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April 26, 2002

Mr. Gardiner Cross
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7017

Re: Hot Spot Delineation and Gasholder Characterization Results
2nd Avenue Former MGP Site
Brooklyn, New York

Dear Mr. Cross:

Roux Associates, Inc. (Roux Associates) has completed the hot spot delineation and gasholder characterization at the 2nd Avenue former MGP Site in Brooklyn, New York (Site). The work was performed pursuant to the Voluntary Cleanup Agreement (VCA) between the Unites States Postal Service (USPS) and the New York State Department of Environmental Conservation (NYSDEC) dated March 15, 2001 (Index Number A2-0430-0009). The fieldwork was performed from January through March 2002. This report is being submitted to the NYSDEC in accordance with the VCA.

The objectives of the work were to:

- delineate the lateral and vertical extent of soil (i.e., fill material) above the meadow mat layer at four areas (i.e., Areas A, B, C, and D) of the Site using the following criteria:
  - total polycyclic aromatic hydrocarbon (PAH) concentrations greater than 1,000 milligrams per kilogram (mg/kg), or
  - mobile coal tar;
- confirm that clean fill material is present within the east side of Gasholder #1;
- further characterize the fill material quality conditions at RI Boring 38 adjacent to the exterior of Gasholder #2; and
- characterize the fill material quality conditions adjacent to the exterior of Gasholder #3 and from beneath its bottom to the meadow mat layer.

The scope of work to achieve the above objectives was intended to be performed in accordance with the December 5, 2001 Revised Remedial Work Plan (RRWP) and

Remedial Work Plan Supplement (RWPS). However, several modifications to the scope of work were made (see the Field Methodology discussion for further details) based on the field conditions encountered. All scope of work modifications were verbally approved by the NYSDEC prior to implementation.

A description of the field methodology is provided below. The results of the field inspection activities and analytical results are discussed following the field methodology discussion.

FIELD METHODOLOGY

A description of the field methods performed is provided below.

Hot Spot Delineation

A total of 66 soil borings were sampled at Areas A, B, C, and D and adjacent to the exterior walls of former Gasholders #2 and #3 from land surface to the meadow mat layer (where present), which ranges in depth from 4 feet (ft) to 17 ft below land surface (bls). If the meadow mat layer was not present, the boring was terminated between 20 ft to 24 ft bls. The soil boring locations are shown in Plate 1.

The borings were sampled using the Geoprobe™ method or the drive and wash method. As stated in the RRWP, the fill material samples were intended to be collected using the Geoprobe™ method; however, due to the subsurface obstructions encountered that prohibited the further use of the Geoprobe™ rig, a scope of work modification was made. This modification included the implementation of the drive and wash method. This method included the collection of fill material samples using a 2-inch or 3-inch diameter split-spoon core barrel from land surface to the top of the obstructions. Steel casing was then installed into the obstruction to prevent the migration of free product (if present) from above the obstruction to below the obstruction. A roller bit was then used to drill through the obstruction. After the obstruction was penetrated, a second, smaller steel casing was installed through the original casing and into the fill material below the obstruction. Sampling of the fill material continued to the meadow mat layer. After each sample was collected, the casing was cleaned out of any remaining fill material using a combination of the roller bit and potable water to the top of the next sampling interval.

Samples were collected at 4 ft intervals using the Geoprobe™ method and at 2 ft intervals using the drive and wash method. Regardless of the drilling method utilized, each 1 ft sample interval was inspected for lithology and impacts (i.e., staining, odors, and free product), and screened in the field for volatile organic compounds (VOCs) using a photoionization detector (PID). Based on the field inspection results, the 1 ft interval (from the intervals 4 ft to 8 ft bls, 8 ft to 12 ft bls, and 12 ft to 16 ft bls) determined to contain the highest degree of impacts was submitted to the laboratory for analysis. Samples were not collected from land surface to 4 ft bls for laboratory analysis because this fill material was previously determined by others to be clean.

Three samples from each boring were submitted for laboratory analysis from the majority of borings, but fewer than three samples were submitted to the laboratory from several borings as a result of obstructions encountered (based on the use of the Geoprobe™ rig prior to the switch in drilling methods), poor sample recovery, or the presence of the meadow mat layer at a depth of less than 12 ft bls. Each sample was analyzed for PAHs using the United States Environmental Protection Agency (USEPA) Method 8270.

Each soil boring was backfilled using cuttings and/or a bentonite grout.

All downhole equipment was decontaminated by steam cleaning immediately after each mobilization to the Site prior to the start of a new phase of work, between each boring, and after completion of the work. The spilt-spoon core barrels used during the drive and wash sampling activities were decontaminated using a non-phosphate soap and potable water rinse. The Geoprobe™ samples were collected in new, acetate sleeves, and were disposed after the collection of a sample.

Cuttings, decontamination water, and the water used to clean out the casing during the implementation of the drive and wash method were containerized in 55-gallon capacity drums onsite.

