



**PHASE II
ENVIRONMENTAL SITE ASSESSMENT
PINEMONT DRIVE RECONSTRUCTION PROJECT
HOUSTON, HARRIS COUNTY, TEXAS**

**PREPARED FOR:
IDC INC.
1111 WILCREST GREEN, SUITE 250
HOUSTON, TEXAS 77042**

**PREPARED BY:
HVJ ASSOCIATES, INC.
HOUSTON, TEXAS
JULY 17, 2013**

**REPORT NO. HE1018720.1
KEY MAP 452 F, G & H**



Houston | 6120 S. Dairy Ashford Rd.
Austin | Houston, TX 77072-1010
Dallas | 281.933.7388 Ph
San Antonio | 281.933.7293 Fax
www.hvj.com

July 17, 2013

Mr. Larry F. Janak, PE
Executive Vice President
IDC Inc.
11111 Wilcrest Green, Suite 250
Houston, Texas 77042

Re: Phase II Environmental Site Assessment (ESA) Report
Pinemont Drive Reconstruction Project
Owner: City of Houston
HVJ Project No. HE1018720.1

Dear Mr. Janak:

Presented herein is our final Phase II Environmental Site Assessment Report for the above referenced project. The study was performed in general accordance with our Proposal No. HE1018720.1 dated March 21, 2012 (revised April 20, 2012); current ASTM Standard Practice E-1903 - 97 (2002) "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process" as modified by the City of Houston (COH) Public Works and Engineering Infrastructure Design Manual "Geotechnical and Environmental Requirements" (July 2012).

This report presents HVJ Associates' understanding of the project's scope, the methodology we employed in executing the work, and the conclusions we reached subject to the limitations discussed in Section 6 of the report. It has been a pleasure to work with you on this project, and we appreciate the opportunity to be of service.

Sincerely,

HVJ ASSOCIATES, INC.

Texas Firm Registration No. F-000646

A handwritten signature in black ink, appearing to read 'Edward Hawkinson', is written over a light gray rectangular background.

Edward Hawkinson, PG, MS, MBA
Project Manager

ZA/EH:abm

Copies submitted: 4 final

The following lists the pages which complete this report:	
● Main Text – 15 pages	● Appendix B – 13 pages
● Plates – 7 pages	● Appendix C – 56 pages
● Appendix A – 27 pages	● Appendix D – 4 pages

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EXECUTIVE SUMMARY

HVJ Associates, Inc. has completed a Phase II ESA for a water and sewer line replacement project along Pinemont Drive from Ella to North Shepherd. The invert depths of the proposed new water and sewer lines should not exceed 25 feet below the existing grade.

The purpose of this study was to determine if soil and/or groundwater contamination from former leaking petroleum storage tank sites and other environmental sites might impact the design and construction of the proposed project. This study was performed in general accordance with our Proposal No. HE1018720.1 dated March 21, 2012 (revised April 20, 2012) and current ASTM Standard Practice E-1903 - 97 (2002) "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process" as modified by the City of Houston (COH) Public Works and Engineering Infrastructure Design Manual "Geotechnical and Environmental Requirements" (July 2012).

The available information for this Subject Project Alignment and subsurface investigation, conducted during November 2012 are summarized below:

- Twelve borings were installed using Geoprobe soil boring equipment at four locations with recognized environmental conditions (RECs) along the Subject Project Alignment. These borings were installed between the REC sites and the proposed construction area along Pinemont Drive.
- One soil sample from each boring was obtained for laboratory analysis of chemicals of concern (COCs). One groundwater sample was obtained from each REC location for laboratory analysis of COCs.
- The subsurface soils generally consist of topsoil and/or fill materials overlying (in general) red clay, silty clay, clayey sand, sandy clay, fine sand and gravel.
- Petroleum hydrocarbons above the analytical method reporting limit were found in two soil samples collected from borings installed at a former gasoline service station location near the east end of the Subject Project Alignment at the intersection of Pinemont and North Shepherd.
- Petroleum hydrocarbons above the analytical method reporting limit were found in one groundwater sample collected from a temporary monitoring well installed in a boring adjacent to an operational gasoline service station location near the west end of the Subject Project Alignment at the intersection of Pinemont and Ella Boulevard.
- Levels of several metals were found above the analytical method reporting limit in soil samples from several borings along Pinemont.

It is likely that the majority of the soils will be non-hazardous and possible that some soil excavated during construction along the Subject Project Alignment will require special handling. Using the City of Houston criteria, two potentially petroleum contaminated areas (PPCAs) were identified along the Subject Project Alignment. A PPCA was identified at/near a service station location along Pinemont Drive near the intersection of Ella between Pinemont Drive Stations 11+90 and 20+00. A PPCA was identified near the intersection of Pinemont and North Shepherd between Pinemont Drive Stations 69+15 and 71+20. These PPCAs along Pinemont Drive may require engineering design considerations. Based on the results of our study and distance from the current and former service station locations along Pinemont Drive, it is possible that contamination is present in a quantity sufficient to impact construction activities along the Subject Project Alignment. During

construction, a decision regarding PPCA soil classification will be made after the analysis of stockpiled soil.

Based on the results of this study, we recommend no further soil testing of the REC areas along the Subject Project Alignment. This executive summary does not fully summarize our findings and opinions. Those findings and opinions are related through the full report only.

1. INTRODUCTION

1.1 Project Objective and Rationale

The project involves replacement of water and sewer lines along Pinemont from Ella to North Shepherd. The invert depths of the proposed new water and sewer lines should not exceed 25 feet below the existing grade.

The objective of the investigation is to determine the nature of possible environmental contamination associated with these “possible high impact” locations of potential concern and their effect on the design, construction and operation of the proposed utilities. Based on recommendations contained in our Phase I Environmental Site Assessment “Pinemont Drive Reconstruction Project” dated July 28, 2011, we assessed five sites with recognized environmental conditions (RECs) along the Subject Project Alignment with 12 borings at four locations (two of the REC sites are in roughly the same location). Work was done in accordance with City of Houston, Department of Public Works and Engineering Infrastructure Design Manual Chapter 11 “Geotechnical and Environmental Requirements” and the current ASTM Standard Practice E-1903 - 97 (2002) “Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process.” The sites to be assessed, type of concern, concern documentation and sample analysis are listed in Table 1.

Name and Location of Concern	Type of Concern	Concern Documentation/Comment
Pilgrim Cleaners 961 Pinemont Drive	VOC in site soil and groundwater.	This facility is not listed in the TCEQ dry cleaners database, is no longer in operation and may be a concern to project construction due to its proximity to the Subject Project Alignment and the risk of a release or releases of chlorinated hydrocarbons to site area soil and groundwater.
Shell Oil Company 5143 Ella Blvd.	BTEX, MTBE and TPH contamination in site soil and groundwater	Petroleum hydrocarbons at the facility were removed to the “maximum extent practicable” but may not have been removed completely and could be encountered during construction. In addition, closure was partially based on an impervious cover over the affected area which would limit potential for exposure and which may be breached during project construction.
Former Adams Texaco 5203 North Shepherd	BTEX, MTBE and TPH contamination in site soil and groundwater	This site is listed as priority code “groundwater impacted, no apparent threats or impacts to receptors” and status code “site assessment.” There is limited information in the file to document the extent of release(s) of contaminants to the Subject Project Alignment. The TCEQ file contained information documenting levels of BTEX and TPH in samples from tank pit walls, floor and backfill adjacent to the Subject Project Alignment.
Former Exxon 1290 Pinemont	BTEX, MTBE and TPH contamination in site soil and groundwater	The leaking petroleum storage tank at this facility adjoins the Subject Project Alignment to the north. There is no information in the file to fully document the extent of possible release(s) of contaminants to the Subject Project Alignment.
Former Landfill Site	VOC and metals in site soil and	This former closed and abandoned municipal and

Table 1 Pinemont Drive Reconstruction Project Environmental Issues		
Ella and Pinemont	groundwater.	solid waste landfill site at the intersection of Ella and Pinemont adjoins the Subject Project Alignment. There is no information in the database regarding types of materials accepted by this landfill before it closed in 1971.
Note: Since the LPST site at 1290 Pinemont and the former landfill site at the intersection of Ella and Pinemont are at roughly the same location, they were assessed with three borings to save costs.		

Groundwater was encountered in sufficient quantity for sampling at several boring locations.

1.2 Project Scope

The following tasks were performed:

1. Obtained environmental drilling permits from the City of Houston Department of Public Works and Engineering (copies of these permits are provided in Appendix A).
2. Prepared a site-specific health and safety plan per 29 CFR 1910.120 (a copy of this document is not attached but is available upon request).
3. Drilled twelve borings to 24 feet below ground surface (bgs), auger refusal or the top of the water table. After several offset attempts, auger refusal occurred in boring EB2 in an area of high utility density. All borings were installed using Geoprobe equipment.
4. Performed soil sample field screening with an organic vapor meter (OVM) and obtained selected samples for subsequent laboratory analyses.
5. Collected groundwater samples at the four locations of concern for analysis.
6. Prepared boring logs (copies of these logs are provided in Appendix B).
7. Submitted selected samples to A&B Laboratory for the appropriate analysis depending on the location. See Table 1 above for boring address and number, type of concern, concern documentation and analysis conducted (laboratory data sheets, QA/QC documentation and chain-of-custody form are provided in Appendix C).
8. Coordinated petroleum contaminated drill cuttings and related drummed non-hazardous waste disposal (see Appendix D).
9. Prepared this report summarizing our findings with conclusions and recommendations.

1.3 Basis of Report

Although this study has been a reasonably thorough attempt to identify soil and groundwater contamination at the proposed locations, there is a possibility that contamination may have escaped detection due to the limitations of this study, or the presence of undetected and unreported environmental releases. HVJ Associates reserves the right to alter our conclusions and recommendations based on our review of any information obtained after the date of this report.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar conditions, by environmental consultants practicing in this or similar localities. No warranty, express or implied, is made as to the professional information included in this report.

1.4 Qualifications of Personnel

The primary investigator for this Phase II ESA is Mr. Edward Hawkinson, PG. Mr. Hawkinson holds BS and MS degrees in geology from The Ohio State University and the University of Cincinnati respectively. Mr. Hawkinson is a registered Professional Geologist in Arkansas, Tennessee and Texas. His career encompasses a period exceeding 30 years involving environmental investigations, hydrogeology, water resource evaluations and energy exploration.

2. BACKGROUND INFORMATION

2.1 Results of Previous Environmental Studies

An HVJ Associates Phase I ESA “Water Line Replacement in Pinemont Drive Area” final report dated July 28, 2012 identified five sites of environmental concern along the Subject Project Alignment. These sites were determined to have a possible impact to the Subject Project Alignment area. The Phase I ESA report contained the following information:

1. Environmental regulatory agency summary records were obtained for regulated environmental sites near the Subject Project Alignment area. Following initial review, additional information was obtained through file reviews, field observations and interviews.
2. Available historical topographic maps, aerial photographs, well and pipeline data and city directories were obtained and reviewed to determine if current or prior land owners/occupants may have engaged in activities on adjacent properties that may have been an environmental concern. Sanborn fire insurance maps were available and reviewed for the Subject Project Alignment and adjoining properties.
3. Available geologic literature was reviewed to characterize the geologic, physiographic, and hydrogeologic setting to determine potential release pathways.
4. An on-site reconnaissance of Subject Project Alignment and the adjoining properties was performed to conduct interviews, verify environmental and historical records, identify hazardous substance and petroleum product storage areas and any obvious signs of environmental releases, identify current land-use activities and discover potential areas of environmental concern based on current conditions and development.
5. Interviews were conducted to obtain information relevant to the Subject Project Alignment and adjoining properties.

The Subject Project Alignment is located approximately 2.8 miles north of the North Loop West and 3.8 miles east of US 290 in Houston, Texas. The Phase I ESA included:

- A database search of environmental records for the Subject Project Alignment and surrounding area.
- A review of historical records to assess past uses of Subject Project Alignment and adjoining property.
- An on-site reconnaissance of Subject Project Alignment during which Subject Project Alignment was visually inspected for the presence and management of hazardous substances and petroleum products and any signs of environmental releases or impacts.
- Interviews to obtain information relevant to Subject Project Alignment and adjoining properties.
- Identification of the current uses and status of properties adjoining the Subject Project Alignment in order to evaluate their potential as sources of contamination.

The Subject Project Alignment area is located in a primarily commercial area. The available information from the Phase I ESA for this project is summarized below:

1. Historical data, maps, and aerial photographs revealed that the Subject Project Alignment was developed prior to 1915 with several dirt roads and scattered residential structures. By the late 1940's, the Subject Project Alignment was developed with scattered single-family residences to the east and remained undeveloped to the west. Subdivision construction in the area around Pinemont and commercialization along Pinemont began prior to 1953.
2. According to the ASTM Standards and the City of Houston guidelines designated search radii, in the Subject Project Alignment, the regulatory database indicates that 47 "locatable" non-water well listings involving both federal and state database information are located within the ASTM search radii. Additionally, according to the City of Houston Fire Department there were no incidents of concern reported within the area Key Map locations 452 F and G.
3. Combined with our review of historical data, maps, reconnaissance and the Texas Commission on Environmental Quality (TCEQ) online and local office files, we identified five sites of possible concern with potential impact near the Subject Project Alignment. The location of five of these sites is shown on Plates 3. These sites are the former Pilgrim Cleaners at 961 Pinemont Drive; Shell Oil Company facility at 5143 Ella Blvd; former Adams Texaco at 5203 North Shepherd; former Exxon at 1290 Pinemont; and former landfill site at the intersection of Ella and Pinemont.
4. The Subject Project Alignment is underlain by clayey soils associated with the Beaumont Formation. Groundwater for domestic and municipal uses occurs at depths ranging from about 400 to 600 feet in the Chicot and Evangeline Aquifers, respectively. Shallow groundwater may be present and is expected to be about 10 to 20 feet below ground.

Five sites with RECs were identified in connection with the Subject Project Alignment while performing the Phase I ESA. HVJ Associates recommended further environmental study of these locations if the proposed construction activities are deeper than five feet bgs.

2.2 Planned Construction Description

The project involves replacement of water and sewer lines along Pinemont Drive from Ella to North Shepherd. The invert depths of the proposed new water and other lines should not exceed 25 feet below the existing grade. Phase II ESA work was performed along Pinemont Drive.

3. INVESTIGATIVE METHODOLOGY

3.1 Soil Boring Sampling Activities

Prior to commencing field activities, Environmental Test Boring permits were obtained from the City of Houston. Copies of the City of Houston Environmental Facility Permits and permit application documentation are provided in Appendix A. HVJ Associates performed this assessment in general accordance with the guidance contained in the American Society for Testing and Materials Designation E 1903-97, Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessments (ASTM E 1903) as modified by the City of Houston Public Works and Infrastructure Design Manual "Geotechnical and Environmental Requirements" (July 2012). Prior to conducting our on-site investigation, City of Houston maps were reviewed to determine the location of water and sewer utilities in the project area. Texas One-Call was contacted to mark other near surface utilities in the Subject Project Alignments area.

Prior to mobilization, a site-specific health and safety plan was prepared in accordance with 29 CFR 1910.120. Prior to drilling and sample screening, all sampling equipment was thoroughly cleaned to prevent cross contamination. All environmental soil borings and temporary groundwater monitoring

wells were installed by driller Total Support Services, Inc. using Geoprobe sampling equipment. At each location, the unit collected four-foot long soil cores from the ground surface to the top of the water bearing zone, to auger refusal or to 24 ft. bgs if no groundwater was encountered.

The locations of the soil borings/probes are shown on the Plan of Borings (Plate 2A, 2B and 2C) and described below. After several offset attempts, auger refusal occurred in borings EB2. The soil borings were placed in the best practicable locations, considering the location of utilities and other site-specific conditions. Soil samples obtained were continuously examined for impact using visual and olfactory methods. Samples were also screened for organic vapors with a properly calibrated Organic Vapor Meter (OVM). Descriptions of the materials encountered are presented on the boring logs (Appendix B).

The on-site screening was conducted by cutting a sub-sample from each one-foot interval of core with a decontaminated knife. The soil samples were placed in airtight containers (sealable plastic bags) and held for approximately twenty minutes to allow the volatilization of organic vapors. At the end of this period, the headspace air inside the container was screened with the OVM. This was accomplished by inserting the OVM probe tip into a narrow opening in the plastic bag seal. The headspace reading and corresponding depth was recorded on the boring log. Following OVM screening, one soil sample from each borehole was selected for laboratory analyses (OVM readings are presented on the boring logs). Samples were selected for analysis based on criteria contained in the project proposal. The samples selected were placed into pre-labeled laboratory-supplied glass jars, placed on water ice in an insulated cooler and shipped under chain-of-custody to A&B Laboratory for analysis.

Groundwater samples were collected from one inch diameter temporary groundwater monitoring wells using clean disposable bailers at the four locations of concern. Subsequent to the drilling and sampling activities, each borehole was plugged from total depth to the surface using bentonite plugging material in accordance with standard drilling practice.

3.2 Laboratory Analysis Performed

A&B Laboratory performed one or more of the following analyses on selected soil and groundwater samples from the environmental borings installed along the Subject Project Alignment as follows:

- TPH using TCEQ TX Method 1005;
- BTEX and MTBE using U.S. EPA Method 8021B;
- Total Recoverable Metals using U.S. EPA Method 6010C;
- Total Metals – Mercury U.S. EPA Method 8260C; and
- Volatile Organic Compounds U.S. EPA Method 8260C.

Copies of laboratory reports by A&B Laboratory as well as the standard chain-of-custody documentation are included in Appendix C.

3.3 Waste Management

Investigation derived wastes (primarily soil cuttings) were generated in a small amounts during this investigation. Approximately five kilograms of soil cuttings were generated per boring. These materials were containerized and transported to HVJ Associates property for temporary storage until the results of the laboratory analyses were received in order to determine disposal requirements (if any). Since the laboratory analysis report indicated several samples analyzed exceeded the applicable method reporting limit and/or the TCEQ TRRP PCLs, these materials were transported for disposal under Republic Services Non-Hazardous Waste Manifest No. 0981172 by an agent of USA Environment to the state approved McCarty Road Landfill, 11013 Old Beaumont Highway, Houston,

Texas. Copies of the Republic Services Special Waste Profile and manifest documents are provided in Appendix D.

4. ASSESSMENT RESULTS

4.1 Site Specific Soil Conditions

The subsurface soils generally consist of topsoil and/or fill materials overlying (in general) red clay, silty clay, clayey sand, sandy clay, fine sand and gravel. Petroleum odors were detected by olfactory methods during the installation of borings EB11 and EB12 along Pinemont Drive. This odor is documented on our boring log. Specific soil descriptions and field observations for the soil borings are included on the boring logs contained in Appendix B. Soil classifications presented on the boring logs are based on visual field classification and have not been verified by geotechnical laboratory tests. Actual soil conditions may differ from those presented on the boring logs.

4.2 Analytical Findings – Soil and Groundwater

The table below lists the laboratory analytical results for parameters that are at or above the method reporting limit (all other results are at or below the reporting limit and are not listed):

Table 2 Soil Analytical Results and TCEQ PCLs (results in mg/kg for soil)							
Parameter	BORING NUMBER AND DEPTH OF SAMPLE					TCEQ PCL Soil ¹	
	EB4 (4-8)	EB5 (8-12)	EB6 (8-12)	EB11 (8-12)	EB12 (8-12)	TOT COMB	GW ING
TOTAL RECOVERABLE METALS BY EPA SW-846 6010C							
Arsenic	0.88	BRL ²	BRL	NS ³	NS	240	5.0
Barium	13.51	11.07	33.80	NS	NS	8100	440
Cadmium	BRL	BRL	BRL	NS	NS	52	1.5
Chromium	2.09	2.59	1.77	NS	NS	33000	2400
Lead	3.23	2.89	2.67	NS	NS	500	3.0
Mercury	0.011	BRL	0.013	NS	NS	3.6	0.0078
VOLATILE ORGANIC COMPOUNDS BY EPA SW-846 8260C							
MTBE	NS	NS	NS	1.18	BRL	130	0.35
Benzene	BRL	BRL	BRL	5.17	0.069	120	0.026
Toluene	BRL	BRL	BRL	61.9	0.921	5900	8.2
Ethylbenzene	BRL	BRL	BRL	31.1	0.491	6400	7.6
Total Xylene	BRL	BRL	BRL	143	3.43	6000	120
TOTAL PETROLEUM HYDROCARBONS BY TX 1005							
TPH (C6-C35)	BRL	BRL	BRL	288.2	25.2	NL (see Note 1)	NL
TPH (C6-C12)	BRL	BRL	BRL	267	25.2	1600	65

Table Notes:

- 1) Levels from TRRP Table 1 Tier 1 Soil Protective Concentration Limits (PCLs) (^{Tot}Soil_{Comb} and ^{GW}Soil_{Ing} exposure pathway for surface soil) last revised on June 29, 2012. The TPH (C6-C35) PCL is not listed (NL) in this table). Results listed in **RED BOLD** exceed the TCEQ PCL for that parameter.
- 2) BRL = Below Reporting Limit.
- 3) NS = not analyzed for parameter.

