/18-1249	S		X	1	X												
2	FLB-233@0.5-2	0.5-2	-1251	S		X	1	X												
3	FLB-233@2-4	2-4	-1253	S		X	1	X												Hold
4	FLB-233@4-6	4-6	-1255	S		X	1	X												Hold
5	FLB-234@0.0-0.5	0.0-0.5	-1034	S		X	1	X												
6	FLB-234@0.5-2	0.5-2	-1036	S		X	1	X												
7	FLB-234@2-4	2-4	-1100	S		X	1	X												Hold
8	FLB-234@4-6	4-6	-1103	S		X	1	X												Hold
9	FLB-235@0.0-0.5	0.0-0.5	-1213	S		X	1	X												
10	FLB-235@0.5-2	0.5-2	-1215	S		X	1	X												

1) Relinquished By: Richard Houde Date / Time 2/8/18 1517
2) Received By: [signature] Date / Time 2-8-18 1517
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT? 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

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Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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Company Name: SpecPro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-Tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: L.C. / 2.7 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC													Container Type
								9													Preservation Code
								PAH													
1	FLB-235 @ 2-4	2-4	2/8/18 - 1232	S		X	1	X													Hold
2	FLB-235 @ 4-6	4-6	- 1234	S		X	1	X													Hold
3	FLB-236 @ 0.0-0.5	0.0-0.5	- 0958	S		X	1	X													
4	FLB-236 @ 0.5-2	0.5-2	- 1000	S		X	1	X													
5	FLB-236 @ 2-4	2-4	- 1002	S		X	1	X													Hold
6	FLB-236 @ 4-6	4-6	- 1004	S		X	1	X													Hold
7	FLB-237 @ 0.0-0.5	0.0-0.5	- 1011	S		X	1	X													
8	FLB-237 @ 0.5-2	0.5-2	- 1014	S		X	1	X													
9	FLB-237 @ 2-4	2-4	- 1017	S		X	1	X													Hold
10	FLB-237 @ 4-6	4-6	- 1019	S		X	1	X													Hold

1) Relinquished By: Richard Houde Date / Time 2/8/18 - 1517
2) Received By: [signature] Date / Time 2-8-18 1517
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / (Lab Pickup) / Hand / Other

MSA or FTS terms and conditions apply

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(STD TAT:) 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

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Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
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FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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Email address: Richard.Houde@Badger-Tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 2.7 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC 9 PAH	Container Type / Preservation Code
1	FLB-238@0.0-0.5	0.0-0.5	2/8/18-0854	S		X	1	X	
2	FLB-238@0.5-2	0.5-2	-0857	S		X	1	X	
3	FLB-238@2-4	2-4	-0928	S		X	1	X	Hold
4	FLB-238@4-6	4-6	-0930	S		X	1	X	Hold
5	FLB-239@0.0-0.5	0.0-0.5	-0937	S		X	1	X	
6	FLB-239@0.5-2	0.5-2	-0941	S		X	1	X	
7	FLB-239@2-4	2-4	-0948	S		X	1	X	Hold
8	FLB-239@4-6	4-6	-0951	S		X	1	X	Hold
9			-	S		X	1	X	
10			-	S		X	1	X	

1) Relinquished By: Richard Houde Date / Time 2/8/18-1517
2) Received By: [signature] Date / Time 2-9-18 1517
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

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Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.7 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC 9 PAH	Container Type / Preservation Code
1	FLB-240@0.0-0.5	0.0-0.5	2/8/18-0837	S		X	1	X	
2	FLB-240@0.5-2	0.5-2	-0837	S		X	1	X	
3	FLB-240@2-4	2-4	-0839	S		X	1	X	
4	FLB-240@4-6	4-6	-0841	S		X	1	X	
5				S		X	1	X	
6				S		X	1	X	
7				S		X	1	X	
8				S		X	1	X	
9				S		X	1	X	
10				S		X	1	X	

Richard Houde

1) Relinquished By:	Date / Time	2) Received By:	Date / Time
Richard Houde	2/8/18-1517	[signature]	2-8-18 1517
Relinquished By:	Date / Time	4) Received By:	Date / Time
Relinquished By:	Date / Time	6) Received By:	Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA=Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

Analytical Report

L8B0099

Project

Winter Haven

Project Number

Winter Haven

February 26, 2018

SpecPro Professional Services

12500 San Pedro Avenue, Suite 670

San Antonio, TX 78216

Minority Women Business Enterprise

Small Disadvantaged Business Enterprise

Minority Women Business Enterprise
Small Disadvantaged Business Enterprise

1412 Tech Blvd
Tampa, FL 33619

Phone #: 813-620-2000
Website: www.ftsanalytical.com

February 26, 2018

Richard Houde
SpecPro Professional Services
12500 San Pedro Avenue, Suite 670
San Antonio, TX 78216

RE: Winter Haven

We are reporting the results of the analyses performed on the samples recieved on 2/8/2018 under the project name referenced above and identified as the lab Work Order L8B0099. All results being reported under this Report apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontracted lab, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reporting using all other available quality control methods.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by FTS Analytical Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise agreed upon. The samples received, and described as recorded in Work Order L8B0099 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise agreed upon. We reserve the right to return to you any unused samples, extracts, or solutions if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding standard practices, controlled/regulated substances, etc.)

We thank you for selecting FTS Analytical to serve your analytical needs. If you have any questions concerning this report, please do not hesitate to contact us at any time. We will be happy to help.

Sincerely,

Chad A. Bechtold

Chad Bechtold
VP of Client Services

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0099-01	FLB-228 @ 0.0-0.5	Solid	08-Feb-2018 08:12	08-Feb-2018 15:17
L8B0099-02	FLB-228 @ 0.5-2	Solid	08-Feb-2018 08:14	08-Feb-2018 15:17
L8B0099-05	FLB-229 @ 0.0-0.5	Solid	08-Feb-2018 08:24	08-Feb-2018 15:17
L8B0099-06	FLB-229 @ 0.5-2	Solid	08-Feb-2018 08:26	08-Feb-2018 15:17
L8B0099-09	FLB-230 @ 0.0-0.5	Solid	08-Feb-2018 13:28	08-Feb-2018 15:17
L8B0099-10	FLB-230 @ 0.5-2	Solid	08-Feb-2018 13:31	08-Feb-2018 15:17
L8B0099-13	FLB-231 @ 0.0-0.5	Solid	08-Feb-2018 13:18	08-Feb-2018 15:17
L8B0099-14	FLB-231 @ 0.5-2	Solid	08-Feb-2018 13:21	08-Feb-2018 15:17
L8B0099-17	FLB-232 @ 0.0-0.5	Solid	08-Feb-2018 12:39	08-Feb-2018 15:17
L8B0099-18	FLB-232 @ 0.5-2	Solid	08-Feb-2018 12:41	08-Feb-2018 15:17
L8B0099-21	FLB-233 @ 0.0-0.5	Solid	08-Feb-2018 12:49	08-Feb-2018 15:17
L8B0099-22	FLB-233 @ 0.5-2	Solid	08-Feb-2018 12:51	08-Feb-2018 15:17
L8B0099-25	FLB-234 @ 0.0-0.5	Solid	08-Feb-2018 10:34	08-Feb-2018 15:17
L8B0099-26	FLB-234 @ 0.5-2	Solid	08-Feb-2018 10:36	08-Feb-2018 15:17
L8B0099-27	FLB-234 @ 2-4	Solid	08-Feb-2018 11:00	08-Feb-2018 15:17
L8B0099-28	FLB-234 @ 4-6	Solid	08-Feb-2018 11:03	08-Feb-2018 15:17
L8B0099-29	FLB-235 @ 0.0-0.5	Solid	08-Feb-2018 12:13	08-Feb-2018 15:17
L8B0099-30	FLB-235 @ 0.5-2	Solid	08-Feb-2018 12:15	08-Feb-2018 15:17
L8B0099-33	FLB-236 @ 0.0-0.5	Solid	08-Feb-2018 09:58	08-Feb-2018 15:17
L8B0099-34	FLB-236 @ 0.5-2	Solid	08-Feb-2018 10:00	08-Feb-2018 15:17
L8B0099-37	FLB-237 @ 0.0-0.5	Solid	08-Feb-2018 10:11	08-Feb-2018 15:17
L8B0099-38	FLB-237 @ 0.5-2	Solid	08-Feb-2018 10:14	08-Feb-2018 15:17
L8B0099-41	FLB-238 @ 0.0-0.5	Solid	08-Feb-2018 08:54	08-Feb-2018 15:17
L8B0099-42	FLB-238 @ 0.5-2	Solid	08-Feb-2018 08:57	08-Feb-2018 15:17
L8B0099-45	FLB-239 @ 0.0-0.5	Solid	08-Feb-2018 09:37	08-Feb-2018 15:17
L8B0099-46	FLB-239 @ 0.5-2	Solid	08-Feb-2018 09:41	08-Feb-2018 15:17
L8B0099-47	FLB-239 @ 2-4	Solid	08-Feb-2018 09:48	08-Feb-2018 15:17
L8B0099-48	FLB-239 @ 4-6	Solid	08-Feb-2018 09:51	08-Feb-2018 15:17
L8B0099-49	FLB-240 @ 0.0-0.5	Solid	08-Feb-2018 08:34	08-Feb-2018 15:17
L8B0099-50	FLB-240 @ 0.5-2	Solid	08-Feb-2018 08:37	08-Feb-2018 15:17
L8B0099-51	FLB-240 @ 2-4	Solid	08-Feb-2018 08:39	08-Feb-2018 15:17
L8B0099-52	FLB-240 @ 4-6	Solid	08-Feb-2018 08:41	08-Feb-2018 15:17

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Analysis Case Narrative

Method 8270D LL PAHs
Batch: B8B0167

The sample L8B0099-25 was analyzed at a dilution due to physical characteristics and/or high levels of non-target compounds.

Method 8270D LL PAHs
Batch: B8B0238

The precision (RPD) of the Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene and Fluorene exceeded control limits due to suspected matrix interference. However, the recoveries are within acceptable limits.
Sample affected: L8B0099-48.

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MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

Sample: FLB-228 @ 0.0-0.5

Lab ID: L8B0099-01

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0521**		0.0360	0.0100	mg/Kg dry	1	2/14/18 21:29	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0539**		0.0360	0.0170	mg/Kg dry	1	2/14/18 21:29	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0539**		0.0360	0.0161	mg/Kg dry	1	2/14/18 21:29	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0428**		0.0360	0.0167	mg/Kg dry	1	2/14/18 21:29	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0406**		0.0360	0.0124	mg/Kg dry	1	2/14/18 21:29	207-08-9	EPA 8270D PAH
Chrysene	**0.0547**		0.0360	0.00852	mg/Kg dry	1	2/14/18 21:29	218-01-9	EPA 8270D PAH
Fluoranthene	**0.100**		0.0360	0.0107	mg/Kg dry	1	2/14/18 21:29	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0410**		0.0360	0.0175	mg/Kg dry	1	2/14/18 21:29	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0600**		0.0360	0.00723	mg/Kg dry	1	2/14/18 21:29	85-01-8	EPA 8270D PAH
Pyrene	**0.0805**		0.0360	0.0114	mg/Kg dry	1	2/14/18 21:29	129-00-0	EPA 8270D PAH
Percent Moisture	**7.29**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-228 @ 0.5-2

Lab ID: L8B0099-02

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.99**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-229 @ 0.0-0.5

Lab ID: L8B0099-05

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0739**		0.0353	0.00986	mg/Kg dry	1	2/15/18 14:11	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0863**		0.0353	0.0168	mg/Kg dry	1	2/15/18 14:11	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0873**		0.0353	0.0158	mg/Kg dry	1	2/15/18 14:11	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0746**		0.0353	0.0164	mg/Kg dry	1	2/15/18 14:11	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0728**		0.0353	0.0122	mg/Kg dry	1	2/15/18 14:11	207-08-9	EPA 8270D PAH
Chrysene	**0.0813**		0.0353	0.00838	mg/Kg dry	1	2/15/18 14:11	218-01-9	EPA 8270D PAH
Fluoranthene	**0.129**		0.0353	0.0105	mg/Kg dry	1	2/15/18 14:11	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0633**		0.0353	0.0172	mg/Kg dry	1	2/15/18 14:11	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0806**		0.0353	0.00711	mg/Kg dry	1	2/15/18 14:11	85-01-8	EPA 8270D PAH
Pyrene	**0.130**		0.0353	0.0112	mg/Kg dry	1	2/15/18 14:11	129-00-0	EPA 8270D PAH
Percent Moisture	**5.71**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-229 @ 0.5-2

Lab ID: L8B0099-06

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.00**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-230 @ 0.0-0.5

Lab ID: L8B0099-09

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.72**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-230 @ 0.5-2

Lab ID: L8B0099-10

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.96**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-231 @ 0.0-0.5

Lab ID: L8B0099-13

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.94**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-231 @ 0.5-2

Lab ID: L8B0099-14

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Fluoranthene	**0.0518**		0.0352	0.0105	mg/Kg dry	1	2/14/18 21:49	206-44-0	EPA 8270D PAH
Pyrene	**0.0433**		0.0352	0.0112	mg/Kg dry	1	2/14/18 21:49	129-00-0	EPA 8270D PAH
Percent Moisture	**5.33**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-232 @ 0.0-0.5

Lab ID: L8B0099-17

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.32**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-232 @ 0.5-2

Lab ID: L8B0099-18

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.64**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-233 @ 0.0-0.5

Lab ID: L8B0099-21

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.85**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-233 @ 0.5-2

Lab ID: L8B0099-22

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.72**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-234 @ 0.0-0.5

Lab ID: L8B0099-25

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.5**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
1-Methylnaphthalene	**0.265**		0.176	0.0587	mg/Kg dry	5	2/14/18 20:48	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.448**		0.176	0.0709	mg/Kg dry	5	2/14/18 20:48	91-57-6	EPA 8270D PAH
Acenaphthene	**3.10**		0.176	0.0693	mg/Kg dry	5	2/14/18 20:48	83-32-9	EPA 8270D PAH
Anthracene	**5.14**		0.176	0.0466	mg/Kg dry	5	2/14/18 20:48	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**9.98**		0.176	0.0492	mg/Kg dry	5	2/14/18 20:48	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**9.56**		0.176	0.0836	mg/Kg dry	5	2/14/18 20:48	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**10.7**		0.176	0.0788	mg/Kg dry	5	2/14/18 20:48	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**7.15**		0.176	0.0820	mg/Kg dry	5	2/14/18 20:48	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**6.42**		0.176	0.0608	mg/Kg dry	5	2/14/18 20:48	207-08-9	EPA 8270D PAH
Chrysene	**9.48**		0.176	0.0418	mg/Kg dry	5	2/14/18 20:48	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**2.57**		0.176	0.0783	mg/Kg dry	5	2/14/18 20:48	53-70-3	EPA 8270D PAH
Fluoranthene	**23.4**		0.176	0.0524	mg/Kg dry	5	2/14/18 20:48	206-44-0	EPA 8270D PAH
Fluorene	**2.42**		0.176	0.0566	mg/Kg dry	5	2/14/18 20:48	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**6.43**		0.176	0.0857	mg/Kg dry	5	2/14/18 20:48	193-39-5	EPA 8270D PAH
Naphthalene	**1.51**		0.176	0.0608	mg/Kg dry	5	2/14/18 20:48	91-20-3	EPA 8270D PAH
Phenanthrene	**21.4**		0.176	0.0354	mg/Kg dry	5	2/14/18 20:48	85-01-8	EPA 8270D PAH
Pyrene	**17.1**		0.176	0.0561	mg/Kg dry	5	2/14/18 20:48	129-00-0	EPA 8270D PAH
Percent Moisture	**5.49**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-234 @ 0.5-2

Lab ID: L8B0099-26

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**92.3**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Anthracene	**0.0986**		0.0361	0.00954	mg/Kg dry	1	2/14/18 21:08	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.627**		0.0361	0.0101	mg/Kg dry	1	2/14/18 21:08	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.706**		0.0361	0.0171	mg/Kg dry	1	2/14/18 21:08	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.693**		0.0361	0.0161	mg/Kg dry	1	2/14/18 21:08	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.561**		0.0361	0.0168	mg/Kg dry	1	2/14/18 21:08	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.599**		0.0361	0.0125	mg/Kg dry	1	2/14/18 21:08	207-08-9	EPA 8270D PAH
Chrysene	**0.678**		0.0361	0.00856	mg/Kg dry	1	2/14/18 21:08	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.184**		0.0361	0.0160	mg/Kg dry	1	2/14/18 21:08	53-70-3	EPA 8270D PAH
Fluoranthene	**1.09**		0.0361	0.0107	mg/Kg dry	1	2/14/18 21:08	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.497**		0.0361	0.0176	mg/Kg dry	1	2/14/18 21:08	193-39-5	EPA 8270D PAH
Phenanthrene	**0.337**		0.0361	0.00726	mg/Kg dry	1	2/14/18 21:08	85-01-8	EPA 8270D PAH
Pyrene	**0.925**		0.0361	0.0115	mg/Kg dry	1	2/14/18 21:08	129-00-0	EPA 8270D PAH
Percent Moisture	**7.72**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-234 @ 2-4

Lab ID: L8B0099-27

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.9**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**3.06**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

Sample: FLB-234 @ 4-6

Lab ID: L8B0099-28

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.2**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**2.82**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

Sample: FLB-235 @ 0.0-0.5

Lab ID: L8B0099-29

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.9**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0484**		0.0351	0.00979	mg/Kg dry	1	2/15/18 15:33	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0586**		0.0351	0.0166	mg/Kg dry	1	2/15/18 15:33	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0642**		0.0351	0.0157	mg/Kg dry	1	2/15/18 15:33	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0498**		0.0351	0.0163	mg/Kg dry	1	2/15/18 15:33	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0481**		0.0351	0.0121	mg/Kg dry	1	2/15/18 15:33	207-08-9	EPA 8270D PAH
Chrysene	**0.0551**		0.0351	0.00832	mg/Kg dry	1	2/15/18 15:33	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0888**		0.0351	0.0104	mg/Kg dry	1	2/15/18 15:33	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0418**		0.0351	0.0171	mg/Kg dry	1	2/15/18 15:33	193-39-5	EPA 8270D PAH
Pyrene	**0.0754**		0.0351	0.0112	mg/Kg dry	1	2/15/18 15:33	129-00-0	EPA 8270D PAH
Percent Moisture	**5.07**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-235 @ 0.5-2

Lab ID: L8B0099-30

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.9**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0866**		0.0355	0.00991	mg/Kg dry	1	2/15/18 15:53	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0955**		0.0355	0.0168	mg/Kg dry	1	2/15/18 15:53	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0891**		0.0355	0.0159	mg/Kg dry	1	2/15/18 15:53	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0763**		0.0355	0.0165	mg/Kg dry	1	2/15/18 15:53	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0795**		0.0355	0.0123	mg/Kg dry	1	2/15/18 15:53	207-08-9	EPA 8270D PAH
Chrysene	**0.0937**		0.0355	0.00842	mg/Kg dry	1	2/15/18 15:53	218-01-9	EPA 8270D PAH
Fluoranthene	**0.170**		0.0355	0.0105	mg/Kg dry	1	2/15/18 15:53	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0671**		0.0355	0.0173	mg/Kg dry	1	2/15/18 15:53	193-39-5	EPA 8270D PAH
Phenanthrene	**0.0845**		0.0355	0.00714	mg/Kg dry	1	2/15/18 15:53	85-01-8	EPA 8270D PAH
Pyrene	**0.149**		0.0355	0.0113	mg/Kg dry	1	2/15/18 15:53	129-00-0	EPA 8270D PAH
Percent Moisture	**6.13**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-236 @ 0.0-0.5

Lab ID: L8B0099-33

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**93.7**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**6.28**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-236 @ 0.5-2

Lab ID: L8B0099-34

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.87**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-237 @ 0.0-0.5

Lab ID: L8B0099-37

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Fluoranthene	**0.0387**		0.0348	0.0104	mg/Kg dry	1	2/15/18 18:40	206-44-0	EPA 8270D PAH
Pyrene	**0.0376**		0.0348	0.0111	mg/Kg dry	1	2/15/18 18:40	129-00-0	EPA 8270D PAH
Percent Moisture	**5.62**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-237 @ 0.5-2

Lab ID: L8B0099-38

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.1**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**4.94**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-238 @ 0.0-0.5

Lab ID: L8B0099-41

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.6**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
1-Methylnaphthalene	**0.0397**		0.0345	0.0115	mg/Kg dry	1	2/16/18 10:40	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	**0.0456**		0.0345	0.0139	mg/Kg dry	1	2/16/18 10:40	91-57-6	EPA 8270D PAH
Acenaphthene	**0.517**		0.0345	0.0136	mg/Kg dry	1	2/16/18 10:40	83-32-9	EPA 8270D PAH
Anthracene	**1.31**		0.0345	0.00911	mg/Kg dry	1	2/16/18 10:40	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**4.27**		0.0345	0.00963	mg/Kg dry	1	2/16/18 10:40	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**4.49**		0.0345	0.0164	mg/Kg dry	1	2/16/18 10:40	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**5.19**		0.0345	0.0154	mg/Kg dry	1	2/16/18 10:40	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**3.34**		0.0345	0.0160	mg/Kg dry	1	2/16/18 10:40	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**2.40**		0.0345	0.0119	mg/Kg dry	1	2/16/18 10:40	207-08-9	EPA 8270D PAH
Chrysene	**4.38**		0.0345	0.00818	mg/Kg dry	1	2/16/18 10:40	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**1.17**		0.0345	0.0153	mg/Kg dry	1	2/16/18 10:40	53-70-3	EPA 8270D PAH
Fluoranthene	**10.7**		0.173	0.0513	mg/Kg dry	5	2/16/18 15:02	206-44-0	EPA 8270D PAH
Fluorene	**0.348**		0.0345	0.0111	mg/Kg dry	1	2/16/18 10:40	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**2.98**		0.0345	0.0168	mg/Kg dry	1	2/16/18 10:40	193-39-5	EPA 8270D PAH
Naphthalene	**0.117**		0.0345	0.0119	mg/Kg dry	1	2/16/18 10:40	91-20-3	EPA 8270D PAH
Phenanthrene	**5.77**		0.0345	0.00694	mg/Kg dry	1	2/16/18 10:40	85-01-8	EPA 8270D PAH
Pyrene	**6.75**		0.0345	0.0110	mg/Kg dry	1	2/16/18 10:40	129-00-0	EPA 8270D PAH
Percent Moisture	**5.41**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-238 @ 0.5-2

Lab ID: L8B0099-42

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.2**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Anthracene	**0.0536**		0.0350	0.00925	mg/Kg dry	1	2/16/18 11:00	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.227**		0.0350	0.00978	mg/Kg dry	1	2/16/18 11:00	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.235**		0.0350	0.0166	mg/Kg dry	1	2/16/18 11:00	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.239**		0.0350	0.0157	mg/Kg dry	1	2/16/18 11:00	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.205**		0.0350	0.0163	mg/Kg dry	1	2/16/18 11:00	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.187**		0.0350	0.0121	mg/Kg dry	1	2/16/18 11:00	207-08-9	EPA 8270D PAH
Chrysene	**0.242**		0.0350	0.00831	mg/Kg dry	1	2/16/18 11:00	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0655**		0.0350	0.0156	mg/Kg dry	1	2/16/18 11:00	53-70-3	EPA 8270D PAH
Fluoranthene	**0.509**		0.0350	0.0104	mg/Kg dry	1	2/16/18 11:00	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.177**		0.0350	0.0170	mg/Kg dry	1	2/16/18 11:00	193-39-5	EPA 8270D PAH
Phenanthrene	**0.255**		0.0350	0.00704	mg/Kg dry	1	2/16/18 11:00	85-01-8	EPA 8270D PAH
Pyrene	**0.364**		0.0350	0.0111	mg/Kg dry	1	2/16/18 11:00	129-00-0	EPA 8270D PAH
Percent Moisture	**5.82**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-239 @ 0.0-0.5

Lab ID: L8B0099-45

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.0**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.0429**		0.0346	0.00965	mg/Kg dry	1	2/16/18 11:23	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0484**		0.0346	0.0164	mg/Kg dry	1	2/16/18 11:23	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.0560**		0.0346	0.0155	mg/Kg dry	1	2/16/18 11:23	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0477**		0.0346	0.0161	mg/Kg dry	1	2/16/18 11:23	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0401**		0.0346	0.0119	mg/Kg dry	1	2/16/18 11:23	207-08-9	EPA 8270D PAH
Chrysene	**0.0505**		0.0346	0.00819	mg/Kg dry	1	2/16/18 11:23	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0795**		0.0346	0.0103	mg/Kg dry	1	2/16/18 11:23	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0422**		0.0346	0.0168	mg/Kg dry	1	2/16/18 11:23	193-39-5	EPA 8270D PAH
Pyrene	**0.0622**		0.0346	0.0110	mg/Kg dry	1	2/16/18 11:23	129-00-0	EPA 8270D PAH
Percent Moisture	**4.03**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-239 @ 0.5-2

Lab ID: L8B0099-46

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Acenaphthene	**0.133**		0.0347	0.0136	mg/Kg dry	1	2/15/18 19:20	83-32-9	EPA 8270D PAH
Anthracene	**0.301**		0.0347	0.00916	mg/Kg dry	1	2/15/18 19:20	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.896**		0.0347	0.00968	mg/Kg dry	1	2/15/18 19:20	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.898**		0.0347	0.0164	mg/Kg dry	1	2/15/18 19:20	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.979**		0.0347	0.0155	mg/Kg dry	1	2/15/18 19:20	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.677**		0.0347	0.0161	mg/Kg dry	1	2/15/18 19:20	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.678**		0.0347	0.0120	mg/Kg dry	1	2/15/18 19:20	207-08-9	EPA 8270D PAH
Chrysene	**0.896**		0.0347	0.00822	mg/Kg dry	1	2/15/18 19:20	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.229**		0.0347	0.0154	mg/Kg dry	1	2/15/18 19:20	53-70-3	EPA 8270D PAH
Fluoranthene	**1.88**		0.0347	0.0103	mg/Kg dry	1	2/15/18 19:20	206-44-0	EPA 8270D PAH
Fluorene	**0.0992**		0.0347	0.0111	mg/Kg dry	1	2/15/18 19:20	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.595**		0.0347	0.0169	mg/Kg dry	1	2/15/18 19:20	193-39-5	EPA 8270D PAH
Phenanthrene	**1.38**		0.0347	0.00697	mg/Kg dry	1	2/15/18 19:20	85-01-8	EPA 8270D PAH
Pyrene	**1.59**		0.0347	0.0110	mg/Kg dry	1	2/15/18 19:20	129-00-0	EPA 8270D PAH
Percent Moisture	**4.58**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-239 @ 2-4

Lab ID: L8B0099-47

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**96.8**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**3.20**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

Sample: FLB-239 @ 4-6

Lab ID: L8B0099-48

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**99.0**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G
Percent Moisture	**0.980**		0.100	0.100	%	1	2/20/18 15:00		SM 2540G

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-240 @ 0.0-0.5

Lab ID: L8B0099-49

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.4**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Benzo(a)anthracene	**0.111**		0.0352	0.00982	mg/Kg dry	1	2/15/18 19:40	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.131**		0.0352	0.0167	mg/Kg dry	1	2/15/18 19:40	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.142**		0.0352	0.0157	mg/Kg dry	1	2/15/18 19:40	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.114**		0.0352	0.0164	mg/Kg dry	1	2/15/18 19:40	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.110**		0.0352	0.0121	mg/Kg dry	1	2/15/18 19:40	207-08-9	EPA 8270D PAH
Chrysene	**0.121**		0.0352	0.00834	mg/Kg dry	1	2/15/18 19:40	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0433**		0.0352	0.0156	mg/Kg dry	1	2/15/18 19:40	53-70-3	EPA 8270D PAH
Fluoranthene	**0.201**		0.0352	0.0105	mg/Kg dry	1	2/15/18 19:40	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0936**		0.0352	0.0171	mg/Kg dry	1	2/15/18 19:40	193-39-5	EPA 8270D PAH
Phenanthrene	**0.109**		0.0352	0.00708	mg/Kg dry	1	2/15/18 19:40	85-01-8	EPA 8270D PAH
Pyrene	**0.184**		0.0352	0.0112	mg/Kg dry	1	2/15/18 19:40	129-00-0	EPA 8270D PAH
Percent Moisture	**5.62**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-240 @ 0.5-2

Lab ID: L8B0099-50

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.8**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.22**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-240 @ 2-4

Lab ID: L8B0099-51

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**89.5**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**10.5**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

Sample: FLB-240 @ 4-6

Lab ID: L8B0099-52

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.8**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G
Percent Moisture	**5.16**		0.100	0.100	%	1	2/13/18 15:15		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results

Client Sample ID: FLB-228 @ 0.0-0.5
Lab Sample ID: L8B0099-01 (Solid) **Sampled:2/8/18 8:12**

PAHs (SVOCs) by Method 8270D

Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0120	U	0.0360	0.0120	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	90-12-0
2-Methylnaphthalene	0.0145	U	0.0360	0.0145	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	91-57-6
Acenaphthene	0.0141	U	0.0360	0.0141	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	83-32-9
Acenaphthylene	0.0120	U	0.0360	0.0120	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	208-96-8
Anthracene	0.00949	U	0.0360	0.00949	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	120-12-7
Benzo(a)anthracene	**0.0521**		0.0360	0.0100	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	56-55-3
Benzo(a)pyrene	**0.0539**		0.0360	0.0170	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	50-32-8
Benzo(b)fluoranthene	**0.0539**		0.0360	0.0161	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	205-99-2
Benzo(g,h,i)perylene	**0.0428**		0.0360	0.0167	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	191-24-2
Benzo(k)fluoranthene	**0.0406**		0.0360	0.0124	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	207-08-9
Chrysene	**0.0547**		0.0360	0.00852	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	218-01-9
Dibenz(a,h)Anthracene	0.0160	U	0.0360	0.0160	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	53-70-3
Fluoranthene	**0.100**		0.0360	0.0107	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	206-44-0
Fluorene	0.0115	U	0.0360	0.0115	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0410**		0.0360	0.0175	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	193-39-5
Naphthalene	0.0124	U	0.0360	0.0124	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	91-20-3
Phenanthrene	**0.0600**		0.0360	0.00723	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	85-01-8
Pyrene	**0.0805**		0.0360	0.0114	mg/Kg dry	1	2/14/18 15:49	2/14/18 21:29	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*64%*	*16-110*				2/14/18 21:29	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*54%*	*19-105*				2/14/18 21:29	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*82%*	*20-137*				2/14/18 21:29	1718-51-0

Percent Moisture by Method 2540G

Laboratory:XENCO Labora Analyst:MAB

% Solids	**92.7**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**7.29**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-228 @ 0.5-2
Lab Sample ID: L8B0099-02 (Solid) **Sampled:2/8/18 8:14**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	120-12-7
Benzo(a)anthracene	0.00979	U	0.0351	0.00979	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	207-08-9
Chrysene	0.00831	U	0.0351	0.00831	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0351	0.0170	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 15:49	2/15/18 13:48	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*42%*	*16-110*				2/15/18 13:48	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*36%*	*19-105*				2/15/18 13:48	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*82%*	*20-137*				2/15/18 13:48	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.99**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-229 @ 0.0-0.5
Lab Sample ID: L8B0099-05 (Solid) **Sampled:2/8/18 8:24**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	90-12-0
2-Methylnaphthalene	0.0142	U	0.0353	0.0142	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	91-57-6
Acenaphthene	0.0139	U	0.0353	0.0139	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	83-32-9
Acenaphthylene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	208-96-8
Anthracene	0.00933	U	0.0353	0.00933	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	120-12-7
Benzo(a)anthracene	**0.0739**		0.0353	0.00986	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	56-55-3
Benzo(a)pyrene	**0.0863**		0.0353	0.0168	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	50-32-8
Benzo(b)fluoranthene	**0.0873**		0.0353	0.0158	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	205-99-2
Benzo(g,h,i)perylene	**0.0746**		0.0353	0.0164	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	191-24-2
Benzo(k)fluoranthene	**0.0728**		0.0353	0.0122	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	207-08-9
Chrysene	**0.0813**		0.0353	0.00838	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	218-01-9
Dibenz(a,h)Anthracene	0.0157	U	0.0353	0.0157	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	53-70-3
Fluoranthene	**0.129**		0.0353	0.0105	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	206-44-0
Fluorene	0.0113	U	0.0353	0.0113	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0633**		0.0353	0.0172	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	193-39-5
Naphthalene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	91-20-3
Phenanthrene	**0.0806**		0.0353	0.00711	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	85-01-8
Pyrene	**0.130**		0.0353	0.0112	mg/Kg dry	1	2/14/18 15:49	2/15/18 14:11	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*67%*	*16-110*				2/15/18 14:11	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/15/18 14:11	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*95%*	*20-137*				2/15/18 14:11	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.71**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-229 @ 0.5-2
Lab Sample ID: L8B0099-06 (Solid) **Sampled:2/8/18 8:26**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	120-12-7
Benzo(a)anthracene	0.00979	U	0.0351	0.00979	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	207-08-9
Chrysene	0.00832	U	0.0351	0.00832	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0351	0.0171	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 18:46	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*54%*	*16-110*				2/14/18 18:46	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/14/18 18:46	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/14/18 18:46	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.00**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-230 @ 0.0-0.5
Lab Sample ID: L8B0099-09 (Solid) **Sampled:2/8/18 13:28**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	90-12-0
2-Methylnaphthalene	0.0142	U	0.0353	0.0142	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	91-57-6
Acenaphthene	0.0139	U	0.0353	0.0139	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	83-32-9
Acenaphthylene	0.0118	U	0.0353	0.0118	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	208-96-8
Anthracene	0.00933	U	0.0353	0.00933	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	120-12-7
Benzo(a)anthracene	0.00986	U	0.0353	0.00986	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	56-55-3
Benzo(a)pyrene	0.0168	U	0.0353	0.0168	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	50-32-8
Benzo(b)fluoranthene	0.0158	U	0.0353	0.0158	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0353	0.0164	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	191-24-2
Benzo(k)fluoranthene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	207-08-9
Chrysene	0.00838	U	0.0353	0.00838	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	218-01-9
Dibenz(a,h)Anthracene	0.0157	U	0.0353	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	53-70-3
Fluoranthene	0.0105	U	0.0353	0.0105	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	206-44-0
Fluorene	0.0113	U	0.0353	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	86-73-7
Indeno(1,2,3-cd)pyrene	0.0172	U	0.0353	0.0172	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	193-39-5
Naphthalene	0.0122	U	0.0353	0.0122	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	91-20-3
Phenanthrene	0.00710	U	0.0353	0.00710	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	85-01-8
Pyrene	0.0112	U	0.0353	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:06	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*51%*	*16-110*				2/14/18 19:06	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/14/18 19:06	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/14/18 19:06	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.72**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-230 @ 0.5-2
Lab Sample ID: L8B0099-10 (Solid) **Sampled:2/8/18 13:31**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	120-12-7
Benzo(a)anthracene	0.00979	U	0.0351	0.00979	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	207-08-9
Chrysene	0.00831	U	0.0351	0.00831	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0351	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:26	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*72%*	*16-110*				2/14/18 19:26	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*62%*	*19-105*				2/14/18 19:26	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/14/18 19:26	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.96**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-231 @ 0.0-0.5
Lab Sample ID: L8B0099-13 (Solid) **Sampled:2/8/18 13:18**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	120-12-7
Benzo(a)anthracene	0.00978	U	0.0351	0.00978	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	56-55-3
Benzo(a)pyrene	0.0166	U	0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	207-08-9
Chrysene	0.00831	U	0.0351	0.00831	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	53-70-3
Fluoranthene	0.0104	U	0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0351	0.0170	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	85-01-8
Pyrene	0.0112	U	0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/15/18 14:31	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*67%*	*16-110*				2/15/18 14:31	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/15/18 14:31	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*91%*	*20-137*				2/15/18 14:31	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.94**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-231 @ 0.5-2
Lab Sample ID: L8B0099-14 (Solid) **Sampled:2/8/18 13:21**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	90-12-0
2-Methylnaphthalene	0.0142	U	0.0352	0.0142	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	208-96-8
Anthracene	0.00930	U	0.0352	0.00930	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	120-12-7
Benzo(a)anthracene	0.00982	U	0.0352	0.00982	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	56-55-3
Benzo(a)pyrene	0.0167	U	0.0352	0.0167	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0352	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0352	0.0164	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	207-08-9
Chrysene	0.00834	U	0.0352	0.00834	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0352	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	53-70-3
Fluoranthene	**0.0518**		0.0352	0.0105	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0352	0.0171	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	193-39-5
Naphthalene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	91-20-3
Phenanthrene	0.00708	U	0.0352	0.00708	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	85-01-8
Pyrene	**0.0433**		0.0352	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:49	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*55%*	*16-110*				2/14/18 21:49	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/14/18 21:49	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/14/18 21:49	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.7**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.33**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-232 @ 0.0-0.5
Lab Sample ID: L8B0099-17 (Solid) **Sampled:2/8/18 12:39**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	90-12-0
2-Methylnaphthalene	0.0141	U	0.0352	0.0141	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	208-96-8
Anthracene	0.00929	U	0.0352	0.00929	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	120-12-7
Benzo(a)anthracene	0.00982	U	0.0352	0.00982	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	56-55-3
Benzo(a)pyrene	0.0167	U	0.0352	0.0167	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0352	0.0157	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	205-99-2
Benzo(g,h,i)perylene	0.0164	U	0.0352	0.0164	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	207-08-9
Chrysene	0.00834	U	0.0352	0.00834	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0352	0.0156	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	53-70-3
Fluoranthene	0.0105	U	0.0352	0.0105	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	86-73-7
Indeno(1,2,3-cd)pyrene	0.0171	U	0.0352	0.0171	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	193-39-5
Naphthalene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	91-20-3
Phenanthrene	0.00707	U	0.0352	0.00707	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	85-01-8
Pyrene	0.0112	U	0.0352	0.0112	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:13	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*71%*	*16-110*				2/15/18 15:13	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*59%*	*19-105*				2/15/18 15:13	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*106%*	*20-137*				2/15/18 15:13	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.7**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.32**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-232 @ 0.5-2
Lab Sample ID: L8B0099-18 (Solid) **Sampled:2/8/18 12:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	208-96-8
Anthracene	0.00923	U	0.0349	0.00923	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	120-12-7
Benzo(a)anthracene	0.00975	U	0.0349	0.00975	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	56-55-3
Benzo(a)pyrene	0.0166	U	0.0349	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0349	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	207-08-9
Chrysene	0.00828	U	0.0349	0.00828	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	193-39-5
Naphthalene	0.0121	U	0.0349	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	91-20-3
Phenanthrene	0.00702	U	0.0349	0.00702	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/14/18 11:40	2/14/18 19:47	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*52%*	*16-110*				2/14/18 19:47	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/14/18 19:47	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/14/18 19:47	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.64**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-233 @ 0.0-0.5
Lab Sample ID: L8B0099-21 (Solid) **Sampled:2/8/18 12:49**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	208-96-8
Anthracene	0.00925	U	0.0350	0.00925	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	120-12-7
Benzo(a)anthracene	0.00977	U	0.0350	0.00977	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0350	0.0157	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	207-08-9
Chrysene	0.00830	U	0.0350	0.00830	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	91-20-3
Phenanthrene	0.00704	U	0.0350	0.00704	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:07	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*47%*	*16-110*				2/14/18 20:07	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*41%*	*19-105*				2/14/18 20:07	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/14/18 20:07	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.85**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-233 @ 0.5-2
Lab Sample ID: L8B0099-22 (Solid) **Sampled:2/8/18 12:51**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	91-57-6
Acenaphthene	0.0137	U	0.0350	0.0137	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	83-32-9
Acenaphthylene	0.0116	U	0.0350	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	208-96-8
Anthracene	0.00923	U	0.0350	0.00923	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	120-12-7
Benzo(a)anthracene	0.00976	U	0.0350	0.00976	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	207-08-9
Chrysene	0.00829	U	0.0350	0.00829	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0350	0.0155	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	91-20-3
Phenanthrene	0.00703	U	0.0350	0.00703	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/14/18 11:40	2/14/18 20:27	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*56%*	*16-110*				2/14/18 20:27	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*48%*	*19-105*				2/14/18 20:27	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*85%*	*20-137*				2/14/18 20:27	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.72**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 0.0-0.5
Lab Sample ID: L8B0099-25 (Solid) **Sampled:2/8/18 10:34**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.265**		0.176	0.0587	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	90-12-0
2-Methylnaphthalene	**0.448**		0.176	0.0709	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	91-57-6
Acenaphthene	**3.10**		0.176	0.0693	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	83-32-9
Acenaphthylene	0.0587	U	0.176	0.0587	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	208-96-8
Anthracene	**5.14**		0.176	0.0466	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	120-12-7
Benzo(a)anthracene	**9.98**		0.176	0.0492	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	56-55-3
Benzo(a)pyrene	**9.56**		0.176	0.0836	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	50-32-8
Benzo(b)fluoranthene	**10.7**		0.176	0.0788	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	205-99-2
Benzo(g,h,i)perylene	**7.15**		0.176	0.0820	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	191-24-2
Benzo(k)fluoranthene	**6.42**		0.176	0.0608	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	207-08-9
Chrysene	**9.48**		0.176	0.0418	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	218-01-9
Dibenz(a,h)Anthracene	**2.57**		0.176	0.0783	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	53-70-3
Fluoranthene	**23.4**		0.176	0.0524	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	206-44-0
Fluorene	**2.42**		0.176	0.0566	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	86-73-7
Indeno(1,2,3-cd)pyrene	**6.43**		0.176	0.0857	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	193-39-5
Naphthalene	**1.51**		0.176	0.0608	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	91-20-3
Phenanthrene	**21.4**		0.176	0.0354	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	85-01-8
Pyrene	**17.1**		0.176	0.0561	mg/Kg dry	5	2/14/18 11:40	2/14/18 20:48	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/14/18 20:48	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*57%*	*19-105*				2/14/18 20:48	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*79%*	*20-137*				2/14/18 20:48	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.5**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.49**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 0.5-2
Lab Sample ID: L8B0099-26 (Solid) **Sampled:2/8/18 10:36**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	90-12-0
2-Methylnaphthalene	0.0145	U	0.0361	0.0145	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	91-57-6
Acenaphthene	0.0142	U	0.0361	0.0142	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	83-32-9
Acenaphthylene	0.0120	U	0.0361	0.0120	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	208-96-8
Anthracene	**0.0986**		0.0361	0.00954	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	120-12-7
Benzo(a)anthracene	**0.627**		0.0361	0.0101	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	56-55-3
Benzo(a)pyrene	**0.706**		0.0361	0.0171	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	50-32-8
Benzo(b)fluoranthene	**0.693**		0.0361	0.0161	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	205-99-2
Benzo(g,h,i)perylene	**0.561**		0.0361	0.0168	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	191-24-2
Benzo(k)fluoranthene	**0.599**		0.0361	0.0125	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	207-08-9
Chrysene	**0.678**		0.0361	0.00856	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	218-01-9
Dibenz(a,h)Anthracene	**0.184**		0.0361	0.0160	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	53-70-3
Fluoranthene	**1.09**		0.0361	0.0107	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	206-44-0
Fluorene	0.0116	U	0.0361	0.0116	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	86-73-7
Indeno(1,2,3-cd)pyrene	**0.497**		0.0361	0.0176	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	193-39-5
Naphthalene	0.0125	U	0.0361	0.0125	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	91-20-3
Phenanthrene	**0.337**		0.0361	0.00726	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	85-01-8
Pyrene	**0.925**		0.0361	0.0115	mg/Kg dry	1	2/14/18 11:40	2/14/18 21:08	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*42%*	*16-110*				2/14/18 21:08	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*37%*	*19-105*				2/14/18 21:08	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*77%*	*20-137*				2/14/18 21:08	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**92.3**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**7.72**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 2-4
Lab Sample ID: L8B0099-27 (Solid) **Sampled:2/8/18 11:00**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	90-12-0
2-Methylnaphthalene	0.0136	U	0.0339	0.0136	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	91-57-6
Acenaphthene	0.0133	U	0.0339	0.0133	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	83-32-9
Acenaphthylene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	208-96-8
Anthracene	0.00895	U	0.0339	0.00895	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	120-12-7
Benzo(a)anthracene	0.00946	U	0.0339	0.00946	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	56-55-3
Benzo(a)pyrene	0.0161	U	0.0339	0.0161	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	50-32-8
Benzo(b)fluoranthene	0.0152	U	0.0339	0.0152	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	205-99-2
Benzo(g,h,i)perylene	0.0158	U	0.0339	0.0158	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	207-08-9
Chrysene	0.00803	U	0.0339	0.00803	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	218-01-9
Dibenz(a,h)Anthracene	0.0151	U	0.0339	0.0151	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	53-70-3
Fluoranthene	0.0101	U	0.0339	0.0101	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	206-44-0
Fluorene	0.0109	U	0.0339	0.0109	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	86-73-7
Indeno(1,2,3-cd)pyrene	0.0165	U	0.0339	0.0165	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	193-39-5
Naphthalene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	91-20-3
Phenanthrene	0.00681	U	0.0339	0.00681	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	85-01-8
Pyrene	0.0108	U	0.0339	0.0108	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:34	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*69%*	*16-110*				2/22/18 20:34	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*59%*	*19-105*				2/22/18 20:34	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*92%*	*20-137*				2/22/18 20:34	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**96.9**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**3.06**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-234 @ 4-6
Lab Sample ID: L8B0099-28 (Solid) **Sampled:2/8/18 11:03**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0111	U	0.0335	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	90-12-0
2-Methylnaphthalene	0.0135	U	0.0335	0.0135	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	91-57-6
Acenaphthene	0.0132	U	0.0335	0.0132	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	83-32-9
Acenaphthylene	0.0111	U	0.0335	0.0111	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	208-96-8
Anthracene	0.00883	U	0.0335	0.00883	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	120-12-7
Benzo(a)anthracene	0.00934	U	0.0335	0.00934	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	56-55-3
Benzo(a)pyrene	0.0159	U	0.0335	0.0159	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	50-32-8
Benzo(b)fluoranthene	0.0150	U	0.0335	0.0150	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	205-99-2
Benzo(g,h,i)perylene	0.0156	U	0.0335	0.0156	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	191-24-2
Benzo(k)fluoranthene	0.0115	U	0.0335	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	207-08-9
Chrysene	0.00793	U	0.0335	0.00793	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	218-01-9
Dibenz(a,h)Anthracene	0.0149	U	0.0335	0.0149	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	53-70-3
Fluoranthene	0.00994	U	0.0335	0.00994	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	206-44-0
Fluorene	0.0107	U	0.0335	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	86-73-7
Indeno(1,2,3-cd)pyrene	0.0163	U	0.0335	0.0163	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	193-39-5
Naphthalene	0.0115	U	0.0335	0.0115	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	91-20-3
Phenanthrene	0.00673	U	0.0335	0.00673	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	85-01-8
Pyrene	0.0106	U	0.0335	0.0106	mg/Kg dry	1	2/21/18 13:00	2/22/18 20:55	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*45%*	*16-110*				2/22/18 20:55	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*39%*	*19-105*				2/22/18 20:55	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/22/18 20:55	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**97.2**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**2.82**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-235 @ 0.0-0.5
Lab Sample ID: L8B0099-29 (Solid) **Sampled:2/8/18 12:13**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	90-12-0
2-Methylnaphthalene	0.0141	U	0.0351	0.0141	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	91-57-6
Acenaphthene	0.0138	U	0.0351	0.0138	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	83-32-9
Acenaphthylene	0.0117	U	0.0351	0.0117	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	208-96-8
Anthracene	0.00926	U	0.0351	0.00926	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	120-12-7
Benzo(a)anthracene	**0.0484**		0.0351	0.00979	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	56-55-3
Benzo(a)pyrene	**0.0586**		0.0351	0.0166	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	50-32-8
Benzo(b)fluoranthene	**0.0642**		0.0351	0.0157	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	205-99-2
Benzo(g,h,i)perylene	**0.0498**		0.0351	0.0163	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	191-24-2
Benzo(k)fluoranthene	**0.0481**		0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	207-08-9
Chrysene	**0.0551**		0.0351	0.00832	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0351	0.0156	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	53-70-3
Fluoranthene	**0.0888**		0.0351	0.0104	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	206-44-0
Fluorene	0.0113	U	0.0351	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0418**		0.0351	0.0171	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	193-39-5
Naphthalene	0.0121	U	0.0351	0.0121	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	91-20-3
Phenanthrene	0.00705	U	0.0351	0.00705	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	85-01-8
Pyrene	**0.0754**		0.0351	0.0112	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:33	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*57%*	*16-110*				2/15/18 15:33	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/15/18 15:33	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*89%*	*20-137*				2/15/18 15:33	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.9**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.07**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-235 @ 0.5-2
Lab Sample ID: L8B0099-30 (Solid) **Sampled:2/8/18 12:15**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0118	U	0.0355	0.0118	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	90-12-0
2-Methylnaphthalene	0.0143	U	0.0355	0.0143	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	91-57-6
Acenaphthene	0.0140	U	0.0355	0.0140	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	83-32-9
Acenaphthylene	0.0118	U	0.0355	0.0118	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	208-96-8
Anthracene	0.00937	U	0.0355	0.00937	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	120-12-7
Benzo(a)anthracene	**0.0866**		0.0355	0.00991	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	56-55-3
Benzo(a)pyrene	**0.0955**		0.0355	0.0168	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	50-32-8
Benzo(b)fluoranthene	**0.0891**		0.0355	0.0159	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	205-99-2
Benzo(g,h,i)perylene	**0.0763**		0.0355	0.0165	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	191-24-2
Benzo(k)fluoranthene	**0.0795**		0.0355	0.0123	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	207-08-9
Chrysene	**0.0937**		0.0355	0.00842	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	218-01-9
Dibenz(a,h)Anthracene	0.0158	U	0.0355	0.0158	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	53-70-3
Fluoranthene	**0.170**		0.0355	0.0105	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	206-44-0
Fluorene	0.0114	U	0.0355	0.0114	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0671**		0.0355	0.0173	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	193-39-5
Naphthalene	0.0123	U	0.0355	0.0123	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	91-20-3
Phenanthrene	**0.0845**		0.0355	0.00714	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	85-01-8
Pyrene	**0.149**		0.0355	0.0113	mg/Kg dry	1	2/14/18 11:40	2/15/18 15:53	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*54%*	*16-110*				2/15/18 15:53	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*46%*	*19-105*				2/15/18 15:53	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/15/18 15:53	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**93.9**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**6.13**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-236 @ 0.0-0.5
Lab Sample ID: L8B0099-33 (Solid) **Sampled:2/8/18 9:58**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	208-96-8
Anthracene	0.00921	U	0.0349	0.00921	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	120-12-7
Benzo(a)anthracene	0.00974	U	0.0349	0.00974	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	56-55-3
Benzo(a)pyrene	0.0165	U	0.0349	0.0165	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	207-08-9
Chrysene	0.00827	U	0.0349	0.00827	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	193-39-5
Naphthalene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	91-20-3
Phenanthrene	0.00701	U	0.0349	0.00701	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/14/18 15:49	2/16/18 10:19	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*59%*	*16-110*				2/16/18 10:19	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*51%*	*19-105*				2/16/18 10:19	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*67%*	*20-137*				2/16/18 10:19	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**93.7**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**6.28**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-236 @ 0.5-2
Lab Sample ID: L8B0099-34 (Solid) **Sampled:2/8/18 10:00**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	90-12-0
2-Methylnaphthalene	0.0139	U	0.0345	0.0139	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	91-57-6
Acenaphthene	0.0136	U	0.0345	0.0136	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	208-96-8
Anthracene	0.00910	U	0.0345	0.00910	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	120-12-7
Benzo(a)anthracene	0.00962	U	0.0345	0.00962	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	56-55-3
Benzo(a)pyrene	0.0163	U	0.0345	0.0163	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0345	0.0154	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0345	0.0160	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	207-08-9
Chrysene	0.00817	U	0.0345	0.00817	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0345	0.0153	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	53-70-3
Fluoranthene	0.0102	U	0.0345	0.0102	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	206-44-0
Fluorene	0.0111	U	0.0345	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	86-73-7
Indeno(1,2,3-cd)pyrene	0.0168	U	0.0345	0.0168	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	193-39-5
Naphthalene	0.0119	U	0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	91-20-3
Phenanthrene	0.00693	U	0.0345	0.00693	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	85-01-8
Pyrene	0.0110	U	0.0345	0.0110	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:20	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*46%*	*16-110*				2/15/18 18:20	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*39%*	*19-105*				2/15/18 18:20	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*87%*	*20-137*				2/15/18 18:20	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**95.1**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.87**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-237 @ 0.0-0.5
Lab Sample ID: L8B0099-37 (Solid) **Sampled:2/8/18 10:11**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0116	U	0.0348	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	90-12-0
2-Methylnaphthalene	0.0140	U	0.0348	0.0140	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	91-57-6
Acenaphthene	0.0137	U	0.0348	0.0137	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	83-32-9
Acenaphthylene	0.0116	U	0.0348	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	208-96-8
Anthracene	0.00920	U	0.0348	0.00920	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	120-12-7
Benzo(a)anthracene	0.00972	U	0.0348	0.00972	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	56-55-3
Benzo(a)pyrene	0.0165	U	0.0348	0.0165	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0348	0.0156	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0348	0.0162	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0348	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	207-08-9
Chrysene	0.00826	U	0.0348	0.00826	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0348	0.0155	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	53-70-3
Fluoranthene	**0.0387**		0.0348	0.0104	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	206-44-0
Fluorene	0.0112	U	0.0348	0.0112	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	86-73-7
Indeno(1,2,3-cd)pyrene	0.0169	U	0.0348	0.0169	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	193-39-5
Naphthalene	0.0120	U	0.0348	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	91-20-3
Phenanthrene	0.00701	U	0.0348	0.00701	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	85-01-8
Pyrene	**0.0376**		0.0348	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 18:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*68%*	*16-110*				2/15/18 18:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*56%*	*19-105*				2/15/18 18:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/15/18 18:40	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**94.4**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.62**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-237 @ 0.5-2
Lab Sample ID: L8B0099-38 (Solid) **Sampled:2/8/18 10:14**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0344	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	90-12-0
2-Methylnaphthalene	0.0138	U	0.0344	0.0138	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	91-57-6
Acenaphthene	0.0135	U	0.0344	0.0135	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	83-32-9
Acenaphthylene	0.0115	U	0.0344	0.0115	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	208-96-8
Anthracene	0.00909	U	0.0344	0.00909	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	120-12-7
Benzo(a)anthracene	0.00961	U	0.0344	0.00961	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	56-55-3
Benzo(a)pyrene	0.0163	U	0.0344	0.0163	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	50-32-8
Benzo(b)fluoranthene	0.0154	U	0.0344	0.0154	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	205-99-2
Benzo(g,h,i)perylene	0.0160	U	0.0344	0.0160	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	191-24-2
Benzo(k)fluoranthene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	207-08-9
Chrysene	0.00816	U	0.0344	0.00816	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0344	0.0153	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	53-70-3
Fluoranthene	0.0102	U	0.0344	0.0102	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	206-44-0
Fluorene	0.0111	U	0.0344	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	86-73-7
Indeno(1,2,3-cd)pyrene	0.0167	U	0.0344	0.0167	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	193-39-5
Naphthalene	0.0119	U	0.0344	0.0119	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	91-20-3
Phenanthrene	0.00692	U	0.0344	0.00692	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	85-01-8
Pyrene	0.0109	U	0.0344	0.0109	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:00	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*68%*	*16-110*				2/15/18 19:00	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*57%*	*19-105*				2/15/18 19:00	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*84%*	*20-137*				2/15/18 19:00	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.1**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.94**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-238 @ 0.0-0.5
Lab Sample ID: L8B0099-41 (Solid) **Sampled:2/8/18 8:54**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	**0.0397**		0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	90-12-0
2-Methylnaphthalene	**0.0456**		0.0345	0.0139	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	91-57-6
Acenaphthene	**0.517**		0.0345	0.0136	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	83-32-9
Acenaphthylene	0.0115	U	0.0345	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	208-96-8
Anthracene	**1.31**		0.0345	0.00911	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	120-12-7
Benzo(a)anthracene	**4.27**		0.0345	0.00963	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	56-55-3
Benzo(a)pyrene	**4.49**		0.0345	0.0164	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	50-32-8
Benzo(b)fluoranthene	**5.19**		0.0345	0.0154	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	205-99-2
Benzo(g,h,i)perylene	**3.34**		0.0345	0.0160	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	191-24-2
Benzo(k)fluoranthene	**2.40**		0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	207-08-9
Chrysene	**4.38**		0.0345	0.00818	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	218-01-9
Dibenz(a,h)Anthracene	**1.17**		0.0345	0.0153	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	53-70-3
Fluoranthene	**10.7**		0.173	0.0513	mg/Kg dry	5	2/15/18 8:26	2/16/18 15:02	206-44-0
Fluorene	**0.348**		0.0345	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	86-73-7
Indeno(1,2,3-cd)pyrene	**2.98**		0.0345	0.0168	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	193-39-5
Naphthalene	**0.117**		0.0345	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	91-20-3
Phenanthrene	**5.77**		0.0345	0.00694	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	85-01-8
Pyrene	**6.75**		0.0345	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 10:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*57%*	*16-110*				2/16/18 10:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*44%*	*19-105*				2/16/18 10:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*68%*	*20-137*				2/16/18 10:40	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.6**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.41**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-238 @ 0.5-2
Lab Sample ID: L8B0099-42 (Solid) **Sampled:2/8/18 8:57**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	208-96-8
Anthracene	**0.0536**		0.0350	0.00925	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	120-12-7
Benzo(a)anthracene	**0.227**		0.0350	0.00978	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	56-55-3
Benzo(a)pyrene	**0.235**		0.0350	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	50-32-8
Benzo(b)fluoranthene	**0.239**		0.0350	0.0157	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	205-99-2
Benzo(g,h,i)perylene	**0.205**		0.0350	0.0163	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	191-24-2
Benzo(k)fluoranthene	**0.187**		0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	207-08-9
Chrysene	**0.242**		0.0350	0.00831	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	218-01-9
Dibenz(a,h)Anthracene	**0.0655**		0.0350	0.0156	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	53-70-3
Fluoranthene	**0.509**		0.0350	0.0104	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	206-44-0
Fluorene	0.0112	U	0.0350	0.0112	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	86-73-7
Indeno(1,2,3-cd)pyrene	**0.177**		0.0350	0.0170	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	91-20-3
Phenanthrene	**0.255**		0.0350	0.00704	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	85-01-8
Pyrene	**0.364**		0.0350	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:00	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*44%*	*16-110*				2/16/18 11:00	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*40%*	*19-105*				2/16/18 11:00	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*74%*	*20-137*				2/16/18 11:00	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.2**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.82**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 0.0-0.5
Lab Sample ID: L8B0099-45 (Solid) **Sampled:2/8/18 9:37**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	90-12-0
2-Methylnaphthalene	0.0139	U	0.0346	0.0139	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	91-57-6
Acenaphthene	0.0136	U	0.0346	0.0136	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	83-32-9
Acenaphthylene	0.0115	U	0.0346	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	208-96-8
Anthracene	0.00913	U	0.0346	0.00913	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	120-12-7
Benzo(a)anthracene	**0.0429**		0.0346	0.00965	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	56-55-3
Benzo(a)pyrene	**0.0484**		0.0346	0.0164	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	50-32-8
Benzo(b)fluoranthene	**0.0560**		0.0346	0.0155	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	205-99-2
Benzo(g,h,i)perylene	**0.0477**		0.0346	0.0161	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	191-24-2
Benzo(k)fluoranthene	**0.0401**		0.0346	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	207-08-9
Chrysene	**0.0505**		0.0346	0.00819	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	218-01-9
Dibenz(a,h)Anthracene	0.0153	U	0.0346	0.0153	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	53-70-3
Fluoranthene	**0.0795**		0.0346	0.0103	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	206-44-0
Fluorene	0.0111	U	0.0346	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0422**		0.0346	0.0168	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	193-39-5
Naphthalene	0.0119	U	0.0346	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	91-20-3
Phenanthrene	0.00695	U	0.0346	0.00695	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	85-01-8
Pyrene	**0.0622**		0.0346	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:23	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*36%*	*16-110*				2/16/18 11:23	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*31%*	*19-105*				2/16/18 11:23	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/16/18 11:23	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**96.0**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.03**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 0.5-2
Lab Sample ID: L8B0099-46 (Solid) **Sampled:2/8/18 9:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	90-12-0
2-Methylnaphthalene	0.0139	U	0.0347	0.0139	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	91-57-6
Acenaphthene	**0.133**		0.0347	0.0136	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	83-32-9
Acenaphthylene	0.0116	U	0.0347	0.0116	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	208-96-8
Anthracene	**0.301**		0.0347	0.00916	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	120-12-7
Benzo(a)anthracene	**0.896**		0.0347	0.00968	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	56-55-3
Benzo(a)pyrene	**0.898**		0.0347	0.0164	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	50-32-8
Benzo(b)fluoranthene	**0.979**		0.0347	0.0155	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	205-99-2
Benzo(g,h,i)perylene	**0.677**		0.0347	0.0161	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	191-24-2
Benzo(k)fluoranthene	**0.678**		0.0347	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	207-08-9
Chrysene	**0.896**		0.0347	0.00822	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	218-01-9
Dibenz(a,h)Anthracene	**0.229**		0.0347	0.0154	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	53-70-3
Fluoranthene	**1.88**		0.0347	0.0103	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	206-44-0
Fluorene	**0.0992**		0.0347	0.0111	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	86-73-7
Indeno(1,2,3-cd)pyrene	**0.595**		0.0347	0.0169	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	193-39-5
Naphthalene	0.0120	U	0.0347	0.0120	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	91-20-3
Phenanthrene	**1.38**		0.0347	0.00697	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	85-01-8
Pyrene	**1.59**		0.0347	0.0110	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:20	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*58%*	*16-110*				2/15/18 19:20	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*43%*	*19-105*				2/15/18 19:20	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/15/18 19:20	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**4.58**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 2-4
Lab Sample ID: L8B0099-47 (Solid) **Sampled:2/8/18 9:48**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	90-12-0
2-Methylnaphthalene	0.0136	U	0.0338	0.0136	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	91-57-6
Acenaphthene	0.0133	U	0.0338	0.0133	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	83-32-9
Acenaphthylene	0.0113	U	0.0338	0.0113	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	208-96-8
Anthracene	0.00892	U	0.0338	0.00892	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	120-12-7
Benzo(a)anthracene	0.00943	U	0.0338	0.00943	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	56-55-3
Benzo(a)pyrene	0.0160	U	0.0338	0.0160	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	50-32-8
Benzo(b)fluoranthene	0.0151	U	0.0338	0.0151	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	205-99-2
Benzo(g,h,i)perylene	0.0157	U	0.0338	0.0157	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	191-24-2
Benzo(k)fluoranthene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	207-08-9
Chrysene	0.00801	U	0.0338	0.00801	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	218-01-9
Dibenz(a,h)Anthracene	0.0150	U	0.0338	0.0150	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	53-70-3
Fluoranthene	0.0100	U	0.0338	0.0100	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	206-44-0
Fluorene	0.0108	U	0.0338	0.0108	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	86-73-7
Indeno(1,2,3-cd)pyrene	0.0164	U	0.0338	0.0164	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	193-39-5
Naphthalene	0.0117	U	0.0338	0.0117	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	91-20-3
Phenanthrene	0.00679	U	0.0338	0.00679	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	85-01-8
Pyrene	0.0107	U	0.0338	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:15	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*48%*	*16-110*				2/22/18 21:15	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*42%*	*19-105*				2/22/18 21:15	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*80%*	*20-137*				2/22/18 21:15	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**96.8**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**3.20**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-239 @ 4-6
Lab Sample ID: L8B0099-48 (Solid) **Sampled:2/8/18 9:51**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0112	U	0.0335	0.0112	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	90-12-0
2-Methylnaphthalene	0.0135	U	0.0335	0.0135	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	91-57-6
Acenaphthene	0.0132	U	0.0335	0.0132	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	83-32-9
Acenaphthylene	0.0112	U	0.0335	0.0112	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	208-96-8
Anthracene	0.00885	U	0.0335	0.00885	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	120-12-7
Benzo(a)anthracene	0.00935	U	0.0335	0.00935	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	56-55-3
Benzo(a)pyrene	0.0159	U	0.0335	0.0159	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	50-32-8
Benzo(b)fluoranthene	0.0150	U	0.0335	0.0150	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	205-99-2
Benzo(g,h,i)perylene	0.0156	U	0.0335	0.0156	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	191-24-2
Benzo(k)fluoranthene	0.0116	U	0.0335	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	207-08-9
Chrysene	0.00794	U	0.0335	0.00794	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	218-01-9
Dibenz(a,h)Anthracene	0.0149	U	0.0335	0.0149	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	53-70-3
Fluoranthene	0.00995	U	0.0335	0.00995	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	206-44-0
Fluorene	0.0108	U	0.0335	0.0108	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	86-73-7
Indeno(1,2,3-cd)pyrene	0.0163	U	0.0335	0.0163	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	193-39-5
Naphthalene	0.0116	U	0.0335	0.0116	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	91-20-3
Phenanthrene	0.00673	U	0.0335	0.00673	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	85-01-8
Pyrene	0.0107	U	0.0335	0.0107	mg/Kg dry	1	2/21/18 13:00	2/22/18 21:36	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*53%*	*16-110*				2/22/18 21:36	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/22/18 21:36	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*86%*	*20-137*				2/22/18 21:36	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:EB
% Solids	**99.0**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	
Percent Moisture	**0.980**		0.100	0.100	%	1	2/20/18 15:00	2/20/18 15:00	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 0.0-0.5
Lab Sample ID: L8B0099-49 (Solid) **Sampled:2/8/18 8:34**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	90-12-0
2-Methylnaphthalene	0.0142	U	0.0352	0.0142	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	91-57-6
Acenaphthene	0.0138	U	0.0352	0.0138	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	83-32-9
Acenaphthylene	0.0117	U	0.0352	0.0117	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	208-96-8
Anthracene	0.00929	U	0.0352	0.00929	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	120-12-7
Benzo(a)anthracene	**0.111**		0.0352	0.00982	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	56-55-3
Benzo(a)pyrene	**0.131**		0.0352	0.0167	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	50-32-8
Benzo(b)fluoranthene	**0.142**		0.0352	0.0157	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	205-99-2
Benzo(g,h,i)perylene	**0.114**		0.0352	0.0164	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	191-24-2
Benzo(k)fluoranthene	**0.110**		0.0352	0.0121	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	207-08-9
Chrysene	**0.121**		0.0352	0.00834	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	218-01-9
Dibenz(a,h)Anthracene	**0.0433**		0.0352	0.0156	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	53-70-3
Fluoranthene	**0.201**		0.0352	0.0105	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	206-44-0
Fluorene	0.0113	U	0.0352	0.0113	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0936**		0.0352	0.0171	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	193-39-5
Naphthalene	0.0121	U	0.0352	0.0121	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	91-20-3
Phenanthrene	**0.109**		0.0352	0.00708	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	85-01-8
Pyrene	**0.184**		0.0352	0.0112	mg/Kg dry	1	2/15/18 8:26	2/15/18 19:40	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*64%*	*16-110*				2/15/18 19:40	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*52%*	*19-105*				2/15/18 19:40	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*79%*	*20-137*				2/15/18 19:40	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.4**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.62**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 0.5-2
Lab Sample ID: L8B0099-50 (Solid) **Sampled:2/8/18 8:37**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	90-12-0
2-Methylnaphthalene	0.0140	U	0.0349	0.0140	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	91-57-6
Acenaphthene	0.0137	U	0.0349	0.0137	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	83-32-9
Acenaphthylene	0.0116	U	0.0349	0.0116	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	208-96-8
Anthracene	0.00922	U	0.0349	0.00922	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	120-12-7
Benzo(a)anthracene	0.00974	U	0.0349	0.00974	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	56-55-3
Benzo(a)pyrene	0.0166	U	0.0349	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	50-32-8
Benzo(b)fluoranthene	0.0156	U	0.0349	0.0156	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	205-99-2
Benzo(g,h,i)perylene	0.0162	U	0.0349	0.0162	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	191-24-2
Benzo(k)fluoranthene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	207-08-9
Chrysene	0.00828	U	0.0349	0.00828	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	218-01-9
Dibenz(a,h)Anthracene	0.0155	U	0.0349	0.0155	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	53-70-3
Fluoranthene	0.0104	U	0.0349	0.0104	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	206-44-0
Fluorene	0.0112	U	0.0349	0.0112	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0349	0.0170	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	193-39-5
Naphthalene	0.0120	U	0.0349	0.0120	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	91-20-3
Phenanthrene	0.00702	U	0.0349	0.00702	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	85-01-8
Pyrene	0.0111	U	0.0349	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 11:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*63%*	*16-110*				2/16/18 11:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*55%*	*19-105*				2/16/18 11:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*73%*	*20-137*				2/16/18 11:44	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**94.8**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.22**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 2-4
Lab Sample ID: L8B0099-51 (Solid) **Sampled:2/8/18 8:39**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0123	U	0.0370	0.0123	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	90-12-0
2-Methylnaphthalene	0.0149	U	0.0370	0.0149	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	91-57-6
Acenaphthene	0.0146	U	0.0370	0.0146	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	83-32-9
Acenaphthylene	0.0123	U	0.0370	0.0123	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	208-96-8
Anthracene	0.00978	U	0.0370	0.00978	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	120-12-7
Benzo(a)anthracene	0.0103	U	0.0370	0.0103	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	56-55-3
Benzo(a)pyrene	0.0176	U	0.0370	0.0176	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	50-32-8
Benzo(b)fluoranthene	0.0166	U	0.0370	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	205-99-2
Benzo(g,h,i)perylene	0.0172	U	0.0370	0.0172	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	191-24-2
Benzo(k)fluoranthene	0.0128	U	0.0370	0.0128	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	207-08-9
Chrysene	0.00878	U	0.0370	0.00878	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	218-01-9
Dibenz(a,h)Anthracene	0.0165	U	0.0370	0.0165	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	53-70-3
Fluoranthene	0.0110	U	0.0370	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	206-44-0
Fluorene	0.0119	U	0.0370	0.0119	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	86-73-7
Indeno(1,2,3-cd)pyrene	0.0180	U	0.0370	0.0180	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	193-39-5
Naphthalene	0.0128	U	0.0370	0.0128	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	91-20-3
Phenanthrene	0.00745	U	0.0370	0.00745	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	85-01-8
Pyrene	0.0118	U	0.0370	0.0118	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:04	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*61%*	*16-110*				2/16/18 12:04	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/16/18 12:04	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*75%*	*20-137*				2/16/18 12:04	1718-51-0

