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# PHASE II ENVIRONMENTAL ASSESSMENT LIMITED SUBSURFACE INVESTIGATION

PROPERTY REFERENCE: Rochdale Village 169-55 137th Avenue, Queens, New York



# Phase II Environmental Assessment Limited Subsurface Investigation

#### Prepared for:

Wells Fargo Multifamily Capital 375 Park Avenue, 9th Floor New York, NY 10152

# **Property Identification**

Rochdale Village 169-55 137<sup>th</sup> Avenue Queens, New York

#### Prepared by:

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> September 17, 2010 GRS Project #: 10-07561

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#### INTRODUCTION

This report documents the results of work completed in accordance with the agreement governing the nature and extent of the assessment. Conditions may exist which could not be identified as a result of this investigation.

#### **PURPOSE**

This investigation was intended as a screen to evaluate soil and groundwater conditions in identified areas of concern in order to determine the related likelihood of a significant, related release as identified below. The assessment is not intended to identify additional areas of concern or to evaluate the potential for release of other chemicals of concern, or to identify the full lateral and vertical extent of release, determine appropriate cleanup actions, or develop a detailed estimate of costs to correct concerns identified.

#### **BACKGROUND INFORMATION**

This assessment is based on the following prior investigation:

Phase I Environmental Site Assessment (Phase I ESA) – GRS Group, 10-05898.1 – 5/25/10

The Property currently consists of Rochdale Village, an approximately 115-acre residential community that was developed sometime in the 1960s. In addition to the multi-story apartment buildings, the Property also contains a power plant, two shopping malls, a gasoline station, medical offices, a community center, a management office, asphalt-paved vehicle parking lots, outdoor seating areas, and children's playgrounds. Landscaping, gardens, and concrete pedestrian walkways are also present onsite.

Information provided shows the Property to have been developed in the early 1900s as the Jamaica Racetrack for thoroughbred horses. Developments associated with these operations included a grandstand, clubhouse, paddock and jockey house, carriage shed, betting ring, field stand, numerous stables, and a residential dwelling. By the mid 1920s, several of the smaller buildings were demolished and by the early 1940s, a modernized grandstand was constructed. The racetrack remained unchanged until these operations ceased in 1959 and the structures razed in 1960. Rochdale Village was developed on-site sometime between 1962 and 1965, and has remained unchanged since that time.

The following Recognized Environmental Conditions (RECs) were identified as part of the Phase I ESA that were assessed during this Phase II subsurface investigation:

 OB's Bakery – A fill port and vent pipe for an existing 1,500-gallon fuel oil underground storage tank (UST) was identified on-site. This UST is used for the baking activities conducted. No information regarding any recent integrity testing of the UST was available for review;



- HIP Cleaners This tenant has been located at the Property since at least 1967 and dry cleaning operations have been performed on-site. The dry cleaning equipment was observed to be situated on an epoxy-coated floor and within a containment room. The dry cleaning equipment is a closed loop system. HIP Cleaners was identified in the regulatory database report as a hazardous waste generator due to the presence of waste water, sludge and lint that are removed from the Property on a general basis by an outside contractor. Additionally, one or potentially two USTs were situated on the rear of this tenant space. No tightness testing results were available for this system;
- JS Rochdale Cleaners This tenant has been located at the Property since 1996; however, this unit had historically been occupied by Rochdale Village Cleaners in the past. Both tenants performed dry cleaning operations. The present dry cleaning equipment was situated within a containment room and on an epoxy-covered floor. The dry cleaning equipment is a closed loop system. JS Rochdale was identified in the regulatory database report as a hazardous waste generator due to the presence of waste water, sludge and lint that are removed from the Property on a general basis by an outside contractor. Several hazardous waste containers were noted throughout the tenant space, outside of the containment room, and the flooring in this vicinity was noted to be in poor condition. No direct evidence of the presence of any USTs was directly identified on the exterior of this tenant space; however, visual limitations were encountered in this vicinity precluding observation of this area. The facility was identified in the regulatory database report as having a release of fuel oil that occurred in 1995. Therefore, it appeared that there was a potential for the existence of the presence of a UST at this facility.

As a result, GRS Group recommended a Phase II Investigation to evaluate possible impacts from the previous use of petroleum products and hazardous materials on the Property. The following additional actions were recommended:

- A geophysical survey, consisting of a ground penetrating radar (GPR) survey, to determine the presence or absence of USTs; and
- A limited subsurface investigation to determine whether subsurface media (soil and/or groundwater) has been impacted.

No other RECs or issues of concern were included in this investigation.

A Topographic Map of the Property and the surrounding area is included in Appendix A. According to United States Geological Survey (USGS), Jamaica, New York Topographic Map, 1966 (photorevised 1979), the Property is located approximately 20 feet above mean sea level (msl) and the parcel is generally flat with little change in elevation. The inferred direction of groundwater flow is to the west-northwest and to the southwest, depending upon the on-site location. However, site-specific groundwater flow conditions may be different. According to the USGS, the estimated depth to

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groundwater at the Property is approximately 14 feet below ground surface (bgs). The geology of the Property is comprised of Cenozoic age or thick glacial deposits (Brock and Brock, Geological Map of New York City, 2001) characterized by soils of the Flatbush-Riverhead-Pavement and Building Complex (New York City Soil and Water Conservation District, New York City Reconnaissance Soil Survey, 2009).

#### **SCOPE OF WORK**

#### **Health and Safety Plan**

GRS developed a Health and Safety Plan that was specific to the Property. The development of this plan is required by the Occupational Safety and Health Administration (OSHA) under Hazardous Waste Operations & Emergency Response 29 CFR 1910.120. The Health and Safety Plan was designed to reduce the risk of physical or chemical exposures that may affect on-site workers in the proposed work area. The Health and Safety Plan includes information about chemicals expected on the property, health and safety procedures, and emergency response procedures. The Health and Safety Plan is on file at our office.

#### **Utility Locating**

A utility inspection was performed at the Property at least 72 hours prior to the initiation of the subsurface investigation, as required by New York State law. This inspection consisted of the marking the underground utility locations by authorized utility locating personnel. The utility ticket numbers were 102-320-550, and 102-320-565, dated August 24, 2010. In addition, some of these locations were confirmed during the geophysical survey on both the interior and exterior portions of the tenant spaces occupied by the JS Rochdale Cleaners and HIP Cleaners units.

#### **Permits**

The City of New York does not currently require drilling permits for the installation of soil borings and temporary well points that are not in the public right-of-way.

# **Subsurface Investigation**

# Geophysical Survey

On August 27, 2010, a geophysical survey was performed on the interior and exterior portions of the tenant suites occupied by the JS Rochdale Cleaners and HIP Cleaners. The survey was performed by Enviroprobe Service Inc. (Enviroprobe) of Moorestown, New Jersey and consisted of an electromagnetic (EM) and ground penetrating radar (GPR) survey. The EM survey was intended to detect a ferrous or non-ferrous UST image and the GPR was intended to detect a UST image or subsurface soil anomalies that may indicate a former UST excavation. Additionally, the GPR survey was additionally used to identify underground utilities on both the exterior and interior portions of the tenant units. The GPR survey identified evidence of one UST on the exterior west side of the HIP Cleaners space. Enviroprobe additionally observed a vent pipe on the exterior north side of the JS Rochdale Cleaners unit; however,

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due to access limitations, this area could not be directly surveyed to confirm the presence of a UST at this location. Visual evidence of appurtenances associated with USTs (i.e., fill port and vent pipe) were additionally observed on the exteriors of both of these tenant spaces during. The geophysical survey report is attached in Appendix E.

#### **Borings**

On August 31, 2010, a total of 10 soil borings were advanced at the Property. Of the 10 soil boring locations (designated as SB1 through SB10), four were advanced on the interior and five on the exterior of the two dry cleaner tenant spaces, and one was installed on the exterior of the bakery. The interior boring locations were advanced using a core drill and hand tools while the exterior borings were installed using a Geoprobe hydraulic push drill rig. The boring locations are illustrated on a site plan provided in the Appendix A.

- JS Rochdale Cleaners SB1 and SB2 were completed on the interior of this tenant space and on the west and south sides, respectively, of the containment room for the dry cleaning equipment. SB1 and SB2 were installed to terminal depths of 6.0 and 5.5 feet below grade. SB3 and SB5 were advanced on the exterior north and south sides of this tenant space. SB3 was situated on the east side of the UST and was advanced to a final depth of 16.0 feet bgs. It should be noted that due to the presence of groundwater, SB3 was converted into temporary well point TW1. SB5 was located in the vicinity of the front or main entrance to this tenant unit and just beyond the overhang for the building. SB5 was advanced to a terminal depth of 8.0 feet below grade, which corresponded to the depth where refusal occurred.
- OB's Bakery Soil boring location SB4 was advanced on the west side of the UST identified on the exterior north side of this tenant space. SB4 was advanced to a terminal depth of 16.0 feet bgs.
- HIP Cleaners SB7 and SB8 were advanced on the interior of this tenant space, in the vicinity of the dry cleaning equipment, just outside of the containment room and to the south and east, respectively. These borings were completed to final depths of 5.0 and 6.0 feet below grade. Soil boring locations SB6, SB9, and SB10 were all advanced on the exterior of this unit. SB6 and SB9 were installed on the rear or west side of this suite and on the west and south sides of the UST. These borings were installed to 12.0 and 8.0 feet bgs, respectively. SB6 was also converted into temporary well point location TW2 due to the presence of groundwater. SB10 had originally been proposed to be installed on the front or east side of the tenant space; however, due to access limitations associated with the width of the drill rig and the presence of an overhang for the building, this boring was placed on the north side of the unit. SB10 was actually situated on the exterior of the building, just beyond the interior dry cleaning equipment and was installed to a final depth of 8.0 feet below grade.

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### **Methodology**

Continuous soil samples were collected from borings SB3 through SB6, and SB9 and SB10 with a fourfoot long, stainless-steel macro core lined with disposable acetate sleeves to terminal depths ranging from 8.0 to 16.0 feet below grade. Bulk samples were collected in laboratory supplied glassware from the four borings advanced with the hand tools. The soil samples collected from each boring were field screened with a photoionization detector (PID) to screen for the presence of volatile organic vapors. Additionally, the visual or olfactory presence (i.e., staining, product, or odors) were also noted during the field screening process.

The following chemicals of concern would normally be expected to be associated with the identified areas of concern:

AREA OF CONCERN	CHEMICALS OF CONCERN	TEST METHODS
JS Rochdale	Chlorinated solvents	VOCs via USEPA Method 8260
Dry Cleaning	Ciliorinated solvents	VOCS VIA OSEFA IVIETITOU 8200
HIP Cleaners	Chlorinated solvents	VOCs via USEPA Method 8260
Dry Cleaning	Chiormated solvents	VOCS VIA USEPA IVIETIOU 8260
OB's Bakery	Petroleum hydrocarbons	VOCs via USEPA Method 8260
No. 2 fuel oil USTs	Petroleum nyurocarbons	PAHs via USEPA Method 8270

# **Soil Sampling**

The soil conditions encountered at the Property consisted mainly of brown, tan or orange-brown fine to medium sand with areas of silt and fill material. The sand became coarser with depth and also corresponded to where groundwater was identified. Soil boring logs are presented in Appendix C.

#### Photoionization Detector (PID)

No visual or olfactory indications of contamination were observed in the soil borings advanced at the Property. Elevated PID readings were identified in SB2, and SB6 through SB8. The highest PID reading in SB2 (5.0 parts per million or ppm) was encountered from the 0.5 to 2.0 foot interval. This boring was advanced on the interior of the JS Rochdale Cleaners tenant space. SB6 was installed on the exterior of the HIP Cleaners unit and in the vicinity of the UST. The highest PID reading for this boring location was 8.2 ppm at 2.0 to 3.5 feet below grade. SB7 and SB8 were both advanced on the interior of the HIP Cleaners unit and in the vicinity of the dry cleaning equipment. SB7 had a maximum PID reading or 95.2 ppm at 1.5 feet bgs, while SB8 had a maximum PID reading of 416 ppm at 6.0 feet below grade.

#### Sample Selection

Based upon the field observations, soil samples were collected for chemical analysis from each of the 10 boring locations advanced on-site. The table below details the area of concern investigated and its associated soil boring designation, along with the depth of the boring and the depth at which the corresponding soil sample was collected.

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AREA OF CONCERN	BORING	MAXIMUM DEPTH	SAMPLE DEPTH
JS Rochdale (DC/UST)	SB1	6.0'	3.0′-3.5′
JS Rochdale (DC/UST)	SB2	5.5′	1.5'-2.0'
JS Rochdale (DC/UST)	SB3	16.0′	8.5'-9.0'
OB's Bakery (UST)	SB4	16.0′	12.5′-13.0′
Dry Cleaning	SB5	8.0′	7.5′-8.0′
Hip Cleaning (DC/UST)	SB6	12.0′	3.0′-3.5′
Hip Cleaning (DC)	SB7	5.0′	1.5'-2.0'
Hip Cleaning (DC)	SB8	6.0'	5.5'-6.0'
Hip Cleaning (DC/UST)	SB9	8.0′	7.5′-8.0′
Hip Cleaning (DC)	SB10	8.0′	7.5′-8.0′

## **Groundwater Sampling**

Evidence of the presence of groundwater was identified in SB3, SB4, SB6, SB9, and SB10. Groundwater was identified at depths ranging between 6.0 feet below grade in SB6 to 13.0 feet bgs in SB4. In accordance with the scope of work, one soil boring advanced on the exterior of each of the dry cleaner tenant spaces was converted into a temporary well point. SB3, situated on the north side of the JS Rochdale Cleaners, was converted into temporary well point TW1, and SB6, positioned on the west side of the HIP Cleaners facility, was converted into temporary well point TW2. Each of the well points was purged prior to sample collection, which was conducted using a dedicated bailer and placed into laboratory supplied glassware.

# **Laboratory Analytical Results**

# **Soil Samples**

The soil samples were transported under chain of custody procedures to Pace Analytical Laboratories (Pace) of Greenburg, Pennsylvania, an NYSDEC certified laboratory. One soil sample was obtained from each of the 10 borings advanced at the Property and submitted for volatile organic compound (VOC) laboratory analysis via USEPA Method 8260 and polynuclear aromatic hydrocarbons (PAHs) via USEPA Method 8270. The results of the soil sampling were compared to the NYSDEC Unrestricted Soil Cleanup Objectives (SCO) promulgated under 6 NYCRR Part 375.

According to the laboratory report, evidence of a release was detected during this investigation.

ADEA OF CONCERN	DODING	SAMPLE	PCE	TCE
AREA OF CONCERN	BORING	DEPTH	MG/KG	MG/KG
JS Rochdale (DC/UST)	SB1	3.0'-3.5'	6.13	ND



ADEA OF CONCERN	BORING	SAMPLE	PCE	TCE
AREA OF CONCERN	BURING	DEPTH	MG/KG	MG/KG
JS Rochdale (DC/UST)	SB2	1.5'-2.0'	0.102	ND
JS Rochdale (DC/UST)	SB3	8.5'-9.0'	0.0417	ND
OB's Bakery (UST)	SB4	12.5'-13.0'	ND	ND
Dry Cleaning	SB5	7.5'-8.0'	0.0074	ND
Hip Cleaning (DC/UST)	SB6	3.0'-3.5'	0.0615	ND
Hip Cleaning (DC)	SB7	1.5'-2.0'	64.4	0.0128
Hip Cleaning (DC)	SB8	5.5'-6.0'	1.89	ND
Hip Cleaning (DC/UST)	SB9	7.5'-8.0'	0.27	0.0062
Hip Cleaning (DC)	SB10	7.5'-8.0'	0.579	0.0069

The concentrations of PCE (tetrachloroethylene) in soil samples SB1, SB7, and SB8 exceed the NYSDEC Unrestricted Use SCO of 1.3 mg/kg (milligrams per kilogram, parts per million). The remaining concentrations and the concentrations of TCE (trichloroethylene) are below the NYSDEC Unrestricted Use SCOs.

In addition, acetone was detected above the method detection limits in nine of ten samples. Concentrations in samples SB1, SB2, SB3, SB5, and SB7 exceed the NYSDEC Unrestricted Use SCO of 0.05 mg/kg; however, acetone is a common laboratory contaminant, and its detection is likely attributed to laboratory cross-contamination and not considered indicative of subsurface impact.

The laboratory report also indicated that several PAHs were detected in various soil samples, but at concentrations well below the NYSDEC Unrestricted Use SCOs.

No petroleum hydrocarbons constituents were detected above method detection limits.

# **Groundwater Samples**

Two groundwater samples, designated as TW1 and TW2, were obtained from temporary well points installed in soil boring locations SB3 and SB6, respectively. The groundwater samples were also transported under chain of custody procedures to Pace and were also submitted for VOC and PAH laboratory analysis. The results of the groundwater sampling were compared to the NYSDEC Groundwater Quality Standards (GQS) provided in 6 NYCRR Part 703.

ADEA OF CONCERN	TEMPORARY	PCE	OTHER VOCS
AREA OF CONCERN	WELL POINT	UG/L	UG/L
Hip Cleaning (DC/UST)	TW1 (SB6)	12.3	ND
Hip Cleaning (DC/UST)	TW2 (SB9)	12.3	ND

According to the laboratory report, evidence of release into groundwater has been detected during this investigation. Each of the groundwater samples from temporary well installed adjacent to the exterior



of the dry cleaners contained elevated levels of PCE in excess of the NYSDEC GQS of 5.0 ug/L. No other VOCs or PAHs were detected above the laboratory method detection limits.

#### CONCLUSIONS

Evidence of a release of hazardous materials was identified.

- Underground Storage Tanks No release from was detected in the area of underground storage tanks.
- Rochdale Cleaners Low concentrations of PCE (tetrachloroethylene) were identified in soil and groundwater. One soil sample and one groundwater sample contained elevated concentrations of PCE above the NYSDEC action level.
- Hip Cleaners Low concentrations of PCE (tetrachloroethylene) were identified in soil and groundwater. Two soil samples and one groundwater sample contained elevated levels of PCE above the NYSDEC action levels.

Because groundwater analytical results revealed the same concentration of PCE at both locations, GRS Group requested the laboratory to verify the results. Their review of quality control documents supports the reported values. As a result, there is a reasonable probability that identified ground water impacts stem from an off-site release.

# **Regulatory Requirements**

State regulations require the property owner to report any identified release which exceeds target cleanup levels.

#### Recommendations

GRS recommends that the findings of this investigation be reported to the NYSDEC.

# **Opinion of Remediation Costs**

Additional assessment of soil and groundwater would typically be expected to range from \$75,000 - \$150,000, with remedial actions in the range of \$100,000 - \$300,000. Costs associated with assessment and correction of the identified conditions are not expected to exceed \$500,000.

Final costs and time to complete the work are wholly dependent on the extent of assessment and remedial action required by NYSDEC.

#### **CERTIFICATION AND RELIANCE**

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The conclusions represent professional judgments founded upon the findings of the investigations identified in the report and the interpretation of such data based on our experience and expertise according to the existing standard of care. No other warranty or limitation exists, either expressed or implied.

The opinion of remediation costs provided herein is based upon available information, reflects our experience of costs associated with similar circumstances, and is not intended as a guarantee of maximum costs. The estimate is predicated on the assumptions that no impacts have migrated off-site and that conditions identified in this assessment are representative of overall conditions at the property.

