PHASE II ENVIRONMENTAL SITE ASSESSMENT

19 DOAT STREET AND 9 LANSDALE PLACE PROPERTIES
BUFFALO, NEW YORK 14211

Prepared for:

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1.0 INTRODUCTION

1.1 PURPOSE

Brydges Environment, Engineering, Energy/Panamerican Environmental, Inc. (BE3/Panamerican) performed a Phase II environmental site assessment (ESA) at the 19 Doat Street and 9 Lansdale Street properties in Buffalo, New York (see **Figure 1**). The project (target site) contains both parcels that are located less than ½ mile southwest from the corner of Genesee Street and Bailey Avenue. The target site contains approximately 4 commercial structures with the primary structure consisting of a 4-story approximately 90,000 SF brick building that is runs north-south along the entire west side of the property (see **Figure 2**). The Phase II ESA addresses the general scope of work communicated via telephone and email on approximately January 22nd between BE3/Panamerican and Regan Development. The scope of work is primarily based on standard Phase II protocol and the findings of previous Phase I ESA performed in October 2017.

The Phase I ESA was completed for the target site ("Phase I Environmental Site Assessment for 19 Doat Street and 9 Lansdale Streets Properties, Buffalo, New York" by BE3/Panamerican) revealed the following recognized environmental conditions (RECs).

- Historic use of portions of the property for textile manufacturing, textile dyeing and bleaching, optical glass and instrument manufacturing, and vehicle and tire repair are uses that typically create environmental impairment.
- Records indicate at least four different USTs were associated with the property. One permit record suggests a history of leaks from one of the UST, and there were no spill reports or documentation of removal of any of these USTs.
- Several drums and containers of unknown content were observed within the basement of the building and outside on the southern and eastern portions of the property.
- Two gasoline service stations were historically located on adjacent northern property across Doat Street.

Due to the age of the structures, lead-based paint and asbestos-containing materials are most likely associated with the buildings. PCBs and mold may also be associated with the structures and electrical equipment. The only data gap identified in the Phase I was the inaccessibility of some of the storage containers.

For this investigation, a series of borings were completed within the exterior areas of the target site using a truck mounted Geoprobe. The purpose of the assessment was to verify potential adverse environmental conditions at the project site and determine if impacts are associated with the former uses and activity on site. An additional objective of the Phase II was to determine whether any environmental impacts encountered are sufficiently significant to apply for the NYSDEC Brownfield Cleanup Program (BCP).

1.2 BACKGROUND

1.2.1 General Site Setting

The target site is currently used as a tire sale-vehicle repair location. The property has always been commercial since its original use as a clothes and textile manufacturer in the early 1900s and later as other manufacturing such as lenses and bedding. The total size of the two adjacent parcels is approximately 2-acres. The two top floors of the large, 4-story building on the property are mostly

vacant. The second floor is used for storage including miscellaneous items and paper products. The first floor is the main location where tire sales and vehicle repair occur. This area contains tools and compressors and vehicle storage. The basement contains miscellaneous items and old machines/equipment, boxes of paper and other items.

The eastern side of the target site contains numerous containers of tires, exterior piles of tires, groups of 55-gallon drums. At least ten vehicles are randomly parked in this "yard" area that is overgrown by weeds and brush/trees. A small storage area surrounded by fencing is located on the southern side and it contains more 55-gallon drums and two 250+-gallon containers partially to mostly full of oily material.

1.2.2 Physical Setting

The middle of the target site is approximately located at latitude 42º54'32.66" N; longitude 78º49'11.40" W with an elevation of 648 feet above sea level. The site is bounded to the north by mixed residential and commercial development and to the east and south by commercial properties and the Concordia Cemetery, which was listed on the National Registry of Historic Places in 2008. The target site is bound to the west by residential properties with some commercial properties along Genesee Street. The surrounding area is generally developed and urbanized.

The target site and surrounding area are relatively flat with less than 7' elevation change over approximately 2 acres. The site topography slopes from south to north and west to east; however, regional topography typically slopes towards south and west towards the Buffalo river and Lake Erie. The property drains mostly through the municipal stormwater sewer system.

Target site soils are a combination of urban land and Lima complex/Cazenovia silt loam (CgA) 0-6% slope mostly covered by concrete, asphalt, buildings, or other impervious surfaces. The area has been significantly developed as dense urban commercial/residential area since at least the late 1800s with current soils predominantly backfill material from redevelopment. Bedrock beneath the target site consists of Onondaga limestone buried beneath glacial deposits with no rock outcrops visible at ground surface. There are no streams or naturally occurring water sources (including wetlands and floodplains) near the target site, and two centuries of construction and development within the heavily urbanized area have altered any natural drainage.

1.2.3 Historical Use

Historical maps and supporting documentation indicate that the target site was vacant until 1912 when the existing the four-story building was constructed by the Monarch Knitting Company, a Canadian firm founded in 1903. The adjacent boiler house was subsequently built in 1918. Historic street directories indicate that the target site was used by the Butterworth Dyeing and Bleach Works in 1925 but was occupied by the Spencer Lens Company shortly thereafter. In 1935 American Optical purchased the Spencer Lens Company that continued to manufacture high grade optical glass, photographic lenses, projection apparatus, microscopes, and various other scientific instruments. In 1946 the building was occupied by the Bond stores, which were men's clothing manufacturers and retailers. From approximately 1950 to the early 2000's the target site was occupied by the Royal Bedding Company and other tenants including Restonic Mattress & Box Spring. By 2009 the property was sold to its current owner with Big Moe's Tires as the primary occupant along with the Patriarch Towing Company in 2014.

The target site has the following environmental history:

- 1929 permit for Spencer Lens Company to install a 550-gallon gasoline tank.
- 1950 permit for Royal Bedding to install a 1,000-gallon gasoline tank.

- 1966 permit for Royal Bedding to install a 1,000-gallon replacement gasoline tank.
- 1972 Bureau of Fire Record indicating a 5,000-gallon fuel oil tank located in the yard.
- 2010 and 2013 - violations of City ordinances regarding tire storage.
- Identified as historical cleaner site from Butterworth Dyeing and Bleach Works (1920s)
- Identified as EPA environmental compliance from Royal Bedding and current owner
- Identified as UST site for Royal Bedding Company with an 8,000-gallon #6 fuel oil tank and a 1,000-gallon diesel tank.

The surrounding area (i.e., approximately one-mile radius) of the target site indicates approximately 74 environmental database records that include some spills, historic dry cleaners, and gasoline service stations. It is possible, but unknown whether any impacts to the target site exists from these sources.

1.2.4 Contaminants of Concern

The history and use of the target site and adjacent properties indicates a potential for environmental impairment from bulk petroleum storage, chemical use, and waste disposal. The primary contaminants associated with petroleum contamination and dry cleaner solvents are primarily Volatile Organic Compounds (VOCs), including BTEX, and chlorinated solvents, respectively. Polyaromatic Hydrocarbons (PAHs) and other specific Semi Volatile Organic Compounds (SVOCs) can also be associated with petroleum in addition to the known areas of urban backfill.

1.3 SCOPE

The objective of this environmental assessment was to determine the presence of environmental impacts from historical use at and adjacent to target site. This was accomplished through subsurface sampling relative to the potential RECs identified in the Phase I ESA. Sampling was strategically performed on site to assess the following: historical petroleum usage and storage, use of dry cleaning solvents, potential contamination due to adjacent historic spills and environmental issues, and impacts associated with waste disposal.

The site investigation included the advancement of 10 soil borings and collection of 3 surface samples at designated locations on the central and east side of the target property (see **Figure 3**). Soil from each boring was visually examined, and soil samples that appeared to be environmentally impacted were collected. A total of 13 soil samples were collected from 12 separate locations and submitted to a New York State approved laboratory for analysis of NYSDEC NYCRR Part 375 compounds. Based on the contaminants typically found in urban fill, petroleum, and dry-cleaning solvents, it was determined that metals, PCBs, Pesticides, VOCs, SVOCs, and TICs would comprehensively characterize the extent of environmental impairment in the soil.

Soil borings and surface sampling locations were field located from predetermined areas with minor adjustments to accommodate underground utilities, unforeseen obstructions, possible UST locations, adjacent releases, etc. All soil borings were advanced at a minimum distance of 2.5 feet away from marked utilities to reduce the possibility of accidentally damaging an underground line. Assessment of subsurface conditions included visual/olfactory observations and VOC screening using a PID instrument of all the borings around the site.

2.0 FIELD INVESTIGATIONS

Phase II field work was completed on a single day on January 26, 2018. A photolog of field operations is included as **Appendix 1,** and a summary of the field investigation methodology and findings is

presented in Sections 2.1 through 2.3.

2.1 Soil Borings and Sampling

Ten soil borings were advanced on the eastern half of the target site (see **Figure 3**). Soil borings were field located to assess the subsurface where contamination may exist based on visual inspection, historical UST locations, waste piles, drum storage, and historical dry cleaner's location. Three surface soil samples were also collected in apparent impacted areas; one near an old transformer house, and two near suspected leaking drums. One of the leaking drum areas was near BH-9 and the other was close to two storage trailers in the center of the site. All 13 samples were collected to assess potential solvent spills, petroleum spills, and metals or pesticides from urban backfill.

Borings were advanced to a depth of four to twelve feet below ground surface (bgs) or until refusal. Drilling into bedrock was not completed, as bedrock core sampling was not required to assess subsurface contamination. The borings were completed using a truck mounted Geoprobe rig, and soil sampling was performed using Macro-Core samplers approximately 4' long and 1½" diameter. Acetate liners are contained within the Macro-Core to capture the subsurface material. Multiple cores are used as the Geoprobe is advanced farther into the subsurface (0-4', 4-8', etc.). Each of the cores is fitted with a new acetate liner prior to use.

The 10 subsurface soil samples were collected at the following locations and depths:

- BH-1 to BH-5, 6" to 1-foot bgs
- BH-6, 1.0 to 2 feet bgs
- BH-7, surface (slight PID/odor noted)
- BH-8, 1.0 to 2 feet bgs
- BH-9, 5-6 feet bgs
- BH-10, 10-12 feet bgs

Three surface samples (i.e., SS-1, 2, and 3) were also collected at areas near potential solvent or petroleum leaks or noticeable impairment of a physical feature. All samples were shipped to a NYSDEC approved laboratory to determine the extent and magnitude of soil contamination in the surface and subsurface. Stratification of material in the borings and observations were noted on boring logs (see **Appendix 2**). Prior to conducting the subsurface investigation, all utilities were located. All sampling tools were cleaned with Alconox, double rinsed with tap water, and rinsed with distilled water between sample collection points. All soil borings were backfilled and sealed with native soil.

2.2 Soil Screening

Field screening of all soil cores for VOCs was completed using a PID MiniRAE 3000. Soil cores from the boreholes were transported to an area adjacent to each boring location. The acetate liners within the Macro-Cores were removed and cut lengthwise to visually examine the material and screen the material with the PID. A wooden or metal stick or sampling spoon is used to access the center of the soil cores. Any unusual observations such as odors and discoloration, and the PID results are noted on the boring logs in **Appendix 2**. Only the boring locations were logged, and therefore, the three surface samples were not screened with the PID.

2.3 Sampling Rationale

Past uses of the site/adjacent properties indicate petroleum, metals, and dry-cleaning solvents to be the primary constituents associated with potential environmental impairment on site. The characteristics of the subsurface and suspected contaminants of concern have been defined through the Phase I ESA

and prior experience with contaminated sites. In addition, potential exists for the target site to be included into the NYSDEC Brownfield Cleanup Program (BCP), and sampling strategy was adjusted accordingly. Sampling parameters were therefore chosen to address all potential contaminants including PCBs, metals, VOCs, SVOC, and pesticides.

The methods selected to assess the potential contamination at the target site are appropriate to determine the extent of environmental impairment. At a minimum, metals, petroleum and solvent contamination (e.g., source or residual) are likely to be detected in the soil above the shallow bedrock based upon the conceptual site model. There also exists the possibility of pesticides and PCBs based upon both urban fill and antiquated electrical equipment encountered at the site. Considering the contaminant possibilities and the BCP, analyzing surface and subsurface soils for the parameters under NYSDEC Part 375 provides adequate assurance of detecting potential contamination.

3.0 RESULTS

3.1 Surface and Subsurface Conditions

The urban and commercial setting of the surrounding area dictate much of the surface conditions at the target site including barren/rocky soil with little vegetation, stained soils with noticed spills, and waste piles of drums, tires and miscellaneous automobile parts. The surface conditions exhibited signs of evident environmental impacts, and as such, a total of 4 surface samples were collected including one at boring location 7 (i.e., BH-7).

The borings indicated that subsurface conditions were also typical of an urban, commercial setting. The initial 1-4 feet of material bgs was primarily a mixture of non-native fill with mixtures of topsoil, gravel, and brick. Below the fill layer down to approximately 8-12 feet bgs, soil is predominantly a sandy/silty clay with gravel and stone. Most of this material was reddish-brown in color and tended to be stiff and hard especially at depth. The borings on the north side of the site were the exception, where the silty and sandy clays were softer at shallower elevations. Bedrock onsite was never encountered and therefore must be deeper than 12 feet bgs. Refusal was encountered at BH-3, but this was believed to be a concrete foundation or buried structure.

3.2 Analytical Results

The soil cleanup objectives (SCOs) listed in 6 NYCRR Part 375-6.8 pertain to sites governed under a NYSDEC environmental remediation program, and since the potential exists for the target site to be included under the BCP, these SCOs are applicable and appropriate in terms of reporting exceedances. See **Table 1** for the results of subsurface and surface soil samples compared to unrestricted, residential, and restricted residential SCOs in Part 375 and see the complete set of analytical data in **Appendix C**.

Samples were also analyzed for Tentatively Identified Compounds (TICs), which are compounds detected by the analytical method, but identification cannot be confirmed without additional testing. TICs are often referred to as unconventional contaminants that are not target compounds within standard test methods. The purpose of requesting the reporting of TICs is gain a more thorough understanding of the releases of chemical compounds at various times in the past. Contaminants can be altered through biological and chemical reactions called “weathering”. If TICs are not reported, environmental impacts can be underestimated. While there are no guidance values for TICs, their analysis can be useful for remediation or treatment decisions on contaminants that might otherwise go undetected.

3.2.1 Subsurface Soil

Subsurface soil samples were collected at 9 of the 10 boring locations shown on **Figure 3**. Metals, pesticides, PCBs, VOCs, or SVOCs, were detected in all but two of the boring locations. Details of the exceedances are shown in **Table 1**, but the following data provides a summary of the subsurface soil contamination:

- Metal exceedances were observed in four of the 9 boring locations – (BH-1, 2, 6, and 8).
- Pesticide exceedances were observed in four of the 9 boring locations as well – (BH-1, 2, 3, and 8).
- SVOC exceedances were observed in five of the 9 boring locations (BH-1, 2, 3, 6, and 10).
- VOC exceedances were observed in four of the 9 boring locations (BH-6, 8, 9, and 10).

Regarding the level of exceedances, either the contaminants exceeded unrestricted SCOs or restricted residential SCOs; there was not many exceedances that fell between residential and restricted residential. Most of the metal contamination exceeds unrestricted SCOs with only BH-6 having restricted residential exceedances. All the pesticide contamination in the subsurface exceeds unrestricted SCOs only and is below residential SCOs. Contamination related to SVOCs predominately exceeds restricted residential SCOs, and VOC contamination primarily exceeds unrestricted SCOs. Some of the more significant observations for contamination in the subsurface soil include the following:

- Of the 4 BHs with metals exceedances, BH-6 was the highest and exceeded restricted residential for arsenic and cyanide.
- None of the pesticide exceedances were greater than residential SCOs
- SVOC contamination in the five borings was most significant of all contaminants and possessed many exceedances above restricted residential.
- VOC contamination was like the metals with only one location exceeding restricted residential, BH-8.

3.2.2 Surface Soil

Surface soil samples were collected in 2 of the 10 boring locations (i.e., BH-7 and 9), and in two biased locations selected due to noticeable environmental impacts. **Figure 3** illustrates these locations and **Table 1** lists the laboratory data for the surface soil samples. Some of the more important observations from the four surface soil locations include the following:

- All surface soil samples have exceedances of metals, pesticides, and SVOCs.
- PCBs were detected above unrestricted SCOs in SS-1.
- SS-1 was the only surface sample to have exceedances above restricted residential SCOs for metals, pesticides, and SVOCs.
- SVOC contaminants exhibited the highest concentrations with most exceeding restricted residential SCOs.

4.0 CONCLUSIONS & RECOMMENDATIONS

The purpose of this assessment was to identify potential contamination in the surface and subsurface at 19 Doat Street with the idea that the BCP could be an option with the future development of the site. The Phase I ESA identified potential RECs from historical uses of the site as well as through observations during the site reconnaissance. These concerns included (1) industrial and commercial

historical use dated from first development of the vacant site in early 1900s, (2) possible UST or USTs located in 3 or 4 locations based upon historical use and no records of removal, (3) site reconnaissance indicates significant environmentally stressed vegetation, and (4) historical violations associated with tire sale/auto garage.

Field observations, VOC screening, and laboratory results indicate that there is widespread contamination in the surface and subsurface. Metal exceedances were observed in 7 of the 12 locations, especially in SS-1 where 7 Part375 metals had concentrations exceeding unrestricted SCOs. Eight of the 12 sampling locations were observed to have pesticide concentrations exceeding 9 Part 375 contaminants. SVOC exceedances were noted in 7 of the 12 sampling locations with all but 6 exceedances higher than restricted residential SCOs. Most of these exceedances are typical of urban fill; however, laboratory results for VOCs indicate four of the nine subsurface samples potentially associated with a petroleum spill.

All four ground of contaminants including PCBs have elevated concentration within at least 4 and up to 9 of the 12 locations investigated at the site. The more elevated results of metals and SVOCs are typical of urban fill, but the elevated VOCs results near BH-8 and corresponding field observations potentially constitute a reportable spill. Although not encountered in the field, USTs could still exist based on the lack of tank closure records. Odors from petroleum substances and transformers were also detected during sampling efforts. Ultimately, the petroleum substances, PCB exceedance, and further investigation of potential tanks must be addressed at this site even without entry into the BCP. If entrance into the BCP is desired for this site, then this laboratory data should be adequate for eligibility into the program.

5.0 WARRANTS AND LIMITATIONS

This report is based on information from limited soil sampling, organic vapor screening, and visual observations of the surface and subsurface soils. This report is intended exclusively for the purpose outlined herein at the site location and project indicated.

This report is intended for the sole use of Regan Development and others approved by Regan Development. The scope of services performed in this assessment may not be appropriate to satisfy the needs of other users and any use or reuse of this document or the findings, conclusions, or recommendations presented, is at the sole risk of the user.

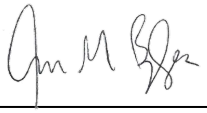
The conclusions set forth in this report are based upon, and limited by, the analytical data and other information available. It should be noted that all surface and subsurface environmental assessments are inherently limited in the sense that conclusions are drawn, and recommendations developed from information obtained from limited data and site evaluation at a specific time. The passage of time may result in a change in environmental circumstances at this site and surrounding properties, or petroleum/hazardous materials beneath the surface may be present but undetectable during this limited Phase II assessment.

Opinions and recommendations presented herein apply to the site conditions existing at the time of the subsurface assessment and those reasonably foreseeable. They cannot necessarily apply to site changes, which are not made aware and therefore not been evaluated.

6.0 PROFESSIONAL STATEMENT/SIGNATURE

This Phase II ESA at 19 Doat Street was performed in conformance with the scope and limitations of

ASTM Practice E 1903-11 for the specific objectives specified in the report. I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in 312.10 of 40CFR312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR 312.



3-31-18

Jason M. Brydges, PE, MS/MBA — Date
Total Years of Environmental Work Experience – Over 20

TABLES

Table 1
Soil Sample Analytical Results
NYCRR Part 375
Sampling Date: 1-29-18

Contaminants	Sample Identification and Depth													Soil Cleanup Objectives		
	BH-1 (0.5-1')	BH-2 (0.5-1')	BH-3 (0.5-1')	BH-4 (0.5-1')	BH-5 (0.5-1')	BH-6 (1'-2')	BH-7 (surface)	BH- 8 (1'-2')	BH-9 (5'-6')	BH-10 (10'-12')	SS-1 (surface)	SS-2 (surface)	SS-3 (surface)	Unrestricted Use	Residential	Restricted Residential
METALS																
Arsenic	1.38	3.15	ND	2.21	ND	18.7	ND	7	2.18	3.52	12.6	ND	3.56	13	16	16
Barium	53.8	99.4	21.7	57	24.3	115	91	136	102	93.8	1730	25.2	104	350	350	400
Beryllium	0.273	0.638	0.145	0.471	0.133	0.71	0.202	0.55	0.543	0.567	0.352	ND	0.513	7.2	14	72
Cadmium	0.435	0.85	0.184	ND	0.132	0.283	0.492	ND	ND	ND	5.03	0.146	0.207	2.5	2.5	4.3
Chromium, hexavalent [a]	10.7	14.5	5.54	14.9	4.14	12.6	16.9	15.3	16.9	18.5	197	4.93	18.5	1	22	110
Chromium, trivalent [a]	10.7	14.5	5.54	14.9	4.14	12.6	16.9	15.3	16.9	18.5	197	4.93	18.5	30	36	180
Copper	63.2	11.1	ND	21.7	5.15	ND	12.8	29.8	13.4	16.7	167	ND	10.2	50	270	270
Total Cyanide [a]	0.344	0.439	0.461	ND	ND	113	0.45	ND	ND	ND	15.1	0.518	0.449	27	27	27
Lead	184	118	51.3	14.1	26.9	130	82.6	69	10.3	14.6	2140	13.5	42.6	63	400	400
Manganese	207	287	160	235	127	240	211	331	428	339	496	87.9	189	1600	2,000	2,000
Total Mercury [c]	0.0308	0.0542	0.0221	0.0343	0.0257	0.107	0.0824	0.0613	0.0266	0.0196	0.612	0.00766	0.0509	0.18	0.81	0.81
Nickel	9.21	9.38	6.07	11.1	6.21	14.6	11.2	13.1	18.6	21	25.5	3.49	13.2	30	140	310
Silver	ND	0.39	0.389	0.337	0.264	0.858	0.581	ND	0.475	ND	2.49	0.47	ND	2	36	180
Zinc	139	494	41.4	44.6	30.7	132	157	81.3	47.6	69.7	2500	274	81.1	109	2200	10,000
PCBs/PESTICIDES																
4,4'-DDE	0.00509	0.00177	ND	ND	ND	ND	ND	0.00496	ND	ND	ND	ND	ND	0.0033	1.8	8.9
4,4'-DDT	0.00376	0.00494	0.00482	ND	0.00242	0.00164	ND	ND	ND	ND	0.246	0.00333	0.00462	0.0033	1.7	7.9
4,4'- DDD	0.0188	0.00474	ND	ND	0.003	0.00241	ND	0.0159	ND	ND	ND	0.00344	0.0125	0.0033	2.6	13
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00595	0.02	0.005	0.019	0.097
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0067	0.00468	0.02	0.097	0.48
Chlordane (alpha)	0.00195	0.0233	0.00187	ND	0.00593	ND	0.773	0.00315	ND	ND	ND	0.00535	0.0154	0.094	0.91	4.2
Dibenzofuran	0.251	0.458	ND	ND	ND	ND	3.04	ND	ND	0.466	12.8	ND	ND	7	14	59
Dieldrin	0.00678	ND	ND	ND	0.0035	ND	ND	0.00212	ND	ND	0.584	0.0236	0.00515	0.005	0.039	0.2
Endosulfan I [b]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00629	0.00511	2.4	4.8	24
Endosulfan II [b]	0.00573	ND	ND	ND	0.00159	ND	ND	0.00444	ND	0.00173	ND	0.00737	0.0224	2.4	4.8	24
Endosulfan sulfate [b]	0.0148	0.0192	0.0221	ND	0.00212	0.00207	0.471	0.00792	ND	0.00389	0.711	0.0146	0.0118	2.4	4.8	24
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00167	ND	0.0188	0.0297	0.014	2.2	11
Lindane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0045	ND	0.1	0.28	1.3
Polychlorinated biphenyls	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	ND	0.1	1	1
SEMIVOLATILE ORGANIC COMPOUNDS																
Acenaphthene	0.313	0.635	ND	ND	ND	ND	3.12	ND	ND	0.944	14	ND	10.2	20	100	100
Acenaphthylene	ND	ND	ND	ND	ND	ND	2.09	ND	ND	ND	ND	ND	ND	100	100	100
Anthracene	0.769	1.52	0.216	ND	ND	0.211	11.2	ND	ND	0.672	30	ND	4.22	100	100	100
Benz(a)anthracene	2.21	4.18	1.01	ND	ND	0.868	26.2	0.222	ND	1.41	64	4.05	ND	1	1	1
Benzo(a)pyrene	1.84	3.63	0.959	ND	ND	0.726	18.6	0.236	ND	0.803	54.2	ND	ND	1	1	1
Benzo(b)fluoranthene	2	3.96	1.15	ND	ND	0.727	23.2	0.312	ND	ND	52.5	4.9	ND	1	1	1
Benzo(g,h,i)perylene	1.23	2.52	0.717	ND	ND	0.468	10.9	0.221	ND	0.436	33.9	3.75	ND	100	100	100
Benzo(k)fluoranthene	1.29	2.59	0.561	ND	ND	0.577	9.96	0.173	ND	ND	40.2	ND	ND	0.8	1	3.9
Chrysene	2.09	4.16	1	ND	ND	0.857	23.4	0.289	ND	2.62	60.2	ND	5.5	1	1	3.9
Dibenz(a,h)anthracene	0.43	0.873	0.251	ND	ND	0.173	4.74	ND	ND	ND	12	ND	ND	0.33	0.33	0.33
Fluoranthene	5.01	9.92	2.02	ND	1.38	1.73	57.1	0.378	ND	0.401	166	6.82	ND	100	100	100
Fluorene	0.335	0.727	ND	ND	ND	ND	4.32	ND	ND	1.46	16.1	ND	15.4	30	100	100
Indeno(1,2,3-cd)pyrene	1.38	2.81	0.786	ND	ND	0.542	13.3	0.263	ND	ND	41	4.9	ND	0.5	0.5	0.5
Naphthalene	0.237	ND	ND	ND	ND	ND	ND	2.68	ND	5.82	13.6	ND	7.51	12	100	100
Phenanthrene	3.83	7.86	1.04	ND	0.894	0.675	55.2	0.424	ND	9.1	149	5.44	47.9	100	100	100
Pyrene	3.6	7.3	1.57	ND	1.03	1.38	39.8	0.452	ND	2	126	6.75	6.73	100	100	100
TICs	74	20.6	7.4	2.05	24.4	6.4	123	104	5.3	271	268	353	5550	NA	NA	NA

Table 1
Soil Sample Analytical Results
NYCRR Part 375
Sampling Date: 1-29-18

Contaminants	Sample Identification and Depth													Soil Cleanup Objectives		
	BH-1 (0.5-1')	BH-2 (0.5-1')	BH-3 (0.5-1')	BH-4 (0.5-1')	BH-5 (0.5-1')	BH-6 (1'-2')	BH-7 (surface)	BH- 8 (1'-2')	BH-9 (5'-6')	BH-10 (10'-12')	SS-1 (surface)	SS-2 (surface)	SS-3 (surface)	Unrestricted Use	Residential	Restricted Residential
VOLATILE ORGANIC COMPOUNDS																
cis-1,2-Dichloroethene	ND	0.00499	0.00414	ND	0.00287	0.00329	NA	ND	ND	ND	NA	ND	NA	0.25	59	100
Acetone	ND	ND	0.0384	ND	ND	0.314	NA	ND	ND	ND	NA	0.203	NA	0.05	100	100
Benzene	ND	0.00316	0.00412	ND	0.00234	0.00652	NA	ND	ND	1.76	NA	ND	NA	0.06	2.9	4.8
Butylbenzene (n)	ND	ND	ND	ND	ND	ND	NA	ND	ND	2.21	NA	ND	NA	12	100	100
Ethylbenzene	ND	0.00277	0.00383	ND	ND	0.0364	NA	5.73	ND	4.56	NA	ND	NA	1	30	41
Methyl ethyl ketone (2-	ND	ND	0.0202	ND	ND	0.0118	NA	ND	ND	ND	NA	0.0519	NA	0.12	100	100
Methylene chloride	ND	0.00688	ND	ND	ND	0.00754	NA	ND	ND	ND	NA	ND	NA	0.05	51	100
n-Propylbenzene	ND	ND	0.00504	ND	ND	0.0166	NA	6.1	ND	1.29	NA	ND	NA	3.9	100	100
sec-Butylbenzene	ND	ND	0.00271	ND	ND	0.00294	NA	ND	ND	0.819	NA	ND	NA	11	100	100
Toluene	0.00297	0.00325	0.00513	ND	0.0023	0.0656	NA	ND	ND	ND	NA	ND	NA	0.7	100	100
Trichloroethene	0.0532	0.214	0.173	0.0367	0.0585	0.0655	NA	ND	8.82	ND	NA	ND	NA	0.47	10	21
1,2,4-Trimethylbenzene	0.00318	0.00388	0.172	0.00298	0.0162	0.203	NA	371	ND	4.54	NA	0.0437	NA	3.6	47	52
1,3,5- Trimethylbenzene	ND	0.00249	0.0358	ND	0.00689	0.0651	NA	154	ND	ND	NA	0.0104	NA	8.4	47	52
Xylene (mixed)	0.01186	0.03463	0.044	0.00949	0.018	0.294	NA	232.2	ND	0.765	NA	0.0302	NA	0.26	100	100
TICs	ND	0.185	4.42	ND	0.186	1.75	NA	2080	5.64	251	NA	1.18	NA	NA	NA	NA

Results and SCOs are in parts per million (ppm).
ND - Non-Detect
NA - Not Applicable
NS - Not Specified, and may be required to calculate the ERSCO
[a] The SCO for this compound (or family of compounds) is considered met if the analysis for the total species of this compound is below the specific SCO.
[b] SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate (but not for Eco or GW SCO).
[c] This SCO includes the values for elemental Hg or inorganic salts Hg.

