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TRANSMITTAL

To: Eleanor Wehner, PG
VCP-Corrective Action Section
Texas Commission on Environmental Quality
Mail Code 221, Building D
P.O. Box 13087
Austin, Texas 78711-3087

Date: 06/22/2018

Re: Final Response Action Plan (RAP)
City of Galveston Old Municipal Incinerator Site
#3 Lennox, Galveston, Texas 77551
Voluntary Cleanup Program No. 1962
CN600241376; RN102450095

Job No.: AECOM Project No. 60420789

Transmitted By: Regular Mail and
E-mail to Eleanor.Wehner@tceq.texas.gov

We are sending you the following:

Copies	Date	Description
1	June 22, 2018	Final Response Action Plan dated June 22, 2018, Old Municipal Incinerator Site (City of Galveston), Lot E, Galveston, Galveston County, Texas (one electronic copy via email and one hard copy via regular mail).
1	June 22, 2018	Final Response Action Plan dated June 22, 2018, Old Municipal Incinerator Site (City of Galveston), Lot E, Galveston, Galveston County, Texas (one electronic copy via CD-ROM/DVD or flash drive)

Dear Ms. Wehner,

On behalf of the Texas General Land Office (GLO), please find enclosed the Final Response Action Plan (RAP) for the above referenced site. We appreciate your review of the information provided herein. If you have any questions regarding the information provided in the response to comments or need further information, please do not hesitate to call us.

Very truly yours,

Douglas E. Zarker, PG
Project Manager
Doug.zarker@aecom.com

Copies To: Mr. Jason Ybarra, Section Manager, TCEQ Region 12, Houston, TX, 1 hard copy
Ms. Miriam Moran – Coastal Protection Division, GLO, Austin, TX, 1 hard copy
Mr. Ross Blackketter, PE – Director of Capital Projects, City of Galveston, TX, 1 hard copy
Project File

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Response Action Plan

Cover Page

Regulatory ID number (Solid waste registration number, VCP ID number, etc) VCP No. 1962
check one: ___Initial submittal for this on-site property X Subsequent submittal for this on-site property
Report date: June 2018 TCEQ Region No.: 12

TCEQ Program (check one)

- [ ] Corrective Action (Mail Code 127)
- [X] Voluntary Cleanup Program (Mail Code 221)
- [ ] RPR Section (Mail Code 137)
- [ ] Superfund PRP Lead (Mail Code 143)
- [ ] Municipal Solid Waste Permits (Mail Code 124)

On-Site Property Information

On-Site Property Name: Old Municipal Incinerator Site (City of Galveston)
Street no. #3 Pre dir: Street name Lennox Street type: Ave Post dir:
City: Galveston County: Galveston County Code: 084 Zip: 77551
Nearest street intersection or location description: Broadway (I-45) and 59th Street

Latitude: Degrees, Minutes, Seconds OR Decimal Degrees (circle one) North 29°17'30"
Longitude: Degrees, Minutes, Seconds OR Decimal Degrees (circle one) West 94°50'10"

Off-Site Affected Property Information

Off-Site Affected Property Name: Multiple Properties Surrounding Lot E
Physical Address:
Street no. Pre dir: Street name Street type: Post dir:
City: Galveston County: Galveston County Code: 084 Zip: 77551

[ ] Check if no off-site properties affected

Contact Person Information and Acknowledgement

Person (or company) Name: City of Galveston
Contact Person: Brian Maxell Title: City Manager
Mailing Address: 823 Rosenberg
City: Galveston State: TX Zip: 77553 E-mail: citymanager@galvestontx.gov
Phone: 409-797-3520 Fax: N/A

By my signature below, I acknowledge the requirement of §350.2(a) that no person shall submit information to the executive director or to parties who are required to be provided information under this chapter which they know or reasonably should have known to be false or intentionally misleading, or fail to submit available information which is critical to the understanding of the matter at hand or to the basis of critical decisions which reasonably would have been influenced by that information. Violation of this rule may subject a person to the imposition of civil, criminal, or administrative penalties.

Signature of Person Name, print: BRIAN MAXWELL Date: 6/15/18

RAP Executive Summary	ID No.: VCP No. 1962
	Report Date: June 2018

Use this worksheet to summarize the report. Be sure to complete and submit the Checklist for Report Completeness. **Attach a chronology of activities associated with the affected property.**

Briefly describe the affected property and PCLE zones, the conclusions from the assessment activities, identify any affected or threatened receptors, and describe any other major considerations taken into account when developing this response action plan. If any portion of the response action is necessitated due to an aesthetic or nuisance condition, identify the nature of that condition and identify that portion of the response action proposed to address it. If any media that contains a PCLE zone is not addressed in this RAP, provide justification.

Groundwater: Sitewide
Municipal Setting Designation (MSD) No. 333 was issued by TCEQ on January 9, 2017, encompassing the City of Galveston Old Municipal Incinerator Site and the surrounding properties that are the subject of this report. By City ordinance, the restrictive covenant prohibits use of groundwater for potable purposes. In this context, there are no groundwater cPCL exceedances, as documented by the Revised APAR that was approved by TCEQ in a letter dated October 18, 2017. As such, no additional response actions are applicable for site groundwater at this time, and groundwater will not be addressed further in this report.

Soil: Lot E
In a letter dated October 24, 2016, TCEQ conditionally approved the Interim RAP for the Old Municipal Incinerator Site, also known as Lot E. The approved response actions for Lot E include demolition/ removal of the incinerator followed by construction of a concrete cap across the property to address source area COC concentrations above cPCLs. Draft design options for demolition and capping were prepared and evaluated during 2017 and early 2018. The City is currently initiating a contractor qualifications and bid solicitation process based on the final design. Selection of a qualified contractor and the commencement of demolition and capping activities are planned for later in 2018. As such, no additional response actions are applicable for Lot E soil at this time, and Lot E will not be addressed further in this report.

Soil: Multiple Properties Surrounding Lot E
With the previously approved Lot E response actions pending implementation, the subject of this supplemental report, or Final RAP, are the properties surrounding Lot E that have residual surface soil COC concentrations above applicable cPCLs. Some of the subject properties are currently owned by City of Galveston. The City also plans to purchase additional properties in this area. All City-owned impacted properties are to be designated for commercial/industrial use through deed restrictions and, where appropriate, remediated to applicable standards (Remedy Standard B). Only one impacted property is anticipated to potentially remain a residential property in the future. If this is the case, the City plans to seek access and subsequently remediate this property to the applicable residential standards (Remedy Standard A).

What is the selected remedy standard for this affected property? ____ A _X_ B

List all media that contains a PCLE zone and specify the proposed response action for each media. Indicate the type of removal, decontamination, physical control and/or institutional control action that is proposed.

Media	COCs[1]	Removal	Decontamination	Control			
				Physical Control	Modified Groundwater Response Objective[2]		
					PMZ	WCU	TI
Surface Soil	Select metals and SVOCs	X					

[1] Specify either a specific COC or, if the response action is the same for all COCs in one type, specify the type of COC (for example, VOCs, SVOCs, metals).
[2] If a modified groundwater response objective is proposed, check the type(s) of proposed modifications.

RAP Executive Summary	ID No.: VCP No. 1962
	Report Date: June 2018

Is there a media that contains a PCLE zone that is not addressed in this RAP? ____ yes _X_ no
If yes, provide justification for not addressing the PCLE zone in this RAP.

NA

On-site land use: [ ] Residential [X] Commercial/Industrial
Off-site land use: [X] Residential [X] Commercial/Industrial (check all that apply)

Is this a re-submittal or revision of a previous RAP? ___ Yes _X_ No
If yes, explain why the RAP is being revised or resubmitted.

TCEQ conditionally approved the Interim RAP for the Old Municipal Incinerator Site, also known as Lot E. With the previously approved Lot E response actions pending implementation, the subject of this supplemental report, or Final RAP, are the properties surrounding Lot E that have residual surface soil COC concentrations above applicable cPCLs.

Were all the appropriate notifications made in accordance with §350.55? _X_ Yes ___ No
If no, explain why notifications were not made:

Appropriate notifications have been or are being made as part of the property acquisitions process.

Checklist for Report Completeness	ID No.: VCP No. 1962
	Report Date: June 2018

Use this checklist to determine the portions of the form that must be submitted for this report. Answer all questions by checking Yes or No. If the answer is Yes include that portion of the report. If the answer is No, do not complete or submit that portion of the report. All form contents that are marked "Required" must be submitted. Form contents marked with an asterisk (*) are not included in the blank form and are to be provided by the person.

				Report Contents
		Required	**Cover Page**	☒
		Required	**Executive Summary**	☒
		Required	**Checklist for Report Completeness**	☒
		Required	**Worksheet 1.0** Response Action Objectives	☒
No ☐	Have new data been collected that was not previously submitted?	☒ Yes	**Attachment 1A*** Maps and Cross Sections	☒
			Attachment 1B* Graphs of Concentration versus Time	☐
		Required	**Worksheet 2.0** Response Action Design	☒
		Required	**Attachment 2A*** Response Action Diagrams and Component/Equipment Descriptions	☒
		Required	**Attachment 2B*** Proposed Well Design	☐
No ☒	Is an ecological services analysis or compensatory restoration plan part of the proposed response action?	☐ Yes	**Attachment 2C*** ESA and Compensatory Restoration Plan	☐
No ☒	Is a plume management zone proposed as part of the response action?	☐ Yes	**Worksheet 2.1** Plume Management Zone	☐
			Attachment 2D* Plume Management Zone Map	☐
			Attachment 2E* Attenuation Action Levels Determination	☐
No ☒	Is a waste control unit proposed as part of the response action?	☐ Yes	**Worksheet 2.2** Waste Control Unit	☐
			Attachment 2F* Map of Waste Control Unit	☐
No ☒	Is a technical impracticability area proposed as part of the response action?	☐ Yes	**Worksheet 2.3** Technical Impracticability	☐
			Attachment 2G* Map of Technical Impracticability Area	☐

Checklist for Report Completeness	ID No.: VCP No. 1962
	Report Date: June 2018

				Report Contents
No ☐	Is the response action a remedy standard B?	☒ Yes	**Worksheet 2.4** Institutional Controls	☒
		Required	**Worksheet 3.0** Performance Measures and Potential Problems	☒
		Required	**Worksheet 3.1** Monitoring and Sampling	☐
		Required	**Attachment 3A*** Map of Monitoring and Sampling Points	☐
		Required	**Worksheet 3.2** Operation and Maintenance	☐
		Required	**Worksheet 4.0** Confirmation Sampling Plan	☒
		Required	**Attachment 4A*** Map of Confirmation Sampling Points	☒ ***see Att 2A***
No ☐	Is the response action a Remedy Standard B?	☒ Yes	**Worksheet 5.0** Post Response Action Care	☒
			Attachment 5A* Map of PRAC Monitoring and Sampling Points	☐
			Attachment 5B* PRAC Costs	☐
No ☒	Does the person, who is a small business, desire to modify the financial assurance requirement?	☐ Yes	**Attachment 5C*** Small Business Affidavit	☐
		Required	**Worksheet 6.0** Implementation Schedule	☒
		Required	**Appendix 1*** References	☒
No ☐	Was any data collected that was not previously reported?	☒ Yes	**Appendix 2*** Data Tables and Boring Logs	☒
No ☒	Were any studies or tests conducted?	☐ Yes	**Appendix 3*** Studies and Tests Documentation	☐
No ☐	Is the response action a Remedy Standard B?	☒ Yes	**Appendix 4*** Proposed Institutional Controls	☒
No ☒	Are any institutional controls proposed/required on property not owned by the person?	☐ Yes	**Appendix 5*** Landowner Concurrence	☐
No ☒	Are any of the sample collection or handling procedures different from those reporting in the APAR or other previously submitted report?	☐ Yes	**Appendix 6*** Sampling Procedures	☐
No ☒	Are statistics or geostatistics proposed to be used as part of the response action?	☐ Yes	**Appendix 7*** Statistical Methodology	☐
No ☒	Was approval received from the TCEQ regarding the use of different rules to address a media?	☐ Yes	**Appendix 8*** Split Media Approval	☐

Form contents marked with an asterisk (*) are not included in the blank form.

Chronology

Old Municipal Incinerator Site, Galveston, Texas

June 2018	Final RAP submitted.
June 2015 – Ongoing	AECOM initiated field activities for an APA at the Site in June 2015. An APAR for the Site was submitted on January 14, 2016. TCEQ provided comments via correspondence dated April 28, 2016 and October 24, 2016. A revised APAR was submitted to address comments and data gaps in August 2017 and was approved on October 18, 2017. An Interim RAP was previously submitted to TCEQ to address Lot E only. The Interim RAP for the on-site property (Lot E) was conditionally approved by the TCEQ in a letter issued October 24, 2016.
September 2015 – January 2017	AECOM prepared a Municipal Setting Designation (MSD) ordinance application for the CoG, which was approved by City Council. The MSD Certificate No. 333 was executed by the TCEQ on January 4, 2017.
March 2014 and September 2014	EFI Global collected supplemental soil samples for analysis of site-specific COCs. The resulting data did not fully delineate the lateral extent of affected surface soil to the Tier 1 RALs ($^{Tot}Soil_{Comb}$ PCLs). The EFI Global report also indicated that previously reported exceedances of pesticides in soil and groundwater samples (Meridian, March 2006) were actually a mistake resulting from misinterpreting the units reported by the lab (micrograms [µg]) as milligrams [mg]). Therefore, pesticides are not site-specific COCs.
September 2006	The Site was accepted into the TCEQ Voluntary Cleanup Program (VCP) on 18 September 2006 and was assigned VCP No. 1962.
March 2006	Meridian prepared and submitted a Phase II Environmental Site Assessment (ESA) APAR for the Site to support the City of Galveston Brownfields Site Assessment Pilot Project for commercial redevelopment of the Site. The Phase II ESA APAR concluded that the shallow groundwater bearing unit at the Site meets the criteria for a Class I groundwater resource, based on indirect evidence. Metals and pesticides were identified as groundwater COCs that were detected above the Tier 1 RALs. Metals, SVOCs, and pesticides were identified as COCs in surface soil, some of which were detected at concentrations above the Tier 1 RALs. Subsurface soil and surface water/sediment exposure pathways were determined to not be complete. The extent of affected groundwater and soil were not defined by the data presented in the Phase II ESA APAR.
April 2003	Meridian prepared and submitted a Phase I ESA to support the CoG Brownfields Site Assessment Pilot Project for commercial redevelopment of its 61st Street properties, including the Site, which is designated Lot E in the report. The Phase I ESA included reviews of historical documents and regulatory databases, and visual inspections. The report concluded there was a high level of uncertainty and environmental concern associated with Lot E and a Phase II ESA was recommended. It also recommended that the Site should be entered into the VCP.
August 2000	Texas Natural Resource Conservation Commission (TNRCC) approved the Site (Petroleum Storage Tank [PST] Facility ID No. 58735/Leaking Petroleum Storage Tank [LPST] Identification [ID] Number [No]. 99366) for closure under the PST Program.

1999	BNC Environmental Services, Inc. (BNC) was retained by CoG to prepare and submit a *Release Determination Report* to the TNRCC, now TCEQ. Soil samples were collected from 17 borings and groundwater grab samples were collected from five of the boreholes. The report recommended site closure, based on the then current site use and generally low levels of hydrocarbon contamination detected in the soil and groundwater samples from the Site (below PST Program Plan A Category II and default construction worker levels).
April 1993	Above-ground storage tank (AST) Nos. 1 through 4 were removed from the Site.
June 1992	Vulcan Environmental Services Corporation was retained by CoG to collect soil samples from the Site. Samples were collected above the water table at a depth of approximately 3 ft bgs from three borings located west of the fire training area. Total Petroleum Hydrocarbon (TPH) and lead were detected above the Texas Water Commission (TWC) minimal acceptable levels.
June 1991 – August 1991	TWC requested that CoG provide an incident report and documentation demonstrating soil contamination from the release was removed. CoG developed and implemented plans to remove the contents of the ASTs and clean up the contaminated soil from the spills. The Galveston Fire Department, which owned the ASTs, registered them with TWC. In July, U.S. Environmental Protection Agency (EPA) inspectors visited the Site and collected samples of the AST contents, stormwater runoff, and soil beneath one of the tanks. The EPA sample results indicated polychlorinated biphenyls that were previously reported in samples collected by EmTech were misidentified and were actually toxaphene.
May 1991	CoG reported a hydrocarbon release from the AST system used to store waste fuels and PCB oils for fire training exercises to the TWC, now TCEQ.
1965 – 1992 (approximately)	The CoG Fire Department used the Site for fire fighter training exercises. Five ASTs were used for on-site storage of combustibles to fuel the fires. These may have included gasoline, alcohol-blended fuel, aviation gasoline, kerosene, diesel and distillate fuel oil, PCB oils, and later propane.
1949 - 1953	The Old Municipal Incinerator (also known as the Old City Landfill and Old City Dump) was used from 1949 through 1953 to burn municipal solid waste and possibly some medical waste. Ash from the incinerator is believed to have been spread on the ground surface at the Site.

WORKSHEET 1.0

Response Action Objectives

Use this worksheet to describe the objectives for the response action in each media.

Response Action Objectives

List the environmental media to which this applies Surface Soil at Multiple Properties Surrounding Lot E
Repeat this section for each medium that has a different response action objective.

State the property-specific response objectives for the PCLE zone in each media in the context of the response objectives set forth in §350.32 or §350.33 as applicable. Explain how the response action is appropriate based on the hydrogeologic characteristics, COC characteristics, and potential unprotective conditions that could continue or result during the remedial period.

As noted in the RAP Executive Summary, with the previously approved Lot E response actions pending implementation, the subject of this supplemental report, or Final RAP, are the properties surrounding Lot E that have residual surface soil COC concentrations above applicable cPCLs. Some of the subject properties are currently owned by City of Galveston. The City also plans to purchase additional properties in this area. All City-owned impacted properties are to be designated for commercial/industrial use through deed restrictions and, where appropriate, remediated to applicable standards (Remedy Standard B). Only one impacted property is anticipated to potentially remain a residential property in the future. If this is the case, the City plans to seek access and subsequently remediate this property to the applicable residential standards (Remedy Standard A).

Explain how the COCs will be handled, treated, disposed, or transferred to another media and document that the response action will not result in any additional potential exposure conditions due to response action activities.

Primary surface soil COCs throughout the area of interest are lead, arsenic, and benzo(a)pyrene. Mercury and a few additional SVOCs are also considered site COCs, although their occurrence is generally limited to 2-3 isolated locations.

For soil impacted above applicable cPCLs, excavation and removal is planned. Soil waste will be handled and disposed off site at an authorized facility following industry standard best practices and applicable regulations. Likewise, applicable safety standards will guide site activities, including use of proper personal protective equipment (PPE) to prevent worker potential exposure to the COCs.

Refer to Attachment 1A Affected Property and COC Concentration Map.

State the proposed “reasonable time frame” and provide the justification for that time frame in the context of any potential for unprotective exposures to exist or develop, COC characteristics, hydrogeologic and affected property characteristics. If the reasonable time frame is different for the different affected media or for particular tracts of land, be sure to discuss that. Provide how the proposed response action will meet the objectives in a reasonable timeframe.

Initiation and completion of the proposed response actions are anticipated within 1 year of the approval or conditional approval of this RAP. However, because property acquisitions are planned for portions of the affected property prior to the implementation of response actions, the currently proposed schedule is considered tentative.

Soil Response Action Objectives

When using removal and/or decontamination with controls or controls only, demonstrate how that physical control or combination of measures will reliably contain COCs within and/or derived from the surface soil and subsurface soil PCLE zone materials over time.

Focused excavation is currently proposed for removal of residual soil impacts. As noted above, some of the subject properties are currently owned by City of Galveston. The City also plans to purchase additional properties in this area. All City-owned impacted properties are to be designated for commercial/industrial use through deed restrictions and, where appropriate, remediated to applicable standards. Only one impacted property is anticipated to potentially remain a residential property in the future. If this is the case, the City plans to seek access and subsequently remediate this property to the applicable residential standards.

Explain how the removal or decontamination action will reduce the concentration of COCs to the critical surface soil and subsurface soil PCL throughout the soil PCLE zone and prevent COC concentrations above the critical soil PCLs from migrating beyond the existing boundary of the soil PCLE zone.

Soil removal to the applicable standards will help protect human health and the environment, and will reduce the migration potential of COCs.