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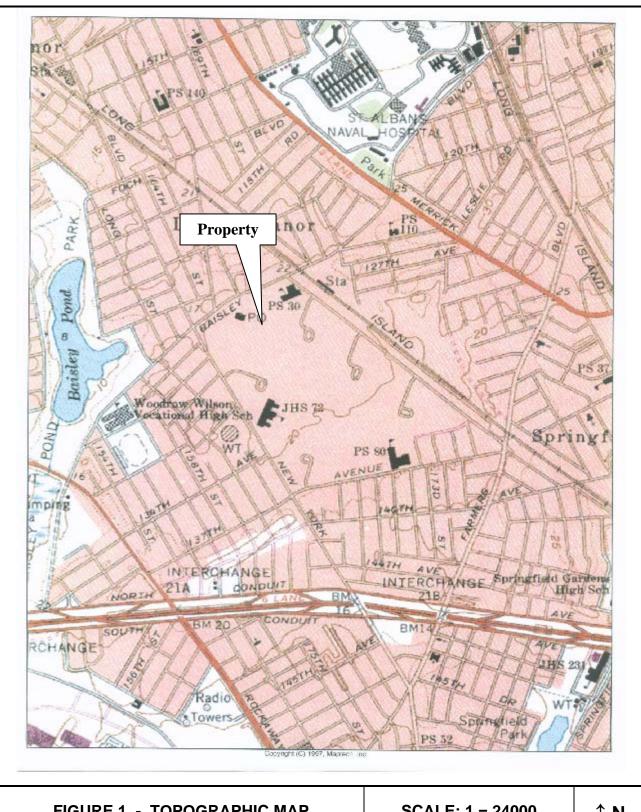
Susan Sisti

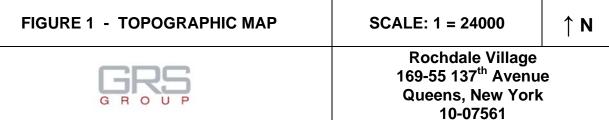
Field Professional

Austin Hewitt Field Professional

Bill Tryon Technical Director







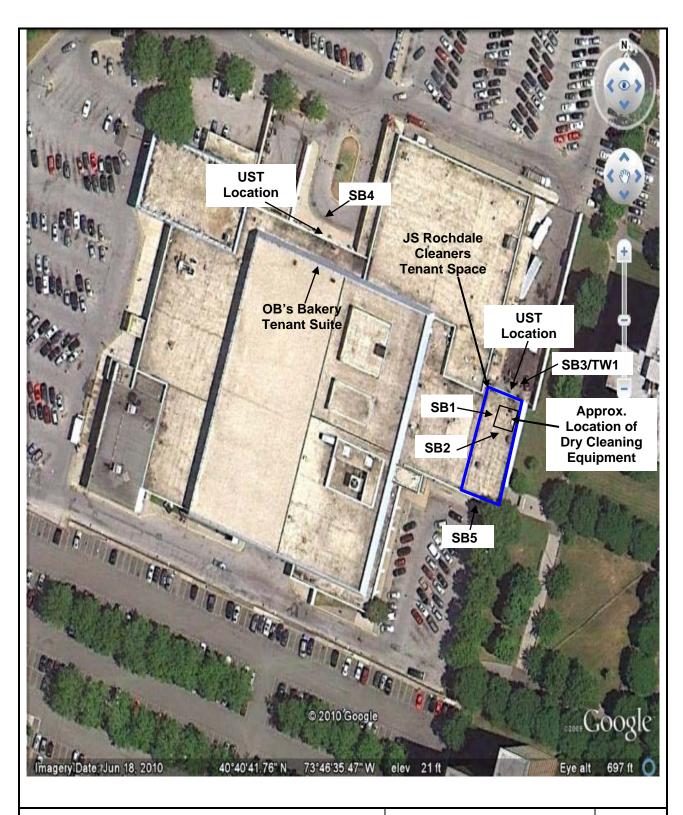


FIGURE 2 - JS ROCHDALE CLEANERS AND OB'S BAKERY BORING LOCATION MAP

SCALE: Aerial

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Rochdale Village 169-55 137<sup>th</sup> Avenue Queens, New York 10-07561

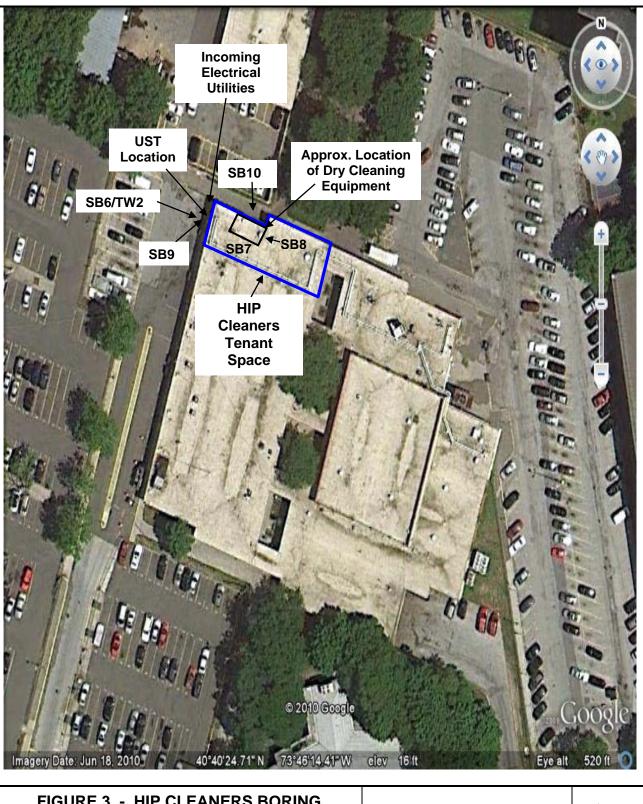


FIGURE 3 - HIP CLEANERS BORING
I OCATION MAP

SCALE: Aerial

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Rochdale Village 169-55 137<sup>th</sup> Avenue Queens, New York 10-07561

# TABLE 1 SUMMARY OF SOIL ANALYTICAL RESULTS ROCHDALE VILLAGE QUEENS, NEW YORK

Sample ID	SB1	SB2	SB3	SB4	SB5	SB6	SB7	SB8	SB9	SB10	NYSDEC
Sample Depth	3.0'-3.5'	1.5'-2.0'	8.5'-9.0'	12.5'-13.0'	7.5'-8.0'	3.0'-3.5'	1.5'-2.0'	5.5'-6.0'	7.5'-8.0'	7.5'-8.0'	Unrestricted Use
Sample Date	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	SCO
VOCs (USEPA 8260B)											
Acetone	0.124	0.0825	0.11	0.019	0.12	0.0473	0.111	ND	0.385	0.0481	0.05
2-butanone	ND	ND	ND	ND	ND	ND	ND	0.0296	ND	ND	0.12
Tetrachloroethylene	6.13	0.102	0.0417	ND	0.0074	0.0615	64.4	1.89	0.27	0.579	1.3
Trichloroethylene	ND	ND	ND	ND	ND	ND	0.0128	ND	0.0062	0.0069	0.47
PAHs (USEPA 8270C)											
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	0.0318	ND	100
Acenaphthylene	0.0383	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Benzo(a)anthracene	0.0371	0.0393	ND	ND	ND	ND	ND	ND	0.0326	ND	1
Benzo(a)pyrene	0.0561	0.0523	ND	ND	ND	ND	0.0347	ND	0.034	ND	1
Benzo(b)fluoranthene	0.0687	0.0636	ND	ND	ND	ND	0.0668	ND	0.0266	ND	1
Benzo(g,h,i)perylene	0.058	0.0478	ND	ND	ND	ND	0.0351	ND	0.0201	ND	100
Benzo(k)fluoranthene	0.0426	0.0472	ND	ND	0.0157	ND	0.0295	ND	0.0324	ND	0.8
Chrysene	0.0513	0.0586	ND	ND	0.0148	ND	0.0341	ND	0.0358	ND	1
Dibenz(a,h)anthracene	0.018	0.0198	ND	ND	ND	ND	0.0157	ND	ND	ND	0.33
Fluoranthene	0.0375	0.0713	ND	ND	ND	ND	ND	ND	0.0601	ND	100
Indeno(1,2,3-cd)pyrene	0.04	0.0384	ND	ND	ND	ND	0.0338	ND	0.019	ND	0.5
Phenanthrene	ND	0.071	ND	ND	ND	ND	ND	ND	0.0582	ND	100
Pyrene	0.0295	0.0913	ND	ND	ND	ND	ND	ND	ND	ND	100

#### Notes:

Concentrations reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

ND - Compound Not Detected

NC - No NYSDEC Criteria

NR - Compound Not Reported

BOLD - Result exceeds NYSDEC Soil Cleanup Objectives (SCO)

# TABLE 2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS ROCHDALE VILLAGE QUEENS, NEW YORK

Sample ID Sample Date	<b>TW1</b> 8/31/2010	<b>TW2</b> 8/31/2010	NYSDEC GW Standards
VOCs (USEPA 8260B)			
Tetrachloroethene	12.3	12.3	5
Remaining VOCs	ND	ND	Varies
PAHs (USEPA 8270C)			
Targeted PAHs	ND	ND	Varies

#### Notes:

All sample results are indicated in micrograms per liter (ug/l) or parts per billion (ppb) ND - Compound Not Detected

**Bold** - Results exceeds the NYSDEC criteria

Project No. 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe Hand Tools

Total Depth: 6.0 feet

Observed Depth to GW: N/A

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-0.5'	6"		Concrete.	0.0
0.5'-2.5'	18"		Brown fine to medium sand, trace gravel.	0.2
2.5'-3.5'	6"	SB1 3.0'-3.5'	Brown fine to medium sand, trace gravel, trace fill (brick).	4.4
3.5'-4.0'	6"		Fill (cinder and coal).	0.0
4.0'-5.0'	12"		Brown fine to medium sand, trace silt, trace fill (brick and cinder)	0.5
5.0'-6.0'	12"		Brown fine to medium sand, dry.	0.0

- Boring terminated at 6.0 feet below ground surface due to the limitations associated with the hand tools used in this location.
- Soil sample SB1 collected from 3.0'-3.5' below grade.

Project No. 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe Hand Tools

Total Depth: 5.5 feet

Observed Depth to GW: N/A

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-0.5'	6"		Concrete.	0.0
0.5'-2.0'	18"	SB2 1.5'-2.0'	Brown fine to medium sand, some gravel.	5.0
2.0'-4.0'	24"		Brown fine to medium sand, trace gravel.	2.7
4.0'-5.5'	18"		Brown fine to medium sand, trace gravel, dry.	0.9

- Boring terminated at 5.5 feet below ground surface due to the limitations associated with the hand tools used in this location.
- Soil sample SB2 collected from 1.5'-2.0' below grade.

# **BORING SB3/TW1**

<b>Project No</b> . 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe

Total Depth: 16.0 feet

**Observed Depth to GW:** 11.5 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-4.0'	2"		0.0'-0.5': Concrete. 0.5'-4.0': Brown fine to medium sand, trace silt, dry.	0.0
4.0'-8.0'	30"		4.0'-7.0': Brown fine to medium sand, trace silt. 7.0'-7.5': Rock (quartz). 7.5'-8.0': Brown fine to medium sand, trace silt, damp	0.0
8.0'- 12.0'	40"	SB3 8.5'-9.0'	8.0'-8.5': Brown fine to medium sand, trace silt. 8.5'-9.0': Brown silt, firm, damp. 9.0'-10.0': Brown fine to medium sand, trace silt, moist-wet. 10.0'-11.5': Brown medium to coarse sand, moist-wet. 11.5'-12.0': Rust medium to coarse sand, wet.	0.0
12.0'- 16.0'	48"		12.0'-13.0': Brown fine to medium sand. 13.0'-14.0': Brown medium to coarse sand. 14.0'-16.0': Tan and brown medium to coarse sand, some quartz gravel, wet.	0.0

- Boring terminated at 16.0 feet below ground surface due to the presence of groundwater.
- Soil sample SB3 collected from 8.5'-9.0' below grade
- Temporary well point TW1 installed in SB3 for the collection of a groundwater sample.

<b>Project No</b> . 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe

Total Depth: 16.0 feet

Observed Depth to GW: <u>13.0 feet</u>

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-4.0'	42"		0.0'-0.25': Asphalt. 0.25'-2.0': Tan fine to medium sand, trace gravel, dry. 2.0'-4.0': Brown fine to medium sand, trace silt, trace fill (concrete), damp.	0.0
4.0'-8.0'	46"		4.0'-5.0': Brown silt, trace clay, dry. 5.0'-5.5': Orange-brown fine to medium sand, trace silt. 5.5'-6.5': Orange-brown medium to coarse sand. 6.5'-7.5': Orange-brown fine to medium sand. 7.5'-8.0': Tan medium to coarse sand, damp.	0.0
8.0'- 12.0'	48"		8.0'-9.0': Brown fine to medium sand, some silt, damp. 9.0'-11.0': Tan fine to medium sand, trace gravel, dry. 11.0'-12.0': Orange-brown medium to coarse sand, damp.	0.0
12.0'- 16.0'	46"	SB4 12.5'- 13.0'	12.0'-12.5': Brown fine to medium sand, damp. 12.5'-13.0': Tan fine to medium sand, damp. 13.0'-13.5': Brown fine to medium sand, wet. 13.5'-16.0': Tan medium to coarse sand, wet.	0.0

- Boring terminated at 16.0 feet below ground surface due to the presence of groundwater in this location.
- Soil sample SB4 collected from 12.5'-13.0' below grade.

Project No. 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe

Total Depth: 8.0 feet

Observed Depth to GW: N/A
Depth of Refusal: 8.0 feet

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-4.0'	38"		0.0'-0.25': Organic material. 0.25'-2.0': Brown fine to medium sand, trace silt. 2.0'-2.25': Fill (cinder), dry. 2.25'-4.0': Brown fine to medium sand, some silt, damp.	0.0
4.0'-8.0'	46"	SB5 7.5'-8.0'	4.0'-4.5': Brown silt. 4.5'-5.0': Dark brown fine to medium sand, trace silt. 5.0'-7.0': Tan fine to medium sand. 7.0'-8.0': Dark brown fine to medium sand, trace gravel, dry. Refusal at 8.0'.	0.0

- Boring terminated at 8.0 feet below ground surface due to refusal.
- Soil sample SB5 was collected from 7.5'-8.0' below grade.

# **BORING SB6/TW2**

Project No. 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe

Total Depth: 12.0 feet

Observed Depth to GW: 6.0 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-4.0'	40"	SB6 3.0'-3.5'	0.0'-0.5': Asphalt. 0.5'-1.0': Brown fine to medium sand, some silt. 1.0'-2.0': Brown fine to medium sand, trace silt, trace fill (bluestone and cinder). 2.0'-3.5': Orange-brown fine to medium sand. 3.5'-4.0': Tan fine to medium sand, dry.	8.2
4.0'-8.0'	40"		4.0'-6.0': Brown, tan and orange-brown fine to medium sand. 6.0'-7.0': Tan medium to coarse sand and silt, wet. 7.0'-8.0': Orange-brown fine to medium sand, wet.	0.9
8.0'- 12.0'	48"		8.0'-8.5': Orange-brown silt. 8.5'-9.0': Orange-brown fine to medium sand. 9.0'-12.0': Gray medium to coarse sand, wet.	0.0

- Boring terminated at 12.0 feet below ground surface for the installation of a temporary well point.
- Soil sample SB6 collected from 3.0'-3.5' below grade.
- Groundwater sample TW2 obtained from a temporary well point installed in soil boring location SB6.

Project No. 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe Hand Tools

Total Depth: 5.0 feet

Observed Depth to GW: N/A

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'- 0.25'	3"		Concrete.	0.0
0.25'- 2.0'	24"	SB7 1.5'-2.0'	0.25'-2.0': Brown fine to medium sand, trace silt, dry.	95.2
2.0'-4.0'	18"		2.0'-2.5': Brown fine to medium sand and silt. 2.5'-4.0': Tan and white fine to medium sand, dry.	40.2
4.0'-5.0'	12"		4.0'-4.25': Gray fine to medium sand, trace gravel. 4.25'-5.0': Brown to orange-brown fine to medium sand, some silt, dry.	30.2 at 4.0'- 4.25' 8.2 at 4.25'- 5.0'

- Boring terminated at 5.0 feet below ground surface due to the limitations associated with the hand tools used in this location.
- Soil sample SB7 collected from 1.5'-2.0' below grade.

Project No. 10-07561	Sample Date: August 31, 2010		
Project Name: Rochdale Village	Field Professional: Suzanne Sisti		
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe		
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe Hand Tools		

Total Depth: 6.0 feet

Observed Depth to GW: N/A

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-2.0'	24"		0.0'-0.25': Concrete. 0.25'-0.5': Orange-brown fine to medium sand, some silt. 0.5'-1.5': Brown fine to medium sand. 1.5'-1.75': White fine to medium sand. 1.75'-2.0': Brown fine to medium sand, dry.	33.4
2.0'-4.0'	22"		2.0'-2.5': Brown fine to medium sand. 2.5'-3.0': Tan and white fine to medium sand. 3.0'-4.0': Brown fine to medium sand.	349
4.0'-6.0'	18"	SB8 5.5'-6.0'	4.0'-4.5': Brown fine to medium sand. 4.5'-6.0': Orange-brown fine to medium sand, some silt, dry.	416

- Boring terminated at 6.0 feet below ground surface due to the limitations associated with the hand tools used in this location.
- Soil sample SB8 collected from 5.5'-6.0' below grade.

Project No. 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe

Total Depth: 8.0 feet

Observed Depth to GW: 8.0 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-4.0'	28"		0.0'-0.5': Concrete. 0.5'-3.5': Orange-brown fine to medium sand, trace silt, trace gravel. 3.5'-4.0': Brown fine to medium sand, trace silt, damp.	0.0
4.0'-8.0'	28"	SB9 7.5'-8.0'	4.0'-7.5': Orange-brown fine to medium sand, trace silt, damp. 7.5'-8.0': Brown silt, wet.	0.0

- Boring terminated at 8.0 feet below ground surface due to the presence of groundwater.
- Soil sample SB9 collected from 7.5'-8.0' below grade.

<b>Project No</b> . 10-07561	Sample Date: August 31, 2010
Project Name: Rochdale Village	Field Professional: Suzanne Sisti
Site Location: 169-55 137 <sup>th</sup> Avenue, Queens, New York	Drilled By: Enviroprobe
Client: Wells Fargo Multifamily Capital	Drill Method: Geoprobe

Total Depth: 8.0 feet

Observed Depth to GW: 8.0 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	PID (ppm)
0.0'-4.0'	34"		0.0'-0.5': Asphalt. 0.5'-4.0': Brown fine to medium sand, trace silt, damp.	0.0
4.0'-8.0'	38"	SB10 7.5'-8.0'	4.0'-6.0': Brown fine to medium sand, trace silt. 6.0'-6.5': Orange-brown fine to medium sand, trace silt. 6.5'-8.0': Orange medium to coarse sand and silt, wet.	0.0

- Boring terminated at 8.0 feet below ground surface due to the presence of groundwater.
- Soil sample SB10 was collected from 7.5'-8.0' below grade.



Pace Analytical Services, Inc. 2225 Riverside Dr. Asheville, NC 28804 (828)254-7176 Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

September 14, 2010

Mr. Austin Hewitt A&W Professional Services 7900-D Steven Mill #120 Matthews, NC 28104

RE: Project: Queens Rochdale

Pace Project No.: 9276886

#### Dear Mr. Hewitt:

Enclosed are the analytical results for sample(s) received by the laboratory on September 03, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring

Kein Slery

kevin.herring@pacelabs.com Project Manager

Enclosures



Pace Analytical Services, Inc.