1	= laboratory value exceeds restricted residential SCOs
2	= laboratory value exceeds residential SCOs but does not exceed restricted residential SCOs
3	= laboratory value exceeds unrestricted SCOs but does not exceed residential SCOs

FIGURES

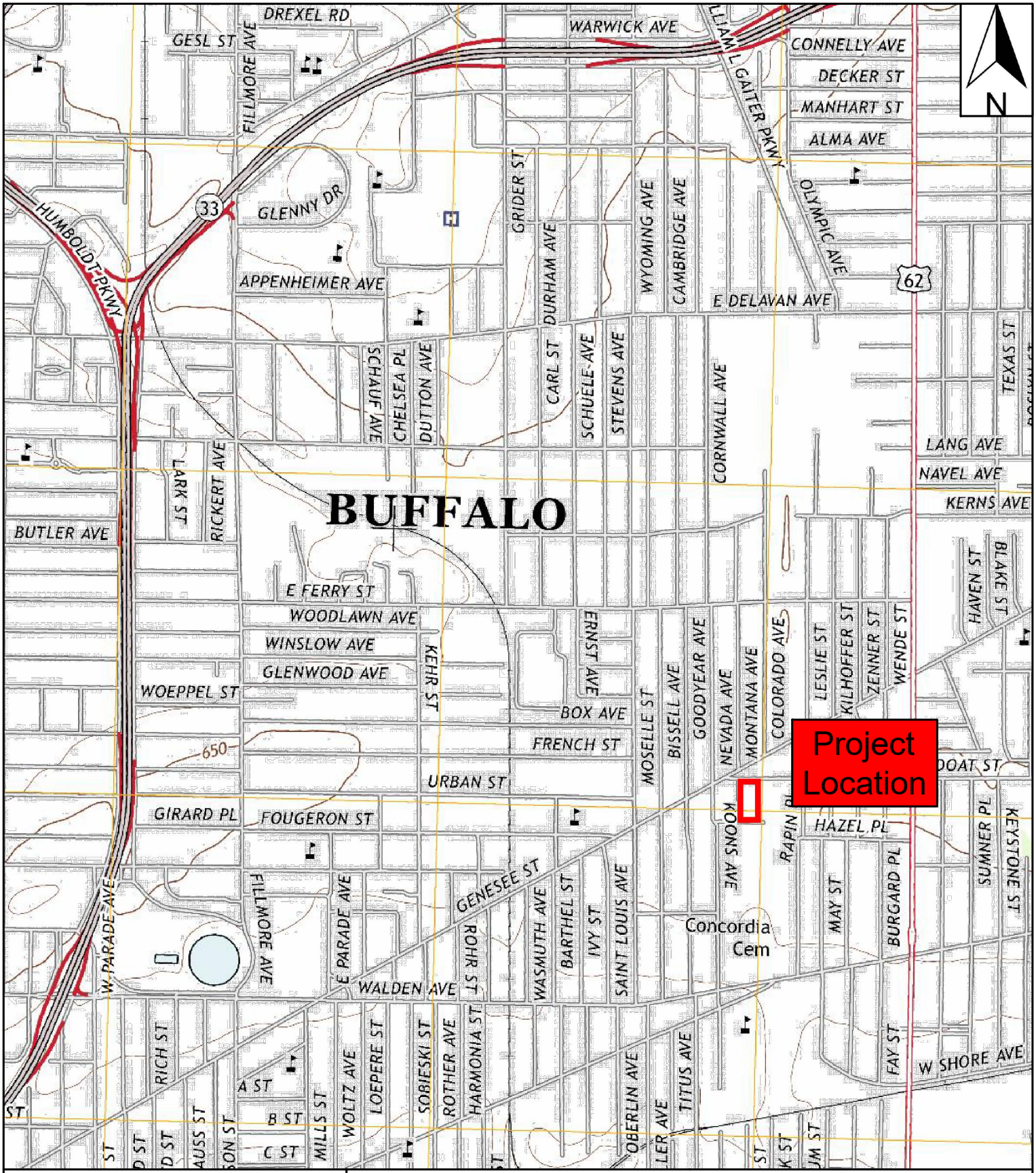


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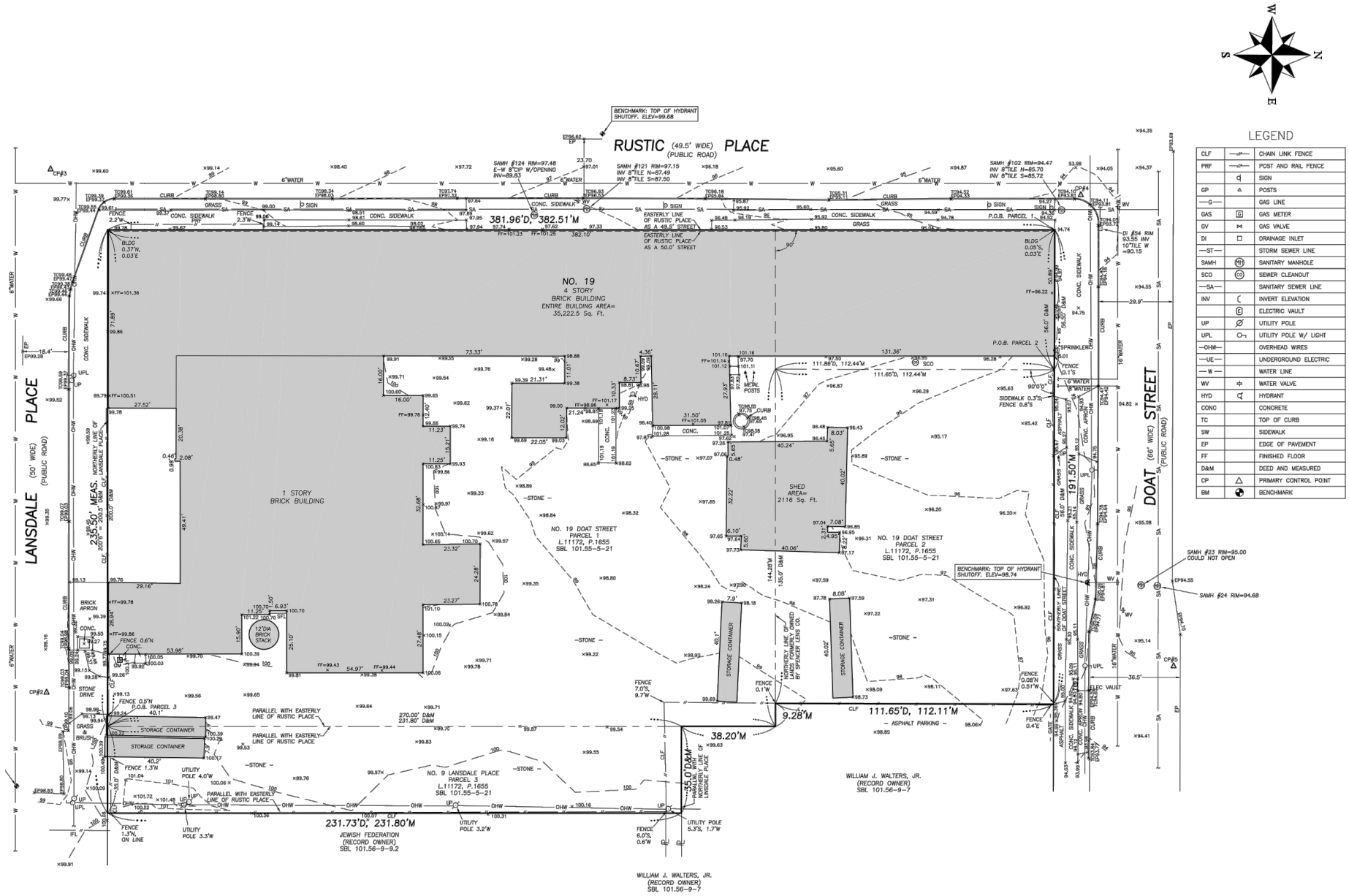
Figure 1: Project Location Map

19 Doat Street	2/26/2018
Buffalo, NY	Regan Devlopment



LEGEND

CLF	—x—x—	CHAIN LINK FENCE
PRF	—//—//—	POST AND RAIL FENCE
		SIGN
GP		POSTS
—G—		GAS LINE
GAS	G	GAS METER
GV		GAS VALVE
DI		DRAINAGE INLET
—ST—		STORM SEWER LINE
SAMH	SA	SANITARY MANHOLE
SCO	SO	SEWER CLEANOUT
—SA—		SANITARY SEWER LINE
INV		INVERT ELEVATION
	E	ELECTRIC VAULT
UP		UTILITY POLE
UPL		UTILITY POLE W/ LIGHT
—OHW—		OVERHEAD WIRES
—UE—		UNDERGROUND ELECTRIC
—W—		WATER LINE
WV		WATER VALVE
HYD		HYDRANT
CONC		CONCRETE
TC		TOP OF CURB
SW		SIDEWALK
EP		EDGE OF PAVEMENT
FF		FINISHED FLOOR
D&M		DEED AND MEASURED
CP		PRIMARY CONTROL POINT
BM		BENCHMARK

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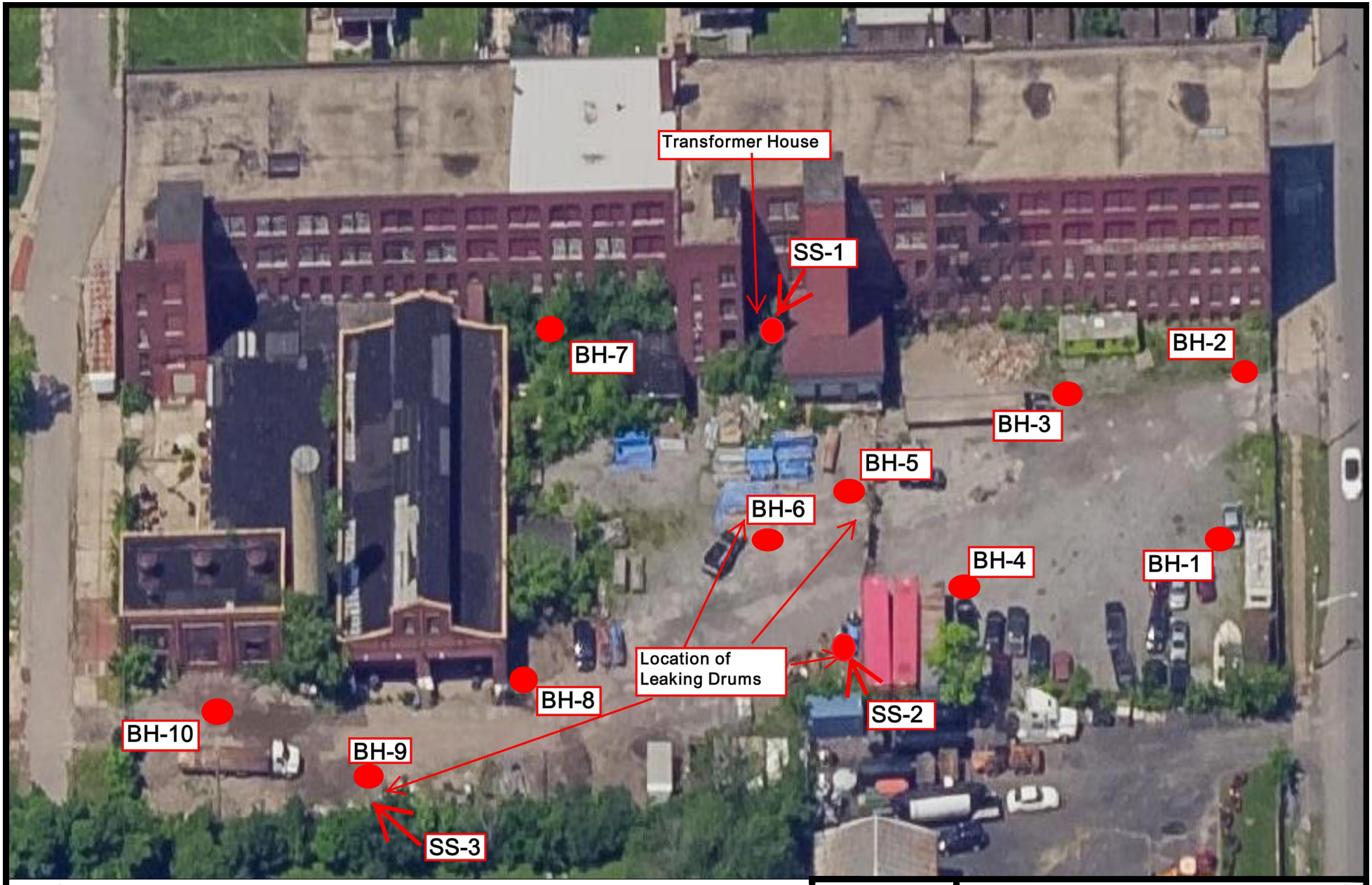
FIGURE 2: SITE SURVEY

19 DOAT STREET

Regan Development
1055 Saw Mill River Road #204
Ardsley, NY 10502

2-28-2018 | SCALE: N/A | SHEET 1 OF 1



LEGEND:

BH-1 Boring/Sampling Location

SS-1 Surface Soil Sample Location

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Figure 3: Boring/Sampling Locations

19 Doat Street

Regan Development
1055 Saw Mill River Road #204
Ardsley, NY 10502

01-31-2018 | SCALE: N/A | SHEET 1 OF 1

APPENDICES

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Date: 1/26/18

1. Borehole BH-1 location; from south facing north towards Doat Street

2. View of location of BH-1 from west facing east facing south

3. Location of BH-1 from east facing west

4. Borehole BH-1 cores

BE3/PANAMERICAN Photolog

Date: 1/26/18

5. Location of BH-2 from east facing west

6. Location of BH-2 from south facing north at Doat Street

7. BH-2 soil cores

8. Location of BH-3 facing south

BE3/PANAMERICAN Photolog

Date: 1/26/18

9. Location of BH-3 facing north

10. Location ofBH-3 facing northwest

11. Borehole BH-3 soil cores

12. Location of BH-4 facing east-southeast from northeast corner of building

BE3/PANAMERICAN Photolog

Date: 1/26/18

13. Location of BH-4 facing east

14. Location of BH-4 facing north from center of yard

15. Soil Cores BH-4

16. Location of Borehole BH-5 facing west

BE3/PANAMERICAN Photolog

Date: 1/26/18

17. Borehole BH-5 location facing north

18. Stained soil at BH-5

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19. Location of transformers and transformer house along the east side of the property mid way

20. Transformers and transformer house and location of surface soil sample 1

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Date: 1/26/18

21. BH-5 soil cores

22. Location of surface soil sample 2

23. Location of Borehole BH-6 facing west at east side of building

24 Location of borehole BH-6 facing south

BE3/PANAMERICAN Photolog

Date: 1/26/18

25. Soil cores BH-6

26. Location of Borehole BH-7 facing southwest

27. Location of borehole BH-7 facing west

28. Location of BH-7 facing east

BE3/PANAMERICAN Photolog

Date: 1/26/18

29. Soil Cores BH-7

30. Location of Borehole BH-8 facing south

31. Location of BH-8 facing west

32. Location of BH-8 facing southwest

BE3/PANAMERICAN Photolog

Date: 1/26/18

33. Soil Cores BH-8

34. Location of Borehole BH-9 facing south

35. Location of BH-9 facing east

36. Surface soil 3 location adjacent to B9 and leaking drums. Drums reportedly filled with fuel oil tank bottoms

BE3/PANAMERICAN Photolog

Date: 1/26/18

37. Location of Borehole BH-10 facing south at Lansdale Place

38. Location of BH-10 from Lansdale Place facing north

35. Soil cores BH-10. Note supposed location of former fuel oil tank

Geoprobe
Bore Hole Log

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-1	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			0-0.5 feet - fill & stone
1			soil sample at 0.5-1 foot
2			0.5-2 feet - sandy silty clay - light brown-red
3			2-3 feet - sandy silty clay - light brown-red - soft
4			3-4 feet - sandy silty clay - hard - some stone
5			
6			4-6 feet - sandy silty clay - light brown- red
7			
8			
9			
10			6-10 feet - sandy sity clay - light brown -red - hard
11			
12			
13			
14			
15			
16			

Comments: PID - 0 ppm above background. Collect surface soil sample at 0.5-1 ft

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Bore Hole Log

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-2	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			
1			0-1 - fill &stone
			Took soil sample from 0.5-1 foot
2			
3			1-3 feet - sandy silt
4			3-4 Sandy silty clay - soft - red-light brown
5			
6			4-6 feet - sandy silty clay - light brown- red - soft
7			
8			6-8 Sandy silty clay - hard - light brown-red
9			
10			
11			
12			8-12 feet - sandy, silty clay - hard - light brown-red
13			
14			
15			
16			

Comments: PID - 0 ppm above background. Collect soil sample at 0.5-1 ft

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-3	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			
1			0-1 - fill & gravel/stone
			Took soil sample from 0.5-1 foot
2			1-2 feet - sandy, silty clay - light brown-red
			refusal at 2 feet - possible concrete
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Comments: PID - 0 ppm above background. Collect soil sample at 0.5-1 ft

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-4	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			
1			0-1 - fill & gravel/stone
			Took soil sample from 0.5-1 foot
2			
3			
4			
5			
6			
7			
8			1-8 feet - silty sandy clay - red - light brown stiff/hard
9			
10			
11			
12			
13			
14			
15			
16			

Comments: PID - 0 ppm above background. Collect soil sample at 0.5-1 ft

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-5	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			
1			0-1 - fill & gravel/stone; oily (adjacent to leaking drums)
			Took soil sample from 0.5-1 foot
2			
3			1-3 feet - silty sandy clay - hard light brown-red
4			3-4 feet - sandy silty clay - red-light brown soft/damp
5			
6			
7			
8			4-8 feet - silty sandy clay - tight
9			
10			
11			
12			
13			
14			
15			
16			

Comments: PID - 0 ppm above background. Collect soil sample at 0.5-1 ft

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-6	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			
1			
2			0-2.5 feet - fill, black silty, stone/gravel, brick
			tooksoil sample 1-2 foot
3			
4			2.5-4 feet - sandy silty clay - red-light brown
5			
6			4-6 feet - sandy, silty clay - red - light brown
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Comments: PID - 0 ppm above background. Collect soil sample at 1-2ft

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-7	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			0-0.5 feet - fill - collected surface soil sample
1			
2			
3			
4			1-4 feet - sandy silty clay - red-light brown - tight
5			
6			
7			
8			4-8 feet - sandy, silty clay - light brown-red - tight
9			
10			
11			
12			
13			
14			
15			
16			

Comments: PID - 0 ppm above background. Collect surface soil sample only

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-8	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			0-0.5 feet - fill
1			
2			0.5-2 feet - brown sandy silty clay - Odor & PID 300+
			took soil sample 1-2 feet
3			
4			2-4 feet - sandy silty clay - red-light brown - tight
			PID - 10 ppm at 4-5.8 feet
5			
6			4-6 feet - sandy silty clay
			PID background at 6 feet
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Comments: PID - 300+ ppm above background at 1-2 feet. 10 ppm at 4-5.8 feet and o ppm at 6 feet. Collect soil sample at 1-2 feet

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-9	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			0-0.5 feet - fill gravel
1			0.5-1 feet dark silty clay
2			
3			
4			1-4 feet - sandy silty clay - red-light brown - tight
5			
6			collected sample 5-6 feet
7			
8			4-8 sandy silty clay - light brown-red
9			
10			
11			
12			
13			
14			
15			
16			

Comments: PID - 3-30ppm above background at 1-8 feet. Collected surface tar sample. Collected soil sample at 5-6 feet

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Project: 19 Doat Street	Sheet: 1 of 1
Client: Regan Development	Location: 19 Doat Street, Buffalo NY
Contractor: Natures Way	Ground Elevation:
Date Started: Jan. 26, 2018	Operator:
Date Completed: Jan. 26, 2018	Geologist/Technician: Gorton
Bore Hole Number: BH-10	Ground Water:

Depth (FT)	Sample NO	Sample TYPE	Description
0			
1			
2			
3			
4			0-4 feet - fill - red,tan brick
5			
6			
7			
8			4-8 feet sandy silt - very wet
9			
10			8-10 feet - sandy sily soft and very wet
11			
12			10-12 - silty sandy clay with tar/oil- odor
13			
14			
15			
16			

Comments: Collected surface tar sample. Collected soil sample at 8-12 feet

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-1 0.5-1 Ft		
Lab Sample ID:	180335-01	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**1.38**	mg/Kg		2/6/2018 18:15
Barium	**53.8**	mg/Kg		2/6/2018 18:15
Beryllium	**0.273**	mg/Kg		2/6/2018 18:15
Cadmium	**0.435**	mg/Kg		2/6/2018 18:15
Chromium	**10.7**	mg/Kg		2/6/2018 18:15
Copper	**63.2**	mg/Kg		2/6/2018 18:15
Lead	**184**	mg/Kg		2/6/2018 18:15
Manganese	**207**	mg/Kg		2/6/2018 18:15
Nickel	**9.21**	mg/Kg		2/6/2018 18:15
Selenium	< 3.01	mg/Kg		2/6/2018 19:26
Silver	< 0.501	mg/Kg		2/6/2018 18:15
Zinc	**139**	mg/Kg		2/6/2018 18:15

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-1 0.5-1 Ft		
Lab Sample ID:	180335-01	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0308**	mg/Kg		2/6/2018 10:51

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-1 0.5-1 Ft		
Lab Sample ID:	180335-01	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1221	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1232	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1242	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1248	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1254	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1260	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1262	< 0.0287	mg/Kg		2/1/2018 01:03
PCB-1268	< 0.0287	mg/Kg		2/1/2018 01:03

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**71.5**	22.2 - 140		2/1/2018 01:03
Tetrachloro-m-xylene	**48.8**	11.8 - 125		2/1/2018 01:03

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-1 0.5-1 Ft		
Lab Sample ID:	180335-01	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	**18.8**	ug/Kg		2/5/2018 14:29
4,4-DDE	**5.09**	ug/Kg		2/5/2018 14:29
4,4-DDT	**3.76**	ug/Kg	P	2/5/2018 14:29
Aldrin	< 2.87	ug/Kg		2/5/2018 14:29
alpha-BHC	< 2.87	ug/Kg		2/5/2018 14:29
beta-BHC	< 2.87	ug/Kg		2/5/2018 14:29
cis-Chlordane	**1.95**	ug/Kg	JP	2/5/2018 14:29
delta-BHC	< 2.87	ug/Kg		2/5/2018 14:29
Dieldrin	**6.78**	ug/Kg	P	2/5/2018 14:29
Endosulfan I	< 2.87	ug/Kg		2/5/2018 14:29
Endosulfan II	**5.73**	ug/Kg	P	2/5/2018 14:29
Endosulfan Sulfate	**14.8**	ug/Kg	P	2/5/2018 14:29
Endrin	< 2.87	ug/Kg		2/5/2018 14:29
Endrin Aldehyde	**3.26**	ug/Kg	P	2/5/2018 14:29
Endrin Ketone	**7.63**	ug/Kg	P	2/5/2018 14:29
gamma-BHC (Lindane)	< 2.87	ug/Kg		2/5/2018 14:29
Heptachlor	< 2.87	ug/Kg		2/5/2018 14:29
Heptachlor Epoxide	< 2.87	ug/Kg		2/5/2018 14:29
Methoxychlor	**26.2**	ug/Kg	P	2/5/2018 14:29
Toxaphene	< 28.7	ug/Kg		2/5/2018 14:29
trans-Chlordane	**5.47**	ug/Kg	P	2/5/2018 14:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**167**	31.5 - 168		2/5/2018 14:29
Tetrachloro-m-xylene (1)	**59.4**	26.7 - 117		2/5/2018 14:29

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-1 0.5-1 Ft
Lab Sample ID: 180335-01 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 306	ug/Kg		1/30/2018 17:30
1,2,4,5-Tetrachlorobenzene	< 306	ug/Kg		1/30/2018 17:30
1,2,4-Trichlorobenzene	< 306	ug/Kg		1/30/2018 17:30
1,2-Dichlorobenzene	< 306	ug/Kg		1/30/2018 17:30
1,3-Dichlorobenzene	< 306	ug/Kg		1/30/2018 17:30
1,4-Dichlorobenzene	< 306	ug/Kg		1/30/2018 17:30
2,2-Oxybis (1-chloropropane)	< 306	ug/Kg		1/30/2018 17:30
2,3,4,6-Tetrachlorophenol	< 306	ug/Kg		1/30/2018 17:30
2,4,5-Trichlorophenol	< 613	ug/Kg		1/30/2018 17:30
2,4,6-Trichlorophenol	< 306	ug/Kg		1/30/2018 17:30
2,4-Dichlorophenol	< 306	ug/Kg		1/30/2018 17:30
2,4-Dimethylphenol	< 306	ug/Kg		1/30/2018 17:30
2,4-Dinitrophenol	< 613	ug/Kg		1/30/2018 17:30
2,4-Dinitrotoluene	< 306	ug/Kg		1/30/2018 17:30
2,6-Dinitrotoluene	< 306	ug/Kg		1/30/2018 17:30
2-Chloronaphthalene	< 306	ug/Kg		1/30/2018 17:30
2-Chlorophenol	< 306	ug/Kg		1/30/2018 17:30
2-Methylnapthalene	< 306	ug/Kg		1/30/2018 17:30
2-Methylphenol	< 306	ug/Kg		1/30/2018 17:30
2-Nitroaniline	< 613	ug/Kg		1/30/2018 17:30
2-Nitrophenol	< 306	ug/Kg		1/30/2018 17:30
3&4-Methylphenol	< 306	ug/Kg		1/30/2018 17:30
3,3'-Dichlorobenzidine	< 306	ug/Kg		1/30/2018 17:30
3-Nitroaniline	< 613	ug/Kg		1/30/2018 17:30
4,6-Dinitro-2-methylphenol	< 613	ug/Kg		1/30/2018 17:30
4-Bromophenyl phenyl ether	< 306	ug/Kg		1/30/2018 17:30
4-Chloro-3-methylphenol	< 306	ug/Kg		1/30/2018 17:30

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-1 0.5-1 Ft
Lab Sample ID: 180335-01 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 306	ug/Kg		1/30/2018	17:30
4-Chlorophenyl phenyl ether	< 306	ug/Kg		1/30/2018	17:30
4-Nitroaniline	< 613	ug/Kg		1/30/2018	17:30
4-Nitrophenol	< 613	ug/Kg		1/30/2018	17:30
Acenaphthene	**313**	ug/Kg		1/30/2018	17:30
Acenaphthylene	< 306	ug/Kg		1/30/2018	17:30
Acetophenone	< 306	ug/Kg		1/30/2018	17:30
Anthracene	**769**	ug/Kg		1/30/2018	17:30
Atrazine	< 306	ug/Kg		1/30/2018	17:30
Benzaldehyde	< 306	ug/Kg		1/30/2018	17:30
Benzo (a) anthracene	**2210**	ug/Kg		1/30/2018	17:30
Benzo (a) pyrene	**1840**	ug/Kg		1/30/2018	17:30
Benzo (b) fluoranthene	**2000**	ug/Kg		1/30/2018	17:30
Benzo (g,h,i) perylene	**1230**	ug/Kg		1/30/2018	17:30
Benzo (k) fluoranthene	**1290**	ug/Kg		1/30/2018	17:30
Bis (2-chloroethoxy) methane	< 306	ug/Kg		1/30/2018	17:30
Bis (2-chloroethyl) ether	< 306	ug/Kg		1/30/2018	17:30
Bis (2-ethylhexyl) phthalate	**270**	ug/Kg	J	1/30/2018	17:30
Butylbenzylphthalate	< 306	ug/Kg		1/30/2018	17:30
Caprolactam	< 306	ug/Kg		1/30/2018	17:30
Carbazole	**498**	ug/Kg		1/30/2018	17:30
Chrysene	**2090**	ug/Kg		1/30/2018	17:30
Dibenz (a,h) anthracene	**430**	ug/Kg		1/30/2018	17:30
Dibenzofuran	**251**	ug/Kg	J	1/30/2018	17:30
Diethyl phthalate	< 306	ug/Kg		1/30/2018	17:30
Dimethyl phthalate	< 613	ug/Kg		1/30/2018	17:30
Di-n-butyl phthalate	< 306	ug/Kg		1/30/2018	17:30
Di-n-octylphthalate	< 306	ug/Kg		1/30/2018	17:30
Fluoranthene	**5010**	ug/Kg		1/30/2018	17:30
Fluorene	**335**	ug/Kg		1/30/2018	17:30

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-1 0.5-1 Ft
Lab Sample ID: 180335-01 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 306	ug/Kg		1/30/2018	17:30
Hexachlorobutadiene	< 306	ug/Kg		1/30/2018	17:30
Hexachlorocyclopentadiene	< 306	ug/Kg		1/30/2018	17:30
Hexachloroethane	< 306	ug/Kg		1/30/2018	17:30
Indeno (1,2,3-cd) pyrene	**1380**	ug/Kg		1/30/2018	17:30
Isophorone	< 306	ug/Kg		1/30/2018	17:30
Naphthalene	**237**	ug/Kg	J	1/30/2018	17:30
Nitrobenzene	< 306	ug/Kg		1/30/2018	17:30
N-Nitroso-di-n-propylamine	< 306	ug/Kg		1/30/2018	17:30
N-Nitrosodiphenylamine	< 306	ug/Kg		1/30/2018	17:30
Pentachlorophenol	< 613	ug/Kg		1/30/2018	17:30
Phenanthrene	**3830**	ug/Kg		1/30/2018	17:30
Phenol	< 306	ug/Kg		1/30/2018	17:30
Pyrene	**3600**	ug/Kg		1/30/2018	17:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**71.1**	55.4 - 114		1/30/2018	17:30
2-Fluorobiphenyl	**69.0**	39.9 - 112		1/30/2018	17:30
2-Fluorophenol	**64.3**	41.9 - 97.1		1/30/2018	17:30
Nitrobenzene-d5	**64.1**	41 - 96		1/30/2018	17:30
Phenol-d5	**65.8**	43.7 - 101		1/30/2018	17:30
Terphenyl-d14	**71.6**	71.7 - 115	*	1/30/2018	17:30

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25008.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-1 0.5-1 Ft		
Lab Sample ID:	180335-01	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 4.28	ug/Kg		1/30/2018 19:40
1,1,2,2-Tetrachloroethane	< 4.28	ug/Kg		1/30/2018 19:40
1,1,2-Trichloroethane	< 4.28	ug/Kg		1/30/2018 19:40
1,1-Dichloroethane	< 4.28	ug/Kg		1/30/2018 19:40
1,1-Dichloroethene	< 4.28	ug/Kg		1/30/2018 19:40
1,2,3-Trichlorobenzene	< 10.7	ug/Kg		1/30/2018 19:40
1,2,4-Trichlorobenzene	< 10.7	ug/Kg		1/30/2018 19:40
1,2,4-Trimethylbenzene	**3.18**	ug/Kg	J	1/30/2018 19:40
1,2-Dibromo-3-Chloropropane	< 21.4	ug/Kg		1/30/2018 19:40
1,2-Dibromoethane	< 4.28	ug/Kg		1/30/2018 19:40
1,2-Dichlorobenzene	< 4.28	ug/Kg		1/30/2018 19:40
1,2-Dichloroethane	< 4.28	ug/Kg		1/30/2018 19:40
1,2-Dichloropropane	< 4.28	ug/Kg		1/30/2018 19:40
1,3,5-Trimethylbenzene	< 4.28	ug/Kg		1/30/2018 19:40
1,3-Dichlorobenzene	< 4.28	ug/Kg		1/30/2018 19:40
1,4-Dichlorobenzene	< 4.28	ug/Kg		1/30/2018 19:40
1,4-dioxane	< 42.8	ug/Kg		1/30/2018 19:40
2-Butanone	< 21.4	ug/Kg		1/30/2018 19:40
2-Hexanone	< 10.7	ug/Kg		1/30/2018 19:40
4-Methyl-2-pentanone	< 10.7	ug/Kg		1/30/2018 19:40
Acetone	< 21.4	ug/Kg		1/30/2018 19:40
Benzene	< 4.28	ug/Kg		1/30/2018 19:40
Bromochloromethane	< 10.7	ug/Kg		1/30/2018 19:40
Bromodichloromethane	< 4.28	ug/Kg		1/30/2018 19:40
Bromoform	< 10.7	ug/Kg		1/30/2018 19:40
Bromomethane	< 4.28	ug/Kg		1/30/2018 19:40
Carbon disulfide	< 4.28	ug/Kg		1/30/2018 19:40

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-1 0.5-1 Ft
Lab Sample ID: 180335-01 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 4.28	ug/Kg		1/30/2018	19:40
Chlorobenzene	< 4.28	ug/Kg		1/30/2018	19:40
Chloroethane	< 4.28	ug/Kg		1/30/2018	19:40
Chloroform	< 4.28	ug/Kg		1/30/2018	19:40
Chloromethane	< 4.28	ug/Kg		1/30/2018	19:40
cis-1,2-Dichloroethene	< 4.28	ug/Kg		1/30/2018	19:40
cis-1,3-Dichloropropene	< 4.28	ug/Kg		1/30/2018	19:40
Cyclohexane	< 21.4	ug/Kg		1/30/2018	19:40
Dibromochloromethane	< 4.28	ug/Kg		1/30/2018	19:40
Dichlorodifluoromethane	< 4.28	ug/Kg		1/30/2018	19:40
Ethylbenzene	< 4.28	ug/Kg		1/30/2018	19:40
Freon 113	< 4.28	ug/Kg		1/30/2018	19:40
Isopropylbenzene	< 4.28	ug/Kg		1/30/2018	19:40
m,p-Xylene	**9.22**	ug/Kg		1/30/2018	19:40
Methyl acetate	< 4.28	ug/Kg		1/30/2018	19:40
Methyl tert-butyl Ether	< 4.28	ug/Kg		1/30/2018	19:40
Methylcyclohexane	**8.16**	ug/Kg		1/30/2018	19:40
Methylene chloride	< 10.7	ug/Kg		1/30/2018	19:40
Naphthalene	< 10.7	ug/Kg		1/30/2018	19:40
n-Butylbenzene	< 4.28	ug/Kg		1/30/2018	19:40
n-Propylbenzene	< 4.28	ug/Kg		1/30/2018	19:40
o-Xylene	**2.64**	ug/Kg	J	1/30/2018	19:40
p-Isopropyltoluene	< 4.28	ug/Kg		1/30/2018	19:40
sec-Butylbenzene	< 4.28	ug/Kg		1/30/2018	19:40
Styrene	< 10.7	ug/Kg		1/30/2018	19:40
tert-Butylbenzene	< 4.28	ug/Kg		1/30/2018	19:40
Tetrachloroethene	< 4.28	ug/Kg		1/30/2018	19:40
Toluene	**2.97**	ug/Kg	J	1/30/2018	19:40
trans-1,2-Dichloroethene	< 4.28	ug/Kg		1/30/2018	19:40
trans-1,3-Dichloropropene	< 4.28	ug/Kg		1/30/2018	19:40

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-1 0.5-1 Ft
Lab Sample ID: 180335-01 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	**53.2**	ug/Kg		1/30/2018	19:40
Trichlorofluoromethane	< 4.28	ug/Kg		1/30/2018	19:40
Vinyl chloride	< 4.28	ug/Kg		1/30/2018	19:40

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**107**	86.2 - 128		1/30/2018	19:40
4-Bromofluorobenzene	**94.9**	69.8 - 123		1/30/2018	19:40
Pentafluorobenzene	**105**	82.2 - 114		1/30/2018	19:40
Toluene-D8	**103**	81.3 - 113		1/30/2018	19:40

Method Reference(s): EPA 8260C
EPA 5035A - L
Data File: x48398.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-1 0.5-1 Ft		
Lab Sample ID:	180335-01	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.344**	mg/Kg	J	2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-2 0.5-1 Ft		
Lab Sample ID:	180335-02	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**3.15**	mg/Kg		2/6/2018 18:18
Barium	**99.4**	mg/Kg		2/6/2018 18:18
Beryllium	**0.638**	mg/Kg		2/6/2018 18:18
Cadmium	**0.850**	mg/Kg		2/6/2018 18:18
Chromium	**14.5**	mg/Kg		2/6/2018 18:18
Copper	**11.1**	mg/Kg		2/6/2018 18:18
Lead	**118**	mg/Kg		2/6/2018 18:18
Manganese	**287**	mg/Kg		2/6/2018 18:18
Nickel	**9.38**	mg/Kg		2/6/2018 18:18
Selenium	< 3.25	mg/Kg		2/6/2018 19:30
Silver	**0.390**	mg/Kg	J	2/6/2018 18:18
Zinc	**494**	mg/Kg		2/6/2018 18:18

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-2 0.5-1 Ft		
Lab Sample ID:	180335-02	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0542**	mg/Kg		2/6/2018 10:54