Percent Moisture by Method 2540G
Laboratory:XENCO Labora Analyst:MAB

% Solids	**89.5**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**10.5**	0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Sample Results
(Continued)

Client Sample ID: FLB-240 @ 4-6
Lab Sample ID: L8B0099-52 (Solid) **Sampled:2/8/18 8:41**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	90-12-0
2-Methylnaphthalene	0.0141	U	0.0350	0.0141	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	91-57-6
Acenaphthene	0.0138	U	0.0350	0.0138	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	83-32-9
Acenaphthylene	0.0117	U	0.0350	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	208-96-8
Anthracene	0.00925	U	0.0350	0.00925	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	120-12-7
Benzo(a)anthracene	0.00978	U	0.0350	0.00978	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	56-55-3
Benzo(a)pyrene	0.0166	U	0.0350	0.0166	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	50-32-8
Benzo(b)fluoranthene	0.0157	U	0.0350	0.0157	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	205-99-2
Benzo(g,h,i)perylene	0.0163	U	0.0350	0.0163	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	191-24-2
Benzo(k)fluoranthene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	207-08-9
Chrysene	0.00831	U	0.0350	0.00831	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	218-01-9
Dibenz(a,h)Anthracene	0.0156	U	0.0350	0.0156	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	53-70-3
Fluoranthene	0.0104	U	0.0350	0.0104	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	206-44-0
Fluorene	0.0113	U	0.0350	0.0113	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	86-73-7
Indeno(1,2,3-cd)pyrene	0.0170	U	0.0350	0.0170	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	193-39-5
Naphthalene	0.0121	U	0.0350	0.0121	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	91-20-3
Phenanthrene	0.00705	U	0.0350	0.00705	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	85-01-8
Pyrene	0.0111	U	0.0350	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 12:24	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*39%*	*16-110*				2/16/18 12:24	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*34%*	*19-105*				2/16/18 12:24	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*69%*	*20-137*				2/16/18 12:24	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.8**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	
Percent Moisture	**5.16**		0.100	0.100	%	1	2/10/18 12:20	2/13/18 15:15	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control

PAHs (SVOCs) by Method 8270D

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167											
Blank (B8B0167-BLK1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U,	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U,	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U,	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U,	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U,	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U,	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U,	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U,	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U,	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U,	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U,	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U,	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U,	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U,	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.945*		*mg/Kg wet*	*1.67*		*57*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.801*		*mg/Kg wet*	*1.67*		*48*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.16*		*mg/Kg wet*	*1.67*		*70*	*20-137*		
LCS (B8B0167-BS1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.887		0.0333	0.0111	mg/Kg wet	1.67		53	39-116		
2-Methylnaphthalene	0.877		0.0333	0.0134	mg/Kg wet	1.67		53	37-112		
Acenaphthene	0.944		0.0333	0.0131	mg/Kg wet	1.67		57	41-116		
Acenaphthylene	0.927		0.0333	0.0111	mg/Kg wet	1.67		56	42-126		
Anthracene	1.29		0.0333	0.00880	mg/Kg wet	1.67		77	39-127		
Benzo(a)anthracene	1.35		0.0333	0.00930	mg/Kg wet	1.67		81	40-129		
Benzo(a)pyrene	1.52		0.0333	0.0158	mg/Kg wet	1.67		91	36-141		
Benzo(b)fluoranthene	1.46		0.0333	0.0149	mg/Kg wet	1.67		87	34-139		
Benzo(g,h,i)perylene	1.58		0.0333	0.0155	mg/Kg wet	1.67		94	32-141		
Benzo(k)fluoranthene	1.46		0.0333	0.0115	mg/Kg wet	1.67		88	31-139		
Chrysene	1.40		0.0333	0.00790	mg/Kg wet	1.67		84	41-124		
Dibenz(a,h)Anthracene	1.56		0.0333	0.0148	mg/Kg wet	1.67		94	35-143		
Fluoranthene	1.26		0.0333	0.00990	mg/Kg wet	1.67		75	38-132		
Fluorene	0.987		0.0333	0.0107	mg/Kg wet	1.67		59	41-121		
Indeno(1,2,3-cd)pyrene	1.55		0.0333	0.0162	mg/Kg wet	1.67		93	27-160		
Naphthalene	0.884		0.0333	0.0115	mg/Kg wet	1.67		53	37-113		
Phenanthrene	1.20		0.0333	0.00670	mg/Kg wet	1.67		72	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
LCS (B8B0167-BS1)					Prepared & Analyzed: 2/14/2018						
Pyrene	1.38		0.0333	0.0106	mg/Kg wet	1.67		83	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.768*		*mg/Kg wet*	*1.67*		*46*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.36*		*mg/Kg wet*	*1.67*		*81*	*20-137*		
LCS Dup (B8B0167-BSD1)					Prepared & Analyzed: 2/14/2018						
1-Methylnaphthalene	0.898		0.0333	0.0111	mg/Kg wet	1.67		54	39-116	1	30
2-Methylnaphthalene	0.888		0.0333	0.0134	mg/Kg wet	1.67		53	37-112	1	30
Acenaphthene	0.922		0.0333	0.0131	mg/Kg wet	1.67		55	41-116	2	30
Acenaphthylene	0.907		0.0333	0.0111	mg/Kg wet	1.67		54	42-126	2	30
Anthracene	1.32		0.0333	0.00880	mg/Kg wet	1.67		79	39-127	2	30
Benzo(a)anthracene	1.36		0.0333	0.00930	mg/Kg wet	1.67		82	40-129	0.7	30
Benzo(a)pyrene	1.49		0.0333	0.0158	mg/Kg wet	1.67		90	36-141	2	30
Benzo(b)fluoranthene	1.43		0.0333	0.0149	mg/Kg wet	1.67		86	34-139	1	30
Benzo(g,h,i)perylene	1.58		0.0333	0.0155	mg/Kg wet	1.67		95	32-141	0.5	30
Benzo(k)fluoranthene	1.45		0.0333	0.0115	mg/Kg wet	1.67		87	31-139	0.6	30
Chrysene	1.42		0.0333	0.00790	mg/Kg wet	1.67		85	41-124	1	30
Dibenz(a,h)Anthracene	1.57		0.0333	0.0148	mg/Kg wet	1.67		94	35-143	0.4	30
Fluoranthene	1.27		0.0333	0.00990	mg/Kg wet	1.67		76	38-132	0.7	30
Fluorene	0.950		0.0333	0.0107	mg/Kg wet	1.67		57	41-121	4	30
Indeno(1,2,3-cd)pyrene	1.56		0.0333	0.0162	mg/Kg wet	1.67		93	27-160	0.4	30
Naphthalene	0.896		0.0333	0.0115	mg/Kg wet	1.67		54	37-113	1	30
Phenanthrene	1.19		0.0333	0.00670	mg/Kg wet	1.67		71	50-115	1	30
Pyrene	1.41		0.0333	0.0106	mg/Kg wet	1.67		84	42-138	2	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.775*		*mg/Kg wet*	*1.67*		*47*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.36*		*mg/Kg wet*	*1.67*		*81*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
Matrix Spike (B8B0167-MS1)		**Source: L8B0099-33**			Prepared: 2/14/2018	Analyzed: 2/15/2018					
1-Methylnaphthalene	0.921		0.0356	0.0118	mg/Kg dry	1.78	ND	52	39-116		
2-Methylnaphthalene	0.917		0.0356	0.0143	mg/Kg dry	1.78	ND	52	37-112		
Acenaphthene	0.988		0.0356	0.0140	mg/Kg dry	1.78	ND	56	41-116		
Acenaphthylene	0.981		0.0356	0.0118	mg/Kg dry	1.78	ND	55	41-118		
Anthracene	1.09		0.0356	0.00939	mg/Kg dry	1.78	ND	61	39-127		
Benzo(a)anthracene	1.13		0.0356	0.00992	mg/Kg dry	1.78	0.0199	62	40-129		
Benzo(a)pyrene	1.22		0.0356	0.0169	mg/Kg dry	1.78	0.0181	68	36-141		
Benzo(b)fluoranthene	1.20		0.0356	0.0159	mg/Kg dry	1.78	0.0202	66	34-139		
Benzo(g,h,i)perylene	1.22		0.0356	0.0165	mg/Kg dry	1.78	0.0181	68	32-141		
Benzo(k)fluoranthene	1.18		0.0356	0.0123	mg/Kg dry	1.78	0.0161	66	31-139		
Chrysene	1.15		0.0356	0.00843	mg/Kg dry	1.78	0.0192	64	41-124		
Dibenz(a,h)Anthracene	1.21		0.0356	0.0158	mg/Kg dry	1.78	ND	68	35-143		
Fluoranthene	1.06		0.0356	0.0106	mg/Kg dry	1.78	0.0328	58	38-132		
Fluorene	0.997		0.0356	0.0114	mg/Kg dry	1.78	ND	56	41-121		
Indeno(1,2,3-cd)pyrene	1.21		0.0356	0.0173	mg/Kg dry	1.78	ND	68	27-160		
Naphthalene	0.900		0.0356	0.0123	mg/Kg dry	1.78	ND	51	37-113		
Phenanthrene	1.09		0.0356	0.00715	mg/Kg dry	1.78	0.0206	60	50-115		
Pyrene	1.19		0.0356	0.0113	mg/Kg dry	1.78	0.0269	66	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.27*		*mg/Kg dry*	*1.78*		*72*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.08*		*mg/Kg dry*	*1.78*		*61*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.49*		*mg/Kg dry*	*1.78*		*84*	*20-137*		
Matrix Spike Dup (B8B0167-MSD1)		**Source: L8B0099-33**			Prepared: 2/14/2018	Analyzed: 2/15/2018					
1-Methylnaphthalene	1.13		0.0356	0.0118	mg/Kg dry	1.78	ND	63	39-116	20	30
2-Methylnaphthalene	1.11		0.0356	0.0143	mg/Kg dry	1.78	ND	62	37-112	19	30
Acenaphthene	1.23		0.0356	0.0140	mg/Kg dry	1.78	ND	69	41-116	22	30
Acenaphthylene	1.23		0.0356	0.0118	mg/Kg dry	1.78	ND	69	41-118	22	30
Anthracene	1.45		0.0356	0.00939	mg/Kg dry	1.78	ND	81	39-127	29	30
Benzo(a)anthracene	1.53		0.0356	0.00992	mg/Kg dry	1.78	0.0199	85	40-129	31	30
Benzo(a)pyrene	1.70		0.0356	0.0169	mg/Kg dry	1.78	0.0181	94	36-141	33	30
Benzo(b)fluoranthene	1.61		0.0356	0.0159	mg/Kg dry	1.78	0.0202	90	34-139	29	30
Benzo(g,h,i)perylene	1.74		0.0356	0.0165	mg/Kg dry	1.78	0.0181	97	32-141	35	30
Benzo(k)fluoranthene	1.45		0.0356	0.0123	mg/Kg dry	1.78	0.0161	81	31-139	20	30
Chrysene	1.57		0.0356	0.00843	mg/Kg dry	1.78	0.0192	87	41-124	31	30
Dibenz(a,h)Anthracene	1.71		0.0356	0.0158	mg/Kg dry	1.78	ND	96	35-143	34	30
Fluoranthene	1.28		0.0356	0.0106	mg/Kg dry	1.78	0.0328	70	38-132	19	30
Fluorene	1.27		0.0356	0.0114	mg/Kg dry	1.78	ND	72	41-121	24	30
Indeno(1,2,3-cd)pyrene	1.70		0.0356	0.0173	mg/Kg dry	1.78	ND	96	27-160	34	30
Naphthalene	1.07		0.0356	0.0123	mg/Kg dry	1.78	ND	60	37-113	17	30
Phenanthrene	1.45		0.0356	0.00715	mg/Kg dry	1.78	0.0206	80	50-115	28	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0167 (Continued)											
Matrix Spike Dup (B8B0167-MSD1)			**Source: L8B0099-33**		Prepared: 2/14/2018 Analyzed: 2/15/2018						
Pyrene	1.72		0.0356	0.0113	mg/Kg dry	1.78	0.0269	95	42-138	36	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.19*		*mg/Kg dry*	*1.78*		*67*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.975*		*mg/Kg dry*	*1.78*		*55*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.63*		*mg/Kg dry*	*1.78*		*91*	*20-137*		
Batch: B8B0178											
Blank (B8B0178-BLK1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U,	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U,	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U,	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U,	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U,	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U,	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U,	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U,	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U,	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U,	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U,	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U,	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U,	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U,	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.926*		*mg/Kg wet*	*1.67*		*56*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.780*		*mg/Kg wet*	*1.67*		*47*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.65*		*mg/Kg wet*	*1.67*		*99*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
LCS (B8B0178-BS1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	1.08		0.0333	0.0111	mg/Kg wet	1.67		65	39-116		
2-Methylnaphthalene	1.06		0.0333	0.0134	mg/Kg wet	1.67		64	37-112		
Acenaphthene	1.13		0.0333	0.0131	mg/Kg wet	1.67		68	41-116		
Acenaphthylene	1.12		0.0333	0.0111	mg/Kg wet	1.67		67	42-126		
Anthracene	1.37		0.0333	0.00880	mg/Kg wet	1.67		82	39-127		
Benzo(a)anthracene	1.46		0.0333	0.00930	mg/Kg wet	1.67		88	40-129		
Benzo(a)pyrene	1.59		0.0333	0.0158	mg/Kg wet	1.67		95	36-141		
Benzo(b)fluoranthene	1.55		0.0333	0.0149	mg/Kg wet	1.67		93	34-139		
Benzo(g,h,i)perylene	1.64		0.0333	0.0155	mg/Kg wet	1.67		98	32-141		
Benzo(k)fluoranthene	1.56		0.0333	0.0115	mg/Kg wet	1.67		93	31-139		
Chrysene	1.52		0.0333	0.00790	mg/Kg wet	1.67		91	41-124		
Dibenz(a,h)Anthracene	1.63		0.0333	0.0148	mg/Kg wet	1.67		98	35-143		
Fluoranthene	1.30		0.0333	0.00990	mg/Kg wet	1.67		78	38-132		
Fluorene	1.13		0.0333	0.0107	mg/Kg wet	1.67		68	41-121		
Indeno(1,2,3-cd)pyrene	1.62		0.0333	0.0162	mg/Kg wet	1.67		97	27-160		
Naphthalene	1.05		0.0333	0.0115	mg/Kg wet	1.67		63	37-113		
Phenanthrene	1.28		0.0333	0.00670	mg/Kg wet	1.67		77	50-115		
Pyrene	1.54		0.0333	0.0106	mg/Kg wet	1.67		92	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.09*		*mg/Kg wet*	*1.67*		*66*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.43*		*mg/Kg wet*	*1.67*		*86*	*20-137*		
LCS Dup (B8B0178-BSD1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	1.06		0.0333	0.0111	mg/Kg wet	1.67		63	39-116	2	30
2-Methylnaphthalene	1.04		0.0333	0.0134	mg/Kg wet	1.67		63	37-112	2	30
Acenaphthene	1.12		0.0333	0.0131	mg/Kg wet	1.67		67	41-116	1	30
Acenaphthylene	1.10		0.0333	0.0111	mg/Kg wet	1.67		66	42-126	1	30
Anthracene	1.32		0.0333	0.00880	mg/Kg wet	1.67		79	39-127	3	30
Benzo(a)anthracene	1.32		0.0333	0.00930	mg/Kg wet	1.67		79	40-129	10	30
Benzo(a)pyrene	1.48		0.0333	0.0158	mg/Kg wet	1.67		89	36-141	7	30
Benzo(b)fluoranthene	1.39		0.0333	0.0149	mg/Kg wet	1.67		83	34-139	10	30
Benzo(g,h,i)perylene	1.52		0.0333	0.0155	mg/Kg wet	1.67		91	32-141	8	30
Benzo(k)fluoranthene	1.42		0.0333	0.0115	mg/Kg wet	1.67		85	31-139	9	30
Chrysene	1.38		0.0333	0.00790	mg/Kg wet	1.67		83	41-124	10	30
Dibenz(a,h)Anthracene	1.50		0.0333	0.0148	mg/Kg wet	1.67		90	35-143	8	30
Fluoranthene	1.18		0.0333	0.00990	mg/Kg wet	1.67		71	38-132	9	30
Fluorene	1.11		0.0333	0.0107	mg/Kg wet	1.67		67	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.48		0.0333	0.0162	mg/Kg wet	1.67		89	27-160	9	30
Naphthalene	1.04		0.0333	0.0115	mg/Kg wet	1.67		63	37-113	0.6	30
Phenanthrene	1.26		0.0333	0.00670	mg/Kg wet	1.67		76	50-115	2	30

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
LCS Dup (B8B0178-BSD1)					Prepared & Analyzed: 2/15/2018						
Pyrene	1.45		0.0333	0.0106	mg/Kg wet	1.67		87	42-138	6	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.07*		*mg/Kg wet*	*1.67*		*64*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.899*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.34*		*mg/Kg wet*	*1.67*		*80*	*20-137*		
Matrix Spike (B8B0178-MS1)		**Source: L8B0120-05**			Prepared: 2/15/2018 Analyzed: 2/16/2018						
1-Methylnaphthalene	0.971		0.0362	0.0120	mg/Kg dry	1.81	ND	54	39-116		
2-Methylnaphthalene	0.930		0.0362	0.0145	mg/Kg dry	1.81	ND	51	37-112		
Acenaphthene	1.14		0.0362	0.0142	mg/Kg dry	1.81	ND	63	41-116		
Acenaphthylene	1.08		0.0362	0.0120	mg/Kg dry	1.81	ND	60	41-118		
Anthracene	1.42		0.0362	0.00955	mg/Kg dry	1.81	ND	79	39-127		
Benzo(a)anthracene	1.46		0.0362	0.0101	mg/Kg dry	1.81	ND	81	40-129		
Benzo(a)pyrene	1.57		0.0362	0.0171	mg/Kg dry	1.81	ND	87	36-141		
Benzo(b)fluoranthene	1.56		0.0362	0.0162	mg/Kg dry	1.81	0.0220	85	34-139		
Benzo(g,h,i)perylene	1.47		0.0362	0.0168	mg/Kg dry	1.81	0.0346	79	32-141		
Benzo(k)fluoranthene	1.50		0.0362	0.0125	mg/Kg dry	1.81	ND	83	31-139		
Chrysene	1.49		0.0362	0.00857	mg/Kg dry	1.81	0.0162	81	41-124		
Dibenz(a,h)Anthracene	1.46		0.0362	0.0161	mg/Kg dry	1.81	ND	81	35-143		
Fluoranthene	1.51		0.0362	0.0107	mg/Kg dry	1.81	0.0155	83	38-132		
Fluorene	1.25		0.0362	0.0116	mg/Kg dry	1.81	ND	69	41-121		
Indeno(1,2,3-cd)pyrene	1.44		0.0362	0.0176	mg/Kg dry	1.81	ND	80	27-160		
Naphthalene	0.826		0.0362	0.0125	mg/Kg dry	1.81	ND	46	37-113		
Phenanthrene	1.38		0.0362	0.00727	mg/Kg dry	1.81	0.0137	76	50-115		
Pyrene	1.38		0.0362	0.0115	mg/Kg dry	1.81	0.0231	75	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.907*		*mg/Kg dry*	*1.81*		*50*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.718*		*mg/Kg dry*	*1.81*		*40*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.26*		*mg/Kg dry*	*1.81*		*70*	*20-137*		

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
Matrix Spike Dup (B8B0178-MSD1)		**Source: L8B0120-05**			Prepared: 2/15/2018 Analyzed: 2/16/2018						
1-Methylnaphthalene	1.17		0.0357	0.0119	mg/Kg dry	1.79	ND	65	39-116	18	30
2-Methylnaphthalene	1.11		0.0357	0.0144	mg/Kg dry	1.79	ND	62	37-112	18	30
Acenaphthene	1.23		0.0357	0.0140	mg/Kg dry	1.79	ND	69	41-116	8	30
Acenaphthylene	1.22		0.0357	0.0119	mg/Kg dry	1.79	ND	68	41-118	12	30
Anthracene	1.41		0.0357	0.00943	mg/Kg dry	1.79	ND	79	39-127	0.5	30
Benzo(a)anthracene	1.42		0.0357	0.00997	mg/Kg dry	1.79	ND	79	40-129	3	30
Benzo(a)pyrene	1.53		0.0357	0.0169	mg/Kg dry	1.79	ND	86	36-141	2	30
Benzo(b)fluoranthene	1.56		0.0357	0.0160	mg/Kg dry	1.79	0.0220	86	34-139	0.3	30
Benzo(g,h,i)perylene	1.47		0.0357	0.0166	mg/Kg dry	1.79	0.0346	81	32-141	0.6	30
Benzo(k)fluoranthene	1.51		0.0357	0.0123	mg/Kg dry	1.79	ND	85	31-139	0.4	30
Chrysene	1.45		0.0357	0.00847	mg/Kg dry	1.79	0.0162	80	41-124	2	30
Dibenz(a,h)Anthracene	1.42		0.0357	0.0159	mg/Kg dry	1.79	ND	80	35-143	2	30
Fluoranthene	1.55		0.0357	0.0106	mg/Kg dry	1.79	0.0155	86	38-132	2	30
Fluorene	1.33		0.0357	0.0115	mg/Kg dry	1.79	ND	74	41-121	6	30
Indeno(1,2,3-cd)pyrene	1.43		0.0357	0.0174	mg/Kg dry	1.79	ND	80	27-160	1	30
Naphthalene	1.00		0.0357	0.0123	mg/Kg dry	1.79	ND	56	37-113	19	30
Phenanthrene	1.37		0.0357	0.00718	mg/Kg dry	1.79	0.0137	76	50-115	0.7	30
Pyrene	1.36		0.0357	0.0114	mg/Kg dry	1.79	0.0231	75	42-138	1	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.03*		*mg/Kg dry*	*1.79*		*58*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.812*		*mg/Kg dry*	*1.79*		*45*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.20*		*mg/Kg dry*	*1.79*		*67*	*20-137*		
Batch: B8B0238											
Blank (B8B0238-BLK1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U,	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U,	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U,	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U,	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U,	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U,	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U,	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U,	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U,	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U,	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U,	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U,	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U,	0.0333	0.0162	mg/Kg wet						

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Blank (B8B0238-BLK1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
Naphthalene	0.0115	U,	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U,	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U,	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.18*		*mg/Kg wet*	*1.67*		*71*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.04*		*mg/Kg wet*	*1.67*		*63*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.47*		*mg/Kg wet*	*1.67*		*88*	*20-137*		
LCS (B8B0238-BS1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.17		0.0333	0.0111	mg/Kg wet	1.67		70	39-116		
2-Methylnaphthalene	1.15		0.0333	0.0134	mg/Kg wet	1.67		69	37-112		
Acenaphthene	1.24		0.0333	0.0131	mg/Kg wet	1.67		74	41-116		
Acenaphthylene	1.21		0.0333	0.0111	mg/Kg wet	1.67		73	42-126		
Anthracene	1.43		0.0333	0.00880	mg/Kg wet	1.67		86	39-127		
Benzo(a)anthracene	1.48		0.0333	0.00930	mg/Kg wet	1.67		89	40-129		
Benzo(a)pyrene	1.66		0.0333	0.0158	mg/Kg wet	1.67		100	36-141		
Benzo(b)fluoranthene	1.59		0.0333	0.0149	mg/Kg wet	1.67		95	34-139		
Benzo(g,h,i)perylene	1.64		0.0333	0.0155	mg/Kg wet	1.67		99	32-141		
Benzo(k)fluoranthene	1.61		0.0333	0.0115	mg/Kg wet	1.67		96	31-139		
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124		
Dibenz(a,h)Anthracene	1.66		0.0333	0.0148	mg/Kg wet	1.67		99	35-143		
Fluoranthene	1.37		0.0333	0.00990	mg/Kg wet	1.67		82	38-132		
Fluorene	1.23		0.0333	0.0107	mg/Kg wet	1.67		74	41-121		
Indeno(1,2,3-cd)pyrene	1.63		0.0333	0.0162	mg/Kg wet	1.67		98	27-160		
Naphthalene	1.16		0.0333	0.0115	mg/Kg wet	1.67		69	37-113		
Phenanthrene	1.36		0.0333	0.00670	mg/Kg wet	1.67		81	50-115		
Pyrene	1.53		0.0333	0.0106	mg/Kg wet	1.67		92	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*74*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.08*		*mg/Kg wet*	*1.67*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.51*		*mg/Kg wet*	*1.67*		*91*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
LCS Dup (B8B0238-BSD1)					Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	1.19		0.0333	0.0111	mg/Kg wet	1.67		71	39-116	1	30
2-Methylnaphthalene	1.16		0.0333	0.0134	mg/Kg wet	1.67		69	37-112	1	30
Acenaphthene	1.25		0.0333	0.0131	mg/Kg wet	1.67		75	41-116	1	30
Acenaphthylene	1.23		0.0333	0.0111	mg/Kg wet	1.67		74	42-126	1	30
Anthracene	1.45		0.0333	0.00880	mg/Kg wet	1.67		87	39-127	1	30
Benzo(a)anthracene	1.47		0.0333	0.00930	mg/Kg wet	1.67		88	40-129	0.7	30
Benzo(a)pyrene	1.64		0.0333	0.0158	mg/Kg wet	1.67		98	36-141	1	30
Benzo(b)fluoranthene	1.56		0.0333	0.0149	mg/Kg wet	1.67		94	34-139	2	30
Benzo(g,h,i)perylene	1.63		0.0333	0.0155	mg/Kg wet	1.67		98	32-141	0.9	30
Benzo(k)fluoranthene	1.58		0.0333	0.0115	mg/Kg wet	1.67		95	31-139	2	30
Chrysene	1.55		0.0333	0.00790	mg/Kg wet	1.67		93	41-124	0.06	30
Dibenz(a,h)Anthracene	1.64		0.0333	0.0148	mg/Kg wet	1.67		99	35-143	0.8	30
Fluoranthene	1.40		0.0333	0.00990	mg/Kg wet	1.67		84	38-132	2	30
Fluorene	1.25		0.0333	0.0107	mg/Kg wet	1.67		75	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.62		0.0333	0.0162	mg/Kg wet	1.67		97	27-160	0.6	30
Naphthalene	1.17		0.0333	0.0115	mg/Kg wet	1.67		70	37-113	1	30
Phenanthrene	1.40		0.0333	0.00670	mg/Kg wet	1.67		84	50-115	3	30
Pyrene	1.52		0.0333	0.0106	mg/Kg wet	1.67		91	42-138	0.5	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.24*		*mg/Kg wet*	*1.67*		*75*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.10*		*mg/Kg wet*	*1.67*		*66*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.46*		*mg/Kg wet*	*1.67*		*88*	*20-137*		
Matrix Spike (B8B0238-MS1)		**Source: L8B0099-48**			Prepared: 2/21/2018 Analyzed: 2/22/2018						
1-Methylnaphthalene	0.775		0.0329	0.0110	mg/Kg dry	1.65	ND	47	39-116		
2-Methylnaphthalene	0.775		0.0329	0.0132	mg/Kg dry	1.65	ND	47	37-112		
Acenaphthene	0.828		0.0329	0.0129	mg/Kg dry	1.65	ND	50	41-116		
Acenaphthylene	0.811		0.0329	0.0110	mg/Kg dry	1.65	ND	49	41-118		
Anthracene	1.18		0.0329	0.00869	mg/Kg dry	1.65	ND	71	39-127		
Benzo(a)anthracene	1.31		0.0329	0.00918	mg/Kg dry	1.65	ND	79	40-129		
Benzo(a)pyrene	1.45		0.0329	0.0156	mg/Kg dry	1.65	ND	88	36-141		
Benzo(b)fluoranthene	1.37		0.0329	0.0147	mg/Kg dry	1.65	ND	83	34-139		
Benzo(g,h,i)perylene	1.44		0.0329	0.0153	mg/Kg dry	1.65	ND	87	32-141		
Benzo(k)fluoranthene	1.39		0.0329	0.0114	mg/Kg dry	1.65	ND	84	31-139		
Chrysene	1.40		0.0329	0.00780	mg/Kg dry	1.65	ND	85	41-124		
Dibenz(a,h)Anthracene	1.46		0.0329	0.0146	mg/Kg dry	1.65	ND	89	35-143		
Fluoranthene	1.23		0.0329	0.00978	mg/Kg dry	1.65	ND	75	38-132		
Fluorene	0.824		0.0329	0.0106	mg/Kg dry	1.65	ND	50	41-121		
Indeno(1,2,3-cd)pyrene	1.43		0.0329	0.0160	mg/Kg dry	1.65	ND	87	27-160		
Naphthalene	0.774		0.0329	0.0114	mg/Kg dry	1.65	ND	47	37-113		
Phenanthrene	1.04		0.0329	0.00662	mg/Kg dry	1.65	ND	63	50-115		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0238 (Continued)											
Matrix Spike (B8B0238-MS1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
Pyrene	1.32		0.0329	0.0105	mg/Kg dry	1.65	ND	80	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.816*		*mg/Kg dry*	*1.65*		*50*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.722*		*mg/Kg dry*	*1.65*		*44*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.28*		*mg/Kg dry*	*1.65*		*78*	*20-137*		
Matrix Spike Dup (B8B0238-MSD1)		**Source: L8B0099-48**			Prepared: 2/21/2018	Analyzed: 2/22/2018					
1-Methylnaphthalene	1.11		0.0329	0.0110	mg/Kg dry	1.64	ND	68	39-116	36	30
2-Methylnaphthalene	1.10		0.0329	0.0132	mg/Kg dry	1.64	ND	67	37-112	35	30
Acenaphthene	1.17		0.0329	0.0129	mg/Kg dry	1.64	ND	71	41-116	34	30
Acenaphthylene	1.16		0.0329	0.0110	mg/Kg dry	1.64	ND	70	41-118	35	30
Anthracene	1.39		0.0329	0.00868	mg/Kg dry	1.64	ND	85	39-127	17	30
Benzo(a)anthracene	1.39		0.0329	0.00917	mg/Kg dry	1.64	ND	84	40-129	6	30
Benzo(a)pyrene	1.54		0.0329	0.0156	mg/Kg dry	1.64	ND	93	36-141	6	30
Benzo(b)fluoranthene	1.46		0.0329	0.0147	mg/Kg dry	1.64	ND	88	34-139	6	30
Benzo(g,h,i)perylene	1.52		0.0329	0.0153	mg/Kg dry	1.64	ND	92	32-141	5	30
Benzo(k)fluoranthene	1.46		0.0329	0.0113	mg/Kg dry	1.64	ND	89	31-139	6	30
Chrysene	1.47		0.0329	0.00779	mg/Kg dry	1.64	ND	89	41-124	5	30
Dibenz(a,h)Anthracene	1.52		0.0329	0.0146	mg/Kg dry	1.64	ND	93	35-143	4	30
Fluoranthene	1.34		0.0329	0.00977	mg/Kg dry	1.64	ND	81	38-132	8	30
Fluorene	1.18		0.0329	0.0106	mg/Kg dry	1.64	ND	72	41-121	35	30
Indeno(1,2,3-cd)pyrene	1.51		0.0329	0.0160	mg/Kg dry	1.64	ND	92	27-160	5	30
Naphthalene	1.11		0.0329	0.0113	mg/Kg dry	1.64	ND	67	37-113	35	30
Phenanthrene	1.33		0.0329	0.00661	mg/Kg dry	1.64	ND	81	50-115	25	30
Pyrene	1.46		0.0329	0.0105	mg/Kg dry	1.64	ND	89	42-138	10	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.16*		*mg/Kg dry*	*1.64*		*70*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*1.05*		*mg/Kg dry*	*1.64*		*64*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.39*		*mg/Kg dry*	*1.64*		*84*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

Percent Moisture by Method 2540G

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0142											
Duplicate (B8B0142-DUP1)		**Source: L8B0104-01**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	86.1		0.100	0.100	%		87.5			2	20
Percent Moisture	13.9		0.100	0.100	%		12.5			11	20
Duplicate (B8B0142-DUP2)		**Source: L8B0104-12**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	94.9		0.100	0.100	%		94.8			0.08	20
Percent Moisture	5.10		0.100	0.100	%		5.18			2	20
Duplicate (B8B0142-DUP3)		**Source: L8B0099-01**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	92.4		0.100	0.100	%		92.7			0.4	20
Percent Moisture	7.62		0.100	0.100	%		7.29			4	20
Duplicate (B8B0142-DUP4)		**Source: L8B0099-21**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	95.0		0.100	0.100	%		95.1			0.1	20
Percent Moisture	4.96		0.100	0.100	%		4.85			2	20
Duplicate (B8B0142-DUP5)		**Source: L8B0099-41**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	94.5		0.100	0.100	%		94.6			0.09	20
Percent Moisture	5.50		0.100	0.100	%		5.41			2	20
Duplicate (B8B0142-DUP6)		**Source: L8B0107-03**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	97.7		0.100	0.100	%		98.0			0.2	20
Percent Moisture	2.26		0.100	0.100	%		2.04			10	20
Batch: B8B0217											
Duplicate (B8B0217-DUP1)		**Source: L8B0186-02**			Prepared & Analyzed: 2/20/2018						
% Solids	77.9		0.100	0.100	%		77.2			0.9	20
Percent Moisture	22.1		0.100	0.100	%		22.8			3	20

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

Quality Control
(Continued)

Percent Moisture by Method 2540G (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0217 (Continued)											
Duplicate (B8B0217-DUP2)		**Source: L8B0040-21**			Prepared & Analyzed: 2/20/2018						
% Solids	84.7		0.100	0.100	%		85.4			0.8	20
Percent Moisture	15.3		0.100	0.100	%		14.6			5	20

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No duplication of this report is allowed, except in its entirety.

MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	2/26/18 14:29

List of Certifications for XENCO Laboratories - Tampa formerly FTS Analytical

Number	Description	Code	Facility	Expires
	Kentucky UST CERTIFICATION	UST KY	FTSL	06/30/2018
E84098	FL MICROBIOLOGY Lakeland CERT	LFLNELAC	FTSL	06/30/2018
E871002	Xenco FL CERT	FLNELAC	FTSL	06/30/2018
E87429	FL NELAC CERT Tampa	AFLNELAC	FTSL	06/30/2018
LI0-135	DoD CERTIFICATE	DOD	FTSL	12/11/2019
P330-07-00105	USDA CERTIFICATE	USDA	FTSL	

Notes and Definitions

Item	Definition
U	Compound was not detected.
Dry	Sample results reported on a dry weight basis.
I	Value estimated to be between the Laboratory Detection and Reporting Limit
J	QC Failure see Case Narrative
L	Concentration exceeds calibration range
N	Tentatively Identified Compound
Q	Hold time exceeded
V	Analyte equal to or above detection limit in the method blank
TNTC	Bacteria is present but Too Numerous To Count

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
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FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: [redacted] 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL) (PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 2.7 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type / Preservation Code
								8 / 9	
1	FLB-228C 0.0-0.5	0.0-0.5	2/8/18-0812	S		X	1	X	
2	FLB-228C 0.5-2	0.5-2	-0814	S		X	1	X	
3	FLB-228C 2-4	2-4	-0816	S		X	1	X	Hold
4	FLB-228C 4-6	4-6	-0818	S		X	1	X	Hold
5	FLB-229C 0.0-0.5	0.0-0.5	-0824	S		X	1	X	
6	FLB-229C 0.5-2	0.5-2	-0826	S		X	1	X	
7	FLB-229C 2-4	2-4	-0827	S		X	1	X	Hold
8	FLB-229C 4-6	4-6	-0829	S		X	1	X	Hold
9	FLB-230C 0.0-0.5	0.0-0.5	-1328	S		X	1	X	
10	FLB-230C 0.5-2	0.5-2	-1331	S		X	1	X	

1) Relinquished By: Richard Houde Date / Time 2/8/18-1517
2) Received By: [signature] Date / Time 2-8-18 1517
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / (Lab Pickup) / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
(STD TAT) 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@badger-tech.com
Contact Phone #: 210-215-5732 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.7 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	Container Type / Preservation Code
								GC / 9	
1	FLB-230C 2-4	2-4	2/8/18-1333	S		1	1	X	Hold
2	FLB-230C 4-6	4-6	-1335	S		1	1	X	Hold
3	FLB-231C 0.0-0.5	0.0-0.5	-1318	S		1	1	X	
4	FLB-231C 0.5-2	0.5-2	-1321	S		1	1	X	
5	FLB-231C 2-4	2-4	-1323	S		1	1	X	Hold
6	FLB-231C 4-6	4-6	-1325	S		1	1	X	Hold
7	FLB-232C 0.0-0.5	0.0-0.5	-1239	S		1	1	X	
8	FLB-232C 0.5-2	0.5-2	-1241	S		1	1	X	
9	FLB-232C 2-4	2-4	-1243	S		1	1	X	Hold
10	FLB-232C 4-6	4-6	-1245	S		1	1	X	Hold

1) Relinquished By: Richard Houde Date / Time 2/8/18-1517
2) Received By: [signature] Date / Time 2-8-18 1517
Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

3) Relinquished By: Date / Time
4) Received By: Date / Time

5) Relinquished By: Date / Time
6) Received By: Date / Time

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days 2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-Tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.7 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH												Container Type / Preservation Code
								GC												Container Type
								9												Preservation Code
1	FLB-233@0.0-0.5	0.0-0.5	2/8/18-1249	S		X	1	X												
2	FLB-233@0.5-2	0.5-2	-1251	S		X	1	X												
3	FLB-233@2-4	2-4	-1253	S		X	1	X												Hold
4	FLB-233@4-6	4-6	-1255	S		X	1	X												Hold
5	FLB-234@0.0-0.5	0.0-0.5	-1034	S		X	1	X												
6	FLB-234@0.5-2	0.5-2	-1036	S		X	1	X												
7	FLB-234@2-4	2-4	-1100	S		X	1	X												Hold
8	FLB-234@4-6	4-6	-1103	S		X	1	X												Hold
9	FLB-235@0.0-0.5	0.0-0.5	-1213	S		X	1	X												
10	FLB-235@0.5-2	0.5-2	-1215	S		X	1	X												

1) Relinquished By: Richard Houde Date / Time 2/8/18 1517
2) Received By: [signature] Date / Time 2-8-18 1517
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT? 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-Tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: (FL PRP) Dry-Cln (ADaPT) SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: L.C. / 2.7 IR-2
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC													Container Type
								9													Preservation Code
								PAH													
1	FLB-235 @ 2-4	2-4	2/8/18 - 1232	S		X	1	X													Hold
2	FLB-235 @ 4-6	4-6	- 1234	S		X	1	X													Hold
3	FLB-236 @ 0.0-0.5	0.0-0.5	- 0958	S		X	1	X													
4	FLB-236 @ 0.5-2	0.5-2	- 1000	S		X	1	X													
5	FLB-236 @ 2-4	2-4	- 1002	S		X	1	X													Hold
6	FLB-236 @ 4-6	4-6	- 1004	S		X	1	X													Hold
7	FLB-237 @ 0.0-0.5	0.0-0.5	- 1011	S		X	1	X													
8	FLB-237 @ 0.5-2	0.5-2	- 1014	S		X	1	X													
9	FLB-237 @ 2-4	2-4	- 1017	S		X	1	X													Hold
10	FLB-237 @ 4-6	4-6	- 1019	S		X	1	X													Hold

1) Relinquished By: Richard Houde Date / Time 2/8/18 - 1517
2) Received By: [signature] Date / Time 2-8-18 1517
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / (Lab Pickup) / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
(STD TAT:) 10 Days ; 5-7 Days; 3 Days
2 Days ; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-Tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Receiver's Initials/Temp: C.C. / 2.7 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC 9 PAH	Container Type / Preservation Code
1	FLB-238@0.0-0.5	0.0-0.5	2/8/18-0854	S		X	1	X	
2	FLB-238@0.5-2	0.5-2	-0857	S		X	1	X	
3	FLB-238@2-4	2-4	-0928	S		X	1	X	Hold
4	FLB-238@4-6	4-6	-0930	S		X	1	X	Hold
5	FLB-239@0.0-0.5	0.0-0.5	-0937	S		X	1	X	
6	FLB-239@0.5-2	0.5-2	-0941	S		X	1	X	
7	FLB-239@2-4	2-4	-0948	S		X	1	X	Hold
8	FLB-239@4-6	4-6	-0951	S		X	1	X	Hold
9			-	S		X	1	X	
10			-	S		X	1	X	

1) Relinquished By: Richard Houde Date / Time 2/8/18-1517
2) Received By: [signature] Date / Time 2-9-18 1517
Relinquished By: Date / Time
4) Received By: Date / Time
Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

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2 Days; 1 Day; Same Day

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Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

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6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: SpecPro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, Al 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA-Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.7 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0099
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC 9 PAH	Container Type / Preservation Code
1	FLB-240@0.0-0.5	0.0-0.5	2/8/18-0837	S		X	1	X	
2	FLB-240@0.5-2	0.5-2	-0837	S		X	1	X	
3	FLB-240@2-4	2-4	-0839	S		X	1	X	
4	FLB-240@4-6	4-6	-0841	S		X	1	X	
5				S		X	1	X	
6				S		X	1	X	
7				S		X	1	X	
8				S		X	1	X	
9				S		X	1	X	
10				S		X	1	X	

Richard Houde

1) Relinquished By:	Date / Time	2) Received By:	Date / Time
Richard Houde	2/8/18-1517	[signature]	2-8-18 1517
Relinquished By:	Date / Time	4) Received By:	Date / Time
Relinquished By:	Date / Time	6) Received By:	Date / Time

Delivered by: (Circle One)
Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

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Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA=Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

LAB REPORT
FENCE LINE SAMPLES & DRUM WASTE SAMPLES

Analytical Report

L8B0107

Project

Winter Haven

Project Number

Winter Haven

March 02, 2018

SpecPro Professional Services

12500 San Pedro Avenue, Suite 670

San Antonio, TX 78216

Minority Women Business Enterprise

Small Disadvantaged Business Enterprise

Minority Women Business Enterprise
Small Disadvantaged Business Enterprise

1412 Tech Blvd
Tampa, FL 33619

Phone #: 813-620-2000
Website: www.ftsanalytical.com

March 02, 2018

Richard Houde
SpecPro Professional Services
12500 San Pedro Avenue, Suite 670
San Antonio, TX 78216

RE: Winter Haven

We are reporting the results of the analyses performed on the samples recieved on 2/9/2018 under the project name referenced above and identified as the lab Work Order L8B0107. All results being reported under this Report apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontracted lab, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reporting using all other available quality control methods.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by FTS Analytical Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise agreed upon. The samples received, and described as recorded in Work Order L8B0107 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise agreed upon. We reserve the right to return to you any unused samples, extracts, or solutions if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding standard practices, controlled/regulated substances, etc.)

We thank you for selecting FTS Analytical to serve your analytical needs. If you have any questions concerning this report, please do not hesitate to contact us at any time. We will be happy to help.