2225 Riverside Dr. Asheville, NC 28804 (828)254-7176 Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078

(704)875-9092

#### **CERTIFICATIONS**

Project: Queens Rochdak

Pace Project No.: 9276886

Pennsylvania Certification IDs

1638 Roseytown Road Suites 2,3&4, Greensburg, PA

15601

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California/NELAC Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

**Delaware Certification** 

Florida/NELAC Certification #: E87683 Guam/PADEP Certification Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification Indiana/PADEP Certification Iowa Certification #: 391

Kansas/NELAC Certification #: E-10358

Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086

Maine Certification #: PA0091 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/NELAC Certification #: 2976 New Jersey/NELAC Certification #: PA 051

New Mexico Certification

New York/NELAC Certification #: 10888 North Carolina Certification #: 42706 Oregon/NELAC Certification #: PA200002 Pennsylvania/NELAC Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/NELAC Certification #: T104704188-09 TX

Utah/NELAC Certification #: ANTE Virgin Island/PADEP Certification
Virginia Certification #: 00112 Washington Certification #: C1941 West Virginia Certification #: 143 Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q



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#### **SAMPLE ANALYTE COUNT**

Project:

Queens Rochdak

Pace Project No.: 9276886

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9276886001	SB1 3-3.5	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886002	SB2 1.5-2	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886003	SB3 8.5-9	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886004	TW-1	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JHC	46	PASI-PA
9276886005	SB4 12.5-13	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886006	SB5 7.5-8	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886007	SB6 3-3.5	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886008	TW2	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JHC	46	PASI-PA
9276886009	SB7 1.5-2	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886010	SB8 5.5-6	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886011	SB9 7.5-8	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA
9276886012	SB-10	EPA 8270 by SIM	SPL	19	PASI-PA
		EPA 8260	JEW	45	PASI-PA



Pace Analytical Services, Inc. 2225 Riverside Dr. Asheville, NC 28804

(828)254-7176

Received: 09/03/10 10:00

Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

Matrix: Solid

#### **ANALYTICAL RESULTS**

Collected: 08/31/10 09:40

Lab ID: 9276886001

ND ug/kg

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB1 3-3.5

Results reported on a "dry-weight" basis **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Acenaphthene ND ug/kg 6.6 1 09/07/10 16:17 09/08/10 20:27 83-32-9 Acenaphthylene 38.3 ug/kg 6.6 09/07/10 16:17 09/08/10 20:27 208-96-8 1 Anthracene ND ug/kg 6.6 09/07/10 16:17 09/08/10 20:27 120-12-7 1 Benzo(a)anthracene 37.1 ug/kg 6.6 1 09/07/10 16:17 09/08/10 20:27 56-55-3 56.1 ug/kg Benzo(a)pyrene 6.6 1 09/07/10 16:17 09/08/10 20:27 50-32-8 Benzo(b)fluoranthene 68.7 ug/kg 6.6 09/07/10 16:17 09/08/10 20:27 205-99-2 1 58.0 ug/kg 6.6 09/07/10 16:17 09/08/10 20:27 191-24-2 Benzo(g,h,i)perylene 1 Benzo(k)fluoranthene 42.6 ug/kg 6.6 09/07/10 16:17 09/08/10 20:27 207-08-9 1 09/07/10 16:17 09/08/10 20:27 218-01-9 Chrysene 51.3 ug/kg 6.6 1 09/07/10 16:17 09/08/10 20:27 53-70-3 Dibenz(a,h)anthracene 18.0 ug/kg 6.6 1 09/07/10 16:17 09/08/10 20:27 206-44-0 Fluoranthene 37.5 ug/kg 6.6 1 Fluorene ND ug/kg 6.6 1 09/07/10 16:17 09/08/10 20:27 86-73-7 Indeno(1,2,3-cd)pyrene 40.0 ug/kg 6.6 1 09/07/10 16:17 09/08/10 20:27 193-39-5 Naphthalene ND ug/kg 09/07/10 16:17 09/08/10 20:27 91-20-3 6.6 1 Phenanthrene ND ug/kg 09/07/10 16:17 09/08/10 20:27 85-01-8 6.6 1 Pyrene 29.5 ug/kg 6.6 1 09/07/10 16:17 09/08/10 20:27 129-00-0 Nitrobenzene-d5 (S) 23-120 98 % 1 09/07/10 16:17 09/08/10 20:27 4165-60-0 2-Fluorobiphenyl (S) 101 % 30-115 09/07/10 16:17 09/08/10 20:27 321-60-8 1 Terphenyl-d14 (S) 103 % 18-137 1 09/07/10 16:17 09/08/10 20:27 1718-51-0 8260 MSV 5030 Low Level Analytical Method: EPA 8260 124 ug/kg 10.4 1 09/07/10 13:16 67-64-1 Acetone ND ug/kg 5.2 09/07/10 13:16 71-43-2 Benzene 1 Bromodichloromethane ND ug/kg 5.2 09/07/10 13:16 75-27-4 1 Bromoform ND ug/kg 5.2 1 09/07/10 13:16 75-25-2 Bromomethane ND ug/kg 5.2 1 09/07/10 13:16 74-83-9 **TOTAL BTEX** ND ug/kg 31.3 09/07/10 13:16 1 2-Butanone (MEK) ND ug/kg 10.4 1 09/07/10 13:16 78-93-3 Carbon disulfide 5.2 09/07/10 13:16 75-15-0 ND ug/kg 1 Carbon tetrachloride ND ug/kg 5.2 1 09/07/10 13:16 56-23-5 Chlorobenzene ND ug/kg 5.2 09/07/10 13:16 108-90-7 1 Chloroethane 5.2 09/07/10 13:16 75-00-3 ND ug/kg 1 Chloroform ND ug/kg 5.2 09/07/10 13:16 67-66-3 1 Chloromethane ND ug/kg 5.2 1 09/07/10 13:16 74-87-3 5.2 Dibromochloromethane ND ug/kg 1 09/07/10 13:16 124-48-1

Date: 09/14/2010 12:21 PM

1.2-Dichlorobenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

1,1-Dichloroethane

1,2-Dichloroethane

1,1-Dichloroethene

cis-1.2-Dichloroethene

1,2-Dichloropropane

trans-1.2-Dichloroethene

cis-1,3-Dichloropropene

1,2-Dichloroethene (Total)

**REPORT OF LABORATORY ANALYSIS** 

5.2

5.2

5.2

5.2

5.2

10.4

5.2

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5.2

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5.2

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09/07/10 13:16 95-50-1

09/07/10 13:16 541-73-1

09/07/10 13:16 106-46-7

09/07/10 13:16 75-34-3

09/07/10 13:16 107-06-2

09/07/10 13:16 540-59-0

09/07/10 13:16 75-35-4

09/07/10 13:16 156-59-2

09/07/10 13:16 156-60-5

09/07/10 13:16 10061-01-5

09/07/10 13:16 78-87-5



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heville, NC 28804 (828)254-7176 Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB1 3-3.5 Lab ID: 9276886001 Collected: 08/31/10 09:40 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV 5030 Low Level	Analytical Met	:hod: EPA 8260	)					
trans-1,3-Dichloropropene	ND ug	g/kg	5.2	1		09/07/10 13:16	10061-02-6	
Ethylbenzene	ND ug	g/kg	5.2	1		09/07/10 13:16	100-41-4	
2-Hexanone	ND ug	g/kg	10.4	1		09/07/10 13:16	591-78-6	
Methylene Chloride	ND ug	g/kg	5.2	1		09/07/10 13:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug	g/kg	10.4	1		09/07/10 13:16	108-10-1	
Methyl-tert-butyl ether	ND ug	g/kg	5.2	1		09/07/10 13:16	1634-04-4	
Styrene	ND ug	g/kg	5.2	1		09/07/10 13:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug	g/kg	5.2	1		09/07/10 13:16	79-34-5	
Tetrachloroethene	<b>6130</b> ug	g/kg	268	50		09/08/10 15:23	127-18-4	
Toluene	ND ug	g/kg	5.2	1		09/07/10 13:16	108-88-3	
1,1,1-Trichloroethane	ND ug	g/kg	5.2	1		09/07/10 13:16	71-55-6	
1,1,2-Trichloroethane	ND ug	g/kg	5.2	1		09/07/10 13:16	79-00-5	
Trichloroethene	ND ug	g/kg	5.2	1		09/07/10 13:16	79-01-6	
Vinyl chloride	ND ug	g/kg	5.2	1		09/07/10 13:16	75-01-4	
Xylene (Total)	ND ug	g/kg	15.6	1		09/07/10 13:16	1330-20-7	
m&p-Xylene	ND ug	g/kg	10.4	1		09/07/10 13:16	179601-23-1	
o-Xylene	ND ug	g/kg	5.2	1		09/07/10 13:16	95-47-6	
Toluene-d8 (S)	96 %		70-130	1		09/07/10 13:16	2037-26-5	
4-Bromofluorobenzene (S)	105 %	)	70-130	1		09/07/10 13:16	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %	)	70-130	1		09/07/10 13:16	17060-07-0	

Sample: SB2 1.5-2 Lab ID: 9276886002 Collected: 08/31/10 09:55 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Me	thod: EPA 827	0 by SIM					
Acenaphthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	83-32-9	
Acenaphthylene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	208-96-8	
Anthracene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	120-12-7	
Benzo(a)anthracene	<b>39.3</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	56-55-3	
Benzo(a)pyrene	<b>52.3</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	50-32-8	
Benzo(b)fluoranthene	<b>63.6</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	205-99-2	
Benzo(g,h,i)perylene	<b>47.8</b> u		6.6	1	09/07/10 16:17	09/08/10 13:02	191-24-2	
Benzo(k)fluoranthene	<b>47.2</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	207-08-9	
Chrysene	<b>58.6</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	218-01-9	
Dibenz(a,h)anthracene	<b>19.8</b> u		6.6	1	09/07/10 16:17	09/08/10 13:02	53-70-3	
Fluoranthene	<b>71.3</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	206-44-0	
Fluorene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	86-73-7	
Indeno(1,2,3-cd)pyrene	<b>38.4</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	193-39-5	
Naphthalene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	91-20-3	
Phenanthrene	<b>71.0</b> u	g/kg	6.6	1	09/07/10 16:17	09/08/10 13:02	85-01-8	
Pyrene	<b>91.3</b> u		6.6	1	09/07/10 16:17	09/08/10 13:02	129-00-0	
Nitrobenzene-d5 (S)	81 %		23-120	1	09/07/10 16:17	09/08/10 13:02	4165-60-0	
2-Fluorobiphenyl (S)	88 %	, D	30-115	1	09/07/10 16:17	09/08/10 13:02	321-60-8	

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#### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Sample: SB2 1.5-2	Lab ID: 9276886002	Collected: 08/31/1	10 09:55	Received: 09	)/03/10 10:00	/latrix: Solid	
Results reported on a "dry-weigh	t" basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270 MSSV PAH by SIM	Analytical Method: EPA 8	B270 by SIM				-	
Terphenyl-d14 (S)	110 %	18-137	1	09/07/10 16:17	09/08/10 13:02	1718-51-0	
8260 MSV 5030 Low Level	Analytical Method: EPA 8	3260					
Acetone	<b>82.5</b> ug/kg	8.9	1		09/07/10 13:38	67-64-1	
Benzene	ND ug/kg	4.4	1		09/07/10 13:38	71-43-2	
Bromodichloromethane	ND ug/kg	4.4	1		09/07/10 13:38	75-27-4	
Bromoform	ND ug/kg	4.4	1		09/07/10 13:38	75-25-2	
Bromomethane	ND ug/kg	4.4	1		09/07/10 13:38		
TOTAL BTEX	ND ug/kg	26.6	1		09/07/10 13:38		
2-Butanone (MEK)	ND ug/kg	8.9	1		09/07/10 13:38	78-93-3	
Carbon disulfide	ND ug/kg	4.4	1		09/07/10 13:38		
Carbon tetrachloride	ND ug/kg	4.4	1		09/07/10 13:38		
Chlorobenzene	ND ug/kg	4.4	1		09/07/10 13:38		
Chloroethane	ND ug/kg	4.4	1		09/07/10 13:38		
Chloroform		4.4	1		09/07/10 13:38		
	ND ug/kg						
Chloromethane	ND ug/kg	4.4	1		09/07/10 13:38		
Dibromochloromethane	ND ug/kg	4.4	1		09/07/10 13:38		
1,2-Dichlorobenzene	ND ug/kg	4.4	1		09/07/10 13:38		
1,3-Dichlorobenzene	ND ug/kg	4.4	1		09/07/10 13:38		
1,4-Dichlorobenzene	ND ug/kg	4.4	1		09/07/10 13:38		
1,1-Dichloroethane	ND ug/kg	4.4	1		09/07/10 13:38		
1,2-Dichloroethane	ND ug/kg	4.4	1		09/07/10 13:38	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg	8.9	1		09/07/10 13:38	540-59-0	
1,1-Dichloroethene	ND ug/kg	4.4	1		09/07/10 13:38	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg	4.4	1		09/07/10 13:38	156-59-2	
rans-1,2-Dichloroethene	ND ug/kg	4.4	1		09/07/10 13:38	156-60-5	
1,2-Dichloropropane	ND ug/kg	4.4	1		09/07/10 13:38	78-87-5	
cis-1,3-Dichloropropene	ND ug/kg	4.4	1		09/07/10 13:38	10061-01-5	
rans-1,3-Dichloropropene	ND ug/kg	4.4	1		09/07/10 13:38	10061-02-6	
Ethylbenzene	ND ug/kg	4.4	1		09/07/10 13:38	100-41-4	
2-Hexanone	ND ug/kg	8.9	1		09/07/10 13:38		
Methylene Chloride	ND ug/kg	4.4	1		09/07/10 13:38		
4-Methyl-2-pentanone (MIBK)	ND ug/kg	8.9	1		09/07/10 13:38		
Methyl-tert-butyl ether	ND ug/kg	4.4	1		09/07/10 13:38		
Styrene	ND ug/kg	4.4	1		09/07/10 13:38		
1,1,2,2-Tetrachloroethane	ND ug/kg	4.4	1		09/07/10 13:38		
Tetrachloroethene	<b>102</b> ug/kg	4.4	1		09/07/10 13:38		
Toluene I,1,1-Trichloroethane	ND ug/kg ND ug/kg	4.4 4.4	1 1		09/07/10 13:38		
	0 0				09/07/10 13:38		
1,1,2-Trichloroethane	ND ug/kg	4.4	1		09/07/10 13:38		
Frichloroethene	ND ug/kg	4.4	1		09/07/10 13:38		
/inyl chloride	ND ug/kg	4.4	1		09/07/10 13:38		
Kylene (Total)	ND ug/kg	13.3	1		09/07/10 13:38		
n&p-Xylene	ND ug/kg	8.9	1		09/07/10 13:38		
o-Xylene	ND ug/kg	4.4	1		09/07/10 13:38	95-47-6	
Toluene-d8 (S)	92 %	70-130	1		09/07/10 13:38	2037-26-5	

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#### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB2 1.5-2 Lab ID: 9276886002 Collected: 08/31/10 09:55 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Quai
8260 MSV 5030 Low Level	Analytical Met	hod: EPA 8260						
4-Bromofluorobenzene (S)	101 %	•	70-130	1		09/07/10 13:38	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		70-130	1		09/07/10 13:38	17060-07-0	

Sample: SB3 8.5-9	Lab ID: 927688600	3 Collected: 08/31/1	0 10:5	0 Received: 09	0/03/10 10:00 M	fatrix: Solid	
Results reported on a "dry-weig	ıht" basis						
Parameters	Results Uni	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8270 MSSV PAH by SIM	Analytical Method: EP	A 8270 by SIM					
Acenaphthene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	83-32-9	
Acenaphthylene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	208-96-8	
Anthracene	ND ug/kg	6.6	1		09/08/10 13:26		
Benzo(a)anthracene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	56-55-3	
Benzo(a)pyrene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	50-32-8	
Benzo(b)fluoranthene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	191-24-2	
Benzo(k)fluoranthene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	207-08-9	
Chrysene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	53-70-3	
Fluoranthene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	206-44-0	
Fluorene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	193-39-5	
Naphthalene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	91-20-3	
Phenanthrene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	85-01-8	
Pyrene	ND ug/kg	6.6	1	09/07/10 16:17	09/08/10 13:26	129-00-0	
Nitrobenzene-d5 (S)	87 %	23-120	1	09/07/10 16:17	09/08/10 13:26	4165-60-0	
2-Fluorobiphenyl (S)	81 %	30-115	1	09/07/10 16:17	09/08/10 13:26	321-60-8	
Terphenyl-d14 (S)	96 %	18-137	1	09/07/10 16:17	09/08/10 13:26	1718-51-0	
8260 MSV 5030 Low Level	Analytical Method: EP	A 8260					
Acetone	<b>110</b> ug/kg	8.4	1		09/07/10 14:00	67-64-1	
Benzene	ND ug/kg	4.2	1		09/07/10 14:00	71-43-2	
Bromodichloromethane	ND ug/kg	4.2	1		09/07/10 14:00	75-27-4	
Bromoform	ND ug/kg	4.2	1		09/07/10 14:00	75-25-2	
Bromomethane	ND ug/kg	4.2	1		09/07/10 14:00	74-83-9	
TOTAL BTEX	ND ug/kg	25.1	1		09/07/10 14:00		
2-Butanone (MEK)	ND ug/kg	8.4	1		09/07/10 14:00	78-93-3	
Carbon disulfide	ND ug/kg	4.2	1		09/07/10 14:00	75-15-0	
Carbon tetrachloride	ND ug/kg	4.2	1		09/07/10 14:00	56-23-5	
Chlorobenzene	ND ug/kg	4.2	1		09/07/10 14:00	108-90-7	
Chloroethane	ND ug/kg	4.2	1		09/07/10 14:00	75-00-3	
Chloroform	ND ug/kg	4.2	1		09/07/10 14:00	67-66-3	
Chloromethane	ND ug/kg	4.2	1		09/07/10 14:00	74-87-3	
Dibromochloromethane	ND ug/kg	4.2	1		09/07/10 14:00	124-48-1	
4.0 B'ablanch	ND #	4.0			00/07/40 44 00	05 50 4	

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1,2-Dichlorobenzene

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4.2

ND ug/kg

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09/07/10 14:00 95-50-1



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#### ANALYTICAL RESULTS

Project: Queens Rochdak

Pace Project No.: 9276886

Lab ID: 9276886003 Sample: SB3 8.5-9 Collected: 08/31/10 10:50 Received: 09/03/10 10:00 Matrix: Solid Results reported on a "dry-weight" basis **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8260 MSV 5030 Low Level Analytical Method: EPA 8260 1,3-Dichlorobenzene ND ug/kg 4.2 1 09/07/10 14:00 541-73-1 1,4-Dichlorobenzene ND ug/kg 4.2 1 09/07/10 14:00 106-46-7 1,1-Dichloroethane ND ug/kg 4.2 09/07/10 14:00 75-34-3 1 1,2-Dichloroethane ND ug/kg 4.2 09/07/10 14:00 107-06-2 1 1,2-Dichloroethene (Total) ND ug/kg 8.4 1 09/07/10 14:00 540-59-0 1,1-Dichloroethene ND ug/kg 4.2 09/07/10 14:00 75-35-4 1 cis-1.2-Dichloroethene 4.2 09/07/10 14:00 156-59-2 ND ug/kg 1 trans-1,2-Dichloroethene ND ug/kg 4.2 09/07/10 14:00 156-60-5 1 4.2 09/07/10 14:00 78-87-5 1,2-Dichloropropane ND ug/kg 1 4.2 cis-1,3-Dichloropropene ND ug/kg 09/07/10 14:00 10061-01-5 1 4.2 09/07/10 14:00 10061-02-6 trans-1,3-Dichloropropene ND ug/kg 1 Ethylbenzene ND ug/kg 4.2 1 09/07/10 14:00 100-41-4 2-Hexanone ND ug/kg 8.4 1 09/07/10 14:00 591-78-6 Methylene Chloride ND ug/kg 4.2 09/07/10 14:00 75-09-2 1 4-Methyl-2-pentanone (MIBK) 8.4 09/07/10 14:00 108-10-1 ND ug/kg 1 Methyl-tert-butyl ether ND ug/kg 4.2 1 09/07/10 14:00 1634-04-4 ND ug/kg 09/07/10 14:00 100-42-5 Styrene 4.2 1 1,1,2,2-Tetrachloroethane ND ug/kg 4.2 09/07/10 14:00 79-34-5 1 Tetrachloroethene 41.7 ug/kg 4.2 1 09/07/10 14:00 127-18-4 Toluene ND ug/kg 4.2 09/07/10 14:00 108-88-3 1 1,1,1-Trichloroethane ND ug/kg 4.2 1 09/07/10 14:00 71-55-6 09/07/10 14:00 79-00-5 1,1,2-Trichloroethane ND ug/kg 4.2 1 Trichloroethene ND ug/kg 4.2 1 09/07/10 14:00 79-01-6 Vinyl chloride ND ug/kg 4.2 09/07/10 14:00 75-01-4 Xylene (Total) 12.6 09/07/10 14:00 1330-20-7 ND ug/kg 1 m&p-Xylene ND ug/kg 8.4 1 09/07/10 14:00 179601-23-1 o-Xylene ND ug/kg 4.2 09/07/10 14:00 95-47-6 1 Toluene-d8 (S) 96 % 70-130 09/07/10 14:00 2037-26-5 1 4-Bromofluorobenzene (S) 103 % 70-130 09/07/10 14:00 460-00-4 1 1,2-Dichloroethane-d4 (S) 100 % 70-130 09/07/10 14:00 17060-07-0 1 Lab ID: 9276886004 Sample: TW-1 Collected: 08/31/10 12:10 Received: 09/03/10 10:00 Matrix: Solid Results reported on a "dry-weight" basis DF **Parameters** Results Units Report Limit Prepared Analyzed CAS No. Qual 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Acenaphthene ND ug/L 2.7 09/03/10 17:18 09/08/10 20:00 83-32-9 1 2.7 09/03/10 17:18 09/08/10 20:00 208-96-8 Acenaphthylene ND ug/L 1