Groundwater Response Action Objectives

Name of groundwater-bearing unit to which this information applies NA (as explained above)
Repeat this section for each groundwater-bearing unit for which a different response action is proposed.
Groundwater classification ____ 1 ___ 2 ___ 3

Is a modified groundwater response action being proposed for any part of the groundwater PCLE zone (§350.33(f)(2), (3), or (4))? ___ Yes ___ No

If yes, does the affected property meet the qualifying criteria for a modified groundwater response action using a waste control unit, plume management zone, or technical impracticability? ___Yes ___No
If yes, complete the appropriate portions of this report.
If no to either question, complete the following:

Explain how the removal or decontamination action will reduce the concentration of COCs to the critical groundwater PCL throughout the groundwater PCLE zone and prevent COC concentrations above the critical groundwater PCL from migrating beyond the existing boundary of the groundwater PCLE zone.

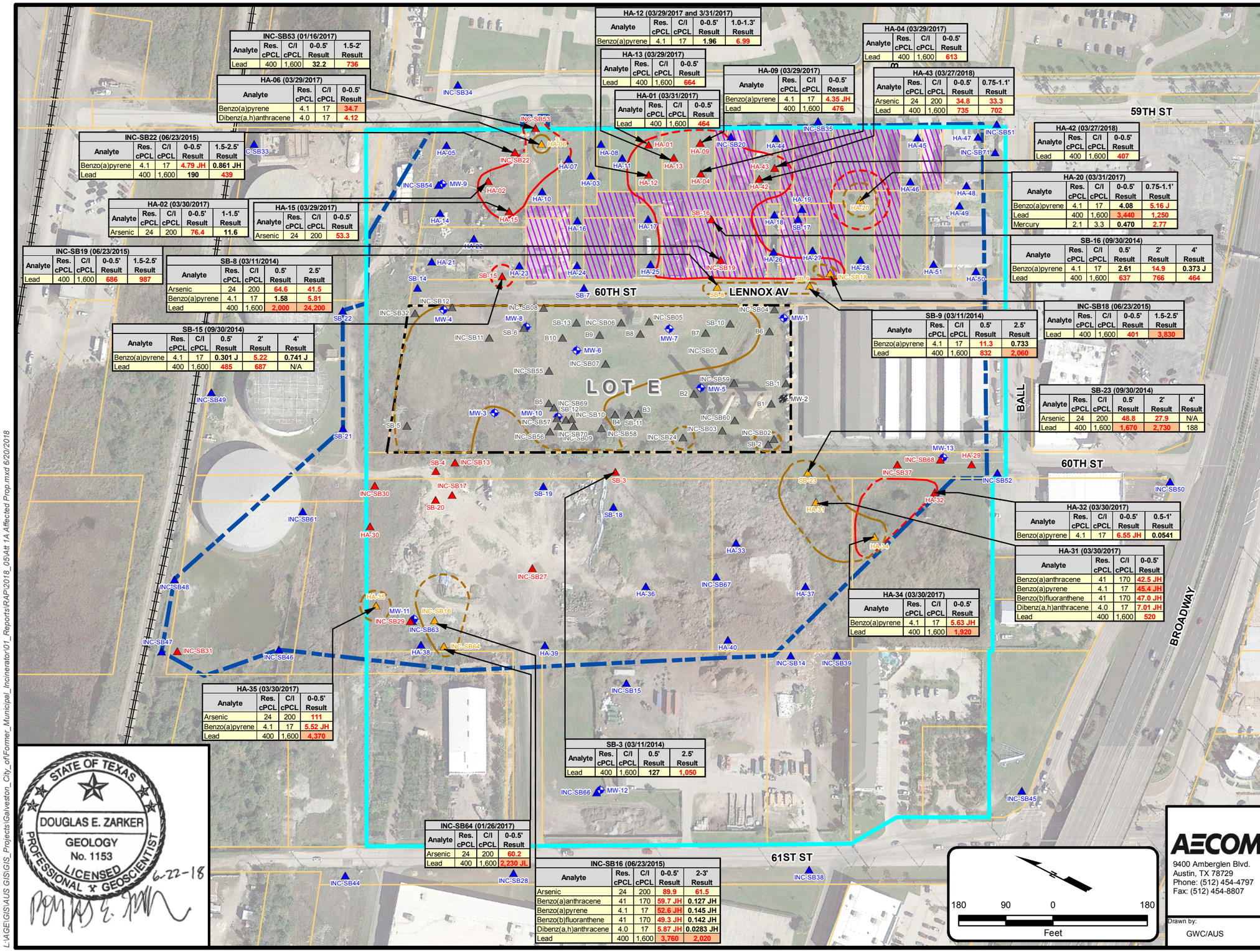
Explain how the response action will prevent COCs from migrating to air at concentrations above the PCLs for air if the groundwater-to-air PCLs (${}^{Air}GW_{Inh\text{-}V}$) is exceeded.

Explain how the response action will prevent COCs from migrating to surface water at concentrations above the PCLs for groundwater discharges to surface water if surface water is a factor.

Explain how the response action will prevent human and ecological receptor exposure to the groundwater PCLE zone.

ATTACHMENT 1A

Maps and Cross Sections



Legend

- On-Site Property Boundary
- Municipal Setting Designation (MSD) Boundary (No. 333)
- Overall Affected Property Boundary/ PCLE Zone (Tier I RAL)
- Real Estate Parcel
- No Right of Entry in 2017 and 2018
- Railroad Track
- Residential $^{Tot}Soil_{Comb}$ PCLE Zone for Metals and PAHs (Dashed Where Inferred)
- Commercial/Industrial $^{Tot}Soil_{Comb}$ PCLE Zone for Metals, PAHs, and TPH (Dashed Where Inferred)
- Monitoring Well Location
- Monitoring Well Location (Decommissioned)
- Soil Sample Location (Lot E)
- Soil Sample Location (No Exceedances of Res or C/I cPCL)
- Soil Sample Location (One or More COCs Exceed Res cPCL)
- Soil Sample Location (One or More COCs Exceed C/I cPCL)
- 4.12 Analyte Exceeds the Residential cPCL
- 34.7 Analyte Exceeds both the Residential and Commercial/Industrial cPCL
- Res Residential
- C/I Commercial/Industrial
- cPCL Critical Protective Concentration Level
- H Bias in sample result is likely to be high.
- J Estimated: The analyte was detected and positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
- L Bias in sample result is likely to be low.
- N/A Not Analyzed at this Depth
- ND Not detected: The analyte was analyzed for but was not detected above the level of the associated value. The associated value is the sample detection limit (SDL).

Notes:
1. *All depths are shown in feet below ground surface (ft bgs).*
2. *All concentrations are shown in milligrams per kilogram (mg/kg).*
3. *Lot E Area to be Capped per the Conditionally Approved RAP (2016)*

STATE OF TEXAS
DOUGLAS E. ZARKER
GEOLOGY
No. 1153
LICENSED
PROFESSIONAL GEOSCIENTIST
6-22-18

AECOM
9400 Amberglen Blvd.
Austin, TX 78729
Phone: (512) 454-4797
Fax: (512) 454-8807

Client: City of Galveston

Report: RAP

Title: **Affected Property and COC Concentrations Map**

Drawn by:	Date:	GIS File:	Attachment:
GWC/AUS	6/20/2018	Att 1A Affected Prop	1A

L:\AGE\GIS\AUS GIS\GIS_Projects\Galveston_City_of\Former_Municipal_Incinerator\01_Reports\RAP\2018_05\Att 1A Affected Prop.mxd 6/20/2018

WORKSHEET 2.0

Response Action Design

Response Action Design

Use this worksheet to provide detailed descriptions of the response action. Attach design and layout drawings and equipment specifications in Attachment 2A.

Media: Surface Soil

List all media to which this information applies. If the response action is different for another media, complete a separate worksheet.

Provide a detailed description of the response action. Describe the removal action, decontamination, treatment system(s), and/or physical or institutional control actions that are proposed for each media and discuss the reasons for choosing the response action(s). Identify and describe any ecological services analysis and compensatory restoration plan that will be utilized (if so, include the complete ESA and compensatory restoration plan in Attachment 2C).

The currently proposed response actions involve focused excavation as a means of addressing surface soil impacts at properties surrounding Lot E.

Prior to excavation activities, additional soil samples may be collected to more fully delineate or refine the target area of remediation and to pre-characterize waste for disposal purposes.

Additionally, the Contractor will submit a site-specific Health and Safety Plan (HASP). The HASP will define appropriate personal protective equipment and safe work procedures to be employed on site. It will also specify that all work is to be performed in accordance with applicable Federal (e.g., U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration [OSHA], etc.), State of Texas, and local government regulations.

A Storm Water Pollution Protection Plan (SWPPP) will be prepared and implemented, as necessary. Appropriate notices and signage will be provided.

During soil excavation, disposal, and backfilling, the Contractor will perform the following activities:

- Mobilize all equipment and temporary facilities to the site;
- Construct, inspect, and maintain erosion and sedimentation controls, as applicable;
- Construct/maintain a haul road and construction entrance;
- Excavate and load out or stockpile soil for off-site disposal;
- Provide dust suppression measures, as needed, to prevent the generation of fugitive dust during earthmoving activities;
- Load, manifest, transport, and dispose soil off site as nonhazardous Class I or Class II municipal solid waste in a TCEQ-approved and licensed waste disposal facility (landfill);
- Obtain and place backfill material in lifts and proof-roll to compact;
- Obtain and place 4 inches of topsoil material over all disturbed areas;
- Re-establish vegetation on site using hydromulch or other appropriate seeding; and
- Demobilize all equipment and temporary facilities from the site.

Details about this process are provided below.

All underground utilities will be identified and marked by the Contractor. The Contractor will establish work zones (exclusion zone, decontamination zone, support zone, etc.) to prevent unauthorized personnel access and to delineate waste management areas. Equipment decontamination areas will also be defined. Other site preparation work will include construction of erosion and sedimentation controls, temporary facilities, site security, stormwater handling equipment, and a decontamination pad, as applicable.

Because the proposed excavation depth is shallow (typically 2 feet deep or less) and excavation areas

will be backfilled and compacted relatively quickly, the need for soil erosion and sediment control practices will be minimal. Nonetheless, where applicable, those practices will be implemented and maintained by the Contractor throughout the duration of the work. At a minimum, stormwater will be diverted away from proposed excavation areas. If applicable, silt fences and rock berms will be installed as shown in the SWPPP. Clearing and grubbing will be kept to a minimum, while still enabling the excavation work to be completed, so as to maintain a degree of erosion and sediment control buffer. Any soil erosion and sediment control measures will be inspected on a weekly basis and after rainfall events as necessary to check for areas that require repair. Sediment that accumulates in erosion and sediment control devices will be removed and placed in the excavated soil area for disposal. Sedimentation control devices will be removed after the excavations have been completed and a permanent vegetative cover has been established.

Enclosed temporary sanitary facilities will be provided by the Contractor and serviced on a regular basis throughout the project.

Stockpiling of soil following excavation may be required to collect samples for waste characterization purposes prior to loading, transportation, and disposal. The Contractor will place liners and install appropriate berms to prevent run-on of stormwater, and cover stockpiles during non-work hours or if rain threatens.

If necessary, a decontamination pad will be constructed by the Contractor within the work area to eliminate removal of contamination outside the area. The pad shall be constructed above grade, bermed, and protected from run-on and runoff. The actual location and size of the decontamination pad will be determined in the field.

The Contractor will construct/maintain a stabilized construction entrance and stabilized haul road as necessary during excavation activities.

Site security will be established upon mobilization. Security will be maintained such that only authorized personnel will be permitted to enter the site. An entry/exit log will be kept to document worker and guest presence on a daily basis.

Existing structures that are to remain on site will be protected from damage by appropriate means. All open excavations will be secured with temporary high-visibility fencing or additional measures, as necessary, to prevent injury.

In general, contaminated soil will be excavated and stockpiled, then loaded into trucks for offsite disposal. As necessary, prior to excavation of soil or ground disturbance, soil will be wetted in place with water to control dust during excavation and loading. If excess dust is observed at any time during the transport phase of the removal process, transport will temporarily cease until additional water is applied for dust control.

The anticipated depth of the excavation is 2-4 feet. Excavation corners will be located using a high-accuracy global positioning system measurement device.

Post-excavation soil samples will be collected from locations within the open excavations. Soil confirmation samples will be collected from the floor and along the sidewalls of the excavation area to determine if cleanup levels have been achieved. If action levels are exceeded in the confirmation samples, additional excavation and confirmation sampling will be conducted to ensure that cleanup levels have been achieved.

Upon approval of the waste profile from the disposal facility, excavated soil will be transferred by the Contractor to an approved off-site disposal facility. The waste material will be loaded into approved trucks, covered with top liners, and hauled to the disposal facility. Placarding of trucks will performed as

required based on the particular classification of the waste material being hauled off from the site.

The Contractor will be responsible for providing a Certificate of Destruction/Disposal as documentation of appropriate handling of the waste.

Backfill, compaction, and grading of the excavation will be performed by the Contractor. Initial activities will require collecting a soil sample (or reviewing sample results) from the selected backfill and topsoil sources. The backfill soil and topsoil sources will be analyzed by appropriate analytical testing to determine that it is free of contamination. Additionally, the backfill soil and top soil will be analyzed for geochemical parameters to ensure that it will be suitable as fill material at the site. Once the materials are approved, the Contractor will initiate backfill operations. Placement of the approved soil within excavations will occur in approximately 8-inch loose lifts. A roller such as a Dynapac CA-152D (or equivalent) or other heavy equipment will be used to compact the soil. Preventive measures as discussed previously will be maintained to prevent excessive dust generation at the property boundary. Backfilled areas will be proof-rolled to maintain the appropriate compaction strength.

Topsoil from an approved source will be utilized to complete the upper 4 inches of material within all excavations. Topsoil will be loosely placed in a single 4-inch layer.

During demobilization, all temporary features, sediment and erosion control devices, and trash generated as a result of on-site activities will be removed upon project completion. Staging areas will be swept clean, as appropriate. Temporary protective features such as gravel pads and haul roads will be removed from the site. Decontamination areas will be dismantled. Portable toilet facilities will be demobilized at job completion.

The fill material in the excavation areas and other disturbed areas will be covered with topsoil and seeded or hydromulched, depending on owner preference. The topsoil and seeding will be watered via water trucks or a temporary sprinkler system, as applicable. Seeded areas will be maintained until the area has a full and uniform stand of grass. Once the vegetation is established, any silt fences will be removed.

Refer to Attachment 2A Response Action Diagram and Confirmation Sampling Points.

Describe all major treatment system components and equipment of the response action. Illustrate the response action design and provide equipment specifications in Attachment 2A.

NA

List permits or registrations needed to construct or implement the response action, including permits or registrations needed to conduct studies or tests. For VCP sites, list the permits that would be required if the site was not in the VCP (required by the VCP).

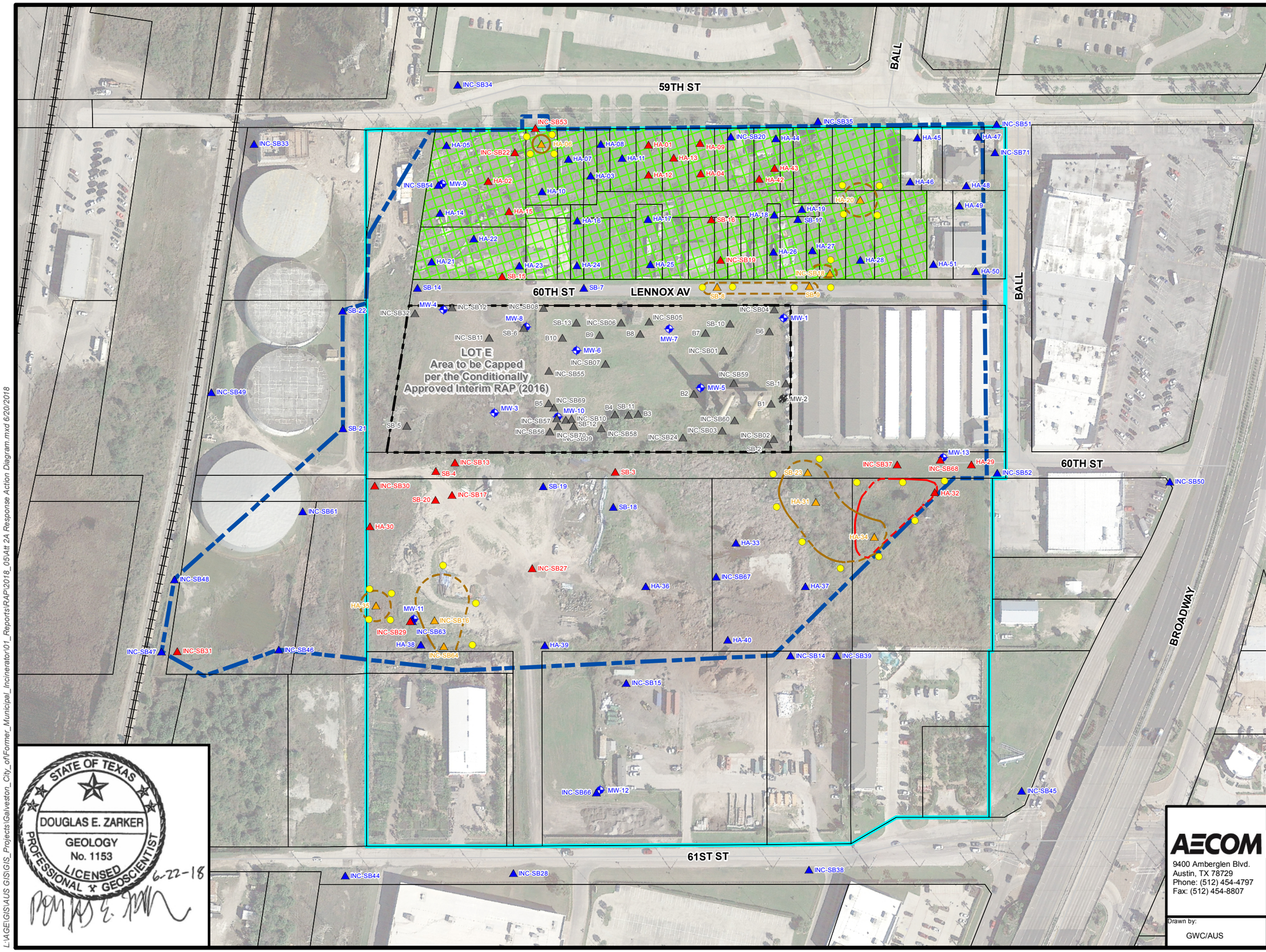
Permitting/Registration Authority	Type of permit/registration	Permit or registration number if already issued	Anticipated application date
NA			

Identify and discuss the results of any studies or tests, such as pilot studies, feasibility studies, technical impracticability studies, treatability studies, and/or toxicity studies conducted or proposed to be conducted at the affected property. Discuss the reason for the study or test and how it verifies the effectiveness and appropriateness of the chosen response action or documents that a particular response action is not appropriate for the affected property. Describe how the results of completed studies or tests determined the design or choice of response action. Attach any separate reports and supporting documentation in Appendix 3.

NA

ATTACHMENT 2A

Response Action Diagrams and Component/Equipment Descriptions



Legend

- On-Site Property Boundary
- Municipal Setting Designation (MSD) Boundary (No. 333)
- Overall Affected Property Boundary/ PCLE Zone (Tier I RAL)
- Real Estate Parcel
- Planned Propery Acquistions (to be Deed Restricted for Commercial/Industrial Use Only)
- Railroad Track
- Area of Excavation; Residential $^{Tot}Soil_{Comb}$ PCLE Zone for Metals and PAHs (Dashed Where Inferred)
- Area of Excavation; Commercial/Industrial $^{Tot}Soil_{Comb}$ PCLE Zone for Metals, PAHs, and TPH (Dashed Where Inferred)
- Monitoring Well Location
- Monitoring Well Location (Decommissioned)
- Soil Sample Location (Lot E)
- Soil Sample Location (No Exceedances of Res or C/I cPCL)
- Soil Sample Location (One or More COCs Exceed Res cPCL)
- Soil Sample Location (One or More COCs Exceed C/I cPCL)
- Conceptual Confirmation Sampling Point

Res Residential
C/I Commercial/Industrial
cPCL Critical Protective Concentration Level

180 90 0 180
Feet

STATE OF TEXAS
DOUGLAS E. ZARKER
GEOLOGY
No. 1153
LICENSED
PROFESSIONAL GEOSCIENTIST
6-22-18

AECOM
9400 Amberglen Blvd.
Austin, TX 78729
Phone: (512) 454-4797
Fax: (512) 454-8807

Client: City of Galveston
Report: RAP
Title: **Response Action Diagram and Confirmation Sampling Points**

Drawn by:	Date:	GIS File:	Attachment:
GWC/AUS	6/20/2018	Att 2A Response Action Diagram	2A

L:\AGE\GIS\AUS GIS\GIS_Projects\Galveston_City_of\Former_Municipal_Incinerator\01_Reports\RAP\2018_05\Att 2A Response Action Diagram.mxd 6/20/2018

WORKSHEET 2.4

Institutional Controls

Institutional Control	RAP Worksheet 2.4 Page 1 of 1	
Associated Information: Appendices 4, 5	ID No.: VCP 1962	Report Date: June 2018

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.
Specify the property for which this applies. Multiple Properties Surrounding Lot E
Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control[1]				Property Ownership		Anticipated Filing Date[2]
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))	X		X		X		Within 90 days of RACR approval
Document use of physical or institutional control under Remedy Standard B §350.31(g))	X		X		X		Within 90 days of RACR approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))							
Document the demonstration of technical impracticability (§350.33(f)(3)(F))							
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

[1] Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.
[2] Specify date or amount of time after RAP approval.