The boring locations were surveyed by a New York State-licensed surveyor, Control Point Associates, Inc., Watchung, New Jersey.

Gasholder Characterization

In accordance with the RRWP, soil borings were drilled and samples collected to confirm that clean fill material is present in the east side of Gasholder #1 and to characterize the quality of the fill material between the bottom of Gasholder #3 and the underlying meadow mat layer. Three borings (GH-1A, GH-1B and GH-1C) were completed in Gasholder #1 and two borings (GH-3A and GH-3B) were completed through Gasholder #3 (Plate 1). Each boring was drilled using the drive and wash method as described for the hot spot delineation borings, except for Boring GH-1B, which was drilled using the hollow-stem auger method. Samples were collected from each boring using a 2-ft long split-spoon sampler and each 1 ft interval was inspected for lithology and impacts (i.e., staining, odors, and free product), and screened in the field for total VOCs using a PID. Selected samples were submitted to the laboratory and analyzed for VOCs using the USEPA Method 8260 and semivolatile organic compounds (SVOCs), including PAHs, using USEPA Method 8270.

Each gasholder is discussed separately in greater detail below.

Gasholder #1

The USPS reportedly used the eastern portion of Gasholder #1 as a boiler room. A reinforced concrete wall that runs from north to south approximately 50 ft east of the

Pathmark building wall divides the gasholder. The equipment was later removed and the space filled with clean fill material by others.

Split-spoon samples were continuously collected from land surface to the expected bottom of the gasholder (reported by others to be about 20 ft bls) at Borings GH-1A, GH-1B and GH-1C. Each boring encountered refusal at approximately 17 ft bls. Because no impacts were identified from any 1-ft interval in GH-1A and GH-1B, a composite sample was then collected from the bottom 4 ft of each boring and submitted to the laboratory for analysis in accordance with the RRWP. Based on the occurrence of black staining in the fill material at Boring GH-1C, a sample was collected from 16 ft to 17.5 ft bls and submitted to the laboratory for analysis. Due to limited recovery, a sample could not be collected for laboratory analysis at the 1 ft interval in GH-1C, but instead was collected from a 1.5 ft interval.

It was concluded that the refusal encountered at approximately 17 ft bls was the floor of the former boiler room (i.e., a false bottom), not the bottom of the holder. Drilling and sampling then continued through this false bottom at Boring GH-1A until refusal was encountered at 24 ft bls, which is the bottom of the gasholder. Due to limited recovery, samples could not be collected for laboratory analysis at the 1 ft interval, but were collected from 2-foot intervals (18 ft to 20 ft bls and 22 ft to 24 ft bls) and submitted to the laboratory for analysis.

Gasholder #3

Two borings were completed through Gasholder #3 (GH-3A and GH3-B) to determine the presence or absence of coal tar contamination between the bottom of the gasholder and the underlying meadow mat layer. Gasholder #3, which is constructed of steel and concrete, does not extend down to the meadow mat layer. Split-spoon samples were collected near the bottom of this gasholder to confirm the presence of product (i.e., coal tar) before drilling through it. Prior to Roux, Langan Engineering completed a Geotechnical boring through the holder in November 1998.

The steel bottom of the gasholder was encountered at approximately 6 ft bls. A steel casing spin shoe was used to cut into the steel and the casing was set about ¾-inch into the steel. A roller bit was then used to drill through the steel and into the underlying concrete. Bentonite chips were then placed into the casing to prevent the migration of free product from above the gasholder bottom to below the gasholder. After allowing the bentonite chips to hydrate, the roller bit was used to drill through the remainder of the concrete. After the steel and concrete were penetrated, a second, smaller steel casing was installed through the original casing and into the underlying fill material. Samples of the underlying fill material were then collected to the meadow mat layer. Samples were collected at Boring GH-3A from 8 ft to 10 ft bls, 10 ft to 12 ft bls, and 10 ft to 13 ft bls. Samples were collected at Boring GH-3B from 7 ft to 9 ft bls and 9 ft to 11 ft bls. None of these samples were submitted to the laboratory for analysis as a result of poor sample recovery (i.e., the volume of material was insufficient for laboratory analysis).

RESULTS

A summary of the results including a description of the Site geology, data usability, field inspection results, and fill material quality is provided below.

Site Geology

The Site is underlain by clean fill material from land surface to approximately 4 ft bls. This material is comprised of fine to coarse brown sand, little gravel, trace silt, wood, brick, and concrete. Underlying the clean fill material is a second type of fill material present from approximately 4 ft to 17 ft bls. This fill material is comprised of fine to coarse brown to black stained sand, some silt and gravel, trace coal, wood, brick, and concrete. Underlying the second fill material is the meadow mat layer that is comprised of peat, silt, and clay. The meadow mat layer was not encountered in 11 of the 66 borings.