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-2 0.5-1 Ft		
Lab Sample ID:	180335-02	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1221	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1232	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1242	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1248	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1254	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1260	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1262	< 0.0321	mg/Kg		2/1/2018 01:26
PCB-1268	< 0.0321	mg/Kg		2/1/2018 01:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**67.1**	22.2 - 140		2/1/2018 01:26
Tetrachloro-m-xylene	**44.8**	11.8 - 125		2/1/2018 01:26

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-2 0.5-1 Ft
Lab Sample ID: 180335-02 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	**4.74**	ug/Kg	P	2/5/2018 14:42
4,4-DDE	**1.77**	ug/Kg	J	2/5/2018 14:42
4,4-DDT	**4.94**	ug/Kg		2/5/2018 14:42
Aldrin	< 3.21	ug/Kg		2/5/2018 14:42
alpha-BHC	< 3.21	ug/Kg		2/5/2018 14:42
beta-BHC	< 3.21	ug/Kg		2/5/2018 14:42
cis-Chlordane	**23.3**	ug/Kg		2/5/2018 14:42
delta-BHC	< 3.21	ug/Kg		2/5/2018 14:42
Dieldrin	< 3.21	ug/Kg		2/5/2018 14:42
Endosulfan I	< 3.21	ug/Kg		2/5/2018 14:42
Endosulfan II	< 3.21	ug/Kg		2/5/2018 14:42
Endosulfan Sulfate	**19.2**	ug/Kg	P	2/5/2018 14:42
Endrin	< 3.21	ug/Kg		2/5/2018 14:42
Endrin Aldehyde	**1.92**	ug/Kg	JP	2/5/2018 14:42
Endrin Ketone	**10.7**	ug/Kg		2/5/2018 14:42
gamma-BHC (Lindane)	< 3.21	ug/Kg		2/5/2018 14:42
Heptachlor	< 3.21	ug/Kg		2/5/2018 14:42
Heptachlor Epoxide	< 3.21	ug/Kg		2/5/2018 14:42
Methoxychlor	**12.8**	ug/Kg	P	2/5/2018 14:42
Toxaphene	< 32.1	ug/Kg		2/5/2018 14:42
trans-Chlordane	< 3.21	ug/Kg		2/5/2018 14:42

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**187**	31.5 - 168	*	2/5/2018 14:42
Tetrachloro-m-xylene (1)	**64.8**	26.7 - 117		2/5/2018 14:42

Method Reference(s): EPA 8081B
EPA 3550C
Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-2 0.5-1 Ft		
Lab Sample ID:	180335-02	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 659	ug/Kg		1/31/2018 13:16
1,2,4,5-Tetrachlorobenzene	< 659	ug/Kg		1/31/2018 13:16
1,2,4-Trichlorobenzene	< 659	ug/Kg		1/31/2018 13:16
1,2-Dichlorobenzene	< 659	ug/Kg		1/31/2018 13:16
1,3-Dichlorobenzene	< 659	ug/Kg		1/31/2018 13:16
1,4-Dichlorobenzene	< 659	ug/Kg		1/31/2018 13:16
2,2-Oxybis (1-chloropropane)	< 659	ug/Kg		1/31/2018 13:16
2,3,4,6-Tetrachlorophenol	< 659	ug/Kg		1/31/2018 13:16
2,4,5-Trichlorophenol	< 1320	ug/Kg		1/31/2018 13:16
2,4,6-Trichlorophenol	< 659	ug/Kg		1/31/2018 13:16
2,4-Dichlorophenol	< 659	ug/Kg		1/31/2018 13:16
2,4-Dimethylphenol	< 659	ug/Kg		1/31/2018 13:16
2,4-Dinitrophenol	< 1320	ug/Kg		1/31/2018 13:16
2,4-Dinitrotoluene	< 659	ug/Kg		1/31/2018 13:16
2,6-Dinitrotoluene	< 659	ug/Kg		1/31/2018 13:16
2-Chloronaphthalene	< 659	ug/Kg		1/31/2018 13:16
2-Chlorophenol	< 659	ug/Kg		1/31/2018 13:16
2-Methylnapthalene	< 659	ug/Kg		1/31/2018 13:16
2-Methylphenol	< 659	ug/Kg		1/31/2018 13:16
2-Nitroaniline	< 1320	ug/Kg		1/31/2018 13:16
2-Nitrophenol	< 659	ug/Kg		1/31/2018 13:16
3&4-Methylphenol	< 659	ug/Kg		1/31/2018 13:16
3,3'-Dichlorobenzidine	< 659	ug/Kg		1/31/2018 13:16
3-Nitroaniline	< 1320	ug/Kg		1/31/2018 13:16
4,6-Dinitro-2-methylphenol	< 1320	ug/Kg		1/31/2018 13:16
4-Bromophenyl phenyl ether	< 659	ug/Kg		1/31/2018 13:16
4-Chloro-3-methylphenol	< 659	ug/Kg		1/31/2018 13:16

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-2 0.5-1 Ft
Lab Sample ID: 180335-02 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 659	ug/Kg		1/31/2018	13:16
4-Chlorophenyl phenyl ether	< 659	ug/Kg		1/31/2018	13:16
4-Nitroaniline	< 1320	ug/Kg		1/31/2018	13:16
4-Nitrophenol	< 1320	ug/Kg		1/31/2018	13:16
Acenaphthene	**635**	ug/Kg	J	1/31/2018	13:16
Acenaphthylene	< 659	ug/Kg		1/31/2018	13:16
Acetophenone	< 659	ug/Kg		1/31/2018	13:16
Anthracene	**1520**	ug/Kg		1/31/2018	13:16
Atrazine	< 659	ug/Kg		1/31/2018	13:16
Benzaldehyde	< 659	ug/Kg		1/31/2018	13:16
Benzo (a) anthracene	**4180**	ug/Kg		1/31/2018	13:16
Benzo (a) pyrene	**3630**	ug/Kg		1/31/2018	13:16
Benzo (b) fluoranthene	**3960**	ug/Kg		1/31/2018	13:16
Benzo (g,h,i) perylene	**2520**	ug/Kg		1/31/2018	13:16
Benzo (k) fluoranthene	**2590**	ug/Kg		1/31/2018	13:16
Bis (2-chloroethoxy) methane	< 659	ug/Kg		1/31/2018	13:16
Bis (2-chloroethyl) ether	< 659	ug/Kg		1/31/2018	13:16
Bis (2-ethylhexyl) phthalate	< 659	ug/Kg		1/31/2018	13:16
Butylbenzylphthalate	< 659	ug/Kg		1/31/2018	13:16
Caprolactam	< 659	ug/Kg		1/31/2018	13:16
Carbazole	**981**	ug/Kg		1/31/2018	13:16
Chrysene	**4160**	ug/Kg		1/31/2018	13:16
Dibenz (a,h) anthracene	**873**	ug/Kg		1/31/2018	13:16
Dibenzofuran	**458**	ug/Kg	J	1/31/2018	13:16
Diethyl phthalate	< 659	ug/Kg		1/31/2018	13:16
Dimethyl phthalate	< 1320	ug/Kg		1/31/2018	13:16
Di-n-butyl phthalate	< 659	ug/Kg		1/31/2018	13:16
Di-n-octylphthalate	< 659	ug/Kg		1/31/2018	13:16
Fluoranthene	**9920**	ug/Kg		1/31/2018	13:16
Fluorene	**727**	ug/Kg		1/31/2018	13:16

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-2 0.5-1 Ft
Lab Sample ID: 180335-02 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 659	ug/Kg		1/31/2018	13:16
Hexachlorobutadiene	< 659	ug/Kg		1/31/2018	13:16
Hexachlorocyclopentadiene	< 659	ug/Kg		1/31/2018	13:16
Hexachloroethane	< 659	ug/Kg		1/31/2018	13:16
Indeno (1,2,3-cd) pyrene	**2810**	ug/Kg		1/31/2018	13:16
Isophorone	< 659	ug/Kg		1/31/2018	13:16
Naphthalene	< 659	ug/Kg		1/31/2018	13:16
Nitrobenzene	< 659	ug/Kg		1/31/2018	13:16
N-Nitroso-di-n-propylamine	< 659	ug/Kg		1/31/2018	13:16
N-Nitrosodiphenylamine	< 659	ug/Kg		1/31/2018	13:16
Pentachlorophenol	< 1320	ug/Kg		1/31/2018	13:16
Phenanthrene	**7860**	ug/Kg		1/31/2018	13:16
Phenol	< 659	ug/Kg		1/31/2018	13:16
Pyrene	**7300**	ug/Kg		1/31/2018	13:16

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**63.7**	55.4 - 114		1/31/2018	13:16
2-Fluorobiphenyl	**64.2**	39.9 - 112		1/31/2018	13:16
2-Fluorophenol	**64.9**	41.9 - 97.1		1/31/2018	13:16
Nitrobenzene-d5	**61.7**	41 - 96		1/31/2018	13:16
Phenol-d5	**63.8**	43.7 - 101		1/31/2018	13:16
Terphenyl-d14	**66.9**	71.7 - 115	*	1/31/2018	13:16

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25027.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-2 0.5-1 Ft		
Lab Sample ID:	180335-02	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 3.96	ug/Kg		1/30/2018 20:04
1,1,2,2-Tetrachloroethane	< 3.96	ug/Kg		1/30/2018 20:04
1,1,2-Trichloroethane	< 3.96	ug/Kg		1/30/2018 20:04
1,1-Dichloroethane	< 3.96	ug/Kg		1/30/2018 20:04
1,1-Dichloroethene	< 3.96	ug/Kg		1/30/2018 20:04
1,2,3-Trichlorobenzene	< 9.90	ug/Kg		1/30/2018 20:04
1,2,4-Trichlorobenzene	< 9.90	ug/Kg		1/30/2018 20:04
1,2,4-Trimethylbenzene	**3.88**	ug/Kg	J	1/30/2018 20:04
1,2-Dibromo-3-Chloropropane	< 19.8	ug/Kg		1/30/2018 20:04
1,2-Dibromoethane	< 3.96	ug/Kg		1/30/2018 20:04
1,2-Dichlorobenzene	< 3.96	ug/Kg		1/30/2018 20:04
1,2-Dichloroethane	< 3.96	ug/Kg		1/30/2018 20:04
1,2-Dichloropropane	< 3.96	ug/Kg		1/30/2018 20:04
1,3,5-Trimethylbenzene	**2.49**	ug/Kg	J	1/30/2018 20:04
1,3-Dichlorobenzene	< 3.96	ug/Kg		1/30/2018 20:04
1,4-Dichlorobenzene	< 3.96	ug/Kg		1/30/2018 20:04
1,4-dioxane	< 39.6	ug/Kg		1/30/2018 20:04
2-Butanone	< 19.8	ug/Kg		1/30/2018 20:04
2-Hexanone	< 9.90	ug/Kg		1/30/2018 20:04
4-Methyl-2-pentanone	< 9.90	ug/Kg		1/30/2018 20:04
Acetone	< 19.8	ug/Kg		1/30/2018 20:04
Benzene	**3.16**	ug/Kg	J	1/30/2018 20:04
Bromochloromethane	< 9.90	ug/Kg		1/30/2018 20:04
Bromodichloromethane	< 3.96	ug/Kg		1/30/2018 20:04
Bromoform	< 9.90	ug/Kg		1/30/2018 20:04
Bromomethane	< 3.96	ug/Kg		1/30/2018 20:04
Carbon disulfide	< 3.96	ug/Kg		1/30/2018 20:04

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-2 0.5-1 Ft
Lab Sample ID: 180335-02 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 3.96	ug/Kg		1/30/2018	20:04
Chlorobenzene	< 3.96	ug/Kg		1/30/2018	20:04
Chloroethane	< 3.96	ug/Kg		1/30/2018	20:04
Chloroform	< 3.96	ug/Kg		1/30/2018	20:04
Chloromethane	< 3.96	ug/Kg		1/30/2018	20:04
cis-1,2-Dichloroethene	**4.99**	ug/Kg		1/30/2018	20:04
cis-1,3-Dichloropropene	< 3.96	ug/Kg		1/30/2018	20:04
Cyclohexane	< 19.8	ug/Kg		1/30/2018	20:04
Dibromochloromethane	< 3.96	ug/Kg		1/30/2018	20:04
Dichlorodifluoromethane	< 3.96	ug/Kg		1/30/2018	20:04
Ethylbenzene	**2.77**	ug/Kg	J	1/30/2018	20:04
Freon 113	< 3.96	ug/Kg		1/30/2018	20:04
Isopropylbenzene	< 3.96	ug/Kg		1/30/2018	20:04
m,p-Xylene	**26.0**	ug/Kg		1/30/2018	20:04
Methyl acetate	< 3.96	ug/Kg		1/30/2018	20:04
Methyl tert-butyl Ether	< 3.96	ug/Kg		1/30/2018	20:04
Methylcyclohexane	**25.8**	ug/Kg		1/30/2018	20:04
Methylene chloride	**6.88**	ug/Kg	J	1/30/2018	20:04
Naphthalene	**5.52**	ug/Kg	J	1/30/2018	20:04
n-Butylbenzene	< 3.96	ug/Kg		1/30/2018	20:04
n-Propylbenzene	< 3.96	ug/Kg		1/30/2018	20:04
o-Xylene	**8.63**	ug/Kg		1/30/2018	20:04
p-Isopropyltoluene	< 3.96	ug/Kg		1/30/2018	20:04
sec-Butylbenzene	< 3.96	ug/Kg		1/30/2018	20:04
Styrene	< 9.90	ug/Kg		1/30/2018	20:04
tert-Butylbenzene	< 3.96	ug/Kg		1/30/2018	20:04
Tetrachloroethene	< 3.96	ug/Kg		1/30/2018	20:04
Toluene	**3.25**	ug/Kg	J	1/30/2018	20:04
trans-1,2-Dichloroethene	< 3.96	ug/Kg		1/30/2018	20:04
trans-1,3-Dichloropropene	< 3.96	ug/Kg		1/30/2018	20:04

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-2 0.5-1 Ft
Lab Sample ID: 180335-02 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	**214**	ug/Kg		1/30/2018	20:04
Trichlorofluoromethane	< 3.96	ug/Kg		1/30/2018	20:04
Vinyl chloride	< 3.96	ug/Kg		1/30/2018	20:04

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**116**	86.2 - 128		1/30/2018	20:04
4-Bromofluorobenzene	**79.4**	69.8 - 123		1/30/2018	20:04
Pentafluorobenzene	**101**	82.2 - 114		1/30/2018	20:04
Toluene-D8	**91.9**	81.3 - 113		1/30/2018	20:04

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: x48399.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-2 0.5-1 Ft		
Lab Sample ID:	180335-02	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.439**	mg/Kg	J	2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-3 0.5-1 Ft		
Lab Sample ID:	180335-03	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	< 0.579	mg/Kg		2/6/2018 18:22
Barium	**21.7**	mg/Kg		2/6/2018 18:22
Beryllium	**0.145**	mg/Kg	J	2/6/2018 18:22
Cadmium	**0.184**	mg/Kg	J	2/6/2018 18:22
Chromium	**5.54**	mg/Kg		2/6/2018 18:22
Copper	< 1.45	mg/Kg		2/6/2018 18:22
Lead	**51.3**	mg/Kg		2/6/2018 18:22
Manganese	**160**	mg/Kg		2/6/2018 18:22
Nickel	**6.07**	mg/Kg		2/6/2018 18:22
Selenium	< 3.47	mg/Kg		2/6/2018 19:34
Silver	**0.389**	mg/Kg	J	2/6/2018 18:22
Zinc	**41.4**	mg/Kg		2/6/2018 18:22

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-3 0.5-1 Ft		
Lab Sample ID:	180335-03	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0221**	mg/Kg		2/6/2018 10:57

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-3 0.5-1 Ft		
Lab Sample ID:	180335-03	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1221	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1232	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1242	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1248	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1254	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1260	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1262	< 0.0315	mg/Kg		2/1/2018 01:49
PCB-1268	< 0.0315	mg/Kg		2/1/2018 01:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**59.9**	22.2 - 140		2/1/2018 01:49
Tetrachloro-m-xylene	**44.7**	11.8 - 125		2/1/2018 01:49

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-3 0.5-1 Ft
Lab Sample ID: 180335-03 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.15	ug/Kg		2/5/2018 14:55
4,4-DDE	< 3.15	ug/Kg		2/5/2018 14:55
4,4-DDT	**4.82**	ug/Kg		2/5/2018 14:55
Aldrin	< 3.15	ug/Kg		2/5/2018 14:55
alpha-BHC	< 3.15	ug/Kg		2/5/2018 14:55
beta-BHC	< 3.15	ug/Kg		2/5/2018 14:55
cis-Chlordane	**1.87**	ug/Kg	JP	2/5/2018 14:55
delta-BHC	< 3.15	ug/Kg		2/5/2018 14:55
Dieldrin	< 3.15	ug/Kg		2/5/2018 14:55
Endosulfan I	< 3.15	ug/Kg		2/5/2018 14:55
Endosulfan II	< 3.15	ug/Kg		2/5/2018 14:55
Endosulfan Sulfate	**21.1**	ug/Kg	P	2/5/2018 14:55
Endrin	< 3.15	ug/Kg		2/5/2018 14:55
Endrin Aldehyde	**4.50**	ug/Kg	P	2/5/2018 14:55
Endrin Ketone	**9.96**	ug/Kg		2/5/2018 14:55
gamma-BHC (Lindane)	< 3.15	ug/Kg		2/5/2018 14:55
Heptachlor	< 3.15	ug/Kg		2/5/2018 14:55
Heptachlor Epoxide	< 3.15	ug/Kg		2/5/2018 14:55
Methoxychlor	**8.96**	ug/Kg	P	2/5/2018 14:55
Toxaphene	< 31.5	ug/Kg		2/5/2018 14:55
trans-Chlordane	< 3.15	ug/Kg		2/5/2018 14:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**165**	31.5 - 168		2/5/2018 14:55
Tetrachloro-m-xylene (1)	**67.2**	26.7 - 117		2/5/2018 14:55

Method Reference(s): EPA 8081B
EPA 3550C
Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-3 0.5-1 Ft		
Lab Sample ID:	180335-03	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 331	ug/Kg		1/30/2018 18:28
1,2,4,5-Tetrachlorobenzene	< 331	ug/Kg		1/30/2018 18:28
1,2,4-Trichlorobenzene	< 331	ug/Kg		1/30/2018 18:28
1,2-Dichlorobenzene	< 331	ug/Kg		1/30/2018 18:28
1,3-Dichlorobenzene	< 331	ug/Kg		1/30/2018 18:28
1,4-Dichlorobenzene	< 331	ug/Kg		1/30/2018 18:28
2,2-Oxybis (1-chloropropane)	< 331	ug/Kg		1/30/2018 18:28
2,3,4,6-Tetrachlorophenol	< 331	ug/Kg		1/30/2018 18:28
2,4,5-Trichlorophenol	< 661	ug/Kg		1/30/2018 18:28
2,4,6-Trichlorophenol	< 331	ug/Kg		1/30/2018 18:28
2,4-Dichlorophenol	< 331	ug/Kg		1/30/2018 18:28
2,4-Dimethylphenol	< 331	ug/Kg		1/30/2018 18:28
2,4-Dinitrophenol	< 661	ug/Kg		1/30/2018 18:28
2,4-Dinitrotoluene	< 331	ug/Kg		1/30/2018 18:28
2,6-Dinitrotoluene	< 331	ug/Kg		1/30/2018 18:28
2-Chloronaphthalene	< 331	ug/Kg		1/30/2018 18:28
2-Chlorophenol	< 331	ug/Kg		1/30/2018 18:28
2-Methylnapthalene	< 331	ug/Kg		1/30/2018 18:28
2-Methylphenol	< 331	ug/Kg		1/30/2018 18:28
2-Nitroaniline	< 661	ug/Kg		1/30/2018 18:28
2-Nitrophenol	< 331	ug/Kg		1/30/2018 18:28
3&4-Methylphenol	< 331	ug/Kg		1/30/2018 18:28
3,3'-Dichlorobenzidine	< 331	ug/Kg		1/30/2018 18:28
3-Nitroaniline	< 661	ug/Kg		1/30/2018 18:28
4,6-Dinitro-2-methylphenol	< 661	ug/Kg		1/30/2018 18:28
4-Bromophenyl phenyl ether	< 331	ug/Kg		1/30/2018 18:28
4-Chloro-3-methylphenol	< 331	ug/Kg		1/30/2018 18:28

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-3 0.5-1 Ft
Lab Sample ID: 180335-03 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 331	ug/Kg		1/30/2018	18:28
4-Chlorophenyl phenyl ether	< 331	ug/Kg		1/30/2018	18:28
4-Nitroaniline	< 661	ug/Kg		1/30/2018	18:28
4-Nitrophenol	< 661	ug/Kg		1/30/2018	18:28
Acenaphthene	< 331	ug/Kg		1/30/2018	18:28
Acenaphthylene	< 331	ug/Kg		1/30/2018	18:28
Acetophenone	< 331	ug/Kg		1/30/2018	18:28
Anthracene	**216**	ug/Kg	J	1/30/2018	18:28
Atrazine	< 331	ug/Kg		1/30/2018	18:28
Benzaldehyde	< 331	ug/Kg		1/30/2018	18:28
Benzo (a) anthracene	**1010**	ug/Kg		1/30/2018	18:28
Benzo (a) pyrene	**959**	ug/Kg		1/30/2018	18:28
Benzo (b) fluoranthene	**1150**	ug/Kg		1/30/2018	18:28
Benzo (g,h,i) perylene	**717**	ug/Kg		1/30/2018	18:28
Benzo (k) fluoranthene	**561**	ug/Kg		1/30/2018	18:28
Bis (2-chloroethoxy) methane	< 331	ug/Kg		1/30/2018	18:28
Bis (2-chloroethyl) ether	< 331	ug/Kg		1/30/2018	18:28
Bis (2-ethylhexyl) phthalate	< 331	ug/Kg		1/30/2018	18:28
Butylbenzylphthalate	< 331	ug/Kg		1/30/2018	18:28
Caprolactam	< 331	ug/Kg		1/30/2018	18:28
Carbazole	< 331	ug/Kg		1/30/2018	18:28
Chrysene	**1000**	ug/Kg		1/30/2018	18:28
Dibenz (a,h) anthracene	**251**	ug/Kg	J	1/30/2018	18:28
Dibenzofuran	< 331	ug/Kg		1/30/2018	18:28
Diethyl phthalate	< 331	ug/Kg		1/30/2018	18:28
Dimethyl phthalate	< 661	ug/Kg		1/30/2018	18:28
Di-n-butyl phthalate	< 331	ug/Kg		1/30/2018	18:28
Di-n-octylphthalate	< 331	ug/Kg		1/30/2018	18:28
Fluoranthene	**2020**	ug/Kg		1/30/2018	18:28
Fluorene	< 331	ug/Kg		1/30/2018	18:28

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-3 0.5-1 Ft
Lab Sample ID: 180335-03 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 331	ug/Kg		1/30/2018	18:28
Hexachlorobutadiene	< 331	ug/Kg		1/30/2018	18:28
Hexachlorocyclopentadiene	< 331	ug/Kg		1/30/2018	18:28
Hexachloroethane	< 331	ug/Kg		1/30/2018	18:28
Indeno (1,2,3-cd) pyrene	**786**	ug/Kg		1/30/2018	18:28
Isophorone	< 331	ug/Kg		1/30/2018	18:28
Naphthalene	< 331	ug/Kg		1/30/2018	18:28
Nitrobenzene	< 331	ug/Kg		1/30/2018	18:28
N-Nitroso-di-n-propylamine	< 331	ug/Kg		1/30/2018	18:28
N-Nitrosodiphenylamine	< 331	ug/Kg		1/30/2018	18:28
Pentachlorophenol	< 661	ug/Kg		1/30/2018	18:28
Phenanthrene	**1040**	ug/Kg		1/30/2018	18:28
Phenol	< 331	ug/Kg		1/30/2018	18:28
Pyrene	**1570**	ug/Kg		1/30/2018	18:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**67.2**	55.4 - 114		1/30/2018	18:28
2-Fluorobiphenyl	**66.7**	39.9 - 112		1/30/2018	18:28
2-Fluorophenol	**67.6**	41.9 - 97.1		1/30/2018	18:28
Nitrobenzene-d5	**63.3**	41 - 96		1/30/2018	18:28
Phenol-d5	**66.7**	43.7 - 101		1/30/2018	18:28
Terphenyl-d14	**68.1**	71.7 - 115	*	1/30/2018	18:28

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25010.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-3 0.5-1 Ft		
Lab Sample ID:	180335-03	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 4.30	ug/Kg		1/30/2018 20:28
1,1,2,2-Tetrachloroethane	< 4.30	ug/Kg		1/30/2018 20:28
1,1,2-Trichloroethane	< 4.30	ug/Kg		1/30/2018 20:28
1,1-Dichloroethane	< 4.30	ug/Kg		1/30/2018 20:28
1,1-Dichloroethene	< 4.30	ug/Kg		1/30/2018 20:28
1,2,3-Trichlorobenzene	< 10.8	ug/Kg		1/30/2018 20:28
1,2,4-Trichlorobenzene	< 10.8	ug/Kg		1/30/2018 20:28
1,2,4-Trimethylbenzene	**172**	ug/Kg		1/30/2018 20:28
1,2-Dibromo-3-Chloropropane	< 21.5	ug/Kg		1/30/2018 20:28
1,2-Dibromoethane	< 4.30	ug/Kg		1/30/2018 20:28
1,2-Dichlorobenzene	< 4.30	ug/Kg		1/30/2018 20:28
1,2-Dichloroethane	< 4.30	ug/Kg		1/30/2018 20:28
1,2-Dichloropropane	< 4.30	ug/Kg		1/30/2018 20:28
1,3,5-Trimethylbenzene	**35.8**	ug/Kg		1/30/2018 20:28
1,3-Dichlorobenzene	< 4.30	ug/Kg		1/30/2018 20:28
1,4-Dichlorobenzene	< 4.30	ug/Kg		1/30/2018 20:28
1,4-dioxane	< 43.0	ug/Kg		1/30/2018 20:28
2-Butanone	**20.2**	ug/Kg	J	1/30/2018 20:28
2-Hexanone	< 10.8	ug/Kg		1/30/2018 20:28
4-Methyl-2-pentanone	**265**	ug/Kg		1/30/2018 20:28
Acetone	**38.4**	ug/Kg		1/30/2018 20:28
Benzene	**4.12**	ug/Kg	J	1/30/2018 20:28
Bromochloromethane	< 10.8	ug/Kg		1/30/2018 20:28
Bromodichloromethane	< 4.30	ug/Kg		1/30/2018 20:28
Bromoform	< 10.8	ug/Kg		1/30/2018 20:28
Bromomethane	< 4.30	ug/Kg		1/30/2018 20:28
Carbon disulfide	< 4.30	ug/Kg		1/30/2018 20:28

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-3 0.5-1 Ft
Lab Sample ID: 180335-03 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 4.30	ug/Kg		1/30/2018	20:28
Chlorobenzene	< 4.30	ug/Kg		1/30/2018	20:28
Chloroethane	< 4.30	ug/Kg		1/30/2018	20:28
Chloroform	< 4.30	ug/Kg		1/30/2018	20:28
Chloromethane	< 4.30	ug/Kg		1/30/2018	20:28
cis-1,2-Dichloroethene	**4.14**	ug/Kg	J	1/30/2018	20:28
cis-1,3-Dichloropropene	< 4.30	ug/Kg		1/30/2018	20:28
Cyclohexane	**10.9**	ug/Kg	J	1/30/2018	20:28
Dibromochloromethane	< 4.30	ug/Kg		1/30/2018	20:28
Dichlorodifluoromethane	< 4.30	ug/Kg		1/30/2018	20:28
Ethylbenzene	**3.83**	ug/Kg	J	1/30/2018	20:28
Freon 113	< 4.30	ug/Kg		1/30/2018	20:28
Isopropylbenzene	< 4.30	ug/Kg		1/30/2018	20:28
m,p-Xylene	**32.8**	ug/Kg		1/30/2018	20:28
Methyl acetate	< 4.30	ug/Kg		1/30/2018	20:28
Methyl tert-butyl Ether	< 4.30	ug/Kg		1/30/2018	20:28
Methylcyclohexane	**46.3**	ug/Kg		1/30/2018	20:28
Methylene chloride	< 10.8	ug/Kg		1/30/2018	20:28
Naphthalene	**301**	ug/Kg		1/30/2018	20:28
n-Butylbenzene	< 4.30	ug/Kg		1/30/2018	20:28
n-Propylbenzene	**5.04**	ug/Kg		1/30/2018	20:28
o-Xylene	**11.2**	ug/Kg		1/30/2018	20:28
p-Isopropyltoluene	**3.46**	ug/Kg	J	1/30/2018	20:28
sec-Butylbenzene	**2.71**	ug/Kg	J	1/30/2018	20:28
Styrene	< 10.8	ug/Kg		1/30/2018	20:28
tert-Butylbenzene	< 4.30	ug/Kg		1/30/2018	20:28
Tetrachloroethene	< 4.30	ug/Kg		1/30/2018	20:28
Toluene	**5.13**	ug/Kg		1/30/2018	20:28
trans-1,2-Dichloroethene	< 4.30	ug/Kg		1/30/2018	20:28
trans-1,3-Dichloropropene	< 4.30	ug/Kg		1/30/2018	20:28

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-3 0.5-1 Ft
Lab Sample ID: 180335-03 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	**173**	ug/Kg			1/30/2018	20:28
Trichlorofluoromethane	< 4.30	ug/Kg			1/30/2018	20:28
Vinyl chloride	< 4.30	ug/Kg			1/30/2018	20:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**106**	86.2 - 128		1/30/2018	20:28
4-Bromofluorobenzene	**79.9**	69.8 - 123		1/30/2018	20:28
Pentafluorobenzene	**102**	82.2 - 114		1/30/2018	20:28
Toluene-D8	**96.0**	81.3 - 113		1/30/2018	20:28

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: x48400.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-3 0.5-1 Ft		
Lab Sample ID:	180335-03	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.461**	mg/Kg	J	2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-4 0.5-1 Ft		
Lab Sample ID:	180335-04	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.21**	mg/Kg		2/6/2018 18:26
Barium	**57.0**	mg/Kg		2/6/2018 18:26
Beryllium	**0.471**	mg/Kg		2/6/2018 18:26
Cadmium	< 0.276	mg/Kg		2/6/2018 18:26
Chromium	**14.9**	mg/Kg		2/6/2018 18:26
Copper	**21.7**	mg/Kg		2/6/2018 18:26
Lead	**14.1**	mg/Kg		2/6/2018 18:26
Manganese	**235**	mg/Kg		2/6/2018 18:26
Nickel	**11.1**	mg/Kg		2/6/2018 18:26
Selenium	< 1.10	mg/Kg		2/6/2018 18:26
Silver	**0.337**	mg/Kg	J	2/6/2018 18:26
Zinc	**44.6**	mg/Kg		2/6/2018 18:26

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-4 0.5-1 Ft		
Lab Sample ID:	180335-04	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0343**	mg/Kg		2/6/2018 11:00

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-4 0.5-1 Ft		
Lab Sample ID:	180335-04	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1221	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1232	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1242	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1248	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1254	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1260	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1262	< 0.0323	mg/Kg		2/1/2018 02:12
PCB-1268	< 0.0323	mg/Kg		2/1/2018 02:12

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**65.4**	22.2 - 140		2/1/2018 02:12
Tetrachloro-m-xylene	**43.3**	11.8 - 125		2/1/2018 02:12

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-4 0.5-1 Ft		
Lab Sample ID:	180335-04	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.23	ug/Kg		2/5/2018 15:08
4,4-DDE	< 3.23	ug/Kg		2/5/2018 15:08
4,4-DDT	< 3.23	ug/Kg		2/5/2018 15:08
Aldrin	< 3.23	ug/Kg		2/5/2018 15:08
alpha-BHC	< 3.23	ug/Kg		2/5/2018 15:08
beta-BHC	< 3.23	ug/Kg		2/5/2018 15:08
cis-Chlordane	< 3.23	ug/Kg		2/5/2018 15:08
delta-BHC	< 3.23	ug/Kg		2/5/2018 15:08
Dieldrin	< 3.23	ug/Kg		2/5/2018 15:08
Endosulfan I	< 3.23	ug/Kg		2/5/2018 15:08
Endosulfan II	< 3.23	ug/Kg		2/5/2018 15:08
Endosulfan Sulfate	< 3.23	ug/Kg		2/5/2018 15:08
Endrin	< 3.23	ug/Kg		2/5/2018 15:08
Endrin Aldehyde	< 3.23	ug/Kg		2/5/2018 15:08
Endrin Ketone	< 3.23	ug/Kg		2/5/2018 15:08
gamma-BHC (Lindane)	< 3.23	ug/Kg		2/5/2018 15:08
Heptachlor	< 3.23	ug/Kg		2/5/2018 15:08
Heptachlor Epoxide	< 3.23	ug/Kg		2/5/2018 15:08
Methoxychlor	**3.79**	ug/Kg		2/5/2018 15:08
Toxaphene	< 32.3	ug/Kg		2/5/2018 15:08
trans-Chlordane	< 3.23	ug/Kg		2/5/2018 15:08

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**56.1**	31.5 - 168		2/5/2018 15:08
Tetrachloro-m-xylene (1)	**62.9**	26.7 - 117		2/5/2018 15:08