WORKSHEET 3.0

Performance Measures and Potential Problems

Performance Measures and Potential Problems	RAP Worksheet 3.0 Page 1 of 1	
	ID No.: VCP No. 1962	Report Date: June 2018

Performance Measures

List and describe the performance measures for each environmental medium containing a PCLE zone that will be used to determine if reasonable progress is being made by the response action in a timely manner. Use these measures to document effectiveness of the response action in the RAER.

Performance measures for surface soil excavation will involve observation and verification of the following items:

- Proper location of excavation areas;
- Correct confirmation sampling protocol;
- Proper location of secondary excavation, if required;
- Proper waste characterization;
- Proper transport and disposal;
- Clean borrow material source;
- Correct thickness of select fill layer;
- Correct establishment of vegetation layer; and
- Proper erosion control.

Potential Problems

Complete the table for the response action. When the response action consists of several components or multiple actions, complete one table for each major component or action.

Response Action Name/Designation: Surface Soil Excavation/Removal

List the potential problems that might be reasonably anticipated for the response action, describe the impact of each problem, and the response to the problem.

Description of the Potential Problem	Impact	Will this cause a response action failure?		Corrective Response
		Yes	No	
Failure to acquire residential property and place deed restriction for commercial/industrial land use	Moderate		X	Seek access and subsequently remediate the property to the applicable residential standards
Incomplete excavation based on confirmation sample results	Minimal		X	Over-excavate and re-sample
Erosion	Minimal		X	Regrade/fill, revegetate

WORKSHEET 4.0

Confirmation Sampling Plan

Confirmation Sampling Plan	RAP Worksheet 4.0 Page 1 of 1	
Associated Information: Attachment 4A	ID No.: VCP No. 1962	Report Date: June 2018

List the COCs and other parameters that will be sampled to confirm completion of the response action. Illustrate the monitoring or sampling locations in Attachment 4A. If monitoring or observation wells will be constructed for the response action, provide well construction details in Attachment 2B if not previously provided. If needed, describe the sample collection and handling methods, if not previously provided, in Appendix 6.

Media	COC[1]	Other parameter (specify)	Sampling Method	Sampling points[2]	Depth/height (ft.)	Analytical Method	Sampling Frequency
Surface Soil	Select metals and SVOCs		Grab sample	Excavation areas	0-4 ft	6010B/7471A, 8270C or other method, as applicable	See below
Subsurface Soil							
Groundwater							
Surface water							
Sediment							
Air							
Other media (specify)							

Explain the reasons for the above-listed sampling plan. Discuss statistical or geostatistical methodology(ies) which will be applied, if any, in the data collection process. Discuss any assumptions made in the statistical/geostatistical assessment, and how they will be met.

Primary surface soil COCs throughout the area of interest are lead, arsenic, and benzo(a)pyrene. Mercury and a few additional SVOCs are also considered site COCs, although their occurrence is generally limited to 2-3 isolated locations.

Pre-excavation and/or post-excavation soil samples will be collected from the excavation areas to demonstrate that soil cleanup levels have been achieved. If action levels are exceeded in the confirmation samples, additional excavation and confirmation sampling will be conducted to ensure that cleanup levels have been achieved.

In place of Attachment 4A, refer to Attachment 2A Response Action Diagram and Confirmation Sampling Points.

[1] Specify either a specific COC or type of COC (such as VOCs, metals).
[2] Specify the sampling point to the degree it is known, (for example, MW-1, or near former boring #2).

WORKSHEET 5.0

Post Response Action Care

Post-Response Action Care	RAP Worksheet 5.0 Page 1 of 1	
Associated Information: Attachments 5A-5C	ID No.: VCP No. 1962	Report date: June 2018

Complete this worksheet only if Remedy Standard B will be used.

What is the proposed initial post-response action care period? (default 30 yr.) NA years

If the proposed initial post-response action care period is less than 30 years, provide a technical justification in accordance with §350.33(h).

For soil impacted above applicable cPCLs, excavation and removal is planned combined with commercial/industrial deed restriction. Thus, upon completion, the response actions proposed herein will be sufficient to demonstrate response action effectiveness and completion. As such, PRAC is not anticipated to be necessary, pending implementation of the IC and approval of the RACR.

What is the foreseeable land use during the post-response action care period? Commercial/industrial

Describe how the future use of the property will not compromise the integrity of the physical controls, will not interfere with the function of the monitoring systems, will not pose a threat to human health or the environment, and will be in accordance with any institutional controls.

No physical controls or monitoring systems are proposed. Soil removal to the applicable standards will help protect human health and the environment, and will reduce the migration potential of COCs.

Briefly describe the proposed post-response action care activities. Describe the type of monitoring and/or inspections to be performed. Discuss the rationale for not including COC(s) analyzed during the response action, monitoring or sampling point location, frequency of monitoring and/or inspections, and the duration of the monitoring program.

NA

Will PRAC sampling procedures be the same as those as previously documented for monitoring and/ or confirmation sampling? NA _____ Yes ____ No

If no, provide in Appendix 6 a description of the monitoring or sampling collection procedures to be conducted during the post-response action care period.

Cost Estimate

Complete this portion of the form only if a physical control is proposed (installed hydraulic control system, slurry wall, cap, etc.). Provide in Attachment 5B a detailed cost estimate for a third party to operate and maintain the physical control during the PRAC period, based on current dollar amount.

Specify the physical control to which this information applies NA

Complete this worksheet for each physical control that will be used as part of the response action.

What is the total estimated annual cost of O&M for the PRAC period? $

What is the total estimated cost for a third party to perform PRAC activities? $

Identify the type of financial assurance mechanism to be used, and the contact person managing fiduciary responsibility, if known.

NA

Does the person meet the criteria and definition of a small business? (see §350.33(n)) ___ Yes X No

If yes and the person desires to pursue the reduced amount of financial assurance, provide a legally binding affidavit as Attachment 5C. Include in the affidavit the information requested in 30 TAC §350.33(l), (m), and (n). An example affidavit is attached in the instructions.

WORKSHEET 6.0

Implementation Schedule

Implementation Schedule	RAP Worksheet 6.0 Page 1 of 1	
	ID No.: VCP No. 1962	Report Date: June 2018

Document the proposed schedule for implementing the response action. Include all major response action activities through the life of the project, including all removal, decontamination, and control actions, component installations, O&M, monitoring, and post-response action care activities.

Implementation of Response Action (specify component or action)	**Start**	**Finish**	**Duration**
The proposed implementation and reporting schedule is presented on the following page.			

List the proposed schedule for report submittals. Add additional lines if more reports than listed will be needed to complete the response action.

Reports	**Submittal date**
Response Action Effectiveness Report (RAER)	
RAER submittal number 1	
RAER submittal number 2	
RAER submittal number 3	
Response Action Completion Report (RACR)	
Post-Response Action Care Report (PRACR)	
PRACR submittal number 1	
PRACR submittal number 2	
PRACR submittal number 3	

Response Action Plan Implementation Schedule (Worksheet 6.0)
Multiple Properties Surrounding Lot E -- City of Galveston Old Municipal Incinerator Site

DATE		PROPERTY	CONTRACTING/ IMPLEMENTATION	REGULATORY DELIVERABLES
2018	Jun	P1 Complete residential (Res) property acquisitions along Lennox Ave and 59th St. For any target properties that cannot be acquired and subsequently restricted to commercial/industrial (C/I) land use, obtain site access from owners/tenants for remediation to Res standard.		R1 Submit Final RAP to TCEQ for properties beyond Lot E.
	Jul			
	Aug			R2 Receive TCEQ conditional approval of RAP.
	Sep			
	Oct			
	Nov			
	Dec		C1 Planning, bidding, and selection of response action (RA) contractor for remediation.	
2019	Jan			
	Feb			
	Mar			
	Apr			
	May			
	Jun		C2 Complete RA at City's C/I properties, the recently acquired Res properties to be restricted to C/I use, and any remaining Res properties.	
	Jul			R3 Prepare/file institutional controls (C/I restrictions) for all applicable properties.
	Aug			
	Sep			
	Oct			R4 Prepare/submit Response Action Completion Report (RACR) to TCEQ. Submit final proof of filing institutional controls for all applicable properties.
	Nov			
	Dec			
2020	Jan			
	Feb			R5 Receive TCEQ approval of RACR and institutional controls.
	Mar			
	Apr			
	May			
	Jun			R6 TCEQ issues VCP Certificate of Completion.

APPENDIX 1

References

References

AECOM, January 14, 2016. *Affected Property Assessment Report*.

AECOM, July 8, 2016. *Municipal Setting Designation (MSD) Texas Commission on Environmental Quality (TCEQ) Application*.

AECOM, August 22, 2016. *Interim Response Action Plan, Old Municipal Incinerator Site, Lot E.*

AECOM, August 31, 2017. *Revised Affected Property Assessment Report.*

City of Galveston (COG), May 27, 2016. *MSD Ordinance No. 16-039*.

TCEQ, April 28, 2016. Letter from Richard Peltier (TCEQ) to COG, General Comments Letter to January 14, 2016 *Affected Property Assessment Report*.

TCEQ, October 24, 2016. Letter from Eleanor Wehner (TCEQ) to COG, Conditional Approval Letter to August 22, 2016 *Interim Response Action Plan, Old Municipal Incinerator Site, Lot E* and *Email response TCEQ preliminary comments to the August 22, 2016 Interim Response Action Plan*, dated October 18, 2016.

TCEQ, January 9, 2017. Letter from Robert Anderson (TCEQ) to COG, *Municipal Setting Designation (MSD) Certificate for Brian Maxwell, Old Municipal Incinerator Site , #3 Lennox Lane, Galveston, Galveston County, TX: MSD No. 333*.

TCEQ, October 18, 2017. Letter from Eleanor Wehner (TCEQ) to COG, Approval Letter to August 31, 2017 *Revised Affected Property Assessment Report* and *Signature Pages for Revised APAR*, dated September 18, 2017.

APPENDIX 2

Data Tables and Boring Logs

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-42, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	**2.40**		1.00	0.643
HA-42, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**8.84**		1.00	0.643
HA-42, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**7890**		2.00	12.9
HA-42, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.250**	J	0.300	0.129
HA-42, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**3.59**		0.300	0.129
HA-42, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**25.8**		2.00	0.643
HA-42, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**407**		0.300	0.129
HA-42, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**14.0**		2.00	0.643
HA-42, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**0.728**		0.500	0.193
HA-42, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	**0.706**		0.200	0.129
HA-42, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.220**		0.0400	0.0203
HA-42, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0782**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.165**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.285**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.09**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.31**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.35**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**1.06**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.704**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.30**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.213**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**2.21**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0648**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**1.08**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0233**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**1.05**		0.0100	0.00685
HA-42, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.84**		0.0100	0.00685
HA-43, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	**1.13**	J	1.00	0.841
HA-43, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**34.8**		1.00	0.841
HA-43, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**972**		2.00	8.41
HA-43, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.633**		0.300	0.168
HA-43, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**3.51**		0.300	0.168
HA-43, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**44.5**		2.00	0.841
HA-43, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**735**		0.300	0.168
HA-43, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**41.2**		2.00	0.841
HA-43, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**2.99**		0.500	0.252
HA-43, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	**0.456**		0.200	0.168
HA-43, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.779**		0.0400	0.0288
HA-43, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0531**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.259**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.401**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.03**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.37**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.48**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**1.17**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.707**		0.0100	0.00887

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-43, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.32**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.240**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**2.06**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0561**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**1.19**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0566**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.901**		0.0100	0.00887
HA-43, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.73**		0.0100	0.00887
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Antimony	SW-846 6020A	15	310	**2.24**		1.00	0.863
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Arsenic	SW-846 6020A	24	200	**33.3**		1.00	0.863
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Barium	SW-846 6020A	8100	120000	**912**		2.00	8.63
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Beryllium	SW-846 6020A	38	250	**0.721**		0.300	0.173
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Cadmium	SW-846 6020A	51	770	**3.55**		0.300	0.173
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Chromium, total	SW-846 6020A	27000	75000	**44.9**		2.00	0.863
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Lead	SW-846 6020A	400	1600	**702**		0.300	0.173
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Nickel	SW-846 6020A	840	8600	**42.1**		2.00	0.863
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Selenium	SW-846 6020A	310	4900	**1.90**		0.500	0.259
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Silver	SW-846 6020A	97	2300	**0.551**		0.200	0.173
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Mercury	SW-846 7471B	2.1	3.3	**1.11**		0.0400	0.131
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Acenaphthene	SW-846 8270C	3000	37000	**0.0281**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Acenaphthylene	SW-846 8270C	3800	37000	**0.101**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Anthracene	SW-846 8270C	18000	190000	**0.169**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Benzo(a)anthracene	SW-846 8270C	41	170	**0.612**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.767**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.825**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.627**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.417**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Chrysene	SW-846 8270C	4100	17000	**0.780**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.128**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Fluoranthene	SW-846 8270C	2300	25000	**1.28**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Fluorene	SW-846 8270C	2300	25000	**0.0243**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.638**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Naphthalene	SW-846 8270C	120	190	**0.0418**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Phenanthrene	SW-846 8270C	1700	19000	**0.556**		0.0100	0.00908
HA-43, 0.75'-1.08'	3/27/2018	.75-1.1	Pyrene	SW-846 8270C	1700	19000	**1.08**		0.0100	0.00908
HA-44, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	**1.38**		1.00	0.682
HA-44, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**8.24**		1.00	0.682
HA-44, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**299**		2.00	0.682
HA-44, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.303**	J	0.300	0.136
HA-44, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**1.02**		0.300	0.136
HA-44, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**17.3**		2.00	0.682
HA-44, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**294**		0.300	0.136
HA-44, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**17.5**		2.00	0.682
HA-44, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**0.828**		0.500	0.204
HA-44, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	**0.189**	J	0.200	0.136
HA-44, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.146**		0.0400	0.0207

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-44, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0234**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0973**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.135**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.448**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.543**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.556**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.464**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.288**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.512**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0893**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.935**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0225**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.456**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0130**	J	0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.385**		0.0100	0.00659
HA-44, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.757**		0.0100	0.00659
HA-45, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	**0.895**	J	1.00	0.536
HA-45, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**9.99**		1.00	0.536
HA-45, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**154**		2.00	0.536
HA-45, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.364**		0.300	0.107
HA-45, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**1.80**		0.300	0.107
HA-45, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**13.5**		2.00	0.536
HA-45, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**87.7**		0.300	0.107
HA-45, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**11.1**		2.00	0.536
HA-45, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**1.01**		0.500	0.161
HA-45, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	**0.117**	J	0.200	0.107
HA-45, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.117**		0.0400	0.0163
HA-45, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.00739**	J	0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0247**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0296**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.147**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.188**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.187**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.174**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0965**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.179**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0394**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.312**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.00893**	J	0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.158**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00536	U	0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.130**		0.0100	0.00536
HA-45, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.255**		0.0100	0.00536
HA-46, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	<0.480	U	1.00	0.480
HA-46, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**10.3**		1.00	0.480
HA-46, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**35.8**		2.00	0.480

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-46, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.644**		0.300	0.0961
HA-46, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	<0.0961	U	0.300	0.0961
HA-46, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**14.0**		2.00	0.480
HA-46, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**12.4**		0.300	0.0961
HA-46, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**9.63**		2.00	0.480
HA-46, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**2.23**		0.500	0.144
HA-46, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	<0.0961	U	0.200	0.0961
HA-46, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	<0.0171	U	0.0400	0.0171
HA-46, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	<0.00529	U	0.0100	0.00529
HA-46, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	<0.00529	U	0.0100	0.00529
HA-47, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	**0.820**	J	1.00	0.556
HA-47, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**3.45**		1.00	0.556
HA-47, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**159**		2.00	0.556
HA-47, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.224**	J	0.300	0.111
HA-47, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**0.331**	J	0.300	0.111
HA-47, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**11.1**		2.00	0.556
HA-47, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**142**		0.300	0.111
HA-47, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**6.74**		2.00	0.556
HA-47, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**0.826**		0.500	0.167
HA-47, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	**0.177**	J	0.200	0.111
HA-47, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.108**		0.0400	0.0193
HA-47, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0849**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0395**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.280**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.841**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.811**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.662**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.563**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.392**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.742**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.155**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.63**		0.0100	0.00621

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-47, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0761**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.575**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0133**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**1.03**		0.0100	0.00621
HA-47, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.32**		0.0100	0.00621
HA-48, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	<0.547	U	1.00	0.547
HA-48, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**3.37**		1.00	0.547
HA-48, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**74.9**		2.00	0.547
HA-48, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.565**		0.300	0.109
HA-48, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	<0.109	U	0.300	0.109
HA-48, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**14.2**		2.00	0.547
HA-48, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**16.9**		0.300	0.109
HA-48, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**10.1**		2.00	0.547
HA-48, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**1.32**		0.500	0.164
HA-48, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	<0.109	U	0.200	0.109
HA-48, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.202**		0.0400	0.0200
HA-48, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00700	U	0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.00712**	J	0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0159**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.0533**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.0602**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.0532**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.0585**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0295**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.0514**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.00919**	J	0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.106**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00700	U	0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.0474**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00700	U	0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0521**		0.0100	0.00700
HA-48, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.0888**		0.0100	0.00700
HA-49, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	<0.494	U	1.00	0.494
HA-49, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**3.94**		1.00	0.494
HA-49, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**55.1**		2.00	0.494
HA-49, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.408**		0.300	0.0988
HA-49, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**0.102**	J	0.300	0.0988
HA-49, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**10.9**		2.00	0.494
HA-49, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**27.9**		0.300	0.0988
HA-49, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**7.02**		2.00	0.494
HA-49, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**1.08**		0.500	0.148
HA-49, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	<0.0988	U	0.200	0.0988
HA-49, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0277**	J	0.0400	0.0199
HA-49, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00638	U	0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0182**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0206**		0.0100	0.00638

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-49, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.0717**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.0867**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.0907**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.0813**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0461**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.0769**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0138**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.123**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00638	U	0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.0704**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00638	U	0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0469**		0.0100	0.00638
HA-49, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.102**		0.0100	0.00638
HA-50, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	<0.541	U	1.00	0.541
HA-50, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**3.31**		1.00	0.541
HA-50, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**111**		2.00	0.541
HA-50, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.389**		0.300	0.108
HA-50, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**0.150**	J	0.300	0.108
HA-50, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**10.6**		2.00	0.541
HA-50, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**19.3**		0.300	0.108
HA-50, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**7.10**		2.00	0.541
HA-50, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**0.955**		0.500	0.162
HA-50, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	<0.108	U	0.200	0.108
HA-50, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0236**	J	0.0400	0.0193
HA-50, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00583	U	0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	<0.00583	U	0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0113**	J	0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.105**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.144**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.157**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.149**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0758**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.137**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0283**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.262**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00583	U	0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.137**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00583	U	0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0673**		0.0100	0.00583
HA-50, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.223**		0.0100	0.00583
HA-51, 0'-0.5'	3/27/2018	0-.5	Antimony	SW-846 6020A	15	310	<0.464	U	1.00	0.464
HA-51, 0'-0.5'	3/27/2018	0-.5	Arsenic	SW-846 6020A	24	200	**5.73**		1.00	0.464
HA-51, 0'-0.5'	3/27/2018	0-.5	Barium	SW-846 6020A	8100	120000	**193**		2.00	0.464
HA-51, 0'-0.5'	3/27/2018	0-.5	Beryllium	SW-846 6020A	38	250	**0.309**		0.300	0.0928
HA-51, 0'-0.5'	3/27/2018	0-.5	Cadmium	SW-846 6020A	51	770	**0.186**	J	0.300	0.0928
HA-51, 0'-0.5'	3/27/2018	0-.5	Chromium, total	SW-846 6020A	27000	75000	**12.6**		2.00	0.464