Table 3	
Texas-Specific Soil Background Concentrations	
milligrams per kilogram (mg/kg)¹	
Metal	Median Background Concentration (mg/kg)
Arsenic	5.9
Barium	300
Total Chromium	30
Cobalt	7
Lead	15
Selenium	0.3

¹Source: 30 TAC §350.51(m) “Background Geochemistry of Some Rocks, Soils, Plants, and Vegetables in the Conterminous United States”, by Jon J. Connor, Hansford T. Shacklette, *et al.*, Geological Survey Professional Paper 574-F, US Geological Survey.

Metals analysis of samples collected from borings EB4, EB5, and EB6 indicate that some metals are above the method reporting limit in these samples. The analysis of samples collected from EB5 and EB6 document that metals levels in these samples are below the TRRP Table 1 Tier 1 Residential PCLs for the 0.5 source area ^{Tot}Soil_{Comb} exposure pathway for surface soil. Lead results for EB4 are above the Texas background concentration for lead (see Table 3 for background concentration levels) and above the ^{GW}Soil_{Ing} PCL. Mercury in the soil sample collected from boring EB4 is above the ^P^{GW}Soil_{Ing} PCL.

Results show that the levels of MTBE, BTEX and TPH in boring EB11 soil are at or above the method reporting limit and above the TRRP Table 1 soil PCLs for the ^{GW}Soil_{Ing} exposure pathway for surface soil. Results show that the levels of toluene, ethylbenzene and xylene in boring EB12 soil are at or above the method reporting limit and below the TRRP Table 1 soil PCLs for both the ^{Tot}Soil_{Comb} and ^{GW}Soil_{Ing} exposure pathway for surface soil. The level of benzene in this boring exceeds the PCL. This result defines a PPCA between boring EB10 and the end of the Subject Project Alignment at North Shepherd. Soil samples from all remaining borings showed no level of BTEX, MTBE, TPH or VOCs.

For groundwater, results show that the levels of MTBE of 0.003 mg/L in the sample collected from boring EB1 is at or above the method reporting limit and below the TRRP Tier 1 Table 3 PCL for the ^{GW}GW_{ing} exposure pathway of 0.24 mg/L. Groundwater samples from all remaining borings showed no level of Metals, BTEX, MTBE, TPH or VOCs.

Using City of Houston criteria, two PPCAs were identified along Pinemont Drive. These PPCAs are at/near an operational service station location at 5143 Ella Boulevard between Stations 11+90 and 20+00 (see Plate 3A) and adjoining a historical service station location at 5203 North Shepherd between Stations 69+15 and 71+20 in the vicinity of borings EB11 and EB12 (see Plate 3B).

The City of Houston Guide Specifications 02105 (03-18-2005) Chemical Sampling and Analysis and 02120 (03-18-2005) Transportation and Disposal for construction defines a PPCA as “an area within station-to-station locations identified on drawings where petroleum contamination has been detected in soil or groundwater.”

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary and Conclusions

The subsurface soils generally consist of topsoil and/or fill materials overlying (in general) red clay, silty clay, clayey sand, sandy clay, fine sand and gravel. We conclude that petroleum hydrocarbons are present in soil samples collected from two of the 12 boring locations (EB11 and EB12). We conclude that petroleum hydrocarbons are present in the groundwater sample collected from the boring EB1 location. We anticipate that groundwater will be present at the boring locations above 24 feet bgs, however, it should be noted that the groundwater table may fluctuate due to seasonal variations in rainfall and local stratigraphic and/or underground (manmade) features and groundwater may not be present at these locations at other times in the year or at nearby locations.

Metals analysis of samples collected from borings EB4, EB5, and EB6 indicate that some metals are above the method reporting limit in these samples. The analysis of samples collected from EB5 and EB6 document that metals levels in these samples are below the TRRP Table 1 Tier 1 Residential PCLs for the 0.5 source area $^{Tot}Soil_{Comb}$ exposure pathway for surface soil. Lead results for EB4 are above the Texas background concentration for lead (see Table 3 for background concentration levels) and above the $^{GW}Soil_{Ing}$ PCL. Mercury in the soil sample collected from boring EB4 is above the $^{GW}Soil_{Ing}$ PCL.

With the exception of lead in boring EB4, all results are below the Texas-Specific Soil Background Concentrations listed in 30 TAC §350.51(m). We conclude that no contaminated soil (based on $^{Tot}Soil_{Comb}$ exposure pathway criteria) which could impact worker health and safety exists at any of the boring locations at or above the depth of the boring at the present time.

We conclude that levels of MTBE, BTEX and TPH in boring EB11 soil are at or above the method reporting limit and above the TRRP Table 1 soil PCLs for the $^{GW}Soil_{Ing}$ exposure pathway for surface soil. We conclude that levels of toluene, ethylbenzene and xylene and TPH in boring EB12 soil are at or above the method reporting limit and below the TRRP Table 1 soil PCLs for both the $^{Tot}Soil_{Comb}$ and $^{GW}Soil_{Ing}$ exposure pathway for surface soil. We conclude that the level of benzene in this boring is above the $^{GW}Soil_{Ing}$ PCL. We conclude that the level of MTBE of 0.003 mg/L in the groundwater sample collected from boring EB1 is at or above the method reporting limit and below the TRRP Tier 1 Table 3 PCL for the $^{GW}GW_{ing}$ exposure pathway of 0.24 mg/L.

Results define a PPCA between boring EB1 and east of boring EB6 near the west end of the Subject Project Alignment. This PPCA is at/near an operational gas station location along Pinemont Drive near the intersection of Ella Boulevard. Based on the results of our study we conclude that it is possible that contamination is present at this location. During construction, a decision regarding PPCA soil classification will be made after the analysis of stockpiled soil. The PPCA extends from the west end of the Subject Project Alignment at Station 11+90 to 150 ft. east of environmental boring EB6 at Station 20+00 (see Plate 3A). Results for borings EB11 and EB12 define a PPCA between boring EB10 and the east end of the Subject Project Alignment. This PPCA is at/near a previously identified historical gas station location along Pinemont Drive near the intersection of North Shepherd. Based on the results of our study and distance from the historical gas station location along Pinemont Drive, it is possible that contamination is present at this location. During

construction, a decision regarding PPCA soil classification will be made after the analysis of stockpiled soil.

5.2 Recommendations

Based on a comparison of analytical results detailed in this report with TCEQ PCLs and other information, we recommend no further environmental studies adjacent to or near the RECs along the Subject Project Alignment. We recommend no additional worker protection since levels of Metals, TPH, BTEX and MTBE are relatively low.

We recommend petroleum resistant piping and gaskets and other petroleum contaminated design considerations for the two Pinemont Drive PPCA locations. We recommend appropriate petroleum contamination design considerations at locations detailed above but no other environmental considerations/protocols for the construction. In the event that environmental contamination is found during construction, we recommend health, safety and other procedures as outlined in the current COH Guide Specifications 02105 and 02120.

6. LIMITATIONS

This report is an instrument of service of HVJ Associates, Inc. The report was prepared for and is intended for the exclusive use of the COH and IDC. The report's contents may not be relied upon by any other party without the express written permission of HVJ Associates. With the written permission of the COH and/or IDC, HVJ Associates will meet with a third party to help identify the additional services required, if any, to permit such third party to rely on the information contained in this report, but only to the same extent of COH and/or IDC reliance, and subject to the same contractual, technological, and other limitations to which COH and IDC has agreed.

The report's findings are based on conditions that existed on the date of HVJ Associates site visit and field investigations and should not be relied upon to precisely represent conditions at any other time. The scope of service executed for this project is not equivalent to the scope of service needed to provide the information to completely establish the quantities and distribution of the petroleum hydrocarbon and other compounds affected soils present at the site. HVJ Associates has based the conclusions included in this report on its observation of existing site conditions, its interpretation of site history, its interpretation of the site usage information it was able to access, and the results of a limited program of subsurface exploration, sample screening and chemical analysis. The concentration of contaminants HVJ Associates measured may not be representative of conditions between locations sampled. Be aware that conditions may change at any sampled or unsampled location as a function of time, in response to natural conditions, chemical reactions, and/or other events.

Conclusions about site conditions under no circumstances comprise a warranty that conditions in all areas within the site and study area (and below existing grade) are of the same quality as the area sampled. Recognize, too, that contamination might exist in forms not indicated by the limited exploration HVJ Associates conducted.

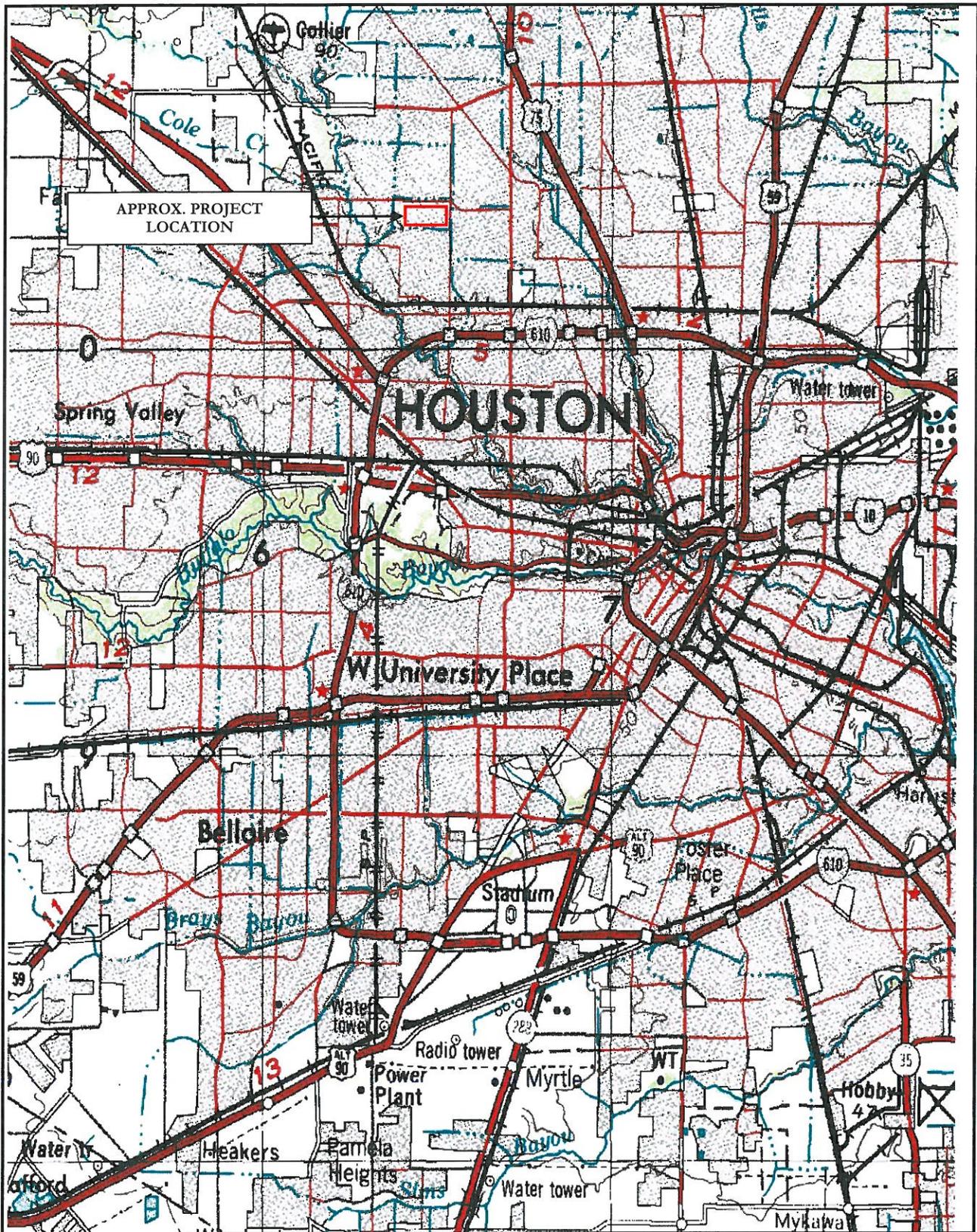
The scope of service HVJ Associates implemented was based, in part, on the rules and regulations for former service station locations as promulgated by the TCEQ and the COH. The rules, regulations and guidelines by which this investigation was conducted were understood to be current or expected at the time HVJ Associates developed its proposal. Changes in regulations, rules, guidelines, interpretations, and/or enforcement policies may occur at any time and such changes could affect the extent of remediation required for the adjacent historical service station locations. Any additional information about this site that becomes available should be provided to HVJ Associates for its review, so HVJ Associates can modify its recommendations as necessary.

7. REFERENCES

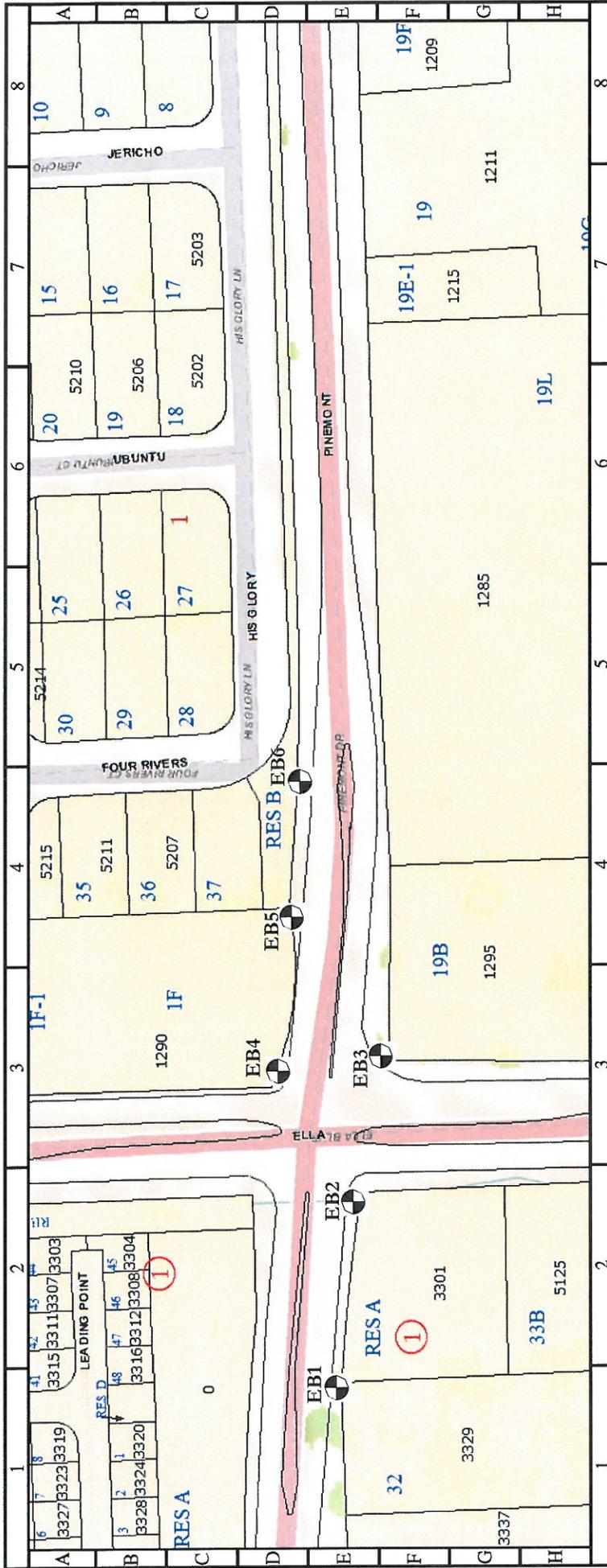
The following references were used to compile this report:

1. Bureau of Economic Geology, 1982. Geologic Atlas of Texas, Houston Sheet, University of Texas at Austin.
2. USDA Soil Conservation Service (Natural Resources Conservation Service), 1976. Soil Survey of Harris County, Texas.
3. ASTM Standard Practice E-1903 - 97 (2002) "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process."
4. City of Houston (COH) Design Manual "Geotechnical and Environmental Requirements" (01-01-11).
5. TCEQ TRRP Residential Soil Protective Concentration Limits (PCLs) Tables (June 29, 2012).
6. HVJ Associates Phase I Environmental Site Assessment (ESA), Pinemont Drive Reconstruction Project (HVJ Project No. HE1018720), July 28, 2012.

PLATES

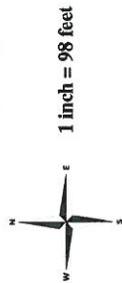


	Drawn:	EH	<p>Plate 1 Site Vicinity Map Pinemont Street Reconstruction Project Houston, Harris County, TX</p> 
	Checked:	EH	
Date:	December 2012		
Scale:	NTS		
Project No.	HE1018720.1		



CITY OF HOUSTON
 Department of Public Works and Engineering
 Geographic Information & Management System (GIMS)

DISCLAIMER: THIS MAP REPRESENTS THE BEST INFORMATION AVAILABLE TO THE CITY.
 THE CITY DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS.
 FIELD VERIFICATIONS SHOULD BE DONE AS NECESSARY.



LEGEND:



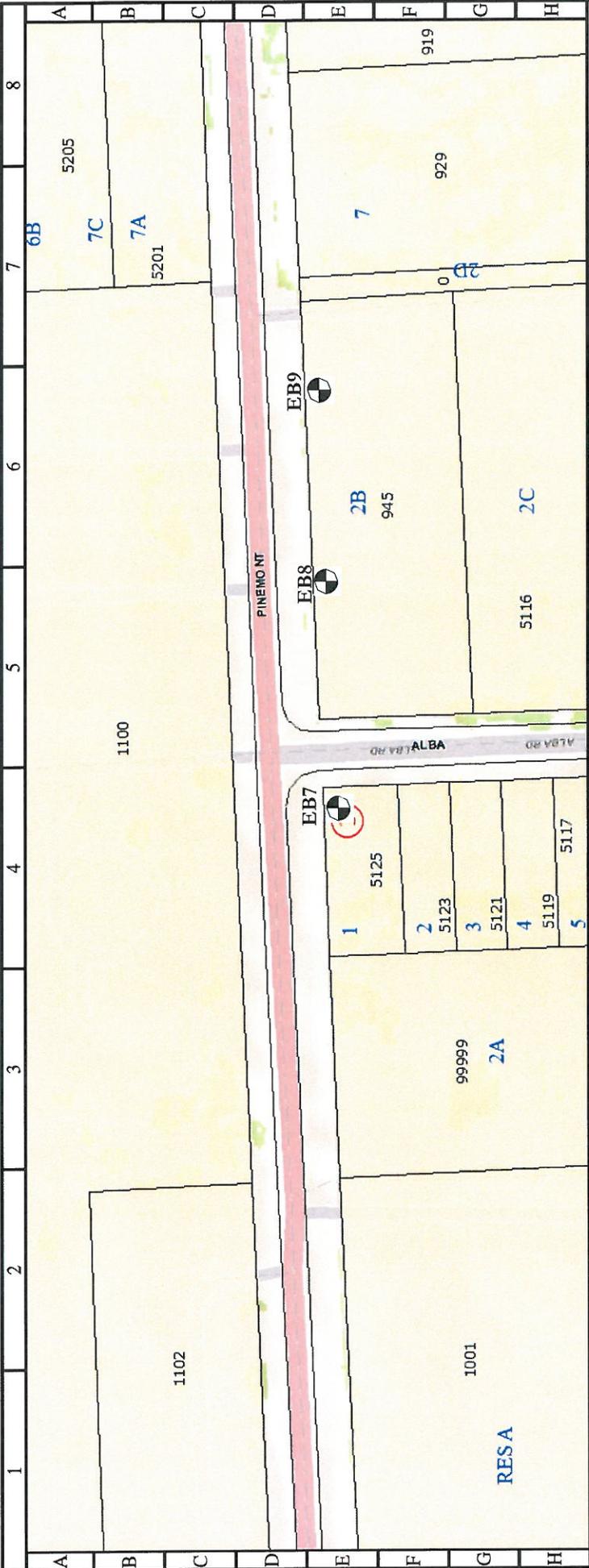
APPROXIMATE BORING LOCATIONS

HVJ
 ASSOCIATES
 6120 S. Dairy Ashford Road
 Houston, Texas 77072-1010
 281.933.7388 Ph
 281.933.7293 Fax

DATE: 12/12/2012 APPROVED BY: EH PREPARED BY: NL

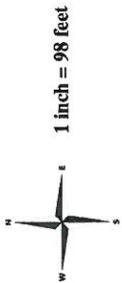
PLAN OF BORINGS
 PINEMONT DR PAVING: ELLA BLVD TO N SHEPHERD DR

PROJECT NO.: HE1018720.1 DRAWING NO.: PLATE 2A



CITY OF HOUSTON
 Department of Public Works and Engineering
 Geographic Information & Management System (GIMS)

DISCLAIMER: THIS MAP REPRESENTS THE BEST INFORMATION AVAILABLE TO THE CITY.
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 FIELD VERIFICATIONS SHOULD BE DONE AS NECESSARY.