The geologic logs for selected borings (i.e., endpoint borings) are provided in Attachment 1. The end point boring geologic logs were provided because these are the key logs that define the lateral and vertical extent of the hot spots for remediation.

Data Usability Summary Report (DUSR)

A DUSR was performed on the analytical data from the endpoint borings of Hot Spot Areas A, B, C, and D and borings sampled adjacent to the exterior of Gasholders #2 and #3. The DUSR was performed by Data Validation Services, North Creek, New York. The DUSR was performed in accordance with the USEPA Region II Validation Standard Operating Procedures, the USEPA National Functional Guidelines for Data Review, and the NYSDEC DUSR guidelines (revised 1997).

The results of the DUSR indicate that most of the analyte values and reporting limits were usable as reported by the laboratory. The DUSR is provided in Attachment 2.

Field Inspection Results

A brief discussion of the field inspection results is provided below.

Hot Spot Areas A, B, C, and D

The results of the field inspection indicate that black staining, odors, and/or product were identified in the fill material at varying depths below 4 ft bls throughout the majority of Hot Spot Areas A, B, C, and D. The PID readings of total VOCs ranged from not detected (ND) up to 1735 parts per million (ppm).

Gasholders

Gasholder #1 – The results of the field inspection indicate that impacts were not identified in any of the samples that were collected above the false bottom, except for occasional non-petroleum odors at boring GH-1A and black staining that was observed immediately above the false bottom in GH-1C.

The results of the field inspection indicate that black staining, odors, and free product were identified in all samples that were collected from below the false bottom. PID readings ranged from 7.3 ppm to 179 ppm in GH-1A, from 2.9 ppm to 12.3 ppm in GH-1B, and from ND to 43.1 ppm in GH-1C

Gasholder #2 – The results of the field inspection indicate that black staining, odors, and product were identified at Boring GH-21 (SB-8), located approximately 15 ft southeast of Gasholder #2 (Plate 1). The PID readings of total VOCs ranged from 0.4 ppm up to 62.4 ppm.

Gasholder #3 – The results of the field inspection indicate that product was identified immediately above the bottom of Gasholder #3 from approximately 6 ft to 6.5 ft bls at Boring GH-3A and from 5 ft to 6 ft bls in GH-3B. The meadow mat layer was encountered below the gasholder at 10 ft bls and 9 ft bls at Borings GH-3A and GH-3B, respectively. Wood debris was encountered at Borings GH-3A and GH-3B, with black staining present on the wood at Boring GH-3A below the Gasholder. The wood is thought to be the form that was originally used to construct the concrete holder. No fill material was recovered at either boring. Traces of free product were observed below the Gasholder in GH-3B, but it was concluded that the product was brought down from within the Gasholder during drilling because the observed product was present on the outside of the peat core, but did not penetrate the core. Bentonite, which was placed in the casing before drilling through the bottom of the gasholder, was also observed in the sample collected immediately below the gasholder. The borings were backfilled with grout and abandoned.

These observations at borings GH-3A and GH3-B are consistent with the results from an independent investigation previously performed through the middle of Gasholder #3 by Langan Engineering in 1998. A copy of Langan's boring (LB-7) is attached.

The results of the field inspection indicate that black staining, odors, and product were identified at Boring GH-31 (SB-7), located approximately 10 ft south of Gasholder #3. The PID readings of total VOCs ranged from not detected up to 595 ppm.

Fill Material Quality Results

A brief discussion of the fill material quality results is presented below. The analytical data for the fill material collected outside the gasholders were compared to the Site criteria of 1,000 mg/kg of total PAH concentrations.

Hot Spot Areas A, B, C, and D

A brief description of the fill material quality for Hot Spot Areas A, B, C, and D is presented below. The lateral and vertical extent of the hot spots has been delineated, and is shown in Plate 2. The NYSDEC has reviewed Plate 2 at the April 2, 2002 meeting, and as stated in their April 5, 2002 letter, "the Department agreed to the excavation limits as indicated in the April 2, 2002 updated plan sheets" (i.e., Plate 2).

Area A – PAHs were detected in the fill material at concentrations that exceeded the Site criteria (Table 1). The lateral and vertical extent of the Area A hot spot is shown in color in Plate 2. The lateral extent of the Area A hot spot is delineated by the following endpoint borings: RI 33; RI 35; ASW-1 (SB-2); ANW-1 (SB-3); AN-4; AN-9; AN-9N; AN-11; and AN-12. The vertical extent of the Area A hot spot varies in depth from 4 ft to 15 ft bls, and is delineated by the following endpoint samples: AS-2; ASW-2; ANE-1 (SB-5); AN-3; and AN-6.