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-51, 0'-0.5'	3/27/2018	0-.5	Lead	SW-846 6020A	400	1600	**27.4**		0.300	0.0928
HA-51, 0'-0.5'	3/27/2018	0-.5	Nickel	SW-846 6020A	840	8600	**8.24**		2.00	0.464
HA-51, 0'-0.5'	3/27/2018	0-.5	Selenium	SW-846 6020A	310	4900	**0.888**		0.500	0.139
HA-51, 0'-0.5'	3/27/2018	0-.5	Silver	SW-846 6020A	97	2300	**0.114**	J	0.200	0.0928
HA-51, 0'-0.5'	3/27/2018	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0443**		0.0400	0.0146
HA-51, 0'-0.5'	3/27/2018	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0126**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0372**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0538**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.290**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.389**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.405**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.388**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.209**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.401**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0611**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.782**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0158**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.363**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00507	U	0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.370**		0.0100	0.00507
HA-51, 0'-0.5'	3/27/2018	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.664**		0.0100	0.00507
HA-SB01-010	3/31/2017	0-.5	Antimony	SW-846 6020A	15	310	**4.47**		1.00	0.685
HA-SB01-010	3/31/2017	0-.5	Arsenic	SW-846 6020A	24	200	**8.82**		1.00	0.685
HA-SB01-010	3/31/2017	0-.5	Barium	SW-846 6020A	8100	120000	**428**		2.00	0.685
HA-SB01-010	3/31/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.497**		0.300	0.137
HA-SB01-010	3/31/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.36**		0.300	0.137
HA-SB01-010	3/31/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**25.9**		2.00	0.685
HA-SB01-010	3/31/2017	0-.5	Lead	SW-846 6020A	400	1600	**464**		0.300	0.137
HA-SB01-010	3/31/2017	0-.5	Nickel	SW-846 6020A	840	8600	**17.6**		2.00	0.685
HA-SB01-010	3/31/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.03**	J	0.500	0.205
HA-SB01-010	3/31/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.328**		0.200	0.137
HA-SB01-010	3/31/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.457**		0.0400	0.0206
HA-SB01-010	3/31/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0902**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.379**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.592**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.50**	JL	0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.70**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.84**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**1.32**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.913**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.79**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.271**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**3.19**	JL	0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0998**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**1.34**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0215**		0.0100	0.00678

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB01-010	3/31/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**1.37**		0.0100	0.00678
HA-SB01-010	3/31/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**2.71**	JL	0.0100	0.00678
HA-SB02-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**9.19**		1.00	0.657
HA-SB02-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**76.4**		1.00	0.657
HA-SB02-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**1700**		2.00	6.57
HA-SB02-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**2.41**		0.300	0.131
HA-SB02-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**2.95**		0.300	0.131
HA-SB02-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**99.5**		2.00	0.657
HA-SB02-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**229**		0.300	0.131
HA-SB02-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**89.5**		2.00	0.657
HA-SB02-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**2.15**	J	0.500	0.197
HA-SB02-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.457**		0.200	0.131
HA-SB02-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0561**		0.0400	0.0176
HA-SB02-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0323**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0581**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.119**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.341**	JL	0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.397**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.458**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.320**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.226**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.440**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0558**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.871**	JL	0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0253**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.325**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0139**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.428**		0.0100	0.00615
HA-SB02-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.686**	JL	0.0100	0.00615
HA-SB02-020	3/30/2017	1-1.5	Antimony	SW-846 6020A	15	310	**1.57**		1.00	0.490
HA-SB02-020	3/30/2017	1-1.5	Arsenic	SW-846 6020A	24	200	**11.6**		1.00	0.490
HA-SB02-020	3/30/2017	1-1.5	Barium	SW-846 6020A	8100	120000	**284**		2.00	0.490
HA-SB02-020	3/30/2017	1-1.5	Beryllium	SW-846 6020A	38	250	**0.404**		0.300	0.0980
HA-SB02-020	3/30/2017	1-1.5	Cadmium	SW-846 6020A	51	770	**0.862**		0.300	0.0980
HA-SB02-020	3/30/2017	1-1.5	Chromium, total	SW-846 6020A	27000	75000	**27.7**		2.00	0.490
HA-SB02-020	3/30/2017	1-1.5	Lead	SW-846 6020A	400	1600	**290**		0.300	0.0980
HA-SB02-020	3/30/2017	1-1.5	Nickel	SW-846 6020A	840	8600	**10.1**		2.00	0.490
HA-SB02-020	3/30/2017	1-1.5	Selenium	SW-846 6020A	310	4900	**0.931**		0.500	0.147
HA-SB02-020	3/30/2017	1-1.5	Silver	SW-846 6020A	97	2300	**0.209**		0.200	0.0980
HA-SB02-020	3/30/2017	1-1.5	Mercury	SW-846 7471B	2.1	3.3	**0.139**		0.0400	0.0162
HA-SB02-020	3/30/2017	1-1.5	Acenaphthene	SW-846 8270C	3000	37000	**0.244**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.394**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Anthracene	SW-846 8270C	18000	190000	**0.989**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Benzo(a)anthracene	SW-846 8270C	41	170	**3.27**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**3.19**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**3.11**		0.0100	0.00565

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB02-020	3/30/2017	1-1.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**2.37**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**1.57**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Chrysene	SW-846 8270C	4100	17000	**3.22**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.431**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Fluoranthene	SW-846 8270C	2300	25000	**8.11**		0.0100	0.0113
HA-SB02-020	3/30/2017	1-1.5	Fluorene	SW-846 8270C	2300	25000	**0.281**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**2.43**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Naphthalene	SW-846 8270C	120	190	**0.0366**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Phenanthrene	SW-846 8270C	1700	19000	**4.04**		0.0100	0.00565
HA-SB02-020	3/30/2017	1-1.5	Pyrene	SW-846 8270C	1700	19000	**6.36**		0.0100	0.0113
HA-SB03-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**1.99**		1.00	0.511
HA-SB03-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**21.1**		1.00	0.511
HA-SB03-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**248**		2.00	0.511
HA-SB03-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.372**		0.300	0.102
HA-SB03-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.671**		0.300	0.102
HA-SB03-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**13.9**		2.00	0.511
HA-SB03-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**229**		0.300	0.102
HA-SB03-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**8.90**		2.00	0.511
HA-SB03-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.22**	J	0.500	0.153
HA-SB03-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.204**	J	0.200	0.102
HA-SB03-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.256**		0.0400	0.0146
HA-SB03-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0408**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.105**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.177**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.635**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.802**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.745**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.543**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.404**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.687**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.111**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.36**	JH	0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0417**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.625**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0150**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.614**		0.0100	0.00561
HA-SB03-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.13**	JH	0.0100	0.00561
HA-SB04-013	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**1.07**		1.00	0.464
HA-SB04-013	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**7.51**		1.00	0.464
HA-SB04-013	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**251**		2.00	0.464
HA-SB04-013	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.260**	J	0.300	0.0928
HA-SB04-013	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.712**		0.300	0.0928
HA-SB04-013	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**11.0**		2.00	0.464
HA-SB04-013	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**613**		0.300	0.464
HA-SB04-013	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**6.64**		2.00	0.464
HA-SB04-013	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.07**	J	0.500	0.139

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB04-013	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.302**		0.200	0.0928
HA-SB04-013	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**1.75**		0.0400	0.325
HA-SB04-013	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0336**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.188**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.223**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.734**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.907**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.776**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.629**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.436**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.752**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.110**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.72**	JH	0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0482**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.755**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0163**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.716**		0.0100	0.00543
HA-SB04-013	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.60**	JH	0.0100	0.00543
HA-SB05-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.462	U	1.00	0.462
HA-SB05-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.60**		1.00	0.462
HA-SB05-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**127**		2.00	0.462
HA-SB05-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.229**	J	0.300	0.0924
HA-SB05-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.187**	J	0.300	0.0924
HA-SB05-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**11.3**		2.00	0.462
HA-SB05-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**29.8**		0.300	0.0924
HA-SB05-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**6.73**		2.00	0.462
HA-SB05-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.883**	J	0.500	0.139
HA-SB05-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.0924	U	0.200	0.0924
HA-SB05-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0690**		0.0400	0.0153
HA-SB05-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0159**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0535**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0825**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.258**	JL	0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.287**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.357**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.261**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.170**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.338**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0452**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.605**	JL	0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0157**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.253**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00523	U	0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.256**		0.0100	0.00523
HA-SB05-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.476**	JL	0.0100	0.00523
HA-SB06-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**2.13**		1.00	0.495

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB06-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**6.70**		1.00	0.495
HA-SB06-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**227**		2.00	0.495
HA-SB06-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.271**	J	0.300	0.0989
HA-SB06-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.19**		0.300	0.0989
HA-SB06-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**19.6**		2.00	0.495
HA-SB06-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**151**		0.300	0.0989
HA-SB06-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**11.5**		2.00	0.495
HA-SB06-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.868**	J	0.500	0.148
HA-SB06-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.183**	J	0.200	0.0989
HA-SB06-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.112**		0.0400	0.0167
HA-SB06-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**3.35**		0.0100	0.0101
HA-SB06-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**1.40**		0.0100	0.0101
HA-SB06-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**9.57**		0.0100	0.0101
HA-SB06-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**34.5**	JL	0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**34.7**		0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**29.9**		0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	<0.101	U	0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**17.6**		0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**32.8**		0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**4.12**		0.0100	0.0101
HA-SB06-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**70.9**	JL	0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**2.49**		0.0100	0.0101
HA-SB06-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**20.6**		0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**1.24**		0.0100	0.0101
HA-SB06-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**52.1**		0.0100	0.101
HA-SB06-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**58.2**	JL	0.0100	0.101
HA-SB07-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**1.60**		1.00	0.521
HA-SB07-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.66**		1.00	0.521
HA-SB07-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**226**		2.00	0.521
HA-SB07-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**1.19**		0.300	0.104
HA-SB07-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.33**		0.300	0.104
HA-SB07-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**61.1**		2.00	0.521
HA-SB07-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**204**		0.300	0.104
HA-SB07-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**31.8**		2.00	0.521
HA-SB07-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.19**	J	0.500	0.156
HA-SB07-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.529**		0.200	0.104
HA-SB07-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0330**	J	0.0400	0.0175
HA-SB07-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0122**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0291**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0512**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.219**	JL	0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.270**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.280**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.229**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.137**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.265**		0.0100	0.00533

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB07-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0393**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.484**	JL	0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0120**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.223**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.00779**	J	0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.219**		0.0100	0.00533
HA-SB07-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.390**	JL	0.0100	0.00533
HA-SB08-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**1.23**		1.00	0.608
HA-SB08-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**7.71**		1.00	0.608
HA-SB08-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**434**		2.00	0.608
HA-SB08-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.394**		0.300	0.122
HA-SB08-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**3.95**		0.300	0.122
HA-SB08-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**26.1**		2.00	0.608
HA-SB08-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**219**		0.300	0.122
HA-SB08-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**16.9**		2.00	0.608
HA-SB08-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.25**	J	0.500	0.182
HA-SB08-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.374**		0.200	0.122
HA-SB08-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.166**		0.0400	0.0162
HA-SB08-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.117**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.263**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.490**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.58**	JL	0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.67**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.71**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**1.22**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.881**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.57**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.239**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**3.23**	JL	0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.116**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**1.24**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0421**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**1.80**		0.0100	0.00591
HA-SB08-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**2.62**	JL	0.0100	0.00591
HA-SB09-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.729**	J	1.00	0.594
HA-SB09-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**5.70**		1.00	0.594
HA-SB09-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**198**	JL	2.00	0.594
HA-SB09-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.214**	J	0.300	0.119
HA-SB09-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.557**		0.300	0.119
HA-SB09-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**10.1**		2.00	0.594
HA-SB09-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**476**		0.300	0.119
HA-SB09-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**4.96**		2.00	0.594
HA-SB09-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.749**		0.500	0.178
HA-SB09-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.241**		0.200	0.119
HA-SB09-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**1.47**		0.0400	0.140
HA-SB09-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.143**	JH	0.0100	0.00575

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB09-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.651**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.911**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**3.64**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**4.35**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**3.53**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**2.61**	J	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**1.92**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**3.50**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.472**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**5.95**	JH	0.0100	0.0287
HA-SB09-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.236**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**3.25**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0333**		0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**2.60**	JH	0.0100	0.00575
HA-SB09-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**5.69**	JH	0.0100	0.0287
HA-SB10-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**2.92**		1.00	0.498
HA-SB10-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**15.0**		1.00	0.498
HA-SB10-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**400**		2.00	0.498
HA-SB10-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.398**		0.300	0.0995
HA-SB10-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**3.77**		0.300	0.0995
HA-SB10-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**21.8**		2.00	0.498
HA-SB10-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**116**		0.300	0.0995
HA-SB10-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**36.1**		2.00	0.498
HA-SB10-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.710**	J	0.500	0.149
HA-SB10-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.579**		0.200	0.0995
HA-SB10-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.276**		0.0400	0.0131
HA-SB10-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0138**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0319**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0653**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.228**	JL	0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.265**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.271**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.235**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.142**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.274**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0405**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.514**	JL	0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0118**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.231**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.00688**	J	0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.251**		0.0100	0.00488
HA-SB10-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.430**	JL	0.0100	0.00488
HA-SB11-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**2.69**		1.00	0.507
HA-SB11-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**4.91**		1.00	0.507
HA-SB11-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**157**		2.00	0.507
HA-SB11-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.247**	J	0.300	0.101

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB11-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.323**		0.300	0.101
HA-SB11-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**9.02**		2.00	0.507
HA-SB11-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**158**		0.300	0.101
HA-SB11-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**5.86**		2.00	0.507
HA-SB11-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.02**	J	0.500	0.152
HA-SB11-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.14**	J	0.200	0.101
HA-SB11-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.334**		0.0400	0.0145
HA-SB11-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0591**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.108**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.251**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.887**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.989**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.965**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.694**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.520**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.972**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.143**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.99**	JH	0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0642**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.847**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0165**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.914**		0.0100	0.00500
HA-SB11-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.67**	JH	0.0100	0.00500
HA-SB12-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.533	U	1.00	0.533
HA-SB12-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.76**		1.00	0.533
HA-SB12-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**67.8**		2.00	0.533
HA-SB12-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.217**	J	0.300	0.107
HA-SB12-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.186**	J	0.300	0.107
HA-SB12-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**7.34**		2.00	0.533
HA-SB12-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**33.5**		0.300	0.107
HA-SB12-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**4.51**		2.00	0.533
HA-SB12-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.822**	J	0.500	0.160
HA-SB12-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.107	U	0.200	0.107
HA-SB12-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0434**		0.0400	0.0170
HA-SB12-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.220**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0633**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.533**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.91**	JL	0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.96**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.97**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**1.36**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**1.04**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**2.02**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.312**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**3.86**	JL	0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.183**		0.0100	0.00533

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB12-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**1.51**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0465**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**2.30**		0.0100	0.00533
HA-SB12-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**2.87**	JL	0.0100	0.00533
HA-SB12-020	3/31/2017	.5-1.3	Antimony	SW-846 6020A	15	310	<0.572	U	1.00	0.572
HA-SB12-020	3/31/2017	.5-1.3	Arsenic	SW-846 6020A	24	200	**3.24**		1.00	0.572
HA-SB12-020	3/31/2017	.5-1.3	Barium	SW-846 6020A	8100	120000	**47.3**		2.00	0.572
HA-SB12-020	3/31/2017	.5-1.3	Beryllium	SW-846 6020A	38	250	**0.296**	J	0.300	0.114
HA-SB12-020	3/31/2017	.5-1.3	Cadmium	SW-846 6020A	51	770	<0.114	U	0.300	0.114
HA-SB12-020	3/31/2017	.5-1.3	Chromium, total	SW-846 6020A	27000	75000	**11.1**		2.00	0.572
HA-SB12-020	3/31/2017	.5-1.3	Lead	SW-846 6020A	400	1600	**34.1**		0.300	0.114
HA-SB12-020	3/31/2017	.5-1.3	Nickel	SW-846 6020A	840	8600	**5.54**		2.00	0.572
HA-SB12-020	3/31/2017	.5-1.3	Selenium	SW-846 6020A	310	4900	**0.740**		0.500	0.172
HA-SB12-020	3/31/2017	.5-1.3	Silver	SW-846 6020A	97	2300	<0.114	U	0.200	0.114
HA-SB12-020	3/31/2017	.5-1.3	Mercury	SW-846 7471B	2.1	3.3	**0.0475**		0.0400	0.0174
HA-SB12-020	3/31/2017	.5-1.3	Acenaphthene	SW-846 8270C	3000	37000	**0.443**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Acenaphthylene	SW-846 8270C	3800	37000	**0.124**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Anthracene	SW-846 8270C	18000	190000	**1.33**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Benzo(a)anthracene	SW-846 8270C	41	170	**7.13**		0.0100	0.0584
HA-SB12-020	3/31/2017	.5-1.3	Benzo(a)pyrene	SW-846 8270C	4.1	17	**6.99**		0.0100	0.0584
HA-SB12-020	3/31/2017	.5-1.3	Benzo(b)fluoranthene	SW-846 8270C	41	170	**7.49**		0.0100	0.0584
HA-SB12-020	3/31/2017	.5-1.3	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**5.02**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**3.70**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Chrysene	SW-846 8270C	4100	17000	**8.23**		0.0100	0.0584
HA-SB12-020	3/31/2017	.5-1.3	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**1.06**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Fluoranthene	SW-846 8270C	2300	25000	**15.7**		0.0100	0.0584
HA-SB12-020	3/31/2017	.5-1.3	Fluorene	SW-846 8270C	2300	25000	**0.444**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**5.38**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Naphthalene	SW-846 8270C	120	190	**0.0309**		0.0100	0.00584
HA-SB12-020	3/31/2017	.5-1.3	Phenanthrene	SW-846 8270C	1700	19000	**7.60**		0.0100	0.0584
HA-SB12-020	3/31/2017	.5-1.3	Pyrene	SW-846 8270C	1700	19000	**11.4**		0.0100	0.0584
HA-SB13-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**1.19**		1.00	0.562
HA-SB13-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**7.09**		1.00	0.562
HA-SB13-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**328**		2.00	0.562
HA-SB13-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.284**	J	0.300	0.112
HA-SB13-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.737**		0.300	0.112
HA-SB13-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**12.4**		2.00	0.562
HA-SB13-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**664**		0.300	0.562
HA-SB13-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**6.87**		2.00	0.562
HA-SB13-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.12**	J	0.500	0.169
HA-SB13-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.305**		0.200	0.112
HA-SB13-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.965**		0.0400	0.170
HA-SB13-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00565	U	0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0321**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0396**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.150**		0.0100	0.00565

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB13-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.164**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.159**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.126**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0914**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.169**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0230**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.345**	JH	0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00565	U	0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.148**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00565	U	0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.120**		0.0100	0.00565
HA-SB13-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.310**	JH	0.0100	0.00565
HA-SB14-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.546**	J	1.00	0.376
HA-SB14-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**4.24**		1.00	0.376
HA-SB14-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**4500**	JL	2.00	18.8
HA-SB14-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**1.54**		0.300	0.0753
HA-SB14-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.691**		0.300	0.0753
HA-SB14-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**35.0**		2.00	0.376
HA-SB14-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**199**		0.300	0.0753
HA-SB14-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**22.7**		2.00	0.376
HA-SB14-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.46**		0.500	0.113
HA-SB14-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.284**		0.200	0.0753
HA-SB14-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0387**		0.0400	0.00914
HA-SB14-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.00913**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0252**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0381**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.126**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.146**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.138**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.126**		0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0810**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.139**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0177**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.311**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.00776**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.128**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00580	U	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.149**	JH	0.0100	0.00580
HA-SB14-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.253**	JH	0.0100	0.00580
HA-SB15-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**5.18**		1.00	0.426
HA-SB15-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**53.3**		1.00	0.426
HA-SB15-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**3040**		2.00	4.26
HA-SB15-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**3.78**		0.300	0.0852
HA-SB15-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.63**		0.300	0.0852
HA-SB15-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**82.5**		2.00	0.426
HA-SB15-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**112**		0.300	0.0852

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB15-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**43.9**		2.00	0.426
HA-SB15-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**4.15**	J	0.500	0.128
HA-SB15-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.177**		0.200	0.0852
HA-SB15-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	<0.0165	U	0.0400	0.0165
HA-SB15-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0505**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0385**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0939**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.382**	JL	0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.425**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.464**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.362**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.218**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.456**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0632**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.04**	JL	0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0309**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.370**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.00647**	J	0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.593**		0.0100	0.00507
HA-SB15-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.802**	JL	0.0100	0.00507
HA-SB16-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.526**	J	1.00	0.512
HA-SB16-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**4.66**		1.00	0.512
HA-SB16-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**267**		2.00	0.512
HA-SB16-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.456**		0.300	0.102
HA-SB16-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.650**		0.300	0.102
HA-SB16-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**14.6**		2.00	0.512
HA-SB16-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**104**		0.300	0.102
HA-SB16-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**11.9**		2.00	0.512
HA-SB16-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.27**	J	0.500	0.154
HA-SB16-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.134**	J	0.200	0.102
HA-SB16-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0773**		0.0400	0.0164
HA-SB16-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.557**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.206**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**1.49**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**3.45**	JL	0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**3.25**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**2.94**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**2.18**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**1.69**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**3.35**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.513**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**7.44**	JL	0.0100	0.0108
HA-SB16-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.448**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**2.45**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.339**		0.0100	0.00539
HA-SB16-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**6.56**		0.0100	0.0108