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-4 0.5-1 Ft
Lab Sample ID: 180335-04 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 313	ug/Kg		1/30/2018 18:57
1,2,4,5-Tetrachlorobenzene	< 313	ug/Kg		1/30/2018 18:57
1,2,4-Trichlorobenzene	< 313	ug/Kg		1/30/2018 18:57
1,2-Dichlorobenzene	< 313	ug/Kg		1/30/2018 18:57
1,3-Dichlorobenzene	< 313	ug/Kg		1/30/2018 18:57
1,4-Dichlorobenzene	< 313	ug/Kg		1/30/2018 18:57
2,2-Oxybis (1-chloropropane)	< 313	ug/Kg		1/30/2018 18:57
2,3,4,6-Tetrachlorophenol	< 313	ug/Kg		1/30/2018 18:57
2,4,5-Trichlorophenol	< 625	ug/Kg		1/30/2018 18:57
2,4,6-Trichlorophenol	< 313	ug/Kg		1/30/2018 18:57
2,4-Dichlorophenol	< 313	ug/Kg		1/30/2018 18:57
2,4-Dimethylphenol	< 313	ug/Kg		1/30/2018 18:57
2,4-Dinitrophenol	< 625	ug/Kg		1/30/2018 18:57
2,4-Dinitrotoluene	< 313	ug/Kg		1/30/2018 18:57
2,6-Dinitrotoluene	< 313	ug/Kg		1/30/2018 18:57
2-Chloronaphthalene	< 313	ug/Kg		1/30/2018 18:57
2-Chlorophenol	< 313	ug/Kg		1/30/2018 18:57
2-Methylnapthalene	< 313	ug/Kg		1/30/2018 18:57
2-Methylphenol	< 313	ug/Kg		1/30/2018 18:57
2-Nitroaniline	< 625	ug/Kg		1/30/2018 18:57
2-Nitrophenol	< 313	ug/Kg		1/30/2018 18:57
3&4-Methylphenol	< 313	ug/Kg		1/30/2018 18:57
3,3'-Dichlorobenzidine	< 313	ug/Kg		1/30/2018 18:57
3-Nitroaniline	< 625	ug/Kg		1/30/2018 18:57
4,6-Dinitro-2-methylphenol	< 625	ug/Kg		1/30/2018 18:57
4-Bromophenyl phenyl ether	< 313	ug/Kg		1/30/2018 18:57
4-Chloro-3-methylphenol	< 313	ug/Kg		1/30/2018 18:57

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-4 0.5-1 Ft
Lab Sample ID: 180335-04 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 313	ug/Kg	1/30/2018	18:57
4-Chlorophenyl phenyl ether	< 313	ug/Kg	1/30/2018	18:57
4-Nitroaniline	< 625	ug/Kg	1/30/2018	18:57
4-Nitrophenol	< 625	ug/Kg	1/30/2018	18:57
Acenaphthene	< 313	ug/Kg	1/30/2018	18:57
Acenaphthylene	< 313	ug/Kg	1/30/2018	18:57
Acetophenone	< 313	ug/Kg	1/30/2018	18:57
Anthracene	< 313	ug/Kg	1/30/2018	18:57
Atrazine	< 313	ug/Kg	1/30/2018	18:57
Benzaldehyde	< 313	ug/Kg	1/30/2018	18:57
Benzo (a) anthracene	< 313	ug/Kg	1/30/2018	18:57
Benzo (a) pyrene	< 313	ug/Kg	1/30/2018	18:57
Benzo (b) fluoranthene	< 313	ug/Kg	1/30/2018	18:57
Benzo (g,h,i) perylene	< 313	ug/Kg	1/30/2018	18:57
Benzo (k) fluoranthene	< 313	ug/Kg	1/30/2018	18:57
Bis (2-chloroethoxy) methane	< 313	ug/Kg	1/30/2018	18:57
Bis (2-chloroethyl) ether	< 313	ug/Kg	1/30/2018	18:57
Bis (2-ethylhexyl) phthalate	< 313	ug/Kg	1/30/2018	18:57
Butylbenzylphthalate	< 313	ug/Kg	1/30/2018	18:57
Caprolactam	< 313	ug/Kg	1/30/2018	18:57
Carbazole	< 313	ug/Kg	1/30/2018	18:57
Chrysene	< 313	ug/Kg	1/30/2018	18:57
Dibenz (a,h) anthracene	< 313	ug/Kg	1/30/2018	18:57
Dibenzofuran	< 313	ug/Kg	1/30/2018	18:57
Diethyl phthalate	< 313	ug/Kg	1/30/2018	18:57
Dimethyl phthalate	< 625	ug/Kg	1/30/2018	18:57
Di-n-butyl phthalate	< 313	ug/Kg	1/30/2018	18:57
Di-n-octylphthalate	< 313	ug/Kg	1/30/2018	18:57
Fluoranthene	< 313	ug/Kg	1/30/2018	18:57
Fluorene	< 313	ug/Kg	1/30/2018	18:57

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-4 0.5-1 Ft
Lab Sample ID: 180335-04 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 313	ug/Kg		1/30/2018	18:57
Hexachlorobutadiene	< 313	ug/Kg		1/30/2018	18:57
Hexachlorocyclopentadiene	< 313	ug/Kg		1/30/2018	18:57
Hexachloroethane	< 313	ug/Kg		1/30/2018	18:57
Indeno (1,2,3-cd) pyrene	< 313	ug/Kg		1/30/2018	18:57
Isophorone	< 313	ug/Kg		1/30/2018	18:57
Naphthalene	< 313	ug/Kg		1/30/2018	18:57
Nitrobenzene	< 313	ug/Kg		1/30/2018	18:57
N-Nitroso-di-n-propylamine	< 313	ug/Kg		1/30/2018	18:57
N-Nitrosodiphenylamine	< 313	ug/Kg		1/30/2018	18:57
Pentachlorophenol	< 625	ug/Kg		1/30/2018	18:57
Phenanthrene	< 313	ug/Kg		1/30/2018	18:57
Phenol	< 313	ug/Kg		1/30/2018	18:57
Pyrene	< 313	ug/Kg		1/30/2018	18:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**59.8**	55.4 - 114		1/30/2018	18:57
2-Fluorobiphenyl	**51.2**	39.9 - 112		1/30/2018	18:57
2-Fluorophenol	**52.3**	41.9 - 97.1		1/30/2018	18:57
Nitrobenzene-d5	**49.3**	41 - 96		1/30/2018	18:57
Phenol-d5	**51.4**	43.7 - 101		1/30/2018	18:57
Terphenyl-d14	**64.5**	71.7 - 115	*	1/30/2018	18:57

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25011.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-4 0.5-1 Ft		
Lab Sample ID:	180335-04	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 3.99	ug/Kg		1/30/2018 20:51
1,1,2,2-Tetrachloroethane	< 3.99	ug/Kg		1/30/2018 20:51
1,1,2-Trichloroethane	< 3.99	ug/Kg		1/30/2018 20:51
1,1-Dichloroethane	< 3.99	ug/Kg		1/30/2018 20:51
1,1-Dichloroethene	< 3.99	ug/Kg		1/30/2018 20:51
1,2,3-Trichlorobenzene	< 9.98	ug/Kg		1/30/2018 20:51
1,2,4-Trichlorobenzene	< 9.98	ug/Kg		1/30/2018 20:51
1,2,4-Trimethylbenzene	**2.98**	ug/Kg	J	1/30/2018 20:51
1,2-Dibromo-3-Chloropropane	< 20.0	ug/Kg		1/30/2018 20:51
1,2-Dibromoethane	< 3.99	ug/Kg		1/30/2018 20:51
1,2-Dichlorobenzene	< 3.99	ug/Kg		1/30/2018 20:51
1,2-Dichloroethane	< 3.99	ug/Kg		1/30/2018 20:51
1,2-Dichloropropane	< 3.99	ug/Kg		1/30/2018 20:51
1,3,5-Trimethylbenzene	< 3.99	ug/Kg		1/30/2018 20:51
1,3-Dichlorobenzene	< 3.99	ug/Kg		1/30/2018 20:51
1,4-Dichlorobenzene	< 3.99	ug/Kg		1/30/2018 20:51
1,4-dioxane	< 39.9	ug/Kg		1/30/2018 20:51
2-Butanone	< 20.0	ug/Kg		1/30/2018 20:51
2-Hexanone	< 9.98	ug/Kg		1/30/2018 20:51
4-Methyl-2-pentanone	< 9.98	ug/Kg		1/30/2018 20:51
Acetone	< 20.0	ug/Kg		1/30/2018 20:51
Benzene	< 3.99	ug/Kg		1/30/2018 20:51
Bromochloromethane	< 9.98	ug/Kg		1/30/2018 20:51
Bromodichloromethane	< 3.99	ug/Kg		1/30/2018 20:51
Bromoform	< 9.98	ug/Kg		1/30/2018 20:51
Bromomethane	< 3.99	ug/Kg		1/30/2018 20:51
Carbon disulfide	< 3.99	ug/Kg		1/30/2018 20:51

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-4 0.5-1 Ft
Lab Sample ID: 180335-04 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 3.99	ug/Kg		1/30/2018	20:51
Chlorobenzene	< 3.99	ug/Kg		1/30/2018	20:51
Chloroethane	< 3.99	ug/Kg		1/30/2018	20:51
Chloroform	< 3.99	ug/Kg		1/30/2018	20:51
Chloromethane	< 3.99	ug/Kg		1/30/2018	20:51
cis-1,2-Dichloroethene	< 3.99	ug/Kg		1/30/2018	20:51
cis-1,3-Dichloropropene	< 3.99	ug/Kg		1/30/2018	20:51
Cyclohexane	< 20.0	ug/Kg		1/30/2018	20:51
Dibromochloromethane	< 3.99	ug/Kg		1/30/2018	20:51
Dichlorodifluoromethane	< 3.99	ug/Kg		1/30/2018	20:51
Ethylbenzene	< 3.99	ug/Kg		1/30/2018	20:51
Freon 113	< 3.99	ug/Kg		1/30/2018	20:51
Isopropylbenzene	< 3.99	ug/Kg		1/30/2018	20:51
m,p-Xylene	**7.07**	ug/Kg		1/30/2018	20:51
Methyl acetate	< 3.99	ug/Kg		1/30/2018	20:51
Methyl tert-butyl Ether	< 3.99	ug/Kg		1/30/2018	20:51
Methylcyclohexane	< 3.99	ug/Kg		1/30/2018	20:51
Methylene chloride	< 9.98	ug/Kg		1/30/2018	20:51
Naphthalene	< 9.98	ug/Kg		1/30/2018	20:51
n-Butylbenzene	< 3.99	ug/Kg		1/30/2018	20:51
n-Propylbenzene	< 3.99	ug/Kg		1/30/2018	20:51
o-Xylene	**2.42**	ug/Kg	J	1/30/2018	20:51
p-Isopropyltoluene	< 3.99	ug/Kg		1/30/2018	20:51
sec-Butylbenzene	< 3.99	ug/Kg		1/30/2018	20:51
Styrene	< 9.98	ug/Kg		1/30/2018	20:51
tert-Butylbenzene	< 3.99	ug/Kg		1/30/2018	20:51
Tetrachloroethene	< 3.99	ug/Kg		1/30/2018	20:51
Toluene	< 3.99	ug/Kg		1/30/2018	20:51
trans-1,2-Dichloroethene	< 3.99	ug/Kg		1/30/2018	20:51
trans-1,3-Dichloropropene	< 3.99	ug/Kg		1/30/2018	20:51

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-4 0.5-1 Ft
Lab Sample ID: 180335-04 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	**36.7**	ug/Kg		1/30/2018	20:51
Trichlorofluoromethane	< 3.99	ug/Kg		1/30/2018	20:51
Vinyl chloride	< 3.99	ug/Kg		1/30/2018	20:51

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**107**	86.2 - 128		1/30/2018	20:51
4-Bromofluorobenzene	**96.7**	69.8 - 123		1/30/2018	20:51
Pentafluorobenzene	**104**	82.2 - 114		1/30/2018	20:51
Toluene-D8	**101**	81.3 - 113		1/30/2018	20:51

Method Reference(s): EPA 8260C
EPA 5035A - L
Data File: x48401.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-4 0.5-1 Ft		
Lab Sample ID:	180335-04	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.522	mg/Kg		2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	< 1.00	mg/Kg		2/7/2018 14:55
Barium	**24.3**	mg/Kg		2/6/2018 18:38
Beryllium	**0.133**	mg/Kg	J	2/6/2018 18:38
Cadmium	**0.132**	mg/Kg	J	2/6/2018 18:38
Chromium	**4.14**	mg/Kg		2/6/2018 18:38
Copper	**5.15**	mg/Kg		2/7/2018 14:59
Lead	**26.9**	mg/Kg		2/6/2018 18:38
Manganese	**127**	mg/Kg		2/6/2018 18:38
Nickel	**6.21**	mg/Kg		2/6/2018 18:38
Selenium	< 5.00	mg/Kg		2/6/2018 19:43
Silver	**0.264**	mg/Kg	J	2/6/2018 18:38
Zinc	**30.7**	mg/Kg		2/6/2018 18:38

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180207B

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0257**	mg/Kg		2/6/2018 11:02

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1221	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1232	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1242	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1248	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1254	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1260	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1262	< 0.0297	mg/Kg		2/1/2018 02:35
PCB-1268	< 0.0297	mg/Kg		2/1/2018 02:35

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**57.4**	22.2 - 140		2/1/2018 02:35
Tetrachloro-m-xylene	**52.7**	11.8 - 125		2/1/2018 02:35

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	**3.00**	ug/Kg	P	2/5/2018 15:22
4,4-DDE	< 2.97	ug/Kg		2/5/2018 15:22
4,4-DDT	**2.42**	ug/Kg	J	2/5/2018 15:22
Aldrin	< 2.97	ug/Kg		2/5/2018 15:22
alpha-BHC	< 2.97	ug/Kg		2/5/2018 15:22
beta-BHC	< 2.97	ug/Kg		2/5/2018 15:22
cis-Chlordane	**5.93**	ug/Kg		2/5/2018 15:22
delta-BHC	< 2.97	ug/Kg		2/5/2018 15:22
Dieldrin	**3.50**	ug/Kg	P	2/5/2018 15:22
Endosulfan I	< 2.97	ug/Kg		2/5/2018 15:22
Endosulfan II	**1.59**	ug/Kg	JP	2/5/2018 15:22
Endosulfan Sulfate	**2.12**	ug/Kg	JP	2/5/2018 15:22
Endrin	< 2.97	ug/Kg		2/5/2018 15:22
Endrin Aldehyde	**2.24**	ug/Kg	JP	2/5/2018 15:22
Endrin Ketone	**2.89**	ug/Kg	JP	2/5/2018 15:22
gamma-BHC (Lindane)	< 2.97	ug/Kg		2/5/2018 15:22
Heptachlor	< 2.97	ug/Kg		2/5/2018 15:22
Heptachlor Epoxide	< 2.97	ug/Kg		2/5/2018 15:22
Methoxychlor	**19.3**	ug/Kg	P	2/5/2018 15:22
Toxaphene	< 29.7	ug/Kg		2/5/2018 15:22
trans-Chlordane	< 2.97	ug/Kg		2/5/2018 15:22

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**138**	31.5 - 168		2/5/2018 15:22
Tetrachloro-m-xylene (1)	**82.0**	26.7 - 117		2/5/2018 15:22

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 1450	ug/Kg		1/30/2018 19:26
1,2,4,5-Tetrachlorobenzene	< 1450	ug/Kg		1/30/2018 19:26
1,2,4-Trichlorobenzene	< 1450	ug/Kg		1/30/2018 19:26
1,2-Dichlorobenzene	< 1450	ug/Kg		1/30/2018 19:26
1,3-Dichlorobenzene	< 1450	ug/Kg		1/30/2018 19:26
1,4-Dichlorobenzene	< 1450	ug/Kg		1/30/2018 19:26
2,2-Oxybis (1-chloropropane)	< 1450	ug/Kg		1/30/2018 19:26
2,3,4,6-Tetrachlorophenol	< 1450	ug/Kg		1/30/2018 19:26
2,4,5-Trichlorophenol	< 2900	ug/Kg		1/30/2018 19:26
2,4,6-Trichlorophenol	< 1450	ug/Kg		1/30/2018 19:26
2,4-Dichlorophenol	< 1450	ug/Kg		1/30/2018 19:26
2,4-Dimethylphenol	< 1450	ug/Kg		1/30/2018 19:26
2,4-Dinitrophenol	< 2900	ug/Kg		1/30/2018 19:26
2,4-Dinitrotoluene	< 1450	ug/Kg		1/30/2018 19:26
2,6-Dinitrotoluene	< 1450	ug/Kg		1/30/2018 19:26
2-Chloronaphthalene	< 1450	ug/Kg		1/30/2018 19:26
2-Chlorophenol	< 1450	ug/Kg		1/30/2018 19:26
2-Methylnapthalene	< 1450	ug/Kg		1/30/2018 19:26
2-Methylphenol	< 1450	ug/Kg		1/30/2018 19:26
2-Nitroaniline	< 2900	ug/Kg		1/30/2018 19:26
2-Nitrophenol	< 1450	ug/Kg		1/30/2018 19:26
3&4-Methylphenol	< 1450	ug/Kg		1/30/2018 19:26
3,3'-Dichlorobenzidine	< 1450	ug/Kg		1/30/2018 19:26
3-Nitroaniline	< 2900	ug/Kg		1/30/2018 19:26
4,6-Dinitro-2-methylphenol	< 2900	ug/Kg		1/30/2018 19:26
4-Bromophenyl phenyl ether	< 1450	ug/Kg		1/30/2018 19:26
4-Chloro-3-methylphenol	< 1450	ug/Kg		1/30/2018 19:26

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

4-Chloroaniline	< 1450	ug/Kg		1/30/2018	19:26
4-Chlorophenyl phenyl ether	< 1450	ug/Kg		1/30/2018	19:26
4-Nitroaniline	< 2900	ug/Kg		1/30/2018	19:26
4-Nitrophenol	< 2900	ug/Kg		1/30/2018	19:26
Acenaphthene	< 1450	ug/Kg		1/30/2018	19:26
Acenaphthylene	< 1450	ug/Kg		1/30/2018	19:26
Acetophenone	< 1450	ug/Kg		1/30/2018	19:26
Anthracene	< 1450	ug/Kg		1/30/2018	19:26
Atrazine	< 1450	ug/Kg		1/30/2018	19:26
Benzaldehyde	< 1450	ug/Kg		1/30/2018	19:26
Benzo (a) anthracene	< 1450	ug/Kg		1/30/2018	19:26
Benzo (a) pyrene	< 1450	ug/Kg		1/30/2018	19:26
Benzo (b) fluoranthene	< 1450	ug/Kg		1/30/2018	19:26
Benzo (g,h,i) perylene	< 1450	ug/Kg		1/30/2018	19:26
Benzo (k) fluoranthene	< 1450	ug/Kg		1/30/2018	19:26
Bis (2-chloroethoxy) methane	< 1450	ug/Kg		1/30/2018	19:26
Bis (2-chloroethyl) ether	< 1450	ug/Kg		1/30/2018	19:26
Bis (2-ethylhexyl) phthalate	< 1450	ug/Kg		1/30/2018	19:26
Butylbenzylphthalate	< 1450	ug/Kg		1/30/2018	19:26
Caprolactam	< 1450	ug/Kg		1/30/2018	19:26
Carbazole	< 1450	ug/Kg		1/30/2018	19:26
Chrysene	< 1450	ug/Kg		1/30/2018	19:26
Dibenz (a,h) anthracene	< 1450	ug/Kg		1/30/2018	19:26
Dibenzofuran	< 1450	ug/Kg		1/30/2018	19:26
Diethyl phthalate	< 1450	ug/Kg		1/30/2018	19:26
Dimethyl phthalate	< 2900	ug/Kg		1/30/2018	19:26
Di-n-butyl phthalate	< 1450	ug/Kg		1/30/2018	19:26
Di-n-octylphthalate	< 1450	ug/Kg		1/30/2018	19:26
Fluoranthene	**1380**	ug/Kg	J	1/30/2018	19:26
Fluorene	< 1450	ug/Kg		1/30/2018	19:26

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-5 0.5-1 Ft
Lab Sample ID: 180335-05 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 1450	ug/Kg		1/30/2018	19:26
Hexachlorobutadiene	< 1450	ug/Kg		1/30/2018	19:26
Hexachlorocyclopentadiene	< 1450	ug/Kg		1/30/2018	19:26
Hexachloroethane	< 1450	ug/Kg		1/30/2018	19:26
Indeno (1,2,3-cd) pyrene	< 1450	ug/Kg		1/30/2018	19:26
Isophorone	< 1450	ug/Kg		1/30/2018	19:26
Naphthalene	< 1450	ug/Kg		1/30/2018	19:26
Nitrobenzene	< 1450	ug/Kg		1/30/2018	19:26
N-Nitroso-di-n-propylamine	< 1450	ug/Kg		1/30/2018	19:26
N-Nitrosodiphenylamine	< 1450	ug/Kg		1/30/2018	19:26
Pentachlorophenol	< 2900	ug/Kg		1/30/2018	19:26
Phenanthrene	**894**	ug/Kg	J	1/30/2018	19:26
Phenol	< 1450	ug/Kg		1/30/2018	19:26
Pyrene	**1030**	ug/Kg	J	1/30/2018	19:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**66.3**	55.4 - 114		1/30/2018	19:26
2-Fluorobiphenyl	**62.8**	39.9 - 112		1/30/2018	19:26
2-Fluorophenol	**58.8**	41.9 - 97.1		1/30/2018	19:26
Nitrobenzene-d5	**54.6**	41 - 96		1/30/2018	19:26
Phenol-d5	**58.7**	43.7 - 101		1/30/2018	19:26
Terphenyl-d14	**70.3**	71.7 - 115	*	1/30/2018	19:26

Reporting limit elevated due to sample matrix

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25012.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 3.88	ug/Kg		1/30/2018 21:15
1,1,2,2-Tetrachloroethane	< 3.88	ug/Kg		1/30/2018 21:15
1,1,2-Trichloroethane	< 3.88	ug/Kg		1/30/2018 21:15
1,1-Dichloroethane	< 3.88	ug/Kg		1/30/2018 21:15
1,1-Dichloroethene	< 3.88	ug/Kg		1/30/2018 21:15
1,2,3-Trichlorobenzene	< 9.70	ug/Kg		1/30/2018 21:15
1,2,4-Trichlorobenzene	< 9.70	ug/Kg		1/30/2018 21:15
1,2,4-Trimethylbenzene	**16.2**	ug/Kg		1/30/2018 21:15
1,2-Dibromo-3-Chloropropane	< 19.4	ug/Kg		1/30/2018 21:15
1,2-Dibromoethane	< 3.88	ug/Kg		1/30/2018 21:15
1,2-Dichlorobenzene	< 3.88	ug/Kg		1/30/2018 21:15
1,2-Dichloroethane	< 3.88	ug/Kg		1/30/2018 21:15
1,2-Dichloropropane	< 3.88	ug/Kg		1/30/2018 21:15
1,3,5-Trimethylbenzene	**6.89**	ug/Kg		1/30/2018 21:15
1,3-Dichlorobenzene	< 3.88	ug/Kg		1/30/2018 21:15
1,4-Dichlorobenzene	< 3.88	ug/Kg		1/30/2018 21:15
1,4-dioxane	< 38.8	ug/Kg		1/30/2018 21:15
2-Butanone	< 19.4	ug/Kg		1/30/2018 21:15
2-Hexanone	< 9.70	ug/Kg		1/30/2018 21:15
4-Methyl-2-pentanone	< 9.70	ug/Kg		1/30/2018 21:15
Acetone	< 19.4	ug/Kg		1/30/2018 21:15
Benzene	**2.34**	ug/Kg	J	1/30/2018 21:15
Bromochloromethane	< 9.70	ug/Kg		1/30/2018 21:15
Bromodichloromethane	< 3.88	ug/Kg		1/30/2018 21:15
Bromoform	< 9.70	ug/Kg		1/30/2018 21:15
Bromomethane	< 3.88	ug/Kg		1/30/2018 21:15
Carbon disulfide	< 3.88	ug/Kg		1/30/2018 21:15

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-5 0.5-1 Ft
Lab Sample ID: 180335-05 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 3.88	ug/Kg		1/30/2018	21:15
Chlorobenzene	< 3.88	ug/Kg		1/30/2018	21:15
Chloroethane	< 3.88	ug/Kg		1/30/2018	21:15
Chloroform	< 3.88	ug/Kg		1/30/2018	21:15
Chloromethane	< 3.88	ug/Kg		1/30/2018	21:15
cis-1,2-Dichloroethene	**2.87**	ug/Kg	J	1/30/2018	21:15
cis-1,3-Dichloropropene	< 3.88	ug/Kg		1/30/2018	21:15
Cyclohexane	< 19.4	ug/Kg		1/30/2018	21:15
Dibromochloromethane	< 3.88	ug/Kg		1/30/2018	21:15
Dichlorodifluoromethane	< 3.88	ug/Kg		1/30/2018	21:15
Ethylbenzene	< 3.88	ug/Kg		1/30/2018	21:15
Freon 113	< 3.88	ug/Kg		1/30/2018	21:15
Isopropylbenzene	< 3.88	ug/Kg		1/30/2018	21:15
m,p-Xylene	**11.6**	ug/Kg		1/30/2018	21:15
Methyl acetate	< 3.88	ug/Kg		1/30/2018	21:15
Methyl tert-butyl Ether	< 3.88	ug/Kg		1/30/2018	21:15
Methylcyclohexane	**14.8**	ug/Kg		1/30/2018	21:15
Methylene chloride	< 9.70	ug/Kg		1/30/2018	21:15
Naphthalene	< 9.70	ug/Kg		1/30/2018	21:15
n-Butylbenzene	< 3.88	ug/Kg		1/30/2018	21:15
n-Propylbenzene	< 3.88	ug/Kg		1/30/2018	21:15
o-Xylene	**6.40**	ug/Kg		1/30/2018	21:15
p-Isopropyltoluene	< 3.88	ug/Kg		1/30/2018	21:15
sec-Butylbenzene	< 3.88	ug/Kg		1/30/2018	21:15
Styrene	< 9.70	ug/Kg		1/30/2018	21:15
tert-Butylbenzene	< 3.88	ug/Kg		1/30/2018	21:15
Tetrachloroethene	< 3.88	ug/Kg		1/30/2018	21:15
Toluene	**2.30**	ug/Kg	J	1/30/2018	21:15
trans-1,2-Dichloroethene	< 3.88	ug/Kg		1/30/2018	21:15
trans-1,3-Dichloropropene	< 3.88	ug/Kg		1/30/2018	21:15

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-5 0.5-1 Ft
Lab Sample ID: 180335-05 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	**58.5**	ug/Kg			1/30/2018	21:15
Trichlorofluoromethane	< 3.88	ug/Kg			1/30/2018	21:15
Vinyl chloride	< 3.88	ug/Kg			1/30/2018	21:15

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**106**	86.2 - 128		1/30/2018	21:15
4-Bromofluorobenzene	**81.1**	69.8 - 123		1/30/2018	21:15
Pentafluorobenzene	**103**	82.2 - 114		1/30/2018	21:15
Toluene-D8	**96.0**	81.3 - 113		1/30/2018	21:15

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: x48402.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-5 0.5-1 Ft		
Lab Sample ID:	180335-05	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.500	mg/Kg		2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-6 1-2 Ft		
Lab Sample ID:	180335-06	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**18.7**	mg/Kg		2/6/2018 18:42
Barium	**115**	mg/Kg		2/6/2018 18:42
Beryllium	**0.710**	mg/Kg		2/6/2018 18:42
Cadmium	**0.283**	mg/Kg		2/6/2018 18:42
Chromium	**12.6**	mg/Kg		2/6/2018 18:42
Copper	**113**	mg/Kg		2/6/2018 18:42
Lead	**130**	mg/Kg		2/6/2018 18:42
Manganese	**240**	mg/Kg		2/6/2018 18:42
Nickel	**14.6**	mg/Kg		2/6/2018 18:42
Selenium	< 1.11	mg/Kg		2/6/2018 18:42
Silver	**0.858**	mg/Kg		2/6/2018 18:42
Zinc	**132**	mg/Kg		2/6/2018 18:42

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-6 1-2 Ft		
Lab Sample ID:	180335-06	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.107**	mg/Kg		2/6/2018 11:05

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-6 1-2 Ft		
Lab Sample ID:	180335-06	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1221	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1232	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1242	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1248	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1254	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1260	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1262	< 0.0322	mg/Kg		2/1/2018 02:58
PCB-1268	< 0.0322	mg/Kg		2/1/2018 02:58

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**49.9**	22.2 - 140		2/1/2018 02:58
Tetrachloro-m-xylene	**46.7**	11.8 - 125		2/1/2018 02:58

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-6 1-2 Ft		
Lab Sample ID:	180335-06	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	**2.41**	ug/Kg	J	2/5/2018 15:35
4,4-DDE	< 3.22	ug/Kg		2/5/2018 15:35
4,4-DDT	**1.64**	ug/Kg	J	2/5/2018 15:35
Aldrin	< 3.22	ug/Kg		2/5/2018 15:35
alpha-BHC	< 3.22	ug/Kg		2/5/2018 15:35
beta-BHC	< 3.22	ug/Kg		2/5/2018 15:35
cis-Chlordane	< 3.22	ug/Kg		2/5/2018 15:35
delta-BHC	< 3.22	ug/Kg		2/5/2018 15:35
Dieldrin	< 3.22	ug/Kg		2/5/2018 15:35
Endosulfan I	< 3.22	ug/Kg		2/5/2018 15:35
Endosulfan II	< 3.22	ug/Kg		2/5/2018 15:35
Endosulfan Sulfate	**2.07**	ug/Kg	JP	2/5/2018 15:35
Endrin	< 3.22	ug/Kg		2/5/2018 15:35
Endrin Aldehyde	< 3.22	ug/Kg		2/5/2018 15:35
Endrin Ketone	**2.41**	ug/Kg	J	2/5/2018 15:35
gamma-BHC (Lindane)	< 3.22	ug/Kg		2/5/2018 15:35
Heptachlor	< 3.22	ug/Kg		2/5/2018 15:35
Heptachlor Epoxide	< 3.22	ug/Kg		2/5/2018 15:35
Methoxychlor	**10.5**	ug/Kg	P	2/5/2018 15:35
Toxaphene	< 32.2	ug/Kg		2/5/2018 15:35
trans-Chlordane	< 3.22	ug/Kg		2/5/2018 15:35

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**53.4**	31.5 - 168		2/5/2018 15:35
Tetrachloro-m-xylene (1)	**50.7**	26.7 - 117		2/5/2018 15:35

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-6 1-2 Ft
Lab Sample ID: 180335-06 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 329	ug/Kg		1/30/2018 19:55
1,2,4,5-Tetrachlorobenzene	< 329	ug/Kg		1/30/2018 19:55
1,2,4-Trichlorobenzene	< 329	ug/Kg		1/30/2018 19:55
1,2-Dichlorobenzene	< 329	ug/Kg		1/30/2018 19:55
1,3-Dichlorobenzene	< 329	ug/Kg		1/30/2018 19:55
1,4-Dichlorobenzene	< 329	ug/Kg		1/30/2018 19:55
2,2-Oxybis (1-chloropropane)	< 329	ug/Kg		1/30/2018 19:55
2,3,4,6-Tetrachlorophenol	< 329	ug/Kg		1/30/2018 19:55
2,4,5-Trichlorophenol	< 659	ug/Kg		1/30/2018 19:55
2,4,6-Trichlorophenol	< 329	ug/Kg		1/30/2018 19:55
2,4-Dichlorophenol	< 329	ug/Kg		1/30/2018 19:55
2,4-Dimethylphenol	< 329	ug/Kg		1/30/2018 19:55
2,4-Dinitrophenol	< 659	ug/Kg		1/30/2018 19:55
2,4-Dinitrotoluene	< 329	ug/Kg		1/30/2018 19:55
2,6-Dinitrotoluene	< 329	ug/Kg		1/30/2018 19:55
2-Chloronaphthalene	< 329	ug/Kg		1/30/2018 19:55
2-Chlorophenol	< 329	ug/Kg		1/30/2018 19:55
2-Methylnapthalene	< 329	ug/Kg		1/30/2018 19:55
2-Methylphenol	< 329	ug/Kg		1/30/2018 19:55
2-Nitroaniline	< 659	ug/Kg		1/30/2018 19:55
2-Nitrophenol	< 329	ug/Kg		1/30/2018 19:55
3&4-Methylphenol	< 329	ug/Kg		1/30/2018 19:55
3,3'-Dichlorobenzidine	< 329	ug/Kg		1/30/2018 19:55
3-Nitroaniline	< 659	ug/Kg		1/30/2018 19:55
4,6-Dinitro-2-methylphenol	< 659	ug/Kg		1/30/2018 19:55
4-Bromophenyl phenyl ether	< 329	ug/Kg		1/30/2018 19:55
4-Chloro-3-methylphenol	< 329	ug/Kg		1/30/2018 19:55

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-6 1-2 Ft		
Lab Sample ID:	180335-06	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