Sincerely,

Chad A. Bechtold

Chad Bechtold
VP of Client Services

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8B0107-01	FLB-246 @ 0.0-0.5	Solid	09-Feb-2018 08:08	09-Feb-2018 12:40
L8B0107-02	FLB-246 @ 0.5-2	Solid	09-Feb-2018 08:11	09-Feb-2018 12:40
L8B0107-03	FLB-246 @ 2-4	Solid	09-Feb-2018 08:13	09-Feb-2018 12:40
L8B0107-04	FLB-246 @ 4-6	Solid	09-Feb-2018 08:15	09-Feb-2018 12:40
L8B0107-05	Fence - WA2	Solid	09-Feb-2018 09:10	09-Feb-2018 12:40
L8B0107-06	Tower - WA3	Solid	09-Feb-2018 09:15	09-Feb-2018 12:40
L8B0107-07	GSB-17 @ 0.0-0.5	Solid	09-Feb-2018 08:29	09-Feb-2018 12:40
L8B0107-08	GSB-17 @ 0.5-2	Solid	09-Feb-2018 08:32	09-Feb-2018 12:40
L8B0107-09	GSB-17 @ 2-4	Solid	09-Feb-2018 08:35	09-Feb-2018 12:40
L8B0107-10	GSB-17 @ 4-6	Solid	09-Feb-2018 08:38	09-Feb-2018 12:40
L8B0107-11	Garage - WA1	Solid	09-Feb-2018 09:05	09-Feb-2018 12:40

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SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:31

Hits Summary

(Not Including Subcontracted Analysis)

Sample: FLB-246 @ 0.0-0.5

Lab ID: L8B0107-01

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.6**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Benzo(a)anthracene	**0.0107**	I	0.0334	0.00933	mg/Kg dry	1	2/16/18 14:22	56-55-3	EPA 8270D PAH
Chrysene	**0.00869**	I	0.0334	0.00792	mg/Kg dry	1	2/16/18 14:22	218-01-9	EPA 8270D PAH
Fluoranthene	**0.0167**	I	0.0334	0.00993	mg/Kg dry	1	2/16/18 14:22	206-44-0	EPA 8270D PAH
Pyrene	**0.0120**	I	0.0334	0.0106	mg/Kg dry	1	2/16/18 14:22	129-00-0	EPA 8270D PAH
Percent Moisture	**2.36**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: FLB-246 @ 0.5-2

Lab ID: L8B0107-02

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.7**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Acenaphthene	**0.0224**	I	0.0339	0.0133	mg/Kg dry	1	2/16/18 14:42	83-32-9	EPA 8270D PAH
Anthracene	**0.0722**		0.0339	0.00895	mg/Kg dry	1	2/16/18 14:42	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.200**		0.0339	0.00946	mg/Kg dry	1	2/16/18 14:42	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.204**		0.0339	0.0161	mg/Kg dry	1	2/16/18 14:42	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.185**		0.0339	0.0152	mg/Kg dry	1	2/16/18 14:42	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.138**		0.0339	0.0158	mg/Kg dry	1	2/16/18 14:42	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.160**		0.0339	0.0117	mg/Kg dry	1	2/16/18 14:42	207-08-9	EPA 8270D PAH
Chrysene	**0.205**		0.0339	0.00803	mg/Kg dry	1	2/16/18 14:42	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0491**		0.0339	0.0150	mg/Kg dry	1	2/16/18 14:42	53-70-3	EPA 8270D PAH
Fluoranthene	**0.464**		0.0339	0.0101	mg/Kg dry	1	2/16/18 14:42	206-44-0	EPA 8270D PAH
Fluorene	**0.0183**	I	0.0339	0.0109	mg/Kg dry	1	2/16/18 14:42	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.126**		0.0339	0.0165	mg/Kg dry	1	2/16/18 14:42	193-39-5	EPA 8270D PAH
Phenanthrene	**0.281**		0.0339	0.00681	mg/Kg dry	1	2/16/18 14:42	85-01-8	EPA 8270D PAH
Pyrene	**0.303**		0.0339	0.0108	mg/Kg dry	1	2/16/18 14:42	129-00-0	EPA 8270D PAH
Percent Moisture	**4.27**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: FLB-246 @ 2-4

Lab ID: L8B0107-03

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**98.0**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Percent Moisture	**2.04**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-246 @ 4-6

Lab ID: L8B0107-04

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**97.8**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Anthracene	**0.0193**	I	0.0332	0.00878	mg/Kg dry	1	2/16/18 15:44	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	**0.0815**		0.0332	0.00928	mg/Kg dry	1	2/16/18 15:44	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	**0.0964**		0.0332	0.0158	mg/Kg dry	1	2/16/18 15:44	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	**0.107**		0.0332	0.0149	mg/Kg dry	1	2/16/18 15:44	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	**0.0751**		0.0332	0.0155	mg/Kg dry	1	2/16/18 15:44	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	**0.0791**		0.0332	0.0115	mg/Kg dry	1	2/16/18 15:44	207-08-9	EPA 8270D PAH
Chrysene	**0.106**		0.0332	0.00788	mg/Kg dry	1	2/16/18 15:44	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	**0.0156**	I	0.0332	0.0148	mg/Kg dry	1	2/16/18 15:44	53-70-3	EPA 8270D PAH
Fluoranthene	**0.228**		0.0332	0.00988	mg/Kg dry	1	2/16/18 15:44	206-44-0	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	**0.0688**		0.0332	0.0162	mg/Kg dry	1	2/16/18 15:44	193-39-5	EPA 8270D PAH
Phenanthrene	**0.124**		0.0332	0.00668	mg/Kg dry	1	2/16/18 15:44	85-01-8	EPA 8270D PAH
Pyrene	**0.143**		0.0332	0.0106	mg/Kg dry	1	2/16/18 15:44	129-00-0	EPA 8270D PAH
Percent Moisture	**2.20**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: Fence - WA2

Lab ID: L8B0107-05

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.6**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Mercury	**0.00141**		0.000200	0.0000700	mg/L	1	2/14/18 15:51	7439-97-6	EPA 7470A
Percent Moisture	**4.45**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: Tower - WA3

Lab ID: L8B0107-06

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.7**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Mercury	**0.00561**		0.000200	0.0000700	mg/L	1	2/14/18 15:51	7439-97-6	EPA 7470A
Percent Moisture	**5.33**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: GSB-17 @ 0.0-0.5

Lab ID: L8B0107-07

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**85.3**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Percent Moisture	**14.7**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: GSB-17 @ 0.5-2

Lab ID: L8B0107-08

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.3**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Percent Moisture	**4.71**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: GSB-17 @ 2-4

Lab ID: L8B0107-09

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Percent Moisture	**4.56**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: GSB-17 @ 4-6

Lab ID: L8B0107-10

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Percent Moisture	**4.58**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

Sample: Garage - WA1

Lab ID: L8B0107-11

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Analyzed	CAS #	Method
% Solids	**94.6**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G
Percent Moisture	**5.44**		0.100	0.100	%	1	2/10/18 12:20		SM 2540G

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results

Client Sample ID: FLB-246 @ 0.0-0.5
Lab Sample ID: L8B0107-01 (Solid) **Sampled:2/9/18 8:08**

PAHs (SVOCs) by Method 8270D

Laboratory:XENCO Labora Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	0.0111	U	0.0334	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	90-12-0
2-Methylnaphthalene	0.0134	U	0.0334	0.0134	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	91-57-6
Acenaphthene	0.0131	U	0.0334	0.0131	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	83-32-9
Acenaphthylene	0.0111	U	0.0334	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	208-96-8
Anthracene	0.00882	U	0.0334	0.00882	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	120-12-7
Benzo(a)anthracene	**0.0107**	I	0.0334	0.00933	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	56-55-3
Benzo(a)pyrene	0.0158	U	0.0334	0.0158	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	50-32-8
Benzo(b)fluoranthene	0.0149	U	0.0334	0.0149	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	205-99-2
Benzo(g,h,i)perylene	0.0155	U	0.0334	0.0155	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	191-24-2
Benzo(k)fluoranthene	0.0115	U	0.0334	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	207-08-9
Chrysene	**0.00869**	I	0.0334	0.00792	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	218-01-9
Dibenz(a,h)Anthracene	0.0148	U	0.0334	0.0148	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	53-70-3
Fluoranthene	**0.0167**	I	0.0334	0.00993	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	206-44-0
Fluorene	0.0107	U	0.0334	0.0107	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	86-73-7
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0334	0.0162	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	193-39-5
Naphthalene	0.0115	U	0.0334	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	91-20-3
Phenanthrene	0.00672	U	0.0334	0.00672	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	85-01-8
Pyrene	**0.0120**	I	0.0334	0.0106	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:22	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*53%*	*16-110*				2/16/18 14:22	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*45%*	*19-105*				2/16/18 14:22	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*70%*	*20-137*				2/16/18 14:22	1718-51-0

Percent Moisture by Method 2540G

Laboratory:XENCO Labora Analyst:MAB

% Solids	**97.6**	0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20
Percent Moisture	**2.36**	0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: FLB-246 @ 0.5-2
Lab Sample ID: L8B0107-02 (Solid) **Sampled:2/9/18 8:11**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	90-12-0
2-Methylnaphthalene	0.0136	U	0.0339	0.0136	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	91-57-6
Acenaphthene	**0.0224**	I	0.0339	0.0133	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	83-32-9
Acenaphthylene	0.0113	U	0.0339	0.0113	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	208-96-8
Anthracene	**0.0722**		0.0339	0.00895	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	120-12-7
Benzo(a)anthracene	**0.200**		0.0339	0.00946	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	56-55-3
Benzo(a)pyrene	**0.204**		0.0339	0.0161	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	50-32-8
Benzo(b)fluoranthene	**0.185**		0.0339	0.0152	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	205-99-2
Benzo(g,h,i)perylene	**0.138**		0.0339	0.0158	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	191-24-2
Benzo(k)fluoranthene	**0.160**		0.0339	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	207-08-9
Chrysene	**0.205**		0.0339	0.00803	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	218-01-9
Dibenz(a,h)Anthracene	**0.0491**		0.0339	0.0150	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	53-70-3
Fluoranthene	**0.464**		0.0339	0.0101	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	206-44-0
Fluorene	**0.0183**	I	0.0339	0.0109	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	86-73-7
Indeno(1,2,3-cd)pyrene	**0.126**		0.0339	0.0165	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	193-39-5
Naphthalene	0.0117	U	0.0339	0.0117	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	91-20-3
Phenanthrene	**0.281**		0.0339	0.00681	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	85-01-8
Pyrene	**0.303**		0.0339	0.0108	mg/Kg dry	1	2/15/18 8:26	2/16/18 14:42	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*44%*	*16-110*				2/16/18 14:42	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*37%*	*19-105*				2/16/18 14:42	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*75%*	*20-137*				2/16/18 14:42	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.7**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**4.27**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: FLB-246 @ 2-4
Lab Sample ID: L8B0107-03 (Solid) **Sampled:2/9/18 8:13**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0110	U	0.0332	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	90-12-0
2-Methylnaphthalene	0.0133	U	0.0332	0.0133	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	91-57-6
Acenaphthene	0.0130	U	0.0332	0.0130	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	83-32-9
Acenaphthylene	0.0110	U	0.0332	0.0110	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	208-96-8
Anthracene	0.00876	U	0.0332	0.00876	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	120-12-7
Benzo(a)anthracene	0.00925	U	0.0332	0.00925	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	56-55-3
Benzo(a)pyrene	0.0157	U	0.0332	0.0157	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	50-32-8
Benzo(b)fluoranthene	0.0148	U	0.0332	0.0148	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	205-99-2
Benzo(g,h,i)perylene	0.0154	U	0.0332	0.0154	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	191-24-2
Benzo(k)fluoranthene	0.0114	U	0.0332	0.0114	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	207-08-9
Chrysene	0.00786	U	0.0332	0.00786	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	218-01-9
Dibenz(a,h)Anthracene	0.0147	U	0.0332	0.0147	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	53-70-3
Fluoranthene	0.00985	U	0.0332	0.00985	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	206-44-0
Fluorene	0.0106	U	0.0332	0.0106	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	86-73-7
Indeno(1,2,3-cd)pyrene	0.0161	U	0.0332	0.0161	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	193-39-5
Naphthalene	0.0114	U	0.0332	0.0114	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	91-20-3
Phenanthrene	0.00667	U	0.0332	0.00667	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	85-01-8
Pyrene	0.0105	U	0.0332	0.0105	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:24	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*67%*	*16-110*				2/16/18 15:24	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*59%*	*19-105*				2/16/18 15:24	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*73%*	*20-137*				2/16/18 15:24	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**98.0**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**2.04**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: FLB-246 @ 4-6
Lab Sample ID: L8B0107-04 (Solid) **Sampled:2/9/18 8:15**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Labora									Analyst:BTJ
1-Methylnaphthalene	0.0111	U	0.0332	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	90-12-0
2-Methylnaphthalene	0.0134	U	0.0332	0.0134	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	91-57-6
Acenaphthene	0.0131	U	0.0332	0.0131	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	83-32-9
Acenaphthylene	0.0111	U	0.0332	0.0111	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	208-96-8
Anthracene	**0.0193**	I	0.0332	0.00878	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	120-12-7
Benzo(a)anthracene	**0.0815**		0.0332	0.00928	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	56-55-3
Benzo(a)pyrene	**0.0964**		0.0332	0.0158	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	50-32-8
Benzo(b)fluoranthene	**0.107**		0.0332	0.0149	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	205-99-2
Benzo(g,h,i)perylene	**0.0751**		0.0332	0.0155	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	191-24-2
Benzo(k)fluoranthene	**0.0791**		0.0332	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	207-08-9
Chrysene	**0.106**		0.0332	0.00788	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	218-01-9
Dibenz(a,h)Anthracene	**0.0156**	I	0.0332	0.0148	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	53-70-3
Fluoranthene	**0.228**		0.0332	0.00988	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	206-44-0
Fluorene	0.0107	U	0.0332	0.0107	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	86-73-7
Indeno(1,2,3-cd)pyrene	**0.0688**		0.0332	0.0162	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	193-39-5
Naphthalene	0.0115	U	0.0332	0.0115	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	91-20-3
Phenanthrene	**0.124**		0.0332	0.00668	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	85-01-8
Pyrene	**0.143**		0.0332	0.0106	mg/Kg dry	1	2/15/18 8:26	2/16/18 15:44	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)			*62%*	*16-110*				2/16/18 15:44	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)			*53%*	*19-105*				2/16/18 15:44	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)			*71%*	*20-137*				2/16/18 15:44	1718-51-0
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**97.8**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**2.20**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: Fence - WA2
Lab Sample ID: L8B0107-05 (Solid) **Sampled:2/9/18 9:10**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.6**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**4.45**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
TCLP 7 RCRA Metals by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Arsenic	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:35	7440-38-2
Barium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:35	7440-39-3
Cadmium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:35	7440-43-9
Chromium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:35	7440-47-3
Lead	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:35	7439-92-1
Selenium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:35	7782-49-2
Silver	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:35	7440-22-4
TCLP Mercury Analysis by Method 7470A									
Laboratory:XENCO Labora									Analyst:JEB
Mercury	**0.00141**		0.000200	0.0000700	mg/L	1	2/13/18 12:00	2/14/18 15:51	7439-97-6
TCLP VOCs by Method 8260B									
Laboratory:XENCO Labora									Analyst:JFL
1,1-Dichloroethene	0.00200	U	0.0100	0.00200	mg/L	10	2/14/18 9:53	2/14/18 18:59	75-35-4
1,2-Dichloroethane	0.00180	U	0.0100	0.00180	mg/L	10	2/14/18 9:53	2/14/18 18:59	107-06-2
1,4-Dichlorobenzene	0.00170	U	0.0100	0.00170	mg/L	10	2/14/18 9:53	2/14/18 18:59	106-46-7
2-Butanone (MEK)	0.00280	U	0.0200	0.00280	mg/L	10	2/14/18 9:53	2/14/18 18:59	78-93-3
Benzene	0.00160	U	0.0100	0.00160	mg/L	10	2/14/18 9:53	2/14/18 18:59	71-43-2
Carbon tetrachloride	0.00330	U	0.0100	0.00330	mg/L	10	2/14/18 9:53	2/14/18 18:59	56-23-5
Chlorobenzene	0.00150	U	0.0100	0.00150	mg/L	10	2/14/18 9:53	2/14/18 18:59	108-90-7
Chloroform	0.00160	U	0.0100	0.00160	mg/L	10	2/14/18 9:53	2/14/18 18:59	67-66-3
Tetrachloroethylene	0.00160	U	0.0100	0.00160	mg/L	10	2/14/18 9:53	2/14/18 18:59	127-18-4
Trichloroethylene	0.00190	U	0.0100	0.00190	mg/L	10	2/14/18 9:53	2/14/18 18:59	79-01-6
Vinyl chloride	0.00190	U	0.0100	0.00190	mg/L	10	2/14/18 9:53	2/14/18 18:59	75-01-4
Surrogate: 1,2-Dichloroethane-D4 (SUR)			*82%*	*53-159*				2/14/18 18:59	10706-07-0
Surrogate: 4-Bromofluorobenzene (SUR)			*99%*	*30-186*				2/14/18 18:59	460-00-4
Surrogate: Toluene-D8 (SUR)			*118%*	*70-130*				2/14/18 18:59	2037-26-5

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: Tower - WA3
Lab Sample ID: L8B0107-06 (Solid) **Sampled:2/9/18 9:15**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.7**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**5.33**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
TCLP 7 RCRA Metals by Method 6010C									
Laboratory:XENCO Labora									Analyst:ALG
Arsenic	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:37	7440-38-2
Barium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:37	7440-39-3
Cadmium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:37	7440-43-9
Chromium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:37	7440-47-3
Lead	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:37	7439-92-1
Selenium	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:37	7782-49-2
Silver	0.0500	U	0.250	0.0500	mg/L	1	2/14/18 11:30	2/15/18 11:37	7440-22-4
TCLP Mercury Analysis by Method 7470A									
Laboratory:XENCO Labora									Analyst:JEB
Mercury	**0.00561**		0.000200	0.0000700	mg/L	1	2/13/18 12:00	2/14/18 15:51	7439-97-6
TCLP VOCs by Method 8260B									
Laboratory:XENCO Labora									Analyst:JFL
1,1-Dichloroethene	0.00200	U	0.0100	0.00200	mg/L	10	2/14/18 9:53	2/14/18 19:26	75-35-4
1,2-Dichloroethane	0.00180	U	0.0100	0.00180	mg/L	10	2/14/18 9:53	2/14/18 19:26	107-06-2
1,4-Dichlorobenzene	0.00170	U	0.0100	0.00170	mg/L	10	2/14/18 9:53	2/14/18 19:26	106-46-7
2-Butanone (MEK)	0.00280	U	0.0200	0.00280	mg/L	10	2/14/18 9:53	2/14/18 19:26	78-93-3
Benzene	0.00160	U	0.0100	0.00160	mg/L	10	2/14/18 9:53	2/14/18 19:26	71-43-2
Carbon tetrachloride	0.00330	U	0.0100	0.00330	mg/L	10	2/14/18 9:53	2/14/18 19:26	56-23-5
Chlorobenzene	0.00150	U	0.0100	0.00150	mg/L	10	2/14/18 9:53	2/14/18 19:26	108-90-7
Chloroform	0.00160	U	0.0100	0.00160	mg/L	10	2/14/18 9:53	2/14/18 19:26	67-66-3
Tetrachloroethylene	0.00160	U	0.0100	0.00160	mg/L	10	2/14/18 9:53	2/14/18 19:26	127-18-4
Trichloroethylene	0.00190	U	0.0100	0.00190	mg/L	10	2/14/18 9:53	2/14/18 19:26	79-01-6
Vinyl chloride	0.00190	U	0.0100	0.00190	mg/L	10	2/14/18 9:53	2/14/18 19:26	75-01-4
Surrogate: 1,2-Dichloroethane-D4 (SUR)			*87%*	*53-159*				2/14/18 19:26	10706-07-0
Surrogate: 4-Bromofluorobenzene (SUR)			*96%*	*30-186*				2/14/18 19:26	460-00-4
Surrogate: Toluene-D8 (SUR)			*119%*	*70-130*				2/14/18 19:26	2037-26-5

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: GSB-17 @ 0.0-0.5
Lab Sample ID: L8B0107-07 (Solid) **Sampled:2/9/18 8:29**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**85.3**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**14.7**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: GSB-17 @ 0.5-2
Lab Sample ID: L8B0107-08 (Solid) **Sampled:2/9/18 8:32**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.3**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**4.71**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: GSB-17 @ 2-4
Lab Sample ID: L8B0107-09 (Solid) **Sampled:2/9/18 8:35**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**4.56**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: GSB-17 @ 4-6
Lab Sample ID: L8B0107-10 (Solid) **Sampled:2/9/18 8:38**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**95.4**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**4.58**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Sample Results
(Continued)

Client Sample ID: Garage - WA1
Lab Sample ID: L8B0107-11 (Solid) **Sampled:2/9/18 9:05**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
Percent Moisture by Method 2540G									
Laboratory:XENCO Labora									Analyst:MAB
% Solids	**94.6**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	
Percent Moisture	**5.44**		0.100	0.100	%	1	2/10/18 12:20	2/10/18 12:20	

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Quality Control

TCLP VOCs by Method 8260B

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0155											
Blank (B8B0155-BLK1)						Prepared & Analyzed: 2/14/2018					
1,1-Dichloroethene	0.000200	U	0.00100	0.000200	mg/L						
1,2-Dichloroethane	0.000180	U	0.00100	0.000180	mg/L						
1,4-Dichlorobenzene	0.000170	U	0.00100	0.000170	mg/L						
2-Butanone (MEK)	0.000280	U	0.00200	0.000280	mg/L						
Benzene	0.000160	U	0.00100	0.000160	mg/L						
Carbon tetrachloride	0.000330	U	0.00100	0.000330	mg/L						
Chlorobenzene	0.000150	U	0.00100	0.000150	mg/L						
Chloroform	0.000160	U	0.00100	0.000160	mg/L						
Tetrachloroethylene	0.000160	U	0.00100	0.000160	mg/L						
Trichloroethylene	0.000190	U	0.00100	0.000190	mg/L						
Vinyl chloride	0.000190	U	0.00100	0.000190	mg/L						
Surrogate: 1,2-Dichloroethane-D4 (SUR)			*0.0443*		*mg/L*	*0.0500*		*89*	*53-159*		
Surrogate: 4-Bromofluorobenzene (SUR)			*0.0472*		*mg/L*	*0.0500*		*94*	*30-186*		
Surrogate: Toluene-D8 (SUR)			*0.0493*		*mg/L*	*0.0500*		*99*	*70-130*		
LCS (B8B0155-BS1)						Prepared & Analyzed: 2/14/2018					
1,1-Dichloroethene	0.0430		0.00100	0.000200	mg/L	0.0500		86	70-130		
1,2-Dichloroethane	0.0415		0.00100	0.000180	mg/L	0.0500		83	70-130		
1,4-Dichlorobenzene	0.0476		0.00100	0.000170	mg/L	0.0500		95	75-125		
2-Butanone (MEK)	0.102		0.00200	0.000280	mg/L	0.100		102	70-135		
Benzene	0.0551		0.00100	0.000160	mg/L	0.0500		110	80-120		
Carbon tetrachloride	0.0407		0.00100	0.000330	mg/L	0.0500		81	65-140		
Chlorobenzene	0.0502		0.00100	0.000150	mg/L	0.0500		100	80-120		
Chloroform	0.0406		0.00100	0.000160	mg/L	0.0500		81	65-135		
Tetrachloroethylene	0.0457		0.00100	0.000160	mg/L	0.0500		91	45-150		
Trichloroethylene	0.0436		0.00100	0.000190	mg/L	0.0500		87	70-125		
Vinyl chloride	0.0467		0.00100	0.000190	mg/L	0.0500		93	50-145		
Surrogate: 1,2-Dichloroethane-D4 (SUR)			*0.0469*		*mg/L*	*0.0500*		*94*	*53-159*		
Surrogate: 4-Bromofluorobenzene (SUR)			*0.0455*		*mg/L*	*0.0500*		*91*	*30-186*		
Surrogate: Toluene-D8 (SUR)			*0.0490*		*mg/L*	*0.0500*		*98*	*70-130*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Quality Control
(Continued)

TCLP VOCs by Method 8260B (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0155 (Continued)											
LCS Dup (B8B0155-BSD1)					Prepared & Analyzed: 2/14/2018						
1,1-Dichloroethene	0.0416		0.00100	0.000200	mg/L	0.0500		83	70-130	3	20
1,2-Dichloroethane	0.0434		0.00100	0.000180	mg/L	0.0500		87	70-130	5	20
1,4-Dichlorobenzene	0.0485		0.00100	0.000170	mg/L	0.0500		97	75-125	2	20
2-Butanone (MEK)	0.104		0.00200	0.000280	mg/L	0.100		104	70-135	2	20
Benzene	0.0560		0.00100	0.000160	mg/L	0.0500		112	80-120	2	20
Carbon tetrachloride	0.0432		0.00100	0.000330	mg/L	0.0500		86	65-140	6	20
Chlorobenzene	0.0508		0.00100	0.000150	mg/L	0.0500		102	80-120	1	20
Chloroform	0.0404		0.00100	0.000160	mg/L	0.0500		81	65-135	0.4	20
Tetrachloroethylene	0.0440		0.00100	0.000160	mg/L	0.0500		88	45-150	4	20
Trichloroethylene	0.0432		0.00100	0.000190	mg/L	0.0500		86	70-125	0.9	20
Vinyl chloride	0.0552		0.00100	0.000190	mg/L	0.0500		110	50-145	17	20
Surrogate: 1,2-Dichloroethane-D4 (SUR)			*0.0472*		*mg/L*	*0.0500*		*94*	*53-159*		
Surrogate: 4-Bromofluorobenzene (SUR)			*0.0491*		*mg/L*	*0.0500*		*98*	*30-186*		
Surrogate: Toluene-D8 (SUR)			*0.0512*		*mg/L*	*0.0500*		*102*	*70-130*		

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12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178											
Blank (B8B0178-BLK1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	0.0111	U	0.0333	0.0111	mg/Kg wet						
2-Methylnaphthalene	0.0134	U	0.0333	0.0134	mg/Kg wet						
Acenaphthene	0.0131	U	0.0333	0.0131	mg/Kg wet						
Acenaphthylene	0.0111	U	0.0333	0.0111	mg/Kg wet						
Anthracene	0.00880	U	0.0333	0.00880	mg/Kg wet						
Benzo(a)anthracene	0.00930	U	0.0333	0.00930	mg/Kg wet						
Benzo(a)pyrene	0.0158	U	0.0333	0.0158	mg/Kg wet						
Benzo(b)fluoranthene	0.0149	U	0.0333	0.0149	mg/Kg wet						
Benzo(g,h,i)perylene	0.0155	U	0.0333	0.0155	mg/Kg wet						
Benzo(k)fluoranthene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Chrysene	0.00790	U	0.0333	0.00790	mg/Kg wet						
Dibenz(a,h)Anthracene	0.0148	U	0.0333	0.0148	mg/Kg wet						
Fluoranthene	0.00990	U	0.0333	0.00990	mg/Kg wet						
Fluorene	0.0107	U	0.0333	0.0107	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	0.0162	U	0.0333	0.0162	mg/Kg wet						
Naphthalene	0.0115	U	0.0333	0.0115	mg/Kg wet						
Phenanthrene	0.00670	U	0.0333	0.00670	mg/Kg wet						
Pyrene	0.0106	U	0.0333	0.0106	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.926*		*mg/Kg wet*	*1.67*		*56*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.780*		*mg/Kg wet*	*1.67*		*47*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.65*		*mg/Kg wet*	*1.67*		*99*	*20-137*		
LCS (B8B0178-BS1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	1.08		0.0333	0.0111	mg/Kg wet	1.67		65	39-116		
2-Methylnaphthalene	1.06		0.0333	0.0134	mg/Kg wet	1.67		64	37-112		
Acenaphthene	1.13		0.0333	0.0131	mg/Kg wet	1.67		68	41-116		
Acenaphthylene	1.12		0.0333	0.0111	mg/Kg wet	1.67		67	42-126		
Anthracene	1.37		0.0333	0.00880	mg/Kg wet	1.67		82	39-127		
Benzo(a)anthracene	1.46		0.0333	0.00930	mg/Kg wet	1.67		88	40-129		
Benzo(a)pyrene	1.59		0.0333	0.0158	mg/Kg wet	1.67		95	36-141		
Benzo(b)fluoranthene	1.55		0.0333	0.0149	mg/Kg wet	1.67		93	34-139		
Benzo(g,h,i)perylene	1.64		0.0333	0.0155	mg/Kg wet	1.67		98	32-141		
Benzo(k)fluoranthene	1.56		0.0333	0.0115	mg/Kg wet	1.67		93	31-139		
Chrysene	1.52		0.0333	0.00790	mg/Kg wet	1.67		91	41-124		
Dibenz(a,h)Anthracene	1.63		0.0333	0.0148	mg/Kg wet	1.67		98	35-143		
Fluoranthene	1.30		0.0333	0.00990	mg/Kg wet	1.67		78	38-132		
Fluorene	1.13		0.0333	0.0107	mg/Kg wet	1.67		68	41-121		
Indeno(1,2,3-cd)pyrene	1.62		0.0333	0.0162	mg/Kg wet	1.67		97	27-160		
Naphthalene	1.05		0.0333	0.0115	mg/Kg wet	1.67		63	37-113		
Phenanthrene	1.28		0.0333	0.00670	mg/Kg wet	1.67		77	50-115		

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San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
LCS (B8B0178-BS1)					Prepared & Analyzed: 2/15/2018						
Pyrene	1.54		0.0333	0.0106	mg/Kg wet	1.67		92	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.09*		*mg/Kg wet*	*1.67*		*66*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.905*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.43*		*mg/Kg wet*	*1.67*		*86*	*20-137*		
LCS Dup (B8B0178-BSD1)					Prepared & Analyzed: 2/15/2018						
1-Methylnaphthalene	1.06		0.0333	0.0111	mg/Kg wet	1.67		63	39-116	2	30
2-Methylnaphthalene	1.04		0.0333	0.0134	mg/Kg wet	1.67		63	37-112	2	30
Acenaphthene	1.12		0.0333	0.0131	mg/Kg wet	1.67		67	41-116	1	30
Acenaphthylene	1.10		0.0333	0.0111	mg/Kg wet	1.67		66	42-126	1	30
Anthracene	1.32		0.0333	0.00880	mg/Kg wet	1.67		79	39-127	3	30
Benzo(a)anthracene	1.32		0.0333	0.00930	mg/Kg wet	1.67		79	40-129	10	30
Benzo(a)pyrene	1.48		0.0333	0.0158	mg/Kg wet	1.67		89	36-141	7	30
Benzo(b)fluoranthene	1.39		0.0333	0.0149	mg/Kg wet	1.67		83	34-139	10	30
Benzo(g,h,i)perylene	1.52		0.0333	0.0155	mg/Kg wet	1.67		91	32-141	8	30
Benzo(k)fluoranthene	1.42		0.0333	0.0115	mg/Kg wet	1.67		85	31-139	9	30
Chrysene	1.38		0.0333	0.00790	mg/Kg wet	1.67		83	41-124	10	30
Dibenz(a,h)Anthracene	1.50		0.0333	0.0148	mg/Kg wet	1.67		90	35-143	8	30
Fluoranthene	1.18		0.0333	0.00990	mg/Kg wet	1.67		71	38-132	9	30
Fluorene	1.11		0.0333	0.0107	mg/Kg wet	1.67		67	41-121	2	30
Indeno(1,2,3-cd)pyrene	1.48		0.0333	0.0162	mg/Kg wet	1.67		89	27-160	9	30
Naphthalene	1.04		0.0333	0.0115	mg/Kg wet	1.67		63	37-113	0.6	30
Phenanthrene	1.26		0.0333	0.00670	mg/Kg wet	1.67		76	50-115	2	30
Pyrene	1.45		0.0333	0.0106	mg/Kg wet	1.67		87	42-138	6	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.07*		*mg/Kg wet*	*1.67*		*64*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.899*		*mg/Kg wet*	*1.67*		*54*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.34*		*mg/Kg wet*	*1.67*		*80*	*20-137*		

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12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
Matrix Spike (B8B0178-MS1)		**Source: L8B0120-05**			Prepared: 2/15/2018	Analyzed: 2/16/2018					
1-Methylnaphthalene	0.971		0.0362	0.0120	mg/Kg dry	1.81	ND	54	39-116		
2-Methylnaphthalene	0.930		0.0362	0.0145	mg/Kg dry	1.81	ND	51	37-112		
Acenaphthene	1.14		0.0362	0.0142	mg/Kg dry	1.81	ND	63	41-116		
Acenaphthylene	1.08		0.0362	0.0120	mg/Kg dry	1.81	ND	60	41-118		
Anthracene	1.42		0.0362	0.00955	mg/Kg dry	1.81	ND	79	39-127		
Benzo(a)anthracene	1.46		0.0362	0.0101	mg/Kg dry	1.81	ND	81	40-129		
Benzo(a)pyrene	1.57		0.0362	0.0171	mg/Kg dry	1.81	ND	87	36-141		
Benzo(b)fluoranthene	1.56		0.0362	0.0162	mg/Kg dry	1.81	0.0220	85	34-139		
Benzo(g,h,i)perylene	1.47		0.0362	0.0168	mg/Kg dry	1.81	0.0346	79	32-141		
Benzo(k)fluoranthene	1.50		0.0362	0.0125	mg/Kg dry	1.81	ND	83	31-139		
Chrysene	1.49		0.0362	0.00857	mg/Kg dry	1.81	0.0162	81	41-124		
Dibenz(a,h)Anthracene	1.46		0.0362	0.0161	mg/Kg dry	1.81	ND	81	35-143		
Fluoranthene	1.51		0.0362	0.0107	mg/Kg dry	1.81	0.0155	83	38-132		
Fluorene	1.25		0.0362	0.0116	mg/Kg dry	1.81	ND	69	41-121		
Indeno(1,2,3-cd)pyrene	1.44		0.0362	0.0176	mg/Kg dry	1.81	ND	80	27-160		
Naphthalene	0.826		0.0362	0.0125	mg/Kg dry	1.81	ND	46	37-113		
Phenanthrene	1.38		0.0362	0.00727	mg/Kg dry	1.81	0.0137	76	50-115		
Pyrene	1.38		0.0362	0.0115	mg/Kg dry	1.81	0.0231	75	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*0.907*		*mg/Kg dry*	*1.81*		*50*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.718*		*mg/Kg dry*	*1.81*		*40*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.26*		*mg/Kg dry*	*1.81*		*70*	*20-137*		
Matrix Spike Dup (B8B0178-MSD1)		**Source: L8B0120-05**			Prepared: 2/15/2018	Analyzed: 2/16/2018					
1-Methylnaphthalene	1.17		0.0357	0.0119	mg/Kg dry	1.79	ND	65	39-116	18	30
2-Methylnaphthalene	1.11		0.0357	0.0144	mg/Kg dry	1.79	ND	62	37-112	18	30
Acenaphthene	1.23		0.0357	0.0140	mg/Kg dry	1.79	ND	69	41-116	8	30
Acenaphthylene	1.22		0.0357	0.0119	mg/Kg dry	1.79	ND	68	41-118	12	30
Anthracene	1.41		0.0357	0.00943	mg/Kg dry	1.79	ND	79	39-127	0.5	30
Benzo(a)anthracene	1.42		0.0357	0.00997	mg/Kg dry	1.79	ND	79	40-129	3	30
Benzo(a)pyrene	1.53		0.0357	0.0169	mg/Kg dry	1.79	ND	86	36-141	2	30
Benzo(b)fluoranthene	1.56		0.0357	0.0160	mg/Kg dry	1.79	0.0220	86	34-139	0.3	30
Benzo(g,h,i)perylene	1.47		0.0357	0.0166	mg/Kg dry	1.79	0.0346	81	32-141	0.6	30
Benzo(k)fluoranthene	1.51		0.0357	0.0123	mg/Kg dry	1.79	ND	85	31-139	0.4	30
Chrysene	1.45		0.0357	0.00847	mg/Kg dry	1.79	0.0162	80	41-124	2	30
Dibenz(a,h)Anthracene	1.42		0.0357	0.0159	mg/Kg dry	1.79	ND	80	35-143	2	30
Fluoranthene	1.55		0.0357	0.0106	mg/Kg dry	1.79	0.0155	86	38-132	2	30
Fluorene	1.33		0.0357	0.0115	mg/Kg dry	1.79	ND	74	41-121	6	30
Indeno(1,2,3-cd)pyrene	1.43		0.0357	0.0174	mg/Kg dry	1.79	ND	80	27-160	1	30
Naphthalene	1.00		0.0357	0.0123	mg/Kg dry	1.79	ND	56	37-113	19	30
Phenanthrene	1.37		0.0357	0.00718	mg/Kg dry	1.79	0.0137	76	50-115	0.7	30

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San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0178 (Continued)											
Matrix Spike Dup (B8B0178-MSD1)			**Source: L8B0120-05**		Prepared: 2/15/2018 Analyzed: 2/16/2018						
Pyrene	1.36		0.0357	0.0114	mg/Kg dry	1.79	0.0231	75	42-138	1	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*1.03*		*mg/Kg dry*	*1.79*		*58*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*0.812*		*mg/Kg dry*	*1.79*		*45*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*1.20*		*mg/Kg dry*	*1.79*		*67*	*20-137*		

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Quality Control
(Continued)

TCLP 7 RCRA Metals by Method 6010C

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0161											
Blank (B8B0161-BLK1)					Prepared: 2/14/2018 Analyzed: 2/15/2018						
Arsenic	0.0250	U	0.125	0.0250	mg/L						
Barium	0.0250	U	0.125	0.0250	mg/L						
Cadmium	0.0250	U	0.125	0.0250	mg/L						
Chromium	0.0250	U	0.125	0.0250	mg/L						
Lead	0.0250	U	0.125	0.0250	mg/L						
Selenium	0.0250	U	0.125	0.0250	mg/L						
Silver	0.0250	U	0.125	0.0250	mg/L						
LCS (B8B0161-BS1)					Prepared: 2/14/2018 Analyzed: 2/15/2018						
Arsenic	0.892		0.125	0.0250	mg/L	1.00		89	85-115		
Barium	0.949		0.125	0.0250	mg/L	1.00		95	85-115		
Cadmium	0.918		0.125	0.0250	mg/L	1.00		92	85-115		
Chromium	0.913		0.125	0.0250	mg/L	1.00		91	85-115		
Lead	0.934		0.125	0.0250	mg/L	1.00		93	85-115		
Selenium	0.916		0.125	0.0250	mg/L	1.00		92	85-115		
Silver	0.916		0.125	0.0250	mg/L	1.00		92	85-115		
LCS Dup (B8B0161-BSD1)					Prepared: 2/14/2018 Analyzed: 2/15/2018						
Arsenic	0.971		0.125	0.0250	mg/L	1.00		97	85-115	8	20
Barium	1.05		0.125	0.0250	mg/L	1.00		105	85-115	10	20
Cadmium	1.01		0.125	0.0250	mg/L	1.00		101	85-115	9	20
Chromium	1.01		0.125	0.0250	mg/L	1.00		101	85-115	10	20
Lead	1.03		0.125	0.0250	mg/L	1.00		103	85-115	10	20
Selenium	1.00		0.125	0.0250	mg/L	1.00		100	85-115	9	20
Silver	1.01		0.125	0.0250	mg/L	1.00		101	85-115	10	20
Duplicate (B8B0161-DUP1)		**Source: L8B0139-02**			Prepared: 2/14/2018 Analyzed: 2/15/2018						
Arsenic	0.0250	U	0.125	0.0250	mg/L		ND				20
Barium	0.0303	I	0.125	0.0250	mg/L		0.0313			3	20
Cadmium	0.0250	U	0.125	0.0250	mg/L		ND				20
Chromium	0.0250	U	0.125	0.0250	mg/L		ND				20
Lead	0.0250	U	0.125	0.0250	mg/L		ND				20
Selenium	0.0250	U	0.125	0.0250	mg/L		ND				20
Silver	0.0250	U	0.125	0.0250	mg/L		ND				20

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Quality Control
(Continued)

TCLP 7 RCRA Metals by Method 6010C (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0161 (Continued)											
Matrix Spike (B8B0161-MS1)		**Source: L8B0139-02**			Prepared: 2/14/2018		Analyzed: 2/15/2018				
Arsenic	0.959		0.125	0.0250	mg/L	1.00	ND	96	85-115		
Barium	0.992		0.125	0.0250	mg/L	1.00	0.0313	96	85-115		
Cadmium	0.935		0.125	0.0250	mg/L	1.00	ND	93	85-115		
Chromium	0.946		0.125	0.0250	mg/L	1.00	ND	95	85-115		
Lead	0.933		0.125	0.0250	mg/L	1.00	ND	93	85-115		
Selenium	0.956		0.125	0.0250	mg/L	1.00	ND	96	85-115		
Silver	0.972		0.125	0.0250	mg/L	1.00	ND	97	85-115		
Matrix Spike Dup (B8B0161-MSD1)		**Source: L8B0139-02**			Prepared: 2/14/2018		Analyzed: 2/15/2018				
Arsenic	1.00		0.125	0.0250	mg/L	1.00	ND	100	85-115	4	20
Barium	1.04		0.125	0.0250	mg/L	1.00	0.0313	100	85-115	4	20
Cadmium	0.978		0.125	0.0250	mg/L	1.00	ND	98	85-115	4	20
Chromium	0.986		0.125	0.0250	mg/L	1.00	ND	99	85-115	4	20
Lead	0.973		0.125	0.0250	mg/L	1.00	ND	97	85-115	4	20
Selenium	0.999		0.125	0.0250	mg/L	1.00	ND	100	85-115	4	20
Silver	1.01		0.125	0.0250	mg/L	1.00	ND	101	85-115	4	20

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services 12500 San Pedro Avenue, Suite 670 San Antonio, TX 78216	Project: Winter Haven Project Number: Winter Haven Project Manager: Richard Houde	**Reported:** 3/2/18 15:31

Quality Control
(Continued)

TCLP Mercury Analysis by Method 7470A

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0132											
Blank (B8B0132-BLK1)					Prepared: 2/12/2018		Analyzed: 2/14/2018				
Mercury	0.0000140	U	0.0000400	0.0000140	mg/L						
LCS (B8B0132-BS1)					Prepared: 2/12/2018		Analyzed: 2/14/2018				
Mercury	0.00283		0.0000400	0.0000140	mg/L	0.00300		94	85-115		
LCS Dup (B8B0132-BSD1)					Prepared: 2/12/2018		Analyzed: 2/14/2018				
Mercury	0.00261		0.0000400	0.0000140	mg/L	0.00300		87	85-115	8	20
Duplicate (B8B0132-DUP1)		**Source: L8B0080-01**			Prepared: 2/12/2018		Analyzed: 2/14/2018				
Mercury	0.0000400		0.0000400	0.0000140	mg/L		ND				20
Matrix Spike (B8B0132-MS1)		**Source: L8B0080-01**			Prepared: 2/12/2018		Analyzed: 2/14/2018				
Mercury	0.00279		0.0000400	0.0000140	mg/L	0.00300	ND	93	85-115		
Matrix Spike Dup (B8B0132-MSD1)		**Source: L8B0080-01**			Prepared: 2/12/2018		Analyzed: 2/14/2018				
Mercury	0.00257		0.0000400	0.0000140	mg/L	0.00300	ND	86	85-115	8	20

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

Quality Control
(Continued)

Percent Moisture by Method 2540G

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8B0142											
Duplicate (B8B0142-DUP1)		**Source: L8B0104-01**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	86.1		0.100	0.100	%		87.5			2	20
Percent Moisture	13.9		0.100	0.100	%		12.5			11	20
Duplicate (B8B0142-DUP2)		**Source: L8B0104-12**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	94.9		0.100	0.100	%		94.8			0.08	20
Percent Moisture	5.10		0.100	0.100	%		5.18			2	20
Duplicate (B8B0142-DUP3)		**Source: L8B0099-01**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	92.4		0.100	0.100	%		92.7			0.4	20
Percent Moisture	7.62		0.100	0.100	%		7.29			4	20
Duplicate (B8B0142-DUP4)		**Source: L8B0099-21**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	95.0		0.100	0.100	%		95.1			0.1	20
Percent Moisture	4.96		0.100	0.100	%		4.85			2	20
Duplicate (B8B0142-DUP5)		**Source: L8B0099-41**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	94.5		0.100	0.100	%		94.6			0.09	20
Percent Moisture	5.50		0.100	0.100	%		5.41			2	20
Duplicate (B8B0142-DUP6)		**Source: L8B0107-03**			Prepared: 2/10/2018		Analyzed: 2/13/2018				
% Solids	97.7		0.100	0.100	%		98.0			0.2	20
Percent Moisture	2.26		0.100	0.100	%		2.04			10	20

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MWBE SDBE
NELAC DoD Accredited

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	3/2/18 15:31

List of Certifications for XENCO Laboratories - Tampa formerly FTS Analytical

Number	Description	Code	Facility	Expires
123066	Kentucky UST CERTIFICATION	UST KY	FTSL	06/30/2018
E84098	FL MICROBIOLOGY Lakeland CERT	LFLNELAC	FTSL	06/30/2018
E871002	Xenco FL CERT	FLNELAC	FTSL	06/30/2018
E87429	FL NELAC CERT Tampa	AFLNELAC	FTSL	06/30/2018
LI0-135	DoD CERTIFICATE	DOD	FTSL	12/11/2019
P330-07-00105	USDA CERTIFICATE	USDA	FTSL	

Notes and Definitions

Item	Definition
U	Compound was not detected.
Dry	Sample results reported on a dry weight basis.
I	Value estimated to be between the Laboratory Detection and Reporting Limit
J	QC Failure see Case Narrative
L	Concentration exceeds calibration range
N	Tentatively Identified Compound
Q	Hold time exceeded
V	Analyte equal to or above detection limit in the method blank
TNTC	Bacteria is present but Too Numerous To Count

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
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FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

Company Name: Spec Pro Professional Services
Address: 7067 Old Madison Pike, #107, Huntsville, AL 35806
Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.9 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0107
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature): Richard Houde
Sampler(s): (printed): Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	PAH	VOC-TCLP	RCRA8-TCLP	Container Type	Preservation Code
								GC	GC	GC		
								9	9	9		
1	FLB-246@0.0-0.5	0.0-0.5	2/9/18 -0808	S		X	1	X				
2	FLB-246@0.5-2	0.5-2	-0814	S		X	1	X				
3	FLB-246@2-4	2-4	-0813	S		X	1	X				
4	FLB-246@4-6	4-6	-0815	S		X	1	X				
5	Fence-WA2	0-0	-0910	S	X		2		X	X		
6	Tower-WA3	0-0	-0915	S	X		2		X	X		
7												
8												
9												
10												

1) Relinquished By: Richard Houde Date / Time 2/9/18-1240
2) Received By: [signature] Date / Time 2.9.18 1240
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT; 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA=Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

FTS ANALYTICAL SERVICES
CHAIN OF CUSTODY

1412 Tech Blvd, Tampa, FL 33619 (813-620-2000) / 5675 New Tampa Hwy, Lakeland, FL 33815 (863-646-8526)
6017 Financial Drive, Norcross, GA 30071 (770-449-8800)

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Results Sent to: Richard Houde
Email address: Richard.Houde@Badger-tech.com
Contact Phone #: 210-215-5932 Cell#:
Project Name (Site): USDA - Winter Haven
Project Number (ID):
Regulations: FL PRP Dry-Cln ADaPT SC NC DOD NPDES

Receiver's Initials/Temp: C.C. / 2.9 IR-1
Custody Seal(s): Y N Lab Work Order # L8B0107
P.O.# (if required):
Field Comments / Lab Precautions:

Sampler(s): (signature) Richard Houde
Sampler(s): (printed) Richard Houde

Analysis Requested

Line No.	Sample ID #	Sample Depth (Ft)	Collection Date / Time	Matrix	Composite	Grab	No. of Containers	GC 9 SS8290-Dioxin-Furan	GC 9 TCLP-SS8290	Dioxin-Furan	Container Type / Preservation Code
1	GSB-17@ 0.0-0.5	0.0-0.5	2/9/18-0829	S		X	1	X			
2	GSB-17@ 0.5-2	0.5-2	-0832	S		X	1	X			
3	GSB-17@ 2-4	2-4	-0835	S		X	1	X			
4	GSB-17@ 4-6	4-6	-0838	S		X	1	X			
5	Garage-WA1	0-0	2/9/18-0905	S	X		1		X		
6											
7											
8											
9											
10											

1) Relinquished By: Richard Houde Date / Time 2/9/18-1240
2) Received By: [signature] Date / Time 2-9-18 12:40
3) Relinquished By: Date / Time
4) Received By: Date / Time
5) Relinquished By: Date / Time
6) Received By: Date / Time

Delivered by: (Circle One) Fed Ex / UPS / Courier / Lab Pickup / Hand / Other

MSA or FTS terms and conditions apply

Circle a Turnaround Time (business days)
STD TAT: 10 Days; 5-7 Days; 3 Days
2 Days; 1 Day; Same Day

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air) (C = Air Cartridge)
Preservation: 1 = HCL 2 = HNO_3 3 = H_2SO_4 4 = NaOH + $NaAsO_2$ 5 = NaOH + ZnAc 6 = $Na_2S_2O_3$ 7 = DI Water & MeOH 8 = NaHSO4 & MeOH 9 = None 10 = NaHS04
Container Type: VC=Vial (Clear); VA =Vial (Amber); GC=Glass (Clear); GA=Glass (Amber); P=Plastic (HDPE); TB=Tedlar Bag; ES=EnCore Sampler; ZB=Ziploc Bag; O=Other

Analytical Report 576099

for

Florida Testing Services

Project Manager: Chad Bechtold

L8B0107

01-MAR-18

Collected By: Client

4147 Greenbriar Dr.
Stafford, TX 77477

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta: Louisiana (04176)
Xenco-Tampa: Florida (E87429), North Carolina (483), DoD (LI0-135), Kentucky (123066)
Xenco-Lakeland: Florida (E84098)

01-MAR-18

Project Manager: **Chad Bechtold**
Florida Testing Services
1412 Tech Blvd
Tampa, FL 33619

Reference: XENCO Report No(s): **576099**
L8B0107
Project Address:

Chad Bechtold:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 576099. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 576099 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Irene Vann
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 576099

Florida Testing Services, Tampa, FL

L8B0107

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GSB-17 @ 0.0-0.5	S	02-09-18 08:29		Not Analyzed
GSB-17 @ 0.5-2	S	02-09-18 08:32		Not Analyzed
GSB-17 @ 2-4	S	02-09-18 08:35		Not Analyzed
GSB-17 @ 4-6	S	02-09-18 08:38		Not Analyzed
Garage - WA1	S	02-09-18 09:05		Not Analyzed

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

FLORIDA flagging criteria

Data were reviewed by the
Department Supervisor and QA Director

A Value reported is the mean (average) of two or more determinations.

B Results based upon colony counts outside the acceptable range.

J Estimated value; value not accurate. All results with a "J" qualifier require comment.
- J1: Surrogate Recoveries exceed established QA/QC Limits
- J2: No known QA/QC exists.
- J3: Reported value failed to meet established QA/QC limits or the sample matrix interfered with the ability to make an accurate determination
- J4: The data is questionable due to improper laboratory or field protocols

Q Sample held beyond the accepted holding time

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes, only and shall not be used in statistical analysis.

U Compound was analyzed for but not detected at the MDL Level.

V Analyte was detected in both the sample and the associated method blank.

Y Laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.

I The reported value is between the laboratory MDL and the laboratory PQL.

R Significant rain in the past 48 hours.

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

576099

FTS MWBE SDBE NELAC DoD Accredited

SUBCONTRACT ORDER

Sending Laboratory:

FTS - Florida
1412 Tech Blvd
Tampa, FL 33619
Phone: 813-620-2000
Fax: NA

Project Manager: Chad Bechtold

Subcontracted Laboratory:

XENCO Houston
4147 Greenbriar Dr.
Houston, TX 77477
Phone: (281) 240-4200
Fax:

Work Order: L8B0107

Analysis	Due	Expires	Comments
GSB-17 @ 0.0-0.5 ***Solid Sampled: 02/09/2018 08:29***			L8B0107-07
SS 8290 Diox-Fur	02/16/2018	02/16/2018 08:29	2,3,7,8-TCDD
Containers Supplied:			
GSB-17 @ 0.5-2 ***Solid Sampled: 02/09/2018 08:32***			L8B0107-08
SS 8290 Diox-Fur	02/16/2018	02/16/2018 08:32	2,3,7,8-TCDD
Containers Supplied:			
GSB-17 @ 2-4 ***Solid Sampled: 02/09/2018 08:35***			L8B0107-09
SS 8290 Diox-Fur	02/16/2018	02/16/2018 08:35	2,3,7,8-TCDD
Containers Supplied:			
GSB-17 @ 4-6 ***Solid Sampled: 02/09/2018 08:38***			L8B0107-10
SS 8290 Diox-Fur	02/16/2018	02/16/2018 08:38	2,3,7,8-TCDD
Containers Supplied:			
Garage - WA1 ***Solid Sampled: 02/09/2018 09:05***			L8B0107-11
SS 8290 TCLP Dioxin	02/16/2018	02/16/2018 09:05	2,3,7,8-TCDD
SS 8290 Diox-Fur	02/16/2018	02/16/2018 09:05	2,3,7,8-TCDD
Containers Supplied:			

R+R: FedEx 2/10/18 1000

Released By — Date 2/9/18 — Received By — Date

IR ID:HOU-068 C/F: 0.3
Temp: 3.2 Corrected: 3.5

ORIGIN ID:MCFA (813) 620-2000
MARIA AREVALO
1412 TECH BLVD
TAMPA, FL 33619
UNITED STATES US

SHIP DATE: 09FEB18
ACTWGT: 55.00 LB
CAD: 110898449/INET3980
DIMS: 20x18x18 IN
BILL RECIPIENT

TO RECEIVING
XENCO - HOUSTON
10555 S. SAM HOUSTON PKWY WEST
HOUSTON TX 77071
(281) 240-4200
INV
PO
REF
DEPT

552J1/122DDCA5

FedEx Express

TRK# 0201 7714 5239 7295

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 SGRA

77071
TX-US IAH

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Sample SUB-Contract#: 1055915

Date Printed: 02.12.2018 08:16

Date/Time: 02.12.2018 08:16

Created by: Heidi Goertz

Subcontractor: Eurofins - Lancaster Laboratories

PO#: **576099**

Delivery Priority:

Air Bill No.:

Invoice To: apInvoices@xenco.com; subcontract@xenco.com; irene.vann@xenco.com

Send report to: Irene Vann

Address: 4147 Greenbriar Dr.
Stafford, TX 77477

Phone:

E-Mail: irene.vann@xenco.com

Due Date: **02.16.2018**

Sample Id	Client Sample Id	Cont #	Matrix	Sample Collection	Method	Method Name	Lab PM
576099-001	GSB-17 @ 0.0-0.5	2943	S	02/09/18 08:29	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-002	GSB-17 @ 0.5-2	2944	S	02/09/18 08:32	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-003	GSB-17 @ 2-4	2945	S	02/09/18 08:35	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-004	GSB-17 @ 4-6	2946	S	02/09/18 08:38	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-005	Garage - WA1	2947	S	02/09/18 09:05	SW8290	Dioxins and Furans by EPA 8290	Irene Vann

SUB-Contracting Comments:

Relinquished By: Heidi Goertz

Received By:

Date/ Time Relinquished: 02/12/2018

Date/ Time Received:

Relinquished By:

Received By:

Date/ Time Relinquished:

Date/ Time Received:

Cooler Temperature:

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Florida Testing Services

Date/ Time Received: 02/10/2018 10:00:00 AM

Work Order #: 576099

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : hou-068

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	sub diox-fur to eurofins
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Heidi Goertz Date: 02/12/2018

Checklist reviewed by: Irene Vann Date: 02/14/2018

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ANALYSIS REPORT

Prepared by:	Prepared for:
Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601	Xenco Laboratories 4147 Greenbriar Dr Stafford TX 77477

Report Date: February 27, 2018 16:06

Project: 1055915

Account #: 38150
Group Number: 1907927
PO Number: 576099
State of Sample Origin: TX

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Xenco Laboratories	Attn: Irene Vann
Electronic Copy To	Xenco Laboratories	Attn: Subcontact Xenco

Respectfully Submitted,

Ana Spencer
Project Manager

(281) 967-8096

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
576099-001 GSB-17@0.0-0.5 Grab Soil	02/09/2018 08:29	9453477
576099-002 GSB-17 @ 0.5-2 Grab Soil	02/09/2018 08:32	9453478
576099-003 GSB-17 @ 2-4 Grab Soil	02/09/2018 08:35	9453479
576099-004 GSB-17 @ 4-6 Grab Soil	02/09/2018 08:38	9453480
576099-005 Garage - WAI Grab Soil	02/09/2018 09:05	9453481

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: **576099-001 GSB-17@0.0-0.5 Grab Soil Xenco**

Project Name: **1055915**

Submittal Date/Time: 02/13/2018 09:50
Collection Date/Time: 02/09/2018 08:29

Xenco Laboratories
ELLE Sample #: SW 9453477
ELLE Group #: 1907927
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	0.0500 JQ	0.0165	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	75	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/25/2018 05:46	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/14/2018 08:20	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **576099-002 GSB-17 @ 0.5-2 Grab Soil**
Xenco

Project Name: **1055915**

Submittal Date/Time: 02/13/2018 09:50
Collection Date/Time: 02/09/2018 08:32

Xenco Laboratories
ELLE Sample #: **SW 9453478**
ELLE Group #: **1907927**
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0182	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	69	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/25/2018 06:43	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/14/2018 08:20	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **576099-003 GSB-17 @ 2-4 Grab Soil Xenco**

Project Name: **1055915**

Submittal Date/Time: 02/13/2018 09:50
Collection Date/Time: 02/09/2018 08:35

Xenco Laboratories
ELLE Sample #: SW 9453479
ELLE Group #: 1907927
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0110	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	68	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/25/2018 07:40	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/14/2018 08:20	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **576099-004 GSB-17 @ 4-6 Grab Soil Xenco**

Project Name: **1055915**

Submittal Date/Time: 02/13/2018 09:50
Collection Date/Time: 02/09/2018 08:38

Xenco Laboratories
ELLE Sample #: SW 9453480
ELLE Group #: 1907927
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0201	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	63	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/25/2018 08:37	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/14/2018 08:20	Alex L Barton	1

EDL = Estimated Detection Limit

Sample Description: **576099-005 Garage - WAI Grab Soil Xenco**

Project Name: **1055915**

Submittal Date/Time: 02/13/2018 09:50
Collection Date/Time: 02/09/2018 09:05

Xenco Laboratories
ELLE Sample #: SW 9453481
ELLE Group #: 1907927
Matrix: Soil

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL	Dilution Factor
Dioxins/Furans	**SW-846 8290A Feb 2007 Rev 1**		**ng/kg**	**ng/kg**	
12937	2378-TCDD	1746-01-6	N.D.	0.0235	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	57	40 - 135

Dioxins/Furans Data Qualifiers:

B	*Detected in Method Blank*
U	*Undetected*
J	*Estimated concentration between Estimated Detection Limit and Minimum Reporting Level*
E	*Exceeds calibration range*
C	*Confirmed quantitation on secondary GC column*
Q	*EMPC - Estimated Maximum Possible Concentration*
F	*Interference is present*
S	*Saturation of detection signal*

Sample Comments

State of Texas Lab Certification No. T104704194-17-23

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12937	Dioxins/Furans in Solids-8290	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/25/2018 09:33	Michael A Ziegler	1
11030	Dioxins/Furans in Solids - Sox	SW-846 8290A Feb 2007 Rev 1	1	18045007	02/14/2018 08:20	Alex L Barton	1

EDL = Estimated Detection Limit

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Quality Control Summary

Client Name: Xenco Laboratories
Reported: 02/27/2018 16:06

Group Number: 1907927

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result ng/kg	EDL ng/kg
Batch number: 18045007	Sample number(s): 9453477-9453481	
2378-TCDD	N.D.	0.0133

OPR/OPRD

Analysis Name	OPR Spike Added ng/kg	OPR Conc ng/kg	OPRD Spike Added ng/kg	OPRD Conc ng/kg	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 18045007	Sample number(s): 9453477-9453481								
2378-TCDD	20	19.13			96		67-158		

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: Dioxins/Furans in Solids-8290
Batch number: 18045007

	13C12-2378-TCDD
9453477	75
9453478	69
9453479	68
9453480	63
9453481	57
Blank	73
OPR	65
Limits:	40-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the MRL.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

38150 / 1907927 / 9453477-81

Sample SUB-Contract#: 1055915

Date Printed: 02.12.2018 08:16

Date/Time: 02.12.2018 08:16 Created by: Heidi Goertz

Subcontractor: Eurofins - Lancaster Laboratories

PO#: **576099**

Delivery Priority:

Air Bill No.:

Invoice To: apInvoices@xenco.com; subcontract@xenco.com; irene.vann@xenco.com

Send report to: Irene Vann

Address: 4147 Greenbriar Dr.
Stafford, TX 77477

Phone:

E-Mail: irene.vann@xenco.com

Due Date: **02.16.2018**

Sample Id	Client Sample Id	Cont #	Matrix	Sample Collection	Method	Method Name	Lab PM
576099-001	GSB-17 @ 0.0-0.5	2943	S	02/09/18 08:29	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-002	GSB-17 @ 0.5-2	2944	S	02/09/18 08:32	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-003	GSB-17 @ 2-4	2945	S	02/09/18 08:35	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-004	GSB-17 @ 4-6	2946	S	02/09/18 08:38	SW8290	Dioxins and Furans by EPA 8290	Irene Vann
576099-005	Garage - WA1	2947	S	02/09/18 09:05	SW8290	Dioxins and Furans by EPA 8290	Irene Vann

SUB-Contracting Comments:

Relinquished By: Heidi Goertz

Received By:

Date/ Time Relinquished: 02/12/2018

Date/ Time Received:

Relinquished By:

Received By:

Date/ Time Relinquished:

Date/ Time Received: 2/13/18 950

Cooler Temperature: 0.6

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 208256

Group Number(s): 1907927

Client: XENCO

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	02/13/2018 9:50
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Wendy Wakeley (1669) at 10:56 on 02/13/2018

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-01	0.6	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
ww

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	non-detect
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

LAB REPORT
FENCE LINE BLACK DEBRIS SAMPLES

Analytical Report

L8D0144

Project

Winter Haven

Project Number

Winter Haven

April 20, 2018

SpecPro Professional Services

12500 San Pedro Avenue, Suite 670

San Antonio, TX 78216

Minority Women Business Enterprise

Small Disadvantaged Business Enterprise

Minority Women Business Enterprise
Small Disadvantaged Business Enterprise

1412 Tech Blvd
Tampa, FL 33619

Phone #: 813-620-2000
Website: www.xenco.com

April 20, 2018

Richard Houde
SpecPro Professional Services
12500 San Pedro Avenue, Suite 670
San Antonio, TX 78216

RE: Winter Haven

We are reporting the results of the analyses performed on the samples recieved on 3/7/2018 under the project name referenced above and identified as the lab Work Order L8D0144. All results being reported under this Report apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontracted lab, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reporting using all other available quality control methods.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by FTS Analytical Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise agreed upon. The samples received, and described as recorded in Work Order L8D0144 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise agreed upon. We reserve the right to return to you any unused samples, extracts, or solutions if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding standard practices, controlled/regulated substances, etc.)