It is important to note that the northeastern portion of this hot spot only extends to a depth of 4 ft bls (shown in green color in Plate 2). An approximate 1 ft thick concrete slab is present in this area. The samples analyzed from below this slab (ANE-3 and ANE-1 [SB-5]) indicate that PAHs were not detected above the Site criteria. Additionally, the hot spot in the northwestern portion of Area A only extends to a depth of 11 ft bls (shown in tan color in Plate 2). An approximate 1.5 ft thick concrete slab is present in this area. The samples analyzed from below this slab (AN-6, AN-6N, and AN-6S) indicate that PAHs were not detected above the Site criteria.

Areas B and C – Although Areas B and C were considered separate hot spot areas as defined by AKRF Engineering, P.C. during the Remedial Investigation, Areas B and C represent one continuous shallow hot spot based on the recent fill material quality results.

PAHs were detected in the fill material at concentrations that exceeded the Site criteria (Table 1). The lateral and vertical extent of the Areas B and C hot spot is shown in color in Plate 1. The lateral extent of the Areas B and C hot spot is delineated by the following endpoint borings: BNE-E-2; BS-2; RI 24; RI 1; CN-5; CN-6; CN-7; CN-8; CN-10N; and CN-12. The vertical extent of the Areas B and C hot spot varies in depth from 8 ft to 16 ft bls, and is delineated by the following endpoint samples: CNE-3; CW-1 (SB-14); CB-1; SB-15-SW; BNW-2; and BS-1 (SB-9).

It is important to note that the west central portion of this hot spot only extends to a depth of 8 ft bls (shown in green color in Plate 2), except for a small area surrounding Boring CW-1 (SB-14). An approximate 1.5 ft thick concrete slab is present in this area, except at Boring CW-1. The samples analyzed from below this slab (CB-1 and CW-2) indicate that PAHs were not detected above the Site criteria. The hot spot surrounding Boring CW-1 (SB-14) extends to a depth of 16 ft bls.

Area D – PAHs were detected in the fill material at concentrations below the Site criteria (Table 1). Therefore, the lateral extent of the Area D hot spot is limited to the area immediately surrounding RI Boring 54, as delineated by the endpoint borings DN-2 and DS-2 (Plate 2).

Based on the fill material analytical data and field inspection results (i.e., trace product), the NYSDEC agreed that excavation in Area D was not necessary. Instead, the NYSDEC has requested that two additional product collection wells be installed in this area to capture any mobile product, if present, above the meadow mat layer. Because the

meadow mat is not present in this area, the screen lengths of two proposed adjacent deep collection wells will be extended to capture shallow mobile product, if present.

Gasholders

Gasholder #1 – Eight VOCs were detected in the fill material samples that were collected above the former USPS boiler-room floor (i.e., false bottom) at borings GH-1A, GH-1B, and GH-1C. A summary of the VOCs detected is provided in Table 2. Ethylbenzene was detected at 11,000 micrograms per kilogram (µg/kg, or parts per billion, ppb) in the sample that was collected near the bottom of the gasholder from 16 ft to 17.5 ft bls at GH-1C representing the highest concentration of VOCs. Total VOCs in the fill material from these borings ranged from 59 µg/kg to 26,340 µg/kg.

Nineteen SVOCs were detected in the fill material samples that were collected above the false bottom at Borings GH-1A, GH-1B, and GH-1C. Phenanthrene was detected at 31,000 µg/kg in the sample from 16 ft to 17.5 ft bls at GH-1C representing the highest concentration of SVOCs. Total SVOCs in the fill material from these three borings ranged from 19,690 µg/kg to 159,910 µg/kg.

In the material below the false bottom, which will be removed from the gasholder, six VOCs were detected at boring GH-1A. Total Xylenes were detected at 620,000 µg/kg in the sample from 22 ft to 24 ft bls at GH-1A representing the highest concentration of VOCs. Total VOCs in the fill material from this boring ranged from 207,000 µg/kg to 1,871,000 µg/kg.

Eighteen SVOCs were detected in the material below the false bottom at boring GH-1A. Naphthalene was detected at 9,200,000 µg/kg in the sample from 22 ft to 24 ft bls at GH-1A representing the highest concentration of SVOCs. Total SVOCs in the fill material from this boring ranged from 4,967,000 µg/kg to 24,928,000 µg/kg.

Gasholder #2 – PAHs were not detected in the fill material from Boring GH-21 (SB-8) at concentrations that exceed the Site criteria (Table 1), located approximately 15 ft southeast of Gasholder #2 (Plate 1). Boring GH-21 (SB-8) is considered an endpoint boring.

Gasholder #3 – Fill material was not encountered below the bottom of Gasholder #3. Although some product was observed, it was concluded that the product was brought down from within the holder during drilling. The borings were backfilled with grout and abandoned.

PAHs were detected in the fill material at concentrations that exceed the Site criteria at Boring GH-31 (SB-7) (Table 1), located approximately 10 ft south of Gasholder #3. The lateral and vertical extent is delineated by Endpoint Borings SB-7-N2 and SB-7-S2 (Plate 2).