4-Chloroaniline	< 329	ug/Kg		1/30/2018	19:55
4-Chlorophenyl phenyl ether	< 329	ug/Kg		1/30/2018	19:55
4-Nitroaniline	< 659	ug/Kg		1/30/2018	19:55
4-Nitrophenol	< 659	ug/Kg		1/30/2018	19:55
Acenaphthene	< 329	ug/Kg		1/30/2018	19:55
Acenaphthylene	< 329	ug/Kg		1/30/2018	19:55
Acetophenone	< 329	ug/Kg		1/30/2018	19:55
Anthracene	**211**	ug/Kg	J	1/30/2018	19:55
Atrazine	< 329	ug/Kg		1/30/2018	19:55
Benzaldehyde	< 329	ug/Kg		1/30/2018	19:55
Benzo (a) anthracene	**868**	ug/Kg		1/30/2018	19:55
Benzo (a) pyrene	**726**	ug/Kg		1/30/2018	19:55
Benzo (b) fluoranthene	**727**	ug/Kg		1/30/2018	19:55
Benzo (g,h,i) perylene	**468**	ug/Kg		1/30/2018	19:55
Benzo (k) fluoranthene	**577**	ug/Kg		1/30/2018	19:55
Bis (2-chloroethoxy) methane	< 329	ug/Kg		1/30/2018	19:55
Bis (2-chloroethyl) ether	< 329	ug/Kg		1/30/2018	19:55
Bis (2-ethylhexyl) phthalate	< 329	ug/Kg		1/30/2018	19:55
Butylbenzylphthalate	< 329	ug/Kg		1/30/2018	19:55
Caprolactam	< 329	ug/Kg		1/30/2018	19:55
Carbazole	< 329	ug/Kg		1/30/2018	19:55
Chrysene	**857**	ug/Kg		1/30/2018	19:55
Dibenz (a,h) anthracene	**173**	ug/Kg	J	1/30/2018	19:55
Dibenzofuran	< 329	ug/Kg		1/30/2018	19:55
Diethyl phthalate	< 329	ug/Kg		1/30/2018	19:55
Dimethyl phthalate	< 659	ug/Kg		1/30/2018	19:55
Di-n-butyl phthalate	< 329	ug/Kg		1/30/2018	19:55
Di-n-octylphthalate	< 329	ug/Kg		1/30/2018	19:55
Fluoranthene	**1730**	ug/Kg		1/30/2018	19:55
Fluorene	< 329	ug/Kg		1/30/2018	19:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-6 1-2 Ft
Lab Sample ID: 180335-06 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 329	ug/Kg			1/30/2018	19:55
Hexachlorobutadiene	< 329	ug/Kg			1/30/2018	19:55
Hexachlorocyclopentadiene	< 329	ug/Kg			1/30/2018	19:55
Hexachloroethane	< 329	ug/Kg			1/30/2018	19:55
Indeno (1,2,3-cd) pyrene	**542**	ug/Kg			1/30/2018	19:55
Isophorone	< 329	ug/Kg			1/30/2018	19:55
Naphthalene	< 329	ug/Kg			1/30/2018	19:55
Nitrobenzene	< 329	ug/Kg			1/30/2018	19:55
N-Nitroso-di-n-propylamine	< 329	ug/Kg			1/30/2018	19:55
N-Nitrosodiphenylamine	< 329	ug/Kg			1/30/2018	19:55
Pentachlorophenol	< 659	ug/Kg			1/30/2018	19:55
Phenanthrene	**675**	ug/Kg			1/30/2018	19:55
Phenol	< 329	ug/Kg			1/30/2018	19:55
Pyrene	**1380**	ug/Kg			1/30/2018	19:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**63.1**	55.4 - 114		1/30/2018	19:55
2-Fluorobiphenyl	**53.4**	39.9 - 112		1/30/2018	19:55
2-Fluorophenol	**50.7**	41.9 - 97.1		1/30/2018	19:55
Nitrobenzene-d5	**48.2**	41 - 96		1/30/2018	19:55
Phenol-d5	**51.3**	43.7 - 101		1/30/2018	19:55
Terphenyl-d14	**66.0**	71.7 - 115	*	1/30/2018	19:55

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25013.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-6 1-2 Ft		
Lab Sample ID:	180335-06	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 4.46	ug/Kg		1/30/2018 21:39
1,1,2,2-Tetrachloroethane	< 4.46	ug/Kg		1/30/2018 21:39
1,1,2-Trichloroethane	< 4.46	ug/Kg		1/30/2018 21:39
1,1-Dichloroethane	< 4.46	ug/Kg		1/30/2018 21:39
1,1-Dichloroethene	< 4.46	ug/Kg		1/30/2018 21:39
1,2,3-Trichlorobenzene	< 11.2	ug/Kg		1/30/2018 21:39
1,2,4-Trichlorobenzene	< 11.2	ug/Kg		1/30/2018 21:39
1,2,4-Trimethylbenzene	**203**	ug/Kg		1/30/2018 21:39
1,2-Dibromo-3-Chloropropane	< 22.3	ug/Kg		1/30/2018 21:39
1,2-Dibromoethane	< 4.46	ug/Kg		1/30/2018 21:39
1,2-Dichlorobenzene	< 4.46	ug/Kg		1/30/2018 21:39
1,2-Dichloroethane	< 4.46	ug/Kg		1/30/2018 21:39
1,2-Dichloropropane	< 4.46	ug/Kg		1/30/2018 21:39
1,3,5-Trimethylbenzene	**65.1**	ug/Kg		1/30/2018 21:39
1,3-Dichlorobenzene	< 4.46	ug/Kg		1/30/2018 21:39
1,4-Dichlorobenzene	< 4.46	ug/Kg		1/30/2018 21:39
1,4-dioxane	< 44.6	ug/Kg		1/30/2018 21:39
2-Butanone	**11.8**	ug/Kg	J	1/30/2018 21:39
2-Hexanone	< 11.2	ug/Kg		1/30/2018 21:39
4-Methyl-2-pentanone	**154**	ug/Kg		1/30/2018 21:39
Acetone	**314**	ug/Kg		1/30/2018 21:39
Benzene	**6.52**	ug/Kg		1/30/2018 21:39
Bromochloromethane	< 11.2	ug/Kg		1/30/2018 21:39
Bromodichloromethane	< 4.46	ug/Kg		1/30/2018 21:39
Bromoform	< 11.2	ug/Kg		1/30/2018 21:39
Bromomethane	< 4.46	ug/Kg		1/30/2018 21:39
Carbon disulfide	< 4.46	ug/Kg		1/30/2018 21:39

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-6 1-2 Ft
Lab Sample ID: 180335-06
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Carbon Tetrachloride	< 4.46	ug/Kg		1/30/2018	21:39
Chlorobenzene	< 4.46	ug/Kg		1/30/2018	21:39
Chloroethane	< 4.46	ug/Kg		1/30/2018	21:39
Chloroform	< 4.46	ug/Kg		1/30/2018	21:39
Chloromethane	< 4.46	ug/Kg		1/30/2018	21:39
cis-1,2-Dichloroethene	**3.29**	ug/Kg	J	1/30/2018	21:39
cis-1,3-Dichloropropene	< 4.46	ug/Kg		1/30/2018	21:39
Cyclohexane	< 22.3	ug/Kg		1/30/2018	21:39
Dibromochloromethane	< 4.46	ug/Kg		1/30/2018	21:39
Dichlorodifluoromethane	< 4.46	ug/Kg		1/30/2018	21:39
Ethylbenzene	**36.4**	ug/Kg		1/30/2018	21:39
Freon 113	< 4.46	ug/Kg		1/30/2018	21:39
Isopropylbenzene	**7.24**	ug/Kg		1/30/2018	21:39
m,p-Xylene	**178**	ug/Kg		1/30/2018	21:39
Methyl acetate	< 4.46	ug/Kg		1/30/2018	21:39
Methyl tert-butyl Ether	< 4.46	ug/Kg		1/30/2018	21:39
Methylcyclohexane	**15.3**	ug/Kg		1/30/2018	21:39
Methylene chloride	**7.54**	ug/Kg	J	1/30/2018	21:39
Naphthalene	**25.5**	ug/Kg		1/30/2018	21:39
n-Butylbenzene	< 4.46	ug/Kg		1/30/2018	21:39
n-Propylbenzene	**16.6**	ug/Kg		1/30/2018	21:39
o-Xylene	**116**	ug/Kg		1/30/2018	21:39
p-Isopropyltoluene	< 4.46	ug/Kg		1/30/2018	21:39
sec-Butylbenzene	**2.94**	ug/Kg	J	1/30/2018	21:39
Styrene	< 11.2	ug/Kg		1/30/2018	21:39
tert-Butylbenzene	< 4.46	ug/Kg		1/30/2018	21:39
Tetrachloroethene	< 4.46	ug/Kg		1/30/2018	21:39
Toluene	**65.6**	ug/Kg		1/30/2018	21:39
trans-1,2-Dichloroethene	< 4.46	ug/Kg		1/30/2018	21:39
trans-1,3-Dichloropropene	< 4.46	ug/Kg		1/30/2018	21:39

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-6 1-2 Ft
Lab Sample ID: 180335-06 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	**65.5**	ug/Kg		1/30/2018	21:39
Trichlorofluoromethane	< 4.46	ug/Kg		1/30/2018	21:39
Vinyl chloride	< 4.46	ug/Kg		1/30/2018	21:39

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**105**	86.2 - 128		1/30/2018	21:39
4-Bromofluorobenzene	**87.9**	69.8 - 123		1/30/2018	21:39
Pentafluorobenzene	**107**	82.2 - 114		1/30/2018	21:39
Toluene-D8	**98.5**	81.3 - 113		1/30/2018	21:39

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: x48403.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-6 1-2 Ft		
Lab Sample ID:	180335-06	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.562	mg/Kg		2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-7 Surface
Lab Sample ID: 180335-07 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	< 0.570	mg/Kg		2/6/2018 18:45
Barium	**91.0**	mg/Kg		2/6/2018 18:45
Beryllium	**0.202**	mg/Kg	J	2/6/2018 18:45
Cadmium	**0.492**	mg/Kg		2/6/2018 18:45
Chromium	**16.9**	mg/Kg		2/6/2018 18:45
Copper	**12.8**	mg/Kg		2/6/2018 18:45
Lead	**82.6**	mg/Kg		2/6/2018 18:45
Manganese	**211**	mg/Kg		2/6/2018 18:45
Nickel	**11.2**	mg/Kg		2/6/2018 18:45
Selenium	< 5.70	mg/Kg		2/6/2018 19:48
Silver	**0.581**	mg/Kg		2/6/2018 18:45
Zinc	**157**	mg/Kg		2/6/2018 18:45

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-7 Surface		
Lab Sample ID:	180335-07	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0824**	mg/Kg		2/6/2018 11:08

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-7 Surface		
Lab Sample ID:	180335-07	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1221	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1232	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1242	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1248	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1254	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1260	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1262	< 0.0336	mg/Kg		2/2/2018 13:33
PCB-1268	< 0.0336	mg/Kg		2/2/2018 13:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**30.6**	22.2 - 140		2/2/2018 13:33
Tetrachloro-m-xylene	**33.5**	11.8 - 125		2/2/2018 13:33

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-7 Surface		
Lab Sample ID:	180335-07	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 168	ug/Kg		2/6/2018 20:10
4,4-DDE	< 168	ug/Kg		2/6/2018 20:10
4,4-DDT	< 168	ug/Kg		2/6/2018 20:10
Aldrin	< 168	ug/Kg		2/6/2018 20:10
alpha-BHC	< 168	ug/Kg		2/6/2018 20:10
beta-BHC	< 168	ug/Kg		2/6/2018 20:10
cis-Chlordane	**773**	ug/Kg		2/6/2018 20:10
delta-BHC	< 168	ug/Kg		2/6/2018 20:10
Dieldrin	< 168	ug/Kg		2/6/2018 20:10
Endosulfan I	< 168	ug/Kg		2/6/2018 20:10
Endosulfan II	< 168	ug/Kg		2/6/2018 20:10
Endosulfan Sulfate	**471**	ug/Kg	P	2/6/2018 20:10
Endrin	< 168	ug/Kg		2/6/2018 20:10
Endrin Aldehyde	< 168	ug/Kg		2/6/2018 20:10
Endrin Ketone	**98.6**	ug/Kg	JP	2/6/2018 20:10
gamma-BHC (Lindane)	< 168	ug/Kg		2/6/2018 20:10
Heptachlor	< 168	ug/Kg		2/6/2018 20:10
Heptachlor Epoxide	< 168	ug/Kg		2/6/2018 20:10
Methoxychlor	**1300**	ug/Kg	P	2/6/2018 20:10
Toxaphene	< 1680	ug/Kg		2/6/2018 20:10
trans-Chlordane	< 168	ug/Kg		2/6/2018 20:10

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	NC	31.5 - 168		2/6/2018 20:10
Tetrachloro-m-xylene (1)	NC	26.7 - 117		2/6/2018 20:10

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-7 Surface		
Lab Sample ID:	180335-07	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 3380	ug/Kg		1/31/2018 13:46
1,2,4,5-Tetrachlorobenzene	< 3380	ug/Kg		1/31/2018 13:46
1,2,4-Trichlorobenzene	< 3380	ug/Kg		1/31/2018 13:46
1,2-Dichlorobenzene	< 3380	ug/Kg		1/31/2018 13:46
1,3-Dichlorobenzene	< 3380	ug/Kg		1/31/2018 13:46
1,4-Dichlorobenzene	< 3380	ug/Kg		1/31/2018 13:46
2,2-Oxybis (1-chloropropane)	< 3380	ug/Kg		1/31/2018 13:46
2,3,4,6-Tetrachlorophenol	< 3380	ug/Kg		1/31/2018 13:46
2,4,5-Trichlorophenol	< 6770	ug/Kg		1/31/2018 13:46
2,4,6-Trichlorophenol	< 3380	ug/Kg		1/31/2018 13:46
2,4-Dichlorophenol	< 3380	ug/Kg		1/31/2018 13:46
2,4-Dimethylphenol	< 3380	ug/Kg		1/31/2018 13:46
2,4-Dinitrophenol	< 6770	ug/Kg		1/31/2018 13:46
2,4-Dinitrotoluene	< 3380	ug/Kg		1/31/2018 13:46
2,6-Dinitrotoluene	< 3380	ug/Kg		1/31/2018 13:46
2-Chloronaphthalene	< 3380	ug/Kg		1/31/2018 13:46
2-Chlorophenol	< 3380	ug/Kg		1/31/2018 13:46
2-Methylnapthalene	< 3380	ug/Kg		1/31/2018 13:46
2-Methylphenol	< 3380	ug/Kg		1/31/2018 13:46
2-Nitroaniline	< 6770	ug/Kg		1/31/2018 13:46
2-Nitrophenol	< 3380	ug/Kg		1/31/2018 13:46
3&4-Methylphenol	< 3380	ug/Kg		1/31/2018 13:46
3,3'-Dichlorobenzidine	< 3380	ug/Kg		1/31/2018 13:46
3-Nitroaniline	< 6770	ug/Kg		1/31/2018 13:46
4,6-Dinitro-2-methylphenol	< 6770	ug/Kg		1/31/2018 13:46
4-Bromophenyl phenyl ether	< 3380	ug/Kg		1/31/2018 13:46
4-Chloro-3-methylphenol	< 3380	ug/Kg		1/31/2018 13:46

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-7 Surface
Lab Sample ID: 180335-07 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 3380	ug/Kg		1/31/2018	13:46
4-Chlorophenyl phenyl ether	< 3380	ug/Kg		1/31/2018	13:46
4-Nitroaniline	< 6770	ug/Kg		1/31/2018	13:46
4-Nitrophenol	< 6770	ug/Kg		1/31/2018	13:46
Acenaphthene	**3120**	ug/Kg	J	1/31/2018	13:46
Acenaphthylene	**2090**	ug/Kg	J	1/31/2018	13:46
Acetophenone	< 3380	ug/Kg		1/31/2018	13:46
Anthracene	**11200**	ug/Kg		1/31/2018	13:46
Atrazine	< 3380	ug/Kg		1/31/2018	13:46
Benzaldehyde	< 3380	ug/Kg		1/31/2018	13:46
Benzo (a) anthracene	**26200**	ug/Kg		1/31/2018	13:46
Benzo (a) pyrene	**18600**	ug/Kg		1/31/2018	13:46
Benzo (b) fluoranthene	**23200**	ug/Kg		1/31/2018	13:46
Benzo (g,h,i) perylene	**10900**	ug/Kg		1/31/2018	13:46
Benzo (k) fluoranthene	**9960**	ug/Kg		1/31/2018	13:46
Bis (2-chloroethoxy) methane	< 3380	ug/Kg		1/31/2018	13:46
Bis (2-chloroethyl) ether	< 3380	ug/Kg		1/31/2018	13:46
Bis (2-ethylhexyl) phthalate	< 3380	ug/Kg		1/31/2018	13:46
Butylbenzylphthalate	< 3380	ug/Kg		1/31/2018	13:46
Caprolactam	< 3380	ug/Kg		1/31/2018	13:46
Carbazole	**5980**	ug/Kg		1/31/2018	13:46
Chrysene	**23400**	ug/Kg		1/31/2018	13:46
Dibenz (a,h) anthracene	**4740**	ug/Kg		1/31/2018	13:46
Dibenzofuran	**3040**	ug/Kg	J	1/31/2018	13:46
Diethyl phthalate	< 3380	ug/Kg		1/31/2018	13:46
Dimethyl phthalate	< 6770	ug/Kg		1/31/2018	13:46
Di-n-butyl phthalate	< 3380	ug/Kg		1/31/2018	13:46
Di-n-octylphthalate	< 3380	ug/Kg		1/31/2018	13:46
Fluoranthene	**57100**	ug/Kg		1/31/2018	13:46
Fluorene	**4320**	ug/Kg		1/31/2018	13:46

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-7 Surface
Lab Sample ID: 180335-07 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 3380	ug/Kg	1/31/2018	13:46
Hexachlorobutadiene	< 3380	ug/Kg	1/31/2018	13:46
Hexachlorocyclopentadiene	< 3380	ug/Kg	1/31/2018	13:46
Hexachloroethane	< 3380	ug/Kg	1/31/2018	13:46
Indeno (1,2,3-cd) pyrene	**13300**	ug/Kg	1/31/2018	13:46
Isophorone	< 3380	ug/Kg	1/31/2018	13:46
Naphthalene	< 3380	ug/Kg	1/31/2018	13:46
Nitrobenzene	< 3380	ug/Kg	1/31/2018	13:46
N-Nitroso-di-n-propylamine	< 3380	ug/Kg	1/31/2018	13:46
N-Nitrosodiphenylamine	< 3380	ug/Kg	1/31/2018	13:46
Pentachlorophenol	< 6770	ug/Kg	1/31/2018	13:46
Phenanthrene	**55200**	ug/Kg	1/31/2018	13:46
Phenol	< 3380	ug/Kg	1/31/2018	13:46
Pyrene	**39800**	ug/Kg	1/31/2018	13:46

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	NC	55.4 - 114		1/31/2018	13:46
2-Fluorobiphenyl	NC	39.9 - 112		1/31/2018	13:46
2-Fluorophenol	NC	41.9 - 97.1		1/31/2018	13:46
Nitrobenzene-d5	NC	41 - 96		1/31/2018	13:46
Phenol-d5	NC	43.7 - 101		1/31/2018	13:46
Terphenyl-d14	NC	71.7 - 115		1/31/2018	13:46

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25028.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-7 Surface		
Lab Sample ID:	180335-07	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.450**	mg/Kg	J	2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**7.00**	mg/Kg		2/6/2018 18:49
Barium	**136**	mg/Kg		2/6/2018 18:49
Beryllium	**0.550**	mg/Kg		2/6/2018 18:49
Cadmium	< 0.300	mg/Kg		2/6/2018 18:49
Chromium	**15.3**	mg/Kg		2/6/2018 18:49
Copper	**29.8**	mg/Kg		2/6/2018 18:49
Lead	**69.0**	mg/Kg		2/6/2018 18:49
Manganese	**331**	mg/Kg		2/6/2018 18:49
Nickel	**13.1**	mg/Kg		2/6/2018 18:49
Selenium	< 1.20	mg/Kg		2/6/2018 18:49
Silver	< 0.600	mg/Kg		2/6/2018 18:49
Zinc	**81.3**	mg/Kg		2/6/2018 18:49

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-8 1-2 Ft		
Lab Sample ID:	180335-08	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0613**	mg/Kg		2/6/2018 11:11

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-8 1-2 Ft		
Lab Sample ID:	180335-08	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1221	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1232	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1242	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1248	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1254	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1260	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1262	< 0.0343	mg/Kg		2/6/2018 10:41
PCB-1268	< 0.0343	mg/Kg		2/6/2018 10:41

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**56.5**	22.2 - 140		2/6/2018 10:41
Tetrachloro-m-xylene	**18.4**	11.8 - 125		2/6/2018 10:41

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	**15.9**	ug/Kg		2/6/2018 19:31
4,4-DDE	**4.96**	ug/Kg		2/6/2018 19:31
4,4-DDT	< 3.43	ug/Kg		2/6/2018 19:31
Aldrin	< 3.43	ug/Kg		2/6/2018 19:31
alpha-BHC	< 3.43	ug/Kg		2/6/2018 19:31
beta-BHC	< 3.43	ug/Kg		2/6/2018 19:31
cis-Chlordane	**3.15**	ug/Kg	JP	2/6/2018 19:31
delta-BHC	< 3.43	ug/Kg		2/6/2018 19:31
Dieldrin	**2.12**	ug/Kg	JP	2/6/2018 19:31
Endosulfan I	< 3.43	ug/Kg		2/6/2018 19:31
Endosulfan II	**4.44**	ug/Kg	P	2/6/2018 19:31
Endosulfan Sulfate	**7.92**	ug/Kg		2/6/2018 19:31
Endrin	< 3.43	ug/Kg		2/6/2018 19:31
Endrin Aldehyde	**12.3**	ug/Kg		2/6/2018 19:31
Endrin Ketone	**2.36**	ug/Kg	JP	2/6/2018 19:31
gamma-BHC (Lindane)	< 3.43	ug/Kg		2/6/2018 19:31
Heptachlor	< 3.43	ug/Kg		2/6/2018 19:31
Heptachlor Epoxide	**2.50**	ug/Kg	J	2/6/2018 19:31
Methoxychlor	< 3.43	ug/Kg		2/6/2018 19:31
Toxaphene	< 34.3	ug/Kg		2/6/2018 19:31
trans-Chlordane	**2.92**	ug/Kg	JP	2/6/2018 19:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**117**	31.5 - 168		2/6/2018 19:31
Tetrachloro-m-xylene (1)	**63.1**	26.7 - 117		2/6/2018 19:31

Method Reference(s): EPA 8081B
EPA 3550C
Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-8 1-2 Ft		
Lab Sample ID:	180335-08	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 326	ug/Kg		1/30/2018 20:54
1,2,4,5-Tetrachlorobenzene	< 326	ug/Kg		1/30/2018 20:54
1,2,4-Trichlorobenzene	< 326	ug/Kg		1/30/2018 20:54
1,2-Dichlorobenzene	< 326	ug/Kg		1/30/2018 20:54
1,3-Dichlorobenzene	< 326	ug/Kg		1/30/2018 20:54
1,4-Dichlorobenzene	< 326	ug/Kg		1/30/2018 20:54
2,2-Oxybis (1-chloropropane)	< 326	ug/Kg		1/30/2018 20:54
2,3,4,6-Tetrachlorophenol	< 326	ug/Kg		1/30/2018 20:54
2,4,5-Trichlorophenol	< 652	ug/Kg		1/30/2018 20:54
2,4,6-Trichlorophenol	< 326	ug/Kg		1/30/2018 20:54
2,4-Dichlorophenol	< 326	ug/Kg		1/30/2018 20:54
2,4-Dimethylphenol	< 326	ug/Kg		1/30/2018 20:54
2,4-Dinitrophenol	< 652	ug/Kg		1/30/2018 20:54
2,4-Dinitrotoluene	< 326	ug/Kg		1/30/2018 20:54
2,6-Dinitrotoluene	< 326	ug/Kg		1/30/2018 20:54
2-Chloronaphthalene	< 326	ug/Kg		1/30/2018 20:54
2-Chlorophenol	< 326	ug/Kg		1/30/2018 20:54
2-Methylnapthalene	**5110**	ug/Kg		1/30/2018 20:54
2-Methylphenol	< 326	ug/Kg		1/30/2018 20:54
2-Nitroaniline	< 652	ug/Kg		1/30/2018 20:54
2-Nitrophenol	< 326	ug/Kg		1/30/2018 20:54
3&4-Methylphenol	< 326	ug/Kg		1/30/2018 20:54
3,3'-Dichlorobenzidine	< 326	ug/Kg		1/30/2018 20:54
3-Nitroaniline	< 652	ug/Kg		1/30/2018 20:54
4,6-Dinitro-2-methylphenol	< 652	ug/Kg		1/30/2018 20:54
4-Bromophenyl phenyl ether	< 326	ug/Kg		1/30/2018 20:54
4-Chloro-3-methylphenol	< 326	ug/Kg		1/30/2018 20:54

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

4-Chloroaniline	< 326	ug/Kg		1/30/2018	20:54
4-Chlorophenyl phenyl ether	< 326	ug/Kg		1/30/2018	20:54
4-Nitroaniline	< 652	ug/Kg		1/30/2018	20:54
4-Nitrophenol	< 652	ug/Kg		1/30/2018	20:54
Acenaphthene	< 326	ug/Kg		1/30/2018	20:54
Acenaphthylene	< 326	ug/Kg		1/30/2018	20:54
Acetophenone	< 326	ug/Kg		1/30/2018	20:54
Anthracene	< 326	ug/Kg		1/30/2018	20:54
Atrazine	< 326	ug/Kg		1/30/2018	20:54
Benzaldehyde	< 326	ug/Kg		1/30/2018	20:54
Benzo (a) anthracene	**222**	ug/Kg	J	1/30/2018	20:54
Benzo (a) pyrene	**236**	ug/Kg	J	1/30/2018	20:54
Benzo (b) fluoranthene	**312**	ug/Kg	J	1/30/2018	20:54
Benzo (g,h,i) perylene	**221**	ug/Kg	J	1/30/2018	20:54
Benzo (k) fluoranthene	**173**	ug/Kg	J	1/30/2018	20:54
Bis (2-chloroethoxy) methane	< 326	ug/Kg		1/30/2018	20:54
Bis (2-chloroethyl) ether	< 326	ug/Kg		1/30/2018	20:54
Bis (2-ethylhexyl) phthalate	< 326	ug/Kg		1/30/2018	20:54
Butylbenzylphthalate	< 326	ug/Kg		1/30/2018	20:54
Caprolactam	< 326	ug/Kg		1/30/2018	20:54
Carbazole	< 326	ug/Kg		1/30/2018	20:54
Chrysene	**289**	ug/Kg	J	1/30/2018	20:54
Dibenz (a,h) anthracene	< 326	ug/Kg		1/30/2018	20:54
Dibenzofuran	< 326	ug/Kg		1/30/2018	20:54
Diethyl phthalate	< 326	ug/Kg		1/30/2018	20:54
Dimethyl phthalate	< 652	ug/Kg		1/30/2018	20:54
Di-n-butyl phthalate	< 326	ug/Kg		1/30/2018	20:54
Di-n-octylphthalate	< 326	ug/Kg		1/30/2018	20:54
Fluoranthene	**378**	ug/Kg		1/30/2018	20:54
Fluorene	< 326	ug/Kg		1/30/2018	20:54

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 326	ug/Kg		1/30/2018	20:54
Hexachlorobutadiene	< 326	ug/Kg		1/30/2018	20:54
Hexachlorocyclopentadiene	< 326	ug/Kg		1/30/2018	20:54
Hexachloroethane	< 326	ug/Kg		1/30/2018	20:54
Indeno (1,2,3-cd) pyrene	**263**	ug/Kg	J	1/30/2018	20:54
Isophorone	< 326	ug/Kg		1/30/2018	20:54
Naphthalene	**2680**	ug/Kg		1/30/2018	20:54
Nitrobenzene	< 326	ug/Kg		1/30/2018	20:54
N-Nitroso-di-n-propylamine	< 326	ug/Kg		1/30/2018	20:54
N-Nitrosodiphenylamine	< 326	ug/Kg		1/30/2018	20:54
Pentachlorophenol	< 652	ug/Kg		1/30/2018	20:54
Phenanthrene	**424**	ug/Kg		1/30/2018	20:54
Phenol	< 326	ug/Kg		1/30/2018	20:54
Pyrene	**452**	ug/Kg		1/30/2018	20:54

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**68.3**	55.4 - 114		1/30/2018	20:54
2-Fluorobiphenyl	**60.7**	39.9 - 112		1/30/2018	20:54
2-Fluorophenol	**54.6**	41.9 - 97.1		1/30/2018	20:54
Nitrobenzene-d5	**47.4**	41 - 96		1/30/2018	20:54
Phenol-d5	**51.6**	43.7 - 101		1/30/2018	20:54
Terphenyl-d14	**62.7**	71.7 - 115	*	1/30/2018	20:54

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25015.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-8 1-2 Ft		
Lab Sample ID:	180335-08	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 3790	ug/Kg		1/31/2018 20:46
1,1,2,2-Tetrachloroethane	< 3790	ug/Kg		1/31/2018 20:46
1,1,2-Trichloroethane	< 3790	ug/Kg		1/31/2018 20:46
1,1-Dichloroethane	< 3790	ug/Kg		1/31/2018 20:46
1,1-Dichloroethene	< 3790	ug/Kg		1/31/2018 20:46
1,2,3-Trichlorobenzene	< 9470	ug/Kg		1/31/2018 20:46
1,2,4-Trichlorobenzene	< 9470	ug/Kg		1/31/2018 20:46
1,2,4-Trimethylbenzene	**371000**	ug/Kg		1/31/2018 20:46
1,2-Dibromo-3-Chloropropane	< 18900	ug/Kg		1/31/2018 20:46
1,2-Dibromoethane	< 3790	ug/Kg		1/31/2018 20:46
1,2-Dichlorobenzene	< 3790	ug/Kg		1/31/2018 20:46
1,2-Dichloroethane	< 3790	ug/Kg		1/31/2018 20:46
1,2-Dichloropropane	< 3790	ug/Kg		1/31/2018 20:46
1,3,5-Trimethylbenzene	**154000**	ug/Kg		1/31/2018 20:46
1,3-Dichlorobenzene	< 3790	ug/Kg		1/31/2018 20:46
1,4-Dichlorobenzene	< 3790	ug/Kg		1/31/2018 20:46
1,4-dioxane	< 37900	ug/Kg		1/31/2018 20:46
2-Butanone	< 18900	ug/Kg		1/31/2018 20:46
2-Hexanone	< 9470	ug/Kg		1/31/2018 20:46
4-Methyl-2-pentanone	< 9470	ug/Kg		1/31/2018 20:46
Acetone	< 18900	ug/Kg		1/31/2018 20:46
Benzene	< 3790	ug/Kg		1/31/2018 20:46
Bromochloromethane	< 9470	ug/Kg		1/31/2018 20:46
Bromodichloromethane	< 3790	ug/Kg		1/31/2018 20:46
Bromoform	< 9470	ug/Kg		1/31/2018 20:46
Bromomethane	< 3790	ug/Kg		1/31/2018 20:46
Carbon disulfide	< 3790	ug/Kg		1/31/2018 20:46

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 3790	ug/Kg	1/31/2018	20:46
Chlorobenzene	< 3790	ug/Kg	1/31/2018	20:46
Chloroethane	< 3790	ug/Kg	1/31/2018	20:46
Chloroform	< 3790	ug/Kg	1/31/2018	20:46
Chloromethane	< 3790	ug/Kg	1/31/2018	20:46
cis-1,2-Dichloroethene	< 3790	ug/Kg	1/31/2018	20:46
cis-1,3-Dichloropropene	< 3790	ug/Kg	1/31/2018	20:46
Cyclohexane	< 18900	ug/Kg	1/31/2018	20:46
Dibromochloromethane	< 3790	ug/Kg	1/31/2018	20:46
Dichlorodifluoromethane	< 3790	ug/Kg	1/31/2018	20:46
Ethylbenzene	**5730**	ug/Kg	1/31/2018	20:46
Freon 113	< 3790	ug/Kg	1/31/2018	20:46
Isopropylbenzene	< 3790	ug/Kg	1/31/2018	20:46
m,p-Xylene	**169000**	ug/Kg	1/31/2018	20:46
Methyl acetate	< 3790	ug/Kg	1/31/2018	20:46
Methyl tert-butyl Ether	< 3790	ug/Kg	1/31/2018	20:46
Methylcyclohexane	**24000**	ug/Kg	1/31/2018	20:46
Methylene chloride	< 9470	ug/Kg	1/31/2018	20:46
Naphthalene	**48900**	ug/Kg	1/31/2018	20:46
n-Butylbenzene	< 3790	ug/Kg	1/31/2018	20:46
n-Propylbenzene	**6100**	ug/Kg	1/31/2018	20:46
o-Xylene	**63200**	ug/Kg	1/31/2018	20:46
p-Isopropyltoluene	**5020**	ug/Kg	1/31/2018	20:46
sec-Butylbenzene	< 3790	ug/Kg	1/31/2018	20:46
Styrene	< 9470	ug/Kg	1/31/2018	20:46
tert-Butylbenzene	< 3790	ug/Kg	1/31/2018	20:46
Tetrachloroethene	< 3790	ug/Kg	1/31/2018	20:46
Toluene	< 3790	ug/Kg	1/31/2018	20:46
trans-1,2-Dichloroethene	< 3790	ug/Kg	1/31/2018	20:46
trans-1,3-Dichloropropene	< 3790	ug/Kg	1/31/2018	20:46

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	< 3790	ug/Kg		1/31/2018	20:46
Trichlorofluoromethane	< 3790	ug/Kg		1/31/2018	20:46
Vinyl chloride	< 3790	ug/Kg		1/31/2018	20:46

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**104**	86.2 - 128		1/31/2018	20:46
4-Bromofluorobenzene	**105**	69.8 - 123		1/31/2018	20:46
Pentafluorobenzene	**101**	82.2 - 114		1/31/2018	20:46
Toluene-D8	**104**	81.3 - 113		1/31/2018	20:46