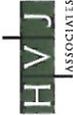


LEGEND:



APPROXIMATE BORING LOCATIONS

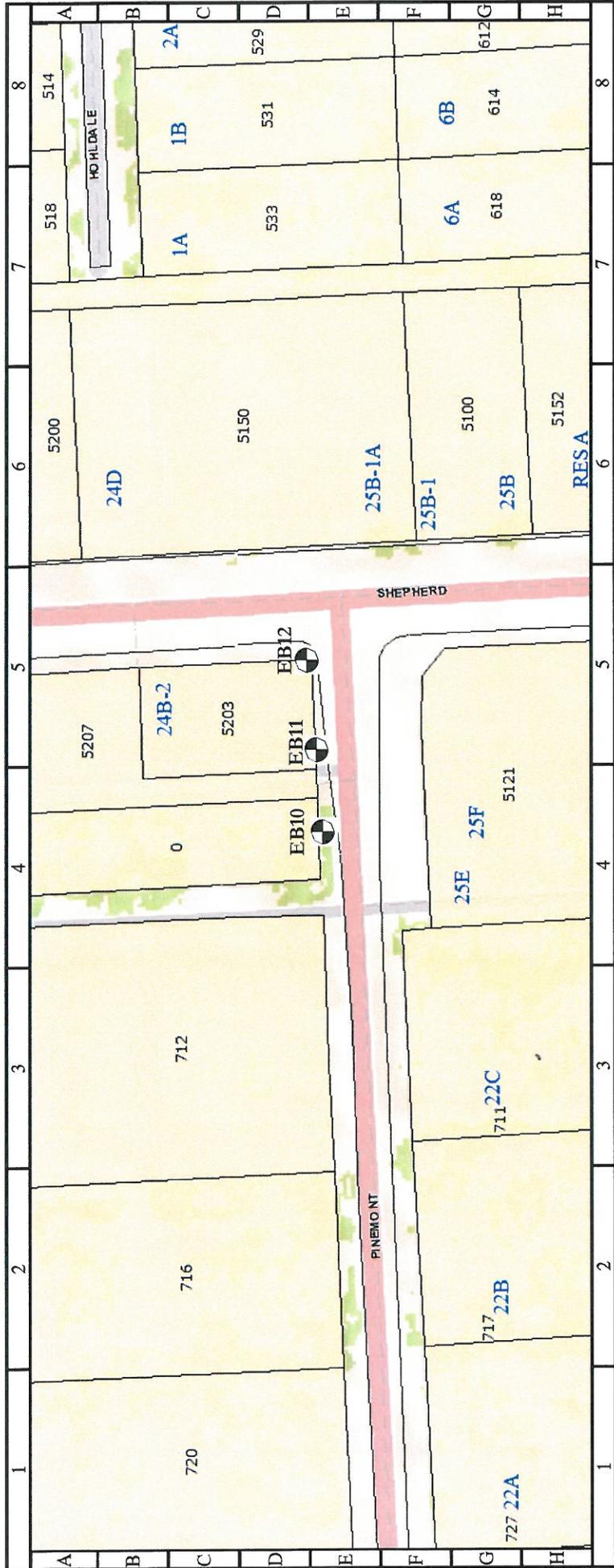
6120 S. Dairy Ashford Road
 Houston, Texas 77072-1010
 281.933.7388 Ph
 281.933.7293 Fax



DATE: 12/12/2012
 APPROVED BY: EH
 PREPARED BY: NL

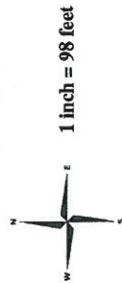
PLAN OF BORINGS
 PINEMONT DR PAVING: ELLA BLVD TO N SHEPHERD DR

PROJECT NO.: HE1018720.1
 DRAWING NO.: PLATE 2B



CITY OF HOUSTON
 Department of Public Works and Engineering
 Geographic Information & Management System (GIMS)

DISCLAIMER: THIS MAP REPRESENTS THE BEST INFORMATION AVAILABLE TO THE CITY.
 THE CITY DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS.
 FIELD VERIFICATIONS SHOULD BE DONE AS NECESSARY.



LEGEND:



APPROXIMATE BORING LOCATIONS



6120 S. Dairy Ashford Road
 Houston, Texas 77072-1010
 281.933.7388 Ph
 281.933.7293 Fax

DATE: 12/12/2012

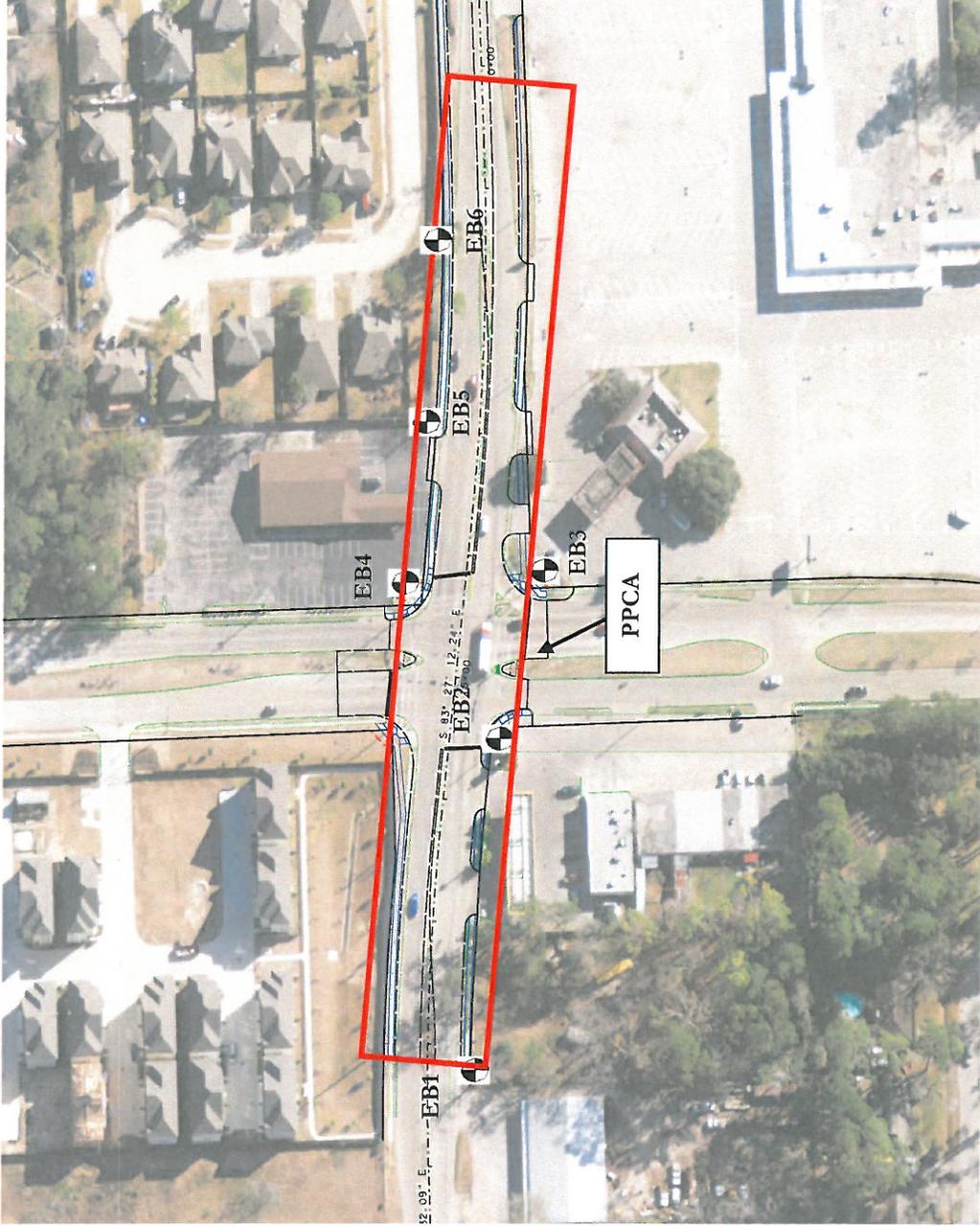
APPROVED BY:
 EH

PREPARED BY:
 NL

PLAN OF BORINGS
 PINEMONT DR PAVING: ELLA BLVD TO N SHEPHERD DR

PROJECT NO.: HE1018720.1

DRAWING NO.: PLATE 2C



M



Plate 3A – Pinchmont at Ella PPCA
 Station 11+90 to Station 20+00
 Pinchmont Street Reconstruction Project
 Houston, Harris County, Texas

Drawn:	EH
Checked:	EH
Date:	January 2013
Scale:	NTS



Report No. HE1018720.1



Plate 3B – Pinemont at North Shepherd PPCA
 Station 69+15 to Station 71+20
Pinemont Street Reconstruction Project
 Houston, Harris County, Texas

Drawn:	EH
Checked:	EH
Date:	January 2013
Scale:	NTS



Report No. HE1018720.1

APPENDIX A

ENVIRONMENTAL BORING FACILITY PERMIT APPLICATION AND PERMITS

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-04

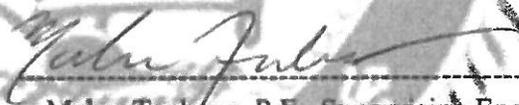
Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Ella Blvd. & Pinemont Dr. Intersection (SB-1) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-05

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Ella Blvd. & Pinemont Dr. Intersection (SB-2) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-06

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,

For the placement or maintenance of:

Environmental test bore

At the following location:

Near Ella Blvd. & Pinemont Dr. Intersection (SB-3) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-07

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Ella Blvd. & Pinemont Dr. Intersection (SB-4) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-08

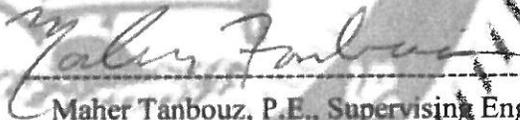
Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Ella Blvd. & Pinemont Dr. Intersection (SB-5) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-09

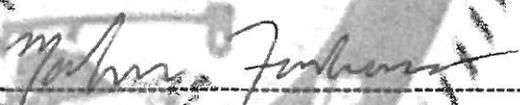
Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Ella Blvd. & Pinemont Dr. Intersection (SB-6) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-10

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Pinemont Dr. & Alba Rd. Intersection (SB-7) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-11

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Pinemont Dr. & Alba Rd. Intersection (SB-8) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-12

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Pinemont Dr. & Alba Rd. Intersection (SB-9) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houston.tx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-13

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Pinemont Dr. & Norht Shepherd Dr. Intersection (SB-10) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-14

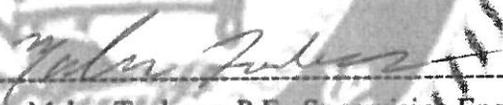
Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Pinemont Dr. & Norht Shepherd Dr. Intersection (SB-11) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

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2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.

FACILITY PERMIT
ARTICLE XII, CHAPTER 40,
CITY OF HOUSTON CODE OF ORDINANCE

PERMIT NO: CIP 12-11-15

Pursuant to the terms and provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, having been approved and adopted by the City of Houston, Texas; the application made for this permit having been approved; said Facility Permit is hereby issued to:

HVJ, Permittee,
For the placement or maintenance of:

Environmental test bore

At the following location:

Near Pinemont Dr. & Norht Shepherd Dr. Intersection (SB-12) (A Minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained) on the condition that, by acceptance of this permit, Permittee expressly covenants and agrees to comply with each and every term, provision and condition contained in Article XII, Chapter 40, City of Houston Code of Ordinances.



Maher Tanbouz, P.E., Supervising Engineer
Department of Public Works and Engineering

1. The Permittee shall contact a Utility Coordinating Committee at (713) 223-4567 or (800) 245-4545 minimum of (48) hours prior to construction to have utilities field located.
2. The Permittee shall contact the Traffic Management Branch at (832) 395-3020 for lane closure permits.
3. The Permittee shall be fully responsible for any damages to existing water, wastewater, storm sewer lines and traffic signal conduits. All damages shall be repaired in accordance with City of Houston, Dept. of Public Works and Engineering "Standard Construction Specifications" with latest addenda and amendments thereto, at no cost to the City of Houston.
4. The Permittee shall notify the Inspector at glenn.boggan@houstontx.gov a minimum of (48) hour prior to drilling or plugging to arrange for an inspection.



Houston | 6120 S. Dairy Ashford Rd.
Austin | Houston, TX 77072-1010
Dallas | 281.933.7388 Ph
San Antonio | 281.933.7293 Fax
www.hvj.com

November 12, 2012

Mr. Tuan Nguyen
Senior Project Manager
City of Houston Department of Public Works & Engineering
611 Walker, 14th Floor
Houston, Texas 77002

Re: Phase II Environmental Site Assessment (ESA)
Pinemont Street Reconstruction Project, WBS No. N-000475-0002-3
Owner: City of Houston
HVJ Project No. HE1018720.1

Dear Mr. Nguyen:

Please find attached an "Application for Monitoring Well/Boring Permit" for environmental borings we propose to install within the City of Houston (COH) right of way in four locations along/adjoining Pinemont between Ella Blvd. and North Shepherd in Houston. The proposed boring locations are annotated on the attached GIMS map. The locations have been approved by COH Project Manager Maher Tanbouz, PE at 832.395.2260.

We understand that because this is a COH project there will be no permit costs for the permit we are requesting. If you have any questions or require additional information, please contact Edward Hawkinson at 281.983.8829.

Sincerely,

HVJ ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read 'Edward Hawkinson', is written over a faint, circular stamp or watermark.

Edward Hawkinson, PG
Project Manager

Attachments

EH:abm



CITY OF HOUSTON, TEXAS
Public Works & Engineering Department



**Application for
Monitoring Well/Boring Permit**

ARTICLE XII, CHAPTER 40, CITY OF HOUSTON CODE OF ORDINANCES
ALL PERMITS SHALL BE EFFECTIVE ONE (1) YEAR FROM DATE OF ISSUANCE

I: APPLICANT INFORMATION

Today's Date : November 12, 2012

Permit Status: Are you obtaining this permit for a City project? Yes No

If yes, what is the CIP/GFS number of this project? WBS No. N-000475-0002-3

Who is the City's Project Manager for this project? John F. Moning, Jr., PE at 832.395.2236

Is this a renewal application? Yes No

Applicant: Name of Owner/Operator: HVJ Associates, Inc.

Telephone Number: 281.983.8829 Fax: 281.933.7293

Street Address: 6120 S. Dairy Ashford Road

Houston, Texas 77072-1010

E-mail Address (If applicable): ehawkinson@hvj.com

If the applicant is a corporation, partnership, or association, then the applicant shall provide evidence of its existence, of its authority to maintain the facility, and of the authority of the person signing the application to act on behalf of the entity.

Person authorized to file application: Name: Edward F. Hawkinson Title: Project Manager

Phone Number: 281.983.8829

E-mail Address (If applicable): ehawkinson@hvj.com

Type of Business Entity: Corporation
(i.e. corporation, partnership, association, sole proprietorship). Organization documents of business entity should be attached. (certificate of incorporation, assumed name certificate, etc.)

Corporate Registered Agent (If applicable): Name: Herbert V. Johnson Title: President

Address: 6120 S. Dairy Ashford Rd., Houston, TX 77072

Phone Number: 281.933.7388

E-mail Address (If applicable): hjohnson@hvj.com



CITY OF HOUSTON, TEXAS
Public Works & Engineering Department



**Application for
Monitoring Well/Boring Permit**

**Emergency Contact Information:
List two(2) persons**

Name:	Edward F. Hawkinson	Mobile Telephone:	281.804.5766
Business Address:	6120 S. Dairy Ashford Rd., Houston, TX 77072-1010	Business Telephone:	281.983.8829
Home Address:	1415 Welch Street, Houston, TX 77006	Home Telephone:	713.520.1116
Name:	Hossam Esmail	Mobile Telephone:	281.415.7723
Business Address:	6120 S. Dairy Ashford Rd., Houston, TX 77072-1010	Business Telephone:	281.933.7388
Home Address:	22535 Holly Lake Drive, Katy, TX 77450	Home Telephone:	281.395.9762

Agents, Contractors, Engineers:

List every agent, contractor, or engineer that will perform work in the installation, monitoring and removal of the facility. (Additional information may be attached). A copy of the Driller's State license for drilling monitoring well facilities must also be attached.

Name:	Total Support Services, Inc. (tentative - reserve the right to employ an alternate driller)	Telephone:	800.259.7174
Address:	P.O. Box 81621 Austin, TX 78708		
Work Performed:	boring installation using Geoprobe		

Name: _____ Telephone: _____

Address: _____

Work Performed: _____

II: MONITORING WELL / BORING INFORMATION

Applying for multiple facilities? Yes No

(Identify the type of each facility.)

Number of Facilities:	<u>4 (estimate)</u>	Monitoring Well or other Device(s)
	<u>8</u>	Environmental Test Boring(s)
	<u>12</u>	TOTAL

CITY OF HOUSTON, TEXAS
Public Works & Engineering Department



**Application for
Monitoring Well/Boring Permit**

Detailed Facility
Location Description:

SEE ATTACHED LIST AND MAPS

Attach additional
descriptions for multiple
locations if necessary.

Key
Map: 452 F&G

Location on GIMS map must be attached

There must be minimum of 10 feet between the facility and any existing sanitary sewer lines and a minimum of 5 feet between the facility and any existing water and storm lines and traffic signal conduits shall be maintained

Attach plan(s.) showing design, dimension and depth of the facility, the manner in which it will be placed, and the process that will be used for its removal and closure. (Information is required for both monitoring wells and borings)

Registered
Engineer/Surveyor:

IDC Inc.

Address: 1111 Wilcrest Green, Suite 250
Houston, TX 77042

Telephone: 713.541.5591

Plan Number: _____

III. PERMIT INFORMATION

NOTE: ALL PERMIT FEES ARE WAIVED FOR THOSE APPLICANTS APPLYING FOR A PERMIT FOR A CITY PROJECT.

PERMIT TYPE	APPLICATION FEES	CALCULATIONS
ORIGINAL	\$ 200* (1 st facility) + \$25* (each additional facility if applicable) →	\$ _____
RENEWAL	\$25* for each facility →	\$ _____
	\$5* Administrative fee to process <u>all</u> applications →	\$ <u>5.00</u>
TOTAL FEE:		\$ 0 (City Project)

Make a Certified or Cashier's Check payable to "City of Houston."

*** ALL FEES ARE NON-REFUNDABLE**

IV. INSURANCE AND BOND INFORMATION

NO PERMIT WILL BE ISSUED WITHOUT AN INSURANCE AND BOND CERTIFICATE

Restoration Bond No.

(Original Bond Attached): N/A

Restoration Bond Sum: N/A

Bond Surety Name: _____

Telephone: _____

Address: _____

Contact Person: _____

E-mail Address(If applicable): _____

CITY OF HOUSTON, TEXAS
Public Works & Engineering Department



Application for
Monitoring Well/Boring Permit

Liability Insurance
Policy No:

61UUNIT2215 - (EFFECTIVE FROM 12/15/2011 to 12/15/2012)

Bodily injury \$300,000.00 per occurrence, property damage \$100,000.00 per occurrence.

Insurer:

USI Southwest

Contact

Person: Rinny Chadwick

Telephone: 713.490.4600

Address: 840 Gessner, Suite 600

Houston, Texas 77024

E-mail Address

(If applicable): [rinny.chadwick@usi.biz]

V. ACKNOWLEDGMENT & AFFIDAVIT:

The undersigned Applicant acknowledges, and agrees to observe all provisions of Article XII, Chapter 40, City of Houston Code of Ordinances, with all subsequent revisions, that are applicable to the work herein described and will perform work in accordance with the above plans and specifications. Applicant further swears under penalty of law that the information provided herein is true and correct to the best of Applicant's knowledge.

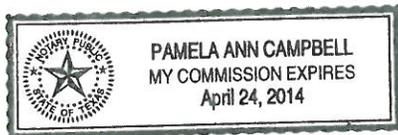
Applicant: HVJ Associates, Inc.

Agent Name: Edward F. Hawkinson Title Project Manager

Agent Signature:

SWORN AND SUBSCRIBED before me the undersigned authority by the above named person on this

13th day of November, 2012



Pamela A. Campbell
Notary Public in and for the State of Texas

(Print Name)

My Commission Expires: 4-24-2014

PERMIT APPROVED:
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS & ENGINEERING

Director

STATEMENT REGARDING THE REQUIREMENT TO “Attach plan(s) showing design, dimension and depth of the facility, the manner in which it will be placed, and the process that will be used for its removal and closure.”

The following sites with Recognized Environmental Conditions (RECs) were identified in connection with Subject Project Alignments while performing a recent Phase I ESA:

- Former Pilgrim Cleaners at 961 Pinemont Drive;
- Shell Oil Company facility at 5143 Ella Blvd;
- Former Adams Texaco at 5203 North Shepherd;
- Former Exxon at 1290 Pinemont; and
- Former Landfill Site at the intersection of Ella and Pinemont.