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB16-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**5.78**	JL	0.0100	0.0108
HA-SB17-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.426	U	1.00	0.426
HA-SB17-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**5.56**		1.00	0.426
HA-SB17-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**88.9**		2.00	0.426
HA-SB17-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.230**	J	0.300	0.0852
HA-SB17-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.185**	J	0.300	0.0852
HA-SB17-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**7.52**		2.00	0.426
HA-SB17-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**42.3**		0.300	0.0852
HA-SB17-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**4.98**		2.00	0.426
HA-SB17-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.823**	J	0.500	0.128
HA-SB17-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.0852	U	0.200	0.0852
HA-SB17-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0549**		0.0400	0.0166
HA-SB17-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0345**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0960**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.162**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.561**	JL	0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.581**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.590**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.481**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.308**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.606**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0884**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.25**	JL	0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0374**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.492**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.00976**	J	0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.592**		0.0100	0.00500
HA-SB17-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.964**	JL	0.0100	0.00500
HA-SB18-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.542	U	1.00	0.542
HA-SB18-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**2.66**		1.00	0.542
HA-SB18-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**59.8**		2.00	0.542
HA-SB18-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.123**	J	0.300	0.108
HA-SB18-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.317**	J	0.300	0.108
HA-SB18-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**4.95**		2.00	0.542
HA-SB18-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**190**		0.300	0.108
HA-SB18-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**3.57**		2.00	0.542
HA-SB18-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.775**	J	0.500	0.163
HA-SB18-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.108	U	0.200	0.108
HA-SB18-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.174**		0.0400	0.0151
HA-SB18-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00621	U	0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0224**		0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0123**	J	0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.0535**	JL	0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.0720**		0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.0603**		0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.0610**		0.0100	0.00621

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB18-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0327**		0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.0679**		0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.00952**	J	0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.109**	JL	0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00621	U	0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.0574**		0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00621	U	0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0310**		0.0100	0.00621
HA-SB18-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.103**	JL	0.0100	0.00621
HA-SB19-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.501	U	1.00	0.501
HA-SB19-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**2.76**		1.00	0.501
HA-SB19-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**137**		2.00	0.501
HA-SB19-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.208**	J	0.300	0.100
HA-SB19-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.201**	J	0.300	0.100
HA-SB19-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**8.67**		2.00	0.501
HA-SB19-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**38.9**		0.300	0.100
HA-SB19-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**6.06**		2.00	0.501
HA-SB19-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.648**	J	0.500	0.150
HA-SB19-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.100	U	0.200	0.100
HA-SB19-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0548**		0.0400	0.0153
HA-SB19-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.111**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.215**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.500**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.36**	JL	0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.38**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.39**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.966**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.750**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.32**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.187**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**2.78**	JL	0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.152**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.946**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.0516	U	0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**1.64**		0.0100	0.0516
HA-SB19-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**2.14**	JL	0.0100	0.0516
HA-SB20-013	3/31/2017	0-.5	Antimony	SW-846 6020A	15	310	**4.11**		1.00	0.585
HA-SB20-013	3/31/2017	0-.5	Arsenic	SW-846 6020A	24	200	**7.41**		1.00	0.585
HA-SB20-013	3/31/2017	0-.5	Barium	SW-846 6020A	8100	120000	**868**		2.00	5.85
HA-SB20-013	3/31/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.285**	J	0.300	0.117
HA-SB20-013	3/31/2017	0-.5	Cadmium	SW-846 6020A	51	770	**3.03**		0.300	0.117
HA-SB20-013	3/31/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**29.4**		2.00	0.585
HA-SB20-013	3/31/2017	0-.5	Lead	SW-846 6020A	400	1600	**3440**		0.300	1.17
HA-SB20-013	3/31/2017	0-.5	Nickel	SW-846 6020A	840	8600	**17.5**		2.00	0.585
HA-SB20-013	3/31/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.779**	J	0.500	0.175
HA-SB20-013	3/31/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.893**		0.200	0.117

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB20-013	3/31/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.470**		0.0400	0.101
HA-SB20-013	3/31/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.266**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.541**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**1.06**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**3.88**	JL	0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**4.08**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**3.98**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**2.65**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**2.13**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**3.74**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.609**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**7.74**	JL	0.0100	0.0123
HA-SB20-013	3/31/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.318**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**2.95**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0670**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**4.38**		0.0100	0.00614
HA-SB20-013	3/31/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**5.92**	JL	0.0100	0.00614
HA-SB20-020	3/31/2017	.75-1.1	Antimony	SW-846 6020A	15	310	**6.06**	J	1.00	0.523
HA-SB20-020	3/31/2017	.75-1.1	Arsenic	SW-846 6020A	24	200	**9.02**		1.00	0.523
HA-SB20-020	3/31/2017	.75-1.1	Barium	SW-846 6020A	8100	120000	**283**		2.00	0.523
HA-SB20-020	3/31/2017	.75-1.1	Beryllium	SW-846 6020A	38	250	**0.249**	J	0.300	0.105
HA-SB20-020	3/31/2017	.75-1.1	Cadmium	SW-846 6020A	51	770	**9.76**		0.300	0.105
HA-SB20-020	3/31/2017	.75-1.1	Chromium, total	SW-846 6020A	27000	75000	**29.8**		2.00	0.523
HA-SB20-020	3/31/2017	.75-1.1	Lead	SW-846 6020A	400	1600	**1250**		0.300	1.05
HA-SB20-020	3/31/2017	.75-1.1	Nickel	SW-846 6020A	840	8600	**17.7**		2.00	0.523
HA-SB20-020	3/31/2017	.75-1.1	Selenium	SW-846 6020A	310	4900	**0.848**		0.500	0.157
HA-SB20-020	3/31/2017	.75-1.1	Silver	SW-846 6020A	97	2300	**0.575**		0.200	0.105
HA-SB20-020	3/31/2017	.75-1.1	Mercury	SW-846 7471B	2.1	3.3	**2.77**		0.0400	0.308
HA-SB20-020	3/31/2017	.75-1.1	Acenaphthene	SW-846 8270C	3000	37000	**0.988**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Acenaphthylene	SW-846 8270C	3800	37000	**0.913**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Anthracene	SW-846 8270C	18000	190000	**2.37**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Benzo(a)anthracene	SW-846 8270C	41	170	**5.45**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Benzo(a)pyrene	SW-846 8270C	4.1	17	**5.16**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Benzo(b)fluoranthene	SW-846 8270C	41	170	**5.10**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**3.73**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**2.62**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Chrysene	SW-846 8270C	4100	17000	**5.60**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.753**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Fluoranthene	SW-846 8270C	2300	25000	**17.7**	J	0.0100	0.0580
HA-SB20-020	3/31/2017	.75-1.1	Fluorene	SW-846 8270C	2300	25000	**0.979**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**3.95**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Naphthalene	SW-846 8270C	120	190	**0.905**	J	0.0100	0.00564
HA-SB20-020	3/31/2017	.75-1.1	Phenanthrene	SW-846 8270C	1700	19000	**14.5**	J	0.0100	0.0580
HA-SB20-020	3/31/2017	.75-1.1	Pyrene	SW-846 8270C	1700	19000	**12.6**	J	0.0100	0.0580
HA-SB21-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.694**	J	1.00	0.468
HA-SB21-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**4.4**		1.00	0.468

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB21-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**345**	JL	2.00	0.468
HA-SB21-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.185**	J	0.300	0.0936
HA-SB21-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.61**		0.300	0.0936
HA-SB21-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**12.1**		2.00	0.468
HA-SB21-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**89.8**		0.300	0.0936
HA-SB21-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**7.52**		2.00	0.468
HA-SB21-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.460**	J	0.500	0.140
HA-SB21-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.0936	U	0.200	0.0936
HA-SB21-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.176**		0.0400	0.0149
HA-SB21-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.160**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.145**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.495**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.05**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.06**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.01**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.613**		0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.579**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.09**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.146**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**2.59**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.151**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.778**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0752**		0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**2.18**	JH	0.0100	0.00514
HA-SB21-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**2.15**	JH	0.0100	0.00514
HA-SB22-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**3.41**		1.00	0.497
HA-SB22-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**10.7**		1.00	0.497
HA-SB22-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**158**	JL	2.00	0.497
HA-SB22-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.236**	J	0.300	0.0994
HA-SB22-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.25**		0.300	0.0994
HA-SB22-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**126**		2.00	0.497
HA-SB22-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**50.4**		0.300	0.0994
HA-SB22-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**174**		2.00	0.497
HA-SB22-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.244**	J	0.500	0.149
HA-SB22-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.127**	J	0.200	0.0994
HA-SB22-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0498**		0.0400	0.0119
HA-SB22-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00554	U	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.00766**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0205**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.151**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.175**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.177**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.159**		0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0930**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.169**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0192**	JH	0.0100	0.00554

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB22-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.254**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00554	U	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.156**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00554	U	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0669**	JH	0.0100	0.00554
HA-SB22-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.231**	JH	0.0100	0.00554
HA-SB23-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**2.60**		1.00	0.499
HA-SB23-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**5.54**		1.00	0.499
HA-SB23-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**211**	JL	2.00	0.499
HA-SB23-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.334**		0.300	0.0998
HA-SB23-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.41**		0.300	0.0998
HA-SB23-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**368**		2.00	0.499
HA-SB23-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**319**		0.300	0.0998
HA-SB23-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**166**		2.00	0.499
HA-SB23-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.884**		0.500	0.150
HA-SB23-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.286**		0.200	0.0998
HA-SB23-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0799**		0.0400	0.0163
HA-SB23-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00522	U	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0376**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0382**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.0634**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.0742**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.102**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.0926**		0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0522**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.0873**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0107**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.162**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.00616**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.0765**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00522	U	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0635**	JH	0.0100	0.00522
HA-SB23-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.147**	JH	0.0100	0.00522
HA-SB24-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**1.20**		1.00	0.548
HA-SB24-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.97**		1.00	0.548
HA-SB24-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**410**		2.00	0.548
HA-SB24-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.291**	J	0.300	0.110
HA-SB24-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.938**		0.300	0.110
HA-SB24-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**13.5**		2.00	0.548
HA-SB24-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**358**		0.300	0.110
HA-SB24-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**9.03**		2.00	0.548
HA-SB24-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.791**	J	0.500	0.164
HA-SB24-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.228**		0.200	0.110
HA-SB24-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.350**		0.0400	0.0164
HA-SB24-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0529**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.111**		0.0100	0.00563

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB24-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.209**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.736**	JL	0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.777**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.787**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.575**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.402**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.771**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.111**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.56**	JL	0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0451**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.589**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0155**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.812**		0.0100	0.00563
HA-SB24-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.23**	JL	0.0100	0.00563
HA-SB25-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.628**	J	1.00	0.490
HA-SB25-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.21**		1.00	0.490
HA-SB25-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**208**	JL	2.00	0.490
HA-SB25-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.276**	J	0.300	0.0980
HA-SB25-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.08**		0.300	0.0980
HA-SB25-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**17.1**		2.00	0.490
HA-SB25-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**394**		0.300	0.0980
HA-SB25-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**5.41**		2.00	0.490
HA-SB25-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.829**		0.500	0.147
HA-SB25-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.374**		0.200	0.0980
HA-SB25-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.126**		0.0400	0.0179
HA-SB25-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0429**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.119**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.186**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.565**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.630**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.599**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.369**		0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.330**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.701**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0772**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.29**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0521**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.444**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0158**		0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.771**	JH	0.0100	0.00567
HA-SB25-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.18**	JH	0.0100	0.00567
HA-SB26-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.517**	J	1.00	0.459
HA-SB26-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.45**		1.00	0.459
HA-SB26-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**45.8**		2.00	0.459
HA-SB26-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.133**	J	0.300	0.0918
HA-SB26-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.745**		0.300	0.0918

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB26-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**6.30**		2.00	0.459
HA-SB26-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**60.1**		0.300	0.0918
HA-SB26-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**4.35**		2.00	0.459
HA-SB26-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.657**	J	0.500	0.138
HA-SB26-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.0924**	J	0.200	0.0918
HA-SB26-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0295**	J	0.0400	0.0156
HA-SB26-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00533	U	0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0395**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0243**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.101**	JL	0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.144**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.143**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.126**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0795**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.165**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0174**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.323**	JL	0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00533	U	0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.114**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00533	U	0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.131**		0.0100	0.00533
HA-SB26-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.273**	JL	0.0100	0.00533
HA-SB27-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.668	U	1.00	0.668
HA-SB27-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**2.31**		1.00	0.668
HA-SB27-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**209**		2.00	0.668
HA-SB27-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.317**	J	0.300	0.134
HA-SB27-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.617**		0.300	0.134
HA-SB27-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**10.7**		2.00	0.668
HA-SB27-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**89.2**		0.300	0.134
HA-SB27-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**6.26**		2.00	0.668
HA-SB27-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.01**	J	0.500	0.200
HA-SB27-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.158**	J	0.200	0.134
HA-SB27-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0744**		0.0400	0.0179
HA-SB27-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.187**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.105**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.453**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.13**	JL	0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.10**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.07**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.815**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.597**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.19**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.168**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**2.66**	JL	0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.188**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.868**		0.0100	0.00651

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB27-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0722**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**2.25**		0.0100	0.00651
HA-SB27-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**2.16**	JL	0.0100	0.00651
HA-SB28-010	3/29/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.499	U	1.00	0.499
HA-SB28-010	3/29/2017	0-.5	Arsenic	SW-846 6020A	24	200	**2.36**		1.00	0.499
HA-SB28-010	3/29/2017	0-.5	Barium	SW-846 6020A	8100	120000	**108**		2.00	0.499
HA-SB28-010	3/29/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.20**	J	0.300	0.0997
HA-SB28-010	3/29/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.283**	J	0.300	0.0997
HA-SB28-010	3/29/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**6.18**		2.00	0.499
HA-SB28-010	3/29/2017	0-.5	Lead	SW-846 6020A	400	1600	**19.5**		0.300	0.0997
HA-SB28-010	3/29/2017	0-.5	Nickel	SW-846 6020A	840	8600	**4.50**		2.00	0.499
HA-SB28-010	3/29/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.805**	J	0.500	0.150
HA-SB28-010	3/29/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.0997	U	0.200	0.0997
HA-SB28-010	3/29/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0194**	J	0.0400	0.0170
HA-SB28-010	3/29/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00533	U	0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.00958**	J	0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0192**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.0850**	JL	0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.109**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.117**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.117**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0602**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.110**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0167**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.193**	JL	0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.00533	U	0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.111**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00533	U	0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0733**		0.0100	0.00533
HA-SB28-010	3/29/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.170**	JL	0.0100	0.00533
HA-SB29-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**2.23**		1.00	0.675
HA-SB29-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**6.83**		1.00	0.675
HA-SB29-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**546**	JL	2.00	0.675
HA-SB29-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.326**	J	0.300	0.135
HA-SB29-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.35**		0.300	0.135
HA-SB29-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**31.6**		2.00	0.675
HA-SB29-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**307**		0.300	0.135
HA-SB29-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**16.8**		2.00	0.675
HA-SB29-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.968**		0.500	0.203
HA-SB29-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.371**		0.200	0.135
HA-SB29-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.152**		0.0400	0.0219
HA-SB29-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.121**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.264**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.645**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**3.16**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**4.25**	JH	0.0100	0.00701

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB29-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**4.93**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**2.96**		0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**2.52**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**4.27**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.566**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**7.15**	JH	0.0100	0.0140
HA-SB29-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.118**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**3.68**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0283**		0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**2.89**	JH	0.0100	0.00701
HA-SB29-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**6.10**	JH	0.0100	0.0140
HA-SB30-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**2.09**		1.00	0.710
HA-SB30-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**8.97**		1.00	0.710
HA-SB30-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**617**	JL	2.00	0.710
HA-SB30-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.798**		0.300	0.142
HA-SB30-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.97**		0.300	0.142
HA-SB30-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**40.8**		2.00	0.710
HA-SB30-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**410**		0.300	0.142
HA-SB30-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**26.8**		2.00	0.710
HA-SB30-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.40**		0.500	0.213
HA-SB30-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.716**		0.200	0.142
HA-SB30-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.232**		0.0400	0.0210
HA-SB30-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0964**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.134**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.438**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**1.21**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**1.34**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**1.45**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.756**		0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.765**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**1.35**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.152**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**3.09**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0905**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.974**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0219**		0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**1.33**	JH	0.0100	0.00714
HA-SB30-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**2.53**	JH	0.0100	0.00714
HA-SB30-020	3/30/2017	.5-1	Antimony	SW-846 6020A	15	310	**2.89**		1.00	0.529
HA-SB30-020	3/30/2017	.5-1	Arsenic	SW-846 6020A	24	200	**10.8**		1.00	0.529
HA-SB30-020	3/30/2017	.5-1	Barium	SW-846 6020A	8100	120000	**619**		2.00	2.64
HA-SB30-020	3/30/2017	.5-1	Beryllium	SW-846 6020A	38	250	**0.571**		0.300	0.106
HA-SB30-020	3/30/2017	.5-1	Cadmium	SW-846 6020A	51	770	**2.55**		0.300	0.106
HA-SB30-020	3/30/2017	.5-1	Chromium, total	SW-846 6020A	27000	75000	**43.8**		2.00	0.529
HA-SB30-020	3/30/2017	.5-1	Lead	SW-846 6020A	400	1600	**564**		0.300	0.529
HA-SB30-020	3/30/2017	.5-1	Nickel	SW-846 6020A	840	8600	**30.6**		2.00	0.529

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB30-020	3/30/2017	.5-1	Selenium	SW-846 6020A	310	4900	**1.18**		0.500	0.159
HA-SB30-020	3/30/2017	.5-1	Silver	SW-846 6020A	97	2300	**0.473**		0.200	0.106
HA-SB30-020	3/30/2017	.5-1	Mercury	SW-846 7471B	2.1	3.3	**0.289**		0.0400	0.0158
HA-SB30-020	3/30/2017	.5-1	Acenaphthene	SW-846 8270C	3000	37000	**0.0239**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Acenaphthylene	SW-846 8270C	3800	37000	**0.0467**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Anthracene	SW-846 8270C	18000	190000	**0.108**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Benzo(a)anthracene	SW-846 8270C	41	170	**0.330**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.376**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.386**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.332**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.199**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Chrysene	SW-846 8270C	4100	17000	**0.397**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0524**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Fluoranthene	SW-846 8270C	2300	25000	**0.784**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Fluorene	SW-846 8270C	2300	25000	**0.0237**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.322**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Naphthalene	SW-846 8270C	120	190	<0.00747	U	0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Phenanthrene	SW-846 8270C	1700	19000	**0.336**		0.0100	0.00747
HA-SB30-020	3/30/2017	.5-1	Pyrene	SW-846 8270C	1700	19000	**0.615**		0.0100	0.00747
HA-SB31-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**5.12**		1.00	0.914
HA-SB31-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**16.4**		1.00	0.914
HA-SB31-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**551**	JL	2.00	0.914
HA-SB31-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.289**	J	0.300	0.183
HA-SB31-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**2.37**		0.300	0.183
HA-SB31-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**33.1**		2.00	0.914
HA-SB31-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**520**		0.300	0.183
HA-SB31-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**18.6**		2.00	0.914
HA-SB31-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.963**		0.500	0.274
HA-SB31-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**1.10**		0.200	0.183
HA-SB31-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.199**		0.0400	0.0274
HA-SB31-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**3.05**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**5.18**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**13.1**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**42.5**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**45.4**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**47.0**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**33.1**	JL	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**26.3**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**44.8**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**7.01**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**105**	JH	0.0100	0.180
HA-SB31-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**2.87**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**40.7**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.770**		0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**43.6**	JH	0.0100	0.0898
HA-SB31-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**72.1**	JH	0.0100	0.0898