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: x48435.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-8 1-2 Ft		
Lab Sample ID:	180335-08	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.561	mg/Kg		2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/8/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-9 5-6 Ft		
Lab Sample ID:	180335-09	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.18**	mg/Kg		2/6/2018 18:53
Barium	**102**	mg/Kg		2/6/2018 18:53
Beryllium	**0.543**	mg/Kg		2/6/2018 18:53
Cadmium	< 0.281	mg/Kg		2/6/2018 18:53
Chromium	**16.9**	mg/Kg		2/6/2018 18:53
Copper	**13.4**	mg/Kg		2/6/2018 18:53
Lead	**10.3**	mg/Kg		2/6/2018 18:53
Manganese	**428**	mg/Kg		2/6/2018 18:53
Nickel	**18.6**	mg/Kg		2/6/2018 18:53
Selenium	< 1.13	mg/Kg		2/6/2018 18:53
Silver	**0.475**	mg/Kg	J	2/6/2018 18:53
Zinc	**47.6**	mg/Kg		2/6/2018 18:53

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-9 5-6 Ft		
Lab Sample ID:	180335-09	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0266**	mg/Kg		2/6/2018 11:14

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-9 5-6 Ft		
Lab Sample ID:	180335-09	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1221	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1232	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1242	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1248	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1254	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1260	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1262	< 0.0323	mg/Kg		2/2/2018 14:19
PCB-1268	< 0.0323	mg/Kg		2/2/2018 14:19

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**30.1**	22.2 - 140		2/2/2018 14:19
Tetrachloro-m-xylene	**35.3**	11.8 - 125		2/2/2018 14:19

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-9 5-6 Ft		
Lab Sample ID:	180335-09	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.23	ug/Kg		2/6/2018 19:44
4,4-DDE	< 3.23	ug/Kg		2/6/2018 19:44
4,4-DDT	< 3.23	ug/Kg		2/6/2018 19:44
Aldrin	< 3.23	ug/Kg		2/6/2018 19:44
alpha-BHC	< 3.23	ug/Kg		2/6/2018 19:44
beta-BHC	< 3.23	ug/Kg		2/6/2018 19:44
cis-Chlordane	< 3.23	ug/Kg		2/6/2018 19:44
delta-BHC	< 3.23	ug/Kg		2/6/2018 19:44
Dieldrin	< 3.23	ug/Kg		2/6/2018 19:44
Endosulfan I	< 3.23	ug/Kg		2/6/2018 19:44
Endosulfan II	< 3.23	ug/Kg		2/6/2018 19:44
Endosulfan Sulfate	< 3.23	ug/Kg		2/6/2018 19:44
Endrin	< 3.23	ug/Kg		2/6/2018 19:44
Endrin Aldehyde	< 3.23	ug/Kg		2/6/2018 19:44
Endrin Ketone	< 3.23	ug/Kg		2/6/2018 19:44
gamma-BHC (Lindane)	< 3.23	ug/Kg		2/6/2018 19:44
Heptachlor	< 3.23	ug/Kg		2/6/2018 19:44
Heptachlor Epoxide	< 3.23	ug/Kg		2/6/2018 19:44
Methoxychlor	**3.36**	ug/Kg		2/6/2018 19:44
Toxaphene	< 32.3	ug/Kg		2/6/2018 19:44
trans-Chlordane	< 3.23	ug/Kg		2/6/2018 19:44

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**82.9**	31.5 - 168		2/6/2018 19:44
Tetrachloro-m-xylene (1)	**53.4**	26.7 - 117		2/6/2018 19:44

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-9 5-6 Ft		
Lab Sample ID:	180335-09	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 332	ug/Kg		1/30/2018 21:23
1,2,4,5-Tetrachlorobenzene	< 332	ug/Kg		1/30/2018 21:23
1,2,4-Trichlorobenzene	< 332	ug/Kg		1/30/2018 21:23
1,2-Dichlorobenzene	< 332	ug/Kg		1/30/2018 21:23
1,3-Dichlorobenzene	< 332	ug/Kg		1/30/2018 21:23
1,4-Dichlorobenzene	< 332	ug/Kg		1/30/2018 21:23
2,2-Oxybis (1-chloropropane)	< 332	ug/Kg		1/30/2018 21:23
2,3,4,6-Tetrachlorophenol	< 332	ug/Kg		1/30/2018 21:23
2,4,5-Trichlorophenol	< 665	ug/Kg		1/30/2018 21:23
2,4,6-Trichlorophenol	< 332	ug/Kg		1/30/2018 21:23
2,4-Dichlorophenol	< 332	ug/Kg		1/30/2018 21:23
2,4-Dimethylphenol	< 332	ug/Kg		1/30/2018 21:23
2,4-Dinitrophenol	< 665	ug/Kg		1/30/2018 21:23
2,4-Dinitrotoluene	< 332	ug/Kg		1/30/2018 21:23
2,6-Dinitrotoluene	< 332	ug/Kg		1/30/2018 21:23
2-Chloronaphthalene	< 332	ug/Kg		1/30/2018 21:23
2-Chlorophenol	< 332	ug/Kg		1/30/2018 21:23
2-Methylnapthalene	< 332	ug/Kg		1/30/2018 21:23
2-Methylphenol	< 332	ug/Kg		1/30/2018 21:23
2-Nitroaniline	< 665	ug/Kg		1/30/2018 21:23
2-Nitrophenol	< 332	ug/Kg		1/30/2018 21:23
3&4-Methylphenol	< 332	ug/Kg		1/30/2018 21:23
3,3'-Dichlorobenzidine	< 332	ug/Kg		1/30/2018 21:23
3-Nitroaniline	< 665	ug/Kg		1/30/2018 21:23
4,6-Dinitro-2-methylphenol	< 665	ug/Kg		1/30/2018 21:23
4-Bromophenyl phenyl ether	< 332	ug/Kg		1/30/2018 21:23
4-Chloro-3-methylphenol	< 332	ug/Kg		1/30/2018 21:23

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-9 5-6 Ft
Lab Sample ID: 180335-09 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 332	ug/Kg	1/30/2018	21:23
4-Chlorophenyl phenyl ether	< 332	ug/Kg	1/30/2018	21:23
4-Nitroaniline	< 665	ug/Kg	1/30/2018	21:23
4-Nitrophenol	< 665	ug/Kg	1/30/2018	21:23
Acenaphthene	< 332	ug/Kg	1/30/2018	21:23
Acenaphthylene	< 332	ug/Kg	1/30/2018	21:23
Acetophenone	< 332	ug/Kg	1/30/2018	21:23
Anthracene	< 332	ug/Kg	1/30/2018	21:23
Atrazine	< 332	ug/Kg	1/30/2018	21:23
Benzaldehyde	< 332	ug/Kg	1/30/2018	21:23
Benzo (a) anthracene	< 332	ug/Kg	1/30/2018	21:23
Benzo (a) pyrene	< 332	ug/Kg	1/30/2018	21:23
Benzo (b) fluoranthene	< 332	ug/Kg	1/30/2018	21:23
Benzo (g,h,i) perylene	< 332	ug/Kg	1/30/2018	21:23
Benzo (k) fluoranthene	< 332	ug/Kg	1/30/2018	21:23
Bis (2-chloroethoxy) methane	< 332	ug/Kg	1/30/2018	21:23
Bis (2-chloroethyl) ether	< 332	ug/Kg	1/30/2018	21:23
Bis (2-ethylhexyl) phthalate	< 332	ug/Kg	1/30/2018	21:23
Butylbenzylphthalate	< 332	ug/Kg	1/30/2018	21:23
Caprolactam	< 332	ug/Kg	1/30/2018	21:23
Carbazole	< 332	ug/Kg	1/30/2018	21:23
Chrysene	< 332	ug/Kg	1/30/2018	21:23
Dibenz (a,h) anthracene	< 332	ug/Kg	1/30/2018	21:23
Dibenzofuran	< 332	ug/Kg	1/30/2018	21:23
Diethyl phthalate	< 332	ug/Kg	1/30/2018	21:23
Dimethyl phthalate	< 665	ug/Kg	1/30/2018	21:23
Di-n-butyl phthalate	< 332	ug/Kg	1/30/2018	21:23
Di-n-octylphthalate	< 332	ug/Kg	1/30/2018	21:23
Fluoranthene	< 332	ug/Kg	1/30/2018	21:23
Fluorene	< 332	ug/Kg	1/30/2018	21:23

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-9 5-6 Ft
Lab Sample ID: 180335-09 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 332	ug/Kg		1/30/2018	21:23
Hexachlorobutadiene	< 332	ug/Kg		1/30/2018	21:23
Hexachlorocyclopentadiene	< 332	ug/Kg		1/30/2018	21:23
Hexachloroethane	< 332	ug/Kg		1/30/2018	21:23
Indeno (1,2,3-cd) pyrene	< 332	ug/Kg		1/30/2018	21:23
Isophorone	< 332	ug/Kg		1/30/2018	21:23
Naphthalene	< 332	ug/Kg		1/30/2018	21:23
Nitrobenzene	< 332	ug/Kg		1/30/2018	21:23
N-Nitroso-di-n-propylamine	< 332	ug/Kg		1/30/2018	21:23
N-Nitrosodiphenylamine	< 332	ug/Kg		1/30/2018	21:23
Pentachlorophenol	< 665	ug/Kg		1/30/2018	21:23
Phenanthrene	< 332	ug/Kg		1/30/2018	21:23
Phenol	< 332	ug/Kg		1/30/2018	21:23
Pyrene	< 332	ug/Kg		1/30/2018	21:23

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**65.8**	55.4 - 114		1/30/2018	21:23
2-Fluorobiphenyl	**55.2**	39.9 - 112		1/30/2018	21:23
2-Fluorophenol	**54.2**	41.9 - 97.1		1/30/2018	21:23
Nitrobenzene-d5	**45.2**	41 - 96		1/30/2018	21:23
Phenol-d5	**55.6**	43.7 - 101		1/30/2018	21:23
Terphenyl-d14	**64.6**	71.7 - 115	*	1/30/2018	21:23

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25016.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-9 5-6 Ft		
Lab Sample ID:	180335-09	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 817	ug/Kg		1/31/2018 16:51
1,1,2,2-Tetrachloroethane	< 817	ug/Kg		1/31/2018 16:51
1,1,2-Trichloroethane	< 817	ug/Kg		1/31/2018 16:51
1,1-Dichloroethane	< 817	ug/Kg		1/31/2018 16:51
1,1-Dichloroethene	< 817	ug/Kg		1/31/2018 16:51
1,2,3-Trichlorobenzene	< 2040	ug/Kg		1/31/2018 16:51
1,2,4-Trichlorobenzene	< 2040	ug/Kg		1/31/2018 16:51
1,2,4-Trimethylbenzene	< 817	ug/Kg		1/31/2018 16:51
1,2-Dibromo-3-Chloropropane	< 4090	ug/Kg		1/31/2018 16:51
1,2-Dibromoethane	< 817	ug/Kg		1/31/2018 16:51
1,2-Dichlorobenzene	< 817	ug/Kg		1/31/2018 16:51
1,2-Dichloroethane	< 817	ug/Kg		1/31/2018 16:51
1,2-Dichloropropane	< 817	ug/Kg		1/31/2018 16:51
1,3,5-Trimethylbenzene	< 817	ug/Kg		1/31/2018 16:51
1,3-Dichlorobenzene	< 817	ug/Kg		1/31/2018 16:51
1,4-Dichlorobenzene	< 817	ug/Kg		1/31/2018 16:51
1,4-dioxane	< 8170	ug/Kg		1/31/2018 16:51
2-Butanone	< 4090	ug/Kg		1/31/2018 16:51
2-Hexanone	< 2040	ug/Kg		1/31/2018 16:51
4-Methyl-2-pentanone	< 2040	ug/Kg		1/31/2018 16:51
Acetone	< 4090	ug/Kg		1/31/2018 16:51
Benzene	< 817	ug/Kg		1/31/2018 16:51
Bromochloromethane	< 2040	ug/Kg		1/31/2018 16:51
Bromodichloromethane	< 817	ug/Kg		1/31/2018 16:51
Bromoform	< 2040	ug/Kg		1/31/2018 16:51
Bromomethane	< 817	ug/Kg		1/31/2018 16:51
Carbon disulfide	< 817	ug/Kg		1/31/2018 16:51

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-9 5-6 Ft
Lab Sample ID: 180335-09 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 817	ug/Kg	1/31/2018	16:51
Chlorobenzene	< 817	ug/Kg	1/31/2018	16:51
Chloroethane	< 817	ug/Kg	1/31/2018	16:51
Chloroform	< 817	ug/Kg	1/31/2018	16:51
Chloromethane	< 817	ug/Kg	1/31/2018	16:51
cis-1,2-Dichloroethene	< 817	ug/Kg	1/31/2018	16:51
cis-1,3-Dichloropropene	< 817	ug/Kg	1/31/2018	16:51
Cyclohexane	< 4090	ug/Kg	1/31/2018	16:51
Dibromochloromethane	< 817	ug/Kg	1/31/2018	16:51
Dichlorodifluoromethane	< 817	ug/Kg	1/31/2018	16:51
Ethylbenzene	< 817	ug/Kg	1/31/2018	16:51
Freon 113	< 817	ug/Kg	1/31/2018	16:51
Isopropylbenzene	< 817	ug/Kg	1/31/2018	16:51
m,p-Xylene	< 817	ug/Kg	1/31/2018	16:51
Methyl acetate	< 817	ug/Kg	1/31/2018	16:51
Methyl tert-butyl Ether	< 817	ug/Kg	1/31/2018	16:51
Methylcyclohexane	< 817	ug/Kg	1/31/2018	16:51
Methylene chloride	< 2040	ug/Kg	1/31/2018	16:51
Naphthalene	< 2040	ug/Kg	1/31/2018	16:51
n-Butylbenzene	< 817	ug/Kg	1/31/2018	16:51
n-Propylbenzene	< 817	ug/Kg	1/31/2018	16:51
o-Xylene	< 817	ug/Kg	1/31/2018	16:51
p-Isopropyltoluene	< 817	ug/Kg	1/31/2018	16:51
sec-Butylbenzene	< 817	ug/Kg	1/31/2018	16:51
Styrene	< 2040	ug/Kg	1/31/2018	16:51
tert-Butylbenzene	< 817	ug/Kg	1/31/2018	16:51
Tetrachloroethene	< 817	ug/Kg	1/31/2018	16:51
Toluene	< 817	ug/Kg	1/31/2018	16:51
trans-1,2-Dichloroethene	< 817	ug/Kg	1/31/2018	16:51
trans-1,3-Dichloropropene	< 817	ug/Kg	1/31/2018	16:51

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-9 5-6 Ft
Lab Sample ID: 180335-09 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	**8820**	ug/Kg		1/31/2018	16:51
Trichlorofluoromethane	< 817	ug/Kg		1/31/2018	16:51
Vinyl chloride	< 817	ug/Kg		1/31/2018	16:51

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**105**	86.2 - 128		1/31/2018	16:51
4-Bromofluorobenzene	**103**	69.8 - 123		1/31/2018	16:51
Pentafluorobenzene	**106**	82.2 - 114		1/31/2018	16:51
Toluene-D8	**104**	81.3 - 113		1/31/2018	16:51

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: x48425.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-9 5-6 Ft		
Lab Sample ID:	180335-09	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.552	mg/Kg		2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/9/2018

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: Panamerican Environmental Consultants

Project Reference: 19 Doat St

Sample Identifier: BH-10 10-12 Ft
Lab Sample ID: 180335-10 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**3.52**	mg/Kg		2/6/2018 18:57
Barium	**93.8**	mg/Kg		2/6/2018 18:57
Beryllium	**0.567**	mg/Kg		2/6/2018 18:57
Cadmium	< 0.283	mg/Kg		2/6/2018 18:57
Chromium	**18.5**	mg/Kg		2/6/2018 18:57
Copper	**16.7**	mg/Kg		2/6/2018 18:57
Lead	**14.6**	mg/Kg		2/6/2018 18:57
Manganese	**339**	mg/Kg		2/6/2018 18:57
Nickel	**21.0**	mg/Kg		2/6/2018 18:57
Selenium	< 1.13	mg/Kg		2/6/2018 18:57
Silver	< 0.566	mg/Kg		2/7/2018 15:03
Zinc	**69.7**	mg/Kg		2/6/2018 18:57

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-10 10-12 Ft		
Lab Sample ID:	180335-10	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0196**	mg/Kg		2/6/2018 11:17

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-10 10-12 Ft		
Lab Sample ID:	180335-10	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1221	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1232	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1242	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1248	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1254	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1260	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1262	< 0.0322	mg/Kg		2/1/2018 04:30
PCB-1268	< 0.0322	mg/Kg		2/1/2018 04:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**128**	22.2 - 140		2/1/2018 04:30
Tetrachloro-m-xylene	**26.9**	11.8 - 125		2/1/2018 04:30

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-10 10-12 Ft		
Lab Sample ID:	180335-10	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 3.22	ug/Kg		2/5/2018 16:27
4,4-DDE	< 3.22	ug/Kg		2/5/2018 16:27
4,4-DDT	< 3.22	ug/Kg		2/5/2018 16:27
Aldrin	< 3.22	ug/Kg		2/5/2018 16:27
alpha-BHC	< 3.22	ug/Kg		2/5/2018 16:27
beta-BHC	< 3.22	ug/Kg		2/5/2018 16:27
cis-Chlordane	< 3.22	ug/Kg		2/5/2018 16:27
delta-BHC	< 3.22	ug/Kg		2/5/2018 16:27
Dieldrin	< 3.22	ug/Kg		2/5/2018 16:27
Endosulfan I	< 3.22	ug/Kg		2/5/2018 16:27
Endosulfan II	**1.73**	ug/Kg	JP	2/5/2018 16:27
Endosulfan Sulfate	**3.89**	ug/Kg		2/5/2018 16:27
Endrin	**1.67**	ug/Kg	JP	2/5/2018 16:27
Endrin Aldehyde	< 3.22	ug/Kg		2/5/2018 16:27
Endrin Ketone	< 3.22	ug/Kg		2/5/2018 16:27
gamma-BHC (Lindane)	< 3.22	ug/Kg		2/5/2018 16:27
Heptachlor	< 3.22	ug/Kg		2/5/2018 16:27
Heptachlor Epoxide	< 3.22	ug/Kg		2/5/2018 16:27
Methoxychlor	**5.17**	ug/Kg	P	2/5/2018 16:27
Toxaphene	< 32.2	ug/Kg		2/5/2018 16:27
trans-Chlordane	< 3.22	ug/Kg		2/5/2018 16:27

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**113**	31.5 - 168		2/5/2018 16:27
Tetrachloro-m-xylene (1)	**67.0**	26.7 - 117		2/5/2018 16:27

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-10 10-12 Ft		
Lab Sample ID:	180335-10	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 788	ug/Kg		1/31/2018 14:15
1,2,4,5-Tetrachlorobenzene	< 788	ug/Kg		1/31/2018 14:15
1,2,4-Trichlorobenzene	< 788	ug/Kg		1/31/2018 14:15
1,2-Dichlorobenzene	< 788	ug/Kg		1/31/2018 14:15
1,3-Dichlorobenzene	< 788	ug/Kg		1/31/2018 14:15
1,4-Dichlorobenzene	< 788	ug/Kg		1/31/2018 14:15
2,2-Oxybis (1-chloropropane)	< 788	ug/Kg		1/31/2018 14:15
2,3,4,6-Tetrachlorophenol	< 788	ug/Kg		1/31/2018 14:15
2,4,5-Trichlorophenol	< 1580	ug/Kg		1/31/2018 14:15
2,4,6-Trichlorophenol	< 788	ug/Kg		1/31/2018 14:15
2,4-Dichlorophenol	< 788	ug/Kg		1/31/2018 14:15
2,4-Dimethylphenol	< 788	ug/Kg		1/31/2018 14:15
2,4-Dinitrophenol	< 1580	ug/Kg		1/31/2018 14:15
2,4-Dinitrotoluene	< 788	ug/Kg		1/31/2018 14:15
2,6-Dinitrotoluene	< 788	ug/Kg		1/31/2018 14:15
2-Chloronaphthalene	< 788	ug/Kg		1/31/2018 14:15
2-Chlorophenol	< 788	ug/Kg		1/31/2018 14:15
2-Methylnapthalene	**11100**	ug/Kg		1/31/2018 14:15
2-Methylphenol	< 788	ug/Kg		1/31/2018 14:15
2-Nitroaniline	< 1580	ug/Kg		1/31/2018 14:15
2-Nitrophenol	< 788	ug/Kg		1/31/2018 14:15
3&4-Methylphenol	< 788	ug/Kg		1/31/2018 14:15
3,3'-Dichlorobenzidine	< 788	ug/Kg		1/31/2018 14:15
3-Nitroaniline	< 1580	ug/Kg		1/31/2018 14:15
4,6-Dinitro-2-methylphenol	< 1580	ug/Kg		1/31/2018 14:15
4-Bromophenyl phenyl ether	< 788	ug/Kg		1/31/2018 14:15
4-Chloro-3-methylphenol	< 788	ug/Kg		1/31/2018 14:15

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-10 10-12 Ft
Lab Sample ID: 180335-10 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 788	ug/Kg		1/31/2018	14:15
4-Chlorophenyl phenyl ether	< 788	ug/Kg		1/31/2018	14:15
4-Nitroaniline	< 1580	ug/Kg		1/31/2018	14:15
4-Nitrophenol	< 1580	ug/Kg		1/31/2018	14:15
Acenaphthene	**944**	ug/Kg		1/31/2018	14:15
Acenaphthylene	< 788	ug/Kg		1/31/2018	14:15
Acetophenone	< 788	ug/Kg		1/31/2018	14:15
Anthracene	**672**	ug/Kg	J	1/31/2018	14:15
Atrazine	< 788	ug/Kg		1/31/2018	14:15
Benzaldehyde	< 788	ug/Kg		1/31/2018	14:15
Benzo (a) anthracene	**1410**	ug/Kg		1/31/2018	14:15
Benzo (a) pyrene	**803**	ug/Kg		1/31/2018	14:15
Benzo (b) fluoranthene	< 788	ug/Kg		1/31/2018	14:15
Benzo (g,h,i) perylene	**436**	ug/Kg	J	1/31/2018	14:15
Benzo (k) fluoranthene	< 788	ug/Kg		1/31/2018	14:15
Bis (2-chloroethoxy) methane	< 788	ug/Kg		1/31/2018	14:15
Bis (2-chloroethyl) ether	< 788	ug/Kg		1/31/2018	14:15
Bis (2-ethylhexyl) phthalate	< 788	ug/Kg		1/31/2018	14:15
Butylbenzylphthalate	< 788	ug/Kg		1/31/2018	14:15
Caprolactam	< 788	ug/Kg		1/31/2018	14:15
Carbazole	< 788	ug/Kg		1/31/2018	14:15
Chrysene	**2620**	ug/Kg		1/31/2018	14:15
Dibenz (a,h) anthracene	< 788	ug/Kg		1/31/2018	14:15
Dibenzofuran	**466**	ug/Kg	J	1/31/2018	14:15
Diethyl phthalate	< 788	ug/Kg		1/31/2018	14:15
Dimethyl phthalate	< 1580	ug/Kg		1/31/2018	14:15
Di-n-butyl phthalate	< 788	ug/Kg		1/31/2018	14:15
Di-n-octylphthalate	< 788	ug/Kg		1/31/2018	14:15
Fluoranthene	**401**	ug/Kg	J	1/31/2018	14:15
Fluorene	**1460**	ug/Kg		1/31/2018	14:15

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-10 10-12 Ft
Lab Sample ID: 180335-10 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 788	ug/Kg			1/31/2018	14:15
Hexachlorobutadiene	< 788	ug/Kg			1/31/2018	14:15
Hexachlorocyclopentadiene	< 788	ug/Kg			1/31/2018	14:15
Hexachloroethane	< 788	ug/Kg			1/31/2018	14:15
Indeno (1,2,3-cd) pyrene	< 788	ug/Kg			1/31/2018	14:15
Isophorone	< 788	ug/Kg			1/31/2018	14:15
Naphthalene	**5820**	ug/Kg			1/31/2018	14:15
Nitrobenzene	< 788	ug/Kg			1/31/2018	14:15
N-Nitroso-di-n-propylamine	< 788	ug/Kg			1/31/2018	14:15
N-Nitrosodiphenylamine	< 788	ug/Kg			1/31/2018	14:15
Pentachlorophenol	< 1580	ug/Kg			1/31/2018	14:15
Phenanthrene	**9100**	ug/Kg			1/31/2018	14:15
Phenol	< 788	ug/Kg			1/31/2018	14:15
Pyrene	**2000**	ug/Kg			1/31/2018	14:15

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**62.1**	55.4 - 114		1/31/2018	14:15
2-Fluorobiphenyl	**59.1**	39.9 - 112		1/31/2018	14:15
2-Fluorophenol	**52.7**	41.9 - 97.1		1/31/2018	14:15
Nitrobenzene-d5	**49.2**	41 - 96		1/31/2018	14:15
Phenol-d5	**56.0**	43.7 - 101		1/31/2018	14:15
Terphenyl-d14	**62.0**	71.7 - 115	*	1/31/2018	14:15

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25029.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-10 10-12 Ft		
Lab Sample ID:	180335-10	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 540	ug/Kg		1/31/2018 16:28
1,1,2,2-Tetrachloroethane	< 540	ug/Kg		1/31/2018 16:28
1,1,2-Trichloroethane	< 540	ug/Kg		1/31/2018 16:28
1,1-Dichloroethane	< 540	ug/Kg		1/31/2018 16:28
1,1-Dichloroethene	< 540	ug/Kg		1/31/2018 16:28
1,2,3-Trichlorobenzene	< 1350	ug/Kg		1/31/2018 16:28
1,2,4-Trichlorobenzene	< 1350	ug/Kg		1/31/2018 16:28
1,2,4-Trimethylbenzene	**4540**	ug/Kg		1/31/2018 16:28
1,2-Dibromo-3-Chloropropane	< 2700	ug/Kg		1/31/2018 16:28
1,2-Dibromoethane	< 540	ug/Kg		1/31/2018 16:28
1,2-Dichlorobenzene	< 540	ug/Kg		1/31/2018 16:28
1,2-Dichloroethane	< 540	ug/Kg		1/31/2018 16:28
1,2-Dichloropropane	< 540	ug/Kg		1/31/2018 16:28
1,3,5-Trimethylbenzene	< 540	ug/Kg		1/31/2018 16:28
1,3-Dichlorobenzene	< 540	ug/Kg		1/31/2018 16:28
1,4-Dichlorobenzene	< 540	ug/Kg		1/31/2018 16:28
1,4-dioxane	< 5400	ug/Kg		1/31/2018 16:28
2-Butanone	< 2700	ug/Kg		1/31/2018 16:28
2-Hexanone	< 1350	ug/Kg		1/31/2018 16:28
4-Methyl-2-pentanone	< 1350	ug/Kg		1/31/2018 16:28
Acetone	< 2700	ug/Kg		1/31/2018 16:28
Benzene	**1760**	ug/Kg		1/31/2018 16:28
Bromochloromethane	< 1350	ug/Kg		1/31/2018 16:28
Bromodichloromethane	< 540	ug/Kg		1/31/2018 16:28
Bromoform	< 1350	ug/Kg		1/31/2018 16:28
Bromomethane	< 540	ug/Kg		1/31/2018 16:28
Carbon disulfide	< 540	ug/Kg		1/31/2018 16:28

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-10 10-12 Ft
Lab Sample ID: 180335-10 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 540	ug/Kg		1/31/2018	16:28
Chlorobenzene	< 540	ug/Kg		1/31/2018	16:28
Chloroethane	< 540	ug/Kg		1/31/2018	16:28
Chloroform	< 540	ug/Kg		1/31/2018	16:28
Chloromethane	< 540	ug/Kg		1/31/2018	16:28
cis-1,2-Dichloroethene	< 540	ug/Kg		1/31/2018	16:28
cis-1,3-Dichloropropene	< 540	ug/Kg		1/31/2018	16:28
Cyclohexane	< 2700	ug/Kg		1/31/2018	16:28
Dibromochloromethane	< 540	ug/Kg		1/31/2018	16:28
Dichlorodifluoromethane	< 540	ug/Kg		1/31/2018	16:28
Ethylbenzene	**4560**	ug/Kg		1/31/2018	16:28
Freon 113	< 540	ug/Kg		1/31/2018	16:28
Isopropylbenzene	**605**	ug/Kg		1/31/2018	16:28
m,p-Xylene	**765**	ug/Kg		1/31/2018	16:28
Methyl acetate	< 540	ug/Kg		1/31/2018	16:28
Methyl tert-butyl Ether	< 540	ug/Kg		1/31/2018	16:28
Methylcyclohexane	**949**	ug/Kg		1/31/2018	16:28
Methylene chloride	< 1350	ug/Kg		1/31/2018	16:28
Naphthalene	**27800**	ug/Kg		1/31/2018	16:28
n-Butylbenzene	**2210**	ug/Kg		1/31/2018	16:28
n-Propylbenzene	**1290**	ug/Kg		1/31/2018	16:28
o-Xylene	< 540	ug/Kg		1/31/2018	16:28
p-Isopropyltoluene	**416**	ug/Kg	J	1/31/2018	16:28
sec-Butylbenzene	**819**	ug/Kg		1/31/2018	16:28
Styrene	< 1350	ug/Kg		1/31/2018	16:28
tert-Butylbenzene	< 540	ug/Kg		1/31/2018	16:28
Tetrachloroethene	< 540	ug/Kg		1/31/2018	16:28
Toluene	< 540	ug/Kg		1/31/2018	16:28
trans-1,2-Dichloroethene	< 540	ug/Kg		1/31/2018	16:28
trans-1,3-Dichloropropene	< 540	ug/Kg		1/31/2018	16:28

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-10 10-12 Ft
Lab Sample ID: 180335-10 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	< 540	ug/Kg		1/31/2018	16:28
Trichlorofluoromethane	< 540	ug/Kg		1/31/2018	16:28
Vinyl chloride	< 540	ug/Kg		1/31/2018	16:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**102**	86.2 - 128		1/31/2018	16:28
4-Bromofluorobenzene	**107**	69.8 - 123		1/31/2018	16:28
Pentafluorobenzene	**106**	82.2 - 114		1/31/2018	16:28
Toluene-D8	**105**	81.3 - 113		1/31/2018	16:28

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: x48424.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	BH-10 10-12 Ft		
Lab Sample ID:	180335-10	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.550	mg/Kg		2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/9/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: Panamerican Environmental Consultants

Project Reference: 19 Doat St

Sample Identifier: SS-1
Lab Sample ID: 180335-11
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**12.6**	mg/Kg		2/6/2018 19:01
Barium	**1730**	mg/Kg		2/6/2018 19:01
Beryllium	**0.352**	mg/Kg	J	2/6/2018 19:01
Cadmium	**5.03**	mg/Kg		2/6/2018 19:01
Chromium	**197**	mg/Kg		2/6/2018 19:01
Copper	**167**	mg/Kg		2/6/2018 19:01
Lead	**2140**	mg/Kg		2/6/2018 19:01
Manganese	**496**	mg/Kg		2/6/2018 19:01
Nickel	**25.5**	mg/Kg		2/6/2018 19:01
Selenium	< 1.72	mg/Kg		2/6/2018 19:01
Silver	**2.49**	mg/Kg		2/6/2018 19:01
Zinc	**2500**	mg/Kg		2/6/2018 19:52

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-1		
Lab Sample ID:	180335-11	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.612**	mg/Kg		2/6/2018 11:25

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-1		
Lab Sample ID:	180335-11	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0479	mg/Kg		2/6/2018 11:04
PCB-1221	< 0.0479	mg/Kg		2/6/2018 11:04
PCB-1232	< 0.0479	mg/Kg		2/6/2018 11:04
PCB-1242	< 0.0479	mg/Kg		2/6/2018 11:04
PCB-1248	< 0.0479	mg/Kg		2/6/2018 11:04
PCB-1254	< 0.0479	mg/Kg		2/6/2018 11:04
PCB-1260	**0.120**	mg/Kg		2/6/2018 11:04
PCB-1262	< 0.0479	mg/Kg		2/6/2018 11:04
PCB-1268	< 0.0479	mg/Kg		2/6/2018 11:04

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**57.8**	22.2 - 140		2/6/2018 11:04
Tetrachloro-m-xylene	**33.7**	11.8 - 125		2/6/2018 11:04

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-1		
Lab Sample ID:	180335-11	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 239	ug/Kg		2/6/2018 20:23
4,4-DDE	< 239	ug/Kg		2/6/2018 20:23
4,4-DDT	**246**	ug/Kg		2/6/2018 20:23
Aldrin	< 239	ug/Kg		2/6/2018 20:23
alpha-BHC	< 239	ug/Kg		2/6/2018 20:23
beta-BHC	< 239	ug/Kg		2/6/2018 20:23
cis-Chlordane	< 239	ug/Kg		2/6/2018 20:23
delta-BHC	< 239	ug/Kg		2/6/2018 20:23
Dieldrin	**584**	ug/Kg		2/6/2018 20:23
Endosulfan I	< 239	ug/Kg		2/6/2018 20:23
Endosulfan II	< 239	ug/Kg		2/6/2018 20:23
Endosulfan Sulfate	**711**	ug/Kg	P	2/6/2018 20:23
Endrin	< 239	ug/Kg		2/6/2018 20:23
Endrin Aldehyde	< 239	ug/Kg		2/6/2018 20:23
Endrin Ketone	< 239	ug/Kg		2/6/2018 20:23
gamma-BHC (Lindane)	< 239	ug/Kg		2/6/2018 20:23
Heptachlor	< 239	ug/Kg		2/6/2018 20:23
Heptachlor Epoxide	< 239	ug/Kg		2/6/2018 20:23
Methoxychlor	**1830**	ug/Kg	P	2/6/2018 20:23
Toxaphene	< 2390	ug/Kg		2/6/2018 20:23
trans-Chlordane	< 239	ug/Kg		2/6/2018 20:23