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Anthracene

Benzo(a)anthracene

Benzo(b)fluoranthene

Benzo(g,h,i)perylene

Benzo(k)fluoranthene

Benzo(a)pyrene

#### REPORT OF LABORATORY ANALYSIS

0.22

0.22

0.22

0.22

0.22

0.22

1

1

1

1

09/03/10 17:18 09/08/10 20:00 120-12-7

09/03/10 17:18 09/08/10 20:00 56-55-3

09/03/10 17:18 09/08/10 20:00 50-32-8

09/03/10 17:18 09/08/10 20:00 205-99-2

09/03/10 17:18 09/08/10 20:00 191-24-2

09/03/10 17:18 09/08/10 20:00 207-08-9

ND ug/L

ND ug/L

ND ug/L

ND ug/L

ND ug/L

ND ug/L

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#### ANALYTICAL RESULTS

Project: Queens Rochdak

Pace Project No.: 9276886 Lab ID: 9276886004 Sample: TW-1 Collected: 08/31/10 12:10 Received: 09/03/10 10:00 Matrix: Solid Results reported on a "dry-weight" basis **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Chrysene ND ug/L 0.22 1 09/03/10 17:18 09/08/10 20:00 218-01-9 Dibenz(a,h)anthracene ND ug/L 0.22 09/03/10 17:18 09/08/10 20:00 53-70-3 1 Fluoranthene ND ug/L 0.22 09/03/10 17:18 09/08/10 20:00 206-44-0 1 Fluorene ND ug/L 0.22 1 09/03/10 17:18 09/08/10 20:00 86-73-7 0.22 Indeno(1,2,3-cd)pyrene ND ug/L 1 09/03/10 17:18 09/08/10 20:00 193-39-5 Naphthalene ND ug/L 1.1 09/03/10 17:18 09/08/10 20:00 91-20-3 1 0.22 09/03/10 17:18 09/08/10 20:00 85-01-8 Phenanthrene ND ug/L 1 0.22 09/03/10 17:18 09/08/10 20:00 129-00-0 Pyrene ND ug/L 1 35-114 09/03/10 17:18 09/08/10 20:00 4165-60-0 Nitrobenzene-d5 (S) 67 % 1 43-116 09/03/10 17:18 09/08/10 20:00 321-60-8 2-Fluorobiphenyl (S) 54 % 1 09/03/10 17:18 09/08/10 20:00 1718-51-0 Terphenyl-d14 (S) 54 % 33-141 1 8260 MSV Analytical Method: EPA 8260 10.0 09/07/10 16:01 67-64-1 ND ug/L 1 Acetone ND ug/L Benzene 1.0 1 09/07/10 16:01 71-43-2 Bromochloromethane ND ug/L 1.0 1 09/07/10 16:01 74-97-5 Bromodichloromethane ND ug/L 1.0 1 09/07/10 16:01 75-27-4 ND ug/L Bromoform 1.0 1 09/07/10 16:01 75-25-2 Bromomethane ND ug/L 1.0 1 09/07/10 16:01 74-83-9 2-Butanone (MEK) ND ug/L 10.0 09/07/10 16:01 78-93-3 1 Carbon disulfide ND ug/L 1.0 09/07/10 16:01 75-15-0 1 Carbon tetrachloride ND ug/L 1.0 09/07/10 16:01 56-23-5 1 ND ug/L 09/07/10 16:01 108-90-7 Chlorobenzene 1.0 1 Chloroethane ND ug/L 1.0 09/07/10 16:01 75-00-3 1 Chloroform ND ug/L 1.0 1 09/07/10 16:01 67-66-3 Chloromethane ND ug/L 1.0 1 09/07/10 16:01 74-87-3 Dibromochloromethane ND ug/L 1.0 09/07/10 16:01 124-48-1 1 1.2-Dichlorobenzene ND ug/L 1.0 1 09/07/10 16:01 95-50-1 ND ug/L 09/07/10 16:01 541-73-1 1,3-Dichlorobenzene 1.0 1 1,4-Dichlorobenzene ND ug/L 1.0 1 09/07/10 16:01 106-46-7 1.1-Dichloroethane ND ug/L 1.0 09/07/10 16:01 75-34-3 1 09/07/10 16:01 107-06-2 1.2-Dichloroethane ND ug/L 1.0 1 1.2-Dichloroethene (Total) ND ug/L 2.0 09/07/10 16:01 540-59-0 1 1.1-Dichloroethene ND ug/L 1.0 09/07/10 16:01 75-35-4 1 cis-1,2-Dichloroethene ND ug/L 1.0 1 09/07/10 16:01 156-59-2 09/07/10 16:01 156-60-5 trans-1,2-Dichloroethene ND ug/L 1.0 1 1,2-Dichloropropane ND ug/L 1.0 09/07/10 16:01 78-87-5 cis-1,3-Dichloropropene ND ug/L 1.0 09/07/10 16:01 10061-01-5 trans-1,3-Dichloropropene ND ug/L 1.0 09/07/10 16:01 10061-02-6 Ethylbenzene 09/07/10 16:01 100-41-4 ND ug/L 1.0 1 2-Hexanone ND ug/L 10.0 09/07/10 16:01 591-78-6 1 Methylene Chloride ND ug/L 1.0 09/07/10 16:01 75-09-2 1 10.0 09/07/10 16:01 108-10-1 4-Methyl-2-pentanone (MIBK) ND ug/L 1 ND ug/L 09/07/10 16:01 1634-04-4 Methyl-tert-butyl ether 1.0 1 ND ug/L 09/07/10 16:01 100-42-5 Styrene 1.0 1 09/07/10 16:01 79-34-5 1,1,2,2-Tetrachloroethane ND ug/L 1.0 1

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### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: TW-1 Lab ID: 9276886004 Collected: 08/31/10 12:10 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Met	hod: EPA 826	0					
Tetrachloroethene	<b>12.3</b> ug	g/L	1.0	1		09/07/10 16:01	127-18-4	
Toluene	ND ug	g/L	1.0	1		09/07/10 16:01	108-88-3	
1,2,4-Trichlorobenzene	ND ug	g/L	1.0	1		09/07/10 16:01	120-82-1	
1,1,1-Trichloroethane	ND ug	g/L	1.0	1		09/07/10 16:01	71-55-6	
1,1,2-Trichloroethane	ND ug	g/L	1.0	1		09/07/10 16:01	79-00-5	
Trichloroethene	ND ug	g/L	1.0	1		09/07/10 16:01	79-01-6	
Vinyl chloride	ND ug	g/L	1.0	1		09/07/10 16:01	75-01-4	
Xylene (Total)	ND ug	g/L	3.0	1		09/07/10 16:01	1330-20-7	
m&p-Xylene	ND ug	g/L	2.0	1		09/07/10 16:01	179601-23-1	
o-Xylene	ND ug	g/L	1.0	1		09/07/10 16:01	95-47-6	
4-Bromofluorobenzene (S)	95 %	- )	70-130	1		09/07/10 16:01	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %	)	70-130	1		09/07/10 16:01	17060-07-0	
Toluene-d8 (S)	94 %	•	70-130	1		09/07/10 16:01	2037-26-5	

Sample: SB4 12.5-13 Lab ID: 9276886005 Collected: 08/31/10 12:40 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Met	nod: EPA 827	0 by SIM					
Acenaphthene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	83-32-9	
Acenaphthylene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	208-96-8	
Anthracene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	120-12-7	
Benzo(a)anthracene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	56-55-3	
Benzo(a)pyrene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	50-32-8	
Benzo(b)fluoranthene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	205-99-2	
Benzo(g,h,i)perylene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	191-24-2	
Benzo(k)fluoranthene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	207-08-9	
Chrysene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	218-01-9	
Dibenz(a,h)anthracene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	53-70-3	
Fluoranthene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	206-44-0	
Fluorene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	193-39-5	
Naphthalene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	91-20-3	
Phenanthrene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	85-01-8	
Pyrene	ND ug	/kg	6.6	1	09/07/10 16:17	09/08/10 13:51	129-00-0	
Nitrobenzene-d5 (S)	78 %		23-120	1	09/07/10 16:17	09/08/10 13:51	4165-60-0	
2-Fluorobiphenyl (S)	96 %		30-115	1	09/07/10 16:17	09/08/10 13:51	321-60-8	
Terphenyl-d14 (S)	110 %		18-137	1	09/07/10 16:17	09/08/10 13:51	1718-51-0	
8260 MSV 5030 Low Level	Analytical Meth	nod: EPA 826	0					
Acetone	<b>19.0</b> ug	/kg	9.9	1		09/07/10 14:23	67-64-1	
Benzene	ND ug		5.0	1		09/07/10 14:23	71-43-2	
Bromodichloromethane	ND ug	/kg	5.0	1		09/07/10 14:23	75-27-4	
Bromoform	ND ug	/kg	5.0	1		09/07/10 14:23	75-25-2	

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### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB4 12.5-13 Lab ID: 9276886005 Collected: 08/31/10 12:40 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Met	hod: EPA 8260	)					
Bromomethane	ND ug	g/kg	5.0	1		09/07/10 14:23	74-83-9	
TOTAL BTEX	ND ug	g/kg	29.8	1		09/07/10 14:23		
2-Butanone (MEK)	ND ug	g/kg	9.9	1		09/07/10 14:23	78-93-3	
Carbon disulfide	ND ug	g/kg	5.0	1		09/07/10 14:23	75-15-0	
Carbon tetrachloride	ND ug	g/kg	5.0	1		09/07/10 14:23	56-23-5	
Chlorobenzene	ND ug	g/kg	5.0	1		09/07/10 14:23	108-90-7	
Chloroethane	ND ug	g/kg	5.0	1		09/07/10 14:23	75-00-3	
Chloroform	ND ug	g/kg	5.0	1		09/07/10 14:23	67-66-3	
Chloromethane	ND ug		5.0	1		09/07/10 14:23	74-87-3	
Dibromochloromethane	ND ug	, ,	5.0	1		09/07/10 14:23	124-48-1	
1,2-Dichlorobenzene	ND ug		5.0	1		09/07/10 14:23	95-50-1	
1,3-Dichlorobenzene	ND ug		5.0	1		09/07/10 14:23	541-73-1	
1,4-Dichlorobenzene	ND ug		5.0	1		09/07/10 14:23	106-46-7	
1,1-Dichloroethane	ND ug	-	5.0	1		09/07/10 14:23		
1,2-Dichloroethane	ND ug	. •	5.0	1		09/07/10 14:23	107-06-2	
1,2-Dichloroethene (Total)	ND ug		9.9	1		09/07/10 14:23		
1,1-Dichloroethene	ND ug		5.0	1		09/07/10 14:23		
cis-1,2-Dichloroethene	ND ug	, ,	5.0	1		09/07/10 14:23		
trans-1,2-Dichloroethene	ND ug	, ,	5.0	1		09/07/10 14:23		
1,2-Dichloropropane	ND ug		5.0	1		09/07/10 14:23		
cis-1,3-Dichloropropene	ND ug	, ,	5.0	1		09/07/10 14:23		
trans-1,3-Dichloropropene	ND ug		5.0	1		09/07/10 14:23		
Ethylbenzene	ND ug		5.0	1		09/07/10 14:23		
2-Hexanone	ND ug	-	9.9	1		09/07/10 14:23		
Methylene Chloride	ND ug	, ,	5.0	1		09/07/10 14:23		
4-Methyl-2-pentanone (MIBK)	ND ug	, ,	9.9	1		09/07/10 14:23		
Methyl-tert-butyl ether	ND ug		5.0	1		09/07/10 14:23		
Styrene	ND ug		5.0	1		09/07/10 14:23		
1,1,2,2-Tetrachloroethane	ND ug	, ,	5.0	1		09/07/10 14:23		
Tetrachloroethene	ND ug	, ,	5.0	1		09/07/10 14:23		
Toluene	ND ug		5.0	1		09/07/10 14:23		
1,1,1-Trichloroethane	ND ug	, ,	5.0	1		09/07/10 14:23		
	-			1				
1,1,2-Trichloroethane	ND ug		5.0			09/07/10 14:23		
Trichloroethene	ND ug	, ,	5.0	1		09/07/10 14:23		
Vinyl chloride	ND ug		5.0	1		09/07/10 14:23		
Xylene (Total)	ND ug	, ,	14.9	1		09/07/10 14:23		
m&p-Xylene	ND ug		9.9	1		09/07/10 14:23		
o-Xylene	ND ug	. •	5.0	1		09/07/10 14:23		
Toluene-d8 (S)	93 %		70-130	1		09/07/10 14:23		
4-Bromofluorobenzene (S)	100 %		70-130	1		09/07/10 14:23		
1,2-Dichloroethane-d4 (S)	101 %		70-130	1		09/07/10 14:23	17060-07-0	

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### ANALYTICAL RESULTS

Project: Queens Rochdak

Pace Project No.: 9276886

Lab ID: 9276886006 Sample: SB5 7.5-8 Collected: 08/31/10 14:00 Received: 09/03/10 10:00 Matrix: Solid Results reported on a "dry-weight" basis **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Acenaphthene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 14:16 83-32-9 Acenaphthylene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 14:16 208-96-8 Anthracene ND ug/kg 6.5 09/07/10 16:17 09/08/10 14:16 120-12-7 1 Benzo(a)anthracene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 14:16 56-55-3 Benzo(a)pyrene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 14:16 50-32-8 Benzo(b)fluoranthene ND ug/kg 6.5 09/07/10 16:17 09/08/10 14:16 205-99-2 1 ND ug/kg 6.5 09/07/10 16:17 09/08/10 14:16 191-24-2 Benzo(g,h,i)perylene 1 Benzo(k)fluoranthene 15.7 ug/kg 6.5 09/07/10 16:17 09/08/10 14:16 207-08-9 1 09/07/10 16:17 09/08/10 14:16 218-01-9 Chrysene 14.8 ug/kg 6.5 1 Dibenz(a,h)anthracene ND ug/kg 6.5 09/07/10 16:17 09/08/10 14:16 53-70-3 1 09/07/10 16:17 09/08/10 14:16 206-44-0 Fluoranthene ND ug/kg 6.5 1 Fluorene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 14:16 86-73-7 Indeno(1,2,3-cd)pyrene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 14:16 193-39-5 Naphthalene ND ug/kg 09/07/10 16:17 09/08/10 14:16 91-20-3 6.5 1 Phenanthrene 6.5 09/07/10 16:17 09/08/10 14:16 85-01-8 ND ug/kg 1 Pyrene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 14:16 129-00-0 Nitrobenzene-d5 (S) 23-120 09/07/10 16:17 09/08/10 14:16 4165-60-0 105 % 1 2-Fluorobiphenyl (S) 98 % 30-115 09/07/10 16:17 09/08/10 14:16 321-60-8 1 Terphenyl-d14 (S) 109 % 18-137 1 09/07/10 16:17 09/08/10 14:16 1718-51-0 8260 MSV 5030 Low Level Analytical Method: EPA 8260 120 ug/kg 90 1 09/07/10 14:45 67-64-1 Acetone ND ug/kg 09/07/10 14:45 71-43-2 Benzene 4.5 1 Bromodichloromethane ND ug/kg 4.5 09/07/10 14:45 75-27-4 1 Bromoform ND ug/kg 4.5 1 09/07/10 14:45 75-25-2 Bromomethane ND ug/kg 4.5 1 09/07/10 14:45 74-83-9 **TOTAL BTEX** ND ug/kg 27.0 09/07/10 14:45 1 2-Butanone (MEK) ND ug/kg 9.0 1 09/07/10 14:45 78-93-3 Carbon disulfide 4.5 09/07/10 14:45 75-15-0 ND ug/kg 1 Carbon tetrachloride ND ug/kg 4.5 1 09/07/10 14:45 56-23-5 Chlorobenzene ND ug/kg 4.5 09/07/10 14:45 108-90-7 1 Chloroethane 4.5 09/07/10 14:45 75-00-3 ND ug/kg 1 Chloroform ND ug/kg 4.5 09/07/10 14:45 67-66-3 1 Chloromethane ND ug/kg 4.5 1 09/07/10 14:45 74-87-3 Dibromochloromethane ND ug/kg 4.5 1 09/07/10 14:45 124-48-1 09/07/10 14:45 95-50-1 4.5 1.2-Dichlorobenzene ND ug/kg 1 1,3-Dichlorobenzene ND ug/kg 4.5 09/07/10 14:45 541-73-1 1,4-Dichlorobenzene ND ug/kg 4.5 09/07/10 14:45 106-46-7 1,1-Dichloroethane ND ug/kg 4.5 09/07/10 14:45 75-34-3 09/07/10 14:45 107-06-2 1,2-Dichloroethane ND ug/kg 4.5 1 1,2-Dichloroethene (Total) ND ug/kg 9.0 1 09/07/10 14:45 540-59-0 1,1-Dichloroethene ND ug/kg 4.5 1 09/07/10 14:45 75-35-4 cis-1.2-Dichloroethene ND ug/kg 4.5 09/07/10 14:45 156-59-2 1 trans-1.2-Dichloroethene ND ug/kg 4.5 09/07/10 14:45 156-60-5 1 1,2-Dichloropropane ND ug/kg 4.5 09/07/10 14:45 78-87-5 1

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cis-1,3-Dichloropropene

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4.5

1

ND ug/kg

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09/07/10 14:45 10061-01-5



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### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB5 7.5-8 Lab ID: 9276886006 Collected: 08/31/10 14:00 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Met	hod: EPA 8260						
trans-1,3-Dichloropropene	ND ug	ı/kg	4.5	1		09/07/10 14:45	10061-02-6	
Ethylbenzene	ND ug	<sub>J</sub> /kg	4.5	1		09/07/10 14:45	100-41-4	
2-Hexanone	ND ug	J/kg	9.0	1		09/07/10 14:45	591-78-6	
Methylene Chloride	ND ug	<sub>J</sub> /kg	4.5	1		09/07/10 14:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug	<sub>J</sub> /kg	9.0	1		09/07/10 14:45	108-10-1	
Methyl-tert-butyl ether	ND ug	<sub>J</sub> /kg	4.5	1		09/07/10 14:45	1634-04-4	
Styrene	ND ug	ı/kg	4.5	1		09/07/10 14:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug	ı/kg	4.5	1		09/07/10 14:45	79-34-5	
Tetrachloroethene	<b>7.4</b> ug	ı/kg	4.5	1		09/07/10 14:45	127-18-4	
Toluene	ND ug	<sub>J</sub> /kg	4.5	1		09/07/10 14:45	108-88-3	
1,1,1-Trichloroethane	ND ug	ı/kg	4.5	1		09/07/10 14:45	71-55-6	
1,1,2-Trichloroethane	ND ug	<sub>J</sub> /kg	4.5	1		09/07/10 14:45	79-00-5	
Trichloroethene	ND ug	ı/kg	4.5	1		09/07/10 14:45	79-01-6	
Vinyl chloride	ND ug	ı/kg	4.5	1		09/07/10 14:45	75-01-4	
Xylene (Total)	ND ug	<sub>J</sub> /kg	13.5	1		09/07/10 14:45	1330-20-7	
m&p-Xylene	ND ug	ı/kg	9.0	1		09/07/10 14:45	179601-23-1	
o-Xylene	ND ug	ı/kg	4.5	1		09/07/10 14:45	95-47-6	
Toluene-d8 (S)	92 %		70-130	1		09/07/10 14:45	2037-26-5	
4-Bromofluorobenzene (S)	101 %		70-130	1		09/07/10 14:45	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		70-130	1		09/07/10 14:45	17060-07-0	

Sample: SB6 3-3.5 Lab ID: 9276886007 Collected: 08/31/10 14:30 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Me	thod: EPA 827	0 by SIM					
Acenaphthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	83-32-9	
Acenaphthylene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	208-96-8	
Anthracene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	120-12-7	
Benzo(a)anthracene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	56-55-3	
Benzo(a)pyrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	50-32-8	
Benzo(b)fluoranthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	205-99-2	
Benzo(g,h,i)perylene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	191-24-2	
Benzo(k)fluoranthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	207-08-9	
Chrysene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	218-01-9	
Dibenz(a,h)anthracene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	53-70-3	
Fluoranthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	206-44-0	
Fluorene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	86-73-7	
Indeno(1,2,3-cd)pyrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	193-39-5	
Naphthalene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	91-20-3	
Phenanthrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	85-01-8	
Pyrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 14:41	129-00-0	
Nitrobenzene-d5 (S)	81 %	, D	23-120	1	09/07/10 16:17	09/08/10 14:41	4165-60-0	
2-Fluorobiphenyl (S)	96 %	, D	30-115	1	09/07/10 16:17	09/08/10 14:41	321-60-8	