Based on the fill material analytical data, the NYSDEC agreed that excavation in the area at Boring GH-31 (SB-7) was not necessary. Instead, the NYSDEC has requested that two shallow product collection wells be installed in this area to capture the product identified at Boring GH-31 (SB-7).

Please call if you have any questions or require additional information.

Sincerely,

ROUX ASSOCIATES, INC.

George A. Tyers
Senior Hydrogeologist

Joseph D. Duminuco
Vice President

Attachments

cc: Rockie Gajawani, Forest City Ratner Companies
Greg Lowe, Forest City Ratner Companies

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	AN2	AN2	AN2	ANE3	ANE3	ANE3	ANW2	AN3	AN3	AN3	AS2
	Sample Date:	01/09/02	01/09/02	01/09/02	01/21/02	01/21/02	01/21/02	01/08/02	01/21/02	01/21/02	01/21/02	01/08/02
	Sample Depth (ft bls):	4.5-5.5	11-12	12-16	4.5-6	8-12	14-15	5-6	5-6	8-9	14-15	6-8
2-Methylnaphthalene		980000	850 J	53000	560000	63000	760 U	310000	220000 J	160000	1400000	250000
Acenaphthene		600000	1200 J	32000	490000	65000	730 J	290000	220000 J	94000	810000	210000
Acenaphthylene		54000 J	330 U	3300 J	26000 J	3500 J	300 U	19000 J	41000 J	5600 J	45000 J	17000 J
Anthracene		210000 J	1900 J	13000 J	180000	25000	320 U	110000 J	530000	32000 J	330000 J	81000 J
Benzo[a]anthracene		100000 J	3200 J	5700 J	73000 J	11000 J	400 U	51000 J	230000 J	16000 J	140000 J	34000 J
Benzo[a]pyrene		83000 J	3400 J	4800 J	63000 J	9700 J	430 U	41000 J	98000 J	13000 J	110000 J	27000 J
Benzo[b]fluoranthene		37000 U	2100 J	2400 U	28000 J	4400 J	1000 U	19000 U	77000 J	6500 J	43000 U	13000 J
Benzo[g,h,i]perylene		26000 J	1700 J	1600 J	24000 J	3900 J	460 U	14000 J	95000 J	5400 J	39000 J	11000 J
Benzo[k]fluoranthene		59000 J	3400 J	3900 J	46000 J	7100 J	1100 U	28000 J	160000 J	9400 J	89000 J	18000 J
Chrysene		110000 J	3600 J	6400 J	74000 J	11000 J	460 U	51000 J	230000 J	17000 J	140000 J	34000 J
Dibenzo[a,h]anthracene		17000 U	530 U	1100 U	7200 U	970 U	490 U	8900 U	22000 U	2700 U	21000 U	5700 U
Fluoranthene		230000 J	8100 J	13000 J	180000	26000	820 J	99000 J	550000	32000 J	270000 J	73000 J
Fluorene		260000 J	870 J	15000 J	240000	30000	540 U	120000 J	790000	43000 J	370000 J	92000 J
Indeno[1,2,3-cd]pyrene		24000 J	1600 J	1400 J	23000 J	3700 J	490 U	11000 J	65000 J	4400 J	34000 J	8200 J
Naphthalene		1800000	1800 J	99000	810000	80000	1900 J	980000	870000	270000	1700000	550000
Phenanthrene		770000	7400 J	44000	580000	80000	1100 J	370000	1700000	110000	1000000	270000
Pyrene		300000 J	8200 J	18000 J	240000	35000	780 J	140000 J	870000	46000 J	400000	95000 J
	Total PAH Concentrations:	**5606000**	49320	314100	**3637000**	458300	5330	**2634000**	**6746000**	864300	**6877000**	**1783200**

Notes:

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

J - Estimated value

U - Analyte not detected

PAH - Polycyclic Aromatic Hydrocarbons

Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	AS2	ASE2	ASE2	ASW2	ASW2	BNE-E-2	BNE-E-2	BNW-2	BNW-2	BNW-2	BW-2
	Sample Date:	01/08/02	01/08/02	01/08/02	01/08/02	01/08/02	01/11/02	01/11/02	01/10/02	01/10/02	01/10/02	01/10/02
	Sample Depth (ft bls):	8-12	7-8	8-12	7-8	8-12	6-7	8-10	6-8	8-12	12-13	7-8
2-Methylnaphthalene		270000	380000	5400 J	570000	680 U	2900 J	16000	230000	1500000	680000	290000
Acenaphthene		250000	230000	3800 J	270000	360 U	23000	16000	130000 J	650000 J	330000	150000
Acenaphthylene		20000 J	20000 J	390 U	17000 J	270 U	2500 J	520 J	7400 J	36000 J	15000 J	16000 J
Anthracene		110000	100000 J	1900 J	100000 J	290 U	9800	5700 J	50000 J	300000 J	150000 J	60000 J
Benzo[a]anthracene		55000 J	56000 J	1200 J	46000 J	360 U	5300 J	4300 J	28000 J	160000 J	80000 J	32000 J
Benzo[a]pyrene		49000 J	44000 J	1000 J	36000 J	390 U	3600 J	4000 J	19000 J	110000 J	62000 J	26000 J
Benzo[b]fluoranthene		21000 J	20000 U	1300 U	23000 U	920 U	1800 J	1700 J	19000 U	77000 U	36000 U	9700 J
Benzo[g,h,i]perylene		22000 J	16000 J	600 U	13000 J	410 U	2200 J	2900 J	8300 U	34000 U	26000 J	6900 J
Benzo[k]fluoranthene		37000 J	37000 J	1400 U	27000 J	940 U	2400 J	3500 J	19000 U	96000 J	48000 J	20000 J
Chrysene		56000 J	57000 J	1300 J	46000 J	410 U	7100 J	5000 J	34000 J	180000 J	92000 J	34000 J
Dibenzo[a,h]anthracene		5500 U	9500 U	630 U	11000 U	440 U	720 J	530 U	8800 U	36000 U	17000 U	4300 U
Fluoranthene		120000	120000 J	2600 J	90000 J	810 J	6900 J	6500 J	43000 J	240000 J	130000 J	60000 J
Fluorene		110000	100000 J	1800 J	110000 J	480 U	8600 J	5400 J	57000 J	300000 J	150000 J	68000 J
Indeno[1,2,3-cd]pyrene		16000 J	13000 J	630 U	11000 U	440 U	1800 J	2300 J	8800 U	36000 U	22000 J	6100 J
Naphthalene		320000	770000	10000 J	1400000	780 U	16000	1200 J	510000	3000000	1400000	560000
Phenanthrene		390000	350000	6500 J	340000	1000 J	33000	21000	180000	980000	510000	220000
Pyrene		150000	130000 J	3000 J	130000 J	700 J	16000	15000	76000 J	480000 J	280000 J	97000
	Total PAH Concentrations:	**1996000**	**2423000**	38500	**3195000**	2510	143620	111020	**1364400**	**8032000**	**3975000**	**1655700**

Notes:

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

J - Estimated value

U - Analyte not detected

PAH - Polycyclic Aromatic Hydrocarbons

Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	BW-2	CB-1	CB-1	CN-2	CN2A	CN2A	CN2A	CN3	CN3	CN3
	Sample Date:	01/10/02	01/17/02	01/21/02	01/16/02	01/17/02	01/17/02	01/17/02	01/23/02	01/23/02	01/23/02
	Sample Depth (ft bls):	8-8.5	6-8	10.5-11.5	6-8	5-6	11-12	12-14	12-16	6-7	8-12
2-Methylnaphthalene		130000	1100000	6800 J	44000000	2800000	15000	2900000	880000	860 U	5200 J
Acenaphthene		81000	530000	3800 J	18000000 J	1300000 J	8000 J	1300000	200000 J	460 U	2700 J
Acenaphthylene		4300 J	82000 J	350 J	3800000 J	130000 J	550 J	210000 J	73000 J	340 U	400 J
Anthracene		30000 J	260000 J	1400 J	7500000 J	530000 J	4100 J	670000 J	200000 J	2000 J	1800 J
Benzo[a]anthracene		18000 J	150000 J	910 J	3500000 J	280000 J	5300 J	350000 J	150000 J	5600 J	990 J
Benzo[a]pyrene		15000 J	140000 J	860 J	2800000 J	210000 J	5100 J	310000 J	99000 J	6000 J	900 J
Benzo[b]fluoranthene		5300 J	60000 J	940 U	2300000 U	200000 U	4900 J	130000 J	71000 J	4500 J	1200 U
Benzo[g,h,i]perylene		7400 J	75000 J	420 U	1000000 J	87000 U	4800 J	170000 J	68000 J	3600 J	520 U
Benzo[k]fluoranthene		9100 J	99000 J	970 U	2300000 U	200000 U	8000 J	280000 J	99000 J	5100 J	1200 U
Chrysene		20000 J	160000 J	940 J	3600000 J	280000 J	6100 J	360000 J	150000 J	5900 J	990 J
Dibenzo[a,h]anthracene		2200 U	26000 J	450 U	1100000 U	92000 U	540 U	42000 U	24000 U	890 J	550 U
Fluoranthene		28000 J	290000 J	1700 J	7900000 J	620000 J	9000 J	680000 J	380000 J	13000	2400 J
Fluorene		31000 J	300000 J	2000 J	10000000 J	690000 J	4800 J	800000	190000 J	610 U	2100 J
Indeno[1,2,3-cd]pyrene		5900 J	67000 J	450 U	1100000 U	92000 U	4700 J	150000 J	59000 J	3600 J	550 U
Naphthalene		280000	2100000	14000	87000000	5900000	40000	5800000	2100000	980 U	18000
Phenanthrene		110000	830000	4800 J	27000000	1800000	14000	2100000	700000	5300 J	6000 J
Pyrene		70000	510000	2000 J	10000000 J	830000 J	8600 J	1100000	350000 J	10000	2600 J
	Total PAH Concentrations:	845000	**6779000**	39560	**226100000**	**15370000**	142950	**17310000**	**5769000**	65490	44080