We thank you for selecting Xenco Laboratories to serve your analytical needs. If you have any questions concerning this report, please do not hesitate to contact us at any time. We will be happy to help.

Sincerely,

Chad A. Bechtold

Chad Bechtold
VP of Client Services

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
L8D0144-01	FLB-201 @ 0.0-0.5'	Solid	05-Feb-2018 12:52	07-Mar-2018 15:33
L8D0144-02	FLB-221 @ 0.0-0.5'	Solid	07-Feb-2018 08:34	07-Mar-2018 15:33
L8D0144-03	FLB-223 @ 0.0-0.5'	Solid	07-Feb-2018 10:10	07-Mar-2018 15:33
L8D0144-04	FLB-224 @ 0.0-0.5'	Solid	07-Feb-2018 10:25	07-Mar-2018 15:33
L8D0144-05	FLB-227 @ 0.0-0.5'	Solid	07-Feb-2018 13:07	07-Mar-2018 15:33
L8D0144-06	FLB-241 @ 0.0-0.5'	Solid	07-Feb-2018 10:49	07-Mar-2018 15:33

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Analysis Case Narrative

Method: 8270D LL PAHs
Batch: B8D0091

Per client request the laboratory filtered the samples through a sieve to collect any larger pieces present in the soil samples included in this report. The laboratory then extracted only these larger size pieces outside the method holding time. The results in this report were qualified with a "Q".

The Laboratory Control Sample Duplicate (LCSD) recoveries for 5 compounds were above control limits.
Samples affected: L8D0144-01 to 06.

One of the surrogates, Nitrobenzene-d5, was recovered outside control limits for the sample L8D0144-03 due to possible matrix interference.

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Hits Summary

(Not Including Subcontracted Analysis)

Sample: FLB-201 @ 0.0-0.5'

Lab ID: L8D0144-01

Analyte	Result	MDL	RL	Units	Dil	Date Analyzed	Qual	CAS #	Method
Acenaphthene	41.2	15.7	40.0	mg/Kg wet	1	4/4/18 20:10	Q	83-32-9	EPA 8270D PAH
Anthracene	91.6	10.6	40.0	mg/Kg wet	1	4/4/18 20:10	Q	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	204	11.2	40.0	mg/Kg wet	1	4/4/18 20:10	Q	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	167	19.0	40.0	mg/Kg wet	1	4/4/18 20:10	Q	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	196	17.9	40.0	mg/Kg wet	1	4/4/18 20:10	Q	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	118	18.6	40.0	mg/Kg wet	1	4/4/18 20:10	Q	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	139	13.8	40.0	mg/Kg wet	1	4/4/18 20:10	Q	207-08-9	EPA 8270D PAH
Chrysene	194	9.48	40.0	mg/Kg wet	1	4/4/18 20:10	Q	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	48.0	17.8	40.0	mg/Kg wet	1	4/4/18 20:10	Q	53-70-3	EPA 8270D PAH
Fluoranthene	538	11.9	40.0	mg/Kg wet	1	4/4/18 20:10	Q	206-44-0	EPA 8270D PAH
Fluorene	37.2	12.8	40.0	mg/Kg wet	1	4/4/18 20:10	IQ	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	116	19.4	40.0	mg/Kg wet	1	4/4/18 20:10	Q	193-39-5	EPA 8270D PAH
Phenanthrene	433	8.04	40.0	mg/Kg wet	1	4/4/18 20:10	Q	85-01-8	EPA 8270D PAH
Pyrene	393	12.7	40.0	mg/Kg wet	1	4/4/18 20:10	Q	129-00-0	EPA 8270D PAH

Sample: FLB-221 @ 0.0-0.5'

Lab ID: L8D0144-02

Analyte	Result	MDL	RL	Units	Dil	Date Analyzed	Qual	CAS #	Method
Acenaphthene	1570	351	893	mg/Kg wet	50	3/30/18 16:03	Q	83-32-9	EPA 8270D PAH
Anthracene	2200	236	893	mg/Kg wet	50	3/30/18 16:03	Q	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	4010	249	893	mg/Kg wet	50	3/30/18 16:03	Q	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	3360	423	893	mg/Kg wet	50	3/30/18 16:03	Q	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	3950	399	893	mg/Kg wet	50	3/30/18 16:03	Q	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	2320	415	893	mg/Kg wet	50	3/30/18 16:03	Q	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	2860	308	893	mg/Kg wet	50	3/30/18 16:03	Q	207-08-9	EPA 8270D PAH
Chrysene	3990	212	893	mg/Kg wet	50	3/30/18 16:03	Q	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	875	396	893	mg/Kg wet	50	3/30/18 16:03	IQ	53-70-3	EPA 8270D PAH
Fluoranthene	10200	265	893	mg/Kg wet	50	3/30/18 16:03	Q	206-44-0	EPA 8270D PAH
Fluorene	1180	287	893	mg/Kg wet	50	3/30/18 16:03	Q	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	1950	434	893	mg/Kg wet	50	3/30/18 16:03	Q	193-39-5	EPA 8270D PAH
Naphthalene	1040	308	893	mg/Kg wet	50	3/30/18 16:03	Q	91-20-3	EPA 8270D PAH
Phenanthrene	9500	179	893	mg/Kg wet	50	3/30/18 16:03	Q	85-01-8	EPA 8270D PAH
Pyrene	7700	284	893	mg/Kg wet	50	3/30/18 16:03	Q	129-00-0	EPA 8270D PAH

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-224 @ 0.0-0.5'

Lab ID: L8D0144-04

Analyte	Result	MDL	RL	Units	Dil	Date Analyzed	Qual	CAS #	Method
Anthracene	149	136	515	mg/Kg wet	50	3/30/18 16:46	IQ	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	289	144	515	mg/Kg wet	50	3/30/18 16:46	IQ	56-55-3	EPA 8270D PAH
Benzo(k)fluoranthene	186	178	515	mg/Kg wet	50	3/30/18 16:46	IQ	207-08-9	EPA 8270D PAH
Chrysene	273	122	515	mg/Kg wet	50	3/30/18 16:46	IQ	218-01-9	EPA 8270D PAH
Fluoranthene	670	153	515	mg/Kg wet	50	3/30/18 16:46	Q	206-44-0	EPA 8270D PAH
Phenanthrene	691	104	515	mg/Kg wet	50	3/30/18 16:46	Q	85-01-8	EPA 8270D PAH
Pyrene	505	164	515	mg/Kg wet	50	3/30/18 16:46	IQ	129-00-0	EPA 8270D PAH

Sample: FLB-227 @ 0.0-0.5'

Lab ID: L8D0144-05

Analyte	Result	MDL	RL	Units	Dil	Date Analyzed	Qual	CAS #	Method
1-Methylnaphthalene	87.1	13.9	41.7	mg/Kg wet	1	4/4/18 21:35	Q	90-12-0	EPA 8270D PAH
2-Methylnaphthalene	145	16.8	41.7	mg/Kg wet	1	4/4/18 21:35	Q	91-57-6	EPA 8270D PAH
Acenaphthene	771	16.4	41.7	mg/Kg wet	1	4/4/18 21:35	Q	83-32-9	EPA 8270D PAH
Anthracene	1040	11.0	41.7	mg/Kg wet	1	4/4/18 21:35	Q	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	2060	11.6	41.7	mg/Kg wet	1	4/4/18 21:35	Q	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	1780	19.8	41.7	mg/Kg wet	1	4/4/18 21:35	Q	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	2260	18.6	41.7	mg/Kg wet	1	4/4/18 21:35	Q	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	1300	19.4	41.7	mg/Kg wet	1	4/4/18 21:35	Q	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	1470	14.4	41.7	mg/Kg wet	1	4/4/18 21:35	Q	207-08-9	EPA 8270D PAH
Chrysene	1870	9.88	41.7	mg/Kg wet	1	4/4/18 21:35	Q	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	553	18.5	41.7	mg/Kg wet	1	4/4/18 21:35	Q	53-70-3	EPA 8270D PAH
Fluoranthene	5080	12.4	41.7	mg/Kg wet	1	4/4/18 21:35	Q	206-44-0	EPA 8270D PAH
Fluorene	619	13.4	41.7	mg/Kg wet	1	4/4/18 21:35	Q	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	1220	20.2	41.7	mg/Kg wet	1	4/4/18 21:35	Q	193-39-5	EPA 8270D PAH
Naphthalene	544	14.4	41.7	mg/Kg wet	1	4/4/18 21:35	Q	91-20-3	EPA 8270D PAH
Phenanthrene	4600	8.38	41.7	mg/Kg wet	1	4/4/18 21:35	Q	85-01-8	EPA 8270D PAH
Pyrene	3750	13.2	41.7	mg/Kg wet	1	4/4/18 21:35	Q	129-00-0	EPA 8270D PAH

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Hits Summary

(Not Including Subcontracted Analysis)

(Continued)

Sample: FLB-241 @ 0.0-0.5'

Lab ID: L8D0144-06

Analyte	Result	MDL	RL	Units	Dil	Date Analyzed	Qual	CAS #	Method
Acenaphthene	34.3	7.02	17.9	mg/Kg wet	1	4/4/18 21:56	Q	83-32-9	EPA 8270D PAH
Anthracene	45.7	4.71	17.9	mg/Kg wet	1	4/4/18 21:56	Q	120-12-7	EPA 8270D PAH
Benzo(a)anthracene	86.8	4.98	17.9	mg/Kg wet	1	4/4/18 21:56	Q	56-55-3	EPA 8270D PAH
Benzo(a)pyrene	73.0	8.46	17.9	mg/Kg wet	1	4/4/18 21:56	Q	50-32-8	EPA 8270D PAH
Benzo(b)fluoranthene	78.4	7.98	17.9	mg/Kg wet	1	4/4/18 21:56	Q	205-99-2	EPA 8270D PAH
Benzo(g,h,i)perylene	55.0	8.30	17.9	mg/Kg wet	1	4/4/18 21:56	Q	191-24-2	EPA 8270D PAH
Benzo(k)fluoranthene	63.4	6.16	17.9	mg/Kg wet	1	4/4/18 21:56	Q	207-08-9	EPA 8270D PAH
Chrysene	85.7	4.23	17.9	mg/Kg wet	1	4/4/18 21:56	Q	218-01-9	EPA 8270D PAH
Dibenz(a,h)Anthracene	23.2	7.93	17.9	mg/Kg wet	1	4/4/18 21:56	Q	53-70-3	EPA 8270D PAH
Fluoranthene	226	5.30	17.9	mg/Kg wet	1	4/4/18 21:56	Q	206-44-0	EPA 8270D PAH
Fluorene	22.9	5.73	17.9	mg/Kg wet	1	4/4/18 21:56	Q	86-73-7	EPA 8270D PAH
Indeno(1,2,3-cd)pyrene	49.3	8.68	17.9	mg/Kg wet	1	4/4/18 21:56	Q	193-39-5	EPA 8270D PAH
Naphthalene	8.39	6.16	17.9	mg/Kg wet	1	4/4/18 21:56	IQ	91-20-3	EPA 8270D PAH
Phenanthrene	194	3.59	17.9	mg/Kg wet	1	4/4/18 21:56	Q	85-01-8	EPA 8270D PAH
Pyrene	164	5.68	17.9	mg/Kg wet	1	4/4/18 21:56	Q	129-00-0	EPA 8270D PAH

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Sample Results

Client Sample ID: FLB-201 @ 0.0-0.5'

Lab Sample ID: L8D0144-01 (Solid) **Sampled:2/5/18 12:52**

PAHs (SVOCs) by Method 8270D

Laboratory:XENCO Laboratories - Tampa formerly FTS Analytical Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	13.3	UQ	40.0	13.3	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	90-12-0
2-Methylnaphthalene	16.1	UQ	40.0	16.1	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	91-57-6
Acenaphthene	**41.2**	Q	40.0	15.7	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	83-32-9
Acenaphthylene	13.3	UQ	40.0	13.3	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	208-96-8
Anthracene	**91.6**	Q	40.0	10.6	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	120-12-7
Benzo(a)anthracene	**204**	Q	40.0	11.2	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	56-55-3
Benzo(a)pyrene	**167**	Q	40.0	19.0	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	50-32-8
Benzo(b)fluoranthene	**196**	Q	40.0	17.9	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	205-99-2
Benzo(g,h,i)perylene	**118**	Q	40.0	18.6	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	191-24-2
Benzo(k)fluoranthene	**139**	Q	40.0	13.8	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	207-08-9
Chrysene	**194**	Q	40.0	9.48	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	218-01-9
Dibenz(a,h)Anthracene	**48.0**	Q	40.0	17.8	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	53-70-3
Fluoranthene	**538**	Q	40.0	11.9	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	206-44-0
Fluorene	**37.2**	IQ	40.0	12.8	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	86-73-7
Indeno(1,2,3-cd)pyrene	**116**	Q	40.0	19.4	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	193-39-5
Naphthalene	13.8	UQ	40.0	13.8	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	91-20-3
Phenanthrene	**433**	Q	40.0	8.04	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	85-01-8
Pyrene	**393**	Q	40.0	12.7	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:10	129-00-0

Surrogate: 2-Fluorobiphenyl (B-SUR)	*Q*	*104%*	*16-110*	4/4/18 20:10	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)	*Q*	*102%*	*19-105*	4/4/18 20:10	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)	*Q*	*116%*	*20-137*	4/4/18 20:10	1718-51-0

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Sample Results
(Continued)

Client Sample ID: FLB-221 @ 0.0-0.5'
Lab Sample ID: L8D0144-02 (Solid) **Sampled:2/7/18 8:34**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Laboratories - Tampa formerly FTS Analytical									Analyst:BTJ
1-Methylnaphthalene	297	UQ	893	297	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	90-12-0
2-Methylnaphthalene	359	UQ	893	359	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	91-57-6
Acenaphthene	**1570**	Q	893	351	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	83-32-9
Acenaphthylene	297	UQ	893	297	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	208-96-8
Anthracene	**2200**	Q	893	236	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	120-12-7
Benzo(a)anthracene	**4010**	Q	893	249	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	56-55-3
Benzo(a)pyrene	**3360**	Q	893	423	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	50-32-8
Benzo(b)fluoranthene	**3950**	Q	893	399	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	205-99-2
Benzo(g,h,i)perylene	**2320**	Q	893	415	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	191-24-2
Benzo(k)fluoranthene	**2860**	Q	893	308	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	207-08-9
Chrysene	**3990**	Q	893	212	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	218-01-9
Dibenz(a,h)Anthracene	**875**	IQ	893	396	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	53-70-3
Fluoranthene	**10200**	Q	893	265	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	206-44-0
Fluorene	**1180**	Q	893	287	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	86-73-7
Indeno(1,2,3-cd)pyrene	**1950**	Q	893	434	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	193-39-5
Naphthalene	**1040**	Q	893	308	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	91-20-3
Phenanthrene	**9500**	Q	893	179	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	85-01-8
Pyrene	**7700**	Q	893	284	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:03	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*85%*	*16-110*				3/30/18 16:03	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*80%*	*19-105*				3/30/18 16:03	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*100%*	*20-137*				3/30/18 16:03	1718-51-0

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Sample Results
(Continued)

Client Sample ID: FLB-223 @ 0.0-0.5'
Lab Sample ID: L8D0144-03 (Solid) **Sampled:2/7/18 10:10**

PAHs (SVOCs) by Method 8270D
Laboratory:XENCO Laboratories - Tampa formerly FTS Analytical Analyst:BTJ

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
1-Methylnaphthalene	8.12	UQ	24.4	8.12	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	90-12-0
2-Methylnaphthalene	9.80	UQ	24.4	9.80	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	91-57-6
Acenaphthene	9.59	UQ	24.4	9.59	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	83-32-9
Acenaphthylene	8.12	UQ	24.4	8.12	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	208-96-8
Anthracene	6.44	UQ	24.4	6.44	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	120-12-7
Benzo(a)anthracene	6.80	UQ	24.4	6.80	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	56-55-3
Benzo(a)pyrene	11.6	UQ	24.4	11.6	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	50-32-8
Benzo(b)fluoranthene	10.9	UQ	24.4	10.9	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	205-99-2
Benzo(g,h,i)perylene	11.3	UQ	24.4	11.3	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	191-24-2
Benzo(k)fluoranthene	8.41	UQ	24.4	8.41	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	207-08-9
Chrysene	5.78	UQ	24.4	5.78	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	218-01-9
Dibenz(a,h)Anthracene	10.8	UQ	24.4	10.8	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	53-70-3
Fluoranthene	7.24	UQ	24.4	7.24	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	206-44-0
Fluorene	7.83	UQ	24.4	7.83	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	86-73-7
Indeno(1,2,3-cd)pyrene	11.9	UQ	24.4	11.9	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	193-39-5
Naphthalene	8.41	UQ	24.4	8.41	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	91-20-3
Phenanthrene	4.90	UQ	24.4	4.90	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	85-01-8
Pyrene	7.76	UQ	24.4	7.76	mg/Kg wet	1	3/29/18 12:00	4/4/18 20:52	129-00-0

Surrogate: 2-Fluorobiphenyl (B-SUR)	*Q*	*105%*	*16-110*	4/4/18 20:52	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)	*JQ*	*108%*	*19-105*	4/4/18 20:52	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)	*Q*	*119%*	*20-137*	4/4/18 20:52	1718-51-0

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Sample Results
(Continued)

Client Sample ID: FLB-224 @ 0.0-0.5'
Lab Sample ID: L8D0144-04 (Solid) **Sampled:2/7/18 10:25**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Laboratories - Tampa formerly FTS Analytical									Analyst:BTJ
1-Methylnaphthalene	172	UQ	515	172	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	90-12-0
2-Methylnaphthalene	207	UQ	515	207	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	91-57-6
Acenaphthene	203	UQ	515	203	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	83-32-9
Acenaphthylene	172	UQ	515	172	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	208-96-8
Anthracene	**149**	IQ	515	136	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	120-12-7
Benzo(a)anthracene	**289**	IQ	515	144	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	56-55-3
Benzo(a)pyrene	244	UQ	515	244	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	50-32-8
Benzo(b)fluoranthene	230	UQ	515	230	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	205-99-2
Benzo(g,h,i)perylene	240	UQ	515	240	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	191-24-2
Benzo(k)fluoranthene	**186**	IQ	515	178	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	207-08-9
Chrysene	**273**	IQ	515	122	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	218-01-9
Dibenz(a,h)Anthracene	229	UQ	515	229	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	53-70-3
Fluoranthene	**670**	Q	515	153	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	206-44-0
Fluorene	165	UQ	515	165	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	86-73-7
Indeno(1,2,3-cd)pyrene	251	UQ	515	251	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	193-39-5
Naphthalene	178	UQ	515	178	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	91-20-3
Phenanthrene	**691**	Q	515	104	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	85-01-8
Pyrene	**505**	IQ	515	164	mg/Kg wet	50	3/29/18 12:00	3/30/18 16:46	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*100%*	*16-110*				3/30/18 16:46	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*95%*	*19-105*				3/30/18 16:46	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*110%*	*20-137*				3/30/18 16:46	1718-51-0

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Sample Results
(Continued)

Client Sample ID: FLB-227 @ 0.0-0.5'
Lab Sample ID: L8D0144-05 (Solid) **Sampled:2/7/18 13:07**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Laboratories - Tampa formerly FTS Analytical									Analyst:BTJ
1-Methylnaphthalene	**87.1**	Q	41.7	13.9	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	90-12-0
2-Methylnaphthalene	**145**	Q	41.7	16.8	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	91-57-6
Acenaphthene	**771**	Q	41.7	16.4	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	83-32-9
Acenaphthylene	13.9	UQ	41.7	13.9	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	208-96-8
Anthracene	**1040**	Q	41.7	11.0	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	120-12-7
Benzo(a)anthracene	**2060**	Q	41.7	11.6	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	56-55-3
Benzo(a)pyrene	**1780**	Q	41.7	19.8	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	50-32-8
Benzo(b)fluoranthene	**2260**	Q	41.7	18.6	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	205-99-2
Benzo(g,h,i)perylene	**1300**	Q	41.7	19.4	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	191-24-2
Benzo(k)fluoranthene	**1470**	Q	41.7	14.4	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	207-08-9
Chrysene	**1870**	Q	41.7	9.88	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	218-01-9
Dibenz(a,h)Anthracene	**553**	Q	41.7	18.5	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	53-70-3
Fluoranthene	**5080**	Q	41.7	12.4	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	206-44-0
Fluorene	**619**	Q	41.7	13.4	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	86-73-7
Indeno(1,2,3-cd)pyrene	**1220**	Q	41.7	20.2	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	193-39-5
Naphthalene	**544**	Q	41.7	14.4	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	91-20-3
Phenanthrene	**4600**	Q	41.7	8.38	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	85-01-8
Pyrene	**3750**	Q	41.7	13.2	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:35	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*99%*	*16-110*				4/4/18 21:35	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*99%*	*19-105*				4/4/18 21:35	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*112%*	*20-137*				4/4/18 21:35	1718-51-0

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Sample Results
(Continued)

Client Sample ID: FLB-241 @ 0.0-0.5'
Lab Sample ID: L8D0144-06 (Solid) **Sampled:2/7/18 10:49**

Analyte	Result	Qual	PQL	MDL	Units	Dil	Date Prepared	Date Analyzed	CAS #
PAHs (SVOCs) by Method 8270D									
Laboratory:XENCO Laboratories - Tampa formerly FTS Analytical									Analyst:BTJ
1-Methylnaphthalene	5.95	UQ	17.9	5.95	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	90-12-0
2-Methylnaphthalene	7.18	UQ	17.9	7.18	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	91-57-6
Acenaphthene	**34.3**	Q	17.9	7.02	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	83-32-9
Acenaphthylene	5.95	UQ	17.9	5.95	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	208-96-8
Anthracene	**45.7**	Q	17.9	4.71	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	120-12-7
Benzo(a)anthracene	**86.8**	Q	17.9	4.98	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	56-55-3
Benzo(a)pyrene	**73.0**	Q	17.9	8.46	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	50-32-8
Benzo(b)fluoranthene	**78.4**	Q	17.9	7.98	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	205-99-2
Benzo(g,h,i)perylene	**55.0**	Q	17.9	8.30	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	191-24-2
Benzo(k)fluoranthene	**63.4**	Q	17.9	6.16	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	207-08-9
Chrysene	**85.7**	Q	17.9	4.23	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	218-01-9
Dibenz(a,h)Anthracene	**23.2**	Q	17.9	7.93	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	53-70-3
Fluoranthene	**226**	Q	17.9	5.30	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	206-44-0
Fluorene	**22.9**	Q	17.9	5.73	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	86-73-7
Indeno(1,2,3-cd)pyrene	**49.3**	Q	17.9	8.68	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	193-39-5
Naphthalene	**8.39**	IQ	17.9	6.16	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	91-20-3
Phenanthrene	**194**	Q	17.9	3.59	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	85-01-8
Pyrene	**164**	Q	17.9	5.68	mg/Kg wet	1	3/29/18 12:00	4/4/18 21:56	129-00-0
Surrogate: 2-Fluorobiphenyl (B-SUR)		*Q*	*99%*	*16-110*				4/4/18 21:56	321-60-8
Surrogate: Nitrobenzene-d5 (B-SUR)		*Q*	*102%*	*19-105*				4/4/18 21:56	4165-60-0
Surrogate: Terphenyl-D14 (B-SUR)		*Q*	*111%*	*20-137*				4/4/18 21:56	1718-51-0

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Quality Control

PAHs (SVOCs) by Method 8270D

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8D0091									**Prep: SW3550**		
Blank (B8D0091-BLK1)					Prepared: 3/29/2018 Analyzed: 3/30/2018						
1-Methylnaphthalene	3.33	U	10.0	3.33	mg/Kg wet						
2-Methylnaphthalene	4.02	U	10.0	4.02	mg/Kg wet						
Acenaphthene	3.93	U	10.0	3.93	mg/Kg wet						
Acenaphthylene	3.33	U	10.0	3.33	mg/Kg wet						
Anthracene	2.64	U	10.0	2.64	mg/Kg wet						
Benzo(a)anthracene	2.79	U	10.0	2.79	mg/Kg wet						
Benzo(a)pyrene	4.74	U	10.0	4.74	mg/Kg wet						
Benzo(b)fluoranthene	4.47	U	10.0	4.47	mg/Kg wet						
Benzo(g,h,i)perylene	4.65	U	10.0	4.65	mg/Kg wet						
Benzo(k)fluoranthene	3.45	U	10.0	3.45	mg/Kg wet						
Chrysene	2.37	U	10.0	2.37	mg/Kg wet						
Dibenz(a,h)Anthracene	4.44	U	10.0	4.44	mg/Kg wet						
Fluoranthene	2.97	U	10.0	2.97	mg/Kg wet						
Fluorene	3.21	U	10.0	3.21	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	4.86	U	10.0	4.86	mg/Kg wet						
Naphthalene	3.45	U	10.0	3.45	mg/Kg wet						
Phenanthrene	2.01	U	10.0	2.01	mg/Kg wet						
Pyrene	3.18	U	10.0	3.18	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl (B-SUR)			*103*		*mg/Kg wet*	*100*		*103*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*104*		*mg/Kg wet*	*100*		*104*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*117*		*mg/Kg wet*	*100*		*117*	*20-137*		
LCS (B8D0091-BS1)					Prepared: 3/29/2018 Analyzed: 3/30/2018						
1-Methylnaphthalene	108		10.0	3.33	mg/Kg wet	100		108	43.3-110		
2-Methylnaphthalene	104		10.0	4.02	mg/Kg wet	100		104	42.1-110		
Acenaphthene	103		10.0	3.93	mg/Kg wet	100		103	47.1-110		
Acenaphthylene	106		10.0	3.33	mg/Kg wet	100		106	45.1-110		
Anthracene	106		10.0	2.64	mg/Kg wet	100		106	64.8-110		
Benzo(a)anthracene	101		10.0	2.79	mg/Kg wet	100		101	68.1-110		
Benzo(a)pyrene	101		10.0	4.74	mg/Kg wet	100		101	36-141		
Benzo(b)fluoranthene	99.6		10.0	4.47	mg/Kg wet	100		100	34-139		
Benzo(g,h,i)perylene	99.3		10.0	4.65	mg/Kg wet	100		99	32-141		
Benzo(k)fluoranthene	105		10.0	3.45	mg/Kg wet	100		105	31-139		
Chrysene	101		10.0	2.37	mg/Kg wet	100		101	41-124		
Dibenz(a,h)Anthracene	99.3		10.0	4.44	mg/Kg wet	100		99	35-143		
Fluoranthene	104		10.0	2.97	mg/Kg wet	100		104	38-132		
Fluorene	105		10.0	3.21	mg/Kg wet	100		105	49.1-110		
Indeno(1,2,3-cd)pyrene	98.2		10.0	4.86	mg/Kg wet	100		98	27-160		
Naphthalene	100		10.0	3.45	mg/Kg wet	100		100	43-110		
Phenanthrene	101		10.0	2.01	mg/Kg wet	100		101	59.6-110		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

Quality Control
(Continued)

PAHs (SVOCs) by Method 8270D (Continued)

Analyte	Result	Qual	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B8D0091 (Continued									**Prep: SW3550**		
LCS (B8D0091-BS1)						Prepared: 3/29/2018 Analyzed: 3/30/2018					
Pyrene	105		10.0	3.18	mg/Kg wet	100		105	42-138		
Surrogate: 2-Fluorobiphenyl (B-SUR)			*104*		*mg/Kg wet*	*100*		*104*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)			*105*		*mg/Kg wet*	*100*		*105*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*118*		*mg/Kg wet*	*100*		*118*	*20-137*		
LCS Dup (B8D0091-BSD1)						Prepared: 3/29/2018 Analyzed: 3/30/2018					
1-Methylnaphthalene	115	J	10.0	3.33	mg/Kg wet	100		115	43.3-110	7	30
2-Methylnaphthalene	113	J	10.0	4.02	mg/Kg wet	100		113	42.1-110	9	30
Acenaphthene	110		10.0	3.93	mg/Kg wet	100		110	47.1-110	7	30
Acenaphthylene	113	J	10.0	3.33	mg/Kg wet	100		113	45.1-110	6	30
Anthracene	112	J	10.0	2.64	mg/Kg wet	100		112	64.8-110	6	30
Benzo(a)anthracene	110		10.0	2.79	mg/Kg wet	100		110	68.1-110	8	30
Benzo(a)pyrene	108		10.0	4.74	mg/Kg wet	100		108	36-141	7	30
Benzo(b)fluoranthene	105		10.0	4.47	mg/Kg wet	100		105	34-139	6	30
Benzo(g,h,i)perylene	107		10.0	4.65	mg/Kg wet	100		107	32-141	7	30
Benzo(k)fluoranthene	113		10.0	3.45	mg/Kg wet	100		113	31-139	7	30
Chrysene	109		10.0	2.37	mg/Kg wet	100		109	41-124	7	30
Dibenz(a,h)Anthracene	107		10.0	4.44	mg/Kg wet	100		107	35-143	8	30
Fluoranthene	109		10.0	2.97	mg/Kg wet	100		109	38-132	4	30
Fluorene	113	J	10.0	3.21	mg/Kg wet	100		113	49.1-110	7	30
Indeno(1,2,3-cd)pyrene	105		10.0	4.86	mg/Kg wet	100		105	27-160	6	30
Naphthalene	109		10.0	3.45	mg/Kg wet	100		109	43-110	9	30
Phenanthrene	108		10.0	2.01	mg/Kg wet	100		108	59.6-110	6	30
Pyrene	112		10.0	3.18	mg/Kg wet	100		112	42-138	7	30
Surrogate: 2-Fluorobiphenyl (B-SUR)			*110*		*mg/Kg wet*	*100*		*110*	*16-110*		
Surrogate: Nitrobenzene-d5 (B-SUR)		*J*	*115*		*mg/Kg wet*	*100*		*115*	*19-105*		
Surrogate: Terphenyl-D14 (B-SUR)			*127*		*mg/Kg wet*	*100*		*127*	*20-137*		

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SpecPro Professional Services	Project: Winter Haven	
12500 San Pedro Avenue, Suite 670	Project Number: Winter Haven	**Reported:**
San Antonio, TX 78216	Project Manager: Richard Houde	4/20/18 13:08

List of Certifications for XENCO Laboratories - Tampa formerly FTS Analytical

Number	Description	Code	Facility	Expires
123066	Kentucky UST CERTIFICATION	UST KY	FTSL	06/30/2018
E84098	FL MICROBIOLOGY Lakeland CERT	LFLNELAC	FTSL	06/30/2018
E871002	Xenco FL CERT	FLNELAC	FTSL	06/30/2018
E87429	FL NELAC CERT Tampa	AFLNELAC	FTSL	06/30/2018
LI0-135	DoD CERTIFICATE	DOD	FTSL	12/11/2019
P330-07-00105	USDA CERTIFICATE	USDA	FTSL	

Notes and Definitions

Item	Definition
U	Compound was not detected.
Dry	Sample results reported on a dry weight basis.
I	Value estimated to be between the Laboratory Detection and Reporting Limit
J	QC Failure see Case Narrative
L	Concentration exceeds calibration range
N	Tentatively Identified Compound
Q	Hold time exceeded
V	Analyte equal to or above detection limit in the method blank
TNTC	Bacteria is present but Too Numerous To Count

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

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APPENDIX V

SITE PHOTOGRAPHS

1. Looking toward the west along the southern boundary of the facility (fence) at the direct-push rig drilling boring FLB-242. Salvation Army property visible in background, left of the fence.

2. Looking toward the SE at the SW corner of the garage. Direct-push drilling rig is drilling GSB-16 to a depth of 25 feet below ground surface.

3. Looking toward the north at the southwest corner of the garage. Rig is drilling GSB-16. Tree damaged by Hurricane Irma has fallen onto the roof of the garage.

4. Looking east along the southern side of the USDA building. CES field technician is drilling shallow boring FLB-239.

5. Field technician drilling shallow boring (FLB-235) to a depth of 6 feet below ground surface. Irrigation well is located behind the technician.

6. Looking north at the southeast corner of the garage. The beater bar (black rod) leaning against the wall (behind tree branch) marks the location where boring GSB-17 was drilled.

7. Looking west along the south side of the USDA building. Former cooling tower slab is visible in the foreground, and the Salvation Army building is on the left side of the photo.

8. Looking toward the SW at the former cooling tower slab and the Salvation Army property (background) located south of the USDA property.

9. Looking toward the SW at the former cooling tower slab and the Salvation Army property (background) located south of the USDA property.

10. Looking toward the south at the north side of the building located on Salvation Army property. The fence is the southern boundary of the USDA property.

11. Looking toward the east at the south boundary (fence) of the USDA property and the Salvation Army adjacent to the south side of the fence.

12. Looking toward the west along the south side of the USDA building. North side of former cooling tower slab is visible on the left side of photograph.

13. Field technician placing asphalt patch at location where FLB-210 was drilled in the parking lot on east side of the USDA property.

14. View of five drums containing cuttings (waste) from soil borings drilled on the USDA property. Drums are stored inside the garage of the USDA building.

15. View of three drums containing cuttings (waste) from soil borings drilled on the USDA property. Drums are stored inside the garage of the USDA building.

16. Looking at the inside of garage bay #1 prior to removing drill cuttings and placing concrete cores back into the slab.

17. Looking at the inside of garage bay #1 after the nine core holes drilled through the slab were repaired with concrete.

18. Looking toward the door at the inside of garage bay #1 after the nine core holes drilled through the slab were repaired.

19. Looking west along the northern boundary (sidewalk) of the USDA property. Entrance (porch) into the building is visible in the background (left side of photo).

20. Looking east along the northern boundary (sidewalk) of the property.

21. Looking west along the northern boundary (sidewalk) of the property.

22. looking west at the north side of the USDA property. Photo taken from NE corner of the facility.

23. Looking south at the east side of the USDA property. Photo taken from NE corner of the facility.

24. Looking south at the east side of the USDA property. Photo taken from NE corner of the facility.

25. Looking east along the southern boundary (fence) of the property. Photo taken from the SW corner of the facility. Salvation Army's building is visible on the right side of photo.

26. Looking toward the west along the south boundary of the facility. Garage is visible on the left side of photo.

27. Looking east at the rear of the garage (background) and the southern boundary (fence) of the USDA property.

28. Looking west along the southern boundary (fence) of the USDA property. Boring FLB-242 was drilled between fence and concrete slab visible in the background.

29. Looking toward the west at the south side of the USDA building and the former cooling tower slab (foreground).

30. Looking toward the northeast at the northeast corner of the facility.

31. Looking toward the east/southeast at the fence and vegetation located near the eastern boundary of the USDA property.

32. Looking toward the southeast at the southeast quadrant of the facility and the vegetation located in the area.

33. Looking toward the west at area where FLB-211 was drilled (orange tape). Water drains from asphalt parking lot out onto the grassy area.

34. Looking toward the west at area where FLB-211 was drilled (orange tape). Water drains from asphalt parking lot out onto the grassy area.

35. Looking south along the eastern fence line. Note weathered sealcoating on the parking lot.

36. Looking south along the eastern fence line. Note weathered sealcoating on the parking lot. FLB-211 was installed in the grassy area east of the fence (left).

37. Looking at stakes marking location of BFL-21 and BFL-22. Note railroad ties positioned adjacent to the fence.

38. Looking north along the eastern fence line. Note railroad ties positioned adjacent to the fence.

39. Looking toward the northwest at the front of the garage. Note railroad ties positioned along the eastern fence line.

40. Looking southwest at storage sheds in the SE quadrant of the Site. Note railroad ties positioned along the fence.

41. Looking toward the south at the southern side of the USDA facility.

42. Looking toward the south at the area located behind the garage. Salvation Army property is visible in the round.

APPENDIX VI

BORING LOGS

FENCE LINE BORINGS

BORING LOG

Boring/Well Number: FLB-200	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA- Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 12:41 ☐ AM ☒ PM End Time: 12:49 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand- Brown to tan.	SP	D	
	1-2						1	Fine to medium grained			
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6				
								EOB@6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-201	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA- Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 12:51 ☐ AM ☒ PM End Time: 12:54 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLeMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium	SP	D	
	1-2						1	grained. Brown to tan color. No odor			
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB@6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-202	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 13:42 ☐ AM ☒ PM End Time: 13:56 ☐ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: J. DeLaMater	Environmental Technician's Name: G. Isenhour

Drilling Company: CES	Pavement Thickness (inches): NA	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1										
	1-2						1	Poorly graded sand, Fine to medium grained. Brown to tan ~~[illegible]~~ No odor.	SP	D	
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-203	Permit Number:	FDEP Facility Identification Number:
Site Name: USOA- Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 13:54 ☐ AM ☒ PM End Time: 14:04 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium	SP	D	
	1-2						1	grained. Brown to tan; No odor.			
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6				
								EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-204	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 14:14 ☐ AM ☒ PM End Time: 14:31 ☐ AM ☒ PM
Environmental Contractor: CL	Geologist's Name: J. DeLaMater	Environmental Technician's Name: L. Isenhour
Drilling Company: CL	Pavement Thickness (inches): 2"	Borehole Diameter (inches): 4 / Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well): / OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium grained. Brown to tan. No odor.	SP	D	
	1-2						1				
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-205	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA-Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 14:37 ☐ AM ☒ PM End Time: 14:43 ☐ AM ☒ PM
Environmental Contractor: CCJ	Geologist's Name: J. DeLamar	Environmental Technician's Name: L. Isenhour

Drilling Company: CCJ	Pavement Thickness (inches): 3	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium	SP	D	
	1-2						1	grained. Brown to tan. No odor.			
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-206	Permit Number:		FDEP Facility Identification Number:
Site Name: USDA Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 08:15 ☑ AM ☐ PM End Time: 09:23 ☑ AM ☐ PM	
Environmental Contractor: CES	Geologist's Name: J. Dela Maner		Environmental Technician's Name: C. Isenhour
Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium	SP	D	
	1-2						1	grained. Brown to Tan. No odor.			
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB@6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-207	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA- Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 08:27 ☒ AM ☐ PM End Time: 08:42 ☒ AM ☐ PM
Environmental Contractor: CCS	Geologist's Name: J. Dela Mater	Environmental Technician's Name: C. Isenhour
Drilling Company: CCS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand- Fine to medium grained. Brown to Tan. No odor	SP	D	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB@6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-208	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 14:53 ☐ AM ☒ PM End Time: 15:04 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): 2	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium grained. Brown to Tan - No odor	SP	D	
	1-2						1				
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-209	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 13:50 ☐ AM ☒ PM End Time: 14:05 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): 3	Borehole Diameter (inches): 6	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND/ASPHALT

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		DARK BROWN POORLY GRADED SAND	SP	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
	2-4	24	—	—	—	—	2	LIGHT BROWN POORLY GRADED SAND	SP	D	
	4-6	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-210	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA- Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 09:39 ☒ AM ☐ PM End Time: 09:43 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: J. Dela Mater	Environmental Technician's Name: C. Isenhour
Drilling Company: CES	Pavement Thickness (inches):	Borehole Diameter (inches): 4
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium	SP	D	
	1-2						1	grained. Brown to Tan. No odor			
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-211	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA-Winter Haven	Borehole Start Date: 2-6-19 End Date: 2-6-19	Borehole Start Time: 08:52 ☒ AM ☐ PM End Time: 09:57 ☒ AM ☐ PM
Environmental Contractor: CCJ	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1										
	1-2						1	Poorly graded sand. Fine to medium grained. Brown to Tan. No odor	SP	D	
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-212	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 09:01 ☒ AM ☐ PM End Time: 09:06 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium grained. Brown to Tan. No odor.	SP	D	
	1-2						1				
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-213	Permit Number:	FDEP Facility Identification Number:
Site Name: USOA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 09:11 ☒ AM ☐ PM End Time: 09:17 ☒ AM ☐ PM
Environmental Contractor: CCS	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C Isenhom

Drilling Company: CCS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand. Fine to medium grained. Brown to tan. No odor.	SP	D	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB@6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-214	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 09:53 ☒ AM ☐ PM End Time: 09:59 ☒ AM ☐ PM
Environmental Contractor: CCS	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C. Isenhour

Drilling Company: CCS	Pavement Thickness (inches): 3	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand. Fine to medium grained. Brown to Tan. No odor	SP	D	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-215	Permit Number:	FDEP Facility Identification Number:
Site Name: USOA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 10:10 ☑ AM ☐ PM End Time: 10:20 ☑ AM ☐ PM
Environmental Contractor: CCS	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CCS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand Fine to medium grained. Brown to Tan. No odor	SP	D	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-5						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-216	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 10:24 ☒ AM ☐ PM End Time: 10:42 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): 3" ~~N/A~~	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium grained. Brown to tan. No odor	SP	D	
	1-2						1				
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-217	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-6-18 End Date:	Borehole Start Time: 10:47 ☒ AM ☐ PM End Time: 10:55 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C. Isenhour
Drilling Company: CES	Pavement Thickness (inches): 2	Borehole Diameter (inches): 4
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand. Fine to medium grained. Brown to Tan. No odor.	SP	D	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-218	Permit Number:	FDEP Facility Identification Number:
Site Name: WOA-Winter Haven	Borehole Start Date: 2-6-19 End Date: 2-6-19	Borehole Start Time: 12:10 ☐ AM ☒ PM End Time: 12:16 ☐ AM ☒ PM
Environmental Contractor: CCJ	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour
Drilling Company: CCJ	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand. Fine to medium grained. Brown to Tan. No odor.	SP	D	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-219	Permit Number:	FDEP Facility Identification Number:
Site Name: WDA- Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 12:29 ☐ AM ☒ PM End Time: 12:26 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium grained. Brown to Tan. No odor.	SP	D	
	1-2						1				
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-220	Permit Number: — N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 08:25 ☑ AM ☐ PM End Time: 08:40 ☑ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3"	Borehole Depth (feet): 6'
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): —	Measured Well DTW (in feet after water recharges in well): —	OVA (list model and check type): — ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☑ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—	1	BLACK SILTY FGS	SM	D	
	0.5'-2'	18	—	—	—	—	2	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
	2'-4'	24	—	—	—	—	3	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-221	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 08:43 ☒ AM ☐ PM End Time: 08:55 ☒ AM ☐ PM
Environmental Contractor: CRS	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3"
Borehole Depth (feet): 6'		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0'-0.5'	6	—	—	—	—	1	BLACK SILTY FGS	SM	D	
	0.5'-2'	18	—	—	—	—	2	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
	2'-4'	24	—	—	—	—	3	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
	4'-6'	24	—	—	—	—	5	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-222	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 09:49 ☒ AM ☐ PM End Time: 09:57 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
AA	0'-0.5'	6	—	—	—	—		BLACK SILTY FGS	SM	D	
							1	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
	0.5'-2'	18	—	—	—	—					
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-223	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 10:08 ☒ AM ☐ PM End Time: 10:19 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED ~~FGS~~ SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-224	Permit Number: N/A	FDEP Facility Identification Number:
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 10:21 ☒ AM ☐ PM End Time: 10:35 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5'	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5'-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-225	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 11:03 ☒ AM ☐ PM End Time: 11:11 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG CEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (Include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0'-0.5'	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5'-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED ~~FGS~~ SAND	SP	D	
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED ~~FGS~~ SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED ~~FGS~~ SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

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

BORING LOG

Boring/Well Number: FCB 226	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA- WINTER HAVEN	Borehole Start Date: 2-7-18 End Date:	Borehole Start Time: 12:53 ☐ AM ☒ PM End Time: 13:02 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0'-0.5'	6	—	—	—	—		BLACK SILTY FES	SM	D	
							1	LIGHT BROWN POORLY GRADED SAND	SP	D	
	0.5'-2'	18	—	—	—	—					
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-227	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTERHAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 13:05 ☐ AM ☒ PM End Time: 13:15 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0'-0.5'	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5'-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-228	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 08:10 ☒ AM ☐ PM End Time: 08:18 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FCB-229	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 08:22 ☒ AM ☐ PM End Time: 08:29 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG CEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-230	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 13:28 ☐ AM ☒ PM End Time: 13:35 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	SAME	SP	D	
							4				
	4-6	24	—	—	—	—	5	SAME	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-231	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 13:17 ☐ AM ☒ PM End Time: 13:25 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2'-4	24	—	—	—	—	3	SAME	SP	D	
							4				
	4-6	24	—	—	—	—	5	SAME	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-232	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 12:36 ☐ AM ☒ PM End Time: 12:45 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0.05	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: RCB-233	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 12:47 ☐ AM ☒ PM End Time: ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5				
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-234	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 10:30 ☒ AM ☐ PM End Time: 11:03 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		MIX BLACK SILTY FGS & LIGHT	SM	D	
	0.5-2	18	—	—	—	—	1	BROWN POORLY GRADED SAND	SP		
							2	MIX BLACK SILTY FGS, LIGHT BROWN POORLY GRADED SAND & RED CLAY SPECKS	SM SP CL	D	
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-~~232~~ 235	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 12:11 ☐ AM ☒ PM End Time: ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	4	—	—	—	—		MIX LIGHT BROWN POORLY	SP/		
	0.5-2'	18	—	—	—	—	1	SORTED SAND & BLACK SILTY FGS	SM	D	
							2	SAME	SP/ SM	D	
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5				
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-236	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 09:54 ☒ AM ☐ PM End Time: 10:04 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
N/A	N/A	3	6

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
HA	N/A	N/A	N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-237	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 10:07 ☒ AM ☐ PM End Time: 10:19 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3				
							4				
	4-6	24	—	—	—	—	5				
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB 238	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 08:53 ☒ AM ☐ PM End Time: 09:30 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		MIX BLACK SILTY FGS & LIGHT BROWN POORLY GRADED SAND	SM/SP	D	
	0.5-2	18	—	—	—	—	1				
							2	MIX BLACK SILTY FGS & LIGHT BROWN POORLY GRADED SAND	SM/SP	D	
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5				
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-239	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 09:34 ☒ AM ☐ PM End Time: 09:51 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		MIX BLACK FGS SILTY & LIGHT BROWN POORLY GRADED SAND	SM/SP	D	
	0.5-2	18	—	—	—	—	1	MIX BLACK SILTY FGS & LIGHT BROWN POORLY GRADED SAND	SM/SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5				
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-240	Permit Number: N/A	FDEP Facility Identification Number: NA
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-8-18 End Date: 2-8-18	Borehole Start Time: 08:32 ☒ AM ☐ PM End Time: 08:41 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB- 241	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 10:41 [X] AM [ ] PM End Time: 10:55 [X] AM [ ] PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A [ ] FID [ ] PID		

Disposition of Drill Cuttings [check method(s)]: [X] Drum [ ] Spread [ ] Backfill [ ] Stockpile [ ] Other

(describe if other or multiple items are checked):

Borehole Completion (check one): [ ] Well [ ] Grout [ ] Bentonite [ ] Backfill [X] Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5'-2'	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED FGS SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-242	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 09:46 ☒ AM ☐ PM End Time: 09:60 ☒ AM ☐ PM
Environmental Contractor: CCS	Geologist's Name: J. Dela Mare	Environmental Technician's Name: C. Isenhour

Drilling Company: Andrill	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 29
Drilling Method(s): DPT	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Brown. Fine	SP	D	
	1-2						1	to medium grained.			
	2-3						2	Same as above. Tan.	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
	6-8						6	" "	SP	D	
							7				
	8-10						8	" "	SP	M	
							9	Sandy clay. Orange. Soft. No odor	CL	M	
	10-12						10	" "	CL	M	
							11				
							12				

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

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

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 2-5-18 End Date: 2-5-18
FLB-242		USDA - Winter Haven	

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	12-14						13	Sandy clay - Orange - No odor.	CL	D	
	14-16						14	Clayey sand. White w/ red mottling.	SC	M	
							15				
	16-18						16	" "	SC	M	
							17				
	18-20						18	" "	SC	M	
							19				
	20-25						20	" "	SC	M	
							21				
							22				
							23				
							24				
							25	Slightly clayey sand. Fine to coarse grained orange soil	SP-SC	M	
							26				
							27				
							28				
							29				
							30	COB @ 29'			

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

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

BORING LOG

Boring/Well Number: FLB-243	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 13:04 ☐ AM ☒ PM End Time: 13:13 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLa Mayner	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1										
	1-2						1	Poorly graded sand. Brown to tan. Fine to medium grained. No odor.	SP	D	
	2-3						2	" " "	SP	D	
	3-4						3	" " "	SP	D	
	4-6						4	" " "	SP	D	
							5	" " "	SP	D	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-244	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 13:28 ☐ AM ☒ PM End Time: 13:37 ☐ AM ☒ PM
Environmental Contractor: CLS	Geologist's Name: J. DeLa Matter	Environmental Technician's Name: C. Isenhour
Drilling Company: CLS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium grained. Brown to tan. No odor.	SP	D	
	1-2						1				
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-245	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 13:18 ☐ AM ☒ PM End Time: 13:25 ☐ AM ☒ PM
Environmental Contractor: CCS	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CCS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium	SP	D	
	1-2						1	grained. Brown to tan. No odor			
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6				
								EOB@6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-246	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USOA-WINTER HAVEN	Borehole Start Date: 2-9-18 End Date: 2-9-18	Borehole Start Time: 08:05 ☒ AM ☐ PM End Time: 08:15 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): ø 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		MX LIGHT BROWN POORLY GRADED	SP/	D	
	0.5-2	18	—	—	—	-	1	SAND & BLACK SILTY FGS	SM		
							2	SAME	SP/ SM	D	
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND	SP	D	
							4				
	4-6	24	—	—	—	—	5	SAME	SP	D	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-247	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 08:59 ☒ AM ☐ PM End Time: 09:11 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5'	6	—	—	—	—		BLACK SILTY FGS	SM	D	
							1	LIGHT BROWN FGS POORLY GRADED SAND	SP	D	
	0.5'-2'	18	—	—	—	—					
							2				
	2'-4'	24	—	—	—	—		LIGHT BROWN FGS POORLY GRADED SAND	SP	D	
							3				
							4				
	4'-6'	24	—	—	—	—		LIGHT BROWN FGS POORLY GRADED SAND	SP	D	
							5				
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-248	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 09:15 ☒ AM ☐ PM End Time: 09:30 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0'-0.5'	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5'-2'	18	—	—	—	—	1	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN ~~FGS~~ POORLY GRADED SAND	SP	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: FLB-249	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA-WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 09:32 ☒ AM ☐ PM End Time: 09:45 ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH

Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5'	6	—	—	—	—		BLACK SILTY FGS	SM	D	
	0.5-2'	18	—	—	—	—	1	MIX OF BLACK SILTY FGS & LIGHT BROWN POORLY GRADED SAND	SM/SP	D	
							2				
	2'-4'	24	—	—	—	—	3	LIGHT BROWN FGS POORLY GRADED SAND	SP	D	
							4				
	4'-6'	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND	SP	D	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: RLB-250	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-7-18 End Date: 2-7-18	Borehole Start Time: 13:25 ☐ AM ☒ PM End Time: 13:35 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		LIGHT BROWN POORLY GRADED SAND	SP	D	
	0.5-2	18	—	—	—	—	1	LIGHT BROWN POORLY GRADED SAND	SP	D	
							2				
	2-4	24	—	—	—	—	3	LIGHT BROWN POORLY GRADED SAND w/ SMALL ORANGE CLAY SPECKS	SP/CL	D	
							4				
	4-6	24	—	—	—	—	5	LIGHT BROWN POORLY GRADED SAND w/ SMALL ORANGE CLAY SPECKS	SP/CL	D	
						—	6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

FORMER COOLING TOWER BORINGS

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

BORING LOG

Boring/Well Number: CTB-41	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA-Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 09:30 ☒ AM ☐ PM End Time: 1000 ☒ AM ☐ PM
Environmental Contractor: CLS	Geologist's Name: J. D. LaMatar	Environmental Technician's Name: C. Isenhour

Drilling Company: Amdrill	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 25
Drilling Method(s): DPT	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Brown. No odor.	SP	M	
	1-2						1				
	2-3						2	" "	SP	D	
								Tan color.			
	3-4						3				
DP	4-6						4	" "	SP	D	
							5				
	6-8						6	" "	SP	M	
							7				
	8-10						8	" "	SP	W	
							9				
	10-12						10	Plastic clay. Sandy. Red-orange.	CH	M	
							11				
							12				

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

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

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 2-5-18 End Date: 2-5-18
CTB-41		USDA - Winter Haven	

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	12-14						13	Plastic clay. Sand. Red-orange. No odor.	CH	M	
	14-16						14	" "	CH	M	
							15				
								Sandy clay. Red-white.	CL	D	
	16-18						16				
							17				
	18-20						18	" "	CL	D	
							19				
	20-25						20	" "	CL	M	
							21				
							22				
							23				
							24				
							25	EOB@25			
							26				
							27				
							28				
							29				
							30				