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB32-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.724	U	1.00	0.724
HA-SB32-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**4.21**		1.00	0.724
HA-SB32-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**216**	JL	2.00	0.724
HA-SB32-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.269**	J	0.300	0.145
HA-SB32-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.479**		0.300	0.145
HA-SB32-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**11.7**		2.00	0.724
HA-SB32-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**96.0**		0.300	0.145
HA-SB32-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**8.59**		2.00	0.724
HA-SB32-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.789**		0.500	0.217
HA-SB32-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.182**	J	0.200	0.145
HA-SB32-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0526**	J	0.0400	0.0247
HA-SB32-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.337**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.681**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**1.58**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**5.83**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**6.55**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**7.15**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**4.09**		0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**3.88**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**6.46**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.901**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**11.4**	JH	0.0100	0.0145
HA-SB32-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.354**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**5.17**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0511**		0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**5.06**	JH	0.0100	0.00726
HA-SB32-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**9.14**	JH	0.0100	0.0145
HA-SB32-020	3/30/2017	.5-1	Antimony	SW-846 6020A	15	310	<0.433	U	1.00	0.433
HA-SB32-020	3/30/2017	.5-1	Arsenic	SW-846 6020A	24	200	**1.49**		1.00	0.433
HA-SB32-020	3/30/2017	.5-1	Barium	SW-846 6020A	8100	120000	**15.8**		2.00	0.433
HA-SB32-020	3/30/2017	.5-1	Beryllium	SW-846 6020A	38	250	<0.0866	U	0.300	0.0866
HA-SB32-020	3/30/2017	.5-1	Cadmium	SW-846 6020A	51	770	<0.0866	U	0.300	0.0866
HA-SB32-020	3/30/2017	.5-1	Chromium, total	SW-846 6020A	27000	75000	**2.76**		2.00	0.433
HA-SB32-020	3/30/2017	.5-1	Lead	SW-846 6020A	400	1600	**11.5**		0.300	0.0866
HA-SB32-020	3/30/2017	.5-1	Nickel	SW-846 6020A	840	8600	**1.91**		2.00	0.433
HA-SB32-020	3/30/2017	.5-1	Selenium	SW-846 6020A	310	4900	**0.467**		0.500	0.130
HA-SB32-020	3/30/2017	.5-1	Silver	SW-846 6020A	97	2300	<0.0866	U	0.200	0.0866
HA-SB32-020	3/30/2017	.5-1	Mercury	SW-846 7471B	2.1	3.3	<0.0126	U	0.0400	0.0126
HA-SB32-020	3/30/2017	.5-1	Acenaphthene	SW-846 8270C	3000	37000	<0.00610	U	0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Acenaphthylene	SW-846 8270C	3800	37000	<0.00610	U	0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Anthracene	SW-846 8270C	18000	190000	**0.0152**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Benzo(a)anthracene	SW-846 8270C	41	170	**0.0556**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.0541**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.0505**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.0401**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0290**		0.0100	0.00610

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB32-020	3/30/2017	.5-1	Chrysene	SW-846 8270C	4100	17000	**0.0514**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.00655**	J	0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Fluoranthene	SW-846 8270C	2300	25000	**0.127**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Fluorene	SW-846 8270C	2300	25000	<0.00610	U	0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.0387**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Naphthalene	SW-846 8270C	120	190	<0.00610	U	0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Phenanthrene	SW-846 8270C	1700	19000	**0.0546**		0.0100	0.00610
HA-SB32-020	3/30/2017	.5-1	Pyrene	SW-846 8270C	1700	19000	**0.0975**		0.0100	0.00610
HA-SB33-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.618**	J	1.00	0.565
HA-SB33-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.29**		1.00	0.565
HA-SB33-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**149**	JL	2.00	0.565
HA-SB33-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.135**	J	0.300	0.113
HA-SB33-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.281**	J	0.300	0.113
HA-SB33-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**7.15**		2.00	0.565
HA-SB33-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**76.3**		0.300	0.113
HA-SB33-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**6.90**		2.00	0.565
HA-SB33-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.443**	J	0.500	0.169
HA-SB33-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.119**	J	0.200	0.113
HA-SB33-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0648**		0.0400	0.0171
HA-SB33-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.0531	U	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.181**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.182**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.444**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.576**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.591**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.546**	JL	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.281**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.627**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0871**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.893**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.0531	U	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.526**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.0531	U	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.372**	JH	0.0100	0.0531
HA-SB33-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**1.01**	JH	0.0100	0.0531
HA-SB34-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**9.36**		1.00	1.03
HA-SB34-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**6.52**		1.00	1.03
HA-SB34-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**446**	JL	2.00	1.03
HA-SB34-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.367**	J	0.300	0.205
HA-SB34-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**1.79**		0.300	0.205
HA-SB34-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**29.3**		2.00	1.03
HA-SB34-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**1920**		0.300	1.03
HA-SB34-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**22.3**		2.00	1.03
HA-SB34-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.08**		0.500	0.308
HA-SB34-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**1.04**		0.200	0.205
HA-SB34-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.340**		0.0400	0.0254

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB34-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.272**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.688**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**1.31**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**4.64**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**5.63**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**6.02**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**3.40**		0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**3.05**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**5.19**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.738**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**9.44**	JH	0.0100	0.0205
HA-SB34-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.279**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**4.32**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0566**		0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**4.43**	JH	0.0100	0.0103
HA-SB34-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**8.59**	JH	0.0100	0.0103
HA-SB35-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**12.3**		1.00	0.566
HA-SB35-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**111**		1.00	0.566
HA-SB35-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**1640**	JL	2.00	11.3
HA-SB35-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.433**		0.300	0.113
HA-SB35-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**15.9**		0.300	0.113
HA-SB35-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**47.4**		2.00	0.566
HA-SB35-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**4370**		0.300	2.26
HA-SB35-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**30.5**		2.00	0.566
HA-SB35-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**2.01**		0.500	0.170
HA-SB35-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**3.02**		0.200	0.113
HA-SB35-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.313**		0.0400	0.0185
HA-SB35-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.491**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.104**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**2.44**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**5.93**	JH	0.0100	0.0567
HA-SB35-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**5.52**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**5.65**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**2.90**		0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**2.97**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**6.11**	JH	0.0100	0.0567
HA-SB35-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.804**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**12.2**	JH	0.0100	0.0567
HA-SB35-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.482**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**3.68**	JH	0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.228**		0.0100	0.00567
HA-SB35-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**9.04**	JH	0.0100	0.0567
HA-SB35-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**9.99**	JH	0.0100	0.0567
HA-SB36-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.466	U	1.00	0.466
HA-SB36-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**1.87**		1.00	0.466
HA-SB36-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**238**	JL	2.00	0.466

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB36-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.121**	J	0.300	0.0932
HA-SB36-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.203**	J	0.300	0.0932
HA-SB36-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**13.6**		2.00	0.466
HA-SB36-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**52.1**		0.300	0.0932
HA-SB36-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**7.32**		2.00	0.466
HA-SB36-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.429**	J	0.500	0.140
HA-SB36-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.0932	U	0.200	0.0932
HA-SB36-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0359**	J	0.0400	0.0167
HA-SB36-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0115**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0569**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0882**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.397**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.606**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.805**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.474**		0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.412**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.753**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0780**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**1.13**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0149**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.576**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00518	U	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.276**	JH	0.0100	0.00518
HA-SB36-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.939**	JH	0.0100	0.00518
HA-SB37-013	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.576	U	1.00	0.576
HA-SB37-013	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**2.60**		1.00	0.576
HA-SB37-013	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**153**	JL	2.00	0.576
HA-SB37-013	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	<0.115	U	0.300	0.115
HA-SB37-013	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.219**	J	0.300	0.115
HA-SB37-013	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**7.30**		2.00	0.576
HA-SB37-013	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**37.5**		0.300	0.115
HA-SB37-013	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**5.65**		2.00	0.576
HA-SB37-013	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.396**	J	0.500	0.173
HA-SB37-013	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.115	U	0.200	0.115
HA-SB37-013	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0348**	J	0.0400	0.0183
HA-SB37-013	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.00660	U	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0393**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0391**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.104**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.163**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.192**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.197**	JL	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0980**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.147**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0251**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.205**	JH	0.0100	0.00660

Appendix 2. 2017 and 2018 Data

Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB37-013	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.00714**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.176**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00660	U	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0434**	JH	0.0100	0.00660
HA-SB37-013	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.191**	JH	0.0100	0.00660
HA-SB38-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.695**	J	1.00	0.493
HA-SB38-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.97**		1.00	0.493
HA-SB38-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**251**	JL	2.00	0.493
HA-SB38-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.199**	J	0.300	0.0986
HA-SB38-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.448**		0.300	0.0986
HA-SB38-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**7.54**		2.00	0.493
HA-SB38-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**92.1**		0.300	0.0986
HA-SB38-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**6.93**		2.00	0.493
HA-SB38-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.603**		0.500	0.148
HA-SB38-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.136**	J	0.200	0.0986
HA-SB38-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0623**		0.0400	0.0156
HA-SB38-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0122**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0575**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0840**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.295**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.365**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.342**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.323**	JL	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.186**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.319**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0528**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.505**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0149**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.306**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00502	U	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.177**	JH	0.0100	0.00502
HA-SB38-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.418**	JH	0.0100	0.00502
HA-SB39-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	**0.511**	J	1.00	0.412
HA-SB39-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**4.46**		1.00	0.412
HA-SB39-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**236**	JL	2.00	0.412
HA-SB39-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.689**		0.300	0.0825
HA-SB39-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.419**		0.300	0.0825
HA-SB39-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**19.6**		2.00	0.412
HA-SB39-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**115**		0.300	0.0825
HA-SB39-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**10.8**		2.00	0.412
HA-SB39-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**1.17**		0.500	0.124
HA-SB39-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	**0.201**		0.200	0.0825
HA-SB39-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.108**		0.0400	0.0193
HA-SB39-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0244**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.178**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.185**	JH	0.0100	0.00624

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
HA-SB39-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.446**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.596**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.525**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.648**	JL	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.283**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.488**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0843**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.803**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0278**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.529**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	**0.0237**		0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.239**	JH	0.0100	0.00624
HA-SB39-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.734**	JH	0.0100	0.00624
HA-SB40-010	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	<1.20	U	1.00	1.20
HA-SB40-010	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**5.87**		1.00	1.20
HA-SB40-010	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**235**	JL	2.00	1.20
HA-SB40-010	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	<0.240	U	0.300	0.240
HA-SB40-010	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.315**	J	0.300	0.240
HA-SB40-010	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**11.8**		2.00	1.20
HA-SB40-010	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**63.4**		0.300	0.240
HA-SB40-010	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**5.73**		2.00	1.20
HA-SB40-010	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.569**	J	0.500	0.360
HA-SB40-010	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.240	U	0.200	0.240
HA-SB40-010	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0533**	J	0.0400	0.0382
HA-SB40-010	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	<0.0121	U	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0755**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0715**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.268**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.425**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.544**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.347**		0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.261**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.397**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0654**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.394**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	<0.0121	U	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.417**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.0121	U	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.0719**	JH	0.0100	0.0121
HA-SB40-010	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.338**	JH	0.0100	0.0121
INC-SB71	3/30/2017	0-.5	Antimony	SW-846 6020A	15	310	<0.508	U	1.00	0.508
INC-SB71	3/30/2017	0-.5	Arsenic	SW-846 6020A	24	200	**3.96**		1.00	0.508
INC-SB71	3/30/2017	0-.5	Barium	SW-846 6020A	8100	120000	**68.6**		2.00	0.508
INC-SB71	3/30/2017	0-.5	Beryllium	SW-846 6020A	38	250	**0.269**	J	0.300	0.102
INC-SB71	3/30/2017	0-.5	Cadmium	SW-846 6020A	51	770	**0.118**	J	0.300	0.102
INC-SB71	3/30/2017	0-.5	Chromium, total	SW-846 6020A	27000	75000	**12.9**		2.00	0.508

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Sample ID	Sample Date	Depth Interval (ft bgs)	Analyte	Analytical Method	Residential cPCL	Commercial/Industrial cCPL	Concentration (mg/kg)	Data Flag	MQL	Detection Limit
INC-SB71	3/30/2017	0-.5	Lead	SW-846 6020A	400	1600	**22.9**		0.300	0.102
INC-SB71	3/30/2017	0-.5	Nickel	SW-846 6020A	840	8600	**9.48**		2.00	0.508
INC-SB71	3/30/2017	0-.5	Selenium	SW-846 6020A	310	4900	**0.975**		0.500	0.152
INC-SB71	3/30/2017	0-.5	Silver	SW-846 6020A	97	2300	<0.102	U	0.200	0.102
INC-SB71	3/30/2017	0-.5	Mercury	SW-846 7471B	2.1	3.3	**0.0199**	J	0.0400	0.0164
INC-SB71	3/30/2017	0-.5	Acenaphthene	SW-846 8270C	3000	37000	**0.0136**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Acenaphthylene	SW-846 8270C	3800	37000	**0.0168**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Anthracene	SW-846 8270C	18000	190000	**0.0481**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Benzo(a)anthracene	SW-846 8270C	41	170	**0.131**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Benzo(a)pyrene	SW-846 8270C	4.1	17	**0.138**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Benzo(b)fluoranthene	SW-846 8270C	41	170	**0.144**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Benzo(g,h,i)perylene	SW-846 8270C	1800	19000	**0.105**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Benzo(k)fluoranthene	SW-846 8270C	420	1700	**0.0785**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Chrysene	SW-846 8270C	4100	17000	**0.14**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Dibenz(a,h)anthracene	SW-846 8270C	4.0	17	**0.0169**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Fluoranthene	SW-846 8270C	2300	25000	**0.357**	JH	0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Fluorene	SW-846 8270C	2300	25000	**0.0116**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Indeno(1,2,3-cd)pyrene	SW-846 8270C	42	170	**0.118**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Naphthalene	SW-846 8270C	120	190	<0.00533	U	0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Phenanthrene	SW-846 8270C	1700	19000	**0.178**		0.0100	0.00533
INC-SB71	3/30/2017	0-.5	Pyrene	SW-846 8270C	1700	19000	**0.267**	JH	0.0100	0.00533

Notes:

Exceeds Residential cPCL

Exceeds both Residential and Commercial/Industrial cPCL

< - Sample was not detected.
J - Estimated: The analyte was detected and positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
H -Bias in sample result likely to be high.
L - Bias in sample result is likely to be low.

cPCL - Critical Protective Concentration Level.
ft bgs - Feet below ground surface.
ID -Identification.
mg/kg - Milligrams per kilogram.
MQL - Method quantitation limit.

1'-16"

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: ~~HA-SB-0~~ 29°17'31.904" N ~~Elevation:~~ 94°50'07.049" W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-01
Sheet: of

Weather:
Logged By: MSZ
Ground Elevation:
Date/Time Started: 1100
Date/Time Finished: 1115 3/31/17
Depth of Boring: 16"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	BROWN (7.5YR, 4/2) SILTY SAND W/ SOME GRAVEL, VERY FINE GRAINED MOIST, NO ODORS TD @ 6"	0-6" 1115	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29°17'34.405"N ~~Elevation:~~ 94°50'09.295"W
Drilling Method: Hand Auger
Sample Type(s): Grab
Boring Diameter: 2"

BORING ID: HA-SB-02
Sheet: 1 of 1

Weather: 75° Partly Cloudy
Logged By: EColmenares
Ground Elevation:
Date/Time Started: 3-30-17 / 1830
Date/Time Finished: 3-30-17 / 1915
Depth of Boring:
Water Level: 1.6'

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	BROWN (7.5YR, 4/2) BLASTED SAND, UNCONSOLIDATED, VERY FINE GRAINED, MOIST NO ODORS		1900 (0-6")
1		1.0'	0	6"	0		0.8'-1.0', OYSTER SHELL LAYER		1915 (1-1.5')
1.5			0		0	SC	DARK GRAY (7.5YR, 4/1) CLAYEY SAND, MOIST, NO ODORS SATURATED @ 1.6' bgs		X
2							WL @ 1.6' bgs		
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:
Moved SE from original location due to a solid concrete pad that was incountered at ~1'

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 32.495 N Elevation: 94° 50' 08.470 W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SB-03-010
Sheet: 1 of 1

Weather:
Boring Diameter: 6"
Logged By: MJZ
Date/Time Started: 1450
Ground Elevation:
Date/Time Finished: 1459 3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR, 3/4) SILTY SAND, W/ABUNDANT OYSTER SHELLS, DRY, NO ODORS	1459 0-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: OYSTER SHELLS

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston	
Project Number: 60420789	
Site Location: Galveston, TX	BORING ID: HA-SB-04-013
Coordinates: 29° 17' 30.735 N	Elevation: 94° 50' 07.378 W
Drilling Method: Hand Auger	Sheet: 1 of 1
Sample Type(s):	Boring Diameter: 2"
Weather:	Logged By: MOZ
	Ground Elevation:
	Date/Time Started: 1540
	Date/Time Finished: 1545
	Depth of Boring: 6"
	Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR, 6/3) SILTY SAND W/ ABUNDANT BRICK DEBRIS AND GRAVEL, DRY, NO ODORS	1545 0-6"	
1							TD @ bgs 6"		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: BRICK DEBRIS, GRAVEL
MS/MOD

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17" 35.649 N ~~Elevation:~~ 94° 50" .679 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-05-010
Sheet: 1 of 1

Weather:
Logged By: MJZ
Ground Elevation:
Date/Time Started: 1330
Date/Time Finished: 1340 3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR, 3/4) SILTY SAND SOME ROOTS, DRY, NO ODORS TD @ 6" bgs	1340 0-6"	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 33.409 N ~~Elevation:~~ 94° 50' 08.163 W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SB-06-010
Sheet: 1 of 1

Weather:
Logged By: MJZ
Ground Elevation:
Boring Diameter: 6"
Date/Time Started: 1345
Date/Time Finished: 1350
3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR, 3/4) SILTY SAND w/ SOME GRAVEL, SOME ROOTS, DRY, NO ODORS	1350 0'-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 33.159N ~~Elevation~~: 94° 50' 08.353W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 6"

BORING ID: HA-SB-07-010
Sheet: 1 of 1

Weather:
Logged By: MJZ
Date/Time Started: 1355
Ground Elevation:
Date/Time Finished: 1400
3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR, 3/4) SILTY SAND w/ SOME ROOTS, VERY FINE GRAINED, DRY, NO ODORS	1400 0-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 32.850 N ~~Elevation~~: 94° 50' 07.358 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: AA-SB-08-010

Sheet: of

Weather:

Logged By: MSZ
Date/Time Started: 1440
Ground Elevation:
Date/Time Finished: 1445
3/29/17

Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR, 3/4) SILTY SAND W/ SOME LIGHT GRAY SILTY CLAY SEAMS (1-2mm), MOIST, NO ODOR (7.5YR, 7/1) TD @ 6" bgs	1445 0-6"	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

MOIST

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29°17'31.166N Elevation: 94°50'06.581 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-09-016
Sheet: 1 of 1

Weather:
Logged By: MJZ
Ground Elevation:
Date/Time Started: 1650
Date/Time Finished: 1600
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR, 3/4) SILTY SAND W/ ABUNDANT ROOTS, VERY FINE GRAINED, NO ODORS	1600 0-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: DUP

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29°17'33.557N ~~Elevation:~~ 94°50'08.988W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter:

BORING ID: HH-SB-10-010
Sheet: 1 of 1

Weather:
Logged By: MGZ
Ground Elevation:
Date/Time Started: 1410
Date/Time Finished: 1415
3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR 3/4) SILTY SAND W/ ABUNDANT GRAVEL AND BRICK DEBRIS, VERY FINE GRAINED, NO ODORS, DRY	1415 0-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 28.233 N ~~Elevation~~: 94° 50' 06.024 W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: AA-SB-20
Sheet: 1 of 1

Weather:
Logged By: MSF
Ground Elevation:
Boring Diameter: 2"
Date/Time Started: 1200
Date/Time Finished: 1220
Depth of Boring: 13"
Water Level:

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR 3/2), SILTY SAND, ABUNDANT ROOTS, SOME GRAVEL VERY MOIST, NO ODORS	0-6" 1210	MS/MSD
1		1"		6"					
		13"	0	1"	0	SM	SATURATED @ 13"	1220 9"-13"	DUP
1.5							NO @ 13" bgs		
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 34.734" N ~~Elevation:~~ 94° 50' 11.387" W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SA-21-010
Sheet: 1 of 1

Weather:
Logged By: MSZ
Ground Elevation:
Boring Diameter:
Date/Time Started: 1825 3/29/17
Date/Time Finished: 1835
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6	0	SM	LIGHT BROWN (7.5YR,6/3) SILTY ~~SAND~~ w/ ABUNDANT CALICHE, VERY FINE GRAINED DRY, NO ODORS	1835 0-6"	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: MANUEVERE LOCATION DUE TO METAL DEBRIS, ABUNDANT CALICHE

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 34.263"N Elevation: 94° 50' 10.585" W
Drilling Method: Hand Auger
Sample Type(s): Boring Diameter: 2"