Notes:

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

J - Estimated value

U - Analyte not detected

PAH - Polycyclic Aromatic Hydrocarbons

Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	CNE3	CNE3	CNE3	CNW3	CNW3	CNW3	CW-2	DN2	DN2	DN2	DS2
	Sample Date:	01/22/02	01/22/02	01/22/02	01/23/02	01/23/02	01/23/02	01/16/02	01/23/02	01/23/02	01/23/02	01/22/02
	Sample Depth (ft bls):	7-8	8-10	15-16	6-7	9-10	12-16	12-12.5	6-8	8-9	12-14	6-8
2-Methylnaphthalene		780000	520000	4800000	12000 J	340000	4000000	31 U	6400 J	11000	5900 J	14000
Acenaphthene		520000	390000	2000000	29000	180000	1600000 J	19 J	4400 J	4800 J	4100 J	6100 J
Acenaphthylene		110000 J	74000 J	370000 J	9900 J	18000 J	220000 J	12 U	290 U	340 U	270 U	540 J
Anthracene		260000 J	200000	1100000 J	8600 J	76000 J	740000 J	15 J	810 J	720 J	740 J	2600 J
Benzo[a]anthracene		160000 J	120000 J	540000 J	7300 J	43000 J	390000 J	17 U	390 U	520 J	370 U	1100 J
Benzo[a]pyrene		140000 J	100000 J	400000 J	14000 J	33000 J	340000 J	18 U	420 U	500 U	400 U	680 J
Benzo[b]fluoranthene		68000 J	38000 J	200000 U	8000 J	13000 J	210000 U	43 U	990 U	1200 U	950 U	910 U
Benzo[g,h,i]perylene		51000 J	46000 J	130000 J	13000 J	15000 J	160000 J	19 U	440 U	530 U	420 U	410 U
Benzo[k]fluoranthene		88000 J	73000 J	300000 J	11000 J	27000 J	230000 J	44 U	1000 U	1200 U	970 U	930 U
Chrysene		160000 J	120000 J	570000 J	9900 J	45000 J	380000 J	19 U	440 J	530 U	420 U	1200 J
Dibenzo[a,h]anthracene		18000 U	12000 J	95000 U	2700 J	4400 U	100000 U	20 U	470 U	560 U	450 U	430 U
Fluoranthene		330000	240000	1100000 J	11000 J	89000	790000 J	25 U	800 J	820 J	690 J	2700 J
Fluorene		290000 J	220000	1200000 J	14000 J	76000 J	820000 J	22 U	1900 J	1700 J	1700 J	2800 J
Indeno[1,2,3-cd]pyrene		43000 J	34000 J	110000 J	9700 J	12000 J	120000 J	20 U	470 U	560 U	450 U	430 U
Naphthalene		1300000	730000	11000000	130000	590000	9400000	46 J	34000	71000	32000	31000
Phenanthrene		870000	660000	3800000	27000	290000	2700000	62 J	3600 J	3200 J	3400 J	9400
Pyrene		400000	360000	1400000 J	21000	140000	1200000 J	29 J	1100 J	1400 J	1100 J	3300 J
	Total PAH Concentrations:	**5570000**	**3937000**	**28820000**	338100	**1987000**	**23090000**	171	53450	95160	49630	75420

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	DS2	DS2	AS-1 (SB-1)	AS-1 (SB-1)	AS-1 (SB-1)	ASW-1 (SB-2)	ASW-1 (SB-2)	ASW-1 (SB-2)
	Sample Date:	01/22/02	01/22/02	01/02/02	01/02/02	01/02/02	01/02/02	01/02/02	01/02/02
	Sample Depth (ft bls):	8-12	12-16	6-7	8-10	12-16	7-8	9-10	12-16
2-Methylnaphthalene		13000	5600 J	160000	25000	18000	110000	24000	3900 J
Acenaphthene		6400 J	2800 J	95000	12000	8900 J	52000	12000	1900 J
Acenaphthylene		1400 J	920 J	6300 J	900 J	660 J	3600 J	1000 J	260 U
Anthracene		3400 J	1100 J	43000 J	4500 J	2800 J	21000 J	6100 J	800 J
Benzo[a]anthracene		2200 J	1400 J	25000 J	2700 J	2000 J	10000 J	3100 J	360 U
Benzo[a]pyrene		1700 J	1100 J	20000 J	2100 J	490 U	7800 J	2400 J	380 U
Benzo[b]fluoranthene		930 U	890 U	8800 J	1000 J	1200 U	4300 U	1100 J	910 U
Benzo[g,h,i]perylene		640 J	400 U	7500 J	430 U	530 U	1900 U	370 U	410 U
Benzo[k]fluoranthene		1500 J	1100 J	14000 J	1700 J	1200 U	4400 U	1700 J	930 U
Chrysene		2400 J	1500 J	26000 J	2800 J	2100 J	9800 J	3100 J	410 U
Dibenzo[a,h]anthracene		440 U	420 U	2400 U	460 U	560 U	2000 U	390 U	430 U
Fluoranthene		4400 J	2700 J	46000	5200 J	4100 J	19000 J	5600 J	530 U
Fluorene		3600 J	1300 J	54000	6500 J	4400 J	22000 J	5900 J	480 U
Indeno[1,2,3-cd]pyrene		540 J	420 U	6300 J	460 U	560 U	2000 U	390 U	430 U
Naphthalene		28000	13000	310000	34000	23000	290000	44000	9600
Phenanthrene		13000	4400 J	140000	15000	11000	68000	19000	2600 J
Pyrene		5700 J	2600 J	71000	7600 J	5500 J	31000 J	9100	450 U
	Total PAH Concentrations:	87880	39520	**1032900**	121000	82460	644200	138100	18800