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### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Sample: SB6 3-3.5	Lab ID: 9276886007	Collected: 08/31/1	∩ 1 <u>/</u> 1.3∩	Received: 09	2/03/10 10:00	Matrix: Solid	
•		Collected: 06/31/1	0 14:30	Received: 08	7/US/TU TU:UU T	viatiix. SUIIU	
Results reported on a "dry-weigh							
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270 MSSV PAH by SIM	Analytical Method: EPA 82	70 by SIM					
Terphenyl-d14 (S)	114 %	18-137	1	09/07/10 16:17	09/08/10 14:41	1718-51-0	
8260 MSV 5030 Low Level	Analytical Method: EPA 82	60					
Acetone	<b>47.3</b> ug/kg	8.7	1		09/07/10 15:08	8 67-64-1	
Benzene	ND ug/kg	4.3	1		09/07/10 15:08	71-43-2	
Bromodichloromethane	ND ug/kg	4.3	1		09/07/10 15:08	3 75-27-4	
Bromoform	ND ug/kg	4.3	1		09/07/10 15:08	3 75-25-2	
Bromomethane	ND ug/kg	4.3	1		09/07/10 15:08	74-83-9	
TOTAL BTEX	ND ug/kg	26.0	1		09/07/10 15:08	3	
2-Butanone (MEK)	ND ug/kg	8.7	1		09/07/10 15:08		
Carbon disulfide	ND ug/kg	4.3	1		09/07/10 15:08		
Carbon tetrachloride	ND ug/kg	4.3	1		09/07/10 15:08		
Chlorobenzene	ND ug/kg	4.3	1		09/07/10 15:08		
Chloroethane	ND ug/kg	4.3	1		09/07/10 15:08		
Chloroform	ND ug/kg	4.3	1		09/07/10 15:08		
Chloromethane		4.3	1		09/07/10 15:08		
	ND ug/kg						
Dibromochloromethane	ND ug/kg	4.3	1		09/07/10 15:08		
1,2-Dichlorobenzene	ND ug/kg	4.3	1		09/07/10 15:08		
1,3-Dichlorobenzene	ND ug/kg	4.3	1		09/07/10 15:08		
1,4-Dichlorobenzene	ND ug/kg	4.3	1		09/07/10 15:08		
1,1-Dichloroethane	ND ug/kg	4.3	1		09/07/10 15:08		
1,2-Dichloroethane	ND ug/kg	4.3	1		09/07/10 15:08		
1,2-Dichloroethene (Total)	ND ug/kg	8.7	1		09/07/10 15:08		
1,1-Dichloroethene	ND ug/kg	4.3	1		09/07/10 15:08	3 75-35-4	
cis-1,2-Dichloroethene	ND ug/kg	4.3	1		09/07/10 15:08		
trans-1,2-Dichloroethene	ND ug/kg	4.3	1		09/07/10 15:08	156-60-5	
1,2-Dichloropropane	ND ug/kg	4.3	1		09/07/10 15:08	8 78-87-5	
cis-1,3-Dichloropropene	ND ug/kg	4.3	1		09/07/10 15:08	10061-01-5	
rans-1,3-Dichloropropene	ND ug/kg	4.3	1		09/07/10 15:08	10061-02-6	
Ethylbenzene	ND ug/kg	4.3	1		09/07/10 15:08	3 100-41-4	
2-Hexanone	ND ug/kg	8.7	1		09/07/10 15:08	591-78-6	
Methylene Chloride	ND ug/kg	4.3	1		09/07/10 15:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg	8.7	1		09/07/10 15:08	3 108-10-1	
Methyl-tert-butyl ether	ND ug/kg	4.3	1		09/07/10 15:08		
Styrene	ND ug/kg	4.3	1		09/07/10 15:08		
1,1,2,2-Tetrachloroethane	ND ug/kg	4.3	1		09/07/10 15:08		
Tetrachloroethene	<b>61.5</b> ug/kg	4.3	1		09/07/10 15:08		
Toluene	ND ug/kg	4.3	1		09/07/10 15:08		
1,1,1-Trichloroethane	ND ug/kg	4.3	1		09/07/10 15:08		
1,1,2-Trichloroethane		4.3	1		09/07/10 15:08		
	ND ug/kg						
Trichloroethene	ND ug/kg	4.3	1		09/07/10 15:08		
Vinyl chloride	ND ug/kg	4.3	1		09/07/10 15:08		
Xylene (Total)	ND ug/kg	13.0	1		09/07/10 15:08		
m&p-Xylene	ND ug/kg	8.7	1			3 179601-23-1	
o-Xylene	ND ug/kg	4.3	1		09/07/10 15:08		
Toluene-d8 (S)	93 %	70-130	1		09/07/10 15:08	2037-26-5	

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### **ANALYTICAL RESULTS**

Project: Queens Rochdak
Pace Project No.: 9276886

Sample: SB6 3-3.5 Lab ID: 9276886007 Collected: 08/31/10 14:30 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Me	thod: EPA 8260						
4-Bromofluorobenzene (S)	101 %		70-130	1		09/07/10 15:08	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %	D	70-130	1		09/07/10 15:08	17060-07-0	

Sample: TW2 Lab ID: 9276886008 Collected: 08/31/10 15:00 Received: 09/03/10 10:00 Matrix: Solid

Lab ID: 927	6886008	Collected: 08/31/1	0 15:0	0 Received: 09	/03/10 10:00 N	latrix: Solid	
ght" basis							
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Met	hod: EPA 827	0 by SIM					
ND ug	ı/L	2.6	1	09/03/10 17:18	09/09/10 12:50	83-32-9	
ND ug	J/L	2.6	1	09/03/10 17:18	09/09/10 12:50	208-96-8	
ND ug	J/L	0.21	1	09/03/10 17:18	09/09/10 12:50	120-12-7	
ND ug	J/L	0.21	1	09/03/10 17:18	09/09/10 12:50	56-55-3	
ND ug	J/L	0.21	1	09/03/10 17:18	09/09/10 12:50	50-32-8	
ND ug	J/L	0.21	1	09/03/10 17:18	09/09/10 12:50	205-99-2	
ND ug	J/L	0.21	1	09/03/10 17:18	09/09/10 12:50	191-24-2	
ND ug	J/L	0.21	1	09/03/10 17:18	09/09/10 12:50	207-08-9	
ND ug	J/L	0.21	1	09/03/10 17:18	09/09/10 12:50	218-01-9	
ND ug	ı/L	0.21	1	09/03/10 17:18	09/09/10 12:50	53-70-3	
ND ug	ı/L	0.21	1	09/03/10 17:18	09/09/10 12:50	206-44-0	
ND ug	ı/L	0.21	1	09/03/10 17:18	09/09/10 12:50	86-73-7	
ND ug	ı/L	0.21	1	09/03/10 17:18	09/09/10 12:50	193-39-5	
ND ug	ı/L	1.0	1	09/03/10 17:18	09/09/10 12:50	91-20-3	
ND ug	ı/L	0.21	1	09/03/10 17:18	09/09/10 12:50	85-01-8	
ND ug	ı/L	0.21	1	09/03/10 17:18	09/09/10 12:50	129-00-0	
37 %		35-114	1	09/03/10 17:18	09/09/10 12:50	4165-60-0	
35 %		43-116	1	09/03/10 17:18	09/09/10 12:50	321-60-8	S1
52 %		33-141	1	09/03/10 17:18	09/09/10 12:50	1718-51-0	
Analytical Met	hod: EPA 826	0					
ND ug	ı/L	10.0	1		09/07/10 15:36	67-64-1	
ND ug	J/L	1.0	1		09/07/10 15:36	71-43-2	
ND ug	J/L	1.0	1		09/07/10 15:36	74-97-5	
ND ug	J/L	1.0	1		09/07/10 15:36	75-27-4	
ND ug	ı/L	1.0	1		09/07/10 15:36	75-25-2	
ND ug	, J/L	1.0	1		09/07/10 15:36	74-83-9	
ND ug	ı/L	10.0	1		09/07/10 15:36	78-93-3	
ND ug	ı/L	1.0	1		09/07/10 15:36	75-15-0	
ND ug	]/L	1.0	1		09/07/10 15:36	56-23-5	
-		1.0	1		09/07/10 15:36	108-90-7	
	•	1.0	1		09/07/10 15:36	75-00-3	
ND ug	ı/L	1.0	1		09/07/10 15:36	67-66-3	
	•	1.0	1		09/07/10 15:36	74-87-3	
-		1.0	1		09/07/10 15:36	124-48-1	
	•	1.0	1		09/07/10 15:36	95-50-1	
	•						
	Results  Analytical Meti  ND ug  ND ug	Results Units  Analytical Method: EPA 827  ND ug/L  ND ug/L	Results	Results	Results	Results	Results

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### ANALYTICAL RESULTS

Project: Queens Rochdak

Pace Project No.: 9276886

Benzo(b)fluoranthene

Benzo(g,h,i)perylene

Date: 09/14/2010 12:21 PM

Lab ID: 9276886008 Sample: TW2 Collected: 08/31/10 15:00 Received: 09/03/10 10:00 Matrix: Solid Results reported on a "dry-weight" basis **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8260 MSV Analytical Method: EPA 8260 1,3-Dichlorobenzene ND ug/L 1.0 1 09/07/10 15:36 541-73-1 1,4-Dichlorobenzene ND ug/L 1.0 1 09/07/10 15:36 106-46-7 1,1-Dichloroethane ND ug/L 09/07/10 15:36 75-34-3 1.0 1 1,2-Dichloroethane ND ug/L 1.0 09/07/10 15:36 107-06-2 1 1,2-Dichloroethene (Total) ND ug/L 2.0 1 09/07/10 15:36 540-59-0 1,1-Dichloroethene ND ug/L 1.0 09/07/10 15:36 75-35-4 1 cis-1.2-Dichloroethene ND ug/L 1.0 09/07/10 15:36 156-59-2 1 trans-1,2-Dichloroethene ND ug/L 09/07/10 15:36 156-60-5 1.0 1 1,2-Dichloropropane ND ug/L 1.0 09/07/10 15:36 78-87-5 1 cis-1,3-Dichloropropene ND ug/L 1.0 09/07/10 15:36 10061-01-5 1 09/07/10 15:36 10061-02-6 trans-1,3-Dichloropropene ND ug/L 1.0 1 Ethylbenzene ND ug/L 1.0 1 09/07/10 15:36 100-41-4 2-Hexanone ND ug/L 10.0 09/07/10 15:36 591-78-6 Methylene Chloride ND ug/L 09/07/10 15:36 75-09-2 1.0 1 4-Methyl-2-pentanone (MIBK) ND ug/L 10.0 09/07/10 15:36 108-10-1 1 Methyl-tert-butyl ether ND ug/L 1.0 1 09/07/10 15:36 1634-04-4 Styrene ND ug/L 1.0 1 09/07/10 15:36 100-42-5 1,1,2,2-Tetrachloroethane ND ug/L 1.0 09/07/10 15:36 79-34-5 1 12.3 ug/L 09/07/10 15:36 127-18-4 Tetrachloroethene 1.0 1 Toluene ND ug/L 09/07/10 15:36 108-88-3 1.0 1 1,2,4-Trichlorobenzene ND ug/L 1.0 1 09/07/10 15:36 120-82-1 1,1,1-Trichloroethane ND ug/L 1.0 1 09/07/10 15:36 71-55-6 1,1,2-Trichloroethane ND ug/L 1.0 1 09/07/10 15:36 79-00-5 Trichloroethene ND ug/L 1.0 09/07/10 15:36 79-01-6 Vinyl chloride ND ug/L 1.0 09/07/10 15:36 75-01-4 Xylene (Total) ND ug/L 3.0 1 09/07/10 15:36 1330-20-7 m&p-Xylene ND ug/L 2.0 09/07/10 15:36 179601-23-1 1 o-Xylene ND ug/L 1.0 09/07/10 15:36 95-47-6 1 4-Bromofluorobenzene (S) 94 % 70-130 09/07/10 15:36 460-00-4 1 70-130 09/07/10 15:36 17060-07-0 1,2-Dichloroethane-d4 (S) 110 % 1 09/07/10 15:36 2037-26-5 Toluene-d8 (S) 95 % 70-130 1 Sample: SB7 1.5-2 Lab ID: 9276886009 Collected: 08/31/10 15:10 Received: 09/03/10 10:00 Matrix: Solid Results reported on a "dry-weight" basis DF **Parameters** Results Units Report Limit Prepared Analyzed CAS No. Qual 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Acenaphthene ND ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 83-32-9 1 6.5 09/07/10 16:17 09/08/10 19:37 208-96-8 Acenaphthylene ND ug/kg 1 6.5 Anthracene ND ug/kg 1 09/07/10 16:17 09/08/10 19:37 120-12-7 Benzo(a)anthracene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 19:37 56-55-3 Benzo(a)pyrene 34.7 ug/kg 6.5 1 09/07/10 16:17 09/08/10 19:37 50-32-8

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66.8 ug/kg

35.1 ug/kg

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09/07/10 16:17 09/08/10 19:37 205-99-2

09/07/10 16:17 09/08/10 19:37 191-24-2



6.5

6.5

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### ANALYTICAL RESULTS

Project: Queens Rochdak

Pace Project No.: 9276886 Sample: SB7 1.5-2 Lab ID: 9276886009 Collected: 08/31/10 15:10 Received: 09/03/10 10:00 Matrix: Solid Results reported on a "dry-weight" basis **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Benzo(k)fluoranthene 29.5 ug/kg 6.5 1 09/07/10 16:17 09/08/10 19:37 207-08-9 Chrysene 34.1 ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 218-01-9 1 Dibenz(a,h)anthracene 15.7 ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 1 Fluoranthene ND ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 1 Fluorene ND ug/kg 6.5 1 09/07/10 16:17 09/08/10 19:37 86-73-7 33.8 ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 193-39-5 Indeno(1,2,3-cd)pyrene 1 ND ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 91-20-3 Naphthalene 1 Phenanthrene ND ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 85-01-8 1 Pyrene ND ug/kg 6.5 09/07/10 16:17 09/08/10 19:37 129-00-0 1 23-120 Nitrobenzene-d5 (S) 98 % 09/07/10 16:17 09/08/10 19:37 4165-60-0 1 2-Fluorobiphenyl (S) 09/07/10 16:17 09/08/10 19:37 321-60-8 90 % 30-115 1 Terphenyl-d14 (S) 94 % 18-137 1 09/07/10 16:17 09/08/10 19:37 1718-51-0 8260 MSV 5030 Low Level Analytical Method: EPA 8260 09/07/10 15:30 67-64-1 Acetone 111 ug/kg 9.1 1 Benzene ND ug/kg 4.5 1 09/07/10 15:30 71-43-2 Bromodichloromethane ND ug/kg 4.5 1 09/07/10 15:30 75-27-4 Bromoform ND ug/kg 4.5 1 09/07/10 15:30 75-25-2 Bromomethane ND ug/kg 4.5 1 09/07/10 15:30 74-83-9 **TOTAL BTEX** ND ug/kg 27.3 09/07/10 15:30 1 9.1 09/07/10 15:30 78-93-3 2-Butanone (MEK) ND ug/kg 1 Carbon disulfide ND ug/kg 4.5 09/07/10 15:30 75-15-0 1 09/07/10 15:30 56-23-5 Carbon tetrachloride ND ug/kg 4.5 1 Chlorobenzene ND ug/kg 4.5 09/07/10 15:30 108-90-7 1 Chloroethane ND ug/kg 4.5 1 09/07/10 15:30 75-00-3 Chloroform ND ug/kg 4.5 1 09/07/10 15:30 67-66-3 Chloromethane ND ug/kg 4.5 09/07/10 15:30 74-87-3 1 Dibromochloromethane ND ug/kg 4.5 1 09/07/10 15:30 124-48-1 4.5 09/07/10 15:30 95-50-1 1,2-Dichlorobenzene ND ug/kg 1 1,3-Dichlorobenzene ND ug/kg 4.5 1 09/07/10 15:30 541-73-1 1.4-Dichlorobenzene ND ug/kg 4.5 09/07/10 15:30 106-46-7 1 4.5 09/07/10 15:30 75-34-3 1.1-Dichloroethane ND ug/kg 1 ND ug/kg 4.5 09/07/10 15:30 107-06-2 1.2-Dichloroethane 1 1,2-Dichloroethene (Total) ND ug/kg 9.1 09/07/10 15:30 540-59-0 1 1,1-Dichloroethene ND ug/kg 4.5 1 09/07/10 15:30 75-35-4 09/07/10 15:30 156-59-2 cis-1.2-Dichloroethene ND ug/kg 4.5 1 trans-1,2-Dichloroethene ND ug/kg 4.5 09/07/10 15:30 156-60-5 1 1,2-Dichloropropane ND ug/kg 4.5 09/07/10 15:30 78-87-5 cis-1,3-Dichloropropene ND ug/kg 4.5 09/07/10 15:30 10061-01-5 09/07/10 15:30 10061-02-6 trans-1,3-Dichloropropene ND ug/kg 4.5 1 Ethylbenzene ND ug/kg 4.5 1 09/07/10 15:30 100-41-4 2-Hexanone ND ug/kg 9.1 1 09/07/10 15:30 591-78-6 ND ug/kg 4.5 09/07/10 15:30 75-09-2 Methylene Chloride 1 ND ug/kg 9.1 09/07/10 15:30 108-10-1 4-Methyl-2-pentanone (MIBK) 1 Methyl-tert-butyl ether ND ug/kg 4.5 09/07/10 15:30 1634-04-4 1 09/07/10 15:30 100-42-5 ND ug/kg 4.5 Styrene 1

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### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB7 1.5-2 Lab ID: 9276886009 Collected: 08/31/10 15:10 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method:	EPA 8260					
1,1,2,2-Tetrachloroethane	ND ug/kg	4.5	1		09/07/10 15:30	79-34-5	
Tetrachloroethene	<b>64400</b> ug/kg	4410	1000		09/09/10 15:54	127-18-4	
Toluene	ND ug/kg	4.5	1		09/07/10 15:30	108-88-3	
1,1,1-Trichloroethane	ND ug/kg	4.5	1		09/07/10 15:30	71-55-6	
1,1,2-Trichloroethane	ND ug/kg	4.5	1		09/07/10 15:30	79-00-5	
Trichloroethene	<b>12.8</b> ug/kg	4.5	1		09/07/10 15:30	79-01-6	
Vinyl chloride	ND ug/kg	4.5	1		09/07/10 15:30	75-01-4	
Xylene (Total)	ND ug/kg	13.6	1		09/07/10 15:30	1330-20-7	
m&p-Xylene	ND ug/kg	9.1	1		09/07/10 15:30	179601-23-1	
o-Xylene	ND ug/kg	4.5	1		09/07/10 15:30	95-47-6	
Toluene-d8 (S)	97 %	70-130	1		09/07/10 15:30	2037-26-5	
4-Bromofluorobenzene (S)	104 %	70-130	1		09/07/10 15:30	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	70-130	1		09/07/10 15:30	17060-07-0	

Sample: SB8 5.5-6 Lab ID: 9276886010 Collected: 08/31/10 15:30 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Met	hod: EPA 827	0 by SIM					
Acenaphthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	83-32-9	
Acenaphthylene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	208-96-8	
Anthracene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	120-12-7	
Benzo(a)anthracene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	56-55-3	
Benzo(a)pyrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	50-32-8	
Benzo(b)fluoranthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	205-99-2	
Benzo(g,h,i)perylene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	191-24-2	
Benzo(k)fluoranthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	207-08-9	
Chrysene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	218-01-9	
Dibenz(a,h)anthracene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	53-70-3	
Fluoranthene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	206-44-0	
Fluorene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	193-39-5	
Naphthalene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	91-20-3	
Phenanthrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	85-01-8	
Pyrene	ND u	g/kg	6.6	1	09/07/10 16:17	09/08/10 15:05	129-00-0	
Nitrobenzene-d5 (S)	111 %	)	23-120	1	09/07/10 16:17	09/08/10 15:05	4165-60-0	
2-Fluorobiphenyl (S)	95 %	)	30-115	1	09/07/10 16:17	09/08/10 15:05	321-60-8	
Terphenyl-d14 (S)	147 %		18-137	1	09/07/10 16:17	09/08/10 15:05	1718-51-0	S3
8260 MSV 5030 Low Level	Analytical Met	hod: EPA 826	0					
Acetone	ND u	g/kg	431	50		09/08/10 16:08	67-64-1	
Benzene	ND u	g/kg	4.4	1		09/07/10 15:53	71-43-2	
Bromodichloromethane	ND u	g/kg	4.4	1		09/07/10 15:53	75-27-4	
Bromoform	ND u	g/kg	4.4	1		09/07/10 15:53	75-25-2	