BORING ID: HA-SB-22-010
Sheet: 1 of 1

Weather:
Logged By: MSZ
Ground Elevation:
Date/Time Started: 1815
Date/Time Finished: 1820 3/29/17
Depth of Boring: 6"
Water Level: W/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
							C7.5YR,2.5/1)		
0.5		6"	0	6"	0	SM	BLACK BLASTING SAND, FINE GRAINED, SOME METAL DEBRIS, DRY, NO ODORS	1820 0'-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: METAL DEBRIS

Date	Time	Depth to groundwater

AECOM

Client:	GLO-Galveston
Project Number:	60420789
Site Location:	Galveston, TX
Coordinates:	29° 17' 33.390" N ~~Elevation:~~ 94° 50' 10.424" W
Drilling Method:	Hand Auger
Sample Type(s):	
Boring Diameter:	2"
Weather:	
Logged By:	MJZ
Date/Time Started:	1840
Ground Elevation:	
Date/Time Finished:	1850 3/29/17

BORING ID: HA-SB-23-010

Sheet: 1 of 1

Depth of Boring: 6"

Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5							LIGHT BROWN (7.5YR, 6/3) SILTY SAND W/ SOME ROOTS, VERY FINE GRAINED, DRY, NO ODORS	1850 0-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29°17'32.250N ~~Elevation:~~ 94°50.07.661 W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SB-11-010

Sheet: of

Weather:

Logged By: MST
Ground Elevation:
Boring Diameter: 2"
Date/Time Started: 1510
Date/Time Finished: 1515
3/29/17

Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR, 6/3) SILTY SAND SOME GRAVEL, DRY, VERY FINE GRAINED NO ODORS	1515 0-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 31.737 N ~~Elevation~~: 94° 50' 07.644W
Drilling Method: Hand Auger
Sample Type(s): Boring Diameter: 2"

BORING ID: HA-SB-12-010
Sheet: 1 of 1

Weather:
Logged By: MJZ Date/Time Started: 1143 Depth of Boring: 6"
Ground Elevation: Date/Time Finished: 1145 Water Level: N/A

6"-16" 1140 3/31/16 3/29/17

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6	0	SM	LIGHT BROWN (7.5YR, 6/3), SILTY SAND, w/ SOME GRAVEL, SOME ROOTS, DRY, VERY FINE GRAINED, DRY	1145 0-6"	
1							TD @ 16" bgs NO ODORS	1-16" 1143 3/31/17	
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: EXTENDED SB TO 16" ON 3/31/17

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 31.381" ~~Elevation~~: 94° 50' 07.301 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-13-010
Sheet: of

Weather:
Logged By: MJZ
Ground Elevation:
Date/Time Started: 1520
Date/Time Finished: 1530
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	DARK BROWN (7.5YR 3/4) SILTY SAND, SOME ROOTS, DRY, VERY FINE GRAINED, NO ODORS	1530 0-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 35.055 N ~~Elevation~~: 94° 50' 10.192 W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SB-14-010
Sheet: 1 of 1

Weather:
Logged By: MST
Ground Elevation:
Boring Diameter: 2"
Date/Time Started: 1750
Date/Time Finished: 1800 3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6	0	SM	BLACK (7.5YR 2.5/1) BLACK FINE SAND, SLIGHTLY SILTY DRY, NO ODORS, FINE GRAINED	1800 0'-6"	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston		BORING ID:
Project Number: 60420789		
Site Location: Galveston, TX		W AA-SB-15-010
Coordinates: 29° 17' 34.006 N ~~Elevation:~~ 94° 50.09.574		Sheet: 1 of 1
Drilling Method: Hand Auger		
Sample Type(s):	Boring Diameter: 2"	
Weather:	Logged By: MSZ / Date/Time Started: 1420	Depth of Boring: 6"
	Ground Elevation: / Date/Time Finished: 1425 3/29/17	Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
							(7.5YR 2.5/1) BLACK BLASTING SAND, SILTY, UNCONSOLIDATED, FINE GRAINED, DRY, NO ODORS	14/25	
0.5								0-6"	
1							TD@6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 32.727 N ~~Elevation~~: 94° 50' 06.902" W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-16-010
Sheet: 1 of 1

Weather:
Logged By: MOT
Date/Time Started: 1126
Ground Elevation:
Date/Time Finished: 1130 3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR, 6/3) SILTY SAND W/ SOME ROOTS, VERY FINE GRAINED, NO ODORS	1130 0-6"	
1							TD @ 6"		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 31.458" N ~~Elevation~~: 94° 50' 08.212 W
Drilling Method: Hand Auger
Sample Type(s): Boring Diameter: 2"

BORING ID: HA-SB-17-010
Sheet: of

Weather:
Logged By: MJZ Date/Time Started: 1135
Ground Elevation: Date/Time Finished: 1140 Depth of Boring: 6"
3/29/17 Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6	0	SM	SANDY SILTS LIGHT BROWN (7.5YR, 6/3), W/SOME GRAVEL, SOME ROOTS, VERY FINE GRAINED, DRY, NO ODORS TD @ 6" bgs	1140 0-6"	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client:	GLO-Galveston
Project Number:	60420789
Site Location:	Galveston, TX
Coordinates:	29° 17'29.335" N ~~Elevation~~: 94°50'07.267" W
Drilling Method:	Hand Auger
Sample Type(s):	Boring Diameter: 2"
Weather:	
Logged By:	MG Z
Ground Elevation:	
Date/Time Started:	1017
Date/Time Finished:	1020, 3/29/17

BORING ID: HA-SB-18-010

Sheet: 1 of 1

Depth of Boring: 6"

Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR 6/3) SILTY SAND W/ MOD AMT ROOTS, VERY FINE GRAINED, WOODCHIPS	1020 0-6"	
1							TD @ 6" bgs	DUP	
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17'28.813"N ~~Elevation~~: 94°50'06.984"W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-19-010
Sheet: 1 of 1

Weather:
Logged By: MJZ
Ground Elevation:
Date/Time Started: 1005
Date/Time Finished: 1015 3/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR 6/4) SILTY SAND W/ ABUNDANT OYSTER SHELLS, ABUNDANT ROOTS, NO ODORS TD @ 6" bgs	1015 0-6"	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client:	GLO-Galveston
Project Number:	60420789
Site Location:	Galveston, TX
Coordinates:	29° 17' 32.353" N
Elevation:	94° 50' 09.751
Drilling Method:	Hand Auger
Sample Type(s):	
Boring Diameter:	2"
Logged By:	MSR
Date/Time Started:	1110
Ground Elevation:	
Date/Time Finished:	1125 3/29/17
Weather:	
BORING ID:	4A-SB-24-010
Sheet:	1 of 1
Depth of Boring:	6"
Water Level:	N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR 6/3) SILTY SAND W/ MICRO ROOTS, VERY FINE GRAINED, DRY, NO ODORS	1125 0-6"	
							TD @ 6"		
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 30.932 N Elevation: 44° 50, 09.259 W
Drilling Method: Hand Auger
Sample Type(s): Boring Diameter: 2"

BORING ID: HA-5B-25
Sheet: 1 of 1

Weather:
Logged By: MSE
Ground Elevation:
Date/Time Started: 1645
Date/Time Finished: 1700 3/30/17
Depth of Boring: 2.0' bgs
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SC	BROWN (7.5YR, 4/2) CLAYEY SAND, W/ SOME ROOTS, MOIST, NO ODORS	0-6" 1700	
1		1.0'	0	6"	0				
1.5		1.5'	0	6"	0	CL	BROWN SILTY CLAY W/ ABUNDANT WHITE CALCAREOUS NODULES, MEDIUM PLASTICITY, MOIST, NO ODORS		
2		2.0'	0	6"	0				
2.5							TD @ 2' bgs		
3									
3.5									
4									
4.5									
5									

NOTES: REFUSAL @ 2' bgs, CALICHE ROCK W/ RED BRICKS

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 29.097" N ~~Elevation:~~ 94° 50' 08.059" W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-26-010
Sheet: 1 of 1

Weather:
Logged By:
Ground Elevation:
Date/Time Started: 1025
Date/Time Finished: 1030
~~8~~/29/17
Depth of Boring: 6"
Water Level:

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR 6/3) SILTY SAND W/ SOME ROOTS, VERY FINE GRAINED, NO ODORS	1030 0-6"	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston	
Project Number: 60420789	
Site Location: Galveston, TX	BORING ID: HA-SB-27-010
Coordinates: 29° 17'28.394"N ~~Elevation:~~ 94° 50' 07.620"	Sheet: 1 of 1
Drilling Method: Hand Auger	
Sample Type(s): Boring Diameter: 2"	
Weather: Logged By: MSZ Date/Time Started: 0950	Depth of Boring: 6"
Ground Elevation: Date/Time Finished: 0955 3/29/17	Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	BROWN (7.5YR, 5/3) SILTY SAND W/ ABUNDANT ROOTS, MOIST, NO ODORS	0955 0-6"	
1							TD @ 6"		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17'27.385" N ~~Elevation:~~ 94° 50'07.578" W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-28-010
Sheet: 1 of 1

Weather:
Logged By: MST
Ground Elevation:
Date/Time Started: 0930
Date/Time Finished: 0940 8/29/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5			0	6"	0	SM	~~COARSE ANIC BROW~~ LIGHT BROWN (7.5YR 6/3) SILTY SAND W/ ABUNDANT OYSTER SHELLS, DRY, NO ODORS. TD @ 6" bgs	0940 0-6"	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 23.809 N Elevation: 94° 50' 10.416 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-29
Sheet: 1 of 1

Weather:
Logged By: MSZ
Ground Elevation:
Date/Time Started: 0910
Date/Time Finished: 0915
3/30/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6	0	SC	BROWN (7.5YR 4/2) CLAYEY SAND, ABUNDANT ROOTS, MOIST, NO ODORS	0-6" 0915	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 33.821" N ~~Elevation:~~ 94° 56' 16.774" W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA SB - 30
Sheet: of

Weather:
Logged By: MJZ
Ground Elevation:
Boring Diameter: 2"
Date/Time Started: 1530
Date/Time Finished: 1555
3/30/17
Depth of Boring: 6"
Water Level: 1.0' bgs

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SC	BROWN (7.5YR, 4/2), CLAYEY SAND W/ ABUNDANT ROOTS, SOFT, NO ODORS	0-6" 1535	
1		1.0'	0	6"	0	SC	SATURATED @ 1.0' bgs	6"-1.0' 1555	
1.5							TD @ 1.0' bgs		
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 26.319" N ~~Elevation:~~ 94° 50' 11.961 W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SB-31
Sheet: 1 of 1

Weather:
Logged By: MS Z
Ground Elevation:
Boring Diameter: 2"
Date/Time Started: 1040
Date/Time Finished: 1045
3/30/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	USCS	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SC	BROWN (7.5YR, 4/2) CLAYEY SAND, HAS ROOTS, MOIST, NO ODORS	(0-6") ~~1040~~ 1045	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 24.402" N ~~Elevation~~: 94° 50' 11.306" W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SB-32
Sheet: 1 of 1

Weather:
Logged By: MSZ
Ground Elevation:
Boring Diameter: 2"
Date/Time Started: 0955
Date/Time Finished: 1020 3/30/17
Depth of Boring: 6"
Water Level: ~~NA~~ 1' bgs

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SC	BROWN (7.5YR, 4/2) CLAYEY SAND, W/ ROOTS, MOIST, NO ODORS	1000 0-6"	
1		1'	0	6"	0	SM	LIGHT YELLOWISH BROWN (10YR, 6/4) SILTY SAND, VERY FINE GRAINED, NO ODORS	6"-1' 1020	▽
1.5							TD @ 1' bgs		
2							SATURATED @ 1' bgs		
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 27.242 N ~~Elevation:~~ 94° 50' 14.984 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-33
Sheet: 1 of 1

Weather:
Logged By: MOZ
Ground Elevation:
Date/Time Started: 1350
Date/Time Finished: 1400
3/21/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	BLACK (7.5YR 2.5/1) SILTY SAND W/ ABUNDANT GRAVEL, MOIST, NO ODOR S	0'-6" 1400	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 25.156" N ~~Elevation:~~ 94° 50' 11.457 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter:

BORING ID: HA-SB-34
Sheet: of

Weather:
Logged By: MGZ
Ground Elevation:
Date/Time Started: 0930
Date/Time Finished: 0940 3/30/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SC	BROWN (7.5YR, 4/1) CLAYEY SAND, ABUNDANT ROOTS, MOIST, NO ODORS	0-6" 0940	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: ADJUSTED SB DUE TO LARGE SWAMP AREA

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 290 17' 32.393 N ~~Elevation~~: 94° 50' 18.615 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-32
Sheet: 1 of 1

Weather:
Logged By: MSE
Ground Elevation:
Date/Time Started: 1140
Date/Time Finished: 1150 3/30/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR, 6/3) SILTY SAND W/ ABUNDANT ROOTS, MOIST, NO ODORS, VERY FINE GRAINED	0-6" 1150	
							TD @ 6" BGS		
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 28.949" N ~~Elevation:~~ 94° 50' 15.930" W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-36
Sheet: of

Weather:
Logged By: MJZ
Ground Elevation:
Date/Time Started: 1430
Date/Time Finished: 1445 3/21/17
Depth of Boring: 1.5' bgs
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	BROWN (7.5YR, 4/2) SILTY SAND W/ SOME CHALICHE ROCK, SOME WOOD DEBRIS, VERY FINE GRAINED, MOIST, NO ODOR	0-6" 1445	
1			0	6"	0				
1.5		1.5'	0	6"	0	SM			
2							TD @ 1.5' bgs		
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: REFUSAL @ 1.5' DUE TO HARD ROCK CHALICHE

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston		BORING ID: HA-SB-37
Project Number: 60420789		
Site Location: Galveston, TX		
Coordinates: 29°17'25.474"N	~~Elevation:~~ 94°50'14.591"W	Sheet: 1 of 1
Drilling Method: Hand Auger		
Sample Type(s):	Boring Diameter: 2"	
Weather:	Logged By: NST	Date/Time Started: 1420
	Ground Elevation:	Date/Time Finished: 1425 3/21/17
		Depth of Boring: 6"
		Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	BROWN (7.5YR 5/2) SILTY SAND W/ SOME WOOD FRAGMENTS, MOIST, NO ODORS	0-6" 1425	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 31.901" N ~~Elevation~~: 94° 50' 18.870" W
Drilling Method: Hand Auger
Sample Type(s):

BORING ID: HA-SB-38
Sheet: 1 of 1

Weather:
Logged By: MSZ
Ground Elevation:
Boring Diameter: 2"
Date/Time Started: 1120
Date/Time Finished: 1130 3/30/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (2.5YR, 6/3) SILTY SAND W/ ABUNDANT GRAVEL, SOME ROOTS, MOIST, NO ODORS	0'-6" 1130	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: LOCATION WAS MOVED DUE TO SAMPLE AREA

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 29.838" N ~~Elevation~~: 94° 50' 17.762" W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter:

BORING ID: HA-SB-39
Sheet: 1 of 1

Weather:
Logged By: MJZ
Ground Elevation:
Date/Time Started: 1100
Date/Time Finished: 1100 3/30/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	LIGHT BROWN (7.5YR, 6/3) SILTY SAND W/SOME ROOTS, MOIST, NO ODOR S	0'-6" 1100	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 27.302 N ~~Elevation:~~ 94° 50' 16.429 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: HA-SB-40
Sheet: 1 of 1

Weather:
Logged By: NJZ
Ground Elevation:
Date/Time Started: 1330
Date/Time Finished: 1340
3/31/17
Depth of Boring: 6"
Water Level: N/A

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft)
0.5		6"	0	6"	0	SM	BROWN (7.5YR, 4/2) SILTY SAND W/ WOOD MULCH, MOIST, FILL, NO ODOR S	0'-6" 1340 DUP	
1							TD @ 6" bgs		
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES: SAMPLE IS IN PEBBLES AREA (WOOD MULCH)

Date	Time	Depth to groundwater

AECOM

Client: GLO-Galveston
Project Number: 60420789
Site Location: Galveston, TX
Coordinates: 29° 17' 25.900 N ~~Elevation~~: 94° 50' 04.341 W
Drilling Method: Hand Auger
Sample Type(s):
Boring Diameter: 2"

BORING ID: ~~INC-SB-1~~ INC-SB-1
Sheet: 1 of 1

Weather:
Logged By: MJZ
Ground Elevation:
Date/Time Started: 1610
Date/Time Finished: 1620
3/30/17
Depth of Boring: 6"
Water Level: NA

Depth (ft)	Geologic sample ID	Sample Depth (ft)	PID Readings	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
0.5		6"	0	6"	0	SM	VERY PALE BROWN (10YR 7/4) SECTY SAND VERY FINE GRAINED, DRY, NO ODORS TD @ 6" BGS	0-6" 1620	
1									
1.5									
2									
2.5									
3									
3.5									
4									
4.5									
5									

NOTES:

Date	Time	Depth to groundwater

Appendix 2. March 2018 Data

Date	Sample Location	Depth Interval (ft bgs)	PID (ppm)	Lithology
3/27/2018	HA-42	0-0.5	0	Brown, silty sand
3/27/2018	HA-43	0-0.5	0	Brown, silty sand
3/27/2018	HA-43	0.75-1.1	0	Brown, silty sand
3/27/2018	HA-44	0-0.5	0	Brown, silty sand
3/27/2018	HA-45	0-0.5	0	Brown, silty sand
3/27/2018	HA-46	0-0.5	0	Brown, silty sand
3/27/2018	HA-46	0.75-1.1	0	Brown, silty sand
3/27/2018	HA-47	0-0.5	0	Brown, silty sand
3/27/2018	HA-49	0-0.5	0	Brown, silty sand
3/27/2018	HA-49	0.75-1.1	0	Brown, silty sand
3/27/2018	HA-50	0-0.5	0	Brown, silty sand
3/27/2018	HA-51	0-0.5	0	Brown, silty sand

Notes:

ft bgs - Feet below ground surface.
PID - Photoionization detector.
ppm - Parts per million.

APPENDIX 4

Proposed Institutional Controls

Texas Risk Reduction Program

Note to TCEQ: Site-specific deed restrictions will be drafted and a metes-and-bounds survey provided upon completion of the proposed property acquisitions and associated surface soil response actions (where applicable).

Deed Notice

STATE OF TEXAS **§**

§

COUNTY OF GALVESTON **§**

This Notice is filed to provide information concerning certain environmental conditions and/or use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described as follows:

[Exhibit A will be attached hereto and incorporated herein by reference. The legal description will include the entire recorded tract of land held by the owner executing this deed notice. The description will consist of the property description used in the last recorded vesting deed covering the Property or, if the Property has since been subdivided, the legal description for the subdivision with reference to the recorded plat map thereof (where the vesting deed covered multiple lots, tracts, or parcels of land, only the lot(s), tract(s), or parcel(s) containing the identified chemicals of concern would need to be included.) This is not a legal description of the Affected Property as set forth below.

Portions of the ***surface soils*** of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the Texas Risk Reduction Program (TRRP). The portion considered to be Affected Property is described as follows:

Exhibit B will be attached hereto and incorporated herein by reference. Exhibit B will include a metes and bounds description of the Affected Property and a plat map clearly demarcating the portions of the Property that contain the Affected Property. The map will contain a north arrow, a correlating map scale, and a legend identifying any used symbols or abbreviations. The metes and bounds description and plat map will be accompanied by a certification from a registered professional land surveyor so registered by the Texas Board of Professional Surveying attesting to the accuracy of the descriptions. After the remedy implementation (excavation), no chemicals of concern exceed their respective critical Protective Concentration Levels for commercial/industrial land use.

This Notice is required for the following reasons:

The Affected Property currently meets TRRP standards for commercial/industrial use. Based on the reports, the chemicals of concern pose no significant present or future risk to humans or the environment based on commercial/industrial land use. No further remediation of the Affected Property is required by the TCEQ as long as the Affected Property is not to be used for residential purposes as the property may not be protective for residential use. If any person desires in the future to use the Affected Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the property may be used for residential purposes. Persons contemplating a change in land use for the Affected Property are encouraged to review the definitions for commercial/industrial and residential land use contained in TRRP as the definition of residential land use is broad.

As of the date of this Notice, the record owner of fee title to the Property is _____with an address of _____.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle, Building E
Austin, Texas 78753

Mail:
TCEQ – MC 199
P.O. Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: VCP No. 1962

This Notice may be rendered of no further force or effect only by a superseding deed notice executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Deed Notice is filed.

Executed this _____day of _____,_____.

[OWNER or RESPONDER]

By:_____

Name:_____

Title:_____

STATE OF TEXAS

TRAVIS COUNTY

BEFORE ME, on this the_____day of _____, personally appeared _____[***name***]_____ , _____[***title***]_____, of _____[***company***]_____, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the _____ day of _____, ____.