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	NC	31.5 - 168		2/6/2018 20:23
Tetrachloro-m-xylene (1)	NC	26.7 - 117		2/6/2018 20:23

Method Reference(s): EPA 8081B
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-1		
Lab Sample ID:	180335-11	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9030	ug/Kg		1/31/2018 14:45
1,2,4,5-Tetrachlorobenzene	< 9030	ug/Kg		1/31/2018 14:45
1,2,4-Trichlorobenzene	< 9030	ug/Kg		1/31/2018 14:45
1,2-Dichlorobenzene	< 9030	ug/Kg		1/31/2018 14:45
1,3-Dichlorobenzene	< 9030	ug/Kg		1/31/2018 14:45
1,4-Dichlorobenzene	< 9030	ug/Kg		1/31/2018 14:45
2,2-Oxybis (1-chloropropane)	< 9030	ug/Kg		1/31/2018 14:45
2,3,4,6-Tetrachlorophenol	< 9030	ug/Kg		1/31/2018 14:45
2,4,5-Trichlorophenol	< 18100	ug/Kg		1/31/2018 14:45
2,4,6-Trichlorophenol	< 9030	ug/Kg		1/31/2018 14:45
2,4-Dichlorophenol	< 9030	ug/Kg		1/31/2018 14:45
2,4-Dimethylphenol	< 9030	ug/Kg		1/31/2018 14:45
2,4-Dinitrophenol	< 18100	ug/Kg		1/31/2018 14:45
2,4-Dinitrotoluene	< 9030	ug/Kg		1/31/2018 14:45
2,6-Dinitrotoluene	< 9030	ug/Kg		1/31/2018 14:45
2-Chloronaphthalene	< 9030	ug/Kg		1/31/2018 14:45
2-Chlorophenol	< 9030	ug/Kg		1/31/2018 14:45
2-Methylnapthalene	**5460**	ug/Kg	J	1/31/2018 14:45
2-Methylphenol	< 9030	ug/Kg		1/31/2018 14:45
2-Nitroaniline	< 18100	ug/Kg		1/31/2018 14:45
2-Nitrophenol	< 9030	ug/Kg		1/31/2018 14:45
3&4-Methylphenol	< 9030	ug/Kg		1/31/2018 14:45
3,3'-Dichlorobenzidine	< 9030	ug/Kg		1/31/2018 14:45
3-Nitroaniline	< 18100	ug/Kg		1/31/2018 14:45
4,6-Dinitro-2-methylphenol	< 18100	ug/Kg		1/31/2018 14:45
4-Bromophenyl phenyl ether	< 9030	ug/Kg		1/31/2018 14:45
4-Chloro-3-methylphenol	< 9030	ug/Kg		1/31/2018 14:45

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-1
Lab Sample ID: 180335-11 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 9030	ug/Kg	1/31/2018	14:45
4-Chlorophenyl phenyl ether	< 9030	ug/Kg	1/31/2018	14:45
4-Nitroaniline	< 18100	ug/Kg	1/31/2018	14:45
4-Nitrophenol	< 18100	ug/Kg	1/31/2018	14:45
Acenaphthene	**14000**	ug/Kg	1/31/2018	14:45
Acenaphthylene	< 9030	ug/Kg	1/31/2018	14:45
Acetophenone	< 9030	ug/Kg	1/31/2018	14:45
Anthracene	**30000**	ug/Kg	1/31/2018	14:45
Atrazine	< 9030	ug/Kg	1/31/2018	14:45
Benzaldehyde	< 9030	ug/Kg	1/31/2018	14:45
Benzo (a) anthracene	**64000**	ug/Kg	1/31/2018	14:45
Benzo (a) pyrene	**54200**	ug/Kg	1/31/2018	14:45
Benzo (b) fluoranthene	**52500**	ug/Kg	1/31/2018	14:45
Benzo (g,h,i) perylene	**33900**	ug/Kg	1/31/2018	14:45
Benzo (k) fluoranthene	**40200**	ug/Kg	1/31/2018	14:45
Bis (2-chloroethoxy) methane	< 9030	ug/Kg	1/31/2018	14:45
Bis (2-chloroethyl) ether	< 9030	ug/Kg	1/31/2018	14:45
Bis (2-ethylhexyl) phthalate	< 9030	ug/Kg	1/31/2018	14:45
Butylbenzylphthalate	< 9030	ug/Kg	1/31/2018	14:45
Caprolactam	< 9030	ug/Kg	1/31/2018	14:45
Carbazole	**18100**	ug/Kg	1/31/2018	14:45
Chrysene	**60200**	ug/Kg	1/31/2018	14:45
Dibenz (a,h) anthracene	**12000**	ug/Kg	1/31/2018	14:45
Dibenzofuran	**12800**	ug/Kg	1/31/2018	14:45
Diethyl phthalate	< 9030	ug/Kg	1/31/2018	14:45
Dimethyl phthalate	< 18100	ug/Kg	1/31/2018	14:45
Di-n-butyl phthalate	< 9030	ug/Kg	1/31/2018	14:45
Di-n-octylphthalate	< 9030	ug/Kg	1/31/2018	14:45
Fluoranthene	**166000**	ug/Kg	1/31/2018	14:45
Fluorene	**16100**	ug/Kg	1/31/2018	14:45

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-1
Lab Sample ID: 180335-11 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 9030	ug/Kg		1/31/2018	14:45
Hexachlorobutadiene	< 9030	ug/Kg		1/31/2018	14:45
Hexachlorocyclopentadiene	< 9030	ug/Kg		1/31/2018	14:45
Hexachloroethane	< 9030	ug/Kg		1/31/2018	14:45
Indeno (1,2,3-cd) pyrene	**41000**	ug/Kg		1/31/2018	14:45
Isophorone	< 9030	ug/Kg		1/31/2018	14:45
Naphthalene	**13600**	ug/Kg		1/31/2018	14:45
Nitrobenzene	< 9030	ug/Kg		1/31/2018	14:45
N-Nitroso-di-n-propylamine	< 9030	ug/Kg		1/31/2018	14:45
N-Nitrosodiphenylamine	< 9030	ug/Kg		1/31/2018	14:45
Pentachlorophenol	< 18100	ug/Kg		1/31/2018	14:45
Phenanthrene	**149000**	ug/Kg		1/31/2018	14:45
Phenol	< 9030	ug/Kg		1/31/2018	14:45
Pyrene	**126000**	ug/Kg		1/31/2018	14:45

Surrogate	**Percent Recovery**	**Limits**	**Outliers**	**Date Analyzed**	
2,4,6-Tribromophenol	NC	55.4 - 114		1/31/2018	14:45
2-Fluorobiphenyl	NC	39.9 - 112		1/31/2018	14:45
2-Fluorophenol	NC	41.9 - 97.1		1/31/2018	14:45
Nitrobenzene-d5	NC	41 - 96		1/31/2018	14:45
Phenol-d5	NC	43.7 - 101		1/31/2018	14:45
Terphenyl-d14	NC	71.7 - 115		1/31/2018	14:45

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25030.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-1		
Lab Sample ID:	180335-11	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**15.1**	mg/Kg		2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/9/2018

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	< 0.532	mg/Kg		2/6/2018 19:04
Barium	**25.2**	mg/Kg		2/6/2018 19:04
Beryllium	< 0.266	mg/Kg		2/6/2018 19:04
Cadmium	**0.146**	mg/Kg	J	2/6/2018 19:04
Chromium	**4.93**	mg/Kg		2/6/2018 19:04
Copper	< 1.33	mg/Kg		2/6/2018 19:04
Lead	**13.5**	mg/Kg		2/6/2018 19:04
Manganese	**87.9**	mg/Kg		2/6/2018 19:04
Nickel	**3.49**	mg/Kg		2/6/2018 19:04
Selenium	< 3.19	mg/Kg		2/6/2018 19:56
Silver	**0.470**	mg/Kg	J	2/6/2018 19:04
Zinc	**274**	mg/Kg		2/6/2018 19:04

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-2		
Lab Sample ID:	180335-12	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.00766**	mg/Kg	J	2/6/2018 11:28

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-2		
Lab Sample ID:	180335-12	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1221	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1232	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1242	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1248	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1254	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1260	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1262	< 0.0289	mg/Kg		2/2/2018 15:28
PCB-1268	< 0.0289	mg/Kg		2/2/2018 15:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**15.8**	22.2 - 140	*	2/2/2018 15:28
Tetrachloro-m-xylene	**31.3**	11.8 - 125		2/2/2018 15:28

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	**3.44**	ug/Kg	JP	2/6/2018 20:36
4,4-DDE	< 5.77	ug/Kg		2/6/2018 20:36
4,4-DDT	**3.33**	ug/Kg	JP	2/6/2018 20:36
Aldrin	**5.95**	ug/Kg	P	2/6/2018 20:36
alpha-BHC	**6.70**	ug/Kg	P	2/6/2018 20:36
beta-BHC	< 5.77	ug/Kg		2/6/2018 20:36
cis-Chlordane	**5.35**	ug/Kg	JP	2/6/2018 20:36
delta-BHC	< 5.77	ug/Kg		2/6/2018 20:36
Dieldrin	**23.6**	ug/Kg	P	2/6/2018 20:36
Endosulfan I	**6.29**	ug/Kg	P	2/6/2018 20:36
Endosulfan II	**7.37**	ug/Kg	P	2/6/2018 20:36
Endosulfan Sulfate	**14.6**	ug/Kg	P	2/6/2018 20:36
Endrin	**18.8**	ug/Kg	P	2/6/2018 20:36
Endrin Aldehyde	**25.4**	ug/Kg		2/6/2018 20:36
Endrin Ketone	**29.9**	ug/Kg		2/6/2018 20:36
gamma-BHC (Lindane)	**4.50**	ug/Kg	JP	2/6/2018 20:36
Heptachlor	< 5.77	ug/Kg		2/6/2018 20:36
Heptachlor Epoxide	**6.57**	ug/Kg	P	2/6/2018 20:36
Methoxychlor	**91.8**	ug/Kg	P	2/6/2018 20:36
Toxaphene	< 57.7	ug/Kg		2/6/2018 20:36
trans-Chlordane	**11.0**	ug/Kg	P	2/6/2018 20:36

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**246**	31.5 - 168	*	2/6/2018 20:36
Tetrachloro-m-xylene (1)	**116**	26.7 - 117		2/6/2018 20:36

Method Reference(s): EPA 8081B
EPA 3550C
Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-2		
Lab Sample ID:	180335-12	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 7110	ug/Kg		2/2/2018 09:07
1,2,4,5-Tetrachlorobenzene	< 7110	ug/Kg		2/2/2018 09:07
1,2,4-Trichlorobenzene	< 7110	ug/Kg		2/2/2018 09:07
1,2-Dichlorobenzene	< 7110	ug/Kg		2/2/2018 09:07
1,3-Dichlorobenzene	< 7110	ug/Kg		2/2/2018 09:07
1,4-Dichlorobenzene	< 7110	ug/Kg		2/2/2018 09:07
2,2-Oxybis (1-chloropropane)	< 7110	ug/Kg		2/2/2018 09:07
2,3,4,6-Tetrachlorophenol	< 7110	ug/Kg		2/2/2018 09:07
2,4,5-Trichlorophenol	< 14200	ug/Kg		2/2/2018 09:07
2,4,6-Trichlorophenol	< 7110	ug/Kg		2/2/2018 09:07
2,4-Dichlorophenol	< 7110	ug/Kg		2/2/2018 09:07
2,4-Dimethylphenol	< 7110	ug/Kg		2/2/2018 09:07
2,4-Dinitrophenol	< 14200	ug/Kg		2/2/2018 09:07
2,4-Dinitrotoluene	< 7110	ug/Kg		2/2/2018 09:07
2,6-Dinitrotoluene	< 7110	ug/Kg		2/2/2018 09:07
2-Chloronaphthalene	< 7110	ug/Kg		2/2/2018 09:07
2-Chlorophenol	< 7110	ug/Kg		2/2/2018 09:07
2-Methylnapthalene	< 7110	ug/Kg		2/2/2018 09:07
2-Methylphenol	< 7110	ug/Kg		2/2/2018 09:07
2-Nitroaniline	< 14200	ug/Kg		2/2/2018 09:07
2-Nitrophenol	< 7110	ug/Kg		2/2/2018 09:07
3&4-Methylphenol	< 7110	ug/Kg		2/2/2018 09:07
3,3'-Dichlorobenzidine	< 7110	ug/Kg		2/2/2018 09:07
3-Nitroaniline	< 14200	ug/Kg		2/2/2018 09:07
4,6-Dinitro-2-methylphenol	< 14200	ug/Kg		2/2/2018 09:07
4-Bromophenyl phenyl ether	< 7110	ug/Kg		2/2/2018 09:07
4-Chloro-3-methylphenol	< 7110	ug/Kg		2/2/2018 09:07

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 7110	ug/Kg		2/2/2018	09:07
4-Chlorophenyl phenyl ether	< 7110	ug/Kg		2/2/2018	09:07
4-Nitroaniline	< 14200	ug/Kg		2/2/2018	09:07
4-Nitrophenol	< 14200	ug/Kg		2/2/2018	09:07
Acenaphthene	< 7110	ug/Kg		2/2/2018	09:07
Acenaphthylene	< 7110	ug/Kg		2/2/2018	09:07
Acetophenone	< 7110	ug/Kg		2/2/2018	09:07
Anthracene	< 7110	ug/Kg		2/2/2018	09:07
Atrazine	< 7110	ug/Kg		2/2/2018	09:07
Benzaldehyde	< 7110	ug/Kg		2/2/2018	09:07
Benzo (a) anthracene	**4050**	ug/Kg	J	2/2/2018	09:07
Benzo (a) pyrene	< 7110	ug/Kg		2/2/2018	09:07
Benzo (b) fluoranthene	**4900**	ug/Kg	J	2/2/2018	09:07
Benzo (g,h,i) perylene	**3750**	ug/Kg	J	2/2/2018	09:07
Benzo (k) fluoranthene	< 7110	ug/Kg		2/2/2018	09:07
Bis (2-chloroethoxy) methane	< 7110	ug/Kg		2/2/2018	09:07
Bis (2-chloroethyl) ether	< 7110	ug/Kg		2/2/2018	09:07
Bis (2-ethylhexyl) phthalate	**14700**	ug/Kg		2/2/2018	09:07
Butylbenzylphthalate	< 7110	ug/Kg		2/2/2018	09:07
Caprolactam	< 7110	ug/Kg		2/2/2018	09:07
Carbazole	< 7110	ug/Kg		2/2/2018	09:07
Chrysene	< 7110	ug/Kg		2/2/2018	09:07
Dibenz (a,h) anthracene	< 7110	ug/Kg		2/2/2018	09:07
Dibenzofuran	< 7110	ug/Kg		2/2/2018	09:07
Diethyl phthalate	< 7110	ug/Kg		2/2/2018	09:07
Dimethyl phthalate	< 14200	ug/Kg		2/2/2018	09:07
Di-n-butyl phthalate	< 7110	ug/Kg		2/2/2018	09:07
Di-n-octylphthalate	< 7110	ug/Kg		2/2/2018	09:07
Fluoranthene	**6820**	ug/Kg	J	2/2/2018	09:07
Fluorene	< 7110	ug/Kg		2/2/2018	09:07

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 7110	ug/Kg		2/2/2018	09:07
Hexachlorobutadiene	< 7110	ug/Kg		2/2/2018	09:07
Hexachlorocyclopentadiene	< 7110	ug/Kg		2/2/2018	09:07
Hexachloroethane	< 7110	ug/Kg		2/2/2018	09:07
Indeno (1,2,3-cd) pyrene	**4900**	ug/Kg	J	2/2/2018	09:07
Isophorone	< 7110	ug/Kg		2/2/2018	09:07
Naphthalene	< 7110	ug/Kg		2/2/2018	09:07
Nitrobenzene	< 7110	ug/Kg		2/2/2018	09:07
N-Nitroso-di-n-propylamine	< 7110	ug/Kg		2/2/2018	09:07
N-Nitrosodiphenylamine	< 7110	ug/Kg		2/2/2018	09:07
Pentachlorophenol	< 14200	ug/Kg		2/2/2018	09:07
Phenanthrene	**5440**	ug/Kg	J	2/2/2018	09:07
Phenol	< 7110	ug/Kg		2/2/2018	09:07
Pyrene	**6750**	ug/Kg	J	2/2/2018	09:07

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	NC	55.4 - 114		2/2/2018	09:07
2-Fluorobiphenyl	NC	39.9 - 112		2/2/2018	09:07
2-Fluorophenol	NC	41.9 - 97.1		2/2/2018	09:07
Nitrobenzene-d5	NC	41 - 96		2/2/2018	09:07
Phenol-d5	NC	43.7 - 101		2/2/2018	09:07
Terphenyl-d14	NC	71.7 - 115		2/2/2018	09:07

Reporting limit elevated due to sample matrix

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25075.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-2		
Lab Sample ID:	180335-12	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 18.3	ug/Kg		1/31/2018 12:53
1,1,2,2-Tetrachloroethane	< 18.3	ug/Kg		1/31/2018 12:53
1,1,2-Trichloroethane	< 18.3	ug/Kg		1/31/2018 12:53
1,1-Dichloroethane	< 18.3	ug/Kg		1/31/2018 12:53
1,1-Dichloroethene	< 18.3	ug/Kg		1/31/2018 12:53
1,2,3-Trichlorobenzene	< 45.7	ug/Kg		1/31/2018 12:53
1,2,4-Trichlorobenzene	< 45.7	ug/Kg		1/31/2018 12:53
1,2,4-Trimethylbenzene	**43.7**	ug/Kg		1/31/2018 12:53
1,2-Dibromo-3-Chloropropane	< 91.3	ug/Kg		1/31/2018 12:53
1,2-Dibromoethane	< 18.3	ug/Kg		1/31/2018 12:53
1,2-Dichlorobenzene	< 18.3	ug/Kg		1/31/2018 12:53
1,2-Dichloroethane	< 18.3	ug/Kg		1/31/2018 12:53
1,2-Dichloropropane	< 18.3	ug/Kg		1/31/2018 12:53
1,3,5-Trimethylbenzene	**10.4**	ug/Kg	J	1/31/2018 12:53
1,3-Dichlorobenzene	< 18.3	ug/Kg		1/31/2018 12:53
1,4-Dichlorobenzene	< 18.3	ug/Kg		1/31/2018 12:53
1,4-dioxane	< 183	ug/Kg		1/31/2018 12:53
2-Butanone	**51.9**	ug/Kg	J	1/31/2018 12:53
2-Hexanone	< 45.7	ug/Kg		1/31/2018 12:53
4-Methyl-2-pentanone	**766**	ug/Kg		1/31/2018 12:53
Acetone	**203**	ug/Kg		1/31/2018 12:53
Benzene	< 18.3	ug/Kg		1/31/2018 12:53
Bromochloromethane	< 45.7	ug/Kg		1/31/2018 12:53
Bromodichloromethane	< 18.3	ug/Kg		1/31/2018 12:53
Bromoform	< 45.7	ug/Kg		1/31/2018 12:53
Bromomethane	< 18.3	ug/Kg		1/31/2018 12:53
Carbon disulfide	< 18.3	ug/Kg		1/31/2018 12:53

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Carbon Tetrachloride	< 18.3	ug/Kg		1/31/2018	12:53
Chlorobenzene	< 18.3	ug/Kg		1/31/2018	12:53
Chloroethane	< 18.3	ug/Kg		1/31/2018	12:53
Chloroform	< 18.3	ug/Kg		1/31/2018	12:53
Chloromethane	< 18.3	ug/Kg		1/31/2018	12:53
cis-1,2-Dichloroethene	< 18.3	ug/Kg		1/31/2018	12:53
cis-1,3-Dichloropropene	< 18.3	ug/Kg		1/31/2018	12:53
Cyclohexane	< 91.3	ug/Kg		1/31/2018	12:53
Dibromochloromethane	< 18.3	ug/Kg		1/31/2018	12:53
Dichlorodifluoromethane	< 18.3	ug/Kg		1/31/2018	12:53
Ethylbenzene	< 18.3	ug/Kg		1/31/2018	12:53
Freon 113	< 18.3	ug/Kg		1/31/2018	12:53
Isopropylbenzene	< 18.3	ug/Kg		1/31/2018	12:53
m,p-Xylene	**18.0**	ug/Kg	J	1/31/2018	12:53
Methyl acetate	< 18.3	ug/Kg		1/31/2018	12:53
Methyl tert-butyl Ether	< 18.3	ug/Kg		1/31/2018	12:53
Methylcyclohexane	< 18.3	ug/Kg		1/31/2018	12:53
Methylene chloride	< 45.7	ug/Kg		1/31/2018	12:53
Naphthalene	**49.3**	ug/Kg		1/31/2018	12:53
n-Butylbenzene	< 18.3	ug/Kg		1/31/2018	12:53
n-Propylbenzene	< 18.3	ug/Kg		1/31/2018	12:53
o-Xylene	**12.3**	ug/Kg	J	1/31/2018	12:53
p-Isopropyltoluene	< 18.3	ug/Kg		1/31/2018	12:53
sec-Butylbenzene	< 18.3	ug/Kg		1/31/2018	12:53
Styrene	< 45.7	ug/Kg		1/31/2018	12:53
tert-Butylbenzene	< 18.3	ug/Kg		1/31/2018	12:53
Tetrachloroethene	< 18.3	ug/Kg		1/31/2018	12:53
Toluene	< 18.3	ug/Kg		1/31/2018	12:53
trans-1,2-Dichloroethene	< 18.3	ug/Kg		1/31/2018	12:53
trans-1,3-Dichloropropene	< 18.3	ug/Kg		1/31/2018	12:53

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Trichloroethene	< 18.3	ug/Kg			1/31/2018 12:53
Trichlorofluoromethane	< 18.3	ug/Kg			1/31/2018 12:53
Vinyl chloride	< 18.3	ug/Kg			1/31/2018 12:53

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**116**	86.2 - 128		1/31/2018 12:53
4-Bromofluorobenzene	**94.9**	69.8 - 123		1/31/2018 12:53
Pentafluorobenzene	**99.5**	82.2 - 114		1/31/2018 12:53
Toluene-D8	**96.6**	81.3 - 113		1/31/2018 12:53

Method Reference(s): EPA 8260C
EPA 5035A - L
Data File: x48415.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-2		
Lab Sample ID:	180335-12	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.518**	mg/Kg	J	2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/9/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: Panamerican Environmental Consultants

Project Reference: 19 Doat St

Sample Identifier: SS-3 At BH-9
Lab Sample ID: 180335-13
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**3.56**	mg/Kg		2/6/2018 19:09
Barium	**104**	mg/Kg		2/6/2018 19:09
Beryllium	**0.513**	mg/Kg		2/6/2018 19:09
Cadmium	**0.207**	mg/Kg	J	2/6/2018 19:09
Chromium	**18.5**	mg/Kg		2/6/2018 19:09
Copper	**10.2**	mg/Kg		2/6/2018 19:09
Lead	**42.6**	mg/Kg		2/6/2018 19:09
Manganese	**189**	mg/Kg		2/6/2018 19:09
Nickel	**13.2**	mg/Kg		2/6/2018 19:09
Selenium	< 1.14	mg/Kg		2/6/2018 19:09
Silver	< 0.568	mg/Kg		2/6/2018 19:09
Zinc	**81.1**	mg/Kg		2/6/2018 19:09

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 2/2/2018
Data File: 180206B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-3 At BH-9		
Lab Sample ID:	180335-13	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0509**	mg/Kg		2/6/2018 11:31

Method Reference(s): EPA 7471B
Preparation Date: 2/5/2018
Data File: Hg180206A

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-3 At BH-9		
Lab Sample ID:	180335-13	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1221	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1232	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1242	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1248	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1254	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1260	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1262	< 0.0295	mg/Kg		2/2/2018 15:51
PCB-1268	< 0.0295	mg/Kg		2/2/2018 15:51

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**42.6**	22.2 - 140		2/2/2018 15:51
Tetrachloro-m-xylene	**39.2**	11.8 - 125		2/2/2018 15:51

Method Reference(s): EPA 8082A
EPA 3550C

Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-3 At BH-9
Lab Sample ID: 180335-13 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	**12.5**	ug/Kg	P	2/6/2018 19:57
4,4-DDE	< 2.95	ug/Kg		2/6/2018 19:57
4,4-DDT	**4.62**	ug/Kg	P	2/6/2018 19:57
Aldrin	**20.0**	ug/Kg	P	2/6/2018 19:57
alpha-BHC	**4.68**	ug/Kg	P	2/6/2018 19:57
beta-BHC	< 2.95	ug/Kg		2/6/2018 19:57
cis-Chlordane	**15.4**	ug/Kg		2/6/2018 19:57
delta-BHC	< 2.95	ug/Kg		2/6/2018 19:57
Dieldrin	**5.15**	ug/Kg		2/6/2018 19:57
Endosulfan I	**5.11**	ug/Kg	P	2/6/2018 19:57
Endosulfan II	**22.4**	ug/Kg	P	2/6/2018 19:57
Endosulfan Sulfate	**11.8**	ug/Kg	P	2/6/2018 19:57
Endrin	**29.7**	ug/Kg		2/6/2018 19:57
Endrin Aldehyde	**19.6**	ug/Kg	P	2/6/2018 19:57
Endrin Ketone	< 2.95	ug/Kg		2/6/2018 19:57
gamma-BHC (Lindane)	< 2.95	ug/Kg		2/6/2018 19:57
Heptachlor	< 2.95	ug/Kg		2/6/2018 19:57
Heptachlor Epoxide	< 2.95	ug/Kg		2/6/2018 19:57
Methoxychlor	**28.0**	ug/Kg	P	2/6/2018 19:57
Toxaphene	< 29.5	ug/Kg		2/6/2018 19:57
trans-Chlordane	**11.7**	ug/Kg	P	2/6/2018 19:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**90.4**	31.5 - 168		2/6/2018 19:57
Tetrachloro-m-xylene (1)	**77.5**	26.7 - 117		2/6/2018 19:57

Method Reference(s): EPA 8081B
EPA 3550C
Preparation Date: 1/31/2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-3 At BH-9		
Lab Sample ID:	180335-13	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	**5720**	ug/Kg	J	1/31/2018 15:44
1,2,4,5-Tetrachlorobenzene	< 6710	ug/Kg		1/31/2018 15:44
1,2,4-Trichlorobenzene	< 6710	ug/Kg		1/31/2018 15:44
1,2-Dichlorobenzene	< 6710	ug/Kg		1/31/2018 15:44
1,3-Dichlorobenzene	< 6710	ug/Kg		1/31/2018 15:44
1,4-Dichlorobenzene	< 6710	ug/Kg		1/31/2018 15:44
2,2-Oxybis (1-chloropropane)	< 6710	ug/Kg		1/31/2018 15:44
2,3,4,6-Tetrachlorophenol	< 6710	ug/Kg		1/31/2018 15:44
2,4,5-Trichlorophenol	< 13400	ug/Kg		1/31/2018 15:44
2,4,6-Trichlorophenol	< 6710	ug/Kg		1/31/2018 15:44
2,4-Dichlorophenol	< 6710	ug/Kg		1/31/2018 15:44
2,4-Dimethylphenol	< 6710	ug/Kg		1/31/2018 15:44
2,4-Dinitrophenol	< 13400	ug/Kg		1/31/2018 15:44
2,4-Dinitrotoluene	< 6710	ug/Kg		1/31/2018 15:44
2,6-Dinitrotoluene	< 6710	ug/Kg		1/31/2018 15:44
2-Chloronaphthalene	< 6710	ug/Kg		1/31/2018 15:44
2-Chlorophenol	< 6710	ug/Kg		1/31/2018 15:44
2-Methylnapthalene	**108000**	ug/Kg		1/31/2018 15:44
2-Methylphenol	< 6710	ug/Kg		1/31/2018 15:44
2-Nitroaniline	< 13400	ug/Kg		1/31/2018 15:44
2-Nitrophenol	< 6710	ug/Kg		1/31/2018 15:44
3&4-Methylphenol	< 6710	ug/Kg		1/31/2018 15:44
3,3'-Dichlorobenzidine	< 6710	ug/Kg		1/31/2018 15:44
3-Nitroaniline	< 13400	ug/Kg		1/31/2018 15:44
4,6-Dinitro-2-methylphenol	< 13400	ug/Kg		1/31/2018 15:44
4-Bromophenyl phenyl ether	< 6710	ug/Kg		1/31/2018 15:44
4-Chloro-3-methylphenol	< 6710	ug/Kg		1/31/2018 15:44

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-3 At BH-9
Lab Sample ID: 180335-13 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

4-Chloroaniline	< 6710	ug/Kg		1/31/2018	15:44
4-Chlorophenyl phenyl ether	< 6710	ug/Kg		1/31/2018	15:44
4-Nitroaniline	< 13400	ug/Kg		1/31/2018	15:44
4-Nitrophenol	< 13400	ug/Kg		1/31/2018	15:44
Acenaphthene	**10200**	ug/Kg		1/31/2018	15:44
Acenaphthylene	< 6710	ug/Kg		1/31/2018	15:44
Acetophenone	< 6710	ug/Kg		1/31/2018	15:44
Anthracene	**4220**	ug/Kg	J	1/31/2018	15:44
Atrazine	< 6710	ug/Kg		1/31/2018	15:44
Benzaldehyde	< 6710	ug/Kg		1/31/2018	15:44
Benzo (a) anthracene	< 6710	ug/Kg		1/31/2018	15:44
Benzo (a) pyrene	< 6710	ug/Kg		1/31/2018	15:44
Benzo (b) fluoranthene	< 6710	ug/Kg		1/31/2018	15:44
Benzo (g,h,i) perylene	< 6710	ug/Kg		1/31/2018	15:44
Benzo (k) fluoranthene	< 6710	ug/Kg		1/31/2018	15:44
Bis (2-chloroethoxy) methane	< 6710	ug/Kg		1/31/2018	15:44
Bis (2-chloroethyl) ether	< 6710	ug/Kg		1/31/2018	15:44
Bis (2-ethylhexyl) phthalate	< 6710	ug/Kg		1/31/2018	15:44
Butylbenzylphthalate	< 6710	ug/Kg		1/31/2018	15:44
Caprolactam	< 6710	ug/Kg		1/31/2018	15:44
Carbazole	< 6710	ug/Kg		1/31/2018	15:44
Chrysene	**5500**	ug/Kg	J	1/31/2018	15:44
Dibenz (a,h) anthracene	< 6710	ug/Kg		1/31/2018	15:44
Dibenzofuran	< 6710	ug/Kg		1/31/2018	15:44
Diethyl phthalate	< 6710	ug/Kg		1/31/2018	15:44
Dimethyl phthalate	< 13400	ug/Kg		1/31/2018	15:44
Di-n-butyl phthalate	< 6710	ug/Kg		1/31/2018	15:44
Di-n-octylphthalate	< 6710	ug/Kg		1/31/2018	15:44
Fluoranthene	< 6710	ug/Kg		1/31/2018	15:44
Fluorene	**15400**	ug/Kg		1/31/2018	15:44

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-3 At BH-9
Lab Sample ID: 180335-13 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Hexachlorobenzene	< 6710	ug/Kg		1/31/2018	15:44
Hexachlorobutadiene	< 6710	ug/Kg		1/31/2018	15:44
Hexachlorocyclopentadiene	< 6710	ug/Kg		1/31/2018	15:44
Hexachloroethane	< 6710	ug/Kg		1/31/2018	15:44
Indeno (1,2,3-cd) pyrene	< 6710	ug/Kg		1/31/2018	15:44
Isophorone	< 6710	ug/Kg		1/31/2018	15:44
Naphthalene	**7510**	ug/Kg		1/31/2018	15:44
Nitrobenzene	< 6710	ug/Kg		1/31/2018	15:44
N-Nitroso-di-n-propylamine	< 6710	ug/Kg		1/31/2018	15:44
N-Nitrosodiphenylamine	< 6710	ug/Kg		1/31/2018	15:44
Pentachlorophenol	< 13400	ug/Kg		1/31/2018	15:44
Phenanthrene	**47900**	ug/Kg		1/31/2018	15:44
Phenol	< 6710	ug/Kg		1/31/2018	15:44
Pyrene	**6730**	ug/Kg		1/31/2018	15:44

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	NC	55.4 - 114		1/31/2018	15:44
2-Fluorobiphenyl	NC	39.9 - 112		1/31/2018	15:44
2-Fluorophenol	NC	41.9 - 97.1		1/31/2018	15:44
Nitrobenzene-d5	NC	41 - 96		1/31/2018	15:44
Phenol-d5	NC	43.7 - 101		1/31/2018	15:44
Terphenyl-d14	NC	71.7 - 115		1/31/2018	15:44

Reporting limit elevated due to sample matrix

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
Data File: B25032.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier:	SS-3 At BH-9		
Lab Sample ID:	180335-13	**Date Sampled:**	1/26/2018
Matrix:	Soil	**Date Received:**	1/29/2018