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

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

BORING LOG

Boring/Well Number: CTB-42	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 13:29 ☐ AM ☒ PM End Time: 13:35 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1										
	1-2						1	Poorly graded sand. Fine to medium grained. Brown to Tan. No odor.	SP	D	
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: CTB-43	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 13:12 ☐ AM ☒ PM End Time: 13:17 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C. Isenhour
Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand- Fine to medium grained- Brown to Tan- No odor	SP	D	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6				
							7	EOB@6'			
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: CTB-44	Permit Number:	FDEP Facility Identification Number:
Site Name: USOA- Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 13:00 ☐ AM ☒ PM End Time: 13:05 ☐ AM ☒ PM
Environmental Contractor: CU	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhow
Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
	0-1										
	1-2						1	Poorly graded sand. Fine to medium grained. Brown to Tan. No odor.	SP	D	
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: CTB-45	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA - Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 13:21 ☐ AM ☒ PM End Time: 13:25 ☐ AM ☒ PM
Environmental Contractor: CG	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: CG	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand. Fine to medium grained. Brown to Tan. No odor	SP	D	
	1-2						2	" "	SP	D	
	2-3						3	" "	SP	D	
	3-4						4	" "	SP	D	
	4-6						5	" "	SP	D	
							6	EOB @ 6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

BORING LOG

Boring/Well Number: CTB-46	Permit Number:	FDEP Facility Identification Number:
Site Name: USDA- Winter Haven	Borehole Start Date: 2-6-18 End Date: 2-6-18	Borehole Start Time: 12:42 ☐ AM ☒ PM End Time: 12:47 ☐ AM ☒ PM
Environmental Contractor: CES	Geologist's Name: J. DeLa Mater	Environmental Technician's Name: C. Isenhour

Drilling Company: CES	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 6
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1							Poorly graded sand. Fine to medium grained. Brown to tan. No odor.	SP	D	
	1-2						1				
	2-3						2	" "	SP	D	
	3-4						3	" "	SP	D	
	4-6						4	" "	SP	D	
							5	" "	SP	D	
							6	EOB@6'			
							7				
							8				
							9				
							10				
							11				
							12				

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

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

EXTERIOR GARAGE AREA BORINGS

BORING LOG

Boring/Well Number: GSB-16	Permit Number:	FDEP Facility Identification Number:
Site Name: USOA- Winter Haven	Borehole Start Date: 2-5-18 End Date: 2-5-18	Borehole Start Time: 10:12 ☒ AM ☐ PM End Time: 10:50 ☒ AM ☐ PM
Environmental Contractor: CCS	Geologist's Name: J. DeLaMater	Environmental Technician's Name: C. Isenhour

Drilling Company: Amdrill	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 4	Borehole Depth (feet): 25
Drilling Method(s): DPT	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1						1	Poorly graded sand. Brown. No odor.	SP	M	
	1-2										
	2-3						2	" "	SP	D	
	3-4						3	Same as above Tan.	SP	D	
DP	4-6						4	" "	SP	D	
							5				
	6-8						6	" "	SP	M	
							7				
	8-10						8	" "	SP	M	
							9				
	10-12						10	" "	SP	M	
							11				
							12				

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

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

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date:
GSB-16		USDA - Winter Haven	End Date: 2-5-18

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	12-14							Plastic clay. Sandy. Orange	CH	M	
							13				
	14-16						14	" "	CH	D	
							15				
	16-18						16	" " Increased sand content	CH	D	
							17				
	18-20						18				
							19	Sandy clay. White-red. No odor	CL	D	
	20-25						20	" "	CL	D	
							21				
							22				
							23				
							24				
							25	EOB @ 25'			
							26				
							27				
							28				
							29				
							30				

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

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

BORING LOG

Boring/Well Number: GSB-17	Permit Number: N/A	FDEP Facility Identification Number: N/A
Site Name: USDA - WINTER HAVEN	Borehole Start Date: 2-9-18 End Date: 2-9-18	Borehole Start Time: 08:25 ☒ AM ☐ PM End Time: ☒ AM ☐ PM
Environmental Contractor: CES	Geologist's Name: TROY TRAYNHAM	Environmental Technician's Name: CRAIG LEACH
Drilling Company: N/A	Pavement Thickness (inches): 3	Borehole Diameter (inches): 3
Borehole Depth (feet): 6		
Drilling Method(s): HA	Apparent Borehole DTW (in feet from soil moisture content): N/A	Measured Well DTW (in feet after water recharges in well): N/A
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☐ Backfill ☒ Other (describe) PLAY SAND & ASPHALT

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-0.5	6	—	—	—	—		LIMESTONE BASE & LIGHT	LS/	D	
	0.5-2	18	—	—	—	—	1	BROWN POORLY GRADED SAND	SP		
								MIX LIGHT BROWN POORLY	SP/	D	
							2	GRADED SAND & BLACK SILTY FINES	SM		
								~~HA~~ LIGHT BROWN POORLY	SP	D	
							3	GRADED SAND			
	2-4	24	—	—	—	—					
							4				
	4-6	24	—	—	—	—	5	SAME	SP	D	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

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

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

APPENDIX VII

FIELD NOTES

USDA - Winter Haven

0500 - Load truck & trailer
0600 - Leave office
0800 - Arrive @ site
0805 - Meet w/ Richard
0818 - Setup
0846 - Begin FLB-242
0920 - Finish FLB-242
0930 - Begin CTB-41
1000 - Finish CTB-41
- EOB @ 25'
1022 - Begin GSB-16
1050 - Finish GSB-16
- EOB @ 25'
1105 - Stop for lunch
1205 - Return from lunch
1209 - Mark boring locations along fence line
1241 - Begin FLB-200
1248 - Finish FLB-200
- EOB @ 6'
1251 - Begin FLB-201
1259 - Finish FLB-201
- EOB @ 6'
1304 - Begin FLB-243
1313 - Finish FLB-243
- EOB @ 6'

Monday - 2/5/18 J. DeLoMar / C. Isenhour

1318 - Begin FLB-245
1323 - Finish FLB-245
- EOB @ 6'
1328 - Begin FLB-244
1337 - Finish FLB-244
- EOB @ 6'
1342 - Begin FLB-202
1350 - Finish FLB-202
- EOB @ 6'
1354 - Begin FLB-203
1404 - Finish FLB-203
- EOB @ 6'
1414 - Begin FLB-204
1431 - Finish FLB-204
- EOB @ 6'
1437 - Begin FLB-205
1443 - Finish FLB-205
- EOB @ 6'
1453 - Begin FLB-208
1504 - Finish FLB-208
- EOB @ 6'
1515 - Back fill holes / patch asphalt / fill out COCs
1610 - Meet w/ lab courier to pick up samples
1620 - Pick up supplies in Lowe's
18:15 - Arrive @ office

USDA- Winter Haven
0545- Load truck
0555- Leave office
0750- Arrive @ site
0757- Setup
0815- Begin FLB-206
0823- Finish FLB-206
0827- Begin FLB-207
0842- Finish FLB-207
- EOB @ 6'
0852- Begin FLB-211
0857- Finish FLB-211
- EOB @ 6'
0901- Begin FLB-212
0906- Finish FLB-212
- EOB @ 6'
0911- Begin FLB-213
0917- Finish FLB-213
- EOB @ 6'
0939- Begin FLB-210
0943- Finish FLB-210
- EOB @ 6'
0953- Begin FLB-214
0959- Finish FLB-214
- EOB @ 6'
1010- Begin FLB-215

Tuesday- 2/6/18 J. DeLaPlater/C. Isenhour EST 2
1020- Finish FLB-215
1024- Begin FLB-216
1042- Finish FLB-216
- EOB @ 6'
1047- Begin FLB-217
1055- Finish FLB-217
- EOB @ 6'
1115- Stop for lunch
1200- Return from lunch
1210- Begin FLB-218
1216- Finish FLB-218
- EOB @ 6'
1221- Begin FLB-219
1226- Finish FLB-219
- EOB @ 6'
1242- Begin CTB-46
1247- Finish CTB-46
1300- Begin CTB-44
1305- Finish CTB-44
- EOB @ 6'
1312- Begin CTB-43
1317- Finish CTB-43
- EOB @ 6'
1321- Begin CTB-45
1325- Finish CTB-45
- EOB @ 6'

USDA - Winter Haven
1329 - Begin CTB-42
1335 - Finish CTB-42
- EOB @ 6'
1345 - Unload supplies / label drums / Fill out COCs
1428 - Finish filling out COCs
1451 - Leave site
1654 - Arrive @ office

Tuesday - 2-6-18 J. DeLaMater / L. Isenhaer

EST
3

Blank

PARTLY CLOUDY - WARM ~~7069~~ 600 AVE S ~~[illegible]~~ NW

USDA WINTER HAVEN WINTER HAVEN, FL

0550	LOAD TRUCK	
0610	DEPART OFFICE IN F-250 4X4	
0755	ARRIVE SITE / RICHARD HOUDE	
—	ON SITE - LOAD TRUCK	
0806	PREP FOR 1ST HOLE	
0825	START FLB-220 TO 6'	
0826	SAMPLE 0'-0.5'	PAHs
0834	SAMPLE 0.5'-2.0'	PAHs
0837	SAMPLE 2'-4'	PAHs
0840	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
0843	START FLB-221 TO 6'	
0845	SAMPLE 0'-0.5'	PAHs
0851	SAMPLE 0.5'-2'	PAHs
0853	SAMPLE 2'-4'	PAHs
0855	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
0859	START FLB-247	
0902	SAMPLE 0'-0.5'	PAHs
0907	SAMPLE 0.5'-2'	PAHs
0909	SAMPLE 2'-4'	PAHs
0911	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
0915	START FLB-248	
0918	SAMPLE 0'-0.5'	PAHs

WED 2-7-18 17-046-01 EST

D.T. TRAYNHAM & C. GEACH 71

0925	SAMPLE 0.5'-2'	PAHs
0927	SAMPLE 2'-4'	PAHs
0930	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
0932	START FLB-249 TO 6'	
0937	SAMPLE 0'-0.5'	PAHs
0940	SAMPLE 0.5'-2'	PAHs
0943	SAMPLE 2'-4'	PAHs
0945	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
0949	START FLB-222 TO 6'	
0950	SAMPLE 0'-0.5'	PAHs
0953	SAMPLE 0.5'-2'	PAHs
0955	SAMPLE 2'-4'	PAHs
0957	SAMPLE 4'-6'	PAHs
—	SEE SOIL BORING LOG SHEETS	
1008	START FBL-223 TO 6'	
1010	SAMPLE 0'-0.5'	PAHs
1014	SAMPLE 0.5'-2'	PAHs
1016	SAMPLE 2'-4'	PAHs
1019	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
1021	START FLB-224 TO 6'	
1025	SAMPLE 0'-0.5'	PAHs
1031	SAMPLE 0.5'-2'	PAHs

PARTLY CLOUDY - WARM 600 AVE S ~~[illegible]~~ NW
USDA - WINTER HAVEN WINTER HAVEN, FL

1033 SAMPLE 2'-4' PAHs
1035 SAMPLE 4'-6' PAHs
— SEE BORING LOG SHEET
1041 START FLB-241 TO 6'
1049 SAMPLE 0'-0.5' PAHs
1051 SAMPLE 0.5'-2' PAHs
1053 SAMPLE 2'-4' PAHs
1055 SAMPLE 4'-6' PAHs
— SEE BORING LOG SHEET
1103 START FLB-225 TO 6'
1105 SAMPLE 0'-0.5' PAHs
1107 SAMPLE 0.5'-2' PAHs
1109 SAMPLE 2'-4' PAHs
1111 SAMPLE 4'-6' PAHs
— SEE BORING LOG SHEET
1115 LUNCH
1215 GO TO HOME DEPOT
1252 START BACK TO SBS
1253 START FLB-226 TO 6'
1256 SAMPLE 0'-0.5' PAHs
1258 SAMPLE 0.5'-2' PAHs
1300 SAMPLE 2'-4' PAHs
1302 SAMPLE 4'-6' PAHs
— SEE BORING LOG SHEET
1305 START FLB-227 TO 6'

WED 2-7-18 17-046-01 EST
☐ T. TRAYNHAM ☐ C. LEACH 72

1307 SAMPLE FLB-227 0'-0.5' PAHs
1310 SAMPLE 0.5'-2' PAHs
1313 SAMPLE 2'-4' PAHs
1315 SAMPLE 4'-6' PAHs
— SEE BORING LOG SHEET
1325 START FLB-~~228~~ 250 TO 6' 250
1327 SAMPLE 0'-0.5' PAHs
1329 SAMPLE 0.5'-2' PAHs
1331 SAMPLE 2'-4' PAHs
1333 SAMPLE 4'-6' PAHs
— SEE BORING LOG SHEET
1350 START FLB-209 TO 6'
1358 SAMPLE 0'-0.5' PAHs
1400 SAMPLE 0.5'-2' PAHs
1404 SAMPLE 2'-4' PAHs
1405 SAMPLE 4'-6' PAHs
— SEE BORING LOG SHEET
1430 DEPART SITE
1605 ARRIVE OFFICE
1620 DONE DECONED BETWEEN SAMPLES & BORINGS

9.5 HOURS

PARTLY CLOUDY-WARM 600 AVE S NW
USDA WINTER HAVEN WINTER HAVEN, FL

0550 PREP/LOAD TRUCK
0610 DEPART OFFICE IN F-250 4X4
0752 ARRIVE SITE / RICHARD
— HOUSE ON SITE
0810 START FLB-228 TO 6'
0812 SAMPLE 0'-0.5' PAHS
0814 SAMPLE 0.5'-2' PAHS
0816 SAMPLE 2'-4' PAHS
0818 SAMPLE 4'-6' PAHS
— SEE BORING LOG SHEET
0822 START FLB-229 TO 6'
0824 SAMPLE 0'-0.5' PAHS
0826 SAMPLE 0.5'-2' PAHS
0827 SAMPLE 2'-4' PAHS
0829 SAMPLE 4'-6' PAHS
— SEE BORING LOG SHEET
0832 START FLB-240 TO 6'
0834 SAMPLE 0'-0.5' PAHS
0837 SAMPLE 0.5'-2' PAHS
0839 SAMPLE 2'-4' PAHS
0841 SAMPLE 4'-6' PAHS
— SEE BORING LOG SHEET
0853 START FLB-238 TO 6'
0854 SAMPLE 0'-0.5' PAHS
0857 SAMPLE 0.5'-2' PAHS

THUR 2-8-18 17-046-01 EST
M. T. TRAYNHAM & C. LEACH 73

0928 SAMPLE 2'-4' PAHS
0930 SAMPLE 4'-6' PAHS
— SEE BORING LOG SHEET
0934 START FLB-239 TO 6'
0937 SAMPLE 0'-0.5' PAHS
0941 SAMPLE 0.5'-2' PAHS
0948 SAMPLE 2'-4' PAHS
0951 SAMPLE 4'-6' PAHS
— SEE BORING LOG SHEET
0954 START FLB-236 TO 6'
0958 SAMPLE 0'-0.5' PAHS
1000 SAMPLE 0.5'-2' PAHS
1002 SAMPLE 2'-4' PAHS
1004 SAMPLE 4'-6' PAHS
— SEE BORING LOG SHEET
1007 START FLB-237 TO 6'
1011 SAMPLE 0'-0.5' PAHS
1014 SAMPLE 0.5'-2' PAHS
1017 SAMPLE 2'-4' PAHS
1019 SAMPLE 4'-6' PAHS
— SEE BORING LOG SHEET
1030 START FLB-234 TO 6'
1034 SAMPLE 0'-0.5' PAHS
1036 SAMPLE 0.5'-2' PAHS
1100 SAMPLE 2'-4' PAHS

MOSTLY CLOUDY-HOT 600 AVE S NW
USDA-WINTER HAVEN WINTER HAVEN, FL

1103	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
1110	LUNCH BREAK	
1210	DONE / BACK ON SITE	
1211	START FLB-235 TO 6'	
1213	SAMPLE 0'-0.5'	PAHs
1215	SAMPLE 0.5'-2'	PAHs
1232	SAMPLE 2'-4'	PAHs
1234	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
1236	START FLB-232 TO 6	
1239	SAMPLE 0'-0.5'	PAHs
1241	SAMPLE 0.5'-2'	PAHs
1243	SAMPLE 2'-4'	PAHs
1245	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
1247	START FLB-233 TO 6'	
1249	SAMPLE 0'-0.5'	PAHs
1251	SAMPLE 0.5'-2'	PAHs
1253	SAMPLE 2'-4'	PAHs
1255	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
1317	START FLB-231 TO 6'	
1318	SAMPLE 0'-0.5'	PAHs
1321	SAMPLE 0.5'-2'	PAHs

J. Id

THUR 2-8-18 17-046-01 EST 74

D T. TRAYNHAM ⌀ C. LEACH

1323	SAMPLE 2'-4'	PAHs
1325	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	
1328	START FLB-230 TO 6'	
1329	SAMPLE 0'-0.5'	PAHs
1331	SAMPLE 0.5'-2'	PAHs
1333	SAMPLE 2'-4'	PAHs
1335	SAMPLE 4'-6'	PAHs
—	SEE BORING LOG SHEET	

* DECONED BETWEEN BORINGS & SAMPLES

1410	DEPART SITE
1600	ARRIVE OFFICE
1620	DONE

9.5 HOURS

J. Id

Mostly Cloudy-Hot 600 AVE S NW FRI 2-9-18 17-046-01 EST

USDA-WINTER HAVEN WINTER HAVEN FL CD T. TRAYNHAM & C. LEACH 75

0550 PREP / LOAD TRUCK

0610 DEPART OFFICE F-250 4X4

0750 ARRIVE SITE / RICHARD HOUSE

— ON SITE

0805 START FLB-246 TO 6'

0808 SAMPLE 0'-0.5' PAHS

0811 SAMPLE 0.5'-2' PAHS

0813 SAMPLE 2'-4' PAHS

0815 SAMPLE 4'-6' PAHS

— SEE BORING LOG SHEET

0825 START GSB-17 TO 6'

0829 SAMPLE 0'-0.5' DIOXIN

0832 SAMPLE 0.5'-2' DIOXIN

0835 SAMPLE 2'-4' DIOXIN

0838 SAMPLE 4'-6' DIOXIN

— SEE BORING LOG SHEET

* HAND AUGER DECONED BETWEEN

~~0840~~ HOLES & SAMPLES

0840 REPAIR ASPHALT & CONCRETE

— CORINGS IN SHED

1100 LOAD UP TRUCK / CLEAN UP

1140 DEPART SITE

1340 ARRIVE OFFICE / DOWNLOAD

1350 DONE

8.0 HOURS

J, JL

APPENDIX VIII

WASTE MANIFEST

Chemtrec

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone 800-424-9300	4. Waste Tracking Number CEI0060501

5. Generator's Name and Mailing Address
US DEPARTMENT OF AGRICULTURE
600 AVENUE SOUTH NORTHWEST
WINTER HAVEN
Generator's Phone: FL 33881

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: CLARK ENVIRONMENTAL INC. 863-429-4884 — U.S. EPA ID Number: FLD987206003

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CLARK ENVIRONMENTAL INC.
755 N PRAIRIE INDUSTRIAL PKWY
INVERNESS FL 33960
Facility's Phone: 863-429-4884 — U.S. EPA ID Number: FLD984206003

9. Waste Shipping Name and Description	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
1. INDUSTRIAL WASTE NON-REGULATED MATERIAL	005	011	00440	G
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
42475 a. DC01 SOLID
b.
c.
d.

WASTE PROCESS HAS NOT CHANGED SINCE PROFILED
Broker:
SPECPRO PROFESSIONAL SERVICES
Broker Site Contact:
RICHARD HOLIDE

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Lloyd S. Prescott — Signature: [signature] — Month 3 Day 15 Year 18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Carl Wynn — Signature: [signature] — Month 3 Day 15 Year 18
Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: B Crawford — Signature: Brandy Crawford — Month 3 Day 15 Year 18

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

169-BLC-O 6 10498 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

APPENDIX IX

LITERATURE REVIEW

International Journal of Soil, Sediment and Water

Volume 2 | Issue 3 Article 5

December 2009

Characterization and Low-Cost Remediation of Soils Contaminated by Timbers in Community Gardens

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CHARACTERIZATION AND LOW-COST REMEDIATION OF SOILS CONTAMINATED BY TIMBERS IN COMMUNITY GARDENS

Heiger-Bernays, W.[1§], Fraser, A.[1], Burns, V.[1], Diskin, K.[1], Pierotti, D.[1], Merchant-Borna, K.[1], McClean, M.[1], Brabander, D.[2], and Hynes, H. P. [1]

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ABSTRACT

Urban community gardens worldwide provide significant health benefits to those gardening and consuming fresh produce from them. Urban gardens are most often placed in locations and on land in which soil contaminants reflect past practices and often contain elevated levels of metals and organic contaminants. Garden plot dividers made from either railroad ties or chromated copper arsenate (CCA) pressure treated lumber contribute to the soil contamination and provide a continuous source of contaminants. Elevated levels of polycyclic aromatic hydrocarbons (PAHs) derived from railroad ties and arsenic from CCA pressure treated lumber are present in the gardens studied. Using a representative garden, we 1) determined the nature and extent of urban community garden soil contaminated with PAHs and arsenic by garden timbers; 2) designed a remediation plan, based on our sampling results, with our community partner guided by public health criteria, local regulation, affordability, and replicability; 3) determined the safety and advisability of adding city compost to Boston community gardens as a soil amendment; and 4) made recommendations for community gardeners regarding healthful gardening practices. This is the first study of its kind that looks at contaminants other than lead in urban garden soil and that evaluates the effect on select soil contaminants of adding city compost to community garden soil.

Keywords: Urban community gardens, creosote timbers, CCA lumber, PAHs, soil, compost, healthy gardening

1. INTRODUCTION

The early history of urban gardens in the United States is one of food production on public land in response to war, economic depression, and short-lived civic reform movements. With the exception of some creative garden projects promoted by public housing authorities in the 1950's and 60's for the purposes of beautification and tenant pride, the tradition of urban gardening was largely abandoned in the United States after World War II, when the focus of residential and commercial growth became the new suburbs (Hynes and Howe, 2002). Older center cities were left to decline as the middle

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Community Garden 2 occupies about 23,000 ft^2 and contains 27 fairly large, variably-sized plots. It is bordered by two residential streets, a dog park and the backyards of nearby homes and it is believed to have a history of residential land use. Creosote timbers, installed approximately 20 years prior to initiation of this project, border half of the gardening plots. The timbers show signs of weathering, but are more intact than those in Garden 1. CCA lumber, installed approximately 12 years prior to initiation of this project, borders about one quarter of the plots, while the remaining one quarter are bordered by a mix of stone and brick.

Community Garden 3 is approximately 16,000 ft^2 in area and contains 27 variably-sized plots. These plots include three raised beds and four very narrow and long plots (~2x24 feet) that were intended to contain only decorative flowers and foliage, but which were subsequently used to grow vegetables, as well. All plots in this garden are bordered by CCA lumber, which was installed about 12 years prior to initiation of this project.

2.3 Sampling Design

Soil samples to be analyzed for PAHs were collected from three representative individual garden plots, one in Garden 1 and two in Garden 2. Each sampling plot was bordered on all four sides by creosote timbers. Composite samples (5 points per sample) were collected at two depths (0-4" and 4-8") and at four distances from the timbers (adjacent, 6", 12" and 18") for a total of eight “edge” samples per plot. For comparison, one “center” sample was collected from each plot to represent the remaining soil in the garden. These “center” samples were a collected to a depth of 8" and consisted of a composite of soil taken from the absolute center of the plot and from four surrounding points measured 30" from each of the four creosote timber borders. A background sample was collected from an undisturbed area in each of the two gardens. Background samples were collected at least ten feet from any garden plot or creosote timber. The sampling design was informed by pilot studies (unpublished) and literature suggesting the relative distance and depth of transport of PAHs in soil (Moret et al. 2007).

Soil samples to be measured for arsenic were collected from four garden plots, one in Garden 2 and three in Garden 3. Each plot was bordered on all four sides by CCA lumber. Composite samples (4-5 points per sample depending on the length of the plot) were collected at two depths (0-4" and 4-8") and at three distances from the timbers (adjacent, 3" and 6") for a total of 6 “edge” samples per plot. For comparison, one “center” sample, depth 8", was collected in each plot. These “center” samples consisted of a composite of soil from the absolute center of each plot and from four surrounding points measured 30" from each of the four CCA timbers. An exception to this was one very narrow plot in which the “center” sample was a composite of 5 points along the center of the plot, approximately one foot from the CCA timbers on either side. A background sample was collected from an undisturbed area in each of the two gardens. These background samples were collected at least ten feet from any garden plot or CCA timber. The distances and depths that were selected are based on pilot studies (unpublished) and the literature on transport of arsenic from CCA timber in soil (Stilwell et al. 2003).

2.4 Sampling Procedures and Analytical Methods

Surface samples (0-4") and root depth samples (4-8") were collected using a large stainless steel spoon and a steel bulb planter, respectively. Approximately equal sized portions from each composite point were mixed together in a large stainless steel bowl. An aliquot of each mixture was then spooned into 8 oz. amber jars and stored in an ice cooler until transport to the USEPA Region 1 Laboratory, or a commercial laboratory where analysis was performed. Field duplicates were collected at a rate of one per plot. Between samples, collection implements and mixing bowls were cleaned using distilled water and dried with paper towels.

All samples to be measured for PAHs and metals were extracted within 14 days of collection. Samples to be measured for PAHs were analyzed using gas chromatography-mass spectroscopy (GC-MS) operating in the full scan mode. The extraction and analysis followed Standard Operating Procedures (SOP) based on SW-846, 3545A, and 8270 methods and Contract Laboratory Program Statement of Work OLM04.2. Samples to be measured for arsenic and lead were analyzed by inductively coupled plasma-atomic emission spectrometry (ICP-AES). Preparation and analysis followed SOP based on SW-846, 3050B and 6010B methods, respectively.

2.5 Statistical analysis of PAH levels in soil

All results below the reporting limit were replaced with a value equal to half the reporting limit for that sample and compound if the analyte was detected in at least one sample. Duplicate samples were averaged. Evaluation of histograms revealed the data to be log-distributed and, thus, the data were log-transformed prior to analysis. Geometric means (GM) and geometric standard deviations (GSD) were calculated for each compound in each sample. T-tests were performed comparing (log) PAH concentrations in background samples to those in samples taken at each distance from the timber. Differences in (log) PAH concentrations by plot and by depth were determined using analysis of variance (ANOVA). Spearman's rank correlation was calculated to evaluate the effect of distance from the creosote timbers (as a continuous variable) on (log) PAH concentrations.

2.6 Compost Analysis

Over the course of the project, four batches of Boston's city compost that did not contain street sweepings and one that did contain street sweepings were analyzed by a contract laboratory for the presence of nitrogen, phosphate, individual PAHs (U.S. EPA 2007, Method 8270), total metals (U.S. EPA 2007, Methods 6010 and 7471), herbicide activity, phthalates and chemical/physical parameters. The compost is comprised of leaf and grass clippings which are collected curbside, placed in windrows at the compost facility, mixed with clean sand, turned and ready for use within a year. In order to characterize the compost, representative samples from each windrow was collected by combining four individual samples from each quadrant of the windrow. In the case of the compost used for remediation of timber-derived contaminants in soil in this study, it was characterized by three samples, each reflecting a composite of six pooled samples. Samples were collected with clean metal shovels, placed in plastic bags or glass bottles, packed in ice and sent to a certified laboratory for analysis.

2.7 Remediation of Timber-Contaminated Soils

Study methods of soil remediation are reported for Garden 2 because remediation funds were available to BNAN for that garden. Timbers were removed from Garden 2 and disposed of by BNAN as hazardous waste. The soils located 6-8" from both sides of the timbers and to a depth of 6-8" were removed and mixed in a 1 part soil to 2.5 parts compost at the facility which makes compost for the city of Boston. This recommended ratio of 1:2.5 was based on a comparison of concentrations of PAHs from municipal compost and PAHs from the most contaminated soils, adjacent to the timbers. The soil: compost mixture was characterized by six samples, each reflecting a composite of six pooled samples. Samples were collected with clean metal shovels, placed in glass bottles, packed in ice and sent to the EPA laboratory or a certified laboratory for analysis. The samples were analyzed only for PAHs, lead and arsenic.

2.8 Survey of Boston Community Gardeners

A closed-ended survey with questions on safe gardening practice and crop preferences was administered anonymously to participants at a BNAN-sponsored workshop at the beginning of the 2006 gardening season. Participation in the survey was voluntary; and 79 of the 114 gardeners (69%) present at the event completed the survey. This convenience sample represented approximately 10% of the community gardeners in Boston. The purpose of the survey was to get a better understanding of the demographics and practices of the gardeners in order to provide recommendations that are most meaningful and relevant.

3. RESULTS AND DISCUSSION

3.1 PAH Concentrations in garden plots bordered by creosote timbers

Soil concentrations at each distance are given in Table 1 for 16 PAHs and for total PAHs. All of the analyzed PAHs were detected adjacent to the timber. Of the carcinogenic PAHs, benzo(a)pyrene, benzo(a)anthracene and benzo(b)fluoranthene predominate adjacent to the timber. Of the non-carcinogenic PAHs, fluoranthene and pyrene are the dominant species. On average, the concentration of total PAHs in soil within 18 inches of creosote timbers was four times that of concentrations found in the center of garden plots and more than five times that of background PAH concentrations.

Polycyclic aromatic hydrocarbon concentrations were highest in soil sampled adjacent to the timbers with concentrations decreasing with increasing distance out to 18 inches, eventually approaching background concentrations as shown in Figure 1. The association between distance from the creosote timbers and change in PAH concentrations was found to be significant, as tested by Spearman's rank correlation, for all individual PAHs and their sum, with the exception of naphthalene (Table 1).

No significant difference was found in overall or individual PAH concentrations among the three plots sampled except for phenanthrene, which was found to be significantly higher in Garden 1 than in either of the plots in Garden 2 ($p=0.0239$). Similarly, no significant difference was found in PAH concentrations between the two

depths, 0-4 inches and 4-8 inches for all distances and analytes measured. Therefore further analyses were not stratified by plot or depth. Concentrations of all individual PAHs were not statistically lower in the background samples compared with the samples taken from the center of the garden plots.

	Edge[a] (n=24)				Center[b] (n=3)				Bkgd (n=2)			
Analyte	Detect (%)	GM (mg/kg)	GSD (mg/kg)	Range[c] (mg/kg)	Detect (%)	GM (mg/kg)	GSD (mg/kg)	Range[c] (mg/kg)	Detect (%)	GM (mg/kg)	GSD (mg/kg)	Range[c] (mg/kg)
Non-carcinogenic PAHs												
Acenaphthene	17	<2.20[d]	*	0.55 - 1.2	0	<0.49[d]	*	-	0	<0.50[d]	*	-
Acenaphthylene	92	1.69	3.09	0.44 - 12.0	33	<0.49[d]	*	0.45 - 0.45	0	<0.50[d]	*	-
Anthracene	96	1.87	2.97	0.52 - 14.0	67	0.46	1.89	0.51 - 0.83	50	<0.50[d]	*	0.48 - 0.48
Benzo(g,h,i)perylene	100	2.72	2.70	0.75 - 19.0	100	0.62	1.18	0.55 - 0.75	50	<0.52[d]	*	0.52 - 0.52
Fluoranthene	100	8.72	3.77	0.56 - 93.0	100	2.74	1.29	2.10 - 3.50	100	2.00	1.37	1.60 - 2.50
Fluorene	42	<4.00[d]	*	0.55 - 4.0	33	<0.55[d]	*	0.55 - 0.55	50	<0.50[d]	*	0.27 - 0.27
Naphthalene	13	<2.20[d]	*	0.51 - 1.1	33	<0.64[d]	*	0.64 - 0.64	0	<0.50[d]	*	-
Phenanthrene	100	3.46	3.11	0.73 - 35.0	100	1.79	1.55	1.10 - 2.60	100	1.69	1.18	1.50 - 1.90
Pyrene	100	9.87	3.01	2.25 - 85.0	100	2.18	1.31	1.60 - 2.60	100	1.65	1.04	1.60 - 1.70
Carcinogenic PAHs												
Benzo(a)anthracene	100	5.51	3.00	1.30 - 43.0	100	1.10	1.44	0.74 - 1.50	100	0.90	1.34	0.73 - 1.10
Benzo(a)pyrene	100	4.06	2.86	1.03 - 28.0	100	0.88	1.36	0.65 - 1.20	100	0.69	1.33	0.56 - 0.84
Benzo(b)fluoranthene	100	6.80	2.79	1.90 - 51.0	100	1.37	1.32	1.00 - 1.70	100	0.74	1.97	0.46 - 1.20
Benzo(k)fluoranthene	100	2.01	2.60	0.55 - 12.0	33	<0.57[d]	*	0.57 - 0.57	50	<0.50[d]	*	0.42 - 0.42
Chrysene	100	5.13	2.74	1.35 - 34.0	100	1.12	1.30	0.84 - 1.40	100	0.86	1.24	0.74 - 1.00
Dibenzo(a,h)anthracene	71	0.82	2.85	0.46 - 5.6	0	<0.49[d]	*	-	0	<0.50[d]	*	-
Indeno(1,2,3-cd)pyrene	100	3.34	2.72	0.90 - 20.0	100	0.76	1.20	0.65 - 0.92	50	<0.65[d]	*	0.65 - 0.65
Non-carcinogenic Total[f]		**31.71**	**2.88**	**6.86 - 264.0**		**9.10**	**1.34**	**6.53 - 11.00**		**6.97**	**1.22**	**6.05 - 8.03**
Carcinogenic Total[f]		**27.75**	**2.81**	**7.49 - 194.0**		**5.80**	**1.32**	**4.35 - 7.53**		**4.15**	**1.46**	**3.17 - 5.43**
Total PAHs[f]		**59.62**	**2.84**	**14.40 - 458.0**		**14.93**	**1.32**	**10.90 - 18.00**		**11.14**	**1.31**	**9.22 - 13.50**

[a]Edge samples are those collected from within 18" of a creosote timber.
[b]Center samples are composites of soil collected from the center of a plot and 30" from surrounding creosote timbers.
[c]Range of detected samples only.
[d]GM not calculated where analyte was undetected in 50% or more samples. The greater of the maximum value detected or the detection limit is shown.
[e]Geometric standard deviation (GSD) not shown due to low level of detection.
[f]Totals were calculated using half of the detection limit for undetected samples.

Table 1. PAH concentration in soil by distance from creosote timbers and results of correlation analyses

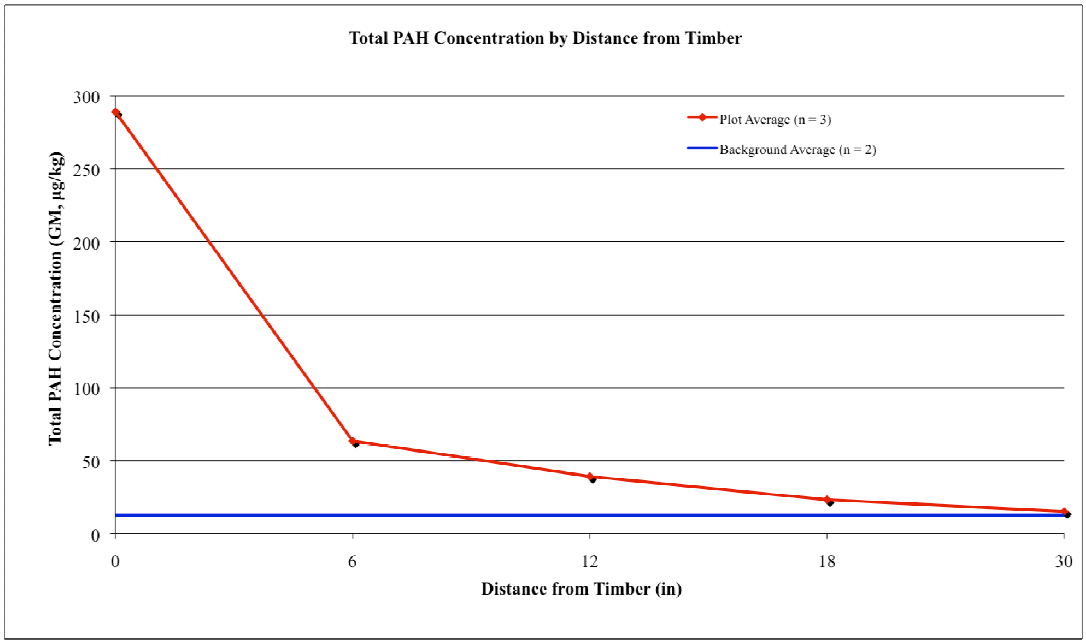


Figure 1. Change in total PAH concentrations from three garden plots by distance from creosote timbers compared to the background average.

3.2 Arsenic concentrations in CCA-bordered garden plots

A total of 24 soil samples were collected from garden plots bordered by CCA-treated timbers in the two gardens. In 18 of the 24 samples, arsenic levels were below the detection limit of 20 mg/kg. Of the remaining 6 samples, all were taken from within 3 inches of the timbers, with no appreciable difference found between those taken at a soil depth of 0-4 inches and 4-8 inches. The arsenic in these samples ranged from 30-39 mg/kg (data not shown).

3.3 Compost Contaminants

Samples from the city compost (without street sweepings) contained very low concentrations of PAHs, phthalates, arsenic, lead and other metals. As shown in Table 2, the concentrations of PAHs in compost are well below the concentrations measured in garden soil adjacent to the creosote timbers, and lower than concentrations in background samples. Concentrations of lead range from 117 mg/kg to 170 mg/kg, with a mean of 130 mg/kg. A sample of city compost to which street sweepings were added contained several PAHs (benzo(a)pyrene, benzo(a)anthracene, and benzo(b)fluoranthene) with concentrations that exceeded background levels of PAHs (data not shown).

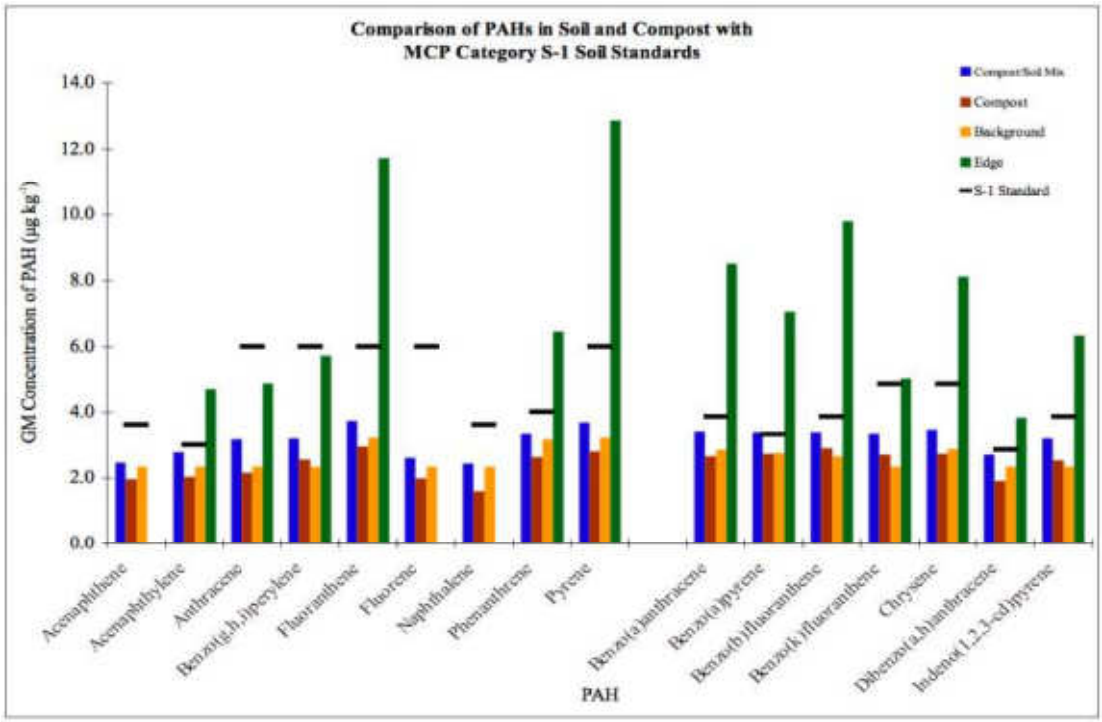
Analyte	DR (%)	Mean[1] (μg kg^{-1})	SD (μg kg^{-1})	Median (μg kg^{-1})	Min. (μg kg^{-1})	Max. (μg kg^{-1})
Metals (n = 7)						
Arsenic	100	3914.3	1294.1	3400	2100	2100 - 5700
Lead	100	138100.0	21661.4	130000	117100	117100 - 170000
Non-Carcinogenic PAHs (n = 10)						
Acenaphthene	20	91.5	96.9	91.5	ND	160
Acenaphthylene	10	110.0	NA	110	ND	110
Anthracene	30	143.6	168.9	100	ND	330
Benzo(*g,h,i*)perylene	80	355.7	187.7	419.5	32.1	588
Fluoranthene	100	909.6	721.9	756	53.1	2800
Fluorene	20	98.0	73.5	98	ND	150
Naphthalene	20	39.0	35.4	39	ND	64
Phenanthrene	60	431.8	601.1	265	1	2000
Pyrene	100	640.0	587.4	394	50.9	2100
Carcinogenic PAHs (n = 10)						
Benzo(*a*)anthracene	100	455.9	303.1	406	88.5	1200
Benzo(*a*)pyrene	100	549.9	338.0	435	37.1	1270
Benzo(*b*)fluoranthene	100	813.1	646.2	760.5	73.9	2471
Benzo(*k*)fluoranthene	100	498.8	471.6	368.5	67.7	1764
Chrysene	100	554.9	267.4	555	171.0	1000
Dibenzo(*a,h*)anthracene	40	79.5	61.0	73.8	ND	150
Indeno(1,2,3-*cd*)pyrene	90	347.4	154.5	386	41.9	515
Totals						
PAHs	100	5688.6	3240.151	4890.25	1318.8	13394
Non-Carcinogenic PAHs	100	2436.9	2111.128	1955.25	137.1	8064
Carcinogenic PAHs	100	3251.7	1604.948	2552.5	1181.7	6522.2

DR: detectable ratio; ND: under detection limit.
[1] Arithmetic mean
(μg kg^{-1}) = micrograms per kilogram (parts per billion, ppb)

Table 2. Summary statistics PAHs, arsenic (As), and lead (Pb) in compost (μg/kg)

3.4 Soil Concentrations of PAHs Following Remediation

Following removal of creosote timbers and dilution of soils with clean compost in the remediation garden (Garden 2), the concentration of PAHs decreased, as expected, as shown in Figure 2. With one exception, benzo(a)pyrene, the concentrations of individual PAHs are lower than the standards set by the Massachusetts Department of Environmental Protection (MADEP) for residential soils known as the MADEP S1 Standards (MA DEP 2008). The mean benzo(a)pyrene concentration before remediation was 4.06 mg/kg and following remediation was 2.42 mg/kg compared to its S1 standard



of 2 mg/kg.

Figure 2. PAH concentration in pre- and post-remediated soil compared with residential soil standards

3.5 Survey of Gardeners

Key results of the gardener's survey are shown in Table 3. The majority of those surveyed are female, with nearly half of the population older than 45 years. About one-third of the gardeners had children present when gardening. Nearly all gardeners consumed the food grown in their gardens and a small number (4%) relied entirely on their home-grown produce for their summer and fall source of vegetables (not shown). While the majority of these urban plots are small, a large number (70%) of those surveyed preserve or dry their produce for consumption later in the year. The most commonly grown crops were tomatoes, lettuce, onions, collards, and cucumbers, with evidence of cultural preference in the vegetables grown. As demonstrated by the survey

results, the community gardens in Boston are used by people of all ages, growing food for consumption.

Gardener Demographics	
Female	73%
Age (>45 yrs)	45%
Garden with children	34%
Gardening Behavior	
Dig Deeper than 1'	30%
Wear gloves (all the time)	47%
Food Growing & Consumption	
Wash hands after gardening	99%
Eat produce	99%
Can or preserve foods	70%
Crop Preference	
Vegetables	97%
Herbs	91%
Fruit	62%

Table 3. Summary of key findings reported by community gardeners

3.6 Discussion

Polycyclic aromatic hydrocarbons are multi-ringed chemical structures with the greater ringed structures presenting both a greater health hazard and a greater resistance to breakdown in soil. Because PAHs are relatively hydrophobic, they can be persistent in the environment, particularly in soil and in sediment. PAHs have been well studied and much about their behavior in the environment is understood. However, data regarding the migration and transport patterns of PAHs from creosote timbers have been limited to studies of aquatic environments and along railroad beds. This study is unique in its measurement of the transport of PAHs in garden soil from creosote timbers. The concentrations of both carcinogenic and non-carcinogenic PAHs exceed the Massachusetts Department of Environmental Protection's S1 Standards, concentrations allowable for residential soils. As demonstrated in the analyses, the concentration of PAHs as a mixture is significantly higher adjacent to and out to 18 inches of the timbers than background levels, with most of the PAHs dropping below the S1 Standards between 6"-12". The PAH with the lowest S1 Standard is benzo(a, h)anthracene, however its concentration at and beyond the timbers is low, compared with the concentration at the timber and beyond for benzo(a)prene. Since the S1 Standard for benzo(a)pyrene is lower than that for the other individual PAHs, benzo(a)pyrene can be used as a guide for reaching urban background soil concentrations. Because of anthropogenic sources of PAHs, concentrations are typically higher in the urban environment than in pristine environments and often these S1 standards are exceeded for urban soils, in the absence of an identifiable source.

Boston residential yard waste is the only feedstock source for municipal compost. Thus, source separation and potential for elevated concentrations of contaminants is less of an issue for Boston compost than with more complex municipal programs that accept a variety of source materials (C. Ambrose Evans, 2006, unpublished). Residents collect and bag yard waste which is picked up curbside by the municipal composting truck. The contents are hauled to a municipal composting facility where the bags are ground by tub

grinder and placed in outdoor windrows for about a year, or until the space is needed for new feedstock. The windrows are forced through a screener, which removes larger debris, such as rocks or woody material that has not fully composted, before distribution.

Field and laboratory studies have been conducted that examine the effects of composted material on the composition and concentration of PAHs. Various types of environmental conditions are supportive of the degradation. Both indigenous soil bacteria and various types of fungi which are present in compost have been shown to successfully degrade PAHs. Some key principles of PAH degradation are that many naturally occurring bacteria and fungi are capable of metabolizing PAHs; that oxygen must be present for the breakdown process, and that lower-weight PAHs degrade rapidly while higher ring PAHs are resistant to microbial breakdown (Crawford et. al. 1993). However, even in the case of the higher-ring PAHs, albeit when PAH concentrations are in the part per million range, there is evidence that a combination of remediation steps may have the potential to sufficiently degrade the PAHs (Kästner and Mahro 1996). Thus "clean" compost is a beneficial soil amendment in urban community gardens as both a dilution agent and also as a stimulant for biodegradation of PAHs.

The uptake of PAHs by vegetables and fruits grown in contaminated soils appears to be minimal (Kipopoulou et al. 1999, Samsoe-Peterson et al. 2002, Schnoor et al. 1995). The hydrophobic nature of PAHs prevents translocation into the inner root system of plants (Samsoe-Peterson et al. 2002, Schnoor et al. 1995, Simonich and Hites, 1995). However, PAHs have been found in vegetables. This is thought to be from atmospheric deposition of PAHs on leaves of plants (Samsoe-Peterson et al. 2002). Carrots, which have a high lipid content, have been observed to have levels of PAHs that may be a result of growth in contaminated soils (Samsoe-Peterson et al. 2002); therefore, these might be avoided when choosing crops to grow or be peeled before eating. A recent study demonstrated that small molecular weight PAHs, were found in oil extracted from olives collected in a rural area where old railway ties were stored (Moret et al. 2007).

Due to the limited uptake of PAHs by plants, there are three routes of exposure to the PAHs that must be considered: inhalation of volatized PAHs or soil particles; ingestion of soil; and dermal contact with soil. Because the PAHs of concern do not volatilize easily, our recommendations below focus on good gardening practices to minimize ingestion and dermal contact. Young children should be carefully monitored in the garden area to prevent "curious ingestion" of the soil. In general, thorough washing of all items harvested from the garden is advisable and will help prevent exposure to PAHs, whether from soil on the plant surface, or from atmospheric deposition. To avoid dermal contact, gloves and proper clothing should be worn while working the garden. Immediately after gardening, hands and shoes should be washed.

The soil sample results obtained from the CCA timber-containing garden (not shown) are consistent with the literature. In an experimental study by Lebow et al. (2004a), arsenic concentrations were measured in the soil adjacent to CCA-treated wood stakes. The highest concentrations were found within 5cm laterally of the stakes. At 6 inches, samples were much less likely to contain elevated concentrations of CCA components as compared to background levels. In an observational study by Rahman et al. (2004), soil samples were collected adjacent to CCA-treated lumber in six established raised garden beds, each approximately 10 years old. Fifteen cm core samples were taken at distances of 0-2, 7.5-10, and 30-33 cm from the lumber. Highest concentrations of arsenic in soil were found 0-2 cm from the wood, with a steady decline in concentration at greater

distances. No samples beyond 10 cm were found to contain arsenic at a concentration greater than 20 mg/kg.

Accumulation of arsenic in soil is a function of both the rate of leaching from the timbers and their subsequent mobility in the soil. Lebow et al. (2004b) reviewed the results of numerous studies on wood preservative leaching and environmental accumulation and found that, "regardless of specific conditions, it is likely that rate of leaching occurring during the first year of exposure [to the elements] will be greater than that during subsequent years." It has also been found that arsenic tends to be quite immobile in soil (Lebow et al. 2004a, Lebow et al. 2004b).

Methods are available to measure the uptake of arsenic and chromium in plants (roots, seeds, fruit) and to determine the mobility of the metal in the soil and its potential for uptake into plants. The literature strongly supports the conclusion that little chromium and arsenic is transported to storage organs of plants (seeds & fruit), but that underground plant tissues can be contaminated by virtue of the adsorption of soil adhering to the plant (Rahman et al. 2004). Most of the data on plant uptake have been collected from soils that contain concentrations of arsenic that exceed 50 mg/kg. The most important potential transfer of soil arsenic is soil particles bound to the skin of root vegetables. Continuing studies are evaluating the affects of soil amendments such as iron, phosphate, sulphates, and organic content on the ability of soils to adsorb arsenic.

4. CONCLUSION

4.0 Safe Work and Treatment Practices

An effective, low cost solution to the contamination of garden soil by PAHs derived from creosote-containing timbers is recommended based on the results of the analyses conducted in this body of work. The recommendations derive from the behavior of benzo(a)pyrene in the soil. Removal of the timbers is necessary, as they remain a continuous source of PAHs that will, in time continue to contaminate the soil. Any removal actions require notification and opportunity for discussion with gardeners and garden owners/managers. The work of remediation should be conducted on days when the wind is minimal and workers should wear garden work gloves. The timbers should not be burned, nor disposed of in the regular trash. They should be disposed according to state regulation. If possible, community garden associations should mix soil beneath and adjacent to creosote timbers to a distance of 18 inches from the timber and a depth of 8 inches with clean compost in the ratio of 1 part soil and 1 part compost. Or, if not feasible, they can mix soil beneath and adjacent to creosote timbers to a distance of 9 inches and a depth of 8 inches with clean compost in the ratio of 1 part soil and 3 parts compost. The mixture would be placed into the excavated areas. Extra soil/compost mixture can be spread throughout the garden. Due to the elevated concentrations of PAHs detected in the batch of compost that contained street sweepings, we recommend that only compost without street sweepings be added to community garden soil. The addition of clean compost with PAHs and metals in concentrations well below the MADEP soil residential standards will serve to a) provide a source of microorganisms that may assist in the breakdown of the PAHs and b) dilute any remaining PAHs present in garden soil.

Since most As leaching occurs during the first year of use and much of the leached arsenic remains near to the timber, we conclude that CCA lumber used for any length of

Coal-tar-based Pavement Sealants – A Potent Source of PAHs

Barbara J. Mahler and Peter C. Van Metre

Pavement sealants are applied to the asphalt pavement of many parking lots, driveways, and even playgrounds in North America (Figure 1), where, when first applied, they render the pavement glossy black and looking like new. Sealant products used commercially in the central, eastern, and northern United States typically are coal-tar-based, whereas those used in the western United States typically are asphalt-based. Although the products look similar, they are chemically different. Coal-tar-based pavement sealants typically are 25-35 percent (by weight) coal tar or coal-tar pitch, materials that are known human carcinogens and that contain high concentrations of polycyclic aromatic hydrocarbons (PAHs) and related chemicals (unless otherwise noted, all data in this article are from Mahler et al. 2012 and references therein).

PAHs are a large group of organic chemicals created by heating or burning material that contains carbon; 16 PAHs are classified as U.S. Environmental Protection Agency Priority Pollutants, six are classified as probable human carcinogens, and one (benzo[*a*]pyrene) is classified as a known human carcinogen. The many sources of PAHs to the urban environment span a wide range of PAH concentrations and include tire particles, used motor oil, and diesel and gasoline engine exhaust (Figure 2). Of known urban PAH sources, coal tar and the related compound creosote have the highest PAH concentrations. Coal-tar-based pavement sealant products contain, on average, about 70,000 mg/kg polycyclic aromatic hydrocarbons (PAHs), on the order of 1,000 times higher than asphalt-based products, which typically contain about 50 mg/kg PAHs.

Pavement sealant is not permanent – the sealant must be reapplied every few years, because it is removed from the pavement by wear and tear from traffic, weathering, and chemical processes. There are at least three ways that pavement sealant (and the PAHs and other chemicals it contains) can leave the pavement surface and enter the surrounding environment: by eroding into small, mobile particles; by dissolving into water; and by volatilizing into air. Where do PAHs derived from sealant go? The answer depends on the process involved. Pavement sealant is worn by vehicle tires into a fine powder that

Figure 1. Pavement sealant is commonly used to seal parking lots, playgrounds, and driveways throughout the United States. Sealants used in the central, northern, eastern, and southern United States typically contain coal tar or coal-tar pitch, both of which are known human carcinogens. Photos by the U.S. Geological Survey.

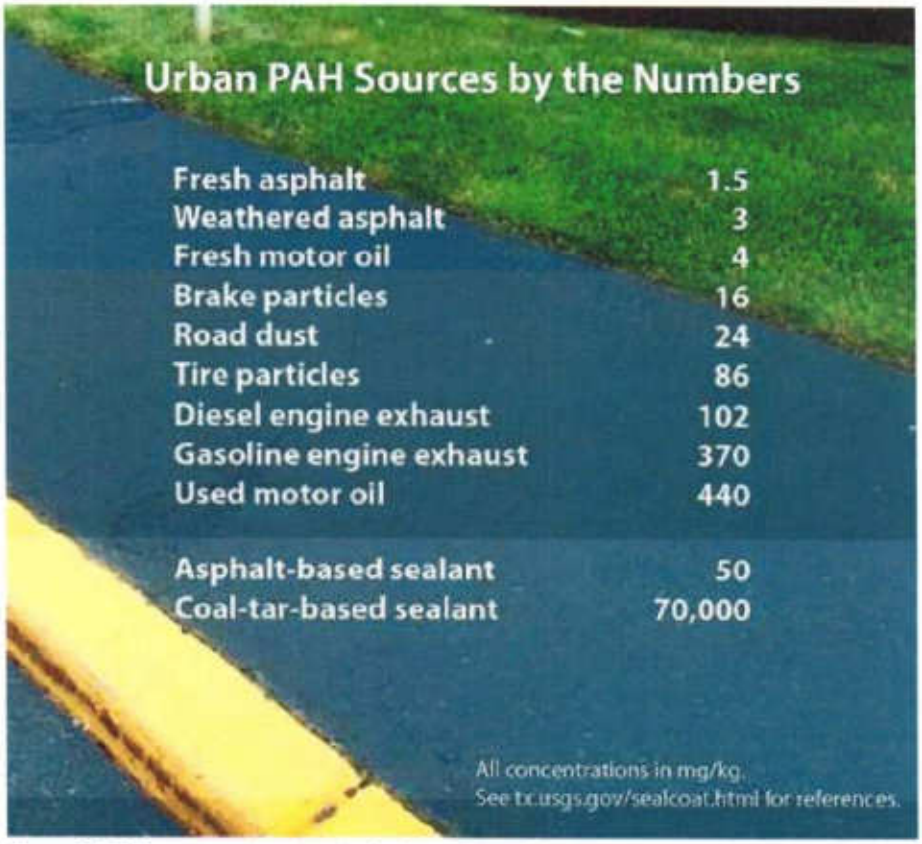


Figure 2. PAH concentrations in typical urban sources. The concentrations shown are a mean or median from as many as six studies.

is transported by stormwater runoff to streams or lakes, or by wind to adjacent soils or other impervious surfaces. Eroded sealant particles can also stick to shoes and be transported indoors. Some PAHs can dissolve into stormwater, especially just after application, and be transported, along with eroded sealcoat particles, to nearby streams and lakes. PAHs also can be released directly into the atmosphere (volatilization). The high PAH concentrations in coal-tar-based sealant can result in high concentrations of PAHs in a number of environmental settings, with potential adverse effects for human and ecosystem health (see other articles on health and ecosystem effects in this issue).

How can we evaluate whether coal-tar-based sealants are an important source of PAH contamination to the environment? One straightforward way is to compare PAH concentrations in pavement dust, runoff, soil, sediment, house dust, and air on or near coal-tar-sealed pavement with PAH concentrations in those same media on or near unsealed asphalt pavement or asphalt-sealed asphalt-based sealant (Figure 3).