Notary Public in and for the State of Texas

County of Travis

My Commission Expires: _____

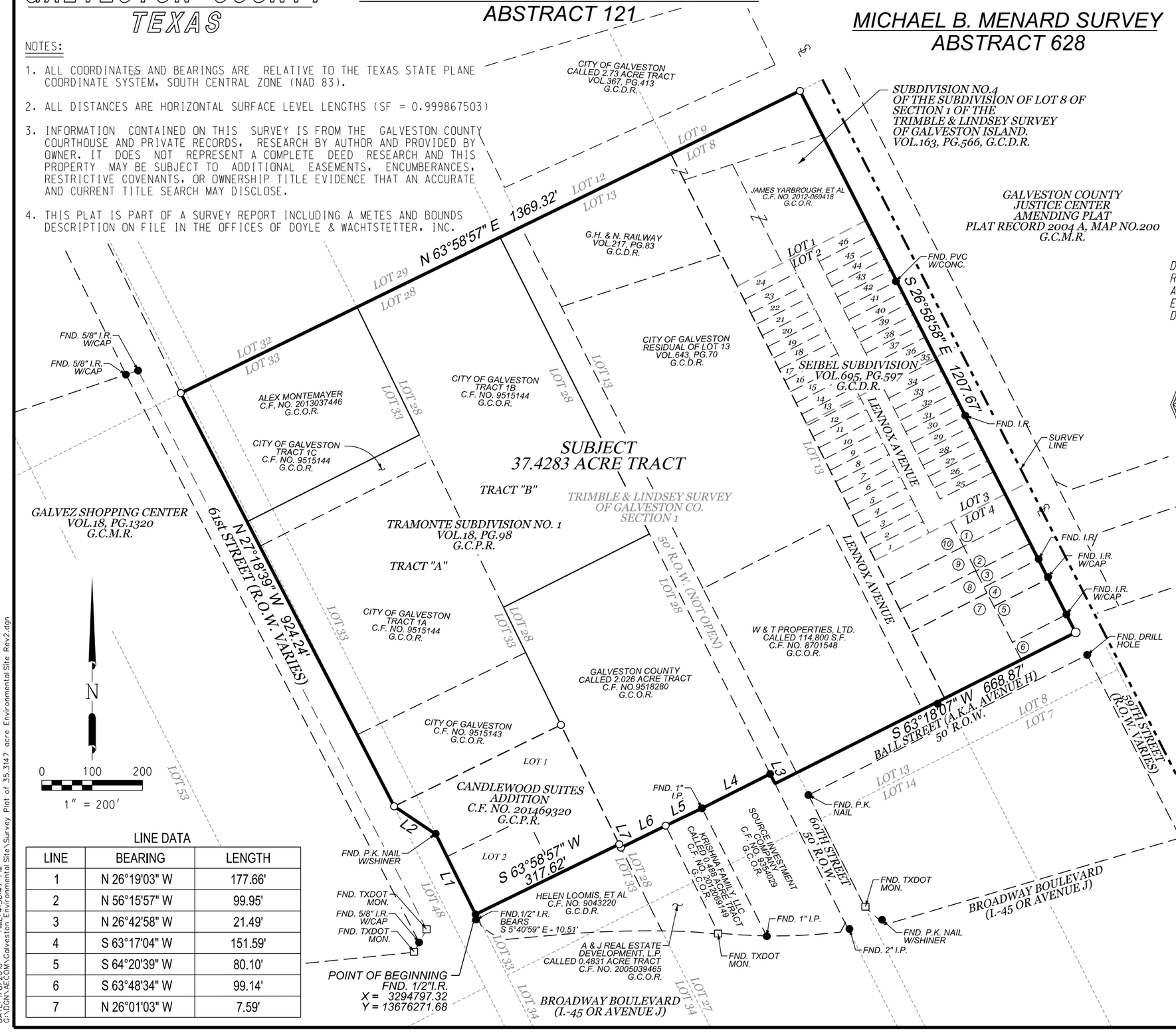
GALVESTON COUNTY TEXAS

EDWARD HALL & LEVI JONES SURVEY ABSTRACT 121

MICHAEL B. MENARD SURVEY ABSTRACT 628

NOTES:

1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.999867503)
3. INFORMATION CONTAINED ON THIS SURVEY IS FROM THE GALVESTON COUNTY COURTHOUSE AND PRIVATE RECORDS, RESEARCH BY AUTHOR AND PROVIDED BY OWNER. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBERANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
4. THIS PLAT IS PART OF A SURVEY REPORT INCLUDING A METES AND BOUNDS DESCRIPTION ON FILE IN THE OFFICES OF DOYLE & WACHTSTETTER, INC.



OWNERSHIP TABLE

TRACT	OWNER	RECORDED IN
1	SARAH J. ALFORD	C.F. NO. 9825869, G.C.O.R.
2	ROBERT E. HOSKINS, ET AL	C.F. NO. 2013061965, G.C.O.R.
3	LUMBERMAN HOMES, INC.	C.F. NO. 2009027497, G.C.O.R.
4	TROY MCLEHANY	C.F. NO. 2005077328, G.C.O.R.
5	CHARLES KAUFMANN, ET AL	C.F. NO. 2011058646, G.C.O.R.
6	CITY OF GALVESTON	C.F. NO. 2001054058, G.C.O.R.
7	JESUS G. SALINAS, ET AL	C.F. NO. 2000039656, G.C.O.R.
8	DAVID J. BROWN	C.F. NO. 2000006770, G.C.O.R.
9	WILBERT WILLIAMS	C.F. NO. 9536805, G.C.O.R.
10	ROSARIA TROST	VOL.1639, PG.299, G.C.D.R.

I, Wm. PATRICK DOYLE, REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE ABOVE AND FOREGOING PLAT IS A TRUE REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION, ON THE GROUND, AND THAT THERE ARE NO EXCESSES NOR INTRUSIONS ON THIS PROPERTY, EXCEPT AS SHOWN HEREON.
DATE SURVEYED: DECEMBER 9, 2015

STATE OF TEXAS REGISTERED WM. PATRICK DOYLE 4467 PROFESSIONAL LAND SURVEYOR

WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

LINE DATA

LINE	BEARING	LENGTH
1	N 26°19'03" W	177.66'
2	N 56°15'57" W	99.95'
3	N 26°42'58" W	21.49'
4	S 63°17'04" W	151.59'
5	S 64°20'39" W	80.10'
6	S 63°48'34" W	99.14'
7	N 26°01'03" W	7.59'

SURVEY PLAT OF

37.4283 ACRE TRACT

BEING A PORTION OF ALL THAT CERTAIN LOTS 8, 13, 28 AND 32 OF THE SECTION 1 OF THE TRIMBLE & LINDSEY SURVEY OF GALVESTON ISLAND

IN THE

EDWARD HALL & LEVI JONES SURVEY ABSTRACT 121 GALVESTON COUNTY, TEXAS.

FOR

AECOM

SHEET 1 OF 1

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX. 979.265.9940 FIRM NO.:10024500

SURVEYED:	12-9-15	BOOK:	GALVESTON VOL.2	PROJECT NO.	954-15-03
DRAWN BY:	JAM/12-23-15	CHECKED:	WPD/12-23-15	REVISED:	

USER: Untitled Workspace
DATE: 1/8/2016 TIME: 4:56:47 PM
G:\DON\AECOM\Galveston Environmental Site\Survey Plat of 35.3147 acre Environmental Site Rev2.dgn

Doyle & Wachtstetter, Inc
Surveying and Mapping • GPS/GIS

37.4283 ACRE TRACT
EDWARD HALL & LEVI JONES SURVEY, ABSTRACT 121
GALVESTON COUNTY, TEXAS

ALL THAT CERTAIN 37.4283 ACRE tract, situated and lying in the Edward Hall and Levi Jones Survey, Abstract 121, Galveston County, Texas, being a portion of the Lots 8, 13, 28 and 33 of the unrecorded plat of Section 1 of the Trimble and Lindsey Survey of Galveston County, being all of Lot 1 and a portion of Lot 4 of Subdivision No. 4 of the Subdivision of Lot 8 of Section 1 of the Trimble and Lindsey Survey, according to the map or plat recorded in Volume 163, Page 566 of the Galveston County Deed Records (G.C.D.R.), Lots 1 through 46 and a 50 foot right-of-way according to the map or plat thereof of the Seibel Subdivision of Tracts 2 and 3, Division 8, Section 1 of the Trimble and Lindsey Survey of Galveston County, according to the map or plat thereof recorded in Volume 695, Page 597 of the G.C.D.R., all of Tract A and Tract B of the Final Tramonte Subdivision No. 1, according to the map or plat thereof recorded in Volume 18, Page 98 of the Galveston County Plat Records (G.C.P.R.) and Lots 1 and 2 of Candlewood Suites Addition, according to the map or plat thereof recorded in Clerk's File No. 201469320 of the G.C.P.R., said 37.4283 acre tract being comprised of the following tracts: a portion of all that certain called 2.026 acre tract conveyed by deed recorded on May 22, 1995 from the University National Bank to The City of Galveston County, Texas, as recorded in Clerk's File No. 9518280 of the Galveston County Official Records (G.C.O.R.), all that certain tract conveyed by deed recorded on April 28, 1995 from the Bank of the West to the City of Galveston as recorded in Clerk's File No. 9515143 of the G.C.O.R., all those certain tracts, Tract 1A, 1B and 1C, being a portion of Tract A and Tract B of Tramonte Subdivision, conveyed by deed recorded April 28, 1995 from The Moody National Bank of Galveston to The City of Galveston as recorded in Clerk's File No. 9515144 of the G.C.O.R., all that certain tract of land conveyed by deed recorded on June 14, 2013 from Peter G. Kovacevich, et ux to Alex Montemayor as recorded in Clerk's File No. 2013037446 of the G.C.O.R., all that certain tract of land, being a portion of said Lot 13 of Section 1 of the Trimble and Lindsey Survey of Galveston County and a portion of Lot No 1 of Subdivision No. 4 of the Subdivision of Lot 8 of Section 1 of the Trimble and Lindsey Survey, conveyed by deed recorded on June 9, 1906 from the Galveston, Houston & Northern Railway Company to The Galveston, Harrisburg and San Antonio Railway Company as recorded in Volume 217, Page 83 of the G.C.D.R., all that certain tract of land conveyed by deed recorded on March 10, 1942 from B. C. Franklin Leonard, et al, to the City of Galveston as recorded in Volume 643, Page 70 of the G.C.D.R., all those certain tracts of land conveyed by deed recorded on December 19, 2012 from James D. Yarbrough to James D. Yarbrough, et al as recorded in Clerk's File No. 2012069418 of the G.C.O.R., a portion of all that certain called 114,600 square foot tract of land, conveyed by deed recorded on January 13, 1987 from Watson & Taylor Realty Company to W&T Properties, Ltd., as recorded in Clerk's File No. 8701548 of the G.C.O.R., all that certain tract of land conveyed by deed recorded on June 5, 1998 from John Reed, et ux to Sarah J. Alford, as recorded in Clerk's File No. 9825869 of the G.C.O.R., all that certain tract of land conveyed by Affidavit of Heirship recorded on September 27, 2013 to Robert E. Hoskins, et al as recorded in Clerk's File No. 2013061965 of the G.C.O.R., all that certain tract of land conveyed by sheriff's deed recorded on May 26, 2009 from the County of Galveston, et al to Lumberman Homes, Inc. as recorded in Clerk's File No. 2009027497 of the G.C.O.R., all that certain tract of land conveyed by deed recorded on November 9, 2005 from Wilbert Williams to Troy McLehany as recorded in Clerk's File No. 2005077328 of the G.C.O.R., all that certain called 0.2222 acre tract of land conveyed by deed recorded on November 17, 2011 from Troy McLehany to Charles Kaufmann, et al as recorded in Clerk's File No. 2011058646 of the G.C.O.R., all that certain called 0.111 acre tract conveyed by deed recorded on October 15, 2001 from Wilbert Williams to the City of Galveston as recorded in Clerk's File No. 2001054058 of the G.C.O.R., all that certain tract of land conveyed by deed recorded on August 7, 2000 from Federico Aguillon to Jesus G. Salinas, et al as recorded in Clerk's File No. 2000039656 of the G.C.O.R., all that certain tract of land conveyed by sheriffs deed recorded on February 14, 200 from Galveston Independent School District, et al to David J. Brown, as recorded in Clerk's File No. 2000006770 of the G.C.O.R., all that certain tract of land, conveyed by deed recorded on September 25, 1995 from Viola Jones to Wilbert Williams as recorded in Clerk's File No. 9536805 of the G.C.O.R., all that certain tract of land tract of land conveyed by deed recorded on July 14, 1964 from Jessie Mae Thompson Sowell to Rosaria Trost as recorded in Volume 1639, Page 299 of the G.C.D.R., said herein described 37.4283 acre tract hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD 83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths, (S.F. = 0.999867503) as follows:

37.4283 ACRE TRACT
EDWARD HALL & LEVI JONES SURVEY, ABSTRACT 121
GALVESTON COUNTY, TEXAS

BEGINNING at a ½" iron rod found marking the South corner of Lot 2 of said Candlewood Suites Addition, same being the northwest corner of all that certain tract of land, conveyed by deed recorded on December 28, 1990 from Helen Loomis, et al to Helen Loomis, et al, as recorded in Clerk's File No. 9043220 of the G.C.O.R., located on the northeastern right-of-way boundary line of 61st Street (right-of-way varies), for the South corner of the herein described 37.4283 acre tract, said Point of Beginning being located at Texas State Plane coordinate position X=3294797.32 and Y=13676271.68;

THENCE North 26°19'03" West, coincident with the northeastern right-of-way boundary line of said 61st Street (right-of-way varies), same being the southwestern boundary line of Lot 1 and Lot 2 of said Candlewood Suites Addition, a distance of 177.66 feet to a p.k. nail found marking an angle corner of Lot 1 of said Candlewood Suites and the herein described 37.4283 acre tract, at position X=3294718.57 and Y=13676430.91;

THENCE North 56°15'57" West, coincident with the northeastern right-of-way boundary line of said 61st Street (right-of-way varies), same being the southwestern boundary line of Lot 1 of said Candlewood Suites Addition, a distance of 99.95 feet to a point for the West corner of said Lot 1 of Candlewood Suites Addition, same being the South corner of said Tract "A" of Tramonte Subdivision No. 1 and the South corner of said City of Galveston tract, recorded in Clerk's File No. 9515143 of the G.C.O.R., for an angle corner of the herein described 37.4283 acre tract, at position X=3294635.49 and Y=13676486.40;

THENCE North 27°18'39" West, coincident with the northeastern right-of-way boundary line of said 61st Street (right-of-way varies), the southwestern boundary line of said Tract "A" and Tract "B" of said Tramonte Subdivision No. 1, same being the southwestern boundary line of said City of Galveston tract recorded in Clerk's File No. 9515143, the southwest boundary line of said City of Galveston Tract 1A and Tract 1C and the southwestern boundary line of said Alex Montemayor tract, a distance of 924.24 feet to the West corner of said Alex Montemayor tract and the West corner of the herein described 37.4283 acre tract, at position X=3294211.46 and Y=13677307.51;

THENCE North 63°58'57" East, coincident with the northwestern boundary line of said Lot 33, Lot 28, Lot 13 and Lot 8 same being the northwestern boundary line of said Alex Montemayor tract, the northwestern boundary line of said City of Galveston Tract 1B, the northwestern boundary line of said Galveston, Harrisburg & San Antonio Railway Company, a distance of 1369.32 feet to the North corner of said Lot 1 of Subdivision No. 4 of Lot 8 of Section 1 of the Trimble and Lindsey Survey of Galveston Island, located on the southwestern right-of-way boundary line of 59th Street, right-of-way varies, for the North corner of the herein described 37.4283 acre tract, at position X=3295441.85 and Y= 13677908.08;

THENCE South 26°58'58" East, coincident with the southwestern right-of-way boundary line of said 59th Street, right-of-way varies, the northeastern boundary line of said Lot 8 of Section 1 of the Trimble and Lindsey Survey of Galveston Island, same being the northeastern boundary line of the said Galveston, Harrisburg and San Antonio Railway Company tract, the northeastern boundary line of said James Yarbrough, et all tract, the northeastern boundary line of Lots 25 through 46 of said Seibel Subdivision, the northeastern boundary line of said Sarah J. Alford tract, said Robert E. Hoskins, et al tract, said Lumberman Homes, Inc. tract, said Troy McLehany tract, said Charles Kaufmann, et al tract and said City of Galveston called 0.111 acre tract, a distance of 1207.67 feet to the intersection of the southwestern right-of-way boundary line of said 59th Street (right-of-way varies) and 50 foot wide Ball Street (A.K.A Avenue H) for the East corner of said City of Galveston called 0.111 acre tract and the herein described 37.4283 acre tract, at position X=3295989.72 and Y=13676832.01;

THENCE South 63°18'07" West, coincident with the northwestern right-of-way boundary line of said 50 foot wide Ball Street, same being the southeastern boundary line of said City of Galveston called 0.111 acre tract and the southeastern boundary line of said Jesus G. Salinas, et al tract, a distance of 668.87 feet to the intersection of the northwestern right-of-way boundary line of said 50 foot wide Ball Street and the southwestern right-of-way boundary line of 50 foot wide 60th Street, same being the northeastern boundary line of all that certain tract of land conveyed by deed recorded on December 21, 1993 from Bayshore National Bank of La Porte to Source Investment Company as recorded in Clerk's File No. 9354029 of the G.C.O.R., for an exterior corner of the herein described 37.4283 acre tract, at position X=3295392.24 and Y=13676531.54;

37.4283 ACRE TRACT
EDWARD HALL & LEVI JONES SURVEY, ABSTRACT 121
GALVESTON COUNTY, TEXAS

THENCE North 26°42'58" West, coincident with the southwestern right-of-way boundary line of said 50 foot wide 60th Street, same being the northeastern boundary line of said Source Investment Company tract, a distance of 21.49 feet to a 2" iron pipe found marking the North corner of said Source Investment Company tract and the South corner of said City of Galveston called 2.026 acre tract, for an interior corner of the herein described 37.4283 acre tract, at position X=3295382.58 and Y=13676550.74;

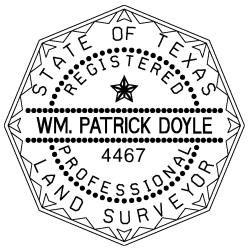
THENCE South 63°17'04" West, coincident with the southeastern boundary line of said City of Galveston called 2.026 acre tract, same being the northwestern boundary line of said Source Investment Company tract, a distance of 151.59 feet to a 1" iron pipe found marking the West corner of said Source Investment Company tract, same being the North corner of that certain tract of land conveyed by deed recorded on December 19, 2012 from Kiritkumar Masrani, M.D., et al to Krishna Family, LLC as recorded in Clerk's File No. 2012069149 of the G.C.O.R., for an angle corner of the herein described 37.4283 acre tract, at position X=3295247.19 and Y=13676482.59;

THENCE South 64°20'39" West, coincident with the southeastern boundary line of said City of Galveston called 2.026 acre tract, same being the northwestern boundary line of said Krishna Family, LLC tract, a distance of 80.10 feet to a point, for the West corner of said Krishna Family LLC tract, same being the North corner of all that certain called 0.4831 acre tract conveyed by deed recorded on June 14, 2005 from Raffaella Viotto to A & J Real Estate Development, L.P., as recorded in Clerk's File No. 2005-039465 of the G.C.O.R., for an angle corner of the herein described 37.4283 acre tract, at position X=3295174.99 and Y=13676447.92;

THENCE South 63°48'34" West, coincident with the southeastern boundary line of said City of Galveston called 2.026 acre tract, same being the northwestern boundary line of said A & J Real Estate Development, L.P. called 0.4831 acre tract, a distance of 99.14 feet to a point, located on the northeastern boundary line of said Helen Loomis, et al tract, for an exterior corner of the herein described 37.4283 acre tract, at position X=3295086.04 and Y=13676404.17;

THENCE North 26°01'03" West, coincident with the southwestern boundary line of said City of Galveston called 2.026 acre tract, same being the northeastern boundary line of said Helen Loomis, et al tract, a distance of 7.59 feet to the North corner of said Helen Loomis, et al tract, same being the East corner of Lot 1 of said Candlewood Suites Addition, for an interior corner of the herein described 37.4283 acre tract, at position X=3294966.93 and Y=13676648.20;

THENCE South 63°58'57" West, coincident with the southeastern boundary line of Lot 1 and Lot 2 of said Candlewood Suites Addition, a distance of 317.62 feet to the **POINT OF BEGINNING**, containing 37.4283 acres of land, more or less.



Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
December 23, 2015
Revised: January 8, 2016

This description is based on a survey, a plat of which, dated December 23, 2015 is on file in the office of Doyle & Wachtstetter, Inc.
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