Based on information contained in the ESA HVJ Associates concluded that there is a potential for environmental contamination to impact the Subject Project Alignments from the these REC sites listed and we recommended further environmental study of this Subject Project Alignments area at/near the intersection of Ella Blvd. and Pinemont, near the intersection of Alba Road and Pinemont and at the intersection of North Shepherd and Pinemont if the proposed construction activities are deeper than five feet below ground surface in these areas. Work will be done in accordance with City of Houston, Department of Public Works & Engineering Design Manual Chapter 11 “Geotechnical and Environmental Requirements” and the current ASTM Standard Practice E-1903 - 97 (2002) “Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process.” The objective of the investigation is to determine the nature of possible environmental contamination associated with the REC sites and their impact to the design, construction and operation of the proposed facilities. It has been determined that impacts (if any) to the project can be assessed with 12 borings along the Subject Project Alignments at four locations. Borings will be positioned at one location to assess more than one REC site. These borings will be adjacent to leaking petroleum storage tank (LPST), former landfill and dry cleaners sites. The borings will be advanced using direct push (Geoprobe) techniques and will be continuously sampled from the surface to the boring total depth bgs. Soil samples will be screened for evidence of impacts in the field using an organic vapor meter (OVM). In accordance with City of Houston guidelines, one soil sample will be collected from each boring and submitted for laboratory analysis. Should groundwater be encountered, a temporary monitoring well will be installed and water sampled for laboratory analysis. No more than one monitoring well will be installed at each location. Groundwater sampling will be limited to four locations with sampling taking place through one inch pvc slotted casing using bailers. Subsequent to the drilling and sampling activities (the same day or the next day), the temporary monitoring well screen and riser pipe will be removed and each borehole will be plugged from boring total depth to the surface using excess soil cuttings/bentonite slurry and the surface repaired with either topsoil, asphalt patch or concrete as appropriate.



The State of Texas

Secretary of State

CERTIFICATE OF AMENDMENT

FOR

HVJ ASSOCIATES, INC.
CHARTER NUMBER 00751720

THE UNDERSIGNED, AS SECRETARY OF STATE OF THE STATE OF TEXAS,
HEREBY CERTIFIES THAT THE ATTACHED ARTICLES OF AMENDMENT FOR THE ABOVE
NAMED ENTITY HAVE BEEN RECEIVED IN THIS OFFICE AND ARE FOUND TO
CONFORM TO LAW.

ACCORDINGLY THE UNDERSIGNED, AS SECRETARY OF STATE, AND BY VIRTUE
OF THE AUTHORITY VESTED IN THE SECRETARY BY LAW, HEREBY ISSUES THIS
CERTIFICATE OF AMENDMENT.

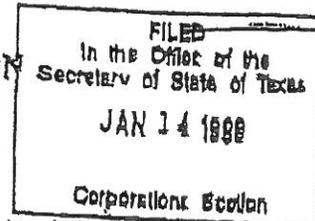
DATED JAN. 14, 1999

EFFECTIVE JAN. 14, 1999




Secretary of State

ARTICLES OF AMENDMENT
TO
THE ARTICLES OF INCORPORATION
OF
HVJ ASSOCIATES, INC.



Pursuant to applicable provisions of the Texas Business Corporation Act and the Bylaws of HVJ Associates, Inc. (the "Corporation"), the Corporation hereby adopts the following Articles of Amendment to the Articles of Incorporation:

ARTICLE I

The name of the Corporation is HVJ Associates, Inc.

ARTICLE II

The Amendment to the Articles of Incorporation of the Corporation changes Article Four of the original Articles of Incorporation, and the full text of such amended Article Four is as follows:

"ARTICLE FOUR

Amount of Capital Stock

The total number of shares into which the authorizing capital stock of the Corporation is divided is one-hundred thousand (100,000) shares, consisting of one-hundred thousand (100,000) shares of no par value.

ARTICLE III

The Amendment to the Articles of Incorporation of the Corporation was adopted by a Unanimous Consent Resolution in lieu of a Special Meeting of Shareholders, said resolution having been adopted on January 4, 1999, by written consent of all shareholders in accordance with Article 9.10 of the Texas Business Corporation Act, and any written notice required by such article has been given.

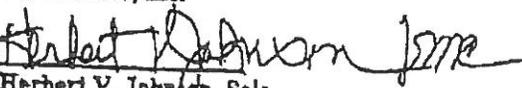
ARTICLE IV

The number of shares of the Corporation outstanding and entitled to vote at a meeting of shareholders or by resolution are nine-thousand (9,000) shares consisting of no par value. There are no shares of the Corporation entitled to vote by class or series

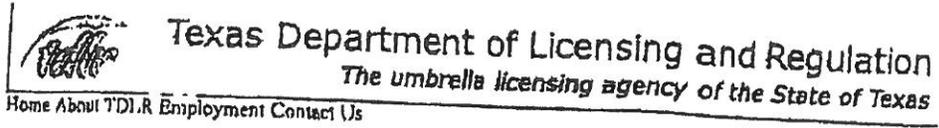
Dated: January 12, 1999

HVJ Associates, Inc.

By:



Herbert V. Johnson, Sole
Director and Sole Share-
holder /mc



Texas Department of Licensing and Regulation
Result Listing

Name and Location	Other Information
SPAUST, RYAN 4647 BRASS WAY DALLAS TX 75236 County: DALLAS	Water Well Driller and Pump Installer Apprentice License #: 57817 Expiration Date: 08/11/2010 Type: N/A Phone: (972) 243-7174

Driller Designation:

- (W) - water well;
- (M) - monitoring well;
- (C) - closed loop geothermal well;
- (N) - injection well;
- (D) - dewatering well;
- (A) - master well driller which includes all designations previously listed.

Pump Installer Designation:

- (L) - windmills, hand pumps, and pump jacks;
- (P) - single phase pumps;
- (K) - three phase pumps;
- (T) - line-shaft turbine pumps;
- (K) - three phase pumps;
- (I) - master water well pump installer which includes all designations previously listed.

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
12/7/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Southwest 840 Gessner Suite 600 Three Memorial City Houston TX 77024	CONTACT NAME: PHONE (A/C, No, Ext): 713-490-4600		FAX (A/C, No): 713-490-4700
	E-MAIL ADDRESS:		
INSURED H V J Associates Inc. 6120 S. Dairy Ashford Houston TX 77072	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A :Hudson Insurance Company		25054
	INSURER B :Travelers Indemnity Company of CT		25682
	INSURER C :The Netherlands Insurance Co.		24171
	INSURER D :Texas Mutual Insurance Company		22945
	INSURER E :Phoenix Insurance Company		25623
INSURER F :St Paul Fire and Marine Insurance C		24767	

COVERAGES

CERTIFICATE NUMBER: 399485568

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
E	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	Y	Y	6608A330863	12/1/2011	12/1/2012	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$300,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
C	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS	Y	Y	BA1011706	12/1/2011	12/1/2012	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B F	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$10,000	Y	Y	CUP3823T963 QI06501439	12/1/2011 12/1/2011	12/1/2012 12/1/2012	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000 Excess:Each Occ & Agg \$5,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y	N/A	TSF0001230889	12/1/2011	12/1/2012	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
A	Professional Liability	N	Y	AEE7204005	12/1/2011	12/1/2012	Per Claim \$2,000,000 Annual Aggregate \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

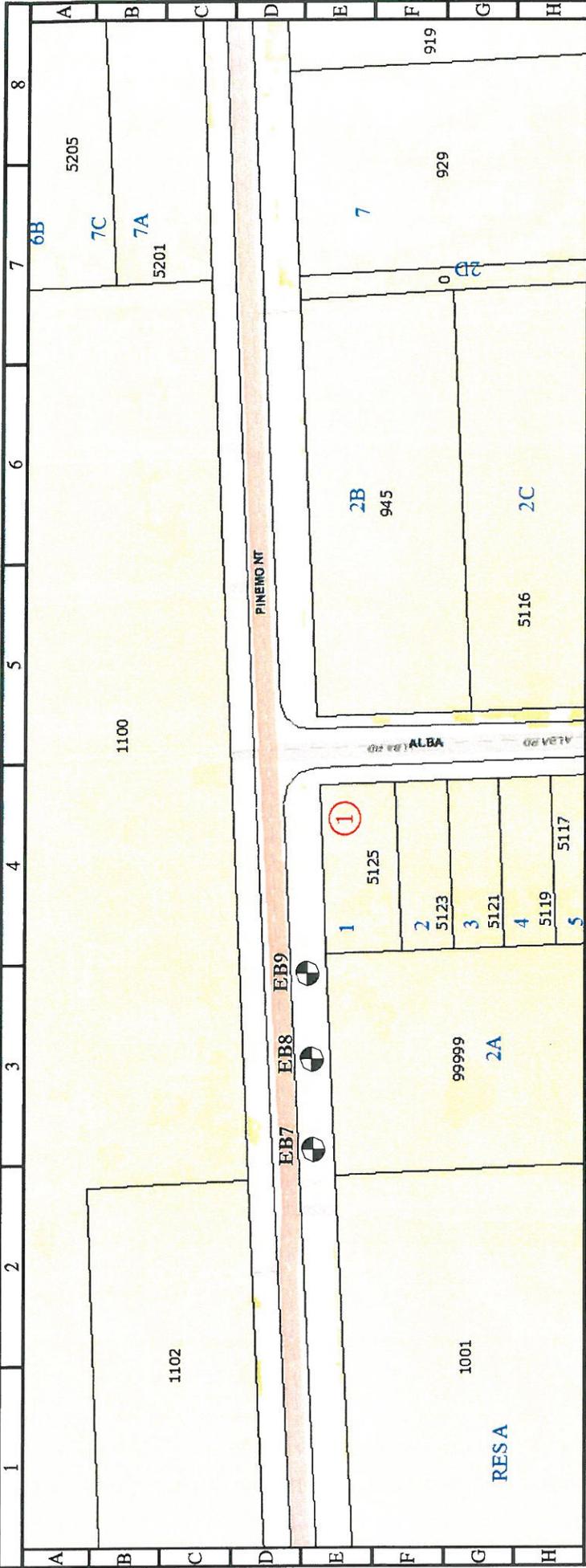
Blanket Waiver of Subrogation (all policies) and Blanket Additional Insured (all policies except Workers Compensation & Professional Liability) is included in favor of the Certificate Holder as required by written contract, but limited to the operations of the Named Insured. The General Liability policy is primary and non-contributory to the insurance available to the Additional Insured as required by written contract. Excluded Officer: Herbert Johnson

Herbert Johnson

CERTIFICATE HOLDER**CANCELLATION**

HVJ Associates Inc. 6120 South Dairy Ashford Road Houston TX 77072	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	---

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CITY OF HOUSTON
 Department of Public Works and Engineering
 Geographic Information & Management System (GIMS)

DISCLAIMER: THIS MAP REPRESENTS THE BEST INFORMATION AVAILABLE TO THE CITY.
 THE CITY DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS.
 FIELD VERIFICATIONS SHOULD BE DONE AS NECESSARY.



LEGEND:



APPROXIMATE BORING LOCATIONS



6120 S. Dairy Ashford Road
 Houston, Texas 77072-1010
 281.933.7388 Ph
 281.933.7293 Fax

DATE: 11/9/2012
 APPROVED BY: EH
 PREPARED BY: NL

PROPOSED PLAN OF BORINGS
 PINEMONT DR PAVING: ELLA BLVD TO N SHEPHERD DR

PROJECT NO.: HE1018720.1
 DRAWING NO.: PLATE 2B

APPENDIX B
BORING LOGS



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720	Boring/Well: EB1
Project: Pinemont Drive Reconstruction Project		Well Construction Data	
Date Started: 11/27/12	Date Completed: 11/27/12	Screen: 	From: - To:
Logged By: ED HAWKINSON	Checked By: EFH	Pack: 	From: - To:
Drilling Co.: Total Support Services	Driller: Chester	Seal: 	From: - To:
Method: Geoprobe	Equipment:	Grout: 	From: - To:
Boring Depth: 16.0	Ground Surface Elevation:	Inner Casing:	
Initial GW Level: 	GW Level: 14.0 	Time/Date:	Outer Casing/Stick Up:

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
0.2						Gray fine sand	NO HYDROCARBON ODOR	
0.2								
0.2						Reddish brown sandy clay		
0.2								
5							NO HYDROCARBON ODOR	5
1.0								
1.0								
1.0								
1.0								
10						Gray fine sand (damp)	NO HYDROCARBON ODOR	10
1.0								
1.0								
1.0								
15						Gray fine sand	NO HYDROCARBON ODOR	15
0.2						Red clay (hard)		
0.2							BORING TERMINATED AT 16 FT. BELOW GROUND SURFACE (BGS)	
0.2								

LAEWNL03 - PINEMONT DRIVE RECONSTRUCTION.GPJ LAEWNL03.GDT 12/12/12



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720		Boring/Well: EB3	
Project: Pinemont Drive Reconstruction Project			Well Construction Data		
Date Started: 11/27/12		Date Completed: 11/27/12		Screen: From: - To:	
Logged By: ED HAWKINSON		Checked By: EFH		Pack: From: - To:	
Drilling Co.: Total Support Services		Driller: Chester		Seal: From: - To:	
Method: Geoprobe		Equipment:		Grout: From: - To:	
Boring Depth: 12.0		Ground Surface Elevation:		Inner Casing:	
Initial GW Level: ∇		GW Level: 11.0	Time/Date:	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill	0	
0.2								
0.2							NO HYDROCARBON ODOR	
0.2								
0.2						Light brown clayey fine sand		
5								
0.4							NO HYDROCARBON ODOR	
0.4								
0.4								
0.4								
0.4								
0.0								
10							NO HYDROCARBON ODOR	
0.0								
0.0								
0.0								
0.0								
							BORING TERMINATED AT 12 FT. BGS	

LAEWNL03 - PINEMONT DRIVE RECONSTRUCTION.GPJ - LAEWNL03.GDT - 12/12/12



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720	Boring/Well: EB4
Project: Pinemont Drive Reconstruction Project		Well Construction Data	
Date Started: 11/27/12	Date Completed: 11/27/12	Screen: 	From: - To:
Logged By: ED HAWKINSON	Checked By: EFH	Pack: 	From: - To:
Drilling Co.: Total Support Services	Driller: Chester	Seal: 	From: - To:
Method: Geoprobe	Equipment:	Grout: 	From: - To:
Boring Depth: 12.0	Ground Surface Elevation:	Inner Casing:	
Initial GW Level: 	GW Level: 11.0	Time/Date:	Outer Casing/Stick Up:

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
0.2						Sand and gravel fill		
0.2							NO HYDROCARBON ODOR	
0.2								
0.2						Clayey fine sand		5
0.2								
0.2							NO HYDROCARBON ODOR	
0.2						Light brown fine sand		
0.2								
0.0								
0.0								
0.0							NO HYDROCARBON ODOR	10
0.0								
0.0								
0.0								
0.0								
							BORING TERMINATED AT 12 FT. BGS	

LAEWNL03 - PINEMONT DRIVE RECONSTRUCTION.GPJ LAEWNL03.GDT 12/12/12



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720		Boring/Well: EB5	
Project: Pinemont Drive Reconstruction Project			Well Construction Data		
Date Started: 11/27/12		Date Completed: 11/27/12		Screen:  From: - To:	
Logged By: ED HAWKINSON		Checked By: EFH		Pack:  From: - To:	
Drilling Co.: Total Support Services		Driller: Chester		Seal:  From: - To:	
Method: Geoprobe		Equipment:		Grout:  From: - To:	
Boring Depth: 12.0		Ground Surface Elevation:		Inner Casing:	
Initial GW Level: 		GW Level: 12.0 		Time/Date:	
				Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
				0.2		Sand and gravel fill (loose)		
				0.2			NO HYDROCARBON ODOR	
				0.2				
				0.2		Light brown fine sand		
5				1.0			NO HYDROCARBON ODOR	5
				1.0				
				1.0				
				1.0				
				1.2				
10				1.2			NO HYDROCARBON ODOR	10
				1.2				
				1.2				
				1.2				
				1.2				
				1.2				
				1.2				
				1.2				
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HVJ Associates Inc.

Telephone:
Fax:

Client: IDC				Job No.: HE1018720		Boring/Well: EB6		
Project: Pinemont Drive Reconstruction Project				Well Construction Data				
Date Started: 11/27/12		Date Completed: 11/27/12		Screen: 		From: - To:		
Logged By: ED HAWKINSON		Checked By: EFH		Pack: 		From: - To:		
Drilling Co.: Total Support Services		Driller: Chester		Seal: 		From: - To:		
Method: Geoprobe		Equipment:		Grout: 		From: - To:		
Boring Depth: 12.0		Ground Surface Elevation:		Inner Casing:				
Initial GW Level: 		GW Level: 11.0 		Time/Date:		Outer Casing/Stick Up:		
Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
						Sand and small gravel fill (loose)		
							NO HYDROCARBON ODOR	
								
						Light brown clayey fine sand		
5							NO HYDROCARBON ODOR	5
								
								
								
								
								
10							NO HYDROCARBON ODOR 	10
								
								
								
								
								
								
								
								
								



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720	Boring/Well: EB7
Project: Pinemont Drive Reconstruction Project		Well Construction Data	
Date Started: 11/28/12	Date Completed: 11/28/12	Screen: 	From: - To:
Logged By: ED HAWKINSON	Checked By: EFH	Pack: 	From: - To:
Drilling Co.: Total Support Services	Driller: Chester	Seal: 	From: - To:
Method: Geoprobe	Equipment:	Grout: 	From: - To:
Boring Depth: 16.0	Ground Surface Elevation:	Inner Casing:	
Initial GW Level: 	GW Level: 15.0	Time/Date:	Outer Casing/Stick Up:

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
				0.6		Sandy fill with organics	NO HYDROCARBON ODOR	
				0.6				
				0.6				
5				0.6		Light brown silty clay	NO HYDROCARBON ODOR	5
				0.6				
				0.6				
				0.6				
				0.6				
				0.6				
10				0.6		Gray clayey sand	NO HYDROCARBON ODOR	10
				0.6		Red fat clay (hard)		
				0.0				
				0.0				
15				0.0		Gray fine sand	NO HYDROCARBON ODOR	15
				0.0				
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HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720	Boring/Well: EB8
Project: Pinemont Drive Reconstruction Project		Well Construction Data	
Date Started: 11/28/12	Date Completed: 11/28/12	Screen: 	From: - To:
Logged By: ED HAWKINSON	Checked By: EFH	Pack: 	From: - To:
Drilling Co.: Total Support Services	Driller: Chester	Seal: 	From: - To:
Method: Geoprobe	Equipment:	Grout: 	From: - To:
Boring Depth: 20.0	Ground Surface Elevation:	Inner Casing:	
Initial GW Level: 	GW Level: 15.0	Time/Date:	Outer Casing/Stick Up:

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
0.6						Light brown clayey sand	NO HYDROCARBON ODOR	
0.6						Gray silt clay mottled yellow/brown	NO HYDROCARBON ODOR	
5						Gray sandy clay	NO HYDROCARBON ODOR	
0.2						Red clay mottled yellow/brown (hard)	NO HYDROCARBON ODOR	
0.2						Gray sandy clay	NO HYDROCARBON ODOR	
0.2						Gray fine sand	NO HYDROCARBON ODOR	
0.2						Red clay (hard)	NO HYDROCARBON ODOR	
15							NO HYDROCARBON ODOR	15
20							BORING TERMINATED AT 20 FT. BGS	20

LAEWNL03 - PINEMONT DRIVE RECONSTRUCTION.GPJ LAEWNL03.GDT 12/12/12



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC				Job No.: HE1018720		Boring/Well: EB9		
Project: Pinemont Drive Reconstruction Project				Well Construction Data				
Date Started: 11/28/12		Date Completed: 11/28/12		Screen: 		From: - To:		
Logged By: ED HAWKINSON		Checked By: EFH		Pack: 		From: - To:		
Drilling Co.: Total Support Services		Driller: Chester		Seal: 		From: - To:		
Method: Geoprobe		Equipment:		Grout: 		From: - To:		
Boring Depth: 16.0		Ground Surface Elevation:		Inner Casing:				
Initial GW Level: ∇		GW Level: ∇ 15.0		Time/Date:		Outer Casing/Stick Up:		
Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
				0.0		Light brown fine sand	NO HYDROCARBON ODOR	
				0.0				
				0.0				
5				0.0				5
				0.0			NO HYDROCARBON ODOR	
				0.0		Light brown clayey sand		
				0.0				
				0.0				
10				0.0		Gray clay mottled yellow/brown thin fine sand at base	NO HYDROCARBON ODOR	10
				0.0				
				0.0				
				0.0				
15				0.0			NO HYDROCARBON ODOR	15
				0.0				
				0.0				
				0.0				
				0.0				
				0.0		Gray clayey fine sand		
				0.0				
							BORING TERMINATED AT 16 FT. BGS	

LAEVNL03 PINEMONT DRIVE RECONSTRUCTION.GPJ LAEVL03.GDT 12/12/12



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720	Boring/Well: EB10
Project: Pinemont Drive Reconstruction Project		Well Construction Data	
Date Started: 11/28/12	Date Completed: 11/28/12	Screen: 	From: - To:
Logged By: ED HAWKINSON	Checked By: EFH	Pack: 	From: - To:
Drilling Co.: Total Support Services	Driller: Chester	Seal: 	From: - To:
Method: Geoprobe	Equipment:	Grout: 	From: - To:
Boring Depth: 16.0	Ground Surface Elevation:	Inner Casing:	
Initial GW Level: 	GW Level: 12.5 	Time/Date:	Outer Casing/Stick Up:

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
				0.0		Sand fill	NO HYDROCARBON ODOR	
				0.0				
				0.0				
5				0.0		Light brown clayey fine sand	NO HYDROCARBON ODOR	5
				0.0				
				0.0				
				0.0		Light brown sandy clay		
10				0.0			NO HYDROCARBON ODOR	10
				0.0		Light brown clayey fine sand		
				0.0				
				0.0		Gray fine sand	NO HYDROCARBON ODOR	15
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HVJ Associates Inc.