Pavement Dust and Runoff

The abrasive action of vehicle tires and snowplows grinds dried sealant on the pavement surface into small particles that mix with other dust on the pavement. In southern, central, and eastern U.S. cities, where coal-tar-based sealant use dominates, dust on sealed pavement has about 1,000 times higher concentrations of PAHs than dust on sealed pavement in western U.S. cities, where asphalt-based sealant use dominates (Figure 4). Concentrations of PAHs on pavement with coal-tar-based sealant generally are in the thousands of mg/kg, comparable to concentrations in soils at some Superfund sites. Further, PAH levels in dust on sealed parking lots in the eastern U.S. can be hundreds of times higher than concentrations in dust on unsealed parking lots in the same watersheds. All of these parking lots, sealed and unsealed, share other sources of urban PAHs – vehicle exhaust, leaking motor oil, tire particles, atmospheric deposition – the only difference is the presence or absence of coal-tar-based sealant.

Pavement dust is mobile – it collects on the pavement surface and at curbs and is readily transported by runoff down storm sewers (Figure 4). When researchers measured PAH concentrations in particles transported by simulated runoff from six coal-tar-sealed parking lots, the mean concentration was 3,500 mg/kg, whereas the mean PAH concentration of particles in runoff from unsealed parking lots (asphalt or concrete) was 54 mg/kg (Mahler et al. 2005). For context, the concentration at which PAH concentrations are expected to harm bottom-dwelling aquatic life is 23 mg/kg.

PAH concentrations in stormwater runoff are highest in the months following sealant application and decrease with time, but even years after application PAH concentrations remain much higher than those in runoff from unsealed pavement, as demonstrated by studies in Wisconsin and New Hampshire. In Madison, WI, the median PAH concentration in unfiltered runoff six years after application of coal-tar sealcoat to a commercial parking lot was 52 μg/L, about 20-1000 times higher than concentrations in runoff collected from a minor arterial street, a commercial rooftop, and a residential street (0.05-2.4 μg/L). During the three months following application of coal-tar-based sealant to a parking lot at the University of New Hampshire, the mean PAH concentration in unfiltered runoff measured by the University of New Hampshire Stormwater Center (UNHSC) was 1,357 μg/L, and decreased over the next two years to a three-month mean of 17–116 μg/L (Figure 5). PAH-contaminated runoff can be acutely and chronically toxic to fish and other aquatic biota, as described in "Toxicity of Coal Tar Pavement Sealant to Aquatic Animals," page 23 this issue.

In some cases, runoff is collected in a stormwater management device, such as a retention pond, to improve water quality by retaining suspended particles. A study by the UNHSC demonstrated that sediment collected in a stormwater management device draining a coal-tar-sealed parking lot contained 393-1,180 mg/kg PAHs, and sediment collected in a device draining an adjacent unsealed lot contained about 2 mg/kg PAHs. The

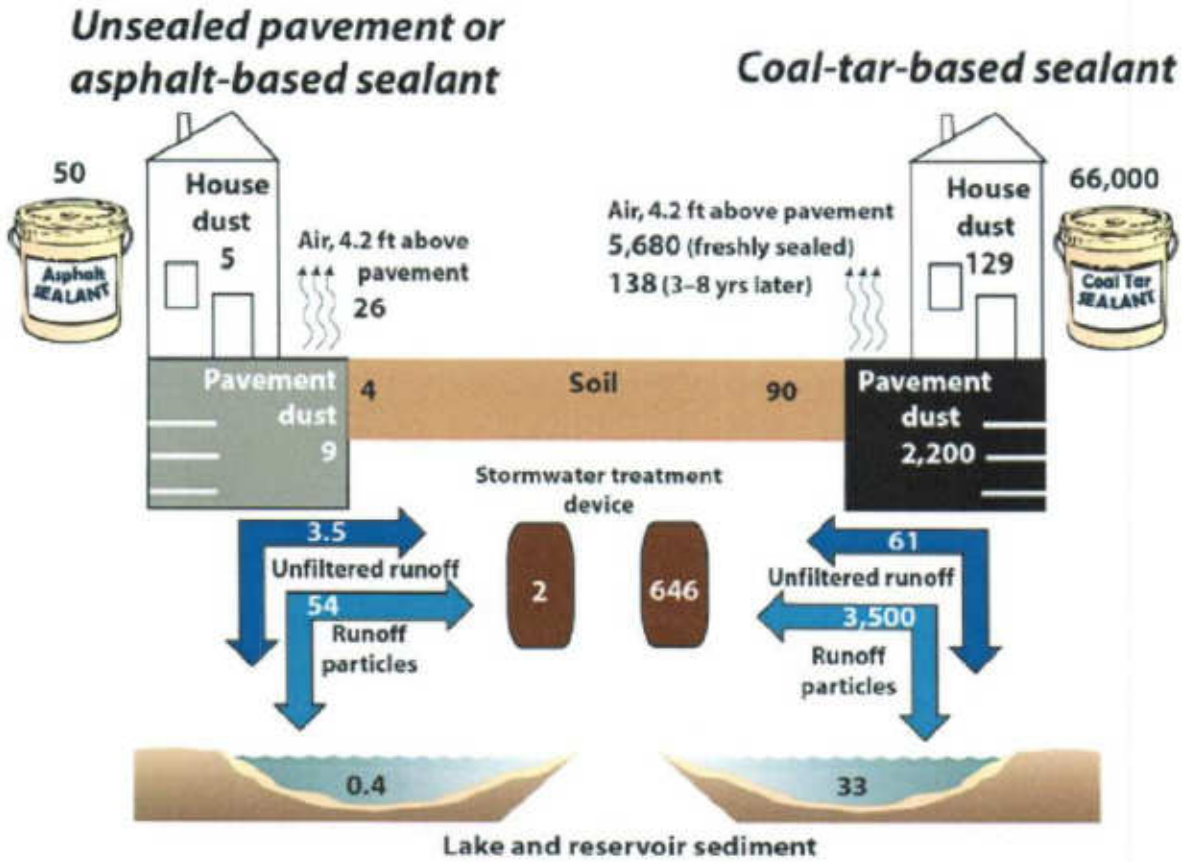


Figure 3. Concentrations of PAHs associated with unsealed or asphalt-sealed pavement (left) are many times lower than those associated with coal-tar-sealed pavement (right). PAHs from sealed pavement are transported to the environment by a variety of pathways, including stormwater runoff to stormwater treatment devices, lakes, and streams; windblown transport to soils; tracking of dried particles indoors; and release by volatilization into air. Humans are exposed to PAHs in pavement dust, soil, house dust, and air; aquatic biota are exposed to PAHs in aquatic sediment, such as in lakes and reservoirs. Concentrations shown are in units of milligrams per kilogram (mg/kg), with the exception of unfiltered runoff (µg/L) and air (ng/m³). Concentration data are from Mahler et al. (2012) (and references therein) or studies cited in this article, and in many cases are the median of multiple studies.

efficient collection of PAH-contaminated sediment in stormwater retention ponds or other devices can have unintended consequences for a municipality because elevated concentrations of PAHs and other contaminants can greatly increase the cost for sediment disposal. Costs for disposing of PAH-contaminated sediment in stormwater ponds in the Minneapolis-St. Paul area are estimated to be $40–50 per cubic yard, or about $125,000 per pond, depending on pond size (Judy Crane, Minnesota Pollution Control Agency, written communication, 2015). That translates to an estimated cost of as much as $1 billion if just ten percent of the ponds in Minnesota contain PAH concentrations that exceed the state's Level 2 human-health risk-based value (Donald Berger, Minnesota Pollution Control Agency, written communication, 2011).

Soil

Contaminated pavement dust can be washed by runoff or blown by wind onto nearby soils. PAH concentrations in soil adjacent to sealcoated pavement in a Chicago, IL, suburb were 23 and 140 mg/kg, 2.3 to 14 times higher than in soil adjacent to unsealed pavement (10 mg/kg) (Van Metre et al. 2009). Composite soil samples from two commercial districts in Fort Worth, TX, where coal-tar sealants were present on some parking lots, had a mean total PAH concentration of about 90 mg/kg, whereas composite soil samples from nearby residential areas, where sealants were not observed, had a mean concentration of about 4 mg/kg (Wilson et al. 2006). Similarly, PAH concentrations in soil adjacent to a coal-tar-sealed parking lot studied by the UNHSC were as high as 411 mg/kg, and decreased with distance from the parking lot to less than 10 mg/kg. The highest PAH concentrations were measured in soil in areas where snowplows had piled snow containing pavement dust and sealant particles scraped off with the snow during the winter.

Lake and Stream Sediment

PAH-contaminated sediment that is not trapped by stormwater ponds can be transported to streams and lakes. The contribution of coal-tar-based sealant to PAHs in lake sediment can be evaluated by a variety of approaches, including "environmental forensics" (the application of statistical methods to evaluate the chemical content of the source and the sediment), microscopic identification of particles, and land-use analysis. An example of environmental forensics is a comparison of the relative proportions of different PAHs – the "fingerprint"

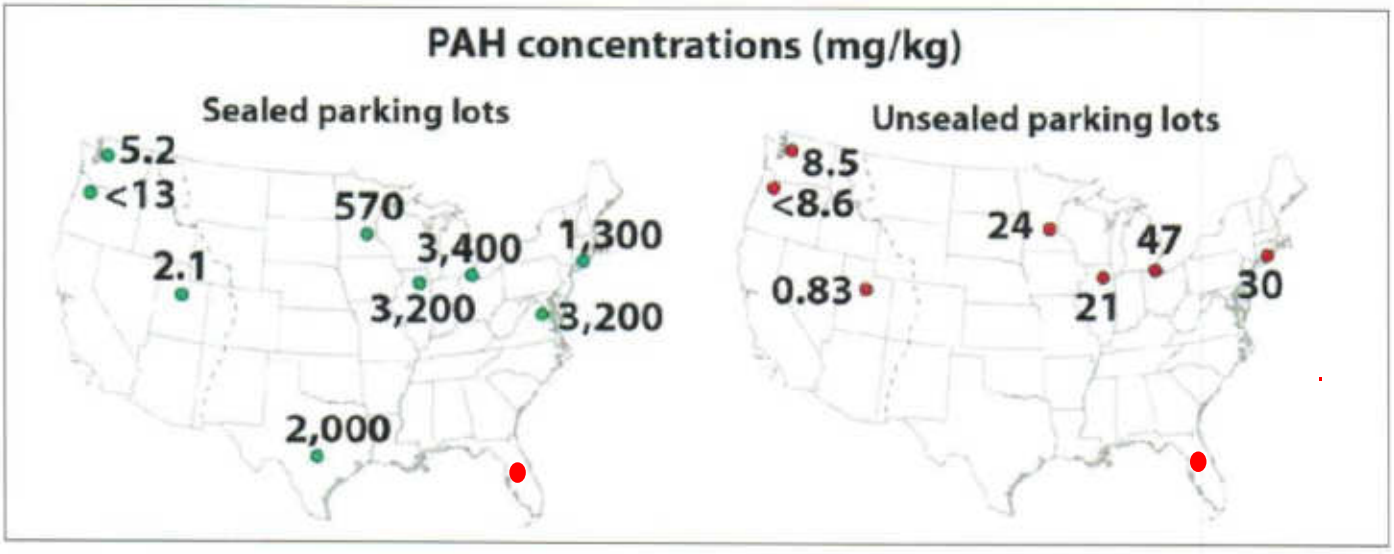


Figure 4. Parking lot "dust" contains abraded sealant (black particles, top). The dust collects on the parking lot surface and along curbs, where it can be carried by runoff down storm drains. PAH concentrations in dust swept from sealed parking lots in the eastern United States, where coal-tar-based sealant is predominantly used, were about 1,000 times higher than in dust from sealed parking lots in the west, where asphalt-based sealant is predominantly used. PAH concentrations in dust on sealed lots in the eastern U.S. also were as much as 100s of times higher than concentrations in dust on unsealed lots in the same watersheds, indicating that the sealant is the principal source of the elevated PAH concentrations (Van Metre et al. 2009). Photo by the U.S. Geological Survey.

Figure 5. Researchers at the University of New Hampshire Stormwater Center simulate runoff on coal-tar-sealed pavement for measurement of polycyclic aromatic hydrocarbons (PAHs). Photo by the University of New Hampshire Stormwater Center.

– in dust collected from parking lots in U.S. cities to fingerprints in sediments from lakes in the same watersheds. For central and eastern U.S. watersheds, the fingerprints of sealed pavement dust and lake sediment were similar, and were different from those in western U.S. watersheds, where the asphalt-based product is used. A more quantitative approach – a statistical method known as source-apportionment modeling – estimated that coal-tar-based sealant contributed about one-half of the PAHs to 40 U.S. urban lakes studied by the U.S. Geological Survey; the other major contributors were vehicles and coal combustion. The topic of PAH sources to lakes and streams is further discussed in "Trends and Sources of PAHs to Urban Lakes & Streams," page 8 this issue.

House Dust

Coal-tar-based sealant can cause indoor as well as outdoor contamination. Abraded sealant particles can stick to the bottoms of shoes and be tracked indoors, where they become incorporated into house dust. In a study of 23 ground-floor apartments in Austin, TX, apartments with coal-tar-sealed parking lots had house dust with PAH concentrations that were 25 times higher on average than apartments with parking lots that were unsealed or that were sealed with an asphalt-based product (Figure 3). The study found no relation between PAH concentrations in house dust and other factors such as tobacco smoking, barbecue and fireplace use, and candle and incense-burning.

These results are of concern because ingestion of house dust is well recognized as a pathway for human exposure to chemicals, especially for toddlers, who play on the floor and put their hands and objects into their mouths. This topic is discussed in more detail in "Human Health Concerns Associated with Exposure to PAHs & Coal-Tar-Sealed Pavement," page 19 this issue.

Air

Some of the PAHs in coal-tar-based sealant are released into air during and after application (Figure 3) through a process called volatilization. Many PAHs, including the seven classified as probable or known human carcinogens, are volatile to some degree. Airborne PAHs are of concern because inhalation is another important pathway for human exposure. Although unseen, airborne releases of PAHs from freshly applied coal-tar-based sealant are on the order of 45,000 $\mu g/m^2/hr$, which is tens of thousands of times higher than releases from unsealed asphalt. Taken across the entire United States, emissions of PAHs to air from newly applied coal-tar-based sealant are estimated to exceed those from motor vehicles.

The concentrations of PAHs in air above freshly coal-tar-sealcoated pavement decrease rapidly during the weeks following application, but even years later remain several times higher than in air over unsealed pavement (Figure 3). Air at approximate breathing height above coal-tar-sealed pavement (4.2 feet, or 1.28 meters) even in suburban areas contains PAH concentrations that rival or exceed those in highly

industrialized areas. For example, in a study that measured volatilization of PAHs from parking lots that had been treated with coal-tar-based sealant years previously, the mean concentration of the PAH pyrene was about 2-19 times higher than pyrene concentrations measured in air samples from urban industrial sites from New Jersey and Chicago, USA (Van Metre et al. 2012).

A Scientific Consensus

Independent research by scientists and engineers from academic institutions and government agencies demonstrates that coal-tar-based sealant is a potent source of PAHs to water, dust, soil, stream and lake sediment, and air. The comparison of PAH concentrations in settings where coal-tar-based sealant is or is not applied provides an unambiguous picture of the importance of coal-tar-based sealants as a source of PAHs to our urban and suburban environments.

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Additional information is available at USGS Research: PAHs and Coal-Tar-Based Pavement Sealcoat, http://tx.usgs.gov/sealcoat.html.

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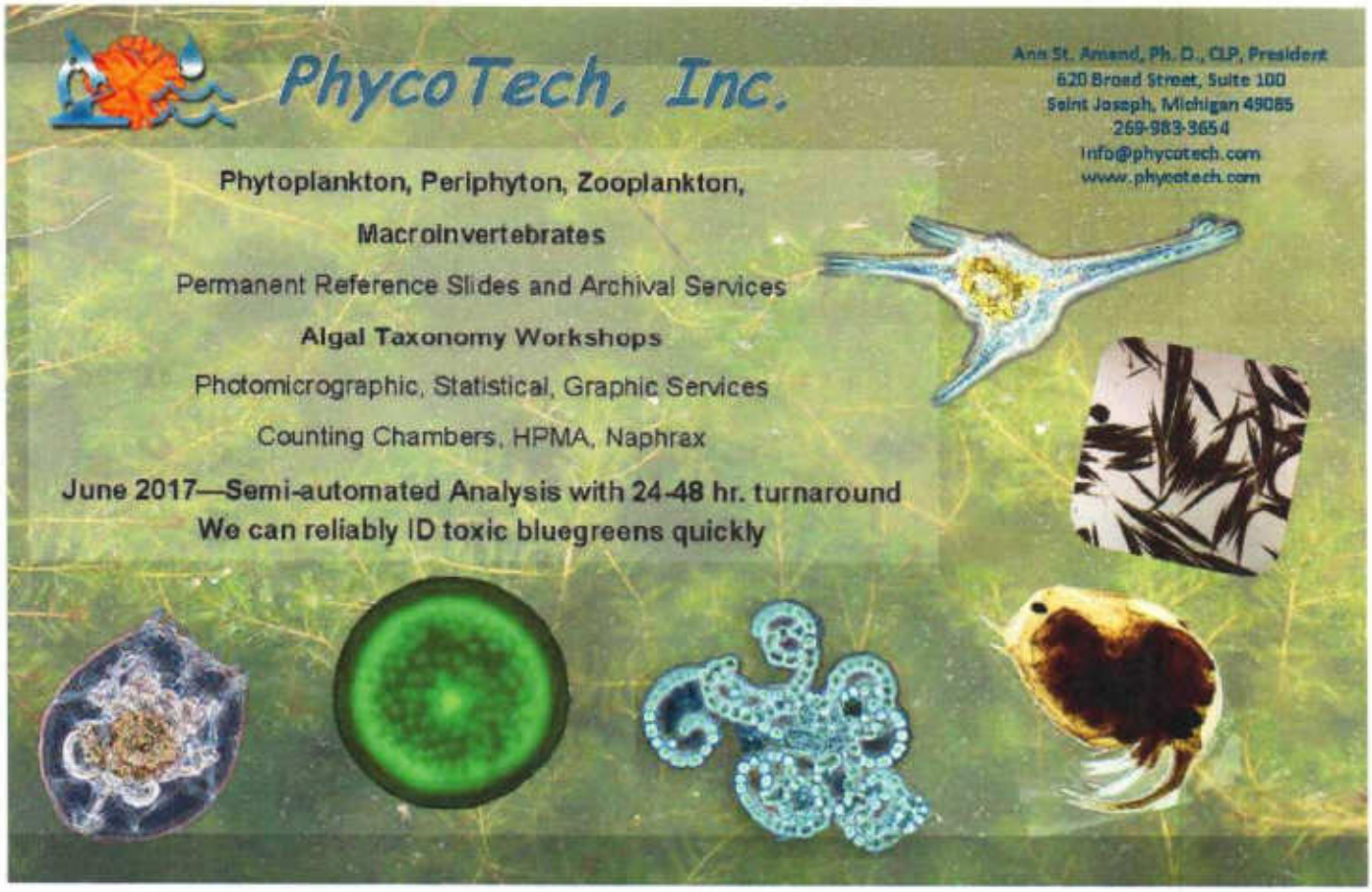

Final Report
Polycyclic Aromatic Hydrocarbons Released from Sealcoated Parking Lots – A Controlled Field Experiment to Determine if Sealcoat is a Significant Source of PAHs in the Environment

Prepared by
The University of New Hampshire Stormwater Center

Prepared under Support from U.S. Environmental Protection Agency GLNPO-4-17

December 2010

Final Report

Polycyclic Aromatic Hydrocarbons Released from Sealcoated Parking Lots – A Controlled Field Experiment to Determine if Sealcoat is a Significant Source of PAHs in the Environment

Executive Summary

This report presents the results of an intensive field study on polycyclic aromatic hydrocarbons (PAH) associated with coal-tar based sealant applied to two parking areas. Samples were collected from adjacent surface soil, parking lot dust, stormwater sediments and air. This study found that the presence of coal-tar based sealant resulted in measurable increases in PAH concentrations in adjacent soil land surface dust, and that air concentrations are elevated shortly after the sealant is applied. Concentrations in stormwater sediments were elevated relative to sediments associated with an unsealed lot.

Problem Statement

The US EPA identifies 16 PAHs as priority pollutants, one of which, benzo(a)pyrene, is also listed as a Persistent Bioaccumulative and Toxic Chemical. PAHs are ubiquitous in the environment, and exceed action levels in many areas. PAHs are one of the compounds most likely to be associated with Tier 1 impacted aquatic sediments, where "adverse effects on aquatic life or human health are probable" (US EPA, 2004). It has been suggested that coaltar-based sealcoat is one of the primary sources of PAHs in streams in urbanized areas in the United States (Mahler et al., 2000). PAH concentrations in sediments in US waterways reached a maximum in the mid 1900s then decreased, probably due to increased emissions controls and the replacement of coal with cleaner burning fuels (Lima et al., 2003; Van Metre et al., 2005). However, in the last decade, PAH concentrations in sediments have increased sharply and exceed sediment quality guidelines in shallow sediment in many urban areas. A recent USGS study of 38 lake sediments found that PAH concentrations are increasing in nearly half of the lakes sampled (Van Metre and Mahler, 2005). Three of the sampling locations were in states surrounding the Great Lakes, and all three of these locations showed increasing PAH levels. The Minnesota Pollution Control Agency (MPCA) recently identified high PAH levels in stormwater ponds, indicating that PAH

levels in stormwater are contributing to water and sediment contamination in the Great Lakes area.

Sealant, or seal coat is a black surface treatment applied to asphalt pavement as a liquid and allowed to dry to form a thin layer. The primary role of sealant is aesthetic, although some protection from chemical spills may be provided. There are two common types of sealant; asphalt based, and coal-tar based. Asphalt based sealant is composed of asphalt, clay and sand, while coal-tar based sealant contains coal tar, clay and sand. Over time, the sealant is worn off the surface normal wear processes, including tire abrasion and plowing. The abraded sealant particles are transported from the surface of the pavement by wind, stormwater runoff, vehicle or foot traffic and snow removal. Contaminants contained in the sealant are released into the environment as the product leaves the pavement. Coal tar contains high levels of polycyclic aromatic hydrocarbons, and coal-tar based sealant commonly contains PAHs at concentrations at over 50,000ppm.

The role of sealcoat as a source of PAHs is currently under debate. Some municipalities have chosen to ban coaltar sealcoat based on the currently available data, but many policy makers do not feel that there is sufficient evidence upon which to base a decision. This project will provide an extensive data set, generated under defined field conditions, which will determine the amount of PAHs exported from sealed and unsealed parking lots.

This project addresses Sub-objective 4.3.3. of EPAs Strategic Plan: "By 2011, prevent water pollution and protect aquatic systems so the overall ecosystem health of the Great Lakes is at least 23 points on a 40-point scale…". The results will also address Strategy Team recommendations for nonpoint source pollution: The Great Lakes Regional Collaboration Strategy (GLRC, 2005) identifies nonpoint chemical pollution as a problem area, and notes that nonpoint source pollution has led to a Great Lakes ecosystem that is deteriorating in health and quality. Identifying a specific source of pollution, and providing guidance on how to eliminate that source will reduce the impact on nonpoint source pollution throughout the Great Lakes area. The Lake Erie Lakewide Management Plan identifies PAHs as a pollutant of concern, and lists asphalt tars and tar products as a possible source (Lake Erie LaMP, 2008). In addition, the 2008 House Appropriations Report directs the EPA to "study human health effects and ecosystem impacts from exposure to polycyclic aromatic hydrocarbons (PAH) through parking lot seal-coatings" (House Report 110-187, 2007).

Introduction and Background

The role of sealcoat as a source of PAHs is currently under debate. Some municipalities have chosen to ban coaltar sealcoat based on the currently available data, but many policy makers do not feel that there is sufficient evidence upon which to base a decision.

This research project was designed to provide quantitative data on the impact of coal-tar based sealant on soils and sediments adjacent to a sealed parking lot under defined, semi-controlled conditions. This project expands the scope of a related study conducted by the UNHSC which measured PAH concentrations in stormwater from two sealed and one unsealed parking lot over a two year period (Figure 1).

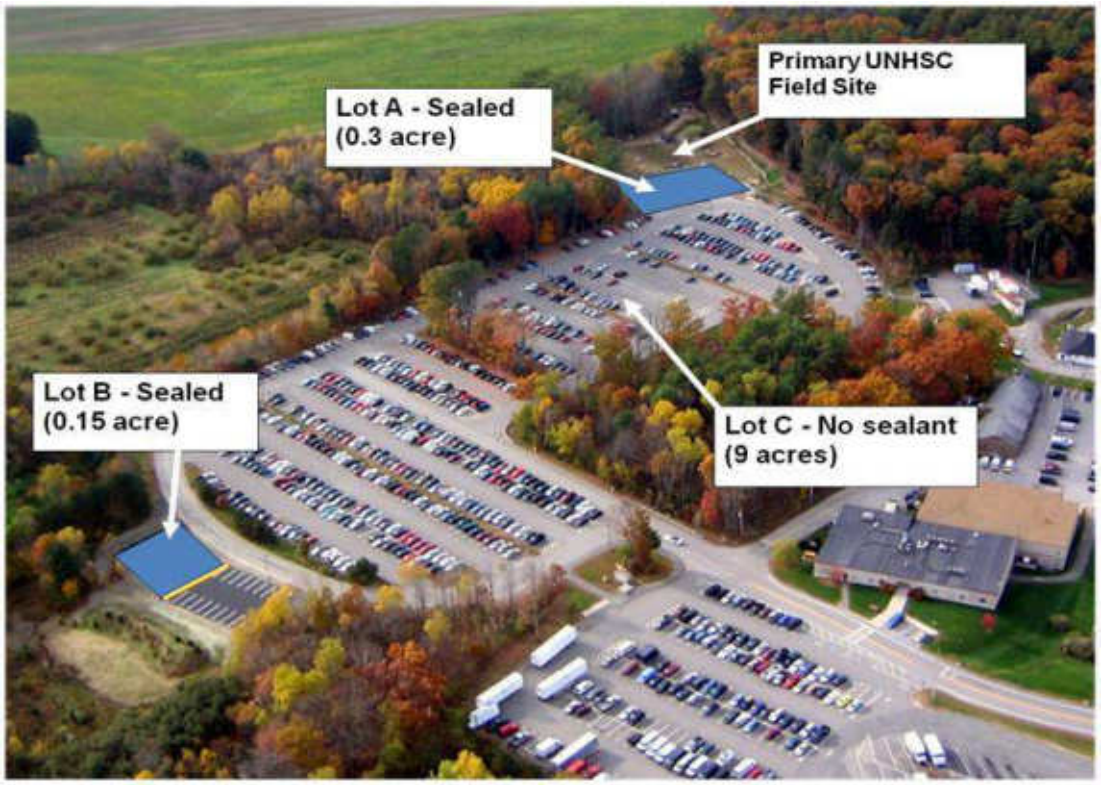

Figure 1. UNH Stormwater Center Field Site, showing coaltar-sealed lots and control lot

The measured flow volume and concentrations were used to calculate a mass of 2.16-4.23 kg per acre exported in stormwater from the two sealed lots, and 0.13 kg per acre from the unsealed control. After sealing, sediment PAH concentrations in a stormwater swale receiving runoff from both sealed and unsealed surfaces increased from less than 4 mg/kg prior to sealing to 95.7 mg/kg near where stormwater first entered the swale (the outfall). Sediment PAH concentrations in the swale decreased with distance from the outfall, and are decreasing near the outfall two years after the sealant was applied. This study found that applying coal-tar based sealcoat increased PAH concentrations in stormwater runoff and in receiving sediments. The calculated mass of PAHs exported from each parking lot was calculated, and it was found

that approximately 10% of PAHs which were lost from the surface over the study period were transported in stormwater. It is clear then, that other significant transport pathways are moving PAHs from the sealed surface of the parking lots.

PAHs can be transported from sealed lots by several different pathways; 1) dissolved compounds and particulates may wash off of the surface in stormwater and snowmelt; 2) sealcoat abraded from the surface by traffic or plowing may be transported by wind, adhered to tires, or moved with snow to the lot's edges; and 3) compounds may volatilize from the surface directly into the air. Mass transport in stormwater was measured in a previous study. The most probable means of non-storm water transport of particulates are plows, which abrade the surface and then move particulates suspended in snow loads. These particles are then deposited with the snow, generally at the edge of the lot. Fine particles are suspended by wind, and are transported to adjacent soil surfaces, or parking areas. Particulates may also adhere to vehicle tires and be transported down vehicle travel lanes. Volatile compounds enter the atmosphere and are transported by wind or dispersion. Each of these pathways is discussed in subsequent sections of this report.

The mass of PAHs transported from the study surfaces as particulates was measured indirectly by measuring the concentration of PAHs in surface soil and dust sweeping samples from each lot.

Methods

Samples were collected between May 2008 and November 2010. All sampling and analysis for this project was conducted in accordance with an EPA approved Quality Assurance Project Plan (QAPP)(Watts, 2009), and the UNHSC QAPP. Some of the baseline data samples discussed in this report (for the sediment and air) were collected in 2007, prior to the start of this project. These samples are not, therefore, collected under the existing project QAPP, but all of the data included in this report meet the data quality objectives specified in the QAPP.

Surface soil sampling

Composite samples were initially collected from the soil adjacent to the lot, and from 3 meters away from the edge of the pavement. Samples were composited from the top 1cm of soil in three cores collected 10cm apart. Initially, a sample set (one adjacent, and one 3 meters from the pavement) were collected at six locations; three locations adjacent to the control lot, two locations adjacent to A Lot, and one location adjacent to B lot. Based on the results of these samples, the locations were expanded in subsequent sampling events to include transects encompassing 5, 10, 20 1nd 30 meters from the edge of each the sealed lots to determine the change in concentration. Additional samples were also collected from the border of the control

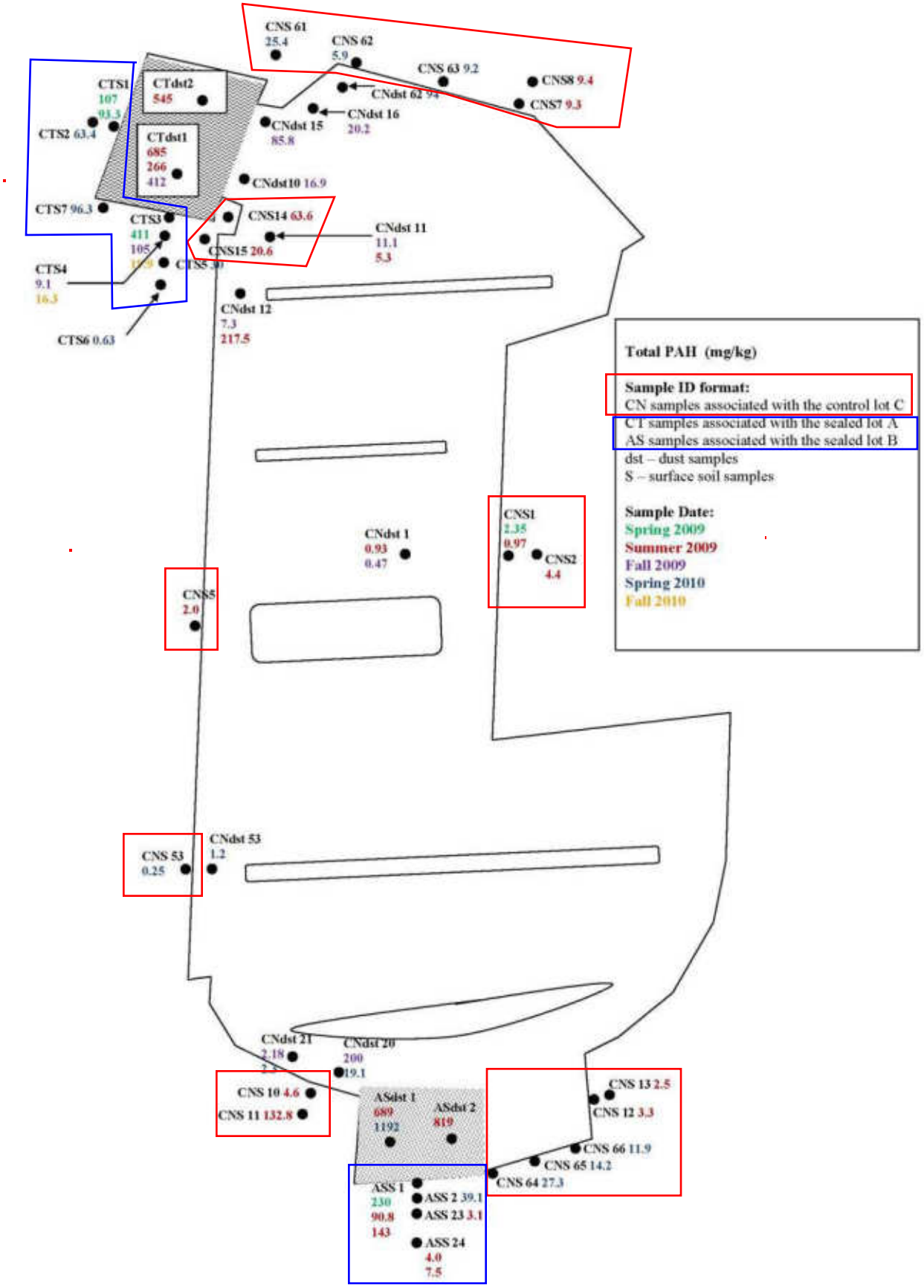

Figure 2. Surface soil and dust sampling locations and concentrations (total PAH mg/kg).

mass of PAHs adhered too, and potentially transported on the tires. When this was found to be impractical, dust sample were collected directly from the surface at each of the lots, and from the control lot pavement near the boundary with each of the sealed lots to determine the extent of transport from the sealed surface onto the unsealed area. Dust sweeping samples collected from the surface of the sealed lots contain concentrations ranging from 266-1192 mg/kg total PAHs. Dust samples collected from the unsealed surface, at distances of 76 and 91 meters from either of the sealed surfaces, contained total PAH concentrations of less than 2 mg/kg which is consistent with background dust concentrations obtained at the offsite unsealed location. Samples collected from the control lot but within 30 meters of the sealed surfaces were elevated above the expected background, while samples from the unsealed surface adjacent to the sealant contained total PAHs of up to 200 mg/kg. This gradient indicates that PAHs are being transported from the sealed to unsealed surfaces by tire tracking and/or wind transport, but that the measurable change in concentration is limited to approximately 30 meters from the entrance to the sealed lots at this site.

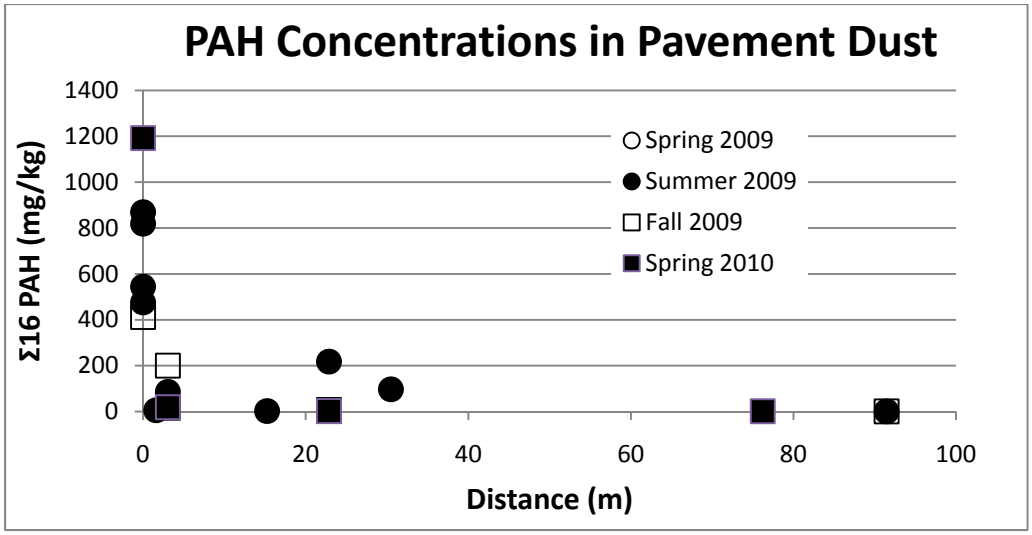

Figure 6. Total PAH concentrations dust samples plotted against distance from a sealed surface. The concentrations generally decrease with distance, and are indistinguishable from background at the more distance locations.

Surface Soil

Surface soil sample locations and total PAHs are shown in Figure 2 and the concentrations are summarized in Appendices B and C.

Surface soil concentrations were less than 5mg/kg at locations 90 meters from the sealed surfaces (samples CNS1, CNS2 and CNS5). Samples collected adjacent to the sealed surfaces

consistently contained concentrations greater than 90mg/kg total PAHs, with the maximum soil concentration detected adjacent to A lot in an area that receives most of the snow removed from the lot during the winter. Visible particles of sealant were present on the surface of the soil along the southern boundary of A lot; and up to 411mg/kg total PAHs were detected in adjacent surface soil (sample CTS3). Concentrations drop rapidly with distance and are at, or near background in samples CTS6 and ASS24 located approximately 10 meters from A and B lot, respectively (Figure 7). The surface soil concentrations exceed levels protective of human health in many samples; the highest concentration of benzo(a)pyrene detected adjacent to A lot was 29mg/kg, which is far above the EPA regional screening level preliminary remediation guideline of 0.21mg/kg for surface soil at industrial locations (USEPA, 2010).

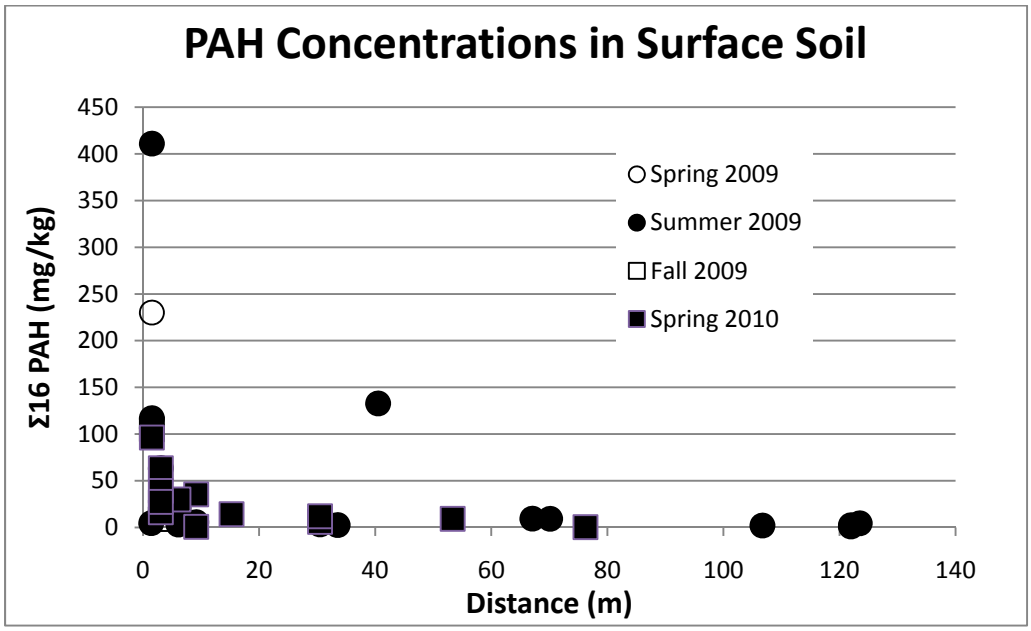

Figure 7. Total PAH concentrations in surface soil samples plotted against distance from a sealed surface. The concentrations generally decrease with distance, and are indistinguishable from background at distances of greater than 90 meters.

Mass Calculations

The mass of PAH present in dried sealant at the site was estimated from the surface area coated and the measured concentration in the dried sealant. The estimated mass was 9kg of total PAHs in dried sealant on Lot A and 8kg on Lot B. In August, 2010, the wear on the lots was estimated from the degree of sealant loss in the drive lanes and parking spaces. Approximately 75% of the sealant had been removed from Lot A, and approximately 50% from Lot B. Therefore approximately 4-7kg of total PAHs were exported from each lot over the course of this study. Note that the dried sealant concentrations were measured in May, 2009, and although volatilization may have occurred shortly after the sealant was applied, it is not believed that it is a significant mass loss pathway for older fully dried product (based on the air sampling results).

The primary mass removal pathways are abrasion and physical transport by water, wind, plows, or traffic.

The mass of PAHs exported from the site in stormwater was measured at approximately 1.4 (lot A) and 0.5 (lot B) kg total PAH (Watts et al., 2010), or less than 10% of the total PAH loss. The most probable mechanism for removal of the additional mass is wind or plow transport of abraded surface particles. Although some of the mass transported by wind is expected to leave the site entirely, it is likely that most of it is deposited, at least temporarily in surface soil surrounding the site. The mass of PAHs in the immediate vicinity of each of the sealed lots was calculated from the mean concentration in surface soil within 2 meters of sealed surfaces. A volume was estimated from the surface area, and it was assumed that the measured concentrations represent the top 2cm of soil. A mass of 1.4kg total PAHs was estimated to be present in surface soil in the immediate vicinity of Lot A, and 1 kg for Lot B. The impact of the sealant probably extends well beyond 2 meters from the lots, and this should be considered to be an absolute minimum mass present. It is likely that most of the mass missing from sealant surface is present as a very diffuse and widespread soil layer in the vicinity of the sites.

	A-Sealed 0.3 acre	**B-Sealed 0.25 acre**
Concentration (mg/kg)	0.63-411	3.1-219
No. of Samples	12	10
Calculated mass	**1.4 kg PAH**	**1 kg PAH**

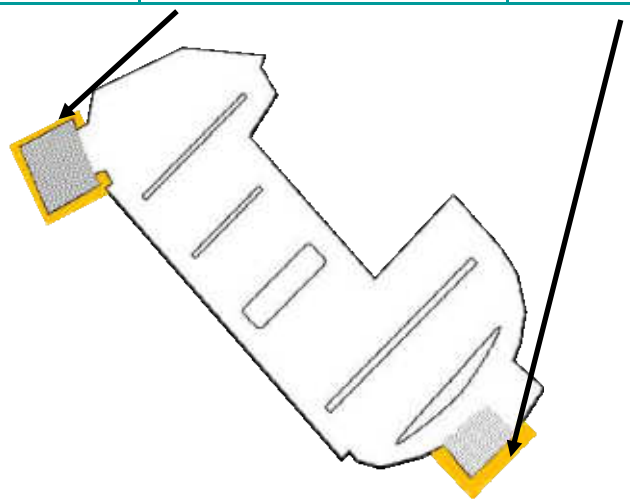

Figure 8 Mass of total PAHs in soils (kg) calculated for a 2m wide, 2cm deep boundary around each sealed lot.

Stormwater treatment sediments

Possible contamination of stormwater pond sediments has recently become a potentially important issue (Crane et al., 2010). As discussed previously, elevated PAH concentrations were identified in a swale conveying stormwater from Lots A and C. Additional samples were collected from several of the stormwater treatment devices to determine if elevated concentrations were associated with the sealed lots. Grab samples were collected from sediment in a gravel wetland and a detention pond at the UNHSC test site. Concentrations ranged from 60-318mg/kg in these systems which receive runoff from a watershed in which 4% of the drainage area had been sealed with coal-tar based product (Figure 9). Samples were also collected from a tree filter which receives runoff solely from the sealed surface of Lot B. Visible particles of sealant were present in this sediment, and the concentrations were high; 390-1,700mg/kg total PAHs. In contrast, one sample (composited from three locations) was collected from a small bioretention basin located in the center of the unsealed control lot, and approximately 100 meters from the sealed surface of lot B. This stormwater device receives runoff only from the untreated surface and contained 1.6mg/kg total PAHs, which is consistent with concentrations in the swale prior to sealant application.

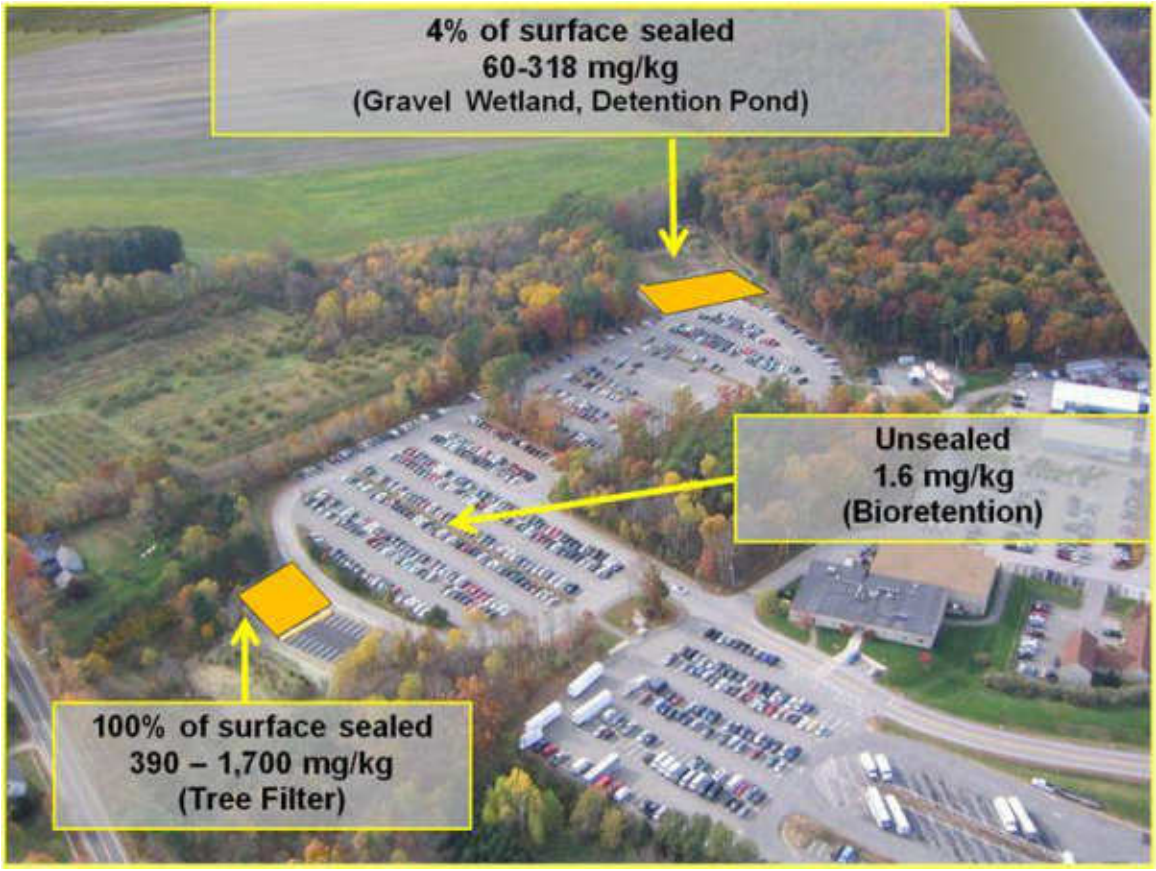

Figure 9 Total PAH concentration (mg/kg) in stormwater system sediment samples.

Summary and Recommendations

PAH concentrations in surface soil, dust, and air were measured in the vicinity of two coal-tar sealed test sites and an unsealed control. A mass balance estimate found that most of the PAH lost from the sealed lots was transported to nearby surfaces by wind, water, or tracking. This study found that coal-tar based sealant increased PAH concentrations in surface soil, pavement dust and stormwater treatment devices:

- ***Surface soil.*** Concentrations of up to 411mg/kg total PAH were present in soil adjacent to sealed lots.
- ***Pavement dust.*** Dust samples from the sealed surfaces contained up to 1,192 mg/kg total PAH, which is highly elevated compared to dust collected from unsealed surfaces (<2mg/kg). Dust concentrations increased within 200 meters of the boundary to the sealed sections.
- ***Stormwater sediments.*** Swale sediments increased from less than 5mg/kg total PAH to over 90 mg/kg near the stormwater outfall, and remain elevated three years after the sealant was applied. Sediments collected from stormwater treatment devices receiving runoff from a partially sealed (4%) watershed are two orders of magnitude higher than sediment in an equivalent device receiving runoff from an unsealed surface.

Recommendations

Based on these findings, decreasing or eliminating the use of coal-tar based sealants would reduce PAHs in the environment. Reductions can be accomplished by either voluntary or regulated controls. Specific actions could include:

Education and outreach to inform consumers on the impact of coal-tar based sealant. This information should be made available through fact sheets, news media, and by education of municipal officials.

Regulated ban or restriction on the use of coal-tar based sealant. Several municipalities have chosen to ban the use of coal-tar based sealants (e.g. Austin, TX, White Bear Lake, Minnesota, Washington, DC).

Development and promotion of alternative sealant products. Asphalt-based sealant contains lower concentrations of PAHs (City of Austin, 2004), and non-petroleum based surface treatments are available. The sealant industry manufacturers should be encouraged to develop alternative formulations with lower or no coal tar additives.