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### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB8 5.5-6 Lab ID: 9276886010 Collected: 08/31/10 15:30 Received: 09/03/10 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV 5030 Low Level	Analytical Meth	nod: EPA 8260	)					
Bromomethane	ND ug	/kg	4.4	1		09/07/10 15:53	74-83-9	
TOTAL BTEX	ND ug	/kg	26.3	1		09/07/10 15:53		
2-Butanone (MEK)	<b>29.6</b> ug	/kg	8.8	1		09/07/10 15:53	78-93-3	
Carbon disulfide	ND ug	-	4.4	1		09/07/10 15:53	75-15-0	
Carbon tetrachloride	ND ug	/kg	4.4	1		09/07/10 15:53	56-23-5	
Chlorobenzene	ND ug	/kg	4.4	1		09/07/10 15:53	108-90-7	
Chloroethane	ND ug	/kg	4.4	1		09/07/10 15:53	75-00-3	
Chloroform	ND ug	-	4.4	1		09/07/10 15:53	67-66-3	
Chloromethane	ND ug	/kg	4.4	1		09/07/10 15:53	74-87-3	
Dibromochloromethane	ND ug	ū	4.4	1		09/07/10 15:53	124-48-1	
1,2-Dichlorobenzene	ND ug	-	4.4	1		09/07/10 15:53	95-50-1	
1,3-Dichlorobenzene	ND ug	-	4.4	1		09/07/10 15:53	541-73-1	
1,4-Dichlorobenzene	ND ug	J	4.4	1		09/07/10 15:53	106-46-7	
1,1-Dichloroethane	ND ug	J	4.4	1		09/07/10 15:53		
1,2-Dichloroethane	ND ug	•	4.4	1		09/07/10 15:53		
1,2-Dichloroethene (Total)	ND ug		8.8	1		09/07/10 15:53	540-59-0	
1,1-Dichloroethene	ND ug	J	4.4	1		09/07/10 15:53		
cis-1,2-Dichloroethene	ND ug	J	4.4	1		09/07/10 15:53		
rans-1,2-Dichloroethene	ND ug	•	4.4	1		09/07/10 15:53		
1,2-Dichloropropane	ND ug	•	4.4	1		09/07/10 15:53		
cis-1,3-Dichloropropene	ND ug	•	4.4	1		09/07/10 15:53		
rans-1,3-Dichloropropene	ND ug	J	4.4	1		09/07/10 15:53		
Ethylbenzene	ND ug	•	4.4	1		09/07/10 15:53		
2-Hexanone	ND ug	-	8.8	1		09/07/10 15:53		
Methylene Chloride	ND ug	ū	4.4	1		09/07/10 15:53		
4-Methyl-2-pentanone (MIBK)	ND ug	J	8.8	1		09/07/10 15:53		
Methyl-tert-butyl ether	ND ug	•	4.4	1		09/07/10 15:53		
Styrene	ND ug	-	4.4	1		09/07/10 15:53		
1,1,2,2-Tetrachloroethane	ND ug	J	4.4	1		09/07/10 15:53		
Tetrachloroethene	<b>1890</b> ug	•	216	50		09/08/10 16:08		
Foluene	ND ug	•	4.4	1		09/07/10 15:53		
1,1,1-Trichloroethane	ND ug	-	4.4	1		09/07/10 15:53		
1,1,2-Trichloroethane	ND ug	J	4.4	1		09/07/10 15:53		
Trichloroethene	ND ug	J	4.4	1		09/07/10 15:53		
/inyl chloride	ND ug	-	4.4	1		09/07/10 15:53		
Kylene (Total)	ND ug		13.1	1		09/07/10 15:53		
m&p-Xylene	ND ug	J	8.8	1		09/07/10 15:53		
o-Xylene	ND ug	•	4.4	1		09/07/10 15:53		
Toluene-d8 (S)	91 %	/Ng	70-130	1		09/07/10 15:53		
4-Bromofluorobenzene (S)	98 %		70-130 70-130	1		09/07/10 15:53		
1,2-Dichloroethane-d4 (S)	103 %		70-130 70-130	1		09/07/10 15:53		

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### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Sample: SB9 7.5-8	Lab ID: 9276886	<b>6011</b> Collected: 08/31	/10 11:10	Received: 09	/03/10 10:00 N	Matrix: Water	
Parameters	Results	Units Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270 MSSV PAH by SIM	Analytical Method:	EPA 8270 by SIM					
Acenaphthene	ND ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	83-32-9	
Acenaphthylene	ND ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	208-96-8	
Anthracene	<b>31.8</b> ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	120-12-7	
Benzo(a)anthracene	<b>32.6</b> ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	56-55-3	
Benzo(a)pyrene	<b>34.0</b> ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	50-32-8	
Benzo(b)fluoranthene	<b>26.6</b> ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	205-99-2	
Benzo(g,h,i)perylene	<b>20.1</b> ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	191-24-2	
Benzo(k)fluoranthene	<b>32.4</b> ug/kg	6.5	1	09/07/10 16:17	09/08/10 18:48	207-08-9	
Chrysene	<b>35.8</b> ug/kg	6.5		09/07/10 16:17	09/08/10 18:48	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg	6.5			09/08/10 18:48		
Fluoranthene	<b>60.1</b> ug/kg	6.5			09/08/10 18:48		
Fluorene	ND ug/kg	6.5			09/08/10 18:48		
Indeno(1,2,3-cd)pyrene	<b>19.0</b> ug/kg	6.5			09/08/10 18:48		
Naphthalene	ND ug/kg	6.5			09/08/10 18:48		
Phenanthrene	<b>58.2</b> ug/kg	6.5			09/08/10 18:48		
Pyrene	ND ug/kg	6.5			09/08/10 18:48		
Nitrobenzene-d5 (S)	105 %	23-120			09/08/10 18:48		
` ,	93 %	30-115			09/08/10 18:48		
2-Fluorobiphenyl (S)							
Terphenyl-d14 (S)	113 %	18-137	1	09/07/10 16:17	09/08/10 18:48	1718-51-0	
8260 MSV 5030 Low Level	Analytical Method:	EPA 8260					
Acetone	<b>38.5</b> ug/kg	9.6	1		09/07/10 16:15	67-64-1	
Benzene	ND ug/kg	4.8	1		09/07/10 16:15	71-43-2	
Bromodichloromethane	ND ug/kg	4.8	1		09/07/10 16:15	75-27-4	
Bromoform	ND ug/kg	4.8	1		09/07/10 16:15	75-25-2	
Bromomethane	ND ug/kg	4.8	1		09/07/10 16:15	74-83-9	
TOTAL BTEX	ND ug/kg	28.8	1		09/07/10 16:15	;	
2-Butanone (MEK)	ND ug/kg	9.6	1		09/07/10 16:15	78-93-3	
Carbon disulfide	ND ug/kg	4.8	1		09/07/10 16:15	75-15-0	
Carbon tetrachloride	ND ug/kg	4.8	1		09/07/10 16:15	56-23-5	
Chlorobenzene	ND ug/kg	4.8	1		09/07/10 16:15	108-90-7	
Chloroethane	ND ug/kg	4.8	1		09/07/10 16:15	75-00-3	
Chloroform	ND ug/kg	4.8	1		09/07/10 16:15	67-66-3	
Chloromethane	ND ug/kg	4.8	1		09/07/10 16:15	74-87-3	
Dibromochloromethane	ND ug/kg	4.8	1		09/07/10 16:15	124-48-1	
1,2-Dichlorobenzene	ND ug/kg	4.8			09/07/10 16:15		
1,3-Dichlorobenzene	ND ug/kg	4.8			09/07/10 16:15		
1,4-Dichlorobenzene	ND ug/kg	4.8			09/07/10 16:15		
1,1-Dichloroethane	ND ug/kg	4.8			09/07/10 16:15		
1,2-Dichloroethane	ND ug/kg	4.8			09/07/10 16:15		
1,2-Dichloroethene (Total)	ND ug/kg	9.6			09/07/10 16:15		
1,1-Dichloroethene	ND ug/kg	4.8			09/07/10 16:15		
cis-1,2-Dichloroethene	ND ug/kg	4.8			09/07/10 16:15		
trans-1,2-Dichloroethene	ND ug/kg	4.8			09/07/10 16:15		
1,2-Dichloropropane		4.8			09/07/10 16:15		
cis-1,3-Dichloropropene	ND ug/kg ND ug/kg	4.8 4.8			09/07/10 16:15		
us- i .5-i uchioropropene	ואוז ממ/גמ	4 X	1		U9/U7/TU T0:15	0-10001-01-5	

Date: 09/14/2010 12:21 PM

**REPORT OF LABORATORY ANALYSIS** 

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Sample: SB9 7.5-8	Lab ID: 9276	886011	Collected: 08/31/1	0 11:10	Received: 09	/03/10 10:00 M	latrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Meth	od: EPA 82	260					
Ethylbenzene	ND ug/	/kg	4.8	1		09/07/10 16:15	100-41-4	
2-Hexanone	ND ug/	/kg	9.6	1		09/07/10 16:15	591-78-6	
Methylene Chloride	ND ug/	/kg	4.8	1		09/07/10 16:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/	/kg	9.6	1		09/07/10 16:15	108-10-1	
Methyl-tert-butyl ether	ND ug/	/kg	4.8	1		09/07/10 16:15	1634-04-4	
Styrene	ND ug/	/kg	4.8	1		09/07/10 16:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/	-	4.8	1		09/07/10 16:15	79-34-5	
Tetrachloroethene	<b>270</b> ug/		4.8	1		09/07/10 16:15	127-18-4	
Toluene	ND ug/	-	4.8	1		09/07/10 16:15	108-88-3	
1,1,1-Trichloroethane	ND ug/	Ü	4.8	1		09/07/10 16:15	71-55-6	
1,1,2-Trichloroethane	ND ug/	-	4.8	1		09/07/10 16:15		
Trichloroethene	<b>6.2</b> ug/	-	4.8	1		09/07/10 16:15		
Vinyl chloride	ND ug/	-	4.8	1		09/07/10 16:15		
Xylene (Total)	ND ug/	-	14.4	1		09/07/10 16:15		
m&p-Xylene	ND ug/	•	9.6	1		09/07/10 16:15		
o-Xylene	ND ug/	-	4.8	1		09/07/10 16:15		
Toluene-d8 (S)	95 %	Ng	70-130	1		09/07/10 16:15		
4-Bromofluorobenzene (S)	102 %		70-130	1		09/07/10 16:15		
4-Diditionadiobenzene (3)	102 /0							
1,2-Dichloroethane-d4 (S)	100 %		70-130	1		09/07/10 16:15	17000-07-0	
1,2-Dichloroethane-d4 (S)					D : 1 00			
	100 % Lab ID: 9276	6886012	Collected: 08/31/1	0 14:20		//03/10 10:00 M	latrix: Water	
		<b>5886012</b> Units			Received: 09			Qual
Sample: SB-10 Parameters	Lab ID: 9276	Units	Collected: 08/31/1	0 14:20		//03/10 10:00 M	latrix: Water	Qual
Sample: SB-10 Parameters 8270 MSSV PAH by SIM	Lab ID: 9276	Units nod: EPA 82	Collected: 08/31/1	0 14:20	Prepared	//03/10 10:00 M	latrix: Water CAS No.	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM Acenaphthene	Lab ID: 9276 Results Analytical Meth	Units nod: EPA 82	Collected: 08/31/1 Report Limit 270 by SIM	0 14:20 DF	Prepared 09/07/10 16:17	//03/10 10:00 M Analyzed	CAS No.	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene	Lab ID: 9276 Results Analytical Meth ND ug/	Units nod: EPA 82 /kg /kg	Collected: 08/31/1 Report Limit 270 by SIM 6.6	0 14:20 DF 1	Prepared 09/07/10 16:17 09/07/10 16:17	0/03/10 10:00 M Analyzed 09/08/10 19:13	CAS No.  83-32-9 208-96-8	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene	Lab ID: 9276 Results  Analytical Meth  ND ug/ ND ug/	Units nod: EPA 82 /kg /kg /kg	Collected: 08/31/1 Report Limit 270 by SIM 6.6 6.6	0 14:20 DF 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 19:13	CAS No.  83-32-9 208-96-8 120-12-7	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene	Lab ID: 9276 Results  Analytical Meth ND ug/ ND ug/ ND ug/	Units od: EPA 82 /kg /kg /kg	Collected: 08/31/1 Report Limit 270 by SIM 6.6 6.6 6.6	0 14:20 DF 1 1 1	09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene	Lab ID: 9276 Results  Analytical Meth ND ug/ ND ug/ ND ug/ ND ug/ ND ug/	Units  od: EPA 82 /kg /kg /kg /kg	Collected: 08/31/1 Report Limit 270 by SIM 6.6 6.6 6.6 6.6 6.6	0 14:20 DF 1 1 1 1	09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene	Lab ID: 9276  Results  Analytical Meth  ND ug/	Units  od: EPA 82 /kg /kg /kg /kg /kg /kg	Collected: 08/31/1 Report Limit 270 by SIM 6.6 6.6 6.6 6.6 6.6 6.6	0 14:20 DF 1 1 1 1 1	09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene	Lab ID: 9276  Results  Analytical Meth  ND ug/	Units  od: EPA 82 /kg /kg /kg /kg /kg /kg /kg	Collected: 08/31/1 Report Limit 270 by SIM 6.6 6.6 6.6 6.6 6.6 6.6 6.6	0 14:20 DF 1 1 1 1 1 1	09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene	Lab ID: 9276  Results  Analytical Meth  ND ug/	Units  od: EPA 82 /kg /kg /kg /kg /kg /kg /kg	Collected: 08/31/1 Report Limit 270 by SIM 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	0 14:20 DF	09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene	Lab ID: 9276  Results  Analytical Meth  ND ug/	Units  od: EPA 82  /kg /kg /kg /kg /kg /kg /kg /kg /kg	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9	Qual
Sample: SB-10  Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene	Lab ID: 9276  Results  Analytical Meth  ND ug/	Units  od: EPA 82  /kg  /kg  /kg  /kg  /kg  /kg  /kg  /k	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3	Qual
Sample: SB-10  Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene	Lab ID: 9276  Results  Analytical Meth  ND ug/	Units  od: EPA 82  /kg /kg /kg /kg /kg /kg /kg /kg	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0	Qual
Sample: SB-10  Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene	Results  Analytical Meth  ND ug/	Units  od: EPA 82  /kg /kg /kg /kg /kg /kg /kg /kg /kg	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene	Results  Analytical Meth  ND ug/	Units  od: EPA 82  /kg /kg /kg /kg /kg /kg /kg /kg /kg	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene	Results  Analytical Methology ND ug/	Units  od: EPA 82  kg  kg  kg  kg  kg  kg  kg  kg  kg  k	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-20-3	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene	Results  Analytical Meth  ND ug/	Units  od: EPA 82  kg  kg  kg  kg  kg  kg  kg  kg  kg  k	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-20-3 85-01-8	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene Pyrene	Results  Analytical Meth  ND ug/	Units  od: EPA 82  kg  kg  kg  kg  kg  kg  kg  kg  kg  k	Collected: 08/31/1 Report Limit 270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-20-3 85-01-8 129-00-0	Qual
Sample: SB-10 Parameters  8270 MSSV PAH by SIM  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene	Results  Analytical Meth  ND ug/	Units  od: EPA 82  kg  kg  kg  kg  kg  kg  kg  kg  kg  k	Collected: 08/31/1  Report Limit  270 by SIM  6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6	0 14:20 DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared  09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17 09/07/10 16:17	09/08/10 10:00 M Analyzed 09/08/10 19:13 09/08/10 19:13	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-20-3 85-01-8 129-00-0 4165-60-0	Qual

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**REPORT OF LABORATORY ANALYSIS** 

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Pace Analytical Services, Inc.

2225 Riverside Dr. Asheville, NC 28804 (828)254-7176 Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **ANALYTICAL RESULTS**

Project: Queens Rochdak

Pace Project No.: 9276886

Results Ur	nits Report Limit	<b>D</b> E	D			
		DF	Prepared	Analyzed	CAS No.	Qua
Analytical Method: El	PA 8260					
<b>48.1</b> ug/kg	8.1	1		09/07/10 16:38	3 67-64-1	
ND ug/kg	4.0	1		09/07/10 16:38	3 71-43-2	
ND ug/kg	4.0	1		09/07/10 16:38	3 75-27-4	
ND ug/kg	4.0	1		09/07/10 16:38	3 75-25-2	
ND ug/kg	4.0	1		09/07/10 16:38	3 74-83-9	
ND ug/kg	24.2	1		09/07/10 16:38	3	
ND ug/kg	8.1	1		09/07/10 16:38	3 78-93-3	
ND ug/kg	4.0	1		09/07/10 16:38	3 75-15-0	
ND ug/kg	4.0	1		09/07/10 16:38	3 56-23-5	
	4.0	1		09/07/10 16:38	3 108-90-7	
	4.0	1		09/07/10 16:38	3 75-00-3	
	4.0	1				
	4.0	1				
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					_	
	ND ug/kg ND ug/kg ND ug/kg ND ug/kg ND ug/kg ND ug/kg ND ug/kg	ND ug/kg 4.0 ND ug/kg 4.0 ND ug/kg 4.0 ND ug/kg 4.0 ND ug/kg 24.2 ND ug/kg 8.1 ND ug/kg 4.0	ND ug/kg	ND ug/kg	ND ug/kg	ND ug/kg 4.0 1 09/07/10 16:38 71-43-2 ND ug/kg 4.0 1 09/07/10 16:38 75-27-4 ND ug/kg 4.0 1 09/07/10 16:38 75-25-2 ND ug/kg 4.0 1 09/07/10 16:38 75-25-2 ND ug/kg 4.0 1 09/07/10 16:38 74-83-9 ND ug/kg 8.1 1 09/07/10 16:38 75-15-0 ND ug/kg 8.1 1 09/07/10 16:38 75-15-0 ND ug/kg 4.0 1 09/07/10 16:38 75-15-0 ND ug/kg 4.0 1 09/07/10 16:38 75-15-0 ND ug/kg 4.0 1 09/07/10 16:38 75-03-3 ND ug/kg 4.0 1 09/07/10 16:38 75-00-3 ND ug/kg 4.0 1 09/07/10 16:38 75-00-3 ND ug/kg 4.0 1 09/07/10 16:38 75-00-3 ND ug/kg 4.0 1 09/07/10 16:38 74-87-3 ND ug/kg 4.0 1 09/07/10 16:38 124-48-1 ND ug/kg 4.0 1 09/07/10 16:38 95-50-1 ND ug/kg 4.0 1 09/07/10 16:38 106-46-7 ND ug/kg 4.0 1 09/07/10 16:38 106-46-7 ND ug/kg 4.0 1 09/07/10 16:38 156-50-2 ND ug/kg 4.0 1 09/07/10 16:38 156-59-2 ND

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**REPORT OF LABORATORY ANALYSIS** 

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### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

QC Batch: MSSV/5893 Analysis Method: EPA 8270 by SIM

QC Batch Method: EPA 8270 by SIM Analysis Description: 8270/3546 MSSV PAH by SIM

Associated Lab Samples: 9276886001, 9276886002, 9276886003, 9276886005, 9276886006, 9276886007, 9276886009, 9276886010,

9276886011, 9276886012

METHOD BLANK: 211826 Matrix: Solid

Associated Lab Samples: 9276886001, 9276886002, 9276886003, 9276886005, 9276886006, 9276886007, 9276886009, 9276886010,

9276886011, 9276886012

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	6.7	09/08/10 11:47	
Acenaphthylene	ug/kg	ND	6.7	09/08/10 11:47	
Anthracene	ug/kg	ND	6.7	09/08/10 11:47	
Benzo(a)anthracene	ug/kg	ND	6.7	09/08/10 11:47	
Benzo(a)pyrene	ug/kg	ND	6.7	09/08/10 11:47	
Benzo(b)fluoranthene	ug/kg	ND	6.7	09/08/10 11:47	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	09/08/10 11:47	
Benzo(k)fluoranthene	ug/kg	ND	6.7	09/08/10 11:47	
Chrysene	ug/kg	ND	6.7	09/08/10 11:47	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	09/08/10 11:47	
Fluoranthene	ug/kg	ND	6.7	09/08/10 11:47	
Fluorene	ug/kg	ND	6.7	09/08/10 11:47	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	09/08/10 11:47	
Naphthalene	ug/kg	ND	6.7	09/08/10 11:47	
Phenanthrene	ug/kg	ND	6.7	09/08/10 11:47	
Pyrene	ug/kg	ND	6.7	09/08/10 11:47	
2-Fluorobiphenyl (S)	%	80	30-115	09/08/10 11:47	
Nitrobenzene-d5 (S)	%	91	23-120	09/08/10 11:47	
Terphenyl-d14 (S)	%	116	18-137	09/08/10 11:47	

LABORATORY	CONTROL	CAMDIE:	211027
LABUKATUKT	CONTROL	SAIVIPLE:	211027

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Acenaphthene	ug/kg	133	99.7	75	70-130	
Acenaphthylene	ug/kg	133	102	76	70-130	
Anthracene	ug/kg	133	112	84	70-130	
Benzo(a)anthracene	ug/kg	133	120	90	70-130	
Benzo(a)pyrene	ug/kg	133	138	104	70-130	
Benzo(b)fluoranthene	ug/kg	133	168	126	70-130	
Benzo(g,h,i)perylene	ug/kg	133	157	118	70-130	
Benzo(k)fluoranthene	ug/kg	133	146	110	70-130	
Chrysene	ug/kg	133	135	101	70-130	
Dibenz(a,h)anthracene	ug/kg	133	149	112	70-130	
Fluoranthene	ug/kg	133	121	91	70-130	
Fluorene	ug/kg	133	115	86	70-130	
Indeno(1,2,3-cd)pyrene	ug/kg	133	147	110	70-130	
Naphthalene	ug/kg	133	113	85	70-130	
Phenanthrene	ug/kg	133	108	81	70-130	
Pyrene	ug/kg	133	118	88	70-130	
2-Fluorobiphenyl (S)	%			82	30-115	

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**REPORT OF LABORATORY ANALYSIS** 

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### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

LABORATORY CONTROL SAMPLE: 211827

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrobenzene-d5 (S) Terphenyl-d14 (S)	% %			90 114	23-120 18-137	