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.449**	mg/Kg	J	2/9/2018

Method Reference(s): EPA 9014
Preparation Date: 2/9/2018

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-1 0.5-1 Ft
Lab Sample ID: 180335-01 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Organic Acid	**1280**	ug/Kg		1/30/2018
Unknown Organic Acid	**1010**	ug/Kg		1/30/2018
Unknown Alkane	**938**	ug/Kg		1/30/2018
Unknown Alkane	**1760**	ug/Kg		1/30/2018
Heptadecane	**1020**	ug/Kg		1/30/2018
Unknown Alkane	**1860**	ug/Kg		1/30/2018
Unknown Alkane	**3070**	ug/Kg		1/30/2018
Unknown Alkane	**1260**	ug/Kg		1/30/2018
Unknown Alkane	**4240**	ug/Kg		1/30/2018
Unknown Alkane	**9720**	ug/Kg		1/30/2018
Unknown Alkane	**9250**	ug/Kg		1/30/2018
Unknown Alkane	**26100**	ug/Kg		1/30/2018
Unknown Alkane	**1980**	ug/Kg		1/30/2018
Eicosane	**1120**	ug/Kg		1/30/2018
Unknown PAH	**1570**	ug/Kg		1/30/2018
Unknown	**1150**	ug/Kg		1/30/2018
Unknown PAH	**962**	ug/Kg		1/30/2018
Unknown	**1150**	ug/Kg		1/30/2018
Unknown	**1890**	ug/Kg		1/30/2018
Unknown Alkane	**2710**	ug/Kg		1/30/2018
Total Reported TICS	**74000**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-1 0.5-1 Ft
Lab Sample ID: 180335-01 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
None Found	< 10.7	ug/Kg		1/30/2018
Total Reported TICS	< 10.7	ug/Kg		1/30/2018

Method Reference(s): EPA 8260C
EPA 5035A - L

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-2 0.5-1 Ft
Lab Sample ID: 180335-02 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Ketone	**751**	ug/Kg	B	1/31/2018
9H-Fluoren-9-one	**586**	ug/Kg		1/31/2018
Unknown PAH	**623**	ug/Kg		1/31/2018
Unknown PAH	**798**	ug/Kg		1/31/2018
Unknown	**1360**	ug/Kg		1/31/2018
Unknown PAH	**1340**	ug/Kg		1/31/2018
Unknown	**732**	ug/Kg		1/31/2018
Unknown PAH	**1040**	ug/Kg		1/31/2018
Unknown	**529**	ug/Kg		1/31/2018
Unknown PAH	**2500**	ug/Kg		1/31/2018
Unknown	**863**	ug/Kg		1/31/2018
Unknown PAH	**1480**	ug/Kg		1/31/2018
Unknown PAH	**837**	ug/Kg		1/31/2018
Unknown PAH	**725**	ug/Kg		1/31/2018
Unknown PAH	**562**	ug/Kg		1/31/2018
Unknown PAH	**1470**	ug/Kg		1/31/2018
Unknown Dibenzopyrene	**1170**	ug/Kg		1/31/2018
Unknown PAH	**883**	ug/Kg		1/31/2018
Coronene	**523**	ug/Kg		1/31/2018
Unknown PAH	**1850**	ug/Kg		1/31/2018
Total Reported TICS	**20600**	ug/Kg		1/31/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-2 0.5-1 Ft
Lab Sample ID: 180335-02 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Hexane	**20.4**	ug/Kg		1/30/2018
Methylcyclopentane	**16.1**	ug/Kg		1/30/2018
3-Methylhexane	**18.8**	ug/Kg		1/30/2018
Unknown	**10.5**	ug/Kg		1/30/2018
Unknown	**10.5**	ug/Kg		1/30/2018
Unknown	**17.9**	ug/Kg		1/30/2018
Unknown Alkane	**16.7**	ug/Kg		1/30/2018
Unknown Alkane	**23.8**	ug/Kg		1/30/2018
Unknown Alkane	**21.4**	ug/Kg		1/30/2018
Unknown	**16.1**	ug/Kg		1/30/2018
Unknown	**12.7**	ug/Kg		1/30/2018
Total Reported TICS	**185**	ug/Kg		1/30/2018

Method Reference(s): EPA 8260C
EPA 5035A - L

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-3 0.5-1 Ft
Lab Sample ID: 180335-03
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Ketone	**602**	ug/Kg	B	1/30/2018
Unknown	**433**	ug/Kg	B	1/30/2018
Unknown	**223**	ug/Kg		1/30/2018
9,10-Anthracenedione	**228**	ug/Kg		1/30/2018
7H-Benz[de]anthracen-7-one	**200**	ug/Kg		1/30/2018
Heneicosane	**217**	ug/Kg		1/30/2018
Unknown PAH	**380**	ug/Kg		1/30/2018
Unknown	**330**	ug/Kg		1/30/2018
Unknown PAH	**800**	ug/Kg		1/30/2018
Unknown	**370**	ug/Kg		1/30/2018
Unknown	**278**	ug/Kg		1/30/2018
Unknown	**301**	ug/Kg		1/30/2018
Unknown	**194**	ug/Kg		1/30/2018
Unknown	**397**	ug/Kg		1/30/2018
Unknown PAH	**503**	ug/Kg		1/30/2018
Unknown PAH	**203**	ug/Kg		1/30/2018
Unknown Alkane	**334**	ug/Kg		1/30/2018
Unknown PAH	**542**	ug/Kg		1/30/2018
Unknown PAH	**328**	ug/Kg		1/30/2018
Unknown PAH	**552**	ug/Kg		1/30/2018
Total Reported TICS	**7420**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-3 0.5-1 Ft
Lab Sample ID: 180335-03
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Aromatic	**247**	ug/Kg		1/30/2018
Unknown Aromatic	**124**	ug/Kg		1/30/2018
Unknown Aromatic	**110**	ug/Kg		1/30/2018
Unknown Aromatic	**352**	ug/Kg		1/30/2018
Unknown Alkane	**242**	ug/Kg		1/30/2018
Unknown Aromatic	**121**	ug/Kg		1/30/2018
Unknown Aromatic	**164**	ug/Kg		1/30/2018
Unknown Aromatic	**125**	ug/Kg		1/30/2018
Unknown Aromatic	**207**	ug/Kg		1/30/2018
Unknown Aromatic	**158**	ug/Kg		1/30/2018
Unknown Aromatic	**263**	ug/Kg		1/30/2018
Unknown Aromatic	**469**	ug/Kg		1/30/2018
Unknown Aromatic	**152**	ug/Kg		1/30/2018
Unknown Aromatic	**267**	ug/Kg		1/30/2018
Unknown Aromatic	**622**	ug/Kg		1/30/2018
Unknown Aromatic	**162**	ug/Kg		1/30/2018
1,2,3,4-Tetrahydronaphthalene	**141**	ug/Kg		1/30/2018
Unknown Aromatic	**167**	ug/Kg		1/30/2018
n-Methylnaphthalene	**217**	ug/Kg		1/30/2018
n-Methylnaphthalene	**108**	ug/Kg		1/30/2018
Total Reported TICS	**4420**	ug/Kg		1/30/2018

Method Reference(s): EPA 8260C
EPA 5035A - L

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

Report Prepared Monday, February 12, 2018

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-4 0.5-1 Ft
Lab Sample ID: 180335-04 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Ketone	**453**	ug/Kg	B	1/30/2018
Unknown	**248**	ug/Kg	B	1/30/2018
Unknown Amide	**130**	ug/Kg		1/30/2018
Unknown	**238**	ug/Kg		1/30/2018
Unknown	**338**	ug/Kg		1/30/2018
Unknown	**131**	ug/Kg		1/30/2018
Unknown	**144**	ug/Kg		1/30/2018
Unknown	**137**	ug/Kg		1/30/2018
Unknown	**231**	ug/Kg		1/30/2018
Total Reported TICS	**2050**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C

Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-4 0.5-1 Ft
Lab Sample ID: 180335-04
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
None Found	< 9.98	ug/Kg		1/30/2018
Total Reported TICS	< 9.98	ug/Kg		1/30/2018

Method Reference(s): EPA 8260C
EPA 5035A - L

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-5 0.5-1 Ft
Lab Sample ID: 180335-05
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Alkane	**936**	ug/Kg		1/30/2018
Unknown Alkane	**945**	ug/Kg		1/30/2018
Unknown Alkane	**1220**	ug/Kg		1/30/2018
Unknown Alkane	**1150**	ug/Kg		1/30/2018
Unknown Alkane	**1320**	ug/Kg		1/30/2018
Unknown Alkane	**1380**	ug/Kg		1/30/2018
Unknown Alkane	**1130**	ug/Kg		1/30/2018
Unknown	**825**	ug/Kg		1/30/2018
Unknown Alkane	**2380**	ug/Kg		1/30/2018
Unknown Alkane	**926**	ug/Kg		1/30/2018
Unknown Alkane	**1650**	ug/Kg		1/30/2018
Unknown Alkane	**1150**	ug/Kg		1/30/2018
Unknown Alkane	**1670**	ug/Kg		1/30/2018
Unknown PAH	**1580**	ug/Kg		1/30/2018
Unknown Alkane	**910**	ug/Kg		1/30/2018
Unknown Alkane	**1510**	ug/Kg		1/30/2018
Unknown PAH	**997**	ug/Kg		1/30/2018
Unknown PAH	**1000**	ug/Kg		1/30/2018
Unknown Alkane	**803**	ug/Kg		1/30/2018
Unknown PAH	**956**	ug/Kg		1/30/2018
Total Reported TICS	**24400**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-5 0.5-1 Ft
Lab Sample ID: 180335-05
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Hexane	**12.3**	ug/Kg		1/30/2018
3-Methylhexane	**11.3**	ug/Kg		1/30/2018
Unknown Alkane	**11.4**	ug/Kg		1/30/2018
Unknown Alkane	**13.5**	ug/Kg		1/30/2018
Unknown Aromatic	**14.5**	ug/Kg		1/30/2018
Unknown Aromatic	**10.1**	ug/Kg		1/30/2018
Unknown Aromatic	**18.5**	ug/Kg		1/30/2018
Unknown Aromatic	**16.9**	ug/Kg		1/30/2018
Undecane	**10.4**	ug/Kg		1/30/2018
Unknown Aromatic	**11.0**	ug/Kg		1/30/2018
Unknown Aromatic	**20.6**	ug/Kg		1/30/2018
Unknown Aromatic	**35.9**	ug/Kg		1/30/2018
Total Reported TICS	**186**	ug/Kg		1/30/2018

Method Reference(s): EPA 8260C
EPA 5035A - L

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-6 1-2 Ft
Lab Sample ID: 180335-06
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Ketone	**408**	ug/Kg	B	1/30/2018
Unknown Xylene	**343**	ug/Kg		1/30/2018
Unknown	**267**	ug/Kg		1/30/2018
Unknown Benzene	**274**	ug/Kg		1/30/2018
Unknown PAH	**244**	ug/Kg		1/30/2018
Unknown	**244**	ug/Kg		1/30/2018
Unknown	**422**	ug/Kg		1/30/2018
Unknown PAH	**488**	ug/Kg		1/30/2018
Unknown	**233**	ug/Kg		1/30/2018
Unknown PAH	**652**	ug/Kg		1/30/2018
Unknown	**210**	ug/Kg		1/30/2018
Unknown	**376**	ug/Kg		1/30/2018
Unknown	**333**	ug/Kg		1/30/2018
Unknown PAH	**224**	ug/Kg		1/30/2018
Unknown PAH	**268**	ug/Kg		1/30/2018
Unknown PAH	**277**	ug/Kg		1/30/2018
Unknown	**272**	ug/Kg		1/30/2018
Unknown PAH	**369**	ug/Kg		1/30/2018
Unknown Dibenzopyrene	**242**	ug/Kg		1/30/2018
Coronene	**261**	ug/Kg		1/30/2018
Total Reported TICS	**6400**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C

Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-6 1-2 Ft
Lab Sample ID: 180335-06
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Aromatic	**194**	ug/Kg		1/30/2018
Unknown Aromatic	**89.1**	ug/Kg		1/30/2018
Unknown Aromatic	**148**	ug/Kg		1/30/2018
Unknown Aromatic	**73.1**	ug/Kg		1/30/2018
Unknown Aromatic	**116**	ug/Kg		1/30/2018
Undecane	**105**	ug/Kg		1/30/2018
Unknown Aromatic	**45.2**	ug/Kg		1/30/2018
Unknown Aromatic	**61.0**	ug/Kg		1/30/2018
Unknown Aromatic	**44.9**	ug/Kg		1/30/2018
Unknown Aromatic	**70.3**	ug/Kg		1/30/2018
Unknown Aromatic	**90.2**	ug/Kg		1/30/2018
Unknown Aromatic	**158**	ug/Kg		1/30/2018
Unknown Alkane	**39.0**	ug/Kg		1/30/2018
Unknown Aromatic	**52.1**	ug/Kg		1/30/2018
Unknown Alkane	**242**	ug/Kg		1/30/2018
Unknown Alkane	**44.7**	ug/Kg		1/30/2018
Unknown Aromatic	**32.8**	ug/Kg		1/30/2018
Unknown Alkane	**67.9**	ug/Kg		1/30/2018
Unknown Alkane	**32.8**	ug/Kg		1/30/2018
Unknown Aromatic	**41.4**	ug/Kg		1/30/2018
Total Reported TICS	**1750**	ug/Kg		1/30/2018

Method Reference(s): EPA 8260C
EPA 5035A - L

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-7 Surface
Lab Sample ID: 180335-07
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
9H-Fluoren-9-one	**5750**	ug/Kg		1/31/2018
Dibenzothiophene	**4230**	ug/Kg		1/31/2018
Unknown PAH	**6600**	ug/Kg		1/31/2018
Unknown PAH	**8090**	ug/Kg		1/31/2018
Unknown PAH	**10400**	ug/Kg		1/31/2018
Unknown PAH	**5040**	ug/Kg		1/31/2018
9,10-Anthracenedione	**10000**	ug/Kg		1/31/2018
Unknown PAH	**3220**	ug/Kg		1/31/2018
Unknown	**3860**	ug/Kg		1/31/2018
Unknown	**3720**	ug/Kg		1/31/2018
Unknown PAH	**5450**	ug/Kg		1/31/2018
Unknown PAH	**12700**	ug/Kg		1/31/2018
Unknown	**3280**	ug/Kg		1/31/2018
Unknown PAH	**7000**	ug/Kg		1/31/2018
Unknown PAH	**4470**	ug/Kg		1/31/2018
Unknown PAH	**5990**	ug/Kg		1/31/2018
Unknown	**3590**	ug/Kg		1/31/2018
Unknown PAH	**7210**	ug/Kg		1/31/2018
Unknown Dibenzopyrene	**4500**	ug/Kg		1/31/2018
Unknown	**7650**	ug/Kg		1/31/2018
Total Reported TICS	**123000**	ug/Kg		1/31/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Xylene	**7610**	ug/Kg		1/30/2018
Unknown Benzene	**14100**	ug/Kg		1/30/2018
Unknown Benzene	**10400**	ug/Kg		1/30/2018
Unknown Benzene	**5600**	ug/Kg		1/30/2018
Unknown Benzene	**9880**	ug/Kg		1/30/2018
Unknown	**3390**	ug/Kg		1/30/2018
Unknown Benzene	**4330**	ug/Kg		1/30/2018
Unknown Benzene	**3080**	ug/Kg		1/30/2018
Unknown Benzene	**8020**	ug/Kg		1/30/2018
Unknown Benzene	**4240**	ug/Kg		1/30/2018
Unknown Benzene	**4000**	ug/Kg		1/30/2018
Unknown Benzene	**4810**	ug/Kg		1/30/2018
Unknown Benzene	**4640**	ug/Kg		1/30/2018
Unknown	**2630**	ug/Kg		1/30/2018
Unknown	**5210**	ug/Kg		1/30/2018
Tetradecane	**3330**	ug/Kg		1/30/2018
Unknown Dimethyl Naphthalene	**2620**	ug/Kg		1/30/2018
Unknown	**3860**	ug/Kg		1/30/2018
Unknown Alkane	**2620**	ug/Kg		1/30/2018
Total Reported TICS	**104000**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-8 1-2 Ft
Lab Sample ID: 180335-08
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Alkane	**77300**	ug/Kg		1/31/2018
Unknown Alkane	**104000**	ug/Kg		1/31/2018
Unknown Alkane	**115000**	ug/Kg		1/31/2018
Unknown Alkane	**55800**	ug/Kg		1/31/2018
Unknown Alkane	**183000**	ug/Kg		1/31/2018
Unknown Alkane	**132000**	ug/Kg		1/31/2018
Unknown Aromatic	**207000**	ug/Kg		1/31/2018
Unknown Aromatic	**103000**	ug/Kg		1/31/2018
Unknown Aromatic	**167000**	ug/Kg		1/31/2018
Unknown Aromatic	**84900**	ug/Kg		1/31/2018
Unknown Aromatic	**81900**	ug/Kg		1/31/2018
Unknown Aromatic	**160000**	ug/Kg		1/31/2018
Unknown Aromatic	**60800**	ug/Kg		1/31/2018
Unknown Aromatic	**54900**	ug/Kg		1/31/2018
Unknown Aromatic	**105000**	ug/Kg		1/31/2018
Unknown Aromatic	**58400**	ug/Kg		1/31/2018
Unknown Aromatic	**67600**	ug/Kg		1/31/2018
Unknown Aromatic	**103000**	ug/Kg		1/31/2018
Unknown Aromatic	**59900**	ug/Kg		1/31/2018
Unknown Aromatic	**97200**	ug/Kg		1/31/2018
Total Reported TICS	**2080000**	ug/Kg		1/31/2018

Method Reference(s): EPA 8260C
EPA 5035A -- H

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-9 5-6 Ft
Lab Sample ID: 180335-09
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Ketone	**525**	ug/Kg	B	1/30/2018
Unknown	**149**	ug/Kg	B	1/30/2018
Benzeneacetic Acid	**229**	ug/Kg		1/30/2018
Unknown	**206**	ug/Kg		1/30/2018
Unknown	**406**	ug/Kg		1/30/2018
Unknown	**532**	ug/Kg		1/30/2018
Unknown PAH	**179**	ug/Kg		1/30/2018
Unknown	**220**	ug/Kg		1/30/2018
Unknown	**174**	ug/Kg		1/30/2018
Unknown Alkane	**209**	ug/Kg		1/30/2018
Unknown	**165**	ug/Kg		1/30/2018
Unknown	**177**	ug/Kg		1/30/2018
Unknown	**399**	ug/Kg		1/30/2018
Unknown	**206**	ug/Kg		1/30/2018
Unknown	**568**	ug/Kg		1/30/2018
Unknown	**134**	ug/Kg		1/30/2018
Unknown	**255**	ug/Kg		1/30/2018
Unknown	**192**	ug/Kg		1/30/2018
Unknown	**213**	ug/Kg		1/30/2018
Unknown	**159**	ug/Kg		1/30/2018
Total Reported TICS	**5300**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C

Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-9 5-6 Ft
Lab Sample ID: 180335-09
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Naphthalene	**3360**	ug/Kg		1/31/2018
n-Methylnaphthalene	**2280**	ug/Kg		1/31/2018
Total Reported TICS	**5640**	ug/Kg		1/31/2018

Method Reference(s): EPA 8260C
EPA 5035A -- H

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-10 10-12 Ft
Lab Sample ID: 180335-10 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Alkane	**8360**	ug/Kg		1/31/2018
Unknown Alkane	**8490**	ug/Kg		1/31/2018
Unknown PAH	**11700**	ug/Kg		1/31/2018
Unknown Dimethyl-Naphthalene	**24000**	ug/Kg		1/31/2018
Unknown Dimethyl-Naphthalene	**25800**	ug/Kg		1/31/2018
Unknown Dimethyl-Naphthalene	**14000**	ug/Kg		1/31/2018
Unknown Dimethyl-Naphthalene	**10400**	ug/Kg		1/31/2018
Unknown Alkane	**15400**	ug/Kg		1/31/2018
Unknown Naphthalene	**16400**	ug/Kg		1/31/2018
Unknown Naphthalene	**8980**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**15500**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**17100**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**10500**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**9010**	ug/Kg		1/31/2018
Unknown	**21800**	ug/Kg		1/31/2018
Unknown Alkane	**10500**	ug/Kg		1/31/2018
Unknown PAH	**8990**	ug/Kg		1/31/2018
Unknown PAH	**8960**	ug/Kg		1/31/2018
Unknown Dimethyl-Phenanthrene	**9700**	ug/Kg		1/31/2018
Unknown Dimethyl-Phenanthrene	**16000**	ug/Kg		1/31/2018
Total Reported TICS	**271000**	ug/Kg		1/31/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: BH-10 10-12 Ft
Lab Sample ID: 180335-10 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Propylcyclohexane	**5610**	ug/Kg		1/31/2018
Unknown Cyclohexane	**6230**	ug/Kg		1/31/2018
Unknown Aromatic	**15500**	ug/Kg		1/31/2018
Unknown Aromatic	**5500**	ug/Kg		1/31/2018
Unknown Aromatic	**5380**	ug/Kg		1/31/2018
Unknown Aromatic	**12100**	ug/Kg		1/31/2018
Unknown Aromatic	**23500**	ug/Kg		1/31/2018
1,2,3,4-Tetrahydronaphthalene	**13200**	ug/Kg		1/31/2018
Unknown Aromatic	**5870**	ug/Kg		1/31/2018
Unknown Aromatic	**9690**	ug/Kg		1/31/2018
Unknown	**5860**	ug/Kg		1/31/2018
Unknown	**10400**	ug/Kg		1/31/2018
Unknown Aromatic	**9870**	ug/Kg		1/31/2018
Unknown Aromatic	**21100**	ug/Kg		1/31/2018
Unknown Aromatic	**8690**	ug/Kg		1/31/2018
Unknown Aromatic	**11300**	ug/Kg		1/31/2018
Unknown	**10400**	ug/Kg		1/31/2018
n-Methylnaphthalene	**41800**	ug/Kg		1/31/2018
Unknown	**5310**	ug/Kg		1/31/2018
n-Methylnaphthalene	**23700**	ug/Kg		1/31/2018
Total Reported TICS	**251000**	ug/Kg		1/31/2018

Method Reference(s): EPA 8260C
EPA 5035A -- H

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

Report Prepared Monday, February 12, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-1
Lab Sample ID: 180335-11 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
9H-Fluoren-9-one	**8310**	ug/Kg		1/31/2018
Dibenzothiophene	**9930**	ug/Kg		1/31/2018
2-Methyl-Anthracene	**9210**	ug/Kg		1/31/2018
Unknown PAH	**12300**	ug/Kg		1/31/2018
Unknown PAH	**20300**	ug/Kg		1/31/2018
Unknown PAH	**8210**	ug/Kg		1/31/2018
9,10-Anthracenedione	**21700**	ug/Kg		1/31/2018
Unknown PAH	**13500**	ug/Kg		1/31/2018
Unknown	**8690**	ug/Kg		1/31/2018
Unknown PAH	**32800**	ug/Kg		1/31/2018
Unknown PAH	**8480**	ug/Kg		1/31/2018
Unknown	**8780**	ug/Kg		1/31/2018
Unknown	**9930**	ug/Kg		1/31/2018
Unknown PAH	**14500**	ug/Kg		1/31/2018
Unknown PAH	**9480**	ug/Kg		1/31/2018
Unknown PAH	**8430**	ug/Kg		1/31/2018
Unknown	**18900**	ug/Kg		1/31/2018
Unknown Dibenzopyrene	**13700**	ug/Kg		1/31/2018
Unknown Dibenzopyrene	**11900**	ug/Kg		1/31/2018
Unknown PAH	**19000**	ug/Kg		1/31/2018
Total Reported TICS	**268000**	ug/Kg		1/31/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown	**9810**	ug/Kg		2/2/2018
Unknown Alkane	**20700**	ug/Kg		2/2/2018
Unknown	**9390**	ug/Kg		2/2/2018
Unknown Alkane	**21400**	ug/Kg		2/2/2018
Unknown Alkane	**21200**	ug/Kg		2/2/2018
Unknown Alkane	**22600**	ug/Kg		2/2/2018
Unknown Alkane	**15400**	ug/Kg		2/2/2018
Unknown Alkane	**26500**	ug/Kg		2/2/2018
Unknown Alkane	**11200**	ug/Kg		2/2/2018
Unknown	**10200**	ug/Kg		2/2/2018
Unknown Alkane	**9880**	ug/Kg		2/2/2018
Unknown	**10200**	ug/Kg		2/2/2018
Unknown Alkane	**16200**	ug/Kg		2/2/2018
Unknown Alkane	**10200**	ug/Kg		2/2/2018
Unknown Alkane	**20400**	ug/Kg		2/2/2018
Unknown Alkane	**53600**	ug/Kg		2/2/2018
Unknown Alkane	**25600**	ug/Kg		2/2/2018
Unknown Alkane	**8960**	ug/Kg		2/2/2018
Unknown Alkane	**19700**	ug/Kg		2/2/2018
Unknown	**9390**	ug/Kg		2/2/2018
Total Reported TICS	**353000**	ug/Kg		2/2/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-2
Lab Sample ID: 180335-12 **Date Sampled:** 1/26/2018
Matrix: Soil **Date Received:** 1/29/2018

Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Aromatic	**47.1**	ug/Kg		1/31/2018
Unknown Aromatic	**46.9**	ug/Kg		1/31/2018
Unknown Aromatic	**54.7**	ug/Kg		1/31/2018
Unknown Aromatic	**52.9**	ug/Kg		1/31/2018
Unknown Aromatic	**98.2**	ug/Kg		1/31/2018
Unknown Aromatic	**60.4**	ug/Kg		1/31/2018
Unknown Aromatic	**223**	ug/Kg		1/31/2018
Unknown	**62.2**	ug/Kg		1/31/2018
Unknown	**88.4**	ug/Kg		1/31/2018
Unknown	**55.7**	ug/Kg		1/31/2018
Unknown Aromatic	**110**	ug/Kg		1/31/2018
Unknown Aromatic	**46.5**	ug/Kg		1/31/2018
Unknown	**54.9**	ug/Kg		1/31/2018
n-Methylnaphthalene	**122**	ug/Kg		1/31/2018
n-Methylnaphthalene	**58.6**	ug/Kg		1/31/2018
Total Reported TICS	**1180**	ug/Kg		1/31/2018

Method Reference(s): EPA 8260C
EPA 5035A - L

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 180335

Client: **Panamerican Environmental Consultants**

Project Reference: 19 Doat St

Sample Identifier: SS-3 At BH-9
Lab Sample ID: 180335-13
Matrix: Soil
Date Sampled: 1/26/2018
Date Received: 1/29/2018

Semi-Volatile Tentatively Identified Compounds

Tentatively Identified Compound	Result	Units	Qualifier	Date Analyzed
Unknown Naphthalene	**123000**	ug/Kg		1/31/2018
Tetradecane	**273000**	ug/Kg		1/31/2018
Unknown Dimethyl-Naphthalene	**259000**	ug/Kg		1/31/2018
Unknown Dimethyl-Naphthalene	**291000**	ug/Kg		1/31/2018
Unknown Dimethyl-Naphthalene	**158000**	ug/Kg		1/31/2018
Unknown Alkane	**275000**	ug/Kg		1/31/2018
Pentadecane	**406000**	ug/Kg		1/31/2018
Unknown Naphthalene	**183000**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**167000**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**253000**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**122000**	ug/Kg		1/31/2018
Unknown Trimethyl-Naphthalene	**233000**	ug/Kg		1/31/2018
Hexadecane	**491000**	ug/Kg		1/31/2018
Unknown Alkane	**227000**	ug/Kg		1/31/2018
Unknown Alkane	**549000**	ug/Kg		1/31/2018
Unknown Alkane	**340000**	ug/Kg		1/31/2018
Unknown Alkane	**266000**	ug/Kg		1/31/2018
Unknown Alkane	**363000**	ug/Kg		1/31/2018
Unknown Alkane	**317000**	ug/Kg		1/31/2018
Unknown Alkane	**254000**	ug/Kg		1/31/2018
Total Reported TICS	**5550000**	ug/Kg		1/31/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client:	**Panamerican Environmental Consultants**
Project Reference:	19 Doat St
Lab Project ID:	180335
SDG #:	0335-01
Matrix:	Soil

Semi-Volatile Tentatively Identified Compounds

Analyte	Result	Units	Qualifier	Date Analyzed
Unknown Ketone	**125**	ug/Kg		1/30/2018
Unknown Ketone	**258**	ug/Kg		1/30/2018
Unknown	**281**	ug/Kg		1/30/2018

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 1/30/2018
QC Batch ID: QC180130STICSS
QC Number: 1

Tentatively Identified Compound results are estimated values, based on Internal Standard response factors.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, January 31, 2018

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term, or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

1 of 2

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:		
CLIENT:	BE3 CORP/PANAMERICAN	CLIENT:		LAB PROJECT ID: 180335
ADDRESS:	1270 NIAGARA ST	ADDRESS:	SAME	
CITY:	BUFFALO STATE: N.Y. ZIP: 14213	CITY:	STATE: ZIP:	Quotation #:
PHONE:	716-308-8220	PHONE:		Email:
ATTN:	PETER J. GORTON	ATTN:		

PROJECT REFERENCE: 19 DOAT ST

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	375 VOCs	SVOCs	METALS	PCBs	PEST	HCN-TCL	TICs	per SH 6f 1/29/18	REMARKS	PARADIGM LAB SAMPLE NUMBER
1-26-18	930		X	BH-1 0.5-1 FT	SO	2	X	X	X	X	X	X	X			01
	1000		X	BH-2 0.5-1 Ft	SO	2	X	X	X	X	X	X	X			02
	1040		X	BH-3 0.5-1 Ft	SO	2	X	X	X	X	X	X	X			03
	1100		X	BH-4 0.5-1 Ft	SO	2	X	X	X	X	X	X	X			04
	1130		X	BH-5 0.5-1 Ft	SO	2	X	X	X	X	X	X	X		OILY NEXT TO DRUMS	05
	110		X	BH-6 1-2 Ft	SO	2	X	X	X	X	X	X	X			06
	200		X	BH-7 SURFACE	SO	1		X	X	X	X	X	X		3-30 ppm PID	07
	215		X	BH-8 1-2 FT	SO	2	X	X	X	X	X	X	X		300+ PID NEAR OLD GAS TANK	08
	250		X	BH-9 5-6 FT	SO	2	X	X	X	X	X	X	X			09
	330		X	BH-10 10-12 FT	SO	2	X	X	X	X	X	X	X	*	CONTAINS TAR/Fuel OIL 6 BOTTOM 10	10

NOTE - MAY CHANGE TO 5 DAY TURN ON MONDAY

OIL10 daily TAT per JB 1/29/18

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	None Required	☐	None Required	☐
10 day	☒	Batch QC	☐	Basic EDD	☒
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☒
Rush 2 day	☐	Category B	☒ per JD 6f 1/29/18		
Rush 1 day	☐				
Other please indicate date needed:	☐	Other please indicate package needed:	☐	Other EDD please indicate EDD needed :	☐

PETER J GORTON	1-26-18 NI DAY	Total Cost:	
Sampled By	Date/Time		
Peter Gorton	1-27-18 550		
Relinquished By	Date/Time		
	1-27-18 5:50		
Received By	Date/Time	P.I.F.	
	1/29/18 14:56		
Received @ Lab By	Date/Time		

3 °C iced 1/29/18 13:26. No Custody Seal 6f 1/29/18

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

2 of 2

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:		
CLIENT:	BE3 CORP./PANAMERICAN	CLIENT:		LAB PROJECT ID: 180335
ADDRESS:	1270 NIAGARA ST	ADDRESS:		
CITY: BUFFALO STATE: NY ZIP: 14213		CITY: STATE: ZIP:		Quotation #:
PHONE:	716-308-8220	PHONE:		Email:
ATTN:	PETER J. GORTON	ATTN:		

PROJECT REFERENCE: 19 BOAT ST

Matrix Codes:

AQ - Aqueous Liquid	WA - Water	DW - Drinking Water	SO - Soil	SD - Solid	WP - Wipe	OL - Oil
NQ - Non-Aqueous Liquid	WG - Groundwater	WW - Wastewater	SL - Sludge	PT - Paint	CK - Caulk	AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	375 VOCs	8260	METALS	PCBs	PEST	HCN	TICs				REMARKS	PARADIGM LAB SAMPLE NUMBER
1-26-18	1117		X	SS-1	SO	1		X	X	X	X	X	X				SURFACE SAMPLE AT TRANSFORMER	11
	1050		X	SS-2	SO	2	X	X	X	X	X	X	X				NEXT TO DRUMS - OILY MATERIAL	12
	240		X	SS-3 NEAR BH-9	SO	1		X	X	X	X	X	X				CONTAINS TAR/#6 OIL BOTTOMS	13

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	None Required	☐	None Required	☐
10 day	☒	Batch QC	☐	Basic EDD	☒
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☒
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other please indicate date needed:	☐	Other please indicate package needed:	☐	Other EDD please indicate EDD needed :	☐

Sampled By: PETER J. GORTON	Date/Time: 1-26-18 ALL DAY	Total Cost:
Relinquished By:	Date/Time: 1-26-18 5:50	
Received By:	Date/Time: 1-26-18 5:50	P.I.F.
Received @ Lab By:	Date/Time: 1/29/18 14:56	

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

Chain of Custody Supplement

Client: Panamerican **Completed by:** Glen Pezzulo

Lab Project ID: 180335 **Date:** 1/29/18

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X	X 5035	
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)			X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		X metals
Comments	3°C rec'd 1/29/18 13:26		
Sufficient Sample Quantity	X		
Comments			