Telephone:
Fax:

Client: IDC		Job No.: HE1018720	Boring/Well: EB11
Project: Pinemont Drive Reconstruction Project		Well Construction Data	
Date Started: 11/28/12	Date Completed: 11/28/12	Screen: 	From: - To:
Logged By: ED HAWKINSON	Checked By: EFH	Pack: 	From: - To:
Drilling Co.: Total Support Services	Driller: Chester	Seal: 	From: - To:
Method: Geoprobe	Equipment:	Grout: 	From: - To:
Boring Depth: 16.0	Ground Surface Elevation:	Inner Casing:	
Initial GW Level: ∇	GW Level: 11.5	Time/Date:	Outer Casing/Stick Up:

Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
				29.8		Gray fine sand	HYDROCARBON ODOR	
				29.8				
				29.8				
				29.8				
5				216			HYDROCARBON ODOR	5
				216				
				216				
				216		Gray clayey sand		
				282				
10				282			HYDROCARBON ODOR	10
				282				
				282				
				282				
15							BORING TERMINATED AT 12 FT. BGS	15

LAEWNL03 PINEMONT DRIVE RECONSTRUCTION.GPJ LAEWNL03.GDT 12/12/12



HVJ Associates Inc.

Telephone:
Fax:

Client: IDC				Job No.: HE1018720		Boring/Well: EB12		
Project: Pinemont Drive Reconstruction Project				Well Construction Data				
Date Started: 11/28/12		Date Completed: 11/28/12		Screen: 		From: - To:		
Logged By: ED HAWKINSON		Checked By: EFH		Pack: 		From: - To:		
Drilling Co.: Total Support Services		Driller: Chester		Seal: 		From: - To:		
Method: Geoprobe		Equipment:		Grout: 		From: - To:		
Boring Depth: 16.0		Ground Surface Elevation:		Inner Casing:				
Initial GW Level: 		GW Level:  15.0		Time/Date:		Outer Casing/Stick Up:		
Depth	Sample	Sample Number	Blow Count Rec./RQD	PID (ppm)	Lithology	Description	Remarks	Well Construction
0						Topsoil and fill		0
				105		Sand fill		
				105			HYDROCARBON ODOR	
				105				
				105		Gray clayey fine sand		
5				178				5
				178			HYDROCARBON ODOR	
				178				
				178				
				285				
10				285			HYDROCARBON ODOR	10
				285				
				285				
				285				
				119				
				119			HYDROCARBON ODOR	
15				119				15
				119		Gray fine sand		
				119				
							BORING TERMINATED AT 16 FT. BGS	

LAEWNL03 PINEMONT DRIVE RECONSTRUCTION.GPJ LAEWNL03.GDT 12/12/12

APPENDIX C

ANALYTICAL LAB REPORT/CHAIN OF CUSTODY DOCUMENTATION

Laboratory Analysis Report

Total Number of Pages: 51

Job ID : 12111246



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, <http://www.ablabs.com>

Client Project Name :

HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Report To : Client Name: HVJ Associates P.O.#.: 12-300
Attn: Ed Hawkinson Sample Collected By: Ed Hawkinson
Client Address: 6120 S. Dairy Ashford Date Collected: 11/27/12 - 11/28/12
City, State, Zip: Houston, Texas, 77072

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
EB1 (12-16)	Soil	12111246.01
EB1	Water	12111246.02
EB2 (4-8)	Soil	12111246.03
EB3 (8-12)	Soil	12111246.04
EB4 (8-12)	Soil	12111246.05
EB4	Water	12111246.06
EB5 (8-12)	Soil	12111246.07
EB6 (8-12)	Soil	12111246.08
EB7 (12-16)	Soil	12111246.09
EB8 (16-20)	Soil	12111246.10
EB8	Water	12111246.11
EB9 (12-16)	Soil	12111246.12
EB10 (12-16)	Soil	12111246.13
EB10	Water	12111246.14
EB11 (8-12)	Soil	12111246.15
EB12 (12-16)	Soil	12111246.16

Shantall Carpenter

Released By: Shantall Carpenter
Title: Senior Project Manager
Date: 12/10/2012



This Laboratory is NELAP (T104704213-12-7) accredited. Effective: 07/01/2012; Expires: 03/31/2013

Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

Date Received : 11/29/2012 13:51

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 12111246

Date: 12/10/2012

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

D1	Sample required dilution due to matrix effects.
E4	Concentration Estimated. Analyte exceeded calibration range, but within linear range.
J	Estimation. Below calibration range but above MDL.
L2	Associated LCS and/or LCSD recovery is below acceptance limits for flagged analyte. Bias may be low.
M2	Matrix Spike and/or Matrix Spike Duplicate recovery is below laboratory control limits due to matrix interference."The sample randomly selected as QC for this batch was not part of your project. Therefore, this sample matrix is not applicable to your project samples."
M6	Not calculated. Sample concentration high. Spike out of linear range. Control limits do not apply."The sample randomly selected as QC for this batch was not part of your project. Therefore, this sample matrix is not applicable to your project samples."
Q18	Soils not collected in a hermetically sealed container may lose low-level VOCs.
R1	RPD exceeds control limits.
R4	LCS/LCSD RPD exceeds control limit. Recovery meets acceptance criteria.
V1	CCV recovery is above acceptance limits. This target analyte was not detected in the sample.



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB1 (12-16) Job Sample ID: 12111246.01
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 13:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	0.98	0.0049			12/01/12 17:04	XA
	Benzene	BRL	mg/Kg	0.98	0.0049			12/01/12 17:04	XA
	Toluene	BRL	mg/Kg	0.98	0.0049			12/01/12 17:04	XA
	Ethylbenzene	BRL	mg/Kg	0.98	0.0049			12/01/12 17:04	XA
	m- & p-Xylenes	BRL	mg/Kg	0.98	0.0098			12/01/12 17:04	XA
	o-Xylene	BRL	mg/Kg	0.98	0.0049			12/01/12 17:04	XA
	Xylenes	BRL	mg/Kg	0.98	0.0049			12/01/12 17:04	XA
	Trifluorotoluene(surr)	106	%	0.98	81-111			12/01/12 17:04	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/Kg	1	23.7		Q18	12/03/12 18:56	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3			12/03/12 18:56	AVB
	>C28-C35 ¹	BRL	mg/Kg	1	17.7			12/03/12 18:56	AVB
	Total C6-C35	BRL	mg/Kg	1				12/03/12 18:56	AVB
	1-Chlorooctane(surr)	92.4	%	1	60-143			12/03/12 18:56	AVB
	Chlorooctadecane(surr)	85.4	%	1	60-150			12/03/12 18:56	AVB



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB1 Job Sample ID: 12111246.02
 Date Collected: 11/27/12 Sample Matrix: Water
 Time Collected: 13:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	0.003	mg/L	1	0.002			12/01/12 18:22	XA
	Benzene	BRL	mg/L	1	0.002			12/01/12 18:22	XA
	Toluene	BRL	mg/L	1	0.002			12/01/12 18:22	XA
	Ethylbenzene	BRL	mg/L	1	0.002			12/01/12 18:22	XA
	m- & p-Xylenes	BRL	mg/L	1	0.004			12/01/12 18:22	XA
	o-Xylene	BRL	mg/L	1	0.002			12/01/12 18:22	XA
	Xylenes	BRL	mg/L	1	0.002			12/01/12 18:22	XA
	Trifluorotoluene(surr)	91.3	%	1	75-125			12/01/12 18:22	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/L	0.95	0.95			11/30/12 20:37	AVB
	>C12-C28 ¹	BRL	mg/L	0.95	2.356			11/30/12 20:37	AVB
	>C28-C35 ¹	BRL	mg/L	0.95	1.786			11/30/12 20:37	AVB
	Total C6-C35	BRL	mg/L	0.95				11/30/12 20:37	AVB
	1-Chlorooctane(surr)	90.9	%	0.95	60-120			11/30/12 20:37	AVB
	Chlorooctadecane(surr)	91.8	%	0.95	53-122			11/30/12 20:37	AVB



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB2 (4-8) Job Sample ID: 12111246.03
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 14:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	0.99	0.0050			12/01/12 17:30	XA
	Benzene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:30	XA
	Toluene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:30	XA
	Ethylbenzene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:30	XA
	m- & p-Xylenes	BRL	mg/Kg	0.99	0.0099			12/01/12 17:30	XA
	o-Xylene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:30	XA
	Xylenes	BRL	mg/Kg	0.99	0.0050			12/01/12 17:30	XA
	Trifluorotoluene(surr)	105	%	0.99	81-111			12/01/12 17:30	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/Kg	1	23.7		Q18	12/03/12 19:34	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3			12/03/12 19:34	AVB
	>C28-C35 ¹	BRL	mg/Kg	1	17.7			12/03/12 19:34	AVB
	Total C6-C35	BRL	mg/Kg	1				12/03/12 19:34	AVB
	1-Chlorooctane(surr)	76	%	1	60-143			12/03/12 19:34	AVB
	Chlorooctadecane(surr)	70	%	1	60-150			12/03/12 19:34	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB3 (8-12) Job Sample ID: 12111246.04
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 15:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	0.98	0.0049			12/01/12 20:31	XA
	Benzene	BRL	mg/Kg	0.98	0.0049			12/01/12 20:31	XA
	Toluene	BRL	mg/Kg	0.98	0.0049			12/01/12 20:31	XA
	Ethylbenzene	BRL	mg/Kg	0.98	0.0049			12/01/12 20:31	XA
	m- & p-Xylenes	BRL	mg/Kg	0.98	0.0098			12/01/12 20:31	XA
	o-Xylene	BRL	mg/Kg	0.98	0.0049			12/01/12 20:31	XA
	Xylenes	BRL	mg/Kg	0.98	0.0049			12/01/12 20:31	XA
	Trifluorotoluene(surr)	103	%	0.98	81-111			12/01/12 20:31	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/Kg	1	23.7		Q18	12/03/12 20:11	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3			12/03/12 20:11	AVB
	>C28-C35 ¹	BRL	mg/Kg	1	17.7			12/03/12 20:11	AVB
	Total C6-C35	BRL	mg/Kg	1				12/03/12 20:11	AVB
	Chlorooctadecane(surr)	85	%	1	60-150			12/03/12 20:11	AVB
	1-Chlorooctane(surr)	89.5	%	1	60-143			12/03/12 20:11	AVB



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB4 (8-12) Job Sample ID: 12111246.05
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 15:30
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 6010C	Total Recoverable Metals								
	Arsenic	0.88	mg/Kg	1	0.5			12/03/12 15:00	SS
	Barium	13.51	mg/Kg	1	0.5			12/03/12 15:00	SS
	Cadmium	BRL	mg/Kg	1	0.5			12/03/12 15:00	SS
	Chromium	2.09	mg/Kg	1	0.5			12/03/12 15:00	SS
	Lead	3.23	mg/Kg	1	0.5			12/03/12 15:00	SS
	Selenium	BRL	mg/Kg	1	0.5			12/03/12 15:00	SS
	Silver	BRL	mg/Kg	1	0.5			12/03/12 15:00	SS
SW-846 7470A	Total Metals - Mercury								
	Mercury	0.011	mg/Kg	1	0.01			12/03/12 12:32	PRK
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/Kg	0.78	0.004		Q18	12/04/12 12:45	KMK
	1,1,1-Trichloroethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,1,2,2-Tetrachloroethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,1,2-Trichloroethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,1-Dichloroethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,1-Dichloroethylene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,1-Dichloropropene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2,3-trichlorobenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2,3-Trichloropropane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2,4-Trichlorobenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2,4-Trimethylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2-Dibromo-3-chloropropane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2-Dibromoethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2-Dichlorobenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2-Dichloroethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2-Dichloropropane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,3,5-Trimethylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,3-Dichlorobenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,3-Dichloropropane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,4-Dichlorobenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	2,2-Dichloropropane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	2-Chlorotoluene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	4-Chlorotoluene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	4-Isopropyltoluene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Benzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Bromobenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Bromochloromethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Bromodichloromethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB4 (8-12) Job Sample ID: 12111246.05
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 15:30
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Bromoform	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Bromomethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Carbon tetrachloride	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Chlorobenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Chloroethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Chloroform	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Chloromethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	cis-1,2-Dichloroethylene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	cis-1,3-Dichloropropene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Dibromochloromethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Dibromomethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Dichlorodifluoromethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Ethylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Isopropylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	m- & p-Xylenes	BRL	mg/Kg	0.78	0.008			12/04/12 12:45	KMK
	MEK	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Methylene chloride	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Naphthalene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	n-Butylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	n-Propylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	o-Xylene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	sec-Butylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Styrene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	t-butylbenzene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Tetrachloroethylene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Toluene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	trans-1,2-Dichloroethylene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	trans-1,3-Dichloropropene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Trichloroethylene	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Trichlorofluoromethane	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	Vinyl Chloride	BRL	mg/Kg	0.78	0.004			12/04/12 12:45	KMK
	1,2-Dichloroethane-d4(surr)	108	%	0.78125	70-130			12/04/12 12:45	KMK
	Toluene-d8(surr)	102	%	0.78125	70-130			12/04/12 12:45	KMK
	Dibromofluoromethane(surr)	107	%	0.78125	70-130			12/04/12 12:45	KMK
	p-Bromofluorobenzene(surr)	95.3	%	0.78125	70-130			12/04/12 12:45	KMK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/Kg	1	23.7		Q18	12/03/12 20:49	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3			12/03/12 20:49	AVB



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB4 (8-12) Job Sample ID: 12111246.05
Date Collected: 11/27/12 Sample Matrix: Soil
Time Collected: 15:30
Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35 ¹	BRL	mg/Kg	1	17.7			12/03/12 20:49	AVB
	Total C6-C35	BRL	mg/Kg	1				12/03/12 20:49	AVB
	1-Chlorooctane(surr)	86.5	%	1	60-143			12/03/12 20:49	AVB
	Chlorooctadecane(surr)	81.9	%	1	60-150			12/03/12 20:49	AVB



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB4 Job Sample ID: 12111246.06
 Date Collected: 11/27/12 Sample Matrix: Water
 Time Collected: 15:30
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 200.7	Total Recoverable Metals								
	Arsenic	0.06	mg/L	2	0.02			11/30/12 18:44	SS
	Barium	6.22	mg/L	40	0.4			12/03/12 12:27	SS
	Cadmium	BRL	mg/L	2	0.02			11/30/12 18:44	SS
	Chromium	0.99	mg/L	2	0.02			11/30/12 18:44	SS
	Lead	1.78	mg/L	2	0.02			11/30/12 18:44	SS
	Selenium	BRL	mg/L	2	0.1			11/30/12 18:44	SS
	Silver	BRL	mg/L	2	0.02			11/30/12 18:44	SS
EPA 245.1	Total Metals - Mercury								
	Mercury	BRL	mg/L	20	0.004		D1	12/03/12 11:38	PRK
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,1,1-Trichloroethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,1,2,2-Tetrachloroethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,1,2-Trichloroethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,1-Dichloroethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,1-Dichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,1-Dichloropropene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2,3-trichlorobenzene	BRL	mg/L	1	0.005		V1	12/06/12 16:05	KMK
	1,2,3-Trichloropropane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2,4-Trichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2,4-Trimethylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2-Dibromo-3-chloropropane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2-Dibromoethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2-Dichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2-Dichloroethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,2-Dichloropropane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,3,5-Trimethylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,3-Dichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,3-Dichloropropane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	1,4-Dichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	2,2-Dichloropropane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	2-Chlorotoluene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	4-Chlorotoluene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	4-Isopropyltoluene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Benzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Bromobenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Bromochloromethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Bromodichloromethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB4 Job Sample ID: 12111246.06
 Date Collected: 11/27/12 Sample Matrix: Water
 Time Collected: 15:30
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Bromoform	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Bromomethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Carbon tetrachloride	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Chlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Chloroethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Chloroform	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Chloromethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	cis-1,2-Dichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	cis-1,3-Dichloropropene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Dibromochloromethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Dibromomethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Dichlorodifluoromethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Ethylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Isopropylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	m- & p-Xylenes	BRL	mg/L	1	0.01			12/06/12 16:05	KMK
	MEK	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Methylene chloride	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Naphthalene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	n-Butylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	n-Propylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	o-Xylene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	sec-Butylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Styrene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	t-butylbenzene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Tetrachloroethylene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Toluene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	trans-1,2-Dichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	trans-1,3-Dichloropropene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Trichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Trichlorofluoromethane	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Vinyl Chloride	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Xylenes	BRL	mg/L	1	0.005			12/06/12 16:05	KMK
	Dibromofluoromethane(surr)	98.9	%	1	70-130			12/06/12 16:05	KMK
	p-Bromofluorobenzene(surr)	112	%	1	70-130			12/06/12 16:05	KMK
	Toluene-d8(surr)	102	%	1	70-130			12/06/12 16:05	KMK
	1,2-Dichloroethane-d4(surr)	85.2	%	1	70-130			12/06/12 16:05	KMK
TX 1005	Total Petroleum Hydrocarbons C6-C12 ¹	BRL	mg/L	0.92	0.92			11/30/12 21:50	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB4 Job Sample ID: 12111246.06
 Date Collected: 11/27/12 Sample Matrix: Water
 Time Collected: 15:30
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C12-C28 ¹	BRL	mg/L	0.92	2.2816			11/30/12 21:50	AVB
	>C28-C35 ¹	BRL	mg/L	0.92	1.7296			11/30/12 21:50	AVB
	Total C6-C35	BRL	mg/L	0.92				11/30/12 21:50	AVB
	Chlorooctadecane(surr)	84.4	%	0.92	53-122			11/30/12 21:50	AVB
	1-Chlorooctane(surr)	83.2	%	0.92	60-120			11/30/12 21:50	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB5 (8-12) Job Sample ID: 12111246.07
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 16:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 6010C	Total Recoverable Metals								
	Arsenic	BRL	mg/Kg	1	0.5			12/03/12 14:31	SS
	Barium	11.07	mg/Kg	1	0.5			12/03/12 14:31	SS
	Cadmium	BRL	mg/Kg	1	0.5			12/03/12 14:31	SS
	Chromium	2.59	mg/Kg	1	0.5			12/03/12 14:31	SS
	Lead	2.89	mg/Kg	1	0.5			12/03/12 14:31	SS
	Selenium	BRL	mg/Kg	1	0.5			12/03/12 14:31	SS
	Silver	BRL	mg/Kg	1	0.5			12/03/12 14:31	SS
SW-846 7470A	Total Metals - Mercury								
	Mercury	BRL	mg/Kg	1	0.01			12/03/12 12:35	PRK
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/Kg	0.98	0.005		Q18	12/04/12 13:16	KMK
	1,1,1-Trichloroethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,1,2,2-Tetrachloroethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,1,2-Trichloroethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,1-Dichloroethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,1-Dichloroethylene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,1-Dichloropropene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2,3-trichlorobenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2,3-Trichloropropane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2,4-Trichlorobenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2,4-Trimethylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2-Dibromo-3-chloropropane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2-Dibromoethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2-Dichlorobenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2-Dichloroethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,2-Dichloropropane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,3,5-Trimethylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,3-Dichlorobenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,3-Dichloropropane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	1,4-Dichlorobenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	2,2-Dichloropropane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	2-Chlorotoluene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	4-Chlorotoluene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	4-Isopropyltoluene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Benzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Bromobenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Bromochloromethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Bromodichloromethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB5 (8-12) Job Sample ID: 12111246.07
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 16:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Bromoform	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Bromomethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Carbon tetrachloride	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Chlorobenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Chloroethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Chloroform	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Chloromethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	cis-1,2-Dichloroethylene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	cis-1,3-Dichloropropene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Dibromochloromethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Dibromomethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Dichlorodifluoromethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Ethylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Isopropylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	m- & p-Xylenes	BRL	mg/Kg	0.98	0.010			12/04/12 13:16	KMK
	MEK	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Methylene chloride	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Naphthalene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	n-Butylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	n-Propylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	o-Xylene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	sec-Butylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Styrene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	t-butylbenzene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Tetrachloroethylene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Toluene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	trans-1,2-Dichloroethylene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	trans-1,3-Dichloropropene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Trichloroethylene	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Trichlorofluoromethane	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Vinyl Chloride	BRL	mg/Kg	0.98	0.005			12/04/12 13:16	KMK
	Dibromofluoromethane(surr)	94.1	%	0.97599	70-130			12/04/12 13:16	KMK
	p-Bromofluorobenzene(surr)	97.3	%	0.97599	70-130			12/04/12 13:16	KMK
	Toluene-d8(surr)	104	%	0.97599	70-130			12/04/12 13:16	KMK
	1,2-Dichloroethane-d4(surr)	98.2	%	0.97599	70-130			12/04/12 13:16	KMK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/Kg	1	23.7		Q18	12/03/12 22:47	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3			12/03/12 22:47	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name:	HVJ Associates	Attn: Ed Hawkinson
Project Name:	HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd	

Client Sample ID:	EB5 (8-12)	Job Sample ID:	12111246.07
Date Collected:	11/27/12	Sample Matrix:	Soil
Time Collected:	16:00		
Other Information:			