MATRIX SPIKE & MATRIX S	PIKE DUPLICAT	E: 21182	8		211829						
			MS	MSD							
	92	276886001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Acenaphthene	ug/kg	ND	131	131	114	120	88	92	70-130	5	
Acenaphthylene	ug/kg	38.3	131	131	135	144	74	81	70-130	6	
Anthracene	ug/kg	ND	131	131	136	140	104	107	70-130	3	
Benzo(a)anthracene	ug/kg	37.1	131	131	175	180	106	109	70-130	3	
Benzo(a)pyrene	ug/kg	56.1	131	131	170	173	87	89	70-130	1	
Benzo(b)fluoranthene	ug/kg	68.7	131	131	229	220	123	116	70-130	4	
Benzo(g,h,i)perylene	ug/kg	58.0	131	131	184	186	97	98	70-130	1	
Benzo(k)fluoranthene	ug/kg	42.6	131	131	149	155	82	86	70-130	4	
Chrysene	ug/kg	51.3	131	131	172	172	93	92	70-130	.1	
Dibenz(a,h)anthracene	ug/kg	18.0	131	131	158	164	107	112	70-130	4	
Fluoranthene	ug/kg	37.5	131	131	181	192	110	118	70-130	6	
Fluorene	ug/kg	ND	131	131	132	129	101	98	70-130	3	
Indeno(1,2,3-cd)pyrene	ug/kg	40.0	131	131	185	187	111	113	70-130	1	
Naphthalene	ug/kg	ND	131	131	126	133	97	102	70-130	5	
Phenanthrene	ug/kg	ND	131	131	130	137	100	105	70-130	5	
Pyrene	ug/kg	29.5	131	131	162	153	101	95	70-130	5	
2-Fluorobiphenyl (S)	%						92	97	70-130		
Nitrobenzene-d5 (S)	%						104	105	70-130		
Terphenyl-d14 (S)	%						98	98	70-130		

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**REPORT OF LABORATORY ANALYSIS** 



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### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

QC Batch: MSSV/5882 Analysis Method: EPA 8270 by SIM

QC Batch Method: EPA 8270 by SIM Analysis Description: 8270 Water PAH by SIM MSSV

Associated Lab Samples: 9276886004, 9276886008

METHOD BLANK: 211020 Matrix: Water

Associated Lab Samples: 9276886004, 9276886008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	2.5	09/09/10 12:12	
Acenaphthylene	ug/L	ND	2.5	09/09/10 12:12	
Anthracene	ug/L	ND	0.20	09/09/10 12:12	
Benzo(a)anthracene	ug/L	ND	0.20	09/09/10 12:12	
Benzo(a)pyrene	ug/L	ND	0.20	09/09/10 12:12	
Benzo(b)fluoranthene	ug/L	ND	0.20	09/09/10 12:12	
Benzo(g,h,i)perylene	ug/L	ND	0.20	09/09/10 12:12	
Benzo(k)fluoranthene	ug/L	ND	0.20	09/09/10 12:12	
Chrysene	ug/L	ND	0.20	09/09/10 12:12	
Dibenz(a,h)anthracene	ug/L	ND	0.20	09/09/10 12:12	
Fluoranthene	ug/L	ND	0.20	09/09/10 12:12	
Fluorene	ug/L	ND	0.20	09/09/10 12:12	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.20	09/09/10 12:12	
Naphthalene	ug/L	ND	1.0	09/09/10 12:12	
Phenanthrene	ug/L	ND	0.20	09/09/10 12:12	
Pyrene	ug/L	ND	0.20	09/09/10 12:12	
2-Fluorobiphenyl (S)	%	27	43-116	09/09/10 12:12	S1
Nitrobenzene-d5 (S)	%	37	35-114	09/09/10 12:12	
Terphenyl-d14 (S)	%	74	33-141	09/09/10 12:12	

	LABORATORY CO	ONTROL SAMI	PLE: 211021	
--	---------------	-------------	-------------	--

LABORATORT CONTROL SAMELL.	211021					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Acenaphthene	ug/L		.84J	42	32-104	
Acenaphthylene	ug/L	2	.74J	37	28-114	
Anthracene	ug/L	2	0.85	42	35-114	
Benzo(a)anthracene	ug/L	2	1.4	69	29-139	
Benzo(a)pyrene	ug/L	2	1.3	63	35-128	
Benzo(b)fluoranthene	ug/L	2	1.4	70	26-141	
Benzo(g,h,i)perylene	ug/L	2	1.5	73	34-131	
Benzo(k)fluoranthene	ug/L	2	1.5	76	29-146	
Chrysene	ug/L	2	1.4	70	39-128	
Dibenz(a,h)anthracene	ug/L	2	1.4	69	39-136	
Fluoranthene	ug/L	2	1.2	61	35-135	
Fluorene	ug/L	2	0.89	44	34-104	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.4	69	37-136	
Naphthalene	ug/L	2	.79J	40	34-98	
Phenanthrene	ug/L	2	1.0	51	32-109	
Pyrene	ug/L	2	1.2	61	34-103	
2-Fluorobiphenyl (S)	%			32	43-116 \$	S1
Nitrobenzene-d5 (S)	%			45	35-114	

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LCS

% Rec

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### **QUALITY CONTROL DATA**

LCS

Project: Queens Rochdak

Pace Project No.: 9276886

LABORATORY CONTROL SAMPLE: 211021

Parameter Units Conc. Result % Rec Limits Qualifiers

Terphenyl-d14 (S) % 75 33-141

Spike

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**REPORT OF LABORATORY ANALYSIS** 



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### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

QC Batch: MSV/7052 Analysis Method: EPA 8260

QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low

9276886001, 9276886002, 9276886003, 9276886005, 9276886006, 9276886007, 9276886009, 9276886010, Associated Lab Samples:

9276886011, 9276886012

METHOD BLANK: 212156 Matrix: Solid

9276886001, 9276886002, 9276886003, 9276886005, 9276886006, 9276886007, 9276886009, 9276886010, Associated Lab Samples:

9276886011, 9276886012

0270	500011, 5270000012	Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	ND	5.0	09/07/10 12:53	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	09/07/10 12:53	
1,1,2-Trichloroethane	ug/kg	ND	5.0	09/07/10 12:53	
1,1-Dichloroethane	ug/kg	ND	5.0	09/07/10 12:53	
1,1-Dichloroethene	ug/kg	ND	5.0	09/07/10 12:53	
1,2-Dichlorobenzene	ug/kg	ND	5.0	09/07/10 12:53	
1,2-Dichloroethane	ug/kg	ND	5.0	09/07/10 12:53	
1,2-Dichloropropane	ug/kg	ND	5.0	09/07/10 12:53	
1,3-Dichlorobenzene	ug/kg	ND	5.0	09/07/10 12:53	
1,4-Dichlorobenzene	ug/kg	ND	5.0	09/07/10 12:53	
2-Butanone (MEK)	ug/kg	ND	10.0	09/07/10 12:53	
2-Hexanone	ug/kg	ND	10.0	09/07/10 12:53	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	09/07/10 12:53	
Acetone	ug/kg	ND	10.0	09/07/10 12:53	
Benzene	ug/kg	ND	5.0	09/07/10 12:53	
Bromodichloromethane	ug/kg	ND	5.0	09/07/10 12:53	
Bromoform	ug/kg	ND	5.0	09/07/10 12:53	
Bromomethane	ug/kg	ND	5.0	09/07/10 12:53	
Carbon disulfide	ug/kg	ND	5.0	09/07/10 12:53	
Carbon tetrachloride	ug/kg	ND	5.0	09/07/10 12:53	
Chlorobenzene	ug/kg	ND	5.0	09/07/10 12:53	
Chloroethane	ug/kg	ND	5.0	09/07/10 12:53	
Chloroform	ug/kg	ND	5.0	09/07/10 12:53	
Chloromethane	ug/kg	ND	5.0	09/07/10 12:53	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	09/07/10 12:53	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	09/07/10 12:53	
Dibromochloromethane	ug/kg	ND	5.0	09/07/10 12:53	
Ethylbenzene	ug/kg	ND	5.0	09/07/10 12:53	
m&p-Xylene	ug/kg	ND	10.0	09/07/10 12:53	
Methyl-tert-butyl ether	ug/kg	ND	5.0	09/07/10 12:53	
Methylene Chloride	ug/kg	ND	5.0	09/07/10 12:53	
o-Xylene	ug/kg	ND	5.0	09/07/10 12:53	
Styrene	ug/kg	ND	5.0	09/07/10 12:53	
Tetrachloroethene	ug/kg	ND	5.0	09/07/10 12:53	
Toluene	ug/kg	ND	5.0	09/07/10 12:53	
TOTAL BTEX	ug/kg	ND	30.0	09/07/10 12:53	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	09/07/10 12:53	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	09/07/10 12:53	
Trichloroethene	ug/kg	ND	5.0	09/07/10 12:53	
Vinyl chloride	ug/kg	ND	5.0	09/07/10 12:53	
Xylene (Total)	ug/kg	ND	15.0	09/07/10 12:53	

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### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

METHOD BLANK: 212156 Matrix: Solid

Associated Lab Samples: 9276886001, 9276886002, 9276886003, 9276886005, 9276886006, 9276886007, 9276886009, 9276886010,

9276886011, 9276886012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane-d4 (S)	<del></del> %	88	70-130	09/07/10 12:53	
4-Bromofluorobenzene (S)	%	100	70-130	09/07/10 12:53	
Toluene-d8 (S)	%	94	70-130	09/07/10 12:53	

LABORATORY CONTROL SAMPLE:	212157					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	20	20.3	101	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	20	16.7	83	70-130	
1,1,2-Trichloroethane	ug/kg	20	18.7	94	70-130	
1,1-Dichloroethane	ug/kg	20	18.8	94	70-130	
1,1-Dichloroethene	ug/kg	20	17.9	89	70-130	
1,2-Dichlorobenzene	ug/kg	20	18.3	91	70-130	
1,2-Dichloroethane	ug/kg	20	17.6	88	70-130	
1,2-Dichloropropane	ug/kg	20	17.4	87	70-130	
1,3-Dichlorobenzene	ug/kg	20	18.5	92	70-130	
1,4-Dichlorobenzene	ug/kg	20	18.5	93	70-130	
2-Butanone (MEK)	ug/kg	20	17.7	88	70-130	
2-Hexanone	ug/kg	20	19.3	97	70-130	
4-Methyl-2-pentanone (MIBK)	ug/kg	20	17.1	85	70-130	
Acetone	ug/kg	20	24.7	124	70-130	
Benzene	ug/kg	20	18.2	91	70-130	
Bromodichloromethane	ug/kg	20	17.4	87	70-130	
Bromoform	ug/kg	20	18.4	92	70-130	
Bromomethane	ug/kg	20	19.2	96	70-130	
Carbon disulfide	ug/kg	20	20.1	101	70-130	
Carbon tetrachloride	ug/kg	20	20.3	102	70-130	
Chlorobenzene	ug/kg	20	18.9	94	70-130	
Chloroethane	ug/kg	20	16.0	80	70-130	
Chloroform	ug/kg	20	18.7	94	70-130	
Chloromethane	ug/kg	20	18.3	92	70-130	
cis-1,2-Dichloroethene	ug/kg	20	18.3	91	70-130	
cis-1,3-Dichloropropene	ug/kg	20	17.7	89	70-130	
Dibromochloromethane	ug/kg	20	18.6	93	70-130	
Ethylbenzene	ug/kg	20	19.3	96	70-130	
m&p-Xylene	ug/kg	40	39.8	100	70-130	
Methyl-tert-butyl ether	ug/kg	20	20.7	103	70-130	
Methylene Chloride	ug/kg	20	18.6	93	70-130	
o-Xylene	ug/kg	20	18.8	94	70-130	
Styrene	ug/kg	20	17.6	88	70-130	
Tetrachloroethene	ug/kg	20	21.1	106	70-130	
Toluene	ug/kg	20	18.9	95	70-130	
TOTAL BTEX	ug/kg		115			
trans-1,2-Dichloroethene	ug/kg	20	18.3	91	70-130	

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

LABORATORY CONTROL SAMPLE: 212157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/kg		16.7	84	70-130	
Trichloroethene	ug/kg	20	19.5	97	70-130	
Vinyl chloride	ug/kg	20	18.7	93	70-130	
Xylene (Total)	ug/kg	60	58.6	98	70-130	
1,2-Dichloroethane-d4 (S)	%			89	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			95	70-130	





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

QC Batch: MSV/7045 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV

Associated Lab Samples: 9276886004, 9276886008

METHOD BLANK: 211861 Matrix: Water

Associated Lab Samples: 9276886004, 9276886008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	09/07/10 10:30	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	09/07/10 10:30	
1,1,2-Trichloroethane	ug/L	ND	1.0	09/07/10 10:30	
1,1-Dichloroethane	ug/L	ND	1.0	09/07/10 10:30	
1,1-Dichloroethene	ug/L	ND	1.0	09/07/10 10:30	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	09/07/10 10:30	
,2-Dichlorobenzene	ug/L	ND	1.0	09/07/10 10:30	
,2-Dichloroethane	ug/L	ND	1.0	09/07/10 10:30	
1,2-Dichloropropane	ug/L	ND	1.0	09/07/10 10:30	
1,3-Dichlorobenzene	ug/L	ND	1.0	09/07/10 10:30	
I,4-Dichlorobenzene	ug/L	ND	1.0	09/07/10 10:30	
2-Butanone (MEK)	ug/L	ND	10.0	09/07/10 10:30	
2-Hexanone	ug/L	ND	10.0	09/07/10 10:30	
1-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	09/07/10 10:30	
Acetone	ug/L	ND	10.0	09/07/10 10:30	
Benzene	ug/L	ND	1.0	09/07/10 10:30	
Bromochloromethane	ug/L	ND	1.0	09/07/10 10:30	
Bromodichloromethane	ug/L	ND	1.0	09/07/10 10:30	
Bromoform	ug/L	ND	1.0	09/07/10 10:30	
Bromomethane	ug/L	ND	1.0	09/07/10 10:30	
Carbon disulfide	ug/L	ND	1.0	09/07/10 10:30	
Carbon tetrachloride	ug/L	ND	1.0	09/07/10 10:30	
Chlorobenzene	ug/L	ND	1.0	09/07/10 10:30	
Chloroethane	ug/L	ND	1.0	09/07/10 10:30	
Chloroform	ug/L	ND	1.0	09/07/10 10:30	
Chloromethane	ug/L	ND	1.0	09/07/10 10:30	
cis-1,2-Dichloroethene	ug/L	ND	1.0	09/07/10 10:30	
sis-1,3-Dichloropropene	ug/L	ND	1.0	09/07/10 10:30	
Dibromochloromethane	ug/L	ND	1.0	09/07/10 10:30	
Ethylbenzene	ug/L	ND	1.0	09/07/10 10:30	
n&p-Xylene	ug/L	ND	2.0	09/07/10 10:30	
Methyl-tert-butyl ether	ug/L	ND	1.0	09/07/10 10:30	
Methylene Chloride	ug/L	ND	1.0	09/07/10 10:30	
o-Xylene	ug/L	ND	1.0	09/07/10 10:30	
Styrene	ug/L	ND	1.0	09/07/10 10:30	
etrachloroethene	ug/L	ND	1.0	09/07/10 10:30	
oluene	ug/L	ND	1.0	09/07/10 10:30	
rans-1,2-Dichloroethene	ug/L	ND	1.0	09/07/10 10:30	
rans-1,3-Dichloropropene	ug/L	ND	1.0	09/07/10 10:30	
richloroethene	ug/L	ND	1.0	09/07/10 10:30	
/inyl chloride	ug/L	ND	1.0	09/07/10 10:30	
(ylene (Total)	ug/L	ND	3.0	09/07/10 10:30	
,2-Dichloroethane-d4 (S)	%	110	70-130	09/07/10 10:30	

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**REPORT OF LABORATORY ANALYSIS** 

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

METHOD BLANK: 211861 Matrix: Water

Associated Lab Samples: 9276886004, 9276886008

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
4-Bromofluorobenzene (S)	<del>%</del>	96	70-130	09/07/10 10:30	
Toluene-d8 (S)	%	97	70-130	09/07/10 10:30	

LABORATORY CONTROL SAMPL	E: 211862					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L		18.7	93	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	16.8	84	70-130	
1,1,2-Trichloroethane	ug/L	20	18.0	90	70-130	
1,1-Dichloroethane	ug/L	20	18.5	92	70-130	
1,1-Dichloroethene	ug/L	20	16.5	82	70-130	
1,2,4-Trichlorobenzene	ug/L	20	19.6	98	70-130	
1,2-Dichlorobenzene	ug/L	20	18.5	93	70-130	
1,2-Dichloroethane	ug/L	20	19.0	95	70-130	
,2-Dichloropropane	ug/L	20	16.8	84	70-130	
1,3-Dichlorobenzene	ug/L	20	19.1	96	70-130	
I,4-Dichlorobenzene	ug/L	20	19.3	96	70-130	
2-Butanone (MEK)	ug/L	20	19.3	96	70-130	
2-Hexanone	ug/L	20	22.4	112	70-130	
l-Methyl-2-pentanone (MIBK)	ug/L	20	19.9	100	70-130	
Acetone	ug/L	20	14.8	74	70-130	
Benzene	ug/L	20	17.5	87	70-130	
Bromochloromethane	ug/L	20	16.5	83	70-130	
Bromodichloromethane	ug/L	20	17.5	87	70-130	
Bromoform	ug/L	20	17.5	87	70-130	
Bromomethane	ug/L	20	18.9	94	70-130	
Carbon disulfide	ug/L	20	19.5	98	70-130	
Carbon tetrachloride	ug/L	20	17.3	87	70-130	
Chlorobenzene	ug/L	20	18.4	92	70-130	
Chloroethane	ug/L	20	14.8	74	70-130	
Chloroform	ug/L	20	18.4	92	70-130	
Chloromethane	ug/L	20	16.5	82	70-130	
sis-1,2-Dichloroethene	ug/L	20	18.5	92	70-130	
cis-1,3-Dichloropropene	ug/L	20	18.0	90	70-130	
Dibromochloromethane	ug/L	20	17.6	88	70-130	
Ethylbenzene	ug/L	20	18.9	95	70-130	
n&p-Xylene	ug/L	40	38.5	96	70-130	
Methyl-tert-butyl ether	ug/L	20	21.5	107	70-130	
Methylene Chloride	ug/L	20	17.6	88	70-130	
-Xylene	ug/L	20	17.9	90	70-130	
Styrene	ug/L	20	17.4	87	70-130	
etrachloroethene	ug/L	20	18.3	92	70-130	
Toluene	ug/L	20	18.3	92	70-130	
rans-1,2-Dichloroethene	ug/L	20	18.7	93	70-130	
rans-1,3-Dichloropropene	ug/L	20	18.1	90	70-130	

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Pace Analytical Services, Inc. 2225 Riverside Dr. Asheville, NC 28804

(828)254-7176

Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

LABORATORY CONTROL SAMPLE: 211862

LABORATORY CONTROL SAMPLE:	211862					
		Spike	LCS	LCS	% Rec	0 ""
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Trichloroethene	ug/L	20	17.4	87	70-130	
Vinyl chloride	ug/L	20	19.2	96	70-130	
Xylene (Total)	ug/L	60	56.4	94	70-130	
1,2-Dichloroethane-d4 (S)	%			106	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			96	70-130	

MATRIX SPIKE & MATRIX SPIR	VE DOLLIOATE	E: 21186:	MS	MSD	211864					
	30	33285001	Spike	Spike	MS	MSD	MS	MSD	% Rec	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD Qua
1,1,1-Trichloroethane	ug/L	ND	20	20	24.3	18.2	122	91	70-130	29
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.2	14.6	101	73	70-130	32 R1
1,1,2-Trichloroethane	ug/L	ND	20	20	22.4	16.6	112	83	70-130	30
1,1-Dichloroethane	ug/L	ND	20	20	23.8	18.3	119	92	70-130	26
1,1-Dichloroethene	ug/L	ND	20	20	24.8	18.5	124	93	70-130	29
1,2,4-Trichlorobenzene	ug/L				24.8	17.7				33 M0
1,2-Dichlorobenzene	ug/L	ND	20	20	23.5	17.4	118	87	70-130	30
1,2-Dichloroethane	ug/L	ND	20	20	24.2	18.7	121	93	70-130	26
1,2-Dichloropropane	ug/L	ND	20	20	21.4	16.1	107	80	70-130	29
1,3-Dichlorobenzene	ug/L	ND	20	20	23.9	17.5	120	87	70-130	31 R1
1,4-Dichlorobenzene	ug/L	ND	20	20	24.2	18.1	121	90	70-130	29
2-Butanone (MEK)	ug/L	ND	20	20	29.0	21.6	145	108	70-130	29 M0
2-Hexanone	ug/L	ND	20	20	31.1	23.2	156	116	70-130	29 M0
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	27.8	21.2	139	106	70-130	27 M0
Acetone	ug/L	10.4	20	20	26.8	20.8	82	52	70-130	25 M0
Benzene	ug/L	ND	20	20	21.7	16.6	108	83	70-130	26
Bromochloromethane	ug/L	ND	20	20	24.3	17.7	122	89	70-130	31 R1
Bromodichloromethane	ug/L	ND	20	20	20.8	15.7	104	79	70-130	28
Bromoform	ug/L	ND	20	20	20.4	14.8	102	74	70-130	32 R1
Bromomethane	ug/L	ND	20	20	31.3	22.2	157	111	70-130	34 M0,R1
Carbon disulfide	ug/L	ND	20	20	25.9	20.8	129	104	70-130	22
Carbon tetrachloride	ug/L	ND	20	20	20.7	15.4	103	77	70-130	29
Chlorobenzene	ug/L	ND	20	20	24.0	18.1	120	90	70-130	28
Chloroethane	ug/L	ND	20	20	43.8	37.1	219	185	70-130	17 M0
Chloroform	ug/L	ND	20	20	23.4	18.0	117	90	70-130	26
Chloromethane	ug/L	ND	20	20	23.8	19.8	119	99	70-130	18
cis-1,2-Dichloroethene	ug/L	ND	20	20	24.7	18.5	123	93	70-130	28
cis-1,3-Dichloropropene	ug/L	ND	20	20	21.7	16.7	108	83	70-130	26
Dibromochloromethane	ug/L	ND	20	20	20.7	15.7	103	78	70-130	28
Ethylbenzene	ug/L	ND	20	20	24.8	18.7	124	93	70-130	28
m&p-Xylene	ug/L	ND	40	40	52.1	38.8	130	97	70-130	29
Methyl-tert-butyl ether	ug/L	267	20	20	307	282	201	79	70-130	8 M0
Methylene Chloride	ug/L	ND	20	20	25.8	19.5	129	98	70-130	28
o-Xylene	ug/L	ND	20	20	24.0	18.3	120	92	70-130	27
Styrene	ug/L	ND	20	20	23.7	17.6	119	88	70-130	30
Tetrachloroethene	ug/L	ND	20	20	21.9	16.0	109	80	70-130	31 R1