Appendix B. Soil and Sediment Analytic Data (Meta Environmental)

Soil and Sediment Analytic Data (mg/kg)
Meta Environmental Laboratory

Sample ID	**CN- S1a**	**CNS7C**	**CNS8C**	**CSN14B**	**CNS15B**
Date Sampled:	05/08/09	11/7/2009	11/7/2009	8/17/2009	8/17/2009
mg/kg dry wt					
Naphthalene	0.006	0.010	0.007		
2-Methylnaphthalene	0.008	0.007	0.008	0.029	0.015
1-Methylnaphthalene	0.005	0.006	0.009		
C1 - Naphthalene	0.008	0.008	0.009		
C2 - Naphthalene	0.028	0.019	0.023		
C3- Naphthalene	0.024	0.027	0.030		
C4- Naphthalene	0.022	0.018	0.018		
Biphenyl	0.009				
Acenaphthylene	0.093	0.060	0.058	0.107	0.102
Acenaphthene	0.009	0.062	0.101	0.257	0.120
Dibenzofuran	0.005	0.029	0.047	0.145	0.061
Fluorene	0.017	0.083	0.126	0.374	0.156
C1 - Fluorene	0.024	0.033	0.040		
C2 - Fluorene	0.032	0.037	0.041		
C3 - Fluorene	0.044	0.022	0.022		
Phenanthrene	0.186	1.14	1.38	6.58	2.19
Anthracene	0.074	0.294	0.364	1.12	0.475
C1 - Phenanthrene/Anthracene	0.119	0.281	0.310		
C2 - Phenanthrene/Anthracene	0.084	0.136	0.139		
C3 - Phenanthrene/Anthracene	0.041	0.059	0.053		
C4 - Phenanthrene/Anthracene	0.019	0.020	0.017		
Dibenzothiophene	0.015	0.057	0.073		
C1 - Dibenzothiophene	0.03	0.025	0.027		
C2 - Dibenzothiophene	0.045	0.030	0.029		
C3 - Dibenzothiophene	0.042	0.028	0.019		
C4 - Dibenzothiophene	0.029	0.014	0.011		
Benzo(b)naphtho(2,1-d)thiophene	0.038	0.129	0.120		
Fluoranthene	0.401	1.88	1.91	12.6	3.89
Pyrene	0.339	1.48	1.48	9.85	3.04
C1 - Fluoranthene/Pyrene	0.166	0.488	0.485		
C2 - Fluoranthene/Pyrene	0.121	0.216	0.205		
C3 - Fluoranthene/Pyrene	0.06	0.082	0.072		
Benz[a]anthracene	0.137	0.647	0.647	4.25	1.36
Chrysene*	0.215	0.771	0.710	5.48	1.79
C1 - Benz(a)anthracene/Chrysene	0.099	0.197	0.180		
C2 - Benz(a)anthracene/Chrysene	0.07	0.097	0.082		
C3 - Benz(a)anthracene/Chrysene	0.044	0.047	0.038		
C4 - Benz(a)anthracene/Chrysene		0.052			
Benzo[b]fluoranthene	0.204	0.654	0.593	5.37	1.62
Benzo[j/k]fluoranthene	0.182	0.582	0.530	4.16	1.48
Benzo(e)pyrene	0.149	0.479	0.430	3.7	1.21
Benzo[a]pyrene	0.17	0.647	0.630	4.95	1.54
Perylene	0.042	0.183	0.176	1.3	0.421
Indeno[1,2,3-cd]pyrene	0.129	0.415	0.386	3.91	1.27
Dibenz[a,h]anthracene	0.04	0.111	0.102	1.07	0.348
Benzo[g,h,i]perylene	0.144	0.435	0.403	3.53	1.18
Coronene	0.053	0.140	0.121	0.992	0.333
Total PAH (16)	2.35	9.27	9.43	**63.6**	**20.6**
Total PAH (42)	3.71	12	12	68.8	22.3

Soil and Sediment Analytic Data (mg/kg)
Meta Environmental Laboratory

Sample ID	**ASS1a**	**ASS1B**	**ASS23B**	**ASS24B**
Date Sampled:	05/08/09	8/17/2009	8/17/2009	8/17/2009
mg/kg dry wt				
Naphthalene	0.066			
2-Methylnaphthalene	0.02	0.026	0.002	0.002
1-Methylnaphthalene	0.013			
C1 - Naphthalene	0.023			
C2 - Naphthalene	0.046			
C3- Naphthalene	0.045			
C4- Naphthalene	0.023			
Biphenyl	0.021			
Acenaphthylene	0.322	0.073	0.007	0.007
Acenaphthene	0.26	0.056	0.002	0.003
Dibenzofuran	0.241	0.073	0.003	0.004
Fluorene	0.541	0.131	0.005	0.007
C1 - Fluorene	0.147			
C2 - Fluorene	0.161			
C3 - Fluorene	0.135			
Phenanthrene	12.6	4.46	0.156	0.224
Anthracene	2.88	0.647	0.023	0.027
C1 - Phenanthrene/Anthracene	2.91			
C2 - Phenanthrene/Anthracene	1.08			
C3 - Phenanthrene/Anthracene	0.41			
C4 - Phenanthrene/Anthracene	0.129			
Dibenzothiophene	0.801			
C1 - Dibenzothiophene	0.302			
C2 - Dibenzothiophene	0.179			
C3 - Dibenzothiophene	0.116			
C4 - Dibenzothiophene	0.074			
Benzo(b)naphtho(2,1-d)thiophene	3.54			
Fluoranthene	46.5	15.8	0.567	0.752
Pyrene	35	12.1	0.426	0.556
C1 - Fluoranthene/Pyrene	10.6			
C2 - Fluoranthene/Pyrene	4.88			
C3 - Fluoranthene/Pyrene	1.26			
Benz[a]anthracene	16.7	6.03	0.193	0.241
Chrysene*	23.5	9.38	0.326	0.407
C1 - Benz(a)anthracene/Chrysene	3.84			
C2 - Benz(a)anthracene/Chrysene	1.03			
C3 - Benz(a)anthracene/Chrysene				
C4 - Benz(a)anthracene/Chrysene				
Benzo[b]fluoranthene	23.5	9.38	0.333	0.407
Benzo[j/k]fluoranthene	20.1	8.14	0.260	0.318
Benzo(e)pyrene	12.4	6.76	0.230	0.285
Benzo[a]pyrene	19.2	8.57	0.279	0.341
Perylene	5.24	2.28	0.071	0.091
Indeno[1,2,3-cd]pyrene	12.2	7.36	0.245	0.305
Dibenz[a,h]anthracene	4.44	2.0	0.067	0.084
Benzo[g,h,i]perylene	12.7	6.68	0.222	0.276
Coronene	3.92	1.89	0.063	0.078
Total PAH (16)	230	**90.8**	**3.11**	**3.96**
Total PAH (42)	276	99.9	3.42	4.34

Soil and Sediment Analytic Data (mg/kg)
Meta Environmental Laboratory

Sample ID	CT- S1a	CT- S1a	CT- S3a	CTS3Cd	CTS4C
Date Sampled:	05/08/09	05/08/09	05/08/09	11/7/2009	11/7/2009
mg/kg dry wt					
Naphthalene	0.055	0.044	0.207	0.036	0.008
2-Methylnaphthalene	0.052	0.038	0.192	0.025	0.008
1-Methylnaphthalene	0.047	0.036	0.174	0.022	0.007
C1 - Naphthalene	0.063	0.048	0.235	0.027	0.009
C2 - Naphthalene	0.201	0.147	0.695	0.074	0.018
C3- Naphthalene	0.345	0.266	1.2	0.150	0.027
C4- Naphthalene	0.263	0.212	0.925	0.120	0.018
Biphenyl	0.037	0.028	0.155		
Acenaphthylene	0.256	0.217	0.932	0.257	0.106
Acenaphthene	0.763	0.517	2.63	0.382	0.052
Dibenzofuran	0.458	0.288	1.6	0.239	0.026
Fluorene	1.15	0.731	3.81	0.625	0.068
C1 - Fluorene	0.385	0.281	1.35	0.245	0.034
C2 - Fluorene	0.391	0.321	1.51	0.298	0.041
C3 - Fluorene	0.263	0.195	0.947	0.174	0.021
Phenanthrene	13.6	11.6	48.2	8.87	0.982
Anthracene	3.25	2.6	11.6	2.09	0.226
C1 - Phenanthrene/Anthracene	3.68	2.83	12.1	2.51	0.279
C2 - Phenanthrene/Anthracene	1.82	1.48	6.29	1.24	0.142
C3 - Phenanthrene/Anthracene	0.67	0.539	2.52	0.503	0.058
C4 - Phenanthrene/Anthracene	0.187	0.16	0.79	0.183	0.024
Dibenzothiophene	0.811	0.594	2.73	0.521	0.050
C1 - Dibenzothiophene	0.3	0.239	0.971	0.160	0.026
C2 - Dibenzothiophene	0.236	0.195	0.75	0.152	0.033
C3 - Dibenzothiophene	0.15	0.129	0.485	0.109	0.022
C4 - Dibenzothiophene	0.076	0.068	0.237	0.062	0.013
Benzo(b)naphtho(2,1-d)thiophene	1.58	1.28	5.7	1.51	0.129
Fluoranthene	22.2	21.4	82.1	24.1	1.78
Pyrene	17.1	16.3	64.1	19.0	1.41
C1 - Fluoranthene/Pyrene	6.28	5.17	22.1	5.26	0.492
C2 - Fluoranthene/Pyrene	2.54	2.09	9.19	2.47	0.271
C3 - Fluoranthene/Pyrene	0.755	0.648	3.02	0.803	0.098
Benz[a]anthracene	7.02	5.5	28.6	6.56	0.591
Chrysene*	8.04	6.6	32.9	7.99	0.797
C1 - Benz(a)anthracene/Chrysene	2.16	1.74	7.98	2.03	0.206
C2 - Benz(a)anthracene/Chrysene	0.758	0.652	2.89	0.853	0.089
C3 - Benz(a)anthracene/Chrysene	0.315	0.235	1.03	0.336	0.035
C4 - Benz(a)anthracene/Chrysene	0.23	0.196	0.875	0.440	
Benzo[b]fluoranthene	7.66	6.5	32.6	8.15	0.699
Benzo[j,k]fluoranthene	6.38	5.24	27.2	6.73	0.625
Benzo(e)pyrene	5.31	4.45	22.6	5.97	0.520
Benzo[a]pyrene	7.29	5.97	29.2	7.49	0.666
Perylene	2.23	1.79	8.21	2.23	0.175
Indeno[1,2,3-cd]pyrene	4.99	4.22	20.8	5.48	0.467
Dibenz[a,h]anthracene	1.73	1.45	6.68	1.36	0.111
Benzo[g,h,i]perylene	5.26	4.43	19.4	5.72	0.496
Coronene	1.62	1.33	6.18	1.84	0.150
Total PAH (16)	107	93.3	411	105	9.08
Total PAH (42)	138	118	524	132	11.8

Appendix C. Soil and Sediment Analytic Data (UNHSC)

Soil and Sediment Analytic Data (mg/kg)
UNHSC laboratory

Date Sampled	4/8/2010	4/8/2010	4/8/2010	6/31/2010	9/10/2010	6/31/10
Sample ID	**CN dst 20**	**CNdst 21**	**CN dst 53**	**CN dst 62**	**CTS3**	**CTS2**
Naphthalene	0.0	0.0	0.0	0.0	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	0.1	ND	0.1
Fluorene	ND	ND	ND	0.2	0.1	0.2
Phenanthrene	1.2	0.1	ND	8.9	1.8	5.5
Anthracene	0.1	ND	ND	1.1	0.2	0.8
Fluoranthene	4.0	0.4	0.1	21.4	3.8	14.3
Pyrene	2.8	0.3	0.1	17.7	2.8	11.5
Benz[a]anthracene	1.2	0.3	0.3	7.9	1.3	6.1
Chrysene	2.5	0.4	0.2	11.7	1.9	9.0
benzo(b&k)fluoranthene	3.0	0.5	0.5	12.7	3.0	7.9
benzo(a)pyrene	1.4	0.3	ND	4.7	1.4	3.1
Indeno(1,2,3-cd)py & Dibenz(a,h)anthracene	2.0	ND	ND	5.7	2.5	3.5
benzo(ghi)perylene	0.9	ND	ND	2.1	1.0	1.4
Total PAH	**19.1**	**2.3**	**1.2**	**94.3**	**19.9**	**63.4**

Soil and Sediment Analytic Data (mg/kg)
UNHSC laboratory

Date Sampled	9/10/2010	6/31/10	6/31/10	6/31/10	6/31/10	8/18/2009
Sample ID	**CTS4**	**CTS5**	**CTS6**	**CTS7**	**ASS2**	**ASS 1b**
Naphthalene	ND	ND	ND	ND	ND	0.7
Acenaphthylene	ND	ND	ND	ND	ND	0.99
Acenaphthene	ND	ND	ND	0.4	ND	1.81
Fluorene	ND	0.2	ND	0.8	ND	0.76
Phenanthrene	1.3	3.3	ND	13.2	2.4	5.6
Anthracene	0.2	0.6	ND	2.6	0.3	1.67
Fluoranthene	2.7	5.9	0.4	22.6	8.7	19.41
Pyrene	2.0	4.5	0.3	18.7	6.4	15.01
Benz[a]anthracene	1.6	2.7	ND	10.1	4.0	7.6
Chrysene	1.6	3.6	ND	10.5	7.4	13.54
benzo(b&k)fluoranthene	2.5	3.7	ND	10.2	ND	16.5
benzo(a)pyrene	1.2	1.4	ND	3.3	3.6	16.59
Indeno(1,2,3-cd)py & Dibenz(a,h)anthracene	2.3	2.8	ND	4.0	4.1	32.66
benzo(ghi)perylene	1.0	1.4	ND	ND	2.1	9.96
Total PAH	**16.3**	**30.0**	**0.6**	**96.3**	**39.1**	**142.8**

Soil and Sediment Analytic Data (mg/kg)
UNHSC laboratory

Date Sampled	4/11/2010	6/31/10	6/31/10	6/31/10	6/31/10	6/31/10	8/17/2009
Sample ID	**CNS53**	**CNS61**	**CNS62**	**CNS63**	**CNS65**	**CNS66**	**CN S1b**
Naphthalene	ND	ND	ND	ND	ND	ND	0.05
Acenaphthylene	ND	ND	ND	ND	ND	ND	0.04
Acenaphthene	ND	0.1	ND	ND	ND	ND	0
Fluorene	ND	0.2	ND	ND	ND	ND	0.03
Phenanthrene	ND	3.0	0.3	0.7	0.8	0.5	0.08
Anthracene	0.2	0.5	0.1	0.2	0.4	0.1	0.04
Fluoranthene	0.1	5.2	0.7	1.4	2.8	1.7	0.13
Pyrene	ND	4.1	0.6	1.1	2.1	1.3	0.12
Benz[a]anthracene	ND	2.1	0.7	0.8	1.2	0.9	0.09
Chrysene	ND	2.9	0.6	0.9	2.2	1.4	0.11
benzo(b&k)fluoranthene	ND	3.4	1.0	1.4	ND	2.2	0.15
benzo(a)pyrene	ND	1.4	0.5	0.7	1.3	0.9	0.13
Indeno(1,2,3-cd)py & Dibenz(a,h)anthracene	ND	1.8	1.4	1.9	2.4	1.9	0
benzo(ghi)perylene	ND	0.9	ND	ND	1.1	1.1	0
Total PAH	**0.3**	**25.4**	**5.9**	**9.2**	**14.2**	**12.0**	**0.97**

Soil and Sediment Analytic Data (mg/kg)
UNHSC laboratory

Date Sampled	8/17/2009	8/17/2009	8/17/2009	8/17/2009	8/17/2009	8/17/2009
Sample ID	**CN S5b**	**CN S2b**	**CN S12b**	**CN S13b**	**CN S10b**	**CN S11b**
Naphthalene	0.03	0.04	0.03	0.03	0.04	0.73
Acenaphthylene	0.04	0.04	0	0	0.08	1
Acenaphthene	0.04	0	0	0.04	0.04	2.01
Fluorene	0.03	0.04	0.03	0.03	0.04	1.18
Phenanthrene	0.14	0.16	0.17	0.15	0.38	11.96
Anthracene	0.05	0.05	0.06	0.05	0.05	2.56
Fluoranthene	0.28	0.47	0.59	0.44	0.83	24.19
Pyrene	0.44	0.37	0.45	0.35	0.75	19.22
Benz[a]anthracene	0.22	0.23	0.28	0.2	0.31	7.82
Chrysene	0.2	0.32	0.36	0.27	0.49	11.09
benzo(b&k)fluoranthene	0.29	0.52	0.62	0.43	0.82	11.82
benzo(a)pyrene	0.24	0.59	0.7	0.46	0.81	12.46
Indeno(1,2,3-cd)py & Dibenz(a,h)anthracene	0	1.59	0	0	0	21.18
benzo(ghi)perylene	0	0	0	0	0	5.57
Total PAH	**2**	**4.42**	**3.29**	**2.45**	**4.64**	**132.79**

Soil and Sediment Analytic Data (mg/kg)
UNHSC laboratory

Date Sampled	8/11/2010	8/11/2010	9/10/2010	9/10/2010
Sample ID	**Alot S3**	**Alot S1**	**Alot dst1**	**Alot dst3**
Naphthalene	ND	ND	0.0	0.0
Acenaphthylene	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND
Phenanthrene	0.2	0.6	0.2	0.1
Anthracene	ND	ND	ND	ND
Fluoranthene	0.4	1.8	0.4	0.2
Pyrene	0.4	1.5	0.3	0.1
Benz[a]anthracene	ND	0.6	0.3	0.3
Chrysene	ND	1.1	0.3	0.2
benzo(b&k)fluoranthene	ND	1.3	0.5	0.4
benzo(a)pyrene	ND	0.8	0.3	ND
Indeno(1,2,3-cd)py & Dibenz(a,h)anthracene	ND	2.2	ND	ND
benzo(ghi)perylene	ND	ND	ND	ND
Total PAH	**1.0**	**10.0**	**2.3**	**1.3**

Samples from unsealed lot located 1 mile from the UNHSC test site

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Polycyclic Aromatic Hydrocarbons (PAHs) in Urban Soil: A Florida Risk Assessment Perspective

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POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN URBAN SOIL: A FLORIDA RISK ASSESSMENT PERSPECTIVE

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ABSTRACT

Over the past decade, polycyclic aromatic hydrocarbons (PAHs) have steadily climbed in importance on the CERCLA list of hazardous substances. Though the listing does not necessarily imply that these chemicals exhibit the greatest degree of toxicity, such recognition by ATSDR and USEPA is predicated at least in part on their demonstrated ubiquity, coupled with toxicity considerations. Regulatory agencies increasingly are under pressure to define and interpret data describing urban background levels, and to appropriately determine the relative importance of waste-producing activities and concentrations resulting from typical natural and/or human activity. Three case studies from Florida are presented that confirm the ubiquity of the PAHs at low levels, and that demonstrate the need for more sophisticated and transparent treatment by regulatory agencies. We discuss assessment and risk assessment activities related to two urban redevelopment projects, as well as one property transaction project. In each case, considerable sampling of surficial soils and sediment identified total benzo(a)pyrene-equivalent (BAPE) concentrations in the range of less than 1 ppm to about 5 ppm. Although those concentrations frequently exceeded the default Florida cleanup target level for both residential and commercial/industrial land use by a wide margin, it was concluded that they are completely consistent with levels reported in a great many urban settings. There is an ongoing need to consider the development of a default urban background level for PAHs in areas characterized by busy roadways or multiple industrial facilities, in much the same way that geological or anthropogenic background levels are established for some inorganics.

Keywords: Polycyclic aromatic hydrocarbons, soil, sediments, water, background, health risk assessment, urban, toxicology, PAH

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1. INTRODUCTION

Over the past decade, polycyclic aromatic hydrocarbons (PAHs) have climbed towards the top of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) list of hazardous substances (ATSDR, 2006). In the biennial ranking comprised of chemicals deemed to pose the greatest possible risk to human health, PAHs placed tenth in 1999 before moving to fifth in 2001 and settling in at seventh in 2005 (ATSDR, 2006). Both the Agency for Toxic Substances and Disease Registry (ATSDR) and US Environmental Protection Agency (EPA) recognize the potential importance of PAHs due to their ubiquity in many urban and rural environments. Acknowledgment of their burgeoning presence means regulatory agencies must define and interpret urban background levels to appropriately determine whether industrial facilities or contaminated sites are impacting the environment beyond concentrations resulting from typical natural and human activity.

PAHs are a collection of over 100 different fused benzene ring chemical compounds with varying prevalence and regulatory concern. Background is defined as concentrations in a common area, such as a road easement, residential yard or non-industrialized locale, due to sources independent of a known waste site (IEPA, 2005). The multitude of non-point, diffuse, and mobile sources of PAHs ranges from automobile exhaust to road asphalt to cigarette smoke (NPI, 2004). These sources create urban background concentrations that often exceed health based regulatory recommendations (Delgado, 2000). Heightened awareness of this potentially costly inconsistency has increased the vigor of efforts to determine local background levels before targeting sites for remediation. Local and state agencies like the Illinois EPA (IEPA) have begun to more actively consider background levels when establishing risk-based objectives in order to determine realistic goals (IEPA, 2005).

In Florida, the Department of Environmental Protection (FDEP) is increasingly aware of and potentially receptive to site-specific demonstrations of urban background, rather than site-related activities, being the cause of or at least a significant contributor to observed PAH impacts. However, at this point, procedural constraints, political climate or financial considerations result in a strict adherence to the much lower default cleanup guidelines.

In this report, we briefly touch on the toxicity of the PAHs, we evaluate the natural and anthropogenic sources of PAHs in the environment, including discussions of the levels observed in air, water, soil and sediment, and we present three case studies from Florida that demonstrate the ubiquity of the PAHs and the challenges they bring to the regulatory framework.

2. HUMAN HEALTH EFFECTS

The potential carcinogenicity of seven common PAH list compounds [benzo(a)anthracene (B(a)A), benzo(a)pyrene (B(a)P), benzo(b)fluoranthene (B(b)F), benzo(k)fluoranthene (B(k)F), chrysene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene] warrant reasonable regulation and remediation. Due to their ubiquity, PAH exposure occurs constantly whether an individual

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4. REPORTED AMBIENT LEVELS OF PAHs

Establishing a universal baseline for urban PAH background has occupied numerous researchers over the course of the past three decades. Intra-town levels can vary two or three-fold depending on different prevailing sources (traffic vs. domestic coal burning), heating fuels (coal vs. natural gas), and position relative to an industrial zone (downwind vs. upwind; EU, 2001). Urban and industrial land-use adjacent to river systems is just one example of the complications associated with source attribution and risk assessment for PAHs (Costa and Gensky, 2001). One specific challenge in attempting to normalize the available information relates to whether individual species or total PAHs are measured and reported. It has become common to utilize B(a)P-equivalents (BAPE) to develop values based on the carcinogenic potency of the seven PAH list compounds in relation to B(a)P, the most often measured and regulated PAH (Grosenheider et al., 2005).

4.1 Air

In the ATSDR's 1995 toxicological profile for polycyclic aromatic hydrocarbons, ambient air's unique role as a feeder to soil and water is identified and background ranges are provided. Rural ambient air for B(a)P ranged between 0.02-1.2 ng/m^3, and urban background in 120 US cities fluctuated between 0.15-19.3 ng/m^3 (ATSDR, 1995). The extent of this urban-rural discrepancy is once again noted in a New Jersey project from 1981 and 1982 that showed a 3-5 times higher concentration for PAHs in urban air as compared to rural air, and also discovered a 5-10 times higher PAH concentration in winter as opposed to summer. Another early 1980's project found that B(a)P had an urban baseline of 0.64 ng/m^3 in Los Angeles. B(g,h,i)PER, a byproduct of automobile emissions on LA's notorious freeways, had a mean geometric concentration of 3.27 ng/m^3. Legzdins et al. (1994) determined that B(g,h,i)PER was the highest individual PAH concentration among hydrocarbons measured in Hamilton, Ontario and New York City. The specific values, 4.3 ng/m^3 in Hamilton and 4.05 ng/m^3 in New York City, furthered the notion that urban ambient air levels follow a general pattern when free of point source contributions.

A worldwide study of 60 towns in the mid-1970's determined the range of B(a)P in European and US ambient air. For Europe, a range of 1-20 ng/m^3 was reported and the U.S. appeared to contain approximately 1 ng/m^3 (Menichini, 1992). However, Europe in the 1990's exhibited significantly improved ranges for B(a)P (EU, 2001). Rural background varied between 0.1 and 1 ng/m^3, and urban baselines ranged from 0.5 to 3 ng/m^3. Nonetheless, the EU (2001) reported 30 ng/m^3 as the commonly accepted background in zones close to industrial processes.

4.2 Soil

PAH compounds found in soil have been an increasing problem since the Industrial Revolution's promotion of PAH-producing anthropogenic behavior. A compilation of data by the ATSDR confirms the expected: urban background concentrations are greatest, followed by

agricultural and rural soil (ATSDR, 1995). Thomas' 1986 survey indicated that even soil in remote Wyoming woods contained 210 ug/kg of total PAHs; whilst, Black et al. (1989) later in the 1980's demonstrated the urban counterpoint by measuring New York City's Fountain Avenue Landfill, which contained concentrations between 400 and 10,000 ug/kg.

Several of the total PAH studies that were reviewed allow a general understanding of urban baseline levels through analysis of samples from several locations throughout an urban domain. The lowest observed levels were in rural soil located far from major highways (Lagoy and Quirk, 1994). According to the IARC (1983), concentrations were between 0.01-10 mg/kg for all PAHs, while urban background ranged from 1-100 mg/kg. Among the more volatile carcinogenic PAHs, Menzie et al. (1992) noted a range of 0.01 to 1.3 mg/kg in forest and rural soil. Based on the 15 samples used in this determination, urban soils ranged from 0.06 to 5.8 mg/kg with a median of 1.1 mg/kg.

A mid-1990's analysis in New England focused on the relationship between proximity to pavement and toxicity in conjunction with background range determinations (Bradley et al., 1994). The study found state regulatory standards, which commonly range from 0.1 to 0.66 mg/kg depending on the state and the particular PAH, difficult to reconcile with background levels. Frequently, the urban surface soil PAH levels dwarfed the cleanup levels for the PAHs. The 95% upper confidence limit on the mean concentrations of 60 samples from three New England cities were 12.4 mg/kg for total carcinogenic PAHs, and 3.3 mg/kg for BAPE. The BAPE for urban background was 30 times greater than the 0.1 mg/kg target cleanup level. Statistical analysis of pavement proximity involved tests for homogeneity of variance and equality of means. The mean for near pavement was 21.9 ppm total PAHs and 2.9 ppm BAPE, while samples away from pavement had means of 8.3 ppm total PAHs and 1.1 ppm BAPE. These tests demonstrated statistical significance at the 0.05 level on all accounts, but emphasized that ppm levels of PAHs were ubiquitous.

The Massachusetts DEP in 1995 attempted to interpret background concentrations in "natural soil," a term used to denote the 90th percentile value (MADEP, 2002). Lower than 90th percentile values were commonly applied when site-specific background information was absent. A common requirement when establishing urban PAH background levels is consideration of the soil type and historical uses of the study area. However, the MADEP methodology and specific urban background levels, serve as a solid foundation for other such efforts. Notable "natural" concentrations identified include B(a)P at 3 mg/kg, B(g,h,i)PER at 1 mg/kg, and chrysene at 2 mg/kg (MADEP, 2002).

Subsequently in 2005, the Illinois EPA, as part of their risk-based tiered remediation program, established their own carcinogenic PAH background levels in soil (IEPA, 2005). Their study separated locales based on population. Areas with over 50,000 residents were branded "Metropolitan Statistical Areas (MSA)," the equivalent of an urban area. Since they deemed the data lognormally distributed, a lognormal 95th percentile concentration, shown on Table 1, represented their conclusions regarding background.

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4.3 Watershed/Sediment

Emissions from a host of mechanisms including stormwater runoff, direct deposition, surface runoff from roadways, and discharges from boats contribute heavily to aquatic sediment contamination (US Navy, 2003; Abrajano and Bopp, 2001). A US Navy review of properties along the Elizabeth River in Virginia examined 20 sediments, and concluded that urban background was 16 mg/kg for a 16-PAH list of priority pollutants and 26 mg/kg for all detectable PAHs. With those statistics in hand, the researchers proposed that 30 mg/kg of priority pollutants should be the cutoff above which urban background alone cannot account for the PAH concentration. Conversely, Stout et al (2004) reported on surficial sediments and reiterated the lack of one representative urban baseline value. Regardless, there was general consistency, with 96% of the 280 sampled sediments containing below 20 mg/kg of the16-PAH list of pollutants.

Table 1. Background concentrations of carcinogenic PAHs in IL (mg/kg)

Individual PAH	Chicago	MSA	Non-MSA
B(a)A	1.1	1.8	0.72
B(b)F	1.5	2.0	0.70
B(k)F	1.0	1.7	0.63
B(a)P	1.3	2.1	0.98
Chrysene	1.1	2.7	1.1
Dibenzo(a,h)A	0.20	0.42	0.15
Indeno(1,2,3-c,d)P	0.86	1.6	0.51

*Derived from IEPA, 2005; see text for full name of abbreviated PAHs

Low solubility and high organic carbon affinity in particulate matter makes sediments a major contributor to the overall watershed PAH content, often with total concentrations in the parts per billion (ug/kg) or parts per million (mg/kg) range, while water concentrations typically are in the parts per trillion (ng/kg) range due to low water solubility. In many instances, the surface water levels may be more closely related to the activity pattern in the surface water body and the local sediment concentrations.

Total PAHs in finished drinking water from 10 US cities, a final destination for PAHs via storm water runoff to reservoirs or infiltration through soil to groundwater, was shown to have levels between 4 and 24 ng/L with the raw water reporting concentrations from 6 to 125 ng/L (Sorrel et al., 1980). In a 1978 study, Basu and Saxena (1978a) reported a mean total PAH concentration of 600 ng/L for a surface water drinking water source in Pittsburg, Pennsylvania. Additionally, Basu and Saxena (1978b) identified groundwater levels between 3-20 ng/L in the bordering states of Ohio, Indiana, and Illinois. A 1986 analysis of the Mississippi River acknowledged that phenanthrene was the highest individual PAH with a maximum of 34 ng/L (DeLeon et al., 1986). This New Orleans industrial zone sample supports the notion that effluents and surface runoff are some of the most significant contributors to water background (McCarthy, 2003). Several studies presented by the ATSDR have uniformly shown the importance of urban runoff's role.

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previously uncontaminated areas in the watershed. With direct contamination a minor threat, the majority of hydrocarbons entered via urban areas such as the city of Staunton and known point sources of PAH impact. In 2001, an initial sampling of only one site in the study area showed several PAHs above PEC guidelines. During the subsequent 2005 sampling sweep, all except one of the 13 sites showed concentrations above the PEC, and all of them exceeded the TEC.

Table 2. PAH concentrations in Mad River Basin sediments (mg/kg)

PAH name	Moore Run	Dugan Run	St. Paris Tributary	Buck Creek
B(a)A	**1.62**	**3.18**	**1.27**	**2.22**
B(a)P	**2.04**	**2.99**	1.38	**2.39**
B(b)F	2.81	3.09	1.55	2.67
B(g,h,i)PER	1.75	2.04	1.09	1.81
B(k)F	2.31	2.96	1.45	2.10
Chrysene	**2.57**	**3.84**	**1.77**	**2.94**
Fluoranthene	**5.41**	**6.98**	**3.31**	**5.92**
Indeno[1,2,3-cd]pyrene	2.08	2.20	1.15	2.04
Phenanthrene	**2.07**	**3.60**	**1.43**	**2.91**
Pyrene	**4.24**	**5.75**	**2.64**	**4.60**
Total PAH	**26.90**	**37.26**	17.04	**29.60**

***Bolded values indicate a level above the PEC.**
**Derived from OH EPA (2005); see text for full name of abbreviated PAHs

5. FLORIDA PERSPECTIVE

In Florida, the Department of Environmental Protection (FDEP) is increasingly aware of and potentially receptive to site-specific demonstrations of urban background, rather than site-related activities, being the cause of observed PAH impacts. However, at this point, procedural constraints, political climate or financial considerations result in a strict adherence to the much lower default cleanup guidelines. The following case studies demonstrate the inconsistency of seemingly unrelated site impacts being cleaned up according to purely health-based Florida guidelines.

5.1 Florida Case Study #1

During investigations related to a former manufactured gas plant destined for urban redevelopment in north-central Florida, PAHs were discovered in soils and roadside ditch sediments at levels that exceeded the site-specific park user scenario soil cleanup target level (SCTL) of 0.35 ppm, as well as the default Florida SCTL for industrial/commercial sites of 0.7 ppm. The 95% upper confidence limit on the mean BAPE concentration for on-site soil samples was approximately 1.2 ppm. Site impacts were observed to be sporadic and not specifically associated with historical activities that may have resulted in PAH releases. Further, upstream roadside ditch samples contained higher levels of PAHs than those observed on the site, implicating general urban conditions.

The consultant demonstrated through literature review and site-specific data analysis that the observed concentrations were quite consistent with urban background for PAHs in such a setting. The federal and state agencies involved with the site concurred in principle, but procedurally required the enactment of an institutional control to notify future property owners of the presence of impacted soil and to prevent exposure.

5.2 Florida Case Study #2

A local housing authority in central Florida undertook the redevelopment of a decades old urban neighborhood bracketed by major roadways and an interstate highway. Surface soil investigations detected PAHs in excess of the default residential SCTL (0.1 ppm for BAPE) over most areas of the site. A statistical analysis of the data revealed a mean concentration of 0.6 ppm and a 95% UCL of the mean concentration of 1.1 ppm for 68 surface soil samples.

A background study was proposed by the consultants, and encouraged by the state, to support the literature-based and site-specific evidence of an urban background phenomenon. However, out of an abundance of caution, and in light of available funding for the remediation, the housing authority decided to excavate, and or cap with two feet of clean soil, the exposed areas of the site (i.e., those areas not covered by roads, driveways or buildings).

5.3 Florida Case Study #3

As part of the due diligence involved in a property transaction in west-central Florida, PAH impacts were discovered in soils adjacent to and beneath an asphalt parking lot of a former retail shopping center. The investigation was expanded multiple times in an attempt to delineate the impacts. No clear delineation was evident for samples beneath the asphalt, but concentrations adjacent to the parking lot decreased with increasing distance from the parking lot. This was a fairly obvious example of the ubiquity of PAHs, and, specifically was concluded to be related to vehicle emissions and parking lot runoff causing low level impacts.

With a maximum BAPE concentration of 2.1 ppm, and mean and 95% UCL concentrations of 0.4 ppm and 0.8 ppm, respectively, site concentrations were well within the widely published range of urban background PAH levels (i.e., typically 1-10 ppm, with some areas as high as 100 ppm). Once again, even though all parties agreed that historical site-related activities were not likely the cause of the observed PAH impacts, in order to facilitate the property transaction process, it was decided that soils adjacent to the parking lot would be excavated and replaced with clean fill. The soils beneath the parking lot were left in place, but an institutional control was enacted to notify future property owners of the presence of impacted soils.

6. DISCUSSION

- Stationary and mobile anthropogenic sources account for as much as 80% of PAHs, with great variability regionally and locally.

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- Remediation should not commence without establishing a site-specific background, if possible.
- Recognition that background is an important contributor to understanding PAH sources is illustrated by the European Union (EU, 2003): "While natural events cannot be controlled they do contribute to the background and can have an important local impact. They may therefore affect the ability of a member state to meet any emission limit."
- Due to incongruity of nature and the variability in activity among people inhabiting a given area, background values vary a great deal.
- CERCLA [Section 104(3)(A)] addresses the impracticality and infeasibility of remediation to guideline levels if naturally occurring background exceeds the maximum allowable value. It deems remediation unnecessary and unproductive in such scenarios.
- Those monitoring health risks and PAH concentrations should first identify and control the principal point sources contributing to ambient levels.
- Urban background and evaluation of low levels of PAHs render assignment of risk to a specific site or site activities difficult.
- ALARA system (setting cleanup levels as low as reasonably achievable): "A tier 1 level of 1 mg/kg of PAHs measured as BAPE is recommended as a remediation goal; if PAHs are below this level, no further action is required. A tier 2 level of 10 mg/kg of PAHs measured as BAPE is recommended as well; if PAHs are below this level, a subjective evaluation of likely current and potential future land use is required. If it appears unlikely that frequent exposure would occur, no further action is required." (Lagoy and Quirk, 1994).
- A tier-based guideline system such as the Illinois TACO or ALARA is often ideal since minor contamination can be addressed through a nominal response.

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Coal-Tar-Based Pavement Sealcoat and PAHs: Implications for the Environment, Human Health, and Stormwater Management

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INTRODUCTION

Driveways and parking lots are common features of cities, suburbs, and small towns. Most single-family residences in the U.S. have paved driveways, and we encounter parking lots at multifamily residences, schools, offices, and commercial businesses. Most people in developed countries, when outdoors, probably spend as much time walking on pavement as on any other type of surface.

There are differences among paved surfaces, however. Most pavement is concrete or asphalt. The asphalt pavement of many parking lots, driveways, and even some playgrounds in North America is sprayed or painted with a black, shiny coating referred to as "sealcoat," "pavement sealant," or "driveway sealer" (Figure 1A). Sealcoat is marketed as improving pavement appearance and increasing pavement longevity.[1] In addition to making pavement black, however, one type of commonly used pavement sealcoat contains refined coal tar and is a potent source of polycyclic aromatic hydrocarbons (PAHs).[2−8] The contribution of pavement sealcoat to PAH contamination of soils, lakes, and homes has only recently been recognized.[4−6]

Coal-Tar-Based Sealcoat: A Newly Identified Source of PAHs. The two primary sealcoat product types on the market are refined coal-tar-pitch emulsion and asphalt emulsion. Coal-tar pitch, a known (Group 1) human carcinogen,[9] is the residue remaining after the distillation of crude coal tar (a byproduct of the coking of coal), and contains about 200 PAH compounds.[10] Most coal-tar-based sealcoat products consist of 20−35% coal-tar pitch as the binder. Asphalt is the residue remaining after the distillation of crude oil and is the binder in asphalt-based sealcoat products. Although the two sealcoat product types are similar in appearance, PAH concentrations in coal-tar-based sealcoat are about 1000 times higher than those in asphalt-based sealcoat[11] (Table 1).

In the U.S., coal-tar-based sealcoat is used primarily east of the Continental Divide, and asphalt-based sealcoat is used primarily west of the Continental Divide.[3] Coal-tar-based sealcoat also is used in Canada.[12] Geographic differences in use in North America likely are a historical and economic artifact of the location of most coal-tar-distillation plants near steel mills, which historically were (and are) in the central and eastern United States. An estimated 85 million gallons (320 million liters) of coal-tar-based sealcoat are used annually in the United States.[11]

The pavement sealcoat issue has been evolving since 2000, when PAH concentrations were discovered to be increasing in many urban lakes across the United States,[15] even as concentrations of other contaminants like lead, polychlorinated biphenyls (PCBs), and DDT were decreasing.[16,17] This was an apparent reversal from earlier reports that PAH concentrations in the U.S. were decreasing in response to reduced emissions from power plants and industries.[18,19] The earlier studies, however, had focused on lakes in undeveloped watersheds, whereas the upward trends in PAHs were in lakes in urban and suburban watersheds. This meant, first, that reductions in PAH emissions caused by changes in home-heating and power-generation technology had been eclipsed in urban areas by some other urban source of PAHs,[15] and second, that this other source was specific to urban and suburban areas.

A breakthrough in understanding urban sources of PAHs came in 2003, when staff with the City of Austin, TX, noted elevated PAH concentrations (ΣPAH_{16} > 1000 mg/kg) in some sediment samples collected from small tributaries and drainages in largely residential areas.[20] Concentrations of PAHs this high are typical of contaminated soils at some manufactured gas plant Superfund sites,[21] but cannot be accounted for by common urban sources (e.g., tire wear, vehicle emissions, asphalt).[2] City of Austin staff connected the dots and hypothesized that the source of the elevated PAHs was particles eroded from parking lots that were coated with coal-tar-based sealcoat.[22] Since that time, an understanding has emerged of relations between coal-tar-based pavement sealcoat and PAHs in the environment.

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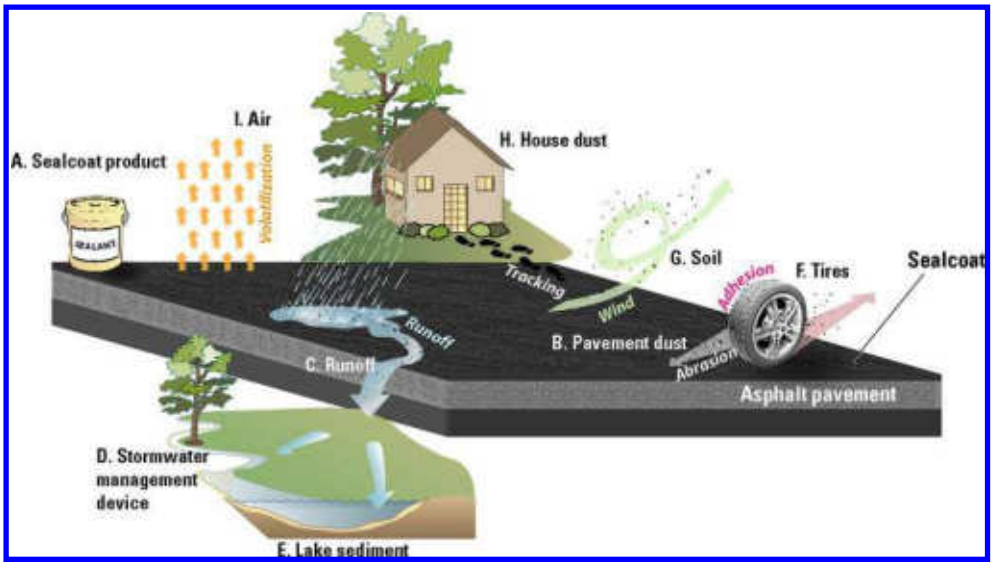

Figure 1. PAHs from coal-tar-based pavement sealcoat are transported by different pathways to various environmental compartments. Once dry, the sealcoat product (A), which contains high concentrations of PAHs, is abraded into a powder and becomes part of the dust on the pavement (B). That dust is transported by storm runoff (C) to stormwater management devices (D) or to receiving streams and lakes (E). Parking lot dust also adheres to tires (F) that track it onto unsealed pavement, and wind and runoff transport the dust to nearby soils (G). Dust particles also are tracked on shoes into residences, where they become incorporated into house dust (H). Volatile PAHs in coal-tar-based sealcoat are released into the air (I). PAH concentrations associated with each compartment and literature sources are provided in Table 1.

WHAT ARE POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)? PAHs are a large group of organic compounds composed of two or more fused benzene rings arranged in various configurations. Those with a low molecular weight (two or three benzene rings) tend to be more volatile, soluble, and biodegradable than those with a higher molecular weight (four or more benzene rings). PAHs occur naturally in coal and petroleum products and are formed by the incomplete combustion of organic matter, from fossil fuels to wood to cigarettes. PAHs have many urban sources, including used motor oil, automobile exhaust, industrial atmospheric emissions, tire particles, and asphalt.[13,14] PAHs always occur as a mixture of different PAH compounds, and are ubiquitous in the urban environment. Of all known PAH sources, the highest concentrations are in coal tar and the related compound creosote. Most laboratories analyze only a subset of PAHs, and concentrations of total PAHs are reported as the sum of the subset analyzed as described in Table 1.

Migration of PAHs from Sealcoated Surfaces into the Environment. Sealcoat doesn't remain on the pavement surface indefinitely, and different applicators recommend reapplication from every 1 to 2 years (e.g., ref 23) to every 3 to 5 years (e.g., ref 24). Tires and snowplows, in particular, abrade the friable sealcoat surface into fine particles.[5,11] The overall annual loss of sealcoat from parking lots in a warm climate is about 2.4% of total sealcoat applied, with wear being most rapid (about 5% per year) in driving areas.[11] Higher wear rates have been noted in a cold-weather climate.[7] The mobilized sealcoat particles and associated PAHs are transported to various environmental compartments (Figure 1, Table 1).

The first compartment is the dust on the pavement surface itself, generated as the sealcoat is abraded from the surface (Figure 1B). Concentrations of PAHs in fine particles (dust) on pavement with coal-tar-based sealcoat are hundreds of times higher than those in dust on concrete pavement or on asphalt pavement that is unsealed or that has asphalt-based sealcoat[3−5] (Table 1). PAHs in dust on sealcoated pavement in the central and eastern U.S. are about 1000 times higher than in dust on sealcoated pavement in the western U.S., supporting anecdotal reports of geographic differences in product use[3] (Figure 2).

Stormwater runoff transports abraded sealcoat particles off sealed pavement (Figure 1C, Table 1). The PAH concentration measured in particles in runoff from parking lots with coal-tar-based sealcoat (3500 mg/kg) was 65 times higher on average than the concentration in particles in runoff from unsealed asphalt and cement lots.[2] Concentrations in unfiltered stormwater runoff from coal-tar-sealcoated pavement are particularly elevated during the months following sealcoat application. The mean ΣPAH_{16} in stormwater runoff from a coal-tar-sealcoated parking lot during the 3 months following sealcoat application was 1357 μg/L and the 3-month mean during the following two years ranged from 17 to 116 μg/L.[7] This relatively elevated concentration persists for years—the median ΣPAH_{18} in stormwater runoff from a parking lot in Madison, WI, 5 years after the last application of coal-tar-based sealcoat, was 52 μg/L.[25] That concentration is about 10 times higher than that in runoff from a mixed-use strip mall, arterial street, and unsealed parking lot (4.8−5.7 μg/L), more than 20 times higher than in runoff from a minor arterial street and a commercial rooftop (1.8−2.4 μg/L), and about 1000 times higher than in runoff from a residential feeder street (0.05 μg/L).[25]

In many communities, the first stop for stormwater runoff is a stormwater-retention pond or other stormwater-management device (Figure 1D), where suspended sediment and associated contaminants settle out. Stormwater ponds are designed to efficiently collect sediment-associated contaminants, which creates an unintended problem for many municipalities because PAHs accumulate in pond sediment. In 5 of 10 ponds sampled in the Minneapolis-St. Paul, MN, metropolitan area, concentrations

Table 1. Concentrations of PAHs as Reported in the Literature for Environmental Compartments Shown in Figure 1, and Definitions of PAH Summations Used

environmental compartment (Figure 1)	medium	PAH concentration (median or mean) in coal-tar-based sealcoat or affected medium	PAH concentration (median or mean) in asphalt sealcoat, affected medium, or associated with unsealed pavement	summation[a]	units	reference
A	sealcoat products	66 000	50	ΣPAH_{16}	mg/kg	11,22
B	pavement dust	2200	11	ΣPAH_{12}	mg/kg	3
		4760	9	ΣPAH_{16}	mg/kg	4
		685	<1	ΣPAH_{16}	mg/kg	5
C	runoff, particles	3500	54	ΣPAH_{12}	mg/kg	2
	runoff, unfiltered water[b]	71	2	ΣPAH_{16}	μg/L	7
		52	5	ΣPAH_{18}	μg/L	25
D	stormwater-management-device sediment	646	2	ΣPAH_{16}	mg/kg	5
E	lake sediment[c]	33	0.4	ΣPAH_{CMB}	mg/kg	6
F	tires	1380	3	ΣPAH_{16}	mg/kg	5
G	soil[d]	105	2	ΣPAH_{16}	mg/kg	5
H	settled house dust	129	5	ΣPAH_{16}	mg/kg	4
I	air (0.03 m from pavement), 3–8 years after sealing	1320	66	ΣPAH_{8}	ng/m^3	28
	air (1.28 m from pavement), 3–8 years after sealing	138	26	ΣPAH_{8}	ng/m^3	28
	air (0.03 m from pavement), 1.6 h after sealing	297 000	66	ΣPAH_{8}	ng/m^3	29
	air (1.28 m from pavement), 1.6 h after sealing	5680	26	ΣPAH_{8}	ng/m^3	29

[a] ΣPAH_{12} is the sum of concentrations of the 12 parent PAH (naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benz[*a*]anthracene, chrysene, benzo[*a*]pyrene, and dibenz[*a*,*h*]anthracene), which are those PAHs used in computation of the probable effects concentration (PEC) sediment-quality guideline,[41] less 2-methylnaphthalene. ΣPAH_{16} is the sum of the concentrations of the 16 priority pollutants identified by the U.S. Environmental Protection Agency,[42] equal to the sum of ΣPAH_{12} and concentrations of benzo[*b*]fluoranthene, benzo[*ghi*]perylene, benzo[*k*]fluoranthene, and indeno[1,2,3-*cd*]pyrene. ΣPAH_{18} is equal to ΣPAH_{16} plus concentrations of 1-methylnaphthalene and 2-methylnaphthalene. ΣPAH_{CMB} is the sum of concentrations of phenanthrene, anthracene, fluoranthene, pyrene, benz[*a*]anthracene, chrysene, benzo[*a*]pyrene, benzo[*b*]fluoranthene, benzo[*ghi*]perylene, benzo[*k*]fluoranthene, indeno[1,2,3-*cd*]pyrene, and benzo[*e*]pyrene. ΣPAH_{8} is the sum of concentrations of phenanthrene, anthracene, 4,5-methylphenanthrene, 1-methylphenanthrene, fluoranthene, pyrene, chrysene, and benzo[*b*]fluoranthene. On the basis of PAH data from primarily combustion sources presented in Mahler et al.,[4] ΣPAH_{12} is about 70–75% of ΣPAH_{16}. ΣPAH_{18} is similar to ΣPAH_{16}, as the additional compounds in the summation either are not detected or are detected at very low concentrations.[2,25] [b] Collected >3 months after sealcoat application. [c] Means for urban lakes with >70% PAH from sealcoat and 0–20% from sealcoat. [d] Concentration in soil adjacent to a sealed parking lot.

Figure 2. PAHs in dust swept from sealcoated parking lots show a striking geographic difference. PAH concentrations in dust from parking lots in central and eastern U.S. cities, where coal-tar-based sealcoat is commonly used, are about 1000 times higher than in the western U.S., where asphalt-based sealcoat is more commonly used. Concentrations are the sum of 12 PAHs (ΣPAH_{12}), in mg/kg. (Figure adapted from ref 3, Figures 1 and 2).

of PAHs in sediment exceeded Minnesota's Level 2 Soil Reference Value of 3 mg/kg benzo[*a*]pyrene equivalents (BaPeq), greatly increasing the cost for disposal.[26] Even a small amount of sealcoated pavement can be the dominant source of PAHs to sediment that collects in stormwater-management devices, as demonstrated at the University of New Hampshire Stormwater Center.[5] Sediment collected from a stormwater-management device receiving runoff from a parking lot with coal-tar-based sealcoat contained ΣPAH_{16} of 393–1180 mg/kg; sediment in devices receiving mixed runoff (4% sealed pavement and 96% unsealed pavement) contained 61–638 mg/kg ΣPAH_{16}; and sediment in a device in the center of an adjacent unsealed lot contained less than 4 mg/kg ΣPAH_{16}.[5]

Some sealcoat particles that are not trapped by stormwater ponds or other collection devices are transported down streams and rivers to lakes, where they are deposited in lake sediment (Figure 1E). Do the PAHs associated with the particles constitute a majority of PAHs in urban lake sediments, and might coal-tar-based sealcoat account for many of the upward trends in PAHs reported by Van Metre et al.?[15] An initial indication comes from a comparison of PAH ratios, or "fingerprints", of the dust collected from parking lots in nine U.S. cities to that of PAHs in sediment from lakes in the same watersheds.[3] In the central and eastern U.S., PAH fingerprints of lake sediment and dust from sealcoated parking lots were similar, and were different from fingerprints of lake sediment and dust in the western U.S., reflecting regional differences in sealcoat product type used. A more sophisticated source-apportionment method—a statistical approach that quantifies

the contribution of sources with known PAH profiles to an environmental receptor—was used to quantify the contribution of identified urban PAH sources to PAHs in bed sediment in 40 U.S. urban lakes.[6] Coal-tar-based sealcoat was estimated to contribute about one-half of the PAHs in the lake sediment, when averaged across the 40 lakes; vehicle-related sources and coal combustion also were important contributors. PAH concentrations in lake sediment and the proportion contributed from coal-tar-based sealcoat were greater in the central and eastern U.S. than in the western U.S. Using sediment cores, trends in PAHs were investigated for eight urban lakes; of the six with significant upward trends, source apportionment indicated that coal-tar-based sealcoat was the cause of the trend in all six of them.

Turning our attention back to sealed pavement, dust from pavement with coal-tar-based sealcoat contaminates nearby unsealed pavement, with concentrations decreasing with distance from the sealed pavement.[5] A petrographic analysis of dust from unsealed pavement in Fort Worth, TX, found that coal-tar pitch was the dominant (92%) source of PAHs in the dust.[8] Particles are transported by adhesion to vehicle tires and by wind from sealed to unsealed surfaces—ΣPAH_{16} in particles swept from tires driven over sealed lots were 400 times higher than in particles swept from tires driven over unsealed lots[5] (Table 1, Figure 1F). Transport of abraded coal-tar-based sealcoat particles by wind and tires might be one reason why PAH concentrations in dust from unsealed parking lots in the central and eastern U.S. (median ΣPAH_{12} 27 mg/kg), where coal-tar-based sealcoat is predominantly used, are significantly higher than those in dust from unsealed parking lots in the western U.S. (median ΣPAH_{12} 0.8 mg/kg), where the asphalt-based product is predominantly used.[3]

PAHs in particles abraded from coal-tar-based sealcoat also are transported by wind, runoff, and snow removal to nearby soils (Table 1, Figure 1G). ΣPAH_{16} in surface soil adjacent to coal-tar-sealed lots at the University of New Hampshire was as high as 411 mg/kg, and concentrations decreased with distance from the sealed lot to less than 10 mg/kg.[5] The highest concentrations were measured in areas where snow was piled adjacent to the lots during the winter months—snowplows were scraping the sealcoat off with the snow. PAHs in surface soils from commercial areas in Fort Worth, TX, were dominantly (88%) from coal-tar pitch.[8]

PAHs from pavement sealed with coal-tar-based sealcoat can contaminate the indoor environment (Figure 1H) as well as the outdoor environment. In a study in Austin, TX, apartments with parking lots with coal-tar-based sealcoat had ΣPAH_{16} in house dust that was 25 times higher, on average, than ΣPAH_{16} in house dust from apartments with parking lots with other surface types (concrete, unsealed asphalt, or asphalt-based sealcoat)[4] (Table 1). The presence or absence of coal-tar-based sealcoat on the apartment complex parking lot was strongly correlated with PAH concentrations in house dust. Although tobacco smoking, candle and incense burning, and barbecue and fireplace use have been suggested to affect PAH concentrations in house dust, Mahler et al.[4] found no relation between any of these and PAH concentrations in the house dust. Concentrations of individual PAHs in house dust collected from apartments in Austin adjacent to pavement with coal-tar-sealcoated parking lots were about 140 times higher than those measured in a study of house dust in California.[27] Lower concentrations of PAHs in house dust in California are consistent with the very low concentrations of PAHs measured in pavement dust in the western U.S. (Figure 2), where coal-tar-based sealcoat is not commonly used.

In addition to contaminating stormwater, sediment, soil, and house dust, PAHs from coal-tar-based sealcoat contaminate air (Figure 1I). Several of the lower molecular weight PAHs in coal-tar-based sealcoat are volatile, which is why sealed parking lots and driveways frequently give off a strong smell. A recent study[28] reported that the flux of ΣPAH_8 from in-use parking lots with coal-tar-based sealcoat of various ages (mostly more than 3 years old) was 60 times higher than that from unsealed pavement on average. A second study[29] reported that ΣPAH_8 in air just after sealcoat application was hundreds to thousands of times higher than that above unsealed parking lots (Table 1), and that one-quarter to one-half of the PAHs in the applied sealcoat were lost to the atmosphere during the first 16 days following application. A mass balance indicated that ΣPAH_8 emissions from new applications of coal-tar-based sealant each year are larger than annual vehicle emissions of PAHs for the U.S.[29]

Biological Concerns. The detrimental effects of PAHs on terrestrial and aquatic ecosystems are well documented.[30] For example, when fish are exposed to PAHs, they exhibit chronic effects, including fin erosion, liver abnormalities, cataracts, skin tumors, and immune system impairments leading to increased susceptibility to disease.[31] When benthic macroinvertebrates—insects and other organisms that live at the bottom of rivers and lakes and that make up the base of the aquatic food chain—are exposed to PAHs, they are susceptible to a number of detrimental effects, including inhibited reproduction, delayed emergence, sediment avoidance, and mortality.[31] The most important mechanism by which acute effects occur in benthic invertebrates is a nonspecific narcosis-like mode of action that results in the degradation of cell membranes.[32] Ultraviolet (UV) radiation greatly increases the toxicity of PAHs in a wide variety of aquatic organisms.[33−36]

As the importance of coal-tar-based sealcoat as a source of PAHs has emerged, several studies have looked at potential biological effects of this particular source of PAHs. When sediment was spiked with coal-tar-based sealcoat to provide a range of environmentally relevant PAH concentrations, frogs (*Xenopus laevis*) had stunted growth or delayed development at 30 mg/kg ΣPAH_{16}, and complete mortality occurred at the highest treatment of 300 mg/kg ΣPAH_{16}.[37] Salamanders (*Ambystoma maculatum*) and newts (*Notophthalmus viridescens*) exposed to sediment contaminated with coal-tar-based sealcoat at PAH concentrations similar to the highest treatment in the frog study had stunted growth, difficulty swimming or righting themselves, and liver problems.[38,39] These effects were magnified by the addition of UV light.[38] At the community level, macroinvertebrate communities exposed to sediment spiked with coal-tar-based sealcoat had significant decreases in species abundance and richness at ΣPAH_{16} concentrations exceeding 300 mg/kg.[40] Similarly, in a study of urban streams, aquatic invertebrate communities downstream from parking lots with coal-tar-based sealcoat suffered losses of abundance and diversity along a gradient of increasing total PAH concentration, starting near the ΣPAH_{12} probable effects concentration (PEC) value of 22.8 mg/kg.[20,41] These studies demonstrate that PAHs in sediment contaminated by coal-tar-based sealcoat are bioavailable and that environmentally relevant concentrations adversely affect amphibians and benthic communities, two robust indicators of aquatic ecosystem health. The finding of adverse biological effects to biota when exposed to

sediment with PAH concentrations near the PEC has widespread relevance: Of the 40 U.S. urban lakes investigated by Van Metre and Mahler,[6] sediment in the nine lakes with the greatest mass loading of PAHs from coal-tar-based sealcoat had concentrations of PAHs that exceeded the PEC.

Human-Health Concerns. Coal tar and coal-tar pitch are listed as Group 1 (carcinogenic to humans) carcinogens,[9] and the U.S. EPA currently classifies seven PAH compounds as probable human carcinogens (Group B2): benz[*a*]anthracene, benzo[*a*]pyrene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, chrysene, dibenz[*a*,*h*]anthracene, and indeno[1,2,3-*cd*]-pyrene.[42] Coal tar itself is a powerful mutagen: The mutagenicity index for coal tar is about 1000 times that of asphalt cements.[43] However, although coal-tar-based sealcoat has been on the market since at least 1960,[6] little has been published to date about the contribution of the sealcoat to PAH exposures and the associated potential for adverse human-health outcomes.

The elevated concentrations of PAHs in house dust, soil, air, water, and sediment associated with coal-tar-based sealcoat raise the possibility of several complete exposure pathways for humans. Incidental ingestion of house dust and soil is particularly relevant for small children, who put their hands and objects into their mouths. A recent study[44] reported that children living in homes adjacent to pavement with coal-tar-based sealcoat likely are exposed to about 14-fold higher doses of PAHs through ingestion of house dust than are children living in residences adjacent to unsealed pavement, and that exposure from ingestion of PAH-contaminated house dust is estimated to be more than double that from diet, even under conservative assumptions. Ingestion of contaminated soil is another way that children might be exposed to PAHs from coal-tar-based sealcoat, particularly given that ingestion rates of soil typically exceed those of house dust.[45] Incidental ingestion of dust directly from sealed pavement also might be important, because the extremely high concentrations of PAHs measured in these materials (Table 1) could translate to substantial doses from miniscule exposures. On a long-term basis, nondietary ingestion of PAH-contaminated house dust and soil likely are the most important routes of exposure, but a complete human-health risk analysis is required before the cancer risk associated with ingestion of these media can be quantified.

Other routes of exposure to coal-tar-based sealcoat, in addition to ingestion, might have implications for human health. Relatively high acute exposures might occur from inhalation of wind-blown particles or fumes that volatilize from sealed parking lots, especially during sealcoat application. Sealcoat applicators, in particular, might be subject to substantial inhalation exposures, but such exposures have not yet been characterized. Other potential routes include skin contact with sealcoat and abraded sealcoat particles and contaminated soil, sediment, dust, and water. Such exposures likely would be relatively infrequent and short-term. However, PAHs are readily absorbed through the skin,[46] and circumstances that increase the frequency or magnitude of exposure events, such as daily activity on pavement treated with coal-tar-based sealcoat, might be associated with increased cancer risk.

Regulatory and Retail Actions. Research to date, as documented here, provides a compelling weight-of-evidence that coal-tar-based sealcoat products are an important source of PAHs to our environment. A patchwork of actions has been taken to either ban or restrict the use of coal-tar-based sealcoat in the United States. The first ban was implemented by the City of Austin, TX, in 2006.[47] As of January 2012, 15 municipalities and two counties in four states (Minnesota, New York, Texas, and Wisconsin), the District of Columbia, and the State of Washington had enacted some type of ban, affecting nearly 10.4 million people.[48] Other local and state jurisdictions have used voluntary or limited-use restrictions for certain groups (e.g., city government) to discourage the use of coal-tar-based sealcoat.[48]

Minnesota, in particular, has been actively engaged in this issue after municipalities contacted state agencies and the Minnesota Legislature for assistance addressing PAH-contaminated stormwater pond sediment.[49] Costs for disposing of this sediment could reach $1 billion if PAHs in sediment in just 10% of the estimated 20 000 municipal stormwater ponds in the Minneapolis-St. Paul, MN, metropolitan area exceed Minnesota's Level 2 human-health risk-based Soil Reference Value of 3 mg/kg BaPeq[50] (Donald Berger, Minnesota Pollution Control Agency, written communication, 2011). The Minnesota Legislature passed a bill in 2009 that provides small grants to local governments for use in treating or disposing of contaminated sediment in stormwater ponds, provided that the governments restrict the use of undiluted coal-tar-based sealcoat.[49] As of January 2012, 13 municipalities had passed ordinances and three municipalities have received grants for remediation of stormwater ponds.

Several national and regional hardware and home-improvement retailers have voluntarily ceased selling coal-tar-based driveway-sealer products.[48] Some private applicators have chosen to use only asphalt-based sealcoat (e.g., refs 51,52). Many professional sealcoating companies in areas unaffected by bans or restrictions use coal-tar-based sealcoat, however, and coal-tar-based sealcoat products are readily available online for purchase by homeowners.

No action has been taken at a federal level to restrict the use of coal-tar-based sealcoat. Coke product residues, such as coal tar, are not classified as hazardous waste under the Resource Conservation and Recovery Act if the product is recycled.[53] This exemption allows coal-tar pitch to be used in the production of aluminum (~95% of use), commercial carbon, built-up roofing, and pavement sealcoat.[54]

Because PAHs are a ubiquitous and persistent class of urban contaminants, a decade or more might be required to assess the effectiveness of bans, restrictions, and/or changes in the retail availability of coal-tar-based sealcoat on reducing PAH concentrations in urban water bodies. Research on trends in the occurrence of PCBs and DDTs supports this concern. Following national bans on use of PCBs and DDT in the 1970s, it was 10−15 years before concentrations in lakes and reservoirs decreased by one-half.[17,55] Unlike these chemicals, all sources of PAHs in urban watersheds will not be eliminated by banning coal-tar-based sealcoat. However, reductions in PAH loads over time might be sufficient to provide more options for disposal of dredged material from stormwater ponds and navigation channels and reduce risk to terrestrial and aquatic ecosystems and human health.

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Notes

The authors declare no competing financial interest.

In cooperation with the City of Fort Worth

Particle-Associated Contaminants in Street Dust, Parking Lot Dust, Soil, Lake-Bottom Sediment, and Suspended and Streambed Sediment, Lake Como and Fosdic Lake Watersheds, Fort Worth, Texas, 2004

Data Series 211

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Abstract

A previous study of impaired water bodies in Fort Worth, Texas, by the U.S. Geological Survey, reported elevated but variable concentrations of particle-associated contaminants (PACs) comprising chlorinated hydrocarbons, polycyclic aromatic hydrocarbons, and trace elements in suspended and bed sediment of lakes and streams affected by urban land use. The U.S. Geological Survey, in cooperation with the City of Fort Worth, collected additional samples during October 2004 to investigate sources of PACs in the watersheds of two impaired lakes: Lake Como and Fosdic Lake. Source materials and aquatic sediment were sampled and analyzed for PACs. Source materials sampled consisted of street dust and soil from areas with residential and commercial land use and parking lot dust from sealed and unsealed parking lots. Aquatic sediment sampled consisted of bottom-sediment cores from the two lakes and suspended and streambed sediment from the influent stream of each lake. Samples were analyzed for chlorinated hydrocarbons (organochlorine pesticides and polychlorinated biphenyls), polycyclic aromatic hydrocarbons, major and trace elements, organic carbon, grain size, and radionuclides.