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35 ¹	BRL	mg/Kg	1	17.7			12/03/12 22:47	AVB
	Total C6-C35	BRL	mg/Kg	1				12/03/12 22:47	AVB
	Chlorooctadecane(surr)	80.8	%	1	60-150			12/03/12 22:47	AVB
	1-Chlorooctane(surr)	85.4	%	1	60-143			12/03/12 22:47	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB6 (8-12) Job Sample ID: 12111246.08
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 17:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 6010C	Total Recoverable Metals								
	Arsenic	BRL	mg/Kg	1	0.5			12/03/12 14:36	SS
	Barium	33.80	mg/Kg	1	0.5			12/03/12 14:36	SS
	Cadmium	BRL	mg/Kg	1	0.5			12/03/12 14:36	SS
	Chromium	1.77	mg/Kg	1	0.5			12/03/12 14:36	SS
	Lead	2.67	mg/Kg	1	0.5			12/03/12 14:36	SS
	Selenium	BRL	mg/Kg	1	0.5			12/03/12 14:36	SS
	Silver	BRL	mg/Kg	1	0.5			12/03/12 14:36	SS
SW-846 7470A	Total Metals - Mercury								
	Mercury	0.013	mg/Kg	1	0.01			12/03/12 12:38	PRK
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/Kg	0.94	0.005		Q18	12/04/12 13:48	KMK
	1,1,1-Trichloroethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,1,2,2-Tetrachloroethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,1,2-Trichloroethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,1-Dichloroethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,1-Dichloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,1-Dichloropropene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2,3-trichlorobenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2,3-Trichloropropane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2,4-Trichlorobenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2,4-Trimethylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2-Dibromo-3-chloropropane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2-Dibromoethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2-Dichlorobenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2-Dichloroethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,2-Dichloropropane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,3,5-Trimethylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,3-Dichlorobenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,3-Dichloropropane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	1,4-Dichlorobenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	2,2-Dichloropropane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	2-Chlorotoluene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	4-Chlorotoluene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	4-Isopropyltoluene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Benzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Bromobenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Bromochloromethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Bromodichloromethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB6 (8-12) Job Sample ID: 12111246.08
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 17:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Bromoform	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Bromomethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Carbon tetrachloride	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Chlorobenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Chloroethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Chloroform	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Chloromethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	cis-1,2-Dichloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	cis-1,3-Dichloropropene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Dibromochloromethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Dibromomethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Dichlorodifluoromethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Ethylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Isopropylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	m- & p-Xylenes	BRL	mg/Kg	0.94	0.009			12/04/12 13:48	KMK
	MEK	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Methylene chloride	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Naphthalene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	n-Butylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	n-Propylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	o-Xylene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	sec-Butylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Styrene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	t-butylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Tetrachloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Toluene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	trans-1,2-Dichloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	trans-1,3-Dichloropropene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Trichloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Trichlorofluoromethane	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Vinyl Chloride	BRL	mg/Kg	0.94	0.005			12/04/12 13:48	KMK
	Toluene-d8(surr)	102	%	0.93931	70-130			12/04/12 13:48	KMK
	1,2-Dichloroethane-d4(surr)	91.2	%	0.93931	70-130			12/04/12 13:48	KMK
	Dibromofluoromethane(surr)	86	%	0.93931	70-130			12/04/12 13:48	KMK
	p-Bromofluorobenzene(surr)	97.6	%	0.93931	70-130			12/04/12 13:48	KMK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/Kg	1	23.7		Q18	12/03/12 23:27	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3			12/03/12 23:27	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB6 (8-12) Job Sample ID: 12111246.08
 Date Collected: 11/27/12 Sample Matrix: Soil
 Time Collected: 17:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35 ⁺	BRL	mg/Kg	1	17.7			12/03/12 23:27	AVB
	Total C6-C35	BRL	mg/Kg	1				12/03/12 23:27	AVB
	Chlorooctadecane(surr)	86.2	%	1	60-150			12/03/12 23:27	AVB
	1-Chlorooctane(surr)	90.4	%	1	60-143			12/03/12 23:27	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB7 (12-16) Job Sample ID: 12111246.09
 Date Collected: 11/28/12 Sample Matrix: Soil
 Time Collected: 09:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/Kg	0.97	0.005		Q18	12/04/12 14:19	KMK
	1,1,1-Trichloroethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,1,2-Tetrachloroethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,1,2-Trichloroethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,1-Dichloroethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,1-Dichloroethylene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,1-Dichloropropene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2,3-trichlorobenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2,3-Trichloropropane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2,4-Trichlorobenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2,4-Trimethylbenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2-Dibromo-3-chloropropane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2-Dibromoethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2-Dichlorobenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2-Dichloroethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,2-Dichloropropane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,3,5-Trimethylbenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,3-Dichlorobenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,3-Dichloropropane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	1,4-Dichlorobenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	2,2-Dichloropropane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	2-Chlorotoluene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	4-Chlorotoluene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	4-Isopropyltoluene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Benzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Bromobenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Bromochloromethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Bromodichloromethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Bromoform	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Bromomethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Carbon tetrachloride	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Chlorobenzene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Chloroethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Chloroform	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Chloromethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	cis-1,2-Dichloroethylene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	cis-1,3-Dichloropropene	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK
	Dibromochloromethane	BRL	mg/Kg	0.97	0.005			12/04/12 14:19	KMK



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB7 (12-16) Job Sample ID: 12111246.09
Date Collected: 11/28/12 Sample Matrix: Soil
Time Collected: 09:00
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8260C Volatile Organic Compounds and various chemical species like Dibromomethane, Dichlorodifluoromethane, etc.



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB8 (16-20) Job Sample ID: 12111246.10
Date Collected: 11/28/12 Sample Matrix: Soil
Time Collected: 09:45
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Contains data for SW-846 8260C Volatile Organic Compounds with various chemical names and their corresponding test results.



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB8 (16-20) Job Sample ID: 12111246.10
 Date Collected: 11/28/12 Sample Matrix: Soil
 Time Collected: 09:45
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Dibromomethane	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Dichlorodifluoromethane	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Ethylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Isopropylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	m- & p-Xylenes	BRL	mg/Kg	0.94	0.009			12/04/12 14:51	KMK
	MEK	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Methylene chloride	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Naphthalene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	n-Butylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	n-Propylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	o-Xylene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	sec-Butylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Styrene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	t-butylbenzene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Tetrachloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Toluene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	trans-1,2-Dichloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	trans-1,3-Dichloropropene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Trichloroethylene	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Trichlorofluoromethane	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	Vinyl Chloride	BRL	mg/Kg	0.94	0.005			12/04/12 14:51	KMK
	1,2-Dichloroethane-d4(surr)	91.5	%	0.93967	70-130			12/04/12 14:51	KMK
	Dibromofluoromethane(surr)	90.9	%	0.93967	70-130			12/04/12 14:51	KMK
	p-Bromofluorobenzene(surr)	92.9	%	0.93967	70-130			12/04/12 14:51	KMK
	Toluene-d8(surr)	103	%	0.93967	70-130			12/04/12 14:51	KMK



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB8 Job Sample ID: 12111246.11
 Date Collected: 11/28/12 Sample Matrix Water
 Time Collected: 10:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,1,1-Trichloroethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,1,2-Tetrachloroethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,1,2-Trichloroethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,1-Dichloroethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,1-Dichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,1-Dichloropropene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2,3-trichlorobenzene	BRL	mg/L	1	0.005		V1	12/06/12 16:36	KMK
	1,2,3-Trichloropropane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2,4-Trichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2,4-Trimethylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2-Dibromo-3-chloropropane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2-Dibromoethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2-Dichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2-Dichloroethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,2-Dichloropropane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,3,5-Trimethylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,3-Dichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,3-Dichloropropane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	1,4-Dichlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	2,2-Dichloropropane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	2-Chlorotoluene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	4-Chlorotoluene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	4-Isopropyltoluene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Benzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Bromobenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Bromochloromethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Bromodichloromethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Bromoform	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Bromomethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Carbon tetrachloride	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Chlorobenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Chloroethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Chloroform	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Chloromethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	cis-1,2-Dichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	cis-1,3-Dichloropropene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Dibromochloromethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB8 Job Sample ID: 12111246.11
 Date Collected: 11/28/12 Sample Matrix: Water
 Time Collected: 10:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Dibromomethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Dichlorodifluoromethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Ethylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Isopropylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	m- & p-Xylenes	BRL	mg/L	1	0.01			12/06/12 16:36	KMK
	MEK	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Methylene chloride	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Naphthalene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	n-Butylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	n-Propylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	o-Xylene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	sec-Butylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Styrene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	t-butylbenzene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Tetrachloroethylene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Toluene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	trans-1,2-Dichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	trans-1,3-Dichloropropene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Trichloroethylene	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Trichlorofluoromethane	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Vinyl Chloride	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
	Xylenes	BRL	mg/L	1	0.005			12/06/12 16:36	KMK
1,2-Dichloroethane-d4(surr)	89.2	%		1	70-130			12/06/12 16:36	KMK
Dibromofluoromethane(surr)	98.3	%		1	70-130			12/06/12 16:36	KMK
p-Bromofluorobenzene(surr)	115	%		1	70-130			12/06/12 16:36	KMK
Toluene-d8(surr)	94.9	%		1	70-130			12/06/12 16:36	KMK



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB9 (12-16) Job Sample ID: 12111246.12
 Date Collected: 11/28/12 Sample Matrix: Soil
 Time Collected: 10:30
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/Kg	1.00	0.005		Q18	12/04/12 15:22	KMK
	1,1,1-Trichloroethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,1,2,2-Tetrachloroethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,1,2-Trichloroethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,1-Dichloroethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,1-Dichloroethylene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,1-Dichloropropene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2,3-trichlorobenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2,3-Trichloropropane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2,4-Trichlorobenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2,4-Trimethylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2-Dibromo-3-chloropropane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2-Dibromoethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2-Dichlorobenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2-Dichloroethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,2-Dichloropropane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,3,5-Trimethylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,3-Dichlorobenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,3-Dichloropropane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	1,4-Dichlorobenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	2,2-Dichloropropane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	2-Chlorotoluene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	4-Chlorotoluene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	4-Isopropyltoluene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Benzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Bromobenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Bromochloromethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Bromodichloromethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Bromoform	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Bromomethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Carbon tetrachloride	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Chlorobenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Chloroethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Chloroform	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Chloromethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	cis-1,2-Dichloroethylene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	cis-1,3-Dichloropropene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Dibromochloromethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB9 (12-16) Job Sample ID: 12111246.12
 Date Collected: 11/28/12 Sample Matrix: Soil
 Time Collected: 10:30
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260C	Volatile Organic Compounds								
	Dibromomethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Dichlorodifluoromethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Ethylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Isopropylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	m- & p-Xylenes	BRL	mg/Kg	1.00	0.010			12/04/12 15:22	KMK
	MEK	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Methylene chloride	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Naphthalene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	n-Butylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	n-Propylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	o-Xylene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	sec-Butylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Styrene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	t-butylbenzene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Tetrachloroethylene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Toluene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	trans-1,2-Dichloroethylene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	trans-1,3-Dichloropropene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Trichloroethylene	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Trichlorofluoromethane	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Vinyl Chloride	BRL	mg/Kg	1.00	0.005			12/04/12 15:22	KMK
	Toluene-d8(surr)	99.5	%	0.99820	70-130			12/04/12 15:22	KMK
	1,2-Dichloroethane-d4(surr)	110	%	0.99820	70-130			12/04/12 15:22	KMK
	Dibromofluoromethane(surr)	103	%	0.99820	70-130			12/04/12 15:22	KMK
	p-Bromofluorobenzene(surr)	98	%	0.99820	70-130			12/04/12 15:22	KMK



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB10 (12-16) Job Sample ID: 12111246.13
 Date Collected: 11/28/12 Sample Matrix: Soil
 Time Collected: 11:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	0.99	0.0050			12/01/12 17:56	XA
	Benzene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:56	XA
	Toluene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:56	XA
	Ethylbenzene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:56	XA
	m- & p-Xylenes	BRL	mg/Kg	0.99	0.0099			12/01/12 17:56	XA
	o-Xylene	BRL	mg/Kg	0.99	0.0050			12/01/12 17:56	XA
	Xylenes	BRL	mg/Kg	0.99	0.0050			12/01/12 17:56	XA
	Trifluorotoluene(surr)	105	%	0.99	81-111			12/01/12 17:56	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/Kg	1	23.7		Q18	12/04/12 00:07	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3			12/04/12 00:07	AVB
	>C28-C35 ¹	BRL	mg/Kg	1	17.7			12/04/12 00:07	AVB
	Total C6-C35	BRL	mg/Kg	1				12/04/12 00:07	AVB
	1-Chlorooctane(surr)	85.9	%	1	60-143			12/04/12 00:07	AVB
	Chlorooctadecane(surr)	82.6	%	1	60-150			12/04/12 00:07	AVB



LABORATORY TEST RESULTS

Job ID : 12111246

Date 12/10/2012

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB10 Job Sample ID: 12111246.14
 Date Collected: 11/28/12 Sample Matrix: Water
 Time Collected: 11:15
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/L	1	0.002			12/01/12 18:51	XA
	Benzene	BRL	mg/L	1	0.002			12/01/12 18:51	XA
	Toluene	BRL	mg/L	1	0.002			12/01/12 18:51	XA
	Ethylbenzene	BRL	mg/L	1	0.002			12/01/12 18:51	XA
	m- & p-Xylenes	BRL	mg/L	1	0.004			12/01/12 18:51	XA
	o-Xylene	BRL	mg/L	1	0.002			12/01/12 18:51	XA
	Xylenes	BRL	mg/L	1	0.002			12/01/12 18:51	XA
	Trifluorotoluene(surr)	90	%	1	75-125			12/01/12 18:51	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	BRL	mg/L	0.95	0.95			11/30/12 22:26	AVB
	>C12-C28 ¹	BRL	mg/L	0.95	2.356			11/30/12 22:26	AVB
	>C28-C35 ¹	BRL	mg/L	0.95	1.786			11/30/12 22:26	AVB
	Total C6-C35	BRL	mg/L	0.95				11/30/12 22:26	AVB
	Chlorooctadecane(surr)	95	%	0.95	53-122			11/30/12 22:26	AVB
	1-Chlorooctane(surr)	93.1	%	0.95	60-120			11/30/12 22:26	AVB



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB11 (8-12) Job Sample ID: 12111246.15
 Date Collected: 11/28/12 Sample Matrix: Soil
 Time Collected: 12:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	1.18	mg/Kg	200	1.002			12/04/12 12:18	XA
	Benzene	5.17	mg/Kg	200	1.002			12/04/12 12:18	XA
	Toluene	61.9	mg/Kg	200	1.002			12/04/12 12:18	XA
	Ethylbenzene	31.1	mg/Kg	200	1.002			12/04/12 12:18	XA
	m- & p-Xylenes	100	mg/Kg	200	2.004			12/04/12 12:18	XA
	o-Xylene	43	mg/Kg	200	1.002			12/04/12 12:18	XA
	Xylenes	143	mg/Kg	200	1.002			12/04/12 12:18	XA
	Trifluorotoluene(surr)	85.5	%	200	81-111			12/04/12 12:18	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	267	mg/Kg	1	23.7			12/04/12 00:49	AVB
	>C12-C28 ¹	21.2	mg/Kg	1	20.3		J	12/04/12 00:49	AVB
	>C28-C35 ¹	BRL	mg/Kg	1	17.7		Q18	12/04/12 00:49	AVB
	Total C6-C35	288.2	mg/Kg	1				12/04/12 00:49	AVB
	1-Chlorooctane(surr)	128	%	1	60-143			12/04/12 00:49	AVB
	Chlorooctadecane(surr)	69.6	%	1	60-150			12/04/12 00:49	AVB



LABORATORY TEST RESULTS

Date 12/10/2012

Job ID : 12111246

Client Name: HVJ Associates Attn: Ed Hawkinson
 Project Name: HE1018720.1 / Pinemont Street Reconstruction / Pinemont St. Between Ella and N. Shepherd

Client Sample ID: EB12 (12-16) Job Sample ID: 12111246.16
 Date Collected: 11/28/12 Sample Matrix: Soil
 Time Collected: 13:00
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	2.82	0.014			12/04/12 21:59	XA
	Benzene	0.069	mg/Kg	2.82	0.014			12/04/12 21:59	XA
	Toluene	0.921	mg/Kg	2.82	0.014			12/04/12 21:59	XA
	Ethylbenzene	0.491	mg/Kg	2.82	0.014			12/04/12 21:59	XA
	m- & p-Xylenes	2.07	mg/Kg	2.82	0.028			12/04/12 21:59	XA
	o-Xylene	1.36	mg/Kg	2.82	0.014		E4	12/04/12 21:59	XA
	Xylenes	3.43	mg/Kg	2.82	0.014		E4	12/04/12 21:59	XA
	Trifluorotoluene(surr)	84.3	%	2.82	81-111			12/04/12 21:59	XA
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12 ¹	25.2	mg/Kg	1	23.7			12/04/12 01:34	AVB
	>C12-C28 ¹	BRL	mg/Kg	1	20.3		Q18	12/04/12 01:34	AVB
	>C28-C35 ¹	BRL	mg/Kg	1	17.7			12/04/12 01:34	AVB
	Total C6-C35	25.2	mg/Kg	1				12/04/12 01:34	AVB
	1-Chlorooctane(surr)	90.7	%	1	60-143			12/04/12 01:34	AVB
	Chlorooctadecane(surr)	83.4	%	1	60-150			12/04/12 01:34	AVB

¹-Parameter not available for accreditation

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Total Recoverable Metals **Method :** EPA 200.7 **Reporting Units :** mg/L

QC Batch ID : Qb12120111 **Created Date :** 11/30/12 **Created By :** Ssrinivasan

Samples in This QC Batch : 12111246.06

Digestion : PB12120112 **Prep Method :** EPA 200.7 **Prep Date :** 11/30/12 10:30 **Prep By :** PRKasar

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Arsenic	7440-38-2	BRL	mg/L	1	0.01	
Barium	7440-39-3	BRL	mg/L	1	0.01	
Cadmium	7440-43-9	BRL	mg/L	1	0.01	
Chromium	7440-47-3	BRL	mg/L	1	0.01	
Lead	7439-92-1	BRL	mg/L	1	0.01	
Selenium	7782-49-2	BRL	mg/L	1	0.05	
Silver	7440-22-4	BRL	mg/L	1	0.01	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Arsenic	1	0.97	96.9	1	0.97	96.9	0.1	20	85-115	
Barium	1	1.01	101	1	1.00	99.9	1	20	85-115	
Cadmium	1	0.97	96.8	1	0.97	96.9	0.1	20	85-115	
Chromium	1	1.03	103	1	1.02	102	1.4	20	85-115	
Lead	1	0.97	97.1	1	0.97	97	0.2	20	85-115	
Selenium	1	1.00	99.7	1	0.99	99.2	0.5	20	85-115	
Silver	1	1.01	101	1	1.00	100	0.7	20	85-115	

QC Type: MS and MSD

QC Sample ID: 12111297.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Arsenic	BRL	1	1.00	99.5						75-125	
Barium	0.1139	1	1.05	93.3						75-125	
Cadmium	BRL	1	0.97	97						75-125	
Chromium	BRL	1	1.02	102						75-125	
Lead	BRL	1	0.91	90.7						75-125	
Selenium	BRL	1	1.01	101						75-125	
Silver	BRL	1	1.01	101						75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Total Petroleum Hydrocarbons	Method : TX 1005	Reporting Units : mg/L
QC Batch ID : Qb12120310	Created Date : 12/03/12	Created By : AVBembde
Samples in This QC Batch : 12111246.02,06,14		
Sample Preparation : PB12120308	Prep Method : TX 1005	Prep Date : 11/30/12 16:00 Prep By : AVBembde

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12	TPH-1005-1	BRL	mg/L	1	1		
>C12-C28	TPH-1005-2	BRL	mg/L	1	2.48		
>C28-C35	TPH-1005-4	BRL	mg/L	1	1.88		
Total C6-C35		BRL	mg/L	1			
Chlorooctadecane(surr)	3386-33-2	62.8	%	1	53-122		
1-Chlorooctane(surr)	111-85-3	64.9	%	1	60-120		

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	43	45.9	107	43	43.8	102	4.7	20	75-125	
>C12-C28	43	44.8	104	43	39.6	92.1	12.3	20	75-125	
>C28-C35	43	41.6	96.7	43	44.4	103	6.5	20	75-125	

QC Type: MS and MSD											
QC Sample ID: 12111207.01											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	40.6	41.6	101						75-125	
>C12-C28	BRL	40.6	42.3	102						75-125	
>C28-C35	BRL	40.6	36.9	90						75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Total Metals - Mercury **Method :** SW-846 7470A **Reporting Units :** mg/Kg

QC Batch ID : Qb12120340 **Created Date :** 12/03/12 **Created By :** PRKasar

Samples in This QC Batch : 12111246.05,07,08

Digestion : PB12120332 **Prep Method :** SW-846 7470A **Prep Date :** 12/03/12 08:30 **Prep By :** PRKasar

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Mercury	7439-97-6	BRL	mg/Kg	1	0.01	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.1	0.095	95.4	0.1	0.095	95.5	0	20	80-120	