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**REPORT OF LABORATORY ANALYSIS** 

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **QUALITY CONTROL DATA**

Project: Queens Rochdak

Pace Project No.: 9276886

MATRIX SPIKE & MATRIX SP	IKE DUPLICAT	E: 21186	3		211864						
			MS	MSD							
	30	033285001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Toluene	ug/L	ND	20	20	23.6	17.9	118	89	70-130	27	
trans-1,2-Dichloroethene	ug/L	ND	20	20	24.4	18.8	122	94	70-130	26	
trans-1,3-Dichloropropene	ug/L	ND	20	20	21.2	16.2	106	81	70-130	27	
Trichloroethene	ug/L	ND	20	20	22.2	16.8	111	84	70-130	27	
Vinyl chloride	ug/L	ND	20	20	29.1	23.7	146	118	70-130	21 MC	)
Xylene (Total)	ug/L	ND	60	60	76.2	57.1	127	95	70-130	29	
1,2-Dichloroethane-d4 (S)	%						105	106	70-130		
1-Bromofluorobenzene (S)	%						93	95	70-130		
Toluene-d8 (S)	%						94	96	70-130		

Date: 09/14/2010 12:21 PM





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **QUALIFIERS**

Project: Queens Rochdak

Pace Project No.: 9276886

### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### **LABORATORIES**

PASI-PA Pace Analytical Services - Greensburg

### **BATCH QUALIFIERS**

Batch: MSV/7052

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSSV/2369

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### **ANALYTE QUALIFIERS**

Date: 09/14/2010 12:21 PM

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

R1 RPD value was outside control limits.

S1 Surrogate recovery outside laboratory control limits (confirmed by re-analysis).

S3 Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples.

Results unaffected by high bias.





# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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F-ALL-Q-020rev.07, 15-May-2007



# GEOPHYSICAL INVESTIGATION REPORT

### PERFORMED AT:

165-50 Baisley Boulevard 169-47 137<sup>th</sup> Avenue Queens, NY

### PREPARED FOR:

Austin Hewitt A&W Professional Services 7900 D Stevens Mill Road Matthews, NC 28104

### PREPARED BY:

Matt Heaney Geophysicist Enviroprobe Service, Inc. 908 N Lenola Road Moorestown, NJ 08057 (856) 858-8584 (800) 596-7472

August 30, 2010

### 1.0 INTRODUCTION

Enviroprobe Service, Inc. (Enviroprobe) is an environmental investigation services firm which provides monitoring well installation (HSA), Geoprobe (DPT) drilling services and Environmental & Engineering Geophysics (EEG) services to the environmental consulting and engineering community.

Enviroprobe conducted a subsurface geophysical investigation at the subject property within client-specified areas of concern. Due to conditions and objectives, the investigation utilized a Sensors and Software N250Plus cart-mounted Ground Penetrating Radar (GPR) unit with a 250 MHz antenna, a Radiodetection 4000T3 multi-frequency transmitter, a Radiodetection 4000 receiver, and a Fisher TW-6 metallic locator.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 2,000 MHz) to acquire subsurface information. An EM wave is propagated downward into the ground by a transmitting antenna. Where abrupt changes in electrical properties occur in the subsurface, a portion of the energy is reflected back to the surface. This reflected wave is detected by a receiver antenna and transmitted to a control unit for real time processing and display. The penetration depth of the N250Plus unit varies from several inches to tens of feet according to site-specific conditions. The penetration depth decreases with increased soil conductivity. The penetration depth is the greatest in ice, dry sands, and fine gravels. Clayey, highly saline or saturated soils, areas covered by concrete, foundry slag, or other highly conductive materials greatly reduce GPR penetration. GPR is a method that is commonly used for environmental, engineering, archaeological, and other shallow investigations.

The Radiodetection (RD) transmitter and receiver are commonly used for pipe and cable locating. The multi-frequency transmitter can be directly connected, clamped, or used to induce a signal in a target line while the multi-frequency receiver is used to measure the signal from energized lines.

The Fisher TW-6 metallic locator is designed to find pipes, cables and other metallic objects such as underground storage tanks (USTs). The TW-6 transmitter generates an electromagnetic field that induces electrical currents in the subsurface. These currents produce a secondary electromagnetic field that is measured by the TW-6 receiver. One surveyor can carry both the transmitter and receiver together to search for underground metallic objects, although the TW-6 response can also be affected by the electrical properties of non-metallic materials in the subsurface.

### 2.0 SCOPE OF WORK

On August 27, 2010, a geophysicist from Enviroprobe Service Inc. was mobilized to the subject property to perform a geophysical investigation. The purpose of this investigation was to detect possible USTs and designate underground conduits/utilities within client-specified portions of the subject properties. The survey included portions of the interior and exterior of two dry cleaning facilities. The ground surface of the survey area consisted of paved, concrete, and tiled surfaces.

### 3.0 SURVEY RESULTS

The survey was conducted using a cart-mounted GPR unit, a Fisher TW-6 metallic locator, and a RD unit. The RD unit was used to trace common utilities from sources in and around the survey area. The RD receiver was also used in the passive mode to search for live underground electrical power cables and other utilities emitting 60Hz electromagnetic signals. A GPR survey was also performed in a grid pattern in two orthogonal directions when possible to search for underground utilities. Designated utilities were marked on-site with spray paint using the following colors; red – electric, yellow – natural gas, green – storm drain, and pink – fuel piping, steam lines, and unknown utilities [Figure 1+2].

The GPR and TW-6 were used in a grid pattern over all accessible client-specified areas of the property. Based on the results of the GPR and TW-6 surveys, a metallic anomaly consistent with an UST was identified near the rear of HIP Cleaners at 169-47 137th Ave. [Figure 1]. This rectangular anomaly measured approximately 5 ft by 7 ft and was located at a depth of approximately 3-4 ft. The approximate extent of this anomaly was designated on-site with pink spray paint. A possible UST vent pipe was identified at the rear of JS Rochdale Cleaners at 165-50 Baisley Blvd. This line was designated towards an area covered with metal dumpsters and steel drums that were not moved. Due to the presence of these dumpsters, this area could not be scanned with the GPR or TW-6. No signals consistent with an UST were found from the GPR or TW-6 data in the area surrounding the dumpsters.

### 4.0 LIMITATIONS

The client-selected areas of the property had multiple obstructions, including dumpsters, steel drums, dry cleaning equipment, and interior walls. These objects prevented a thorough investigation of the spaces beneath and immediately adjacent to them.

Due to surface conditions and subsurface content, the GPR signal penetration was estimated at 2-3 feet in the majority of the survey area. This penetration was reduced in areas of concrete cover.

The TW-6 survey was kept up to 6 feet away from aboveground objects containing metals depending on the sizes, shapes and positions of the metal objects. Due to surrounding interference, the TW-6 survey was not effective in the interior of the buildings.

Due to the dielectric properties of the subsurface, plastic polymer and fiberglass utilities may not have been detected. All field services were conducted in compliance with the industry standard of care guidelines found in ASCE 38-02 (Level B).

### 5.0 WARRANTIES

The field observations and measurements reported herein are considered sufficient in detail and scope for this project. Enviroprobe Service, Inc. warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted environmental engineering methods. There is a possibility that conditions may exist which could not be identified within the scope of this project and were not apparent during the site activities performed for this project.

Enviroprobe represents that the services were performed in a manner consistent with that level of care and skill ordinarily exercised by environmental consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

Enviroprobe Service, Inc. believes that the information provided in this report is reliable. However, Enviroprobe cannot warrant or guarantee that the information provided by others is complete or accurate. No other warranties or guarantees are implied or expressed.

GPR data is subject to signal anomalies and operator interpretation. The GPR data is intended to provide the locations of areas of concern requiring additional investigation or the approximate location of underground structures and utilities. Great care must be utilized when excavating and/or drilling around underground structures and utilities since GPR data can only be used for estimation purposes and GPR data is subject to misinterpretation. Enviroprobe can not guarantee that utilities, post-tension cables, and/or rebar will not be incurred during drilling, cutting, coring, or excavating activities.

This report was prepared pursuant to the contract Enviroprobe has with the Client. That contractual relationship included an exchange of information about the property that was unique and between Enviroprobe and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between Enviroprobe and its client, reliance or any use of this report by anyone other than the Client, for whom it was prepared, is prohibited and therefore not foreseeable to Enviroprobe.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to Enviroprobe contract with the Client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.



Figure 1 – Metallic anomaly consistent with an UST and associated piping designated with pink paint. Note the electrical line nearby designated in red.



Figure 2 – Steam line designated with pink paint. Note the dry cleaning equipment and interior walls limiting the scope of the survey.



# **BILL TRYON**

### TECHNICAL DIRECTOR

### **OVERVIEW**

During his thirty years in the industry, Bill has developed risk management policies and procedures for one of the world's real estate lenders and has participated with governmental agencies to refine policies and requirements. Bill has developed a reputation for risk-based problem solving and excellence. As a leader in developing due diligence practices, many of his innovations and refinements have become common practice in the industry.

ENVIRONMENTAL ASSESSMENT

Bill first became involved in environmental due diligence in 1988, before the creation of current industry standards. As Chief of Construction and Environmental Services for a major real estate lender, he developed independent standards for the completion an evaluation of environmental assessment activities. In the mid-90's he became a founding member of the Environmental Bankers Association. As committee chair for various committees, he worked to assure an indepth understanding of environmental issues across the membership. More recently, he has consulted with the Small Business Administration and Office of the Comptroller of the Currency regarding environmental policies, participated in the Environmental Protection Agency's development of standards governing "all appropriate inquiry" and presented various topics at EPA Brownfield and other industry forums.

PROPERTY CONDITION ASSESSMENT During his involvement with the early development of due diligence standards to support early CMBS lending programs, Bill worked to refine broad industry standards to produce scopes of work more specific to lending risks, resulting in price reductions of nearly 40%. Additional cost reductions were realized by implementation of a "small loan" assessment. Bill's ability to cut the fat away from standardized industry products helped control risks while reducing costs and creating a competitive advantage.

SEISMIC

In 1989, after California's Loma Prieta earthquake, Bill became involved in the evaluation of earthquake risks associated with owned properties as well as the loan portfolio of a major real estate lender. Since no standardized approach to the evaluation of such portfolios existed at that time, he was forced to become familiar with the principles of earthquake risk assessment in order to develop appropriate corporate policies. As the market expanded, he extended his approach to portfolio analysis to include the evaluation of CMBS loans. It quickly became apparent that the industry and even many of the consultants involved in the analysis earthquake risks had a limited understanding of the variables which can significantly impact the conclusions of such studies. Bill adopted and defended criteria



appropriate to a portfolio-level evaluation of risks which was eventually validated by ASTM International standards published in 2007.

# CONSTRUCTION SERVICES

Over his career, Bill has been responsible for staff performing and cost analysis and construction monitoring for over \$100,000,000,000 in construction loans and has personally been involved in the cost analysis and monitoring of loans ranging from single family homes of a few hundred thousand dollars through high rise commercial structures and rehab projects of up to \$425,000,000. By standardizing procedures during his tenure at Wells Fargo, he was able to minimize risks associated with their construction loan portfolio.

### **PAST EXPERIENCE**

### LANDAMERICA ASSESSMENT COMPANY 2007 – 2009

# Vice-President Technical Director

Responsible for management or report quality through development and refinement of principles and procedures to assure consistent identification and treatment of risks.

- Development and implementation of due diligence practices and policies for an international provider of real estate due diligence.
- Refinement of contracts and practices to reduce risk exposures
- Development of criteria for project management and report writing software.
- Participation in the professional and client community through the Environmental Banker's Association, ASTM, Common Ground, Due Diligence at Dawn, Mortgage Bankers Association, MISMO and others.

### WELLS FARGO BANK 1986 - 2007

### Senior Vice President

### **Director of Construction and Environmental Services**

- Management and development of a team to evaluate construction, engineering and environmental risks at proposed and existing properties
  - Direct accountability for staff of 18 consisting of both construction and engineering professionals located throughout the US
  - In 2006, Technical Services supported in excess of \$40b in commercial lending and \$11b in active construction loans.
- Participation in EPA's negotiated rule-making process to define "All Appropriate Inquiry" and consultation the U.S Small Business Administration and Office of Thrift Services concerning environmental due diligence requirements.
- Development, management and approval of Corporate Credit policies governing construction and environmental due diligence
- Exceeded service expectations despite significant increases in



### volume and without additions to staff:

- Creation of automated systems and templates for comparison, review and analysis of inspection results
- Implemented the limited use of third-party reviewers, along with supporting systems for quality control
- Created and implemented program documents to improve consistency among consultants
- Developed Excel-based reports to quickly identify bottlenecks and evaluate team performance
- Development of program documents to support construction services for small loans not managed by his department
- Continual refinement of risk-based decision-making tools
- Industry leadership by development of and participation in industry groups
  - Organization of an affiliation of construction risk mangers for major lending institutions
  - Chair of Environmental Banker's Association Technical Committee
  - Participation in EPAs FACA committee for development of the rule on All Appropriate Inquiry
  - Public speaking to support Wells Fargo philosophies

### **AFFILIATIONS**

Mortgage Bankers Association Environmental Bankers Association (Founding Member) ASTM International (E-50 Committees)

### **EDUCATION AND CERTIFICATIONS**

- Bachelor of Science University of California, Davis, CA
- Hazardous Materials Management Certificate Program UC, Davis
- Real Estate License, California and Washington (lapsed)
- Insurance License, California (lapsed)

### REPRESENTATIVE SPEAKING ENGAGEMENTS

- All Appropriate Inquiry EPA Brownfield Convention, Portland, OR
- All Appropriate Inquiry EPA Brownfield Convention, St. Louis, MO
- Lending on Environmentally Challenged Properties EPA Brownfield Convention, Boston, MA
- Keynote Address Colorado Brownfield Association, Denver, CO
- Brownfield Redevelopment A Lenders Perspective National Brownfield Association, Chicago, IL



- Revisions to Environmental Requirements of the Small Business Administration's – Environmental Banker's Association, Snow Bird, Utah
- Environmental Due Diligence National Association of Government Guaranteed Lenders, San Diego, CA
- Doing Due Diligence National Association of Government Guaranteed Lenders, Indian Wells, CA
- Tools for Workplace Efficiency Environmental Banker's Association, Snow Bird, Utah
- Really? What is a REC? Environmental Banker's Association, Snow Bird, Utah
- Revisions to Environmental Requirements of the Small Business Administration's – Environmental Banker's Association, Charlotte, NC
- Streamlining Due Diligence Environmental Banker's Association, Scottsdale, AZ
- Balancing Technical and Legal Needs in Due Diligence Environmental Banker's Association, San Antonio, TX
- Perspectives on Lender's Due Diligence Requirements Environmental Banker's Association, San Antonio, TX



# Austin Hewitt, PE, LEED AP

Field Professional

**Education:** B.S. Civil & Environmental Engineering,

Tennessee Tech University, 2002

**Licenses/Registrations:** NC Professional Engineer #034411

LEED Accredited Professional #10367456

40-Hr OSHA HAZWOPER

**Years of Experience:** 7 years

# <u>Summary of Professional Experience</u>

Mr. Hewitt has been conducting a wide variety of due diligence assessments, subsurface soil and groundwater investigations, and remedial actions throughout the United States since 2003.

For a national environmental consulting firm Mr. Hewitt served as Project Manager, where he performed and managed Phase II and Phase III Environmental Site Assessments on various industrial, commercial, and residential properties. Mr. Hewitt also participated in a variety of projects including underground storage tank removals, dry cleaner site cleanup, EPA stormwater compliance reviews, and inactive hazardous waste site closures. Mr. Hewitt has assisted in the preparation of proposals, investigative plans, and reports for submittal to regulatory agencies, such as Voluntary Cleanup Programs and Dry Cleaning Remediation Programs. He has designed and implemented pilot testing for remediation projects and prepared remedial action workplans involving soil excavation, air sparging, soil vapor extraction, natural attenuation, injection of potassium permanganate, injection of sodium permanganate, injection of oxygen-releasing compounds, and the installation of engineering barriers/caps.

Mr. Hewitt has conducted numerous Phase I Environmental Site Assessments and Property Condition Assessments in accordance with ASTM guidelines, as well for HUD, Freddie Mac, and Fannie Mae requirements. He has also performed construction draws, project budget estimating and budget analyses, geotechnical explorations, asbestos sampling, domestic water sampling, lead-based paint sampling, radon sampling, soil-gas sampling, indoor air sampling, wetland delineation, SPCC Plans, and SWPP Plans.



# Suzanne Sisti Field Professional

**Education:** B.S., Biology, Georgian Court College, 1993

**Licenses/Registrations:** OSHA 29 CFR 1910.120 HAZWOPER

EPA AHERA Asbestos Inspector, 1995

EPA AHERA Asbestos Management Planner, 1995

NJDEP Regulated Underground Storage Tanks (Closure and

Subsurface Investigation), 1997

NJDEP Unregulated Heating Oil Underground Storage Tanks, 2008

**Years of Experience:** 15 years

# Summary of Professional Experience

Ms. Sisti has been conducting Transaction Screens and Phase I Environmental Site Assessments of various single- and multi-family residential properties, as well as undeveloped wooded and agricultural land, commercial and industrial facilities since 1994 throughout the northeastern United States. Included in many of the assessments performed were peer reviews, review of regulatory documentation, and limited and comprehensive surveys for asbestos, lead-based paint, lead-in-drinking-water and radon gas. Written reports were prepared in formats prescribed by various lending, insurance, and fiduciary institutions. Ms. Sisti previously developed and implemented a Phase I Environmental Site Assessment program for a former regional office for a national consulting firm.

Ms. Sisti has conducted numerous subsurface investigations to assess areas of concern. These activities included the performance of initial site investigations at various facilities to horizontally and vertically delineate the extent of soil and groundwater contamination utilizing test pit excavations, Geoprobe boring unit, and hollow stem auger, air hammer, and mud rotary drilling methods. Her additional duties included the description and collection of soil samples, the installation of temporary well points and unconsolidated and consolidated groundwater monitoring wells, and groundwater sampling. Remedial activities including soil excavation, injections, and the installation of groundwater remedial systems were also performed.

Ms. Sisti has also performed preliminary site assessments of commercial and industrial facilities undergoing regulatory compliance with the New Jersey Department of Environmental Protection (NJDEP) Industrial Site Recovery Act (ISRA) ISRA.

Ms. Sisti has performed and directed the abandonment in-place and removal of numerous UST systems at various commercial, industrial, residential, and publicly owned properties. Her duties included the oversight of project fieldwork, which consisted of tank removal/closure, evaluation, and delineation of impacted soils and/or groundwater, sample collection, and remedial activities associated with the release of products. In addition, site investigation, remedial investigation, and remedial action reports have been prepared and submitted to the NJDEP for ultimate case closure via the issuance of No Further Action determinations. Additionally, Ms. Sisti previously managed 15 gasoline service station projects throughout central and northern New Jersey and was



responsible for the preparation of Remedial Investigation Reports/Remedial Investigation Workplans (RIR/RIW) and Remedial Action Workplans (RAW) reports in accordance with the NJDEP requirements.

Ms. Sisti's diversity across public and private industrial environments is a major contribution to Global Realty Services Assessment Companies Contractor team in the Northeastern United States.