Introduction

Particle-associated contaminants (PACs) are an important component of urban nonpoint-source pollution to aquatic systems. PACs, which include chlorinated hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), and trace elements, pose a threat to aquatic biota and humans because many are persistent, bioaccumulative, or toxic (U.S. Environmental Protection Agency, 1997). Occurrence of PACs has resulted in the impairment of thousands of streams, lakes, and reservoirs. PACs were responsible for fish-consumption advisories for 35 percent of total lake acreage and 24 percent of total river mileage in the United States in 2004 (U.S. Environmental Protection Agency, 2005), and PACs comprise more than 20 percent of total maximum daily loads (TMDLs) nationwide (U.S. Environmental Protection Agency, 2006). Lakes and streams in Fort Worth, Tex., are among these impaired water bodies: Lake Como, Echo Lake, Fosdic Lake, and segments of the West Fork Trinity River and Clear Fork Trinity River are under fishing advisories or fish consumption bans and are included in part of a study of TMDLs for legacy pollutants (Van Metre and others, 2003). A “legacy pollutant” is a constituent once widely used for certain applications but now banned or withdrawn from such use.

The U.S. Geological Survey (USGS) studied the occurrence of and trends in PACs in several Fort Worth water bodies (Van Metre and others, 2003) and found relatively high concentrations of chlorinated hydrocarbons, PAHs, and trace elements in the more urban sites. The USGS also found that legacy pollutants and PAHs were not uniformly preserved in bottom sediment in the lakes as they were in suspended sediment in streams (Van Metre and Mahler, 2004).

Higher concentrations of some organic pollutants in streams relative to the downstream reservoirs raises several questions, including: Are some contaminant concentrations in street dust and soil much higher than indicated by measurements in aquatic sediment? One potential PAH contaminant source of particular interest is parking lot sealcoat, the black, shiny substance sprayed or painted on the surfaces of parking lots and driveways to protect the underlying asphalt and to enhance appearance. A recent study of PAH sources to urban water bodies (Mahler and others, 2005), found that sealcoats have extremely high concentrations of PAHs and that sealcoats could account for the majority of PAHs in the streams studied.

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Those streams included the inflows to Lake Como and Fosdic Lake in Fort Worth.

This report, prepared by the USGS in cooperation with the City of Fort Worth and in collaboration with the University of Illinois, documents measured concentrations of PACs in various source materials and aquatic sediment in the Lake Como and Fosdic Lake watersheds (figs. 1 and 2). Source materials consisted of street dust, parking lot dust, and soil. Aquatic sediment consisted of bottom-sediment cores from the two lakes and suspended and streambed sediment from the influent stream to each lake.

Approach

Study Design and Sampling

Samples of source materials and aquatic sediment from the watersheds of Lake Como and Fosdic Lake were collected and analyzed for PACs. Samples of residential street dust, parking lot dust from sealed and unsealed commercial parking lots, commercial soil, residential soil, lake-bottom sediment (core), and suspended and streambed sediment were collected from each watershed. Sampling of street and parking lot dust, soil, and lake-bottom sediment was done during October 20–21, 2004. The street and parking lot dust and soil samples were composed of material expected to wash off (street and parking lot dust) or deemed most likely to erode (soil) in the next rain storm. Sampling of suspended sediment was done during a storm on October 22, 2004. Sampling of streambed sediment was completed after the stormflow receded on October 25, 2004.

Street and parking lot dust samples were collected by sweeping with clean, nylon push brooms and dust pans. Parking lot samples were a composite sample from three commercial parking lots of each surface type, sealed or unsealed. Residential asphalt street dust samples were a composite of sweepings from three blocks of residential roadway in each watershed (figs. 1 and 2). These samples were sieved using a 1-millimeter sieve, homogenized, and split for chemical analyses. Samples for analyses of organic compounds were stored chilled pending analysis.

Each soil sample was a composite of material scraped from an exposed area of soil (scraped to about 1-centimeter deep or less) within a few meters of the street. About 40 locations distributed randomly over a several-block commercial or residential area were sampled to form each composite sample (figs. 1 and 2). About 4 liters of material were collected, air-dried under a hood, broken up, and passed through a 1-millimeter sieve. The material that passed the sieve was homogenized and split for chemical analyses.

Bottom-sediment core samples from the lakes were collected using a 14- by 14-centimeter-square, 50-centimeter-tall box corer following the sampling methods of Van Metre and others (2004). Four cores were collected from a single site in each lake (figs. 1 and 2), corresponding to the lower lake site in Lake Como and mid-lake site in Fosdic Lake reported by Van Metre and others (2003). The cores were sliced at 5-centimeter intervals by vertical extrusion, and segments from corresponding depth intervals from the four cores were combined to form six composite samples to a depth of 30 centimeters. Samples were homogenized, split, and stored chilled.

Suspended sediment samples were obtained during a storm that caused runoff on October 22, 2004, the day after street and parking lot dust, soil, and lake-bottom sediment sampling was completed. Samples were collected by filling three 25-liter polycarbonate containers with water during storm runoff and then filtering the samples at the USGS Texas Water Science Center (WSC) in Fort Worth to isolate the sediment following the method of Mahler and Van Metre (2003). Samples were collected at the same site on each influent stream that was monitored for suspended-sediment chemistry and loads by Van Metre and others (2003). The 25-liter containers were filled by submerging them in the center of the small (1- to 2-meter wide) channel of each stream (figs. 1 and 2). Sediment for elemental analyses was isolated by filtration using 0.45-micrometer Teflon filters held in 140-millimeter-diameter acrylic filter holders. Sediment for organic-compound analyses was isolated by filtration using 0.45-micrometer Teflon filters held in 293-millimeter-diameter stainless steel filter holders. Two organic-compound filters (reused twice each) and eight elemental-analyses filters were used for the Lake Como inflow sample. Three organic-compound filters (reused twice each) and five elemental-analyses filters were used to isolate sediment from the Fosdic Lake inflow sample. For both lakes, all 75 liters were filtered.

Streambed sediment samples were collected 3 days after the storm, on October 25, 2004, from pools in the influent streams to the two lakes near the locations where suspended sediment samples were collected (figs. 1 and 2). Samples were collected from areas of the channel where fine-grained sediment tends to accumulate by scooping the soft, relatively fine-grained sediment with a 125-milliliter baked glass sampling jar. Numerous scoops were combined in 4-liter baked glass sampling jars (total of 6.5 liters from Lake Como inflow channel and 9 liters from Fosdic Lake inflow channel). The wet material was chilled and sieved using a 1-millimeter mesh sieve at the USGS Texas WSC in Austin. The material that passed the sieve was homogenized and split into subsamples for chemical analyses.

Analytical

Analyses included chlorinated hydrocarbons (organochlorine pesticides and polychlorinated biphenyls [PCBs]), PAHs, and major and trace elements. Selected samples were analyzed for organic carbon, grain size, and radionuclides. Samples for analysis of organic compounds were chilled and shipped wet to the USGS National Water Quality Laboratory

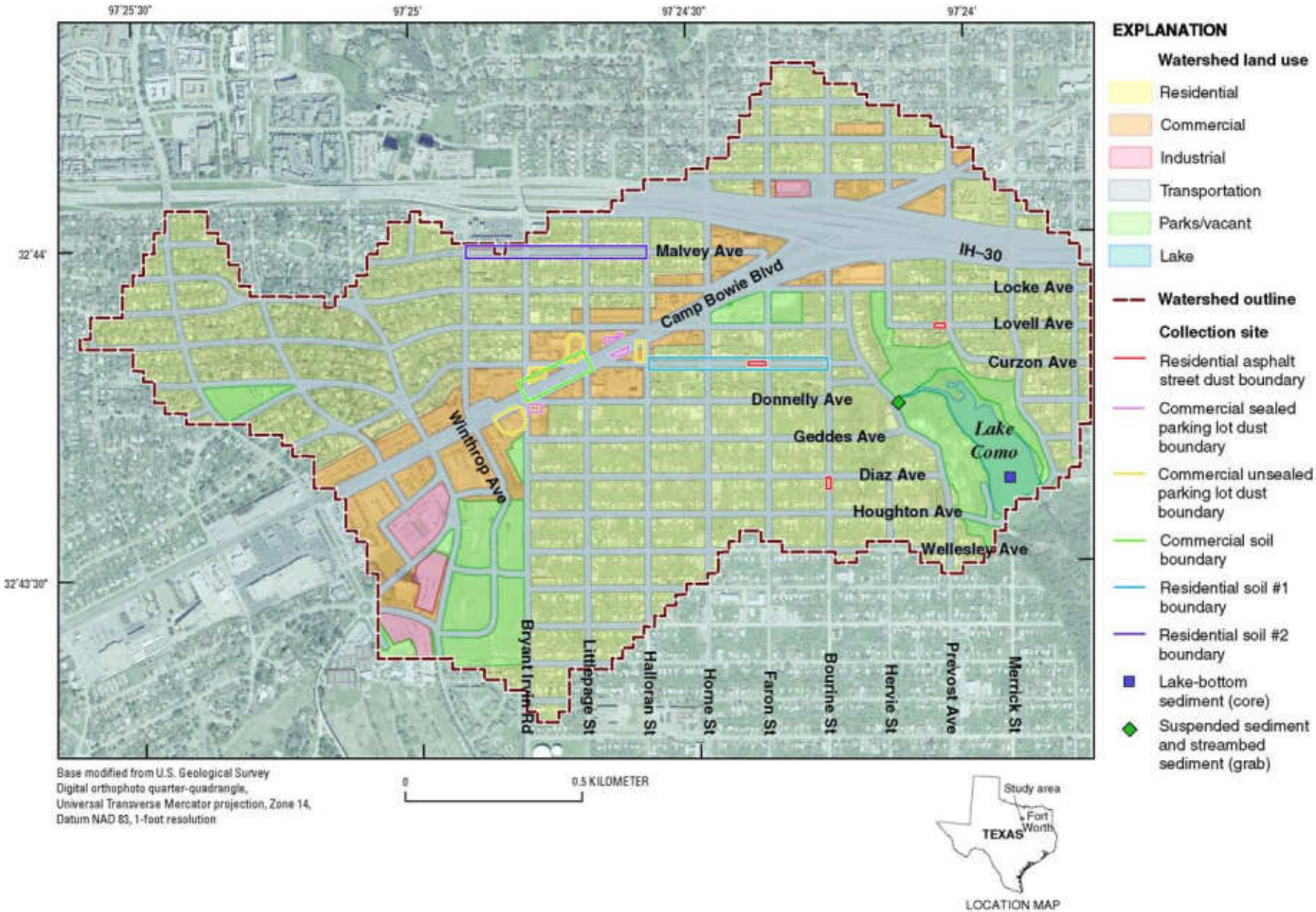

Figure 1. Sites where samples of street dust, parking lot dust, soil, lake-bottom sediment, and suspended and streambed sediment were collected in Lake Como watershed, October 2004.

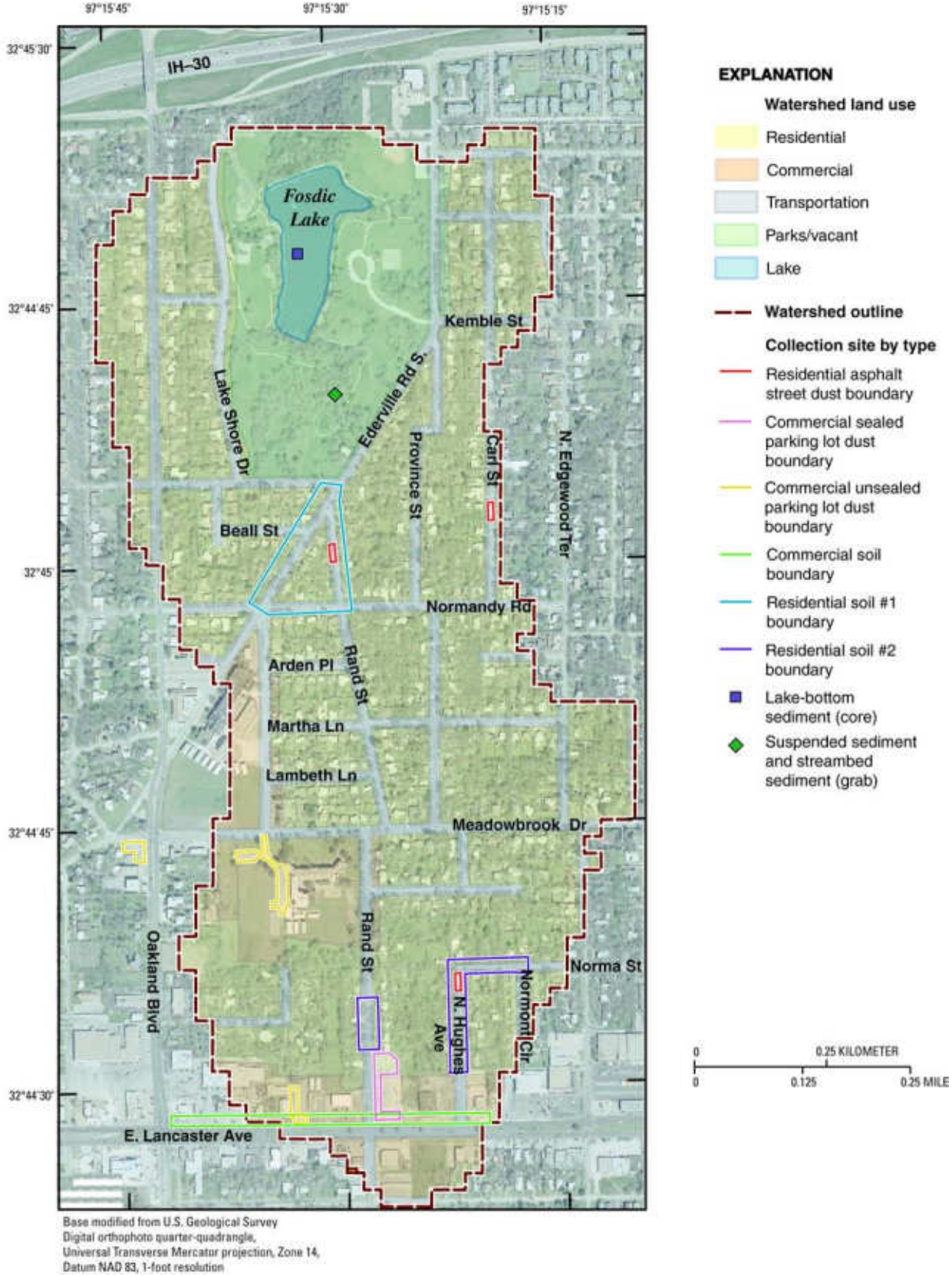

Figure 2. Sites where samples of street dust, parking lot dust, soil, lake-bottom sediment, and suspended and streambed sediment were collected in Fosdic Lake watershed, October 2004.

(NWQL) in Denver, Colo. Samples for analyses of major and trace elements, forms of carbon, and radionuclides were freeze-dried and ground to a fine powder at the USGS Texas WSC in Austin, prior to analyses by the USGS Geology Discipline Mineral Resources Team Laboratory in Denver, Colo. Samples for analysis of organic carbon were chilled and shipped wet to the laboratory of the University of Illinois Urbana-Champaign, in Urbana, Ill. Samples for analysis of grain size were chilled and shipped wet to the USGS Iowa WSC sediment laboratory in Iowa City. The Iowa sediment laboratory did the grain-size analyses of lake-bottom and streambed sediment samples using sieve and pipet methods (Guy, 1969). Brief descriptions of the other analytical procedures follow.

Organic Compounds

Organochlorine pesticides, PCBs, PAHs, and alkyl-substituted PAHs (alkyl-PAHs) were extracted, isolated, and analyzed using the procedures of Noriega and others (2003) and Olson and others (2003). Briefly, wet lake-bottom sediment and streambed sediment were extracted overnight with dichloromethane in a Soxhlet apparatus. The extract was reduced in volume and filtered. Two aliquots of the sample extract were quantitatively injected into a polystyrene-divinylbenzene gel permeation column and eluted with dichloromethane to remove sulfur and partially isolate the target analytes. The first aliquot was analyzed for PAHs and alkyl-PAHs by capillary-column gas chromatography with detection by full-scan mass spectrometry (MS) or by selected ion monitoring MS. Eighteen parent PAHs, nine specific alkyl-PAHs, and the homologous series of alkyl-PAHs for 2- to 5-ringed PAH were determined.

The second aliquot was split into two sample fractions by combined alumina/silica adsorption chromatography, followed by Florisil adsorption chromatography for further cleanup of the second fraction. Both fractions were analyzed by dual capillary-column gas chromatography with electron capture detection (GC-ECD) for the determination of the organochlorine pesticides and PCBs. Organochlorine pesticides were reported as individual compounds, and PCBs were reported as individual Aroclor (1016/1242, 1254, or 1260) equivalents.

The PCB fraction of the organic compound analysis was analyzed for 27 (of 209 possible) selected PCB congeners along with the other analytes during GC-ECD analysis. The congeners chosen for this analysis were some of the more dominant congeners in the most widely used Aroclors (1016, 1242, 1254, and 1260). In addition to the dominance of these congeners, potential coelution issues and signal response for this analytical method were considered. A series of dilutions of a custom mixture containing the 27 selected PCB congeners was used to make the calibration standards. Calibration standards were prepared at four concentrations, and a minimum of three points were used for the calibration curves. An additional congener solution, prepared at a concentration that was mid-range on the curve, was used as a check standard to verify the calibration curve.

Quality assurance for organic compound analyses was provided by analyzing an environmental duplicate sample, a blank sample, and a spiked sample and by monitoring recovery of surrogate compounds with each set of 12 environmental samples. Van Metre and others (2004) reported that the median relative percent differences using these methods for chlorinated hydrocarbons was 11.8 percent for 41 duplicate samples and for PAHs was 11.9 percent for 40 samples.

Major and Trace Elements

Elemental concentrations were determined on concentrated-acid (hydrochloric-nitric-perchloric-hydrofloric) digests (“total” digestions) by inductively coupled plasma/mass spectrometry at the Mineral Resources Team laboratory in Denver (Briggs and Meier, 2003). Concentrations of mercury were determined by cold-vapor atomic adsorption spectroscopy (Brown and others, 2003). Total carbon was measured by combustion with an automatic carbon analyzer, inorganic carbon was measured as carbon dioxide by coulometric titration, and organic carbon was computed by difference (Arbogast, 1996). Quality assurance was provided by analyzing several standard reference materials, sample replicates, and a blank sample with each batch of as many as 20 samples.

Organic Carbon

Percent organic carbon was determined for selected sediment samples at the University of Illinois Urbana-Champaign laboratory. Sediment was air-dried, ground, and passed through a 200-mesh (75-micrometer) sieve. Inorganic carbon was removed with a 4-normal (N) hydrochloric acid (HCl) treatment, followed by 22-N hydrofluoric acid (HF) and 6-N HCl treatments to remove silicate minerals (Durand and Nicaise, 1980). Easily extracted organic matter such as polysaccharides and other hydrolyzable organic matter was removed by treatment with trifluoroacetic acid (Gelinas and others, 2001). Humic and fulvic acids then were extracted from the sample (Swift, 1996). Humic acid was extracted using 0.1-molar sodium hydroxide (NaOH) and precipitated by neutralization using 6-molar HCl. Fulvic acid, which is not precipitated with 6-molar HCl, was separated by passing through a column of XAD-8 (acrylic ester composition). At this point, the remaining carbon material was enriched in kerogen and black carbon. Kerogen was removed by heat treatment leaving only black carbon. After each treatment step, total organic carbon was analyzed using a carbon dioxide coulometer and thermal combustion at 950 degrees Celsius (Li and Werth, 2001).

Radionuclides

Selected samples from the two lake-bottom sediment cores were analyzed for lead-210 (^{210}Pb), radium-226 (^{226}Ra), and

cesium-137 (^{137}Cs) at a USGS laboratory in Menlo Park, Calif. Activities of total ^{210}Pb, ^{226}Ra, and ^{137}Cs were measured simultaneously by gamma spectrometry on the basis of American Society for Testing and Materials (ASTM) methods C 1402–98 and E 181–98. The analytical method used for the samples in this study is similar to methods described by Robbins and Edgington (1975), Baskaran and Naidu (1994), and Fuller and others (1999). Subsamples of dried sediment samples were counted for radionuclide activity using a high-resolution intrinsic germanium detector gamma spectrometer. The supported ^{210}Pb activity, defined by the ^{226}Ra activity, was determined on each sample from the 352 and 609 kiloelectron-volt gamma emission lines of lead-214 and bismuth-214 (the short-lived daughters of ^{226}Ra), respectively. Self-absorption of the gamma emission line for each isotope was accounted for using an attenuation factor for each counting container calculated from an empirical relation between self-absorption and bulk density developed for this geometry on the basis of the method of Cutshall and others (1983). Detector efficiency for each isotope was determined from National Institute of Standards and Technology traceable standards. National Institute of Standards and Technology and International Atomic Energy Agency reference materials were counted monthly to check detector calibration. The reported uncertainty in the measured activity was calculated from the random counting error of samples, and background spectra at the one standard deviation level was typically within ±10 percent. The measured activities of replicate analysis of material from the same sample agreed to within 15 percent.

Particle-Associated Contaminants in Street Dust, Parking Lot Dust, Soil, Lake-Bottom Sediment, and Suspended and Streambed Sediment

Results of selected physical and chemical analyses (detected constituents only) are presented in tables 1–6 (at end of report). Analyses were not completed for samples collected from parking lots in the Fosdic Lake watershed because sample jars were broken during shipment to the laboratory. Total DDT was computed as the sum of the detected and estimated (identified with an “E” before the concentration) concentrations of *p,p’*-DDD, *p,p’*-DDE, and *p,p’*-DDT. Technical chlordane was computed as 1.6 times the sum of the detected and estimated concentrations of *cis*-chlordane, *trans*-chlordane, and *trans*-nonachlor (Dennis Markovich, U.S. Geological Survey National Water Quality Laboratory, written commun., 2006). The sum of the PCB Aroclors was computed as the sum of the detected and estimated concentrations of PCB Aroclors 1016/1242, 1254, and 1260. The sum of the PCB congeners was computed as the sum of the detected and estimated concentrations of 18 congeners ranging from PCB 52 to PCB 206. Total PAH was computed as the sum of the detected and estimated concentrations of 13 PAHs: napthalene, 2-methylnaphthalene, acenaphthylene, acenaphthene, 9H-fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benz(*a*)anthracene, chrysene, dibenzo(*a,h*)anthracene, and benzo(*a*)pyrene (Ingersoll and others, 2000).

The most notable result is the very high PAH concentration in the sample from sealed parking lots in the Lake Como watershed. Total PAH concentration in the sealed parking lot sample is 980,000 micrograms per kilogram, more than 30 times greater than the total PAH concentration of 32,000 micrograms per kilogram measured in the unsealed parking lot sample (table 2). These concentrations are consistent with concentrations in particles collected from runoff from sealed and unsealed parking lots as reported by Mahler and others (2005) for parking lots in Austin. Also noteworthy are the few high concentrations of organochlorine pesticides in commercial and residential soil.

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Table 2. Polycyclic aromatic hydrocarbon (PAH) concentrations in street dust, parking lot dust, soil, lake-bottom sediment, and suspended and streambed sediment samples collected in Lake Como and Fosdic Lake watersheds, October 2004—Continued.

Micrograms per Kilogram

Sample ID (core interval, in centimeters)	Sample type	Laboratory set number	C5-202 Isomers, C5-alkylated fluoranthene/ pyrenes	C2-228 Isomers, C2-alkylated benzo(*a*)-anthracene/ chrysenes	Benzo(*b*)-fluoran-thene	Benzo(*k*)-fluoran-thene	Benzo(*e*)-pyrene	Benzo(*a*)-pyrene	Peryl-ene
			Lake Como						
CMO resid. asphalt street dust	Street dust (sweeping)	200512303	<15	<40	E103	E72	71	66	<10
CMO comm. sealed pkng. lot dust	Parking lot dust (sweeping)	200512303	<1,540	<8,130	E131,000	E90,000	80,400	**103,000**	32,300
CMO comm. unsealed pkng. lot dust	Parking lot dust (sweeping)	200512303	<55	<200	E4,320	E2,760	2,580	**3,030**	867
CMO comm. soil	Soil (grab)	200512303	<25	<140	E1,930	E1,180	1,090	1,260	373
CMO resid. soil #1	Soil (grab)	200512303	<15	<55	E91	E65	77	61	<10
CMO resid. soil #2	Soil (grab)	200512303	<20	<95	E1,640	E829	930	1,020	320
CMO (0–5)	Lake-bottom sediment (core)	200509403	<66	<161	E1,240	E909	743	679	134
CMO (10–15)	Lake-bottom sediment (core)	200509403	<70	<210	E1,290	E1,080	888	869	246
CMO (25–30)	Lake-bottom sediment (core)	200509403	<50	<270	E1,820	E1,440	1,200	1,220	356
Como inflow	Suspended sediment	200509403	<580	<900	8,630	5,610	4,960	**4,420**	992
Como inflow	Streambed sediment (grab)	200506806	<65	<140	1,440	987	918	1,140	302
			Fosdic Lake						
FOS resid. asphalt street dust	Street dust (sweeping)	200512303	<10	<40	E487	E432	317	355	129
FOS comm. soil	Soil (grab)	200515210	<550	<1,810	28,100	21,500	18,600	**22,400**	6,580
FOS resid. soil #1	Soil (grab)	200512303	<10	<30	E444	E245	220	180	54
FOS resid. soil #2	Soil (grab)	200515210	<18	<30	737	650	617	751	210
FOS (0–5)	Lake-bottom sediment (core)	200509403	<200	<170	E1,230	E937	769	847	361
FOS (5–10)	Lake-bottom sediment (core)	200509403	<55	<180	E1,440	E1,160	902	1,000	533
FOS (10–15)	Lake-bottom sediment (core)	200509403	<60	<200	E1,360	E1,240	964	1,010	786
FOS (15–20)	Lake-bottom sediment (core)	200509403	<60	<190	E1,970	E1,460	1,210	1,290	1,020
FOS (20–25)	Lake-bottom sediment (core)	200515210	<40	<110	1,720	1,260	1,490	**1,530**	1,040
FOS (25–30)	Lake-bottom sediment (core)	200515210	<50	<90	1,720	1,410	1,520	**1,550**	1,330
Fosdic inflow	Suspended sediment	200509403	<340	<790	4,800	3,400	3,260	**3,070**	804
Fosdic inflow	Streambed sediment (grab)	200509403	<35	<120	1,040	764	731	891	254
Sediment-quality guidelines									
Threshold effect concentration	--	--	na	na	na	na	na	150	na
Probable effect concentration	--	--	na	na	na	na	na	**1,450**	na

Table 2. Polycyclic aromatic hydrocarbon (PAH) concentrations in street dust, parking lot dust, soil, lake-bottom sediment, and suspended and streambed sediment samples collected in Lake Como and Fosdic Lake watersheds, October 2004—Continued.

Micrograms per Kilogram

Sample ID (core interval, in centimeters)	Sample type	Laboratory set number	C1-252 Isomers, C1-methylated benzopyrene/ perylenes	C3-228 Isomers, C3-benzo(*a*)-anthracene/ chrysenes	C2-252 Isomers, C2-alkylated benzopyrene/ perylenes	C4-228 Isomers, C4-benzo(*a*)-anthracene/ chrysenes	Benzo-(*g,h,i*)-perylene	Indeno-(1,2,3-*c,d*)-pyrene	Dibenzo-(*a,h*)-anthra-cene
			Lake Como						
CMO resid. asphalt street dust	Street dust (sweeping)	200512303	<70	<30	<75	<30	E47	<10	<10
CMO comm. sealed pkng. lot dust	Parking lot dust (sweeping)	200512303	E45,500	<7,190	<20,700	<12,300	81,600	84,100	21,300
CMO comm. unsealed pkng. lot dust	Parking lot dust (sweeping)	200512303	E1,510	<150	<580	<420	2,650	3,670	678
CMO comm. soil	Soil (grab)	200512303	E658	<90	<350	<190	1,020	1,600	287
CMO resid. soil #1	Soil (grab)	200512303	E95	<50	<90	<30	E52	E55	<10
CMO resid. soil #2	Soil (grab)	200512303	E545	<70	<270	<180	870	1,250	269
CMO (0–5)	Lake-bottom sediment (core)	200509403	<460	<109	<280	<123	922	923	<260
CMO (10–15)	Lake-bottom sediment (core)	200509403	<570	<130	<410	<170	1,010	1,080	<296
CMO (25–30)	Lake-bottom sediment (core)	200509403	<780	<140	<490	<230	1,300	1,440	<408
Como inflow	Suspended sediment	200509403	<3,350	<710	<2390	<960	5,350	5,590	1140
Como inflow	Streambed sediment (grab)	200506806	<600	<90	<350	<60	1,030	929	251
			Fosdic Lake						
FOS resid. asphalt street dust	Street dust (sweeping)	200512303	<190	<45	<120	<60	259	362	135
FOS comm. soil	Soil (grab)	200515210	E7,310	<1,020	<3,200	<510	17,200	19,900	4,900
FOS resid. soil #1	Soil (grab)	200512303	<100	<30	<80	<30	E109	E170	E39
FOS resid. soil #2	Soil (grab)	200515210	E266	<30	<150	<15	500	634	282
FOS (0–5)	Lake-bottom sediment (core)	200509403	<500	<100	<300	<140	885	951	<275
FOS (5–10)	Lake-bottom sediment (core)	200509403	<600	<100	<360	<160	1,040	1,120	<345
FOS (10–15)	Lake-bottom sediment (core)	200509403	<670	<130	<410	<180	1,120	1,180	<314
FOS (15–20)	Lake-bottom sediment (core)	200509403	<750	<150	<450	<190	1,320	1,450	<330
FOS (20–25)	Lake-bottom sediment (core)	200515210	E651	<65	<230	<60	1,360	1,420	327
FOS (25–30)	Lake-bottom sediment (core)	200515210	E773	<65	<240	<60	1,420	1,510	376
Fosdic inflow	Suspended sediment	200509403	<2,060	<640	<1,810	<670	3,470	3,580	744
Fosdic inflow	Streambed sediment (grab)	200509403	E428	<75	<300	<120	672	795	245
Sediment-quality guidelines									
Threshold effect concentration	--	--	na	na	na	na	na	na	33
Probable effect concentration	--	--	na	na	na	na	na	na	na

Table 2. Polycyclic aromatic hydrocarbon (PAH) concentrations in street dust, parking lot dust, soil, lake-bottom sediment, and suspended and streambed sediment samples collected in Lake Como and Fosdic Lake watersheds, October 2004—Continued.

Micrograms per Kilogram

Sample ID (core interval, in centimeters)	Sample type	Laboratory set number	C3-252 Isomers, C3-alkylated benzo-pyrene/ perylenes	C4-252 Isomers, C4-alkylated benzo-pyrene/ perylenes	C5-228 Isomers, C5-benzo(*a*)-anthra-cene/ chrysenes	C5-252 Isomers, C5-alkylated benzo-pyrene/ perylenes	Calculated values			
							Total PAH	Fluoran-thene/ pyrene	Benzo-(*a*)-pyrene: benzo-(*e*)-pyrene	Indeno-(1,2,3-*cd*)-pyrene/ benzo-(*g,h,i*)-perlyene
				Lake Como						
CMO resid. asphalt street dust	Street dust (sweeping)	200512303	<25	<25	<25	<30	650	1.3	.9	0
CMO comm. sealed pkng. lot dust	Parking lot dust (sweeping)	200512303	<3,490	<2,550	<2,360	<28,000	**980,000**	1.3	1.3	1.0
CMO comm. unsealed pkng. lot dust	Parking lot dust (sweeping)	200512303	<60	<65	<100	<640	**32,000**	1.4	1.2	1.4
CMO comm. soil	Soil (grab)	200512303	<60	<45	<55	<250	11,000	1.3	1.2	1.6
CMO resid. soil #1	Soil (grab)	200512303	<35	<20	<30	<25	490	1.1	.8	1.1
CMO resid. soil #2	Soil (grab)	200512303	<45	<35	<40	<230	7,600	1.3	1.1	1.4
CMO (0–5)	Lake-bottom sediment (core)	200509403	<128	<166	<187	<447	5,700	1.3	.9	1.0
CMO (10–15)	Lake-bottom sediment (core)	200509403	<120	<140	<130	<440	7,100	1.3	1.0	1.1
CMO (25–30)	Lake-bottom sediment (core)	200509403	<160	<160	<120	<510	10,000	1.3	1.0	1.1
Como inflow	Suspended sediment	200509403	<910	<900	<700	<3,520	**43,000**	1.4	.9	1.0
Como inflow	Streambed sediment (grab)	200506806	<90	<85	<90	<425	11,000	1.4	1.2	.9
				Fosdic Lake						
FOS resid. asphalt street dust	Street dust (sweeping)	200512303	<25	<30	<20	<60	3,900	1.3	1.1	1.4
FOS comm. soil	Soil (grab)	200515210	<420	<530	<280	<160	**170,000**	1.2	1.2	1.2
FOS resid. soil #1	Soil (grab)	200512303	<30	<20	<20	<45	1,900	1.3	.8	1.6
FOS resid. soil #2	Soil (grab)	200515210	<25	<17	<14	<20	6,500	1.3	1.2	1.3
FOS (0–5)	Lake-bottom sediment (core)	200509403	<90	<120	<100	<350	7,000	1.3	1.1	1.1
FOS (5–10)	Lake-bottom sediment (core)	200509403	<110	<130	<60	<380	7,700	1.2	1.1	1.1
FOS (10–15)	Lake-bottom sediment (core)	200509403	<120	<110	<90	<380	7,700	1.2	1.0	1.1
FOS (15–20)	Lake-bottom sediment (core)	200509403	<130	<120	<90	<440	9,900	1.2	1.1	1.1
FOS (20–25)	Lake-bottom sediment (core)	200515210	<40	<40	<60	<210	11,000	1.3	1.0	1.0
FOS (25–30)	Lake-bottom sediment (core)	200515210	<50	<50	<60	<210	11,000	1.3	1.0	1.1
Fosdic inflow	Suspended sediment	200509403	<790	<580	<470	<2,150	**27,000**	1.3	.9	1.0
Fosdic inflow	Streambed sediment (grab)	200509403	<90	<70	<60	<400	7,400	1.3	1.2	1.2
Sediment-quality guidelines										
Threshold effect concentration	--	--	na	na	na	na	1,610	na	na	na
Probable effect concentration	--	--	na	na	na	na	**22,800**	na	na	na

Establishing Generic Remediation Goals for the Polycyclic Aromatic Hydrocarbons: Critical Issues

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Polycyclic aromatic hydrocarbons (PAHs) were one of the first classes of compounds identified as carcinogens and are often chemicals of concern at hazardous waste sites. Remediation goals established by regulatory agencies for carcinogenic PAHs in soil are generally either risk based or based on the method detection limits. PAHs are products of incomplete combustion, are components of petroleum, and as such, are prevalent in the environment from both natural and anthropogenic sources. Background concentrations are often above risk- or detection limit-based criteria, and therefore these remediation goals are of limited practical use as target criteria. In addition, the approaches used to establish target criteria do not account for several factors that may produce over- or underestimates of risk associated with the PAHs. Because of the frequency with which these compounds are detected, it is imperative that reasonably achievable and practical remediation goals be established. This paper examines the various factors that contribute to over- and underestimates of risks associated with PAHs and presents an approach for establishing cleanup criteria that takes into account health risks, background concentrations, and achievability. *Key words:* BaP equivalents, cleanup levels, polycyclic aromatic hydrocarbons, remediation goals, toxicity equivalency factors. *Environ Health Perspect* 102:348-352(1994)

Polycyclic aromatic hydrocarbons (PAHs) from both natural and anthropogenic sources are ubiquitous in the environment (*1,2*). Several of the PAHs are considered to be carcinogenic, and for this reason, PAHs are often chemicals of concern at hazardous waste sites. Examination of remediation goals established by different state regulatory agencies for carcinogenic PAHs in soils indicates that values are fairly consistent and uniformly low, generally below 1 mg/kg (Table 1). These remediation goals are either risk based or, if the state has determined that method detection limits (MDLs) are above the risk-based values, are based on the MDLs. However, as a practical matter, reviews of background PAH concentrations show that in many cases, background concentrations are above state goals (*1,2*). If background soil concentrations are often above established goals and consequently, detailed site-specific evaluation is required on a regular basis, the remediation goals are of limited usefulness.

The health risk-based remediation goals for PAHs have been established using standard procedures and maximum exposure assumptions and are designed to represent an upper bound on likely risks. However, several unresolved issues greatly increase uncertainty in a risk assessment involving PAHs (and in risk-based goals) and, more importantly, make it difficult to determine whether risk is being over- or underestimated. Issues related to regulatory toxicology that affect uncertainty in risk estimates include the lack of a dose–response estimate for site-of-contact tumors caused by dermal exposure, questions regarding the accuracy of the available cancer slope factor for oral exposure, and the lack of an adequate approach for addressing the potency of mixtures of PAHs. Factors that affect uncertainty in exposure estimates include questions regarding the effect of the environmental matrix on the availability of the chemicals to a biological receptor and the lack of information on levels of those PAHs that are not detected using standard analytical procedures. A consideration of these issues is critical to defining the risk posed by PAHs at hazardous waste sites. These unresolved issues and their potential influence on risk assessment results are described here. In addition, cleanup goals for PAHs based on a consideration of both health risks and practicality are proposed.

Table 1. Soil remediation goals proposed by various state regulatory agencies for carcinogenic PAHs (mg/kg)[a]

	State				
Compound	New Jersey[b]	Michigan[c]	Oregon[d]	Illinois[e]	Washington
Benzo[*a*]anthracene	0.66	0.33	0.1	0.009	—
Benzo[*a*]pyrene	0.66	0.33	0.1	0.009	—
Benzo[*b*]fluoranthene	ND	0.33	0.1	0.009	—
Benzo[*k*]fluoranthene	0.66	0.33	0.1	0.009	—
Chrysene	0.66	0.33	0.1	0.009	—
Dibenzo[*ah*]anthracene	0.66	0.33	0.1	0.009	—
Indeno[123-*cd*]pyrene	0.66	0.33	0.1	0.009	—
Total carcinogenic PAHs[f]	4.6	2.3	0.7	0.004 (0.2)[e]	1

ND, not determined.

[a]All states allow adjustments to account for site-specific factors including elevated background concentrations.

[b]Proposed New Jersey values are based on direct contact exposure to surface soils; proposed standards for subsurface soils (below 2 feet) are higher (100–500 mg/kg) (*3*).

[c]Michigan values are based on method detection limits for these compounds in soils; risk-based values established based on direct contact exposure were 0.2 mg/kg and were below method detection limits (*4*).

[d]Oregon values are for residential exposure via direct contact (*5*).

[e]The Illinois Underground Storage Tank Program established a health-based standard of 0.004 mg/kg for carcinogenic PAHs; however, this level is below the allowable detection limit for these compounds of 0.2 mg/kg (*6*). (Most states consider detection limits of around 0.1 mg/kg as reasonable for individual PAHs in soils.)

[f]These values are the sum of individual criteria for the seven carcinogenic PAHs, except for New Jersey (a value of 0.66 mg/kg was used for benzo[*b*]fluoranthene) and Washington (only a total carcinogenic PAH value was available) (*7*).

Background PAH Levels

Many authors have measured levels of PAHs in the environment (*1,2*). In general, the lowest levels are seen in rural areas away from major highways. The International Agency for Research on Cancer (IARC) reported concentrations of 0.01–10 mg/kg for total PAHs (*2*) and Menzie et al. (*1*) listed concentrations in forest and rural soils of 0.01–1.3 mg/kg for carcinogenic PAHs (n = 24). It should be noted that Menzie et al. (*1*) includes benzo[*ghi*]perylene among the carcinogenic PAHs, although this compound is not commonly considered to be carcinogenic (*8*). IARC (*2*) notes that somewhat higher levels of total PAHs are present in urban soils (1–100 mg/kg) and that indus-

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trial areas have even higher levels (1 to >100 mg/kg). Likewise, Menzie et al. (*1*) report levels of carcinogenic PAHs (plus benzo[*ghi*]perylene) in urban soils ranging from 0.06 to 5.8 mg/kg, with a median value of 1.1 mg/kg (n = 15). These authors also note that road dust contained very high levels of PAHs, with a median of 137 mg/kg and a range of 8–336 mg/kg (n = 7).

Issues Influencing Risk Assessments for PAHs

The original cancer slope factor of 11.5 $(mg/kg/day)^{-1}$, developed for oral exposure to benzo[*a*]pyrene (BaP) and used as the basis for most PAH risk assessments, was derived from a study by Neal and Rigdon (*9*). Because this study lasted only 140 days out of an expected 2 years (730 days), an adjustment factor of $(730/140)^3$ = 140 was incorporated into the cancer slope factor, following EPA policy for less-than-lifetime studies (*10*). The power function (K value) of 3 is based on a paper that shows that the overall tumor incidence in the human population increases with age by a power of at least 3 (*11*). Other researchers do not necessarily agree with the EPA adjustment factor of K = 3. For example, Crump et al. (*12*) assumes K = 4 for tumors in general. Humans do not have a forestomach, the tumor site in the Neal and Rigdon study (*9*). The human tissues most similar to the forestomach are the esophagus and the stomach, and Doll (*11*) noted K values of around 6 for both stomach and esophageal cancer. Consequently, an adjustment factor as high as $(730/140)^6$ = 20,000 might be more appropriate for the Neal and Rigdon data. If this K value of 6 is appropriate, the corresponding cancer slope factor would be 800 $(mg/kg/day)^{-1}$, approximately 100 times greater than the current value. Even a K value of 4 based on Crump et al. (*12*) would mean that the current cancer slope factor for BaP is too low by a factor of 5.

EPA has revised the cancer slope factor for oral exposure to BaP to a value of 7.3 $(mg/kg/day)^{-1}$ (*13*). This value is the geometric mean of values from three analyses of the Neal and Rigdon data and one analysis of a study by Brune et al. (*14*). All cancer slope factors from these four analyses were within a range of 4.5–9.0 $(mg/kg/day)^{-1}$. The Brune et al. (*14*) study lasted 2 years, and consequently, no adjustment for length of lifetime was necessary. However, this study by itself is probably insufficient to prove that a K value of 3 is appropriate for the Neal and Rigdon (*9*) study or that a cancer slope factor of around 7 $(mg/kg/day)^{-1}$, and not 35 or 800 $(mg/kg/day)^{-1}$ (the cancer slope factor associated with a K value of 4 or 6, respectively), is appropriate for BaP.

EPA has established an approach for calculating preliminary remediation goals (PRGs) for residential exposure via soil ingestion (*15*). Using standard EPA assumptions (*15*), a target risk level of 10^{-6}, a cancer slope factor of 7.3 $(mg/kg/day)^{-1}$, and EPA's equation for calculating PRGs for residential soil, a PRG for BaP of 0.1 mg/kg is determined. However, if a higher slope factor such as 800 $(mg/kg/day)^{-1}$ is appropriate, a PRG as low as 0.001 mg/kg can be calculated.

BaP and other carcinogenic PAHs produce skin tumors at the site of contact in mice at very low doses, and evidence suggests that materials containing these compounds are also skin carcinogens for humans (*16*). The primary route of exposure to PAHs at many hazardous waste sites is likely to be direct dermal contact. There is currently no estimate of the dose–response relationship between dermal exposure and site-of-contact cancer, and this route of exposure is therefore not considered in setting remediation goals such as those listed in Table 1.

Sullivan et al. (*17*) estimated a dermal site-of-contact cancer slope factor for BaP of 6.6×10^3 $(mg/cm^2/day)^{-1}$ based on data from a mouse skin-painting bioassay. This value is somewhat questionable because the doses used in the skin-painting study produced over 90% tumor response, and results presented in Clement (*18*) indicate that at these response levels, a very poor curve fit is achieved (*19*). Based on discussions with the author of the skin-painting study, Sullivan et al. (*17*) assumed that the exposed area of the mouse back was 30 cm^2 and that three weekly skin-painting applications led to exposure for 3/7 of a week, or, in other words, that the BaP stays on the skin for 24 hr after application. Using these assumptions, a linearized multistage model (GLOBAL82), and data collected by Schmahl et al. (*20*) (Table 2), a dermal site-of-contact cancer slope factor of 2.3×10^4 $(mg/cm^2/day)^{-1}$ is calculated, which is fairly close to the Sullivan et al. (*17*) estimate. However, information on the number of tumors per animal was not available and therefore it is probably more appropriate to express the cancer slope factor in terms of mg of chemical per whole animal exposed dermally. This approach, essentially eliminating the need to assume that 30 cm^2 of skin was exposed, yields a slope factor of 760 $(mg/exposed\ animal/day)^{-1}$. Using the cancer slope factor of 760 $(mg/day)^{-1}$ under the assumption that exposure of equivalent surface areas of mouse and human skin will lead to the same response, and the further assumption that exposed areas will be similar (approximately 20–25% of the skin is exposed in EPA exposure estimates for humans and in skin painting studies on mice), this value can be used as a site-of-contact cancer slope factor for humans.

EPA has not developed an approach for determining allowable soil concentrations for site-of-contact carcinogens. However, EPA (*21*) has developed default assumptions for use in evaluating risks associated with dermal absorption of chemicals. Using these assumptions and the preliminary site-of-contact slope factor of 760 $(mg/day)^{-1}$, a PRG for BaP can be calculated using the formula:

$$PRG = \frac{TR \times AT \times 365\ days/year}{SF \times EF \times ED \times CR \times SA \times AB}$$

where TR is the target excess cancer risk (1 in 1,000,000 or 10^{-6}); AT is the averaging time (70 years); SF is the dermal site-of-contact slope factor [760 $(mg/day)^{-1}$]; EF is the exposure frequency (central estimate: 40 days/year); ED is the exposure duration (upper estimate: 30 years); CR is the contact rate (central estimate: 2×10^{-7} kg/cm^2); SA is the surface area (central estimate: 25% or 5000 cm^2); and AB is the percentage available from soil relative to availability from solvent used in the skin painting study that is the basis for the slope factor (best professional judgment: 1% or 0.01)

Based on this equation, a PRG that is protective for direct dermal exposure to BaP is calculated to be 0.003 mg/kg. This value is well below risk-based regulatory limits established for BaP and other car-

Table 2. Dose levels and results from the Schmahl et al. (*20*) study

Compound administered	Dose groups	Dose levels[a] (µg/treatment)	Cancer incidence, %
Benzo[*a*]pyrene	A1	1.0	13 (10/81)
	A2	1.7	28 (25/88)
	A3	3.0	53 (43/81)
Control group[b]		0	1 (1/100)

[a]BaP was administered to the shaved skin of mice twice a week until the natural death of the animals or until the animals developed a tumor. At the start of the study, each dose group consisted of 100 animals, but autolysis limited the total number of animals examined in each group.
[b]No untreated control group was used in this study. However, based on the results from a group exposed to very low levels of "noncarcinogenic" PAHs, an incidence rate of 1/100 was assumed for an untreated control group in calculations.

cinogenic PAHs, and although preliminary, suggests that further investigation of dermal exposure is warranted. The value is in the same range as the PRG developed based on ingestion exposure and an oral slope factor for BaP of 800 $(mg/kg/day)^{-1}$, and taken together, these values indicate that current criteria may pose risks above the 10^{-6} risk level used as a goal by many regulatory agencies.

Carcinogenic Potency of PAH Mixtures

The PAHs consist of a large family of compounds with a rather large range of toxic potency (*2,16*). PAHs are seldom found separately in the environment; rather, they occur as complex mixtures of numerous compounds. In calculating site risks, EPA and most state agencies historically separated the PAHs into two categories: carcinogens and noncarcinogens, and treated all the carcinogenic PAHs as equipotent with BaP, one of the more potent PAHs. This approach oversimplifies the situation, as some of the "carcinogenic" compounds are clearly more potent than others, and some of the "noncarcinogenic" compounds appear to have some weak carcinogenic activity or to act as cancer promoters or cocarcinogens (*16*).

Several authors have evaluated the available data on the carcinogenic potency of different PAHs and developed toxicity equivalency factors (TEFs) for the individual PAHs (*18,19,22*). These TEFs indicate the carcinogenic potency of each compound relative to BaP, and multiplying the concentration of each PAH by the TEF yields a concentration for the total PAH mixture that is expressed in terms of an equivalent concentration (with regard to toxic potency) of BaP, called BaP equivalents (BaP_{equiv}). Table 3 presents the TEFs developed by the various researchers, and Table 4 indicates the BaP equivalent concentrations determined using the historical EPA approach, the current EPA approach (*22*), and the Nisbet and LaGoy (*19*) approach on some PAH data from a coal-tar-contaminated soil sample (*23*). An evaluation of these data indicates that using appropriate TEFs rather than assuming all carcinogenic PAHs are equipotent with BaP would decrease the conservatism in the risk values by a factor of approximately two to three.

Table 3. Toxicity equivalency factors proposed for individual PAHs

Compound	Clement (*18*)	EPA (*22*)	Nisbet and LaGoy (*19*)
Benzo[*a*]pyrene	1	1	1
Dibenzo[*ah*]anthracene	1.1	1	5
Benzo[*a*]anthracene	0.145	0.1	0.1
Benzo[*b*]fluoranthene	0.140	0.1	0.1
Benzo[*k*]fluoranthene	0.066	0.01	0.1
Indeno[123-*cd*]pyrene	0.232	0.1	0.1
Anthracene	0.32	ND	0.01
Benzo[*ghi*]perylene	0.022	ND	0.01
Chrysene	0.0044	0.001	0.01
Acenaphthene	ND	ND	0.001
Acenaphthylene	ND	ND	0.001
Fluoranthene	ND	ND	0.001
Fluorene	ND	ND	0.001
Methyl naphthalene	ND	ND	0.001
Naphthalene	ND	ND	0.001
Phenanthrene	ND	ND	0.001
Pyrene	0.081	ND	0.001

ND, not determined.

Table 4. A comparison of BaP-equivalent concentrations for a coal-tar-contaminated soil (mg/kg)

	Concentration			
Detected compound	Measured	EPA[a]	EPA[b]	Nisbet/LaGoy[c]
Benzo[*a*]pyrene	39	39	39	39
Dibenzo[*ah*]anthracene	15	15	15	75
Benzo[*a*]anthracene	51	51	5	5
Benzo[*b*]fluoranthene	36	36	4	4
Benzo[*k*]fluoranthene	36	36	0.2	4
Indeno[123-*cd*]pyrene	36	36	4	4
Anthracene	12	0	0	0.1
Benzo[*ghi*]perylene	31	0	0	0.3
Chrysene	46	46	0.05	0.5
Acenaphthene	2	0	0	<0.01
Acenaphthylene	1	0	0	<0.01
Fluoranthene	58	0	0	0.06
Fluorene	13	0	0	0.01
Methyl naphthalene	3	0	0	<0.01
Naphthalene	6	0	0	<0.01
Phenanthrene	19	0	0	0.02
Pyrene	82	0	0	0.08
Subtotal PAHs[d]	486			
Total BaP equivalent		259	67	132

[a]Historical approach that assumes all carcinogenic PAHs are as potent carcinogens as BaP.
[b]EPA (*22*) toxic equivalency factors (TEFs) are based in large part on the TEFs developed by Clement (18).
[c]Based on the TEFs developed by Nisbet and LaGoy (*19*).
[d]In this study (*23*), 74 PAHs were detected with a total concentration of 1115 mg/kg. The 17 compounds included in standard analyses represented 486/1115 or over 40% of the total amount of available PAHs.

Unreported PAHs

The standard EPA analytical methods (methods 625 and 8270) test for the presence of only 17 of the many PAHs likely to occur in environmental samples. The other PAHs may contribute to risk and, by their absence from standard analyses, contribute to the uncertainty in the risk assessment. Over the years, considerable effort has been directed at identifying the carcinogenic components of petroleum products, with much of this effort focused on the PAHs. Consequently, the 17 PAHs that are analyzed in the standard EPA procedures may pose a substantial portion of the risk in most materials. In the one study reviewed in detail (*23*), the 17 regularly analyzed PAHs accounted for 40% of the total concentration, twice their expected contribution given that a total of 74 PAHs were detected. However, the converse is that 60% of the PAHs in this mixture would be routinely overlooked and consequently not considered in risk estimates. Furthermore, as noted by Poirier (*8*), certain methylated PAHs and PAHs containing nitrogen or oxygen may be quite potent carcinogens and if present could pose substantial risks.

Bioavailability

To produce toxic effects, PAHs must be available to the target tissue (i.e., must be bioavailable). The carcinogenic PAHs are commonly found in nature in association with other high molecular weight organic compounds (e.g., asphaltenes), and these other compounds probably decrease the bioavailability of the PAHs. In addition, PAHs with fairly high octanol-water partition coefficients tend to bind tightly to most soils, particularly if they have been in contact with the soils for a considerable length of time (*21*). Consequently, the carcinogenic PAHs may not be readily bioavailable in some situations.

Remediation Goals for Carcinogenic PAHs

Generic, state, or region-wide remediation goals for soils are generally established at the highest of the following: 1) risk assessment-based values, with a cancer risk level of 10^{-6} commonly used as a target risk level, 2) MDLs, or 3) regional background soil levels. A caveat is that if MDLs are well above risk-based values, regulatory agencies may require the use of more sensitive analytical techniques to achieve remediation goals that are close to risk-based levels. The remediation goals listed in Table 1 were developed with either risk-based values or method detection limits as the criteria. Considering that MDLs and the allowable levels based on previous estimates of residential risks via soil ingestion are reasonably close and that both are above concentrations of carcinogenic PAHs in rural background soils, this approach was appropriate. However, evaluation of the issues affecting risk assessment described above and of the more detailed review of background PAH levels by Menzie et al. (*1*) suggests that these cleanup criteria are not reasonable.

A preliminary analysis of site-of-contact risks and reevaluation of the oral slope factor suggests that generic remediation goals (10^{-6} risk) for carcinogenic PAHs may be close to 0.001 mg/kg, well below even rural background PAH levels. In addition, urban soils are probably more representative of background in areas near hazardous waste sites, and, as noted by Menzie et al. (*1*), background levels of carcinogenic PAHs in urban soils ranged from 0.06 to 6 mg/kg, with a median of 1 mg/kg. Considering that risk-based remediation goals are unachievable, urban background concentrations in soils appear to be the most appropriate basis for setting remediation goals at hazardous waste sites.

In establishing remediation goals based on background chemical concentrations, states such as New Jersey and Washington have generally used upper-bound estimates of likely background (*3,7*). Based on the data reviewed by Menzie et al. (*1*), upper-bound estimates of background levels of carcinogenic PAHs are around 1 mg/kg for rural and forest soils and 6 mg/kg for urban soils. Although the value for urban soils is probably most appropriate, considering the fact that risk-based cleanup goals would be several orders of magnitude below this level, it seems most prudent to set levels "as low as reasonably achievable." Consequently, a level of 1 mg/kg as BaP_{equiv} (rural background) should be used as a target remediation goal. However, because there will clearly be cases where background concentrations exceed this level, a second-tier value of 10 mg/kg (6 mg/kg rounded to reflect the likely uncertainty in this value) is also recommended. This second-tier value should be used if, based on a subjective review, exposure appears unlikely to involve frequent or repeated soil contact. For example, levels below 10 mg/kg would be acceptable as remediation goals at an industrial site or at a grass-covered park and might be acceptable in well-vegetated residential areas. Substantially higher levels would also be allowable if supported by a risk assessment and by site-specific considerations.

Establishing cleanup criteria based on both practicality and risk is similar to the approach used for years to establish goals for radionuclides, namely, setting levels as low as reasonably achievable (ALARA). The concept of ALARA was required for radionuclides because it was recognized that even very low and therapeutic doses had some recognizable health risk. PAHs and radionuclides are similar in that both are naturally and anthropogenically produced materials that regularly occur at levels above health risk-based goals.

Discussion and Conclusions

Because large numbers of sites will contain PAHs and definition of cleanup criteria can affect remediation costs by millions of dollars, it is important to establish reasonably achievable remediation goals for PAHs. Current remediation goals do not consider several factors that are likely to substantially impact risk estimates. The lack of a cancer slope factor for dermal exposure, questions about the oral cancer slope factor, and testing for only 17 of the numerous PAHs are all likely to lead to underestimating risks. On the other hand, not accounting for differences in the relative potency of individual PAHs and ignoring bioavailability issues may lead to overestimating risks. Because of these factors, it may not be possible at this time to firmly establish a risk-based remediation goal. However, it also appears that background soil concentrations may be more appropriate as remediation goals in any case. Considering the toxicity of this class of compounds but also considering their widespread presence in the environment, a two-tiered system is proposed based on the concept of ALARA: A tier 1 level of 1 mg/kg of PAHs measured as BaP_{equiv} is recommended as a remediation goal; if PAHs are below this level, no further action is required. A tier 2 level of 10 mg/kg of PAHs measured as BaP_{equiv} is recommended as well; if PAHs are below this level, a subjective evaluation of likely current and potential future land use is required. If it appears unlikely that frequent exposure would occur, no further action is required.

Obviously, higher soil levels may also be acceptable if, based on a risk assessment, exposure is determined to be unlikely. For example, levels well over 100 mg/kg BaP_{equiv} may not pose a health risk if covered with a surface soil layer and digging into the soils would occur infrequently. Higher levels may require restrictions on future land use to ensure safety. Alternative risk assessment procedures designed to measure the bioavailability of PAHs from soils or the effect of contaminated soils on organisms may also be useful in assessing site risks and in establishing site-specific cleanup criteria (*24,25*).

Research to address some of the issues raised in this article (e.g., oral cancer slope factors; the effect of mixtures) is underway in both government and private laboratories. However, much work remains to be done, particularly in the areas of determining an appropriate dermal site-of-contact slope factor, evaluating the effects of unanalyzed compounds, and in assessing the bioavailability of PAHs from environmental media.

References

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