QC Type: MS and MSD

QC Sample ID: 12111195.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.1	0.100	99.4						70-130	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Purgeable Aromatics **Method :** SW-846 8021B **Reporting Units :** mg/Kg

QC Batch ID : Qb12120357 **Created Date :** 12/03/12 **Created By :** Xan

Samples in This QC Batch : 12111246.01,03,04,13,15,16

Sample Preparation : PB12120339 **Prep Method :** SW-846 5035A **Prep Date :** 12/01/12 13:00 **Prep By :** Xan

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
MTBE	1634-04-4	BRL	mg/Kg	1	0.005	
Benzene	71-43-2	BRL	mg/Kg	1	0.005	
Toluene	108-88-3	BRL	mg/Kg	1	0.005	
Ethylbenzene	100-41-4	BRL	mg/Kg	1	0.005	
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/Kg	1	0.01	
o-Xylene	95-47-6	BRL	mg/Kg	1	0.005	
Xylenes	1330-20-7	BRL	mg/Kg	1	0.005	
Trifluorotoluene(surr)	98-08-8	108	%	1	81-111	

QC Type: Duplicate

QC Sample ID: 12111246.04

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Benzene	BRL	BRL	mg/Kg		30	
Ethylbenzene	BRL	BRL	mg/Kg		30	
m- & p-Xylenes	BRL	BRL	mg/Kg		30	
MTBE	BRL	BRL	mg/Kg		30	
o-Xylene	BRL	BRL	mg/Kg		30	
Toluene	BRL	BRL	mg/Kg		30	
Xylenes	BRL	BRL	mg/Kg		30	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
MTBE	0.05	0.046	92	0.05	0.046	92	0	20	67.2-132	
Benzene	0.05	0.047	94	0.05	0.049	98	4.2	20	76.2-128	
Toluene	0.05	0.047	94	0.05	0.05	100	6.2	20	74.2-126	
Ethylbenzene	0.05	0.046	92	0.05	0.052	104	12.2	20	79.4-125	
m- & p-Xylenes	0.1	0.089	89	0.1	0.096	96	7.6	20	76.3-126	
o-Xylene	0.05	0.047	94	0.05	0.055	110	15.7	20	77.1-123	
Xylenes	0.15	0.136	90.7	0.15	0.151	101	10.5	20	77.2-125	

QC Type: MS and MSD

QC Sample ID: 12111246.04

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
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Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Purgeable Aromatics Method : SW-846 8021B Reporting Units : mg/Kg

QC Batch ID : Qb12120357 Created Date : 12/03/12 Created By : Xan

Samples in This QC Batch : 12111246.01,03,04,13,15,16

QC Type: MS and MSD

QC Sample ID: 12111246.04

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
MTBE	BRL	0.05	0.051	102						76-134	
Benzene	BRL	0.05	0.056	107						68-138	
Toluene	BRL	0.05	0.057	112						67-135	
Ethylbenzene	BRL	0.05	0.057	113						71-127	
m- & p-Xylenes	BRL	0.099	0.11	108						56-135	
o-Xylene	BRL	0.05	0.06	119						56-134	
Xylenes	BRL	0.149	0.17	114						59-134	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Total Recoverable Metals **Method :** SW-846 6010C **Reporting Units :** mg/Kg

QC Batch ID : Qb12120367 **Created Date :** 12/03/12 **Created By :** Ssrinivasan

Samples in This QC Batch : 12111246.05,07,08

Digestion : PB12120344 **Prep Method :** SW-846 3050B **Prep Date :** 12/03/12 10:00 **Prep By :** PRKasar

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Arsenic	7440-38-2	BRL	mg/Kg	1	0.5	
Barium	7440-39-3	BRL	mg/Kg	1	0.5	
Cadmium	7440-43-9	BRL	mg/Kg	1	0.5	
Chromium	7440-47-3	BRL	mg/Kg	1	0.5	
Lead	7439-92-1	BRL	mg/Kg	1	0.5	
Selenium	7782-49-2	BRL	mg/Kg	1	0.5	
Silver	7440-22-4	BRL	mg/Kg	1	0.5	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Arsenic	25	23.96	95.8	25	23.77	95.1	0.8	20	80-120	
Barium	25	26.09	104	25	25.92	104	0.6	20	80-120	
Cadmium	25	23.94	95.8	25	23.74	94.9	0.9	20	80-120	
Chromium	25	25.25	101	25	25.14	101	0.4	20	80-120	
Lead	25	24.25	97	25	24.06	96.2	0.8	20	80-120	
Selenium	25	23.04	92.2	25	22.76	91	1.3	20	80-120	
Silver	25	24.38	97.5	25	24.36	97.4	0.1	20	80-120	

QC Type: MS and MSD

QC Sample ID: 12120003.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Arsenic	1.6628	25	20.69	76.1						70-130	
Barium	99.0	25	N/C	N/C						70-130	M6
Cadmium	BRL	25	19.15	76.3						70-130	
Chromium	5.8208	25	22.96	68.6						70-130	M2
Lead	2.9894	25	17.87	59.5						70-130	M2
Selenium	BRL	25	18.23	72.5						70-130	
Silver	BRL	25	20.73	82.9						70-130	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/Kg

QC Batch ID : Qb12120424 **Created Date :** 12/04/12 **Created By :** AVBembde

Samples in This QC Batch : 12111246.01,03,04,05,07,08,13,15,16

Sample Preparation : PB12120417 **Prep Method :** TX 1005 **Prep Date :** 12/03/12 16:00 **Prep By :** AVBembde

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
C6-C12	TPH-1005-1	BRL	mg/Kg	1	23.7	
>C12-C28	TPH-1005-2	BRL	mg/Kg	1	20.3	
>C28-C35	TPH-1005-4	BRL	mg/Kg	1	17.7	
Total C6-C35		BRL	mg/Kg	1		
Chlorooctadecane(surr)	3386-33-2	76.3	%	1	60-150	
1-Chlorooctane(surr)	111-85-3	93.3	%	1	60-143	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	461	92.2	500	425	85	8.1	20	75-125	
>C12-C28	500	454	90.8	500	434	86.8	4.5	20	75-125	
>C28-C35	500	492	98.4	500	432	86.4	13	20	75-125	

QC Type: MS and MSD

QC Sample ID: 12111245.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	500	452	88						75-125	
>C12-C28	BRL	500	474	92.2						75-125	
>C28-C35	BRL	500	468	93.4						75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds **Method :** SW-846 8260C **Reporting Units :** mg/Kg

QC Batch ID : Qb12120538 **Created Date :** 12/04/12 **Created By :** KKrch

Samples in This QC Batch : 12111246.05,07,08,09,10,12

Sample Preparation : PB12120538 **Prep Method :** SW-846 5030C **Prep Date :** 12/04/12 11:45 **Prep By :** KKrch

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
1,1,1,2-Tetrachloroethane	630-20-6	BRL	mg/Kg	0.94	0.005	
1,1,1-Trichloroethane	71-55-6	BRL	mg/Kg	0.94	0.005	
1,1,2,2-Tetrachloroethane	79-34-5	BRL	mg/Kg	0.94	0.005	
1,1,2-Trichloroethane	79-00-5	BRL	mg/Kg	0.94	0.005	
1,1-Dichloroethane	75-34-3	BRL	mg/Kg	0.94	0.005	
1,1-Dichloroethylene	75-35-4	BRL	mg/Kg	0.94	0.005	
1,1-Dichloropropene	563-58-6	BRL	mg/Kg	0.94	0.005	
1,2,3-trichlorobenzene	87-61-6	BRL	mg/Kg	0.94	0.005	
1,2,3-Trichloropropane	96-18-4	BRL	mg/Kg	0.94	0.005	
1,2,4-Trichlorobenzene	120-82-1	BRL	mg/Kg	0.94	0.005	
1,2,4-Trimethylbenzene	95-63-6	BRL	mg/Kg	0.94	0.005	
1,2-Dibromo-3-chloropropa	96-12-8	BRL	mg/Kg	0.94	0.005	
1,2-Dibromoethane	106-93-4	BRL	mg/Kg	0.94	0.005	
1,2-Dichlorobenzene	95-50-1	BRL	mg/Kg	0.94	0.005	
1,2-Dichloroethane	107-06-2	BRL	mg/Kg	0.94	0.005	
1,2-Dichloropropane	78-87-5	BRL	mg/Kg	0.94	0.005	
1,3,5-Trimethylbenzene	108-67-8	BRL	mg/Kg	0.94	0.005	
1,3-Dichlorobenzene	541-73-1	BRL	mg/Kg	0.94	0.005	
1,3-Dichloropropane	142-28-9	BRL	mg/Kg	0.94	0.005	
1,4-Dichlorobenzene	106-46-7	BRL	mg/Kg	0.94	0.005	
2,2-Dichloropropane	594-20-7	BRL	mg/Kg	0.94	0.005	
2-Chlorotoluene	95-49-8	BRL	mg/Kg	0.94	0.005	
4-Chlorotoluene	106-43-4	BRL	mg/Kg	0.94	0.005	
4-Isopropyltoluene	99-87-6	BRL	mg/Kg	0.94	0.005	
Benzene	71-43-2	BRL	mg/Kg	0.94	0.005	
Bromobenzene	108-86-1	BRL	mg/Kg	0.94	0.005	
Bromochloromethane	74-97-5	BRL	mg/Kg	0.94	0.005	
Bromodichloromethane	75-27-4	BRL	mg/Kg	0.94	0.005	
Bromoform	75-25-2	BRL	mg/Kg	0.94	0.005	
Bromomethane	74-83-9	BRL	mg/Kg	0.94	0.005	
Carbon tetrachloride	56-23-5	BRL	mg/Kg	0.94	0.005	
Chlorobenzene	108-90-7	BRL	mg/Kg	0.94	0.005	
Chloroethane	75-00-3	BRL	mg/Kg	0.94	0.005	
Chloroform	67-66-3	BRL	mg/Kg	0.94	0.005	
Chloromethane	74-87-3	BRL	mg/Kg	0.94	0.005	
cis-1,2-Dichloroethylene	156-59-2	BRL	mg/Kg	0.94	0.005	
cis-1,3-Dichloropropene	10061-01-5	BRL	mg/Kg	0.94	0.005	
Dibromochloromethane	124-48-1	BRL	mg/Kg	0.94	0.005	
Dibromomethane	74-95-3	BRL	mg/Kg	0.94	0.005	
Dichlorodifluoromethane	75-71-8	BRL	mg/Kg	0.94	0.005	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds Method : SW-846 8260C Reporting Units : mg/Kg

QC Batch ID : Qb12120538 Created Date : 12/04/12 Created By : KKrch

Samples in This QC Batch : 12111246.05,07,08,09,10,12

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Ethylbenzene	100-41-4	BRL	mg/Kg	0.94	0.005	
Isopropylbenzene	98-82-8	BRL	mg/Kg	0.94	0.005	
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/Kg	0.94	0.009	
MEK	78-93-3	BRL	mg/Kg	0.94	0.005	
Methylene chloride	75-09-2	BRL	mg/Kg	0.94	0.005	
Naphthalene	91-20-3	BRL	mg/Kg	0.94	0.005	
n-Butylbenzene	104-51-8	BRL	mg/Kg	0.94	0.005	
n-Propylbenzene	103-65-1	BRL	mg/Kg	0.94	0.005	
o-Xylene	95-47-6	BRL	mg/Kg	0.94	0.005	
sec-Butylbenzene	135-98-8	BRL	mg/Kg	0.94	0.005	
Styrene	100-42-5	BRL	mg/Kg	0.94	0.005	
t-butylbenzene	98-06-6	BRL	mg/Kg	0.94	0.005	
Tetrachloroethylene	127-18-4	BRL	mg/Kg	0.94	0.005	
Toluene	108-88-3	BRL	mg/Kg	0.94	0.005	
trans-1,2-Dichloroethylene	156-60-5	BRL	mg/Kg	0.94	0.005	
trans-1,3-Dichloropropene	10061-02-6	BRL	mg/Kg	0.94	0.005	
Trichloroethylene	79-01-6	BRL	mg/Kg	0.94	0.005	
Trichlorofluoromethane	75-69-4	BRL	mg/Kg	0.94	0.005	
Vinyl Chloride	75-01-4	BRL	mg/Kg	0.94	0.005	
Dibromofluoromethane(surr)	1868-53-7	105	%	0.9351037	70-130	
1,2-Dichloroethane-d4(surr)	17060-07-0	96.5	%	0.9351037	70-130	
Toluene-d8(surr)	2037-26-5	101	%	0.9351037	70-130	
p-Bromofluorobenzene(surr)	460-00-4	96.8	%	0.9351037	70-130	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.016	80	0.02	0.017	85	6.1	30	71.4-131	
1,1,1-Trichloroethane	0.02	0.018	90	0.02	0.018	90	0	30	69.6-140	
1,1,2,2-Tetrachloroethane	0.02	0.017	85	0.02	0.017	85	0	30	66.6-128	
1,1,2-Trichloroethane	0.02	0.016	80	0.02	0.017	85	6.1	30	72.8-125	
1,1-Dichloroethane	0.02	0.018	90	0.02	0.018	90	0	30	72.7-129	
1,1-Dichloroethylene	0.02	0.018	90	0.02	0.018	90	0	30	71.4-131	
1,1-Dichloropropene	0.02	0.018	90	0.02	0.018	90	0	30	75.9-132	
1,2,3-trichlorobenzene	0.02	0.021	105	0.02	0.019	95	10	30	56.7-153	
1,2,3-Trichloropropane	0.02	0.017	85	0.02	0.016	80	6.1	30	61.6-138	
1,2,4-Trichlorobenzene	0.02	0.021	105	0.02	0.018	90	15.4	30	55.9-150	
1,2,4-Trimethylbenzene	0.02	0.016	80	0.02	0.016	80	0	30	71.1-131	
1,2-Dibromo-3-chloropropa	0.02	0.018	90	0.02	0.017	85	5.7	30	52.4-150	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds

Method : SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID : Qb12120538 **Created Date :** 12/04/12

Created By : KKrch

Samples in This QC Batch : 12111246.05,07,08,09,10,12

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,2-Dibromoethane	0.02	0.016	80	0.02	0.017	85	6.1	30	72.9-125	
1,2-Dichlorobenzene	0.02	0.017	85	0.02	0.017	85	0	30	76.1-126	
1,2-Dichloroethane	0.02	0.018	90	0.02	0.018	90	0	30	66.4-134	
1,2-Dichloropropane	0.02	0.017	85	0.02	0.018	90	5.7	30	70.2-128	
1,3,5-Trimethylbenzene	0.02	0.016	80	0.02	0.016	80	0	30	75.1-127	
1,3-Dichlorobenzene	0.02	0.016	80	0.02	0.016	80	0	30	73.9-126	
1,3-Dichloropropane	0.02	0.017	85	0.02	0.017	85	0	30	68.3-124	
1,4-Dichlorobenzene	0.02	0.017	85	0.02	0.016	80	6.1	30	72.3-127	
2,2-Dichloropropane	0.02	0.018	90	0.02	0.018	90	0	30	68.5-138	
2-Chlorotoluene	0.02	0.016	80	0.02	0.016	80	0	30	71.7-128	
4-Chlorotoluene	0.02	0.017	85	0.02	0.016	80	6.1	30	72.2-126	
4-Isopropyltoluene	0.02	0.017	85	0.02	0.016	80	6.1	30	77.5-125	
Benzene	0.02	0.017	85	0.02	0.018	90	5.7	30	74-126	
Bromobenzene	0.02	0.016	80	0.02	0.017	85	6.1	30	73.3-129	
Bromochloromethane	0.02	0.018	90	0.02	0.018	90	0	30	68.8-131	
Bromodichloromethane	0.02	0.018	90	0.02	0.018	90	0	30	69-135	
Bromoform	0.02	0.017	85	0.02	0.017	85	0	30	62-146	
Bromomethane	0.02	0.019	95	0.02	0.02	100	5.1	30	58.7-139	
Carbon tetrachloride	0.02	0.018	90	0.02	0.018	90	0	30	68.7-135	
Chlorobenzene	0.02	0.016	80	0.02	0.016	80	0	30	73.3-129	
Chloroethane	0.02	0.018	90	0.02	0.018	90	0	30	66.2-129	
Chloroform	0.02	0.018	90	0.02	0.018	90	0	30	73.7-134	
Chloromethane	0.02	0.019	95	0.02	0.018	90	5.4	30	51.4-135	
cis-1,2-Dichloroethylene	0.02	0.018	90	0.02	0.018	90	0	30	72.4-132	
cis-1,3-Dichloropropene	0.02	0.017	85	0.02	0.017	85	0	30	67.7-134	
Dibromochloromethane	0.02	0.017	85	0.02	0.017	85	0	30	73.2-126	
Dibromomethane	0.02	0.02	100	0.02	0.02	100	0	30	69.9-134	
Dichlorodifluoromethane	0.02	0.019	95	0.02	0.018	90	5.4	30	36.8-144	
Ethylbenzene	0.02	0.016	80	0.02	0.016	80	0	30	72.2-128	
Isopropylbenzene	0.02	0.016	80	0.02	0.016	80	0	30	71.2-131	
m- & p-Xylenes	0.04	0.032	80	0.04	0.033	82.5	3.1	30	70.7-131	
MEK	0.02	0.023	115	0.02	0.022	110	4.4	30	52.5-152	
Methylene chloride	0.02	0.018	90	0.02	0.018	90	0	30	70.6-129	
Naphthalene	0.02	0.022	110	0.02	0.02	100	9.5	30	60.7-145	
n-Butylbenzene	0.02	0.017	85	0.02	0.016	80	6.1	30	66.5-136	
n-Propylbenzene	0.02	0.016	80	0.02	0.016	80	0	30	73.3-126	
o-Xylene	0.02	0.016	80	0.02	0.016	80	0	30	71.6-130	
sec-Butylbenzene	0.02	0.016	80	0.02	0.016	80	0	30	77.9-124	
Styrene	0.02	0.016	80	0.02	0.016	80	0	30	71.1-131	
t-butylbenzene	0.02	0.016	80	0.02	0.016	80	0	30	74.4-130	
Tetrachloroethylene	0.02	0.017	85	0.02	0.017	85	0	30	62.6-157	
Toluene	0.02	0.016	80	0.02	0.016	80	0	30	73.3-127	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds

Method : SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID : Qb12120538

Created Date : 12/04/12

Created By : KKrch

Samples in This QC Batch : 12111246.05,07,08,09,10,12

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
trans-1,2-Dichloroethylene	0.02	0.018	90	0.02	0.018	90	0	30	80-120	
trans-1,3-Dichloropropene	0.02	0.017	85	0.02	0.016	80	6.1	30	71.5-124	
Trichloroethylene	0.02	0.017	85	0.02	0.017	85	0	30	69.2-133	
Trichlorofluoromethane	0.02	0.018	90	0.02	0.019	95	5.4	30	63.9-140	
Vinyl Chloride	0.02	0.019	95	0.02	0.018	90	5.4	30	40.9-159	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds Method : SW-846 8260C Reporting Units : mg/L

QC Batch ID : Qb12121007 Created Date : 12/06/12 Created By : KKrch

Samples in This QC Batch : 12111246.06,11

Sample Preparation : PB12121005 Prep Method : SW-846 5030C Prep Date : 12/06/12 11:00 Prep By : KKrch

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
1,1,1,2-Tetrachloroethane	630-20-6	BRL	mg/L	1	0.005	
1,1,1-Trichloroethane	71-55-6	BRL	mg/L	1	0.005	
1,1,2,2-Tetrachloroethane	79-34-5	BRL	mg/L	1	0.005	
1,1,2-Trichloroethane	79-00-5	BRL	mg/L	1	0.005	
1,1-Dichloroethane	75-34-3	BRL	mg/L	1	0.005	
1,1-Dichloroethylene	75-35-4	BRL	mg/L	1	0.005	
1,1-Dichloropropene	563-58-6	BRL	mg/L	1	0.005	
1,2,3-trichlorobenzene	87-61-6	BRL	mg/L	1	0.005	
1,2,3-Trichloropropane	96-18-4	BRL	mg/L	1	0.005	
1,2,4-Trichlorobenzene	120-82-1	BRL	mg/L	1	0.005	
1,2,4-Trimethylbenzene	95-63-6	BRL	mg/L	1	0.005	
1,2-Dibromo-3-chloropropa	96-12-8	BRL	mg/L	1	0.005	
1,2-Dibromoethane	106-93-4	BRL	mg/L	1	0.006	
1,2-Dichlorobenzene	95-50-1	BRL	mg/L	1	0.005	
1,2-Dichloroethane	107-06-2	BRL	mg/L	1	0.005	
1,2-Dichloropropane	78-87-5	BRL	mg/L	1	0.006	
1,3,5-Trimethylbenzene	108-67-8	BRL	mg/L	1	0.005	
1,3-Dichlorobenzene	541-73-1	BRL	mg/L	1	0.005	
1,3-Dichloropropane	142-28-9	BRL	mg/L	1	0.005	
1,4-Dichlorobenzene	106-46-7	BRL	mg/L	1	0.005	
2,2-Dichloropropane	594-20-7	BRL	mg/L	1	0.005	
2-Chlorotoluene	95-49-8	BRL	mg/L	1	0.005	
4-Chlorotoluene	106-43-4	BRL	mg/L	1	0.005	
4-Isopropyltoluene	99-87-6	BRL	mg/L	1	0.005	
Benzene	71-43-2	BRL	mg/L	1	0.005	
Bromobenzene	108-86-1	BRL	mg/L	1	0.005	
Bromochloromethane	74-97-5	BRL	mg/L	1	0.006	
Bromodichloromethane	75-27-4	BRL	mg/L	1	0.006	
Bromoform	75-25-2	BRL	mg/L	1	0.005	
Bromomethane	74-83-9	BRL	mg/L	1	0.005	
Carbon tetrachloride	56-23-5	BRL	mg/L	1	0.006	
Chlorobenzene	108-90-7	BRL	mg/L	1	0.005	
Chloroethane	75-00-3	BRL	mg/L	1	0.006	
Chloroform	67-66-3	BRL	mg/L	1	0.006	
Chloromethane	74-87-3	BRL	mg/L	1	0.005	
cis-1,2-Dichloroethylene	156-59-2	BRL	mg/L	1	0.005	
cis-1,3-Dichloropropene	10061-01-5	BRL	mg/L	1	0.006	
Dibromochloromethane	124-48-1	BRL	mg/L	1	0.005	
Dibromomethane	74-95-3	BRL	mg/L	1	0.005	
Dichlorodifluoromethane	75-71-8	BRL	mg/L	1	0.006	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds

Method : SW-846 8260C

Reporting Units : mg/L

QC Batch ID : Qb12121007 **Created Date :** 12/06/12

Created By : KKrch

Samples in This QC Batch : 12111246.06,11

QC Type: Method Blank						
Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Ethylbenzene	100-41-4	BRL	mg/L	1	0.005	
Isopropylbenzene	98-82-8	BRL	mg/L	1	0.005	
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/L	1	0.01	
MEK	78-93-3	BRL	mg/L	1	0.005	
Methylene chloride	75-09-2	BRL	mg/L	1	0.005	
Naphthalene	91-20-3	BRL	mg/L	1	0.005	
n-Butylbenzene	104-51-8	BRL	mg/L	1	0.005	
n-Propylbenzene	103-65-1	BRL	mg/L	1	0.005	
o-Xylene	95-47-6	BRL	mg/L	1	0.005	
sec-Butylbenzene	135-98-8	BRL	mg/L	1	0.005	
Styrene	100-42-5	BRL	mg/L	1	0.005	
t-butylbenzene	98-06-6	BRL	mg/L	1	0.005	
Tetrachloroethylene	127-18-4	BRL	mg/L	1	0.006	
Toluene	108-88-3	BRL	mg/L	1	0.005	
trans-1,2-Dichloroethylene	156-60-5	BRL	mg/L	1	0.005	
trans-1,3-Dichloropropene	10061-02-6	BRL	mg/L	1	0.005	
Trichloroethylene	79-01-6	BRL	mg/L	1	0.005	
Trichlorofluoromethane	75-69-4	BRL	mg/L	1	0.005	
Vinyl Chloride	75-01-4	BRL	mg/L	1	0.005	
Xylenes	1330-20-7	BRL	mg/L	1	0.015	
Dibromofluoromethane(surr)	1868-53-7	97	%	1	70-130	
1,2-Dichloroethane-d4(surr)	17060-07-0	76.7	%	1	70-130	
Toluene-d8(surr)	2037-26-5	102	%	1	70-130	
p-Bromofluorobenzene(surr)	460-00-4	120	%	1	70-130	

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.018	90	0.02	0.017	85	5.7	12	86.6-113	
1,1,1-Trichloroethane	0.02	0.019	95	0.02	0.019	95	0	13	76.9-125	
1,1,2,2-Tetrachloroethane	0.02	0.017	85	0.02	0.016	80	6.1	20	74.4-125	
1,1,2-Trichloroethane	0.02	0.018	90	0.02	0.019	95	5.4	14	82.4-117	
1,1-Dichloroethane	0.02	0.02	100	0.02	0.02	100	0	12	74.5-125	
1,1-Dichloroethylene	0.02	0.019	95	0.02	0.019	95	0	12	75.4-124	
1,1-Dichloropropene	0.02	0.019	95	0.02	0.019	95	0	12	76.9-125	
1,2,3-trichlorobenzene	0.02	0.02	100	0.02	0.012	60	50	20	70.8-125	L2,R1
1,2,3-Trichloropropane	0.02	0.018	90	0.02	0.017	85	5.7	22	69.6-126	
1,2,4-Trichlorobenzene	0.02	0.022	110	0.02	0.013	65	51.4	16	74.8-121	L2,R1
1,2,4-Trimethylbenzene	0.02	0.02	100	0.02	0.016	80	22.2	12	80.4-114	R4

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds Method : SW-846 8260C Reporting Units : mg/L

QC Batch ID : Qb12121007 Created Date : 12/06/12 Created By : KKrch

Samples in This QC Batch : 12111246.06,11

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,2-Dibromo-3-chloropropa	0.02	0.018	90	0.02	0.016	80	11.8	27	61.7-140	
1,2-Dibromoethane	0.02	0.019	95	0.02	0.019	95	0	15	80.6-118	
1,2-Dichlorobenzene	0.02	0.02	100	0.02	0.016	80	22.2	11	82.6-113	R4
1,2-Dichloroethane	0.02	0.016	80	0.02	0.017	85	6.1	14	72.8-126	
1,2-Dichloropropane	0.02	0.02	100	0.02	0.02	100	0	13	82.4-120	
1,3,5-Trimethylbenzene	0.02	0.02	100	0.02	0.017	85	16.2	10	81.3-114	R4
1,3-Dichlorobenzene	0.02	0.02	100	0.02	0.016	80	22.2	11	83.4-113	R4
1,3-Dichloropropane	0.02	0.016	80	0.02	0.016	80	0	16	79.8-115	
1,4-Dichlorobenzene	0.02	0.02	100	0.02	0.016	80	22.2	11	82.6-113	R4
2,2-Dichloropropane	0.02	0.019	95	0.02	0.018	90	5.4	15	69.4-131	
2-Chlorotoluene	0.02	0.021	105	0.02	0.016	80	27	17	77.8-118	R4
4-Chlorotoluene	0.02	0.019	95	0.02	0.015	75	23.5	15	78.8-117	R4
4-Isopropyltoluene	0.02	0.02	100	0.02	0.017	85	16.2	11	80.9-114	R4
Benzene	0.02	0.02	100	0.02	0.019	95	5.1	11	84.1-118	
Bromobenzene	0.02	0.02	100	0.02	0.017	85	16.2	12	82.8-116	R4
Bromochloromethane	0.02	0.02	100	0.02	0.021	105	4.9	15	70.7-131	
Bromodichloromethane	0.02	0.018	90	0.02	0.018	90	0	12	83.1-119	
Bromoform	0.02	0.018	90	0.02	0.018	90	0	20	70.3-136	
Bromomethane	0.02	0.022	110	0.02	0.023	115	4.4	23	59-134	
Carbon tetrachloride	0.02	0.018	90	0.02	0.018	90	0	13	74.6-129	
Chlorobenzene	0.02	0.02	100	0.02	0.017	85	16.2	11	87.8-110	R4
Chloroethane	0.02	0.021	105	0.02	0.022	110	4.7	13	73.7-124	
Chloroform	0.02	0.018	90	0.02	0.019	95	5.4	10	76.4-124	
Chloromethane	0.02	0.018	90	0.02	0.018	90	0	15	59.4-138	
cis-1,2-Dichloroethylene	0.02	0.02	100	0.02	0.019	95	5.1	15	74.3-124	
cis-1,3-Dichloropropene	0.02	0.019	95	0.02	0.019	95	0	11	84.6-117	
Dibromochloromethane	0.02	0.017	85	0.02	0.017	85	0	13	81.6-118	
Dibromomethane	0.02	0.018	90	0.02	0.02	100	10.5	16	75.8-126	
Dichlorodifluoromethane	0.02	0.016	80	0.02	0.017	85	6.1	15	44.4-149	
Ethylbenzene	0.02	0.019	95	0.02	0.016	80	17.1	12	82.8-114	R4
Isopropylbenzene	0.02	0.019	95	0.02	0.017	85	11.1	11	86.8-113	R4
m- & p-Xylenes	0.04	0.037	92.5	0.04	0.032	80	14.5	10	76.9-122	R4
MEK	0.02	0.02	100	0.02	0.02	100	0	42	44.9-154	
Methylene chloride	0.02	0.023	115	0.02	0.024	120	4.3	13	67.3-130	
Naphthalene	0.02	0.019	95	0.02	0.011	55	53.3	27	55.8-136	R4
n-Butylbenzene	0.02	0.019	95	0.02	0.015	75	23.5	20	74.1-120	r4
n-Propylbenzene	0.02	0.02	100	0.02	0.017	85	16.2	12	78.9-115	R4
o-Xylene	0.02	0.018	90	0.02	0.016	80	11.8	11	86-111	R4
sec-Butylbenzene	0.02	0.021	105	0.02	0.017	85	21.1	12	80.2-115	R4
Styrene	0.02	0.02	100	0.02	0.016	80	22.2	12	86.7-111	R4
t-butylbenzene	0.02	0.02	100	0.02	0.019	95	5.1	14	80.7-116	
Tetrachloroethylene	0.02	0.02	100	0.02	0.019	95	5.1	27	77.9-126	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 12111246

Date : 12/10/2012

Analysis : Volatile Organic Compounds Method : SW-846 8260C Reporting Units : mg/L

QC Batch ID : Qb12121007 Created Date : 12/06/12 Created By : KKrch

Samples in This QC Batch : 12111246.06,11

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Toluene	0.02	0.019	95	0.02	0.017	85	11.1	12	85.9-110	R1
trans-1,2-Dichloroethylene	0.02	0.019	95	0.02	0.019	95	0	12	73.7-124	
trans-1,3-Dichloropropene	0.02	0.017	85	0.02	0.017	85	0	14	83-114	
Trichloroethylene	0.02	0.019	95	0.02	0.018	90	5.4	12	85.4-114	
Trichlorofluoromethane	0.02	0.017	85	0.02	0.019	95	11.1	12	74.3-126	
Vinyl Chloride	0.02	0.017	85	0.02	0.018	90	5.7	17	68-129	
Xylenes	0.06	0.055	91.7	0.06	0.048	80	13.6	9	81.2-117	R4

Refer to the Definition page for terms.

10100 East Fwy (I-10)
Suite 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com



A&B JOB ID # 1211246
Project # ME101872A.1

1. REPORT TO:
Company: **HVS ASSOCIATES**
Address: **6205 DUNE ASHFOR**
HOUSTON, TX 77022
Contact: **ED HAWKINSON**
Phone: **281.983.8829**
Fax: **281.933.7293**
E-mail: **EHAWKINSON@HVS.COM**

2. INVOICE TO:
Company: **SAME AS REPORT TO**
Address:
Contact:
Phone:
Fax:
E-mail:

3. PO # **12-300**
3a. A&B Quote #
4. Turnaround Time (Business Days)
 1 Day Other:
 2 Days* Surcharge applies
 3 Days*
 Days - Standard

6. Project Name/Location **PINEMONT ST. RECONSTRUCTION**
PINEMONT ST. BETWEEN ELLA AND N. SHERIDAN

13. Containers*
15. Preservatives**
16. PH-Lab Only
17. **ANALYSES/METHODS**
TRIA-TMTRAE
VOC
METALS

7. Reporting Requirement:
 TRRP Limits only TRRP Rpt. Package See Attached Standard Level II PST MDL EDD

8. Sampler's Name & Company (PLEASE PRINT) **Ed Hawkinson, HVS ASSOCIATES** Sampler's Signature & Date: *[Signature]* **11/29/12**

LAB USE ONLY	9. Sample ID and Description	10. Sampling		11. 12. Matrix							18. REMARKS															
		Date	Time 24hr	Comp.	Grab	Water	Soil	Sludge	Oil	Drinking Water		Air	Other													
	08A EB6 (8-12)	11/29/12	1100		X																					
	09A EB7 (12-16)	11/29/12	900		X																					
	10AB EB8 (16-20)	11/29/12	945		X																					
	11A-F EBE	11/29/12	1000		X																					
	12AB EB9 (12-14)	11/29/12	1030		X																					
	13AB EB10 (12-16)	11/29/12	1100		X																					
	14A-F EB10	11/29/12	1115		X																					

19. CONTAINERS USED BY: **[Signature]**
1. **Allison Diamond** DATE: **11/29/12** TIME: **900**
2. **Allison Diamond** DATE: **11/29/12** TIME: **1357**
3.

*Containers: VOA - 40 ml vial A/G - Amber/Glass 1 Liter
4 oz/8 oz - glass wide mouth P/O - Plastic/Other

METHOD OF SHIPMENT: **TRUCK**

LAB USE ONLY: **SAMPLING** RENTAL: **P/U**

20. RECEIVED BY: **Allison Diamond** DATE: **11/29/12** TIME: **12:43**
[Signature] DATE: **11/29/12** TIME: **1351**

21. KNOWN HAZARDS/COMMENTS
Temperature: **4.9** °C
Thermometer ID: **111601055**
Intact Y/N: **Y** Initials: **A.D.**

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091
Samples will be disposed of after 30 days
A&B reserves the right to refuse service

1. REPORT TO:
 Company: HVJ ASSOCIATES
 Address: 622 S. DAWY AVE #202
HOUSTON, TX 77072
 Contact: ED HANKINSON
 Phone: 281.98.8824
 Fax: 281.93.7243
 E-mail: EHANKINSON@HVJ.COM

2. INVOICE TO:
 Company: SAME AS REPORT TO
 Address: _____
 Contact: _____
 Phone: _____
 Fax: _____
 E-mail: _____

3. PO # 12-300
3a. A&B Quote # _____
4. Turnaround Time (Business Days)
 1 Day* Other:
 2 Days* *Surcharge applies
 3 Days* 7 Days - Standard

5. Project # HE1018720.1

6. Project Name/Location PINEMONT ST. RECONSTRUCTION
PINEMONT BETWEEN FM AND N. STANLEY

7. Reporting Requirement:
 TRRP Limits only TRRP Rpt. Package See Attached Standard Level II PST MDL EDD

8. Sampler's Name & Company (PLEASE PRINT) Ed Hankinson, HVJ ASSOCIATES
Sampler's Signature & Date [Signature] _____

LAB USE ONLY	9. Sample ID and Description	10. Sampling		11. Matrix							18. REMARKS							
		Date	Time 24hr	Comp.	Grab	Water	Soil	Sludge	Oil	Drinking Water		Air	Other					
	<u>15AB EB 11 (8-12)</u>	<u>11/29/12</u>	<u>1200</u>															
	<u>10AB EB 12 (12-16)</u>	<u>11/29/12</u>	<u>1200</u>															

13. Containers* _____

14. Containers* _____

15. Preservatives** _____

16. PH-Lab Only _____

17. Analyses/Methods GREX + METALS

19. RELINQUISHED BY [Signature]

20. RECEIVED BY Allison Diamond

DATE 11/29/12 **TIME** 13:51

DATE 11/29/12 **TIME** 12:43

21. KNOWN HAZARDS/COMMENTS

Temperature: 4.9 °C

Thermometer ID: 111601055

Intact: Y N Initials: AJD

A&B cannot accept verbal changes
 Please FAX written changes to 713-453-6091

***Containers:** VOA - 40 ml vial A/G - Amber/Glass 1 Liter S - H₂SO₄
 4 oz/8 - oz - glass wide mouth P/O - Plastic/other N - HNO₃ H - HCl X - Other

****Preservatives:** C - Cool OH - NaOH T - Na₂S₂O₃ X - Other

BILL OF LADING/TRACKING # _____

METHOD OF SHIPMENT _____

LAB USE ONLY **SAMPLING** _____ **RENTAL** _____ **P/U** _____



Sample Condition Checklist

A&B JobID : 12111246	Date Received : 11/29/2012	Time Received : 1:51PM	
Client Name : HVJ Associates			
Temperature : 4.9°C	Sample pH : N/A		
Thermometer ID : 111601055	pH Paper ID : N/A		
Check Points			
	Yes	No	N/A
1. Cooler seal present and signed.		X	
2. Sample(s) in a cooler.	X		
3. If yes, ice in cooler.	X		
4. Sample(s) received with chain-of-custody.	X		
5. C-O-C signed and dated.	X		
6. Sample(s) received with signed sample custody seal.		X	
7. Sample containers arrived intact. (If no comment).	X		
8. Matrix	Water	Soil	Liquid
	Sludge	Solid	Cassette
	Tube	Bulk	Badge
	Food	Other	
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Sample(s) were received in appropriate container(s).		X	
10. Sample(s) were received with proper preservative		X	
11. All samples were logged or labeled.		X	
12. Sample ID labels match C-O-C ID's		X	
13. Bottle count on C-O-C matches bottles found.		X	
14. Sample volume is sufficient for analyses requested.		X	
15. Samples were received within the hold time.		X	
16. VOA vials completely filled.		X	
17. Sample accepted.		X	
Comments : Include actions taken to resolve discrepancies/problem:			
Sample 14: No analysis marked on COC.			

Received by : CCripe

Check in by/date : CCripe / 11/29/2012

APPENDIX D
WASTE DISPOSAL DOCUMENTATION



Requested Disposal Facility: 5113 McCarty Road LF TX

Waste Profile #
Sales Rep #.

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: HVJ and Associates			
Generator Site Address: Along Scenic Ridge, 1800 Sherwood Forest Houston, Texas			
City: Houston	County: Harris	State: Texas	Zip: 77017
State ID/Reg No: TXCESQG	State Approval/Waste Code: CESQ3192	(if applicable)	NAICS # : NA
Generator Mailing Address (if different): 6120 S. Dairy Ashford			
City: Houston	County: Harris	State: Texas	Zip: 77072
Generator Contact Name: Ed Hawkinson		Email: Ehawkinson@@HVJ.com	
Phone Number: (281) 983-8829	Ext:	Fax Number: (713) 425-6956	

Iia. Transporter Information

Transporter Name: USA Waste Transportation Services		Contact Name: Debbie Jorgensen	
Transporter Address: 10234 Lucore Street			
City: Houston	County: Harris	State: Texas	Zip: 77017
Phone Number: (713) 335-9776	Fax Number: (713) 425-6956	State Transportation Number: 86133	

Iib. Billing Information

Bill To: USA Environment, L.P. 2067-TD-H015		Contact Name: Debbie Jorgensen	
Billing Address: 10234 Lucore Street		Email: djorgensen@usaenviro.com	
City: Houston	State: Texas	Zip: 77017	Phone: (713) 335-9750

III. Waste Stream Information

Name of Waste: Preconstruction investigative sampling of soils for City of Houston
Process Generating Waste: Used a geoprobe to take samples of the soil at multiple locations along Scenic Ridge, 1800 Sherwood Forest in Houston, Texas to determine if there are any contaminated areas prior to construction activities by the City of Houston
Physical State: <input checked="" type="checkbox"/> SOLID <input type="checkbox"/> SEMI-SOLID <input type="checkbox"/> POWDER <input type="checkbox"/> LIQUID
Method of Shipment: <input type="checkbox"/> BULK <input checked="" type="checkbox"/> DRUM <input type="checkbox"/> BAGGED <input type="checkbox"/> OTHER:
Estimated Annual Volume: 1 Drums
Frequency: <input checked="" type="checkbox"/> ONE TIME <input type="checkbox"/> ANNUAL
Disposal Consideration: <input checked="" type="checkbox"/> LANDFILL <input type="checkbox"/> SOLIDIFICATION <input type="checkbox"/> BIOREMEDIATION

IV. Representative Sample Certification

NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	<input checked="" type="checkbox"/> YES or <input type="checkbox"/> NO
Sample Date: 11/27/12	Type of Sample: <input checked="" type="checkbox"/> COMPOSITE SAMPLE <input type="checkbox"/> GRAB SAMPLE
Sample ID Numbers: EB1, EB2, EB3	



Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Soil	100.000
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
Brown	none	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No	100.00	NA	>200 °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and it epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm) [reference 40 CFR 261.23(a)(5)]?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this waste a reactive or heat generating waste?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does the waste contain sulfur or sulfur by-products?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this waste generated at a Federal Superfund Clean Up Site?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this waste from a TSD facility, TSD-like facility or waste consolidator?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither I nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Ed Hawkinson/Project Manager

HVJ and Associates

Authorized Representative Name/Title (Type or Print)

Company Name



01/07/2013

Authorized Representative Signature

Date



NON-HAZARDOUS WASTE MANIFEST

0981171

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address HVJ and Associates 1800 Sherwood Forest Houston, TX 77017				5. Generating Location (if different) SAME				
4. Phone () 281-983-8829				6. Phone ()				
7. Transporter #1 Company Name USA Waste Transportation Services			8. US EPA ID Number TXR000032045		9. Transporter #1's Phone 713-425-6900			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address MC CARTY ROAD LF TX, LP #261A 11013 OLD BEAUMONT HWY HOUSTON, TX 77078			14. US EPA ID Number		15. Facility's Phone 713-671-1550			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type		
a. SOIL CUTTINGS			5113130338 CESA 319a		1	DM	175	P
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above USA JOB/PO # 2007-10-11								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Weinman				Signature Steve Weinman		Month 01	Day 10	Year 13
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name L. DeMone Hatch				Signature L. DeMone Hatch		Month 1	Day 14	Year 13
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033