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	ANW-1 (SB-3) 01/02/02 6-8	ANW-1 (SB-3) 01/02/02 8-12	ANW-1 (SB-3) 01/02/02 12-16	AN-1 (SB4) 01/03/02 4-5	AN-1 (SB4) 01/03/02 8-9	AN-1 (SB4) 01/03/02 12-16	ANE-1 (SB5) 01/21/02 4-4.5
2-Methylnaphthalene		6500 J	8500 J	2900 J	600000	100000	14000	3100000 J
Acenaphthene		29000	31000	11000	230000 J	46000 J	6300 J	170000 U
Acenaphthylene		2000 J	1600 J	530 J	11000 U	1600 U	590 J	130000 U
Anthracene		14000 J	14000 J	4600 J	95000 J	16000 J	2500 J	140000 U
Benzo[a]anthracene		7600 J	7000 J	2400 J	46000 J	7300 J	1500 J	170000 U
Benzo[a]pyrene		6100 J	5600 J	1900 J	15000 U	2400 U	420 U	180000 U
Benzo[b]fluoranthene		2900 J	2200 U	860 U	36000 U	5700 U	990 U	430000 U
Benzo[g,h,i]perylene		1000 U	1000 U	390 U	16000 U	2500 U	440 U	190000 U
Benzo[k]fluoranthene		3900 J	2300 U	890 U	37000 U	5800 U	1000 U	450000 U
Chrysene		7400 J	6800 J	2400 J	47000 J	7500 J	1500 J	190000 U
Dibenzo[a,h]anthracene		1100 U	1100 U	410 U	17000 U	2700 U	470 U	210000 U
Fluoranthene		14000 J	13000 J	4400 J	110000 J	17000 J	3100 J	250000 U
Fluorene		15000 J	14000 J	4600 J	120000 J	20000 J	3100 J	230000 U
Indeno[1,2,3-cd]pyrene		1100 U	1100 U	410 U	17000 U	2700 U	470 U	210000 U
Naphthalene		96000	91000	30000	1600000	250000	38000	17000000
Phenanthrene		43000	43000	14000	330000	57000	9100	270000 U
Pyrene		20000	21000	7300 J	140000 J	25000 J	4700 J	220000 U
	Total PAH Concentrations:	267400	256500	86030	**3318000**	545800	84390	**20100000**

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	ANE-1 (SB5) 01/21/02 5-7	ANE-1 (SB5) 01/21/02 8-12	ANE-1 (SB5) 01/21/02 12-13	ASE-1 (SB6) 01/03/02 5-6	ASE-1 (SB6) 01/03/02 9-10	ASE-1 (SB6) 01/03/02 13-14	GH-31 (SB7) 01/04/02 7-8	GH-31 (SB7) 01/04/02 9-10
2-Methylnaphthalene		60000	23000	7100 J	860000	100000	4400 J	10000	330000
Acenaphthene		15000 J	3100 J	1300 J	450000	59000	3100 J	4900 J	99000 J
Acenaphthylene		1400 U	680 U	340 U	23000 J	3200 J	360 U	240 U	47000 J
Anthracene		5600 J	1300 J	370 U	160000 J	23000 J	1300 J	2000 J	60000 J
Benzo[a]anthracene		2800 J	930 U	470 U	82000 J	13000 J	500 U	940 J	37000 J
Benzo[a]pyrene		2100 J	990 U	500 U	58000 J	1900 U	530 U	360 U	7200 U
Benzo[b]fluoranthene		4800 U	2300 U	1200 U	26000 J	4600 U	1300 U	840 U	17000 U
Benzo[g,h,i]perylene		2300 U	1100 U	530 U	10000 U	2100 U	560 U	380 U	7700 U
Benzo[k]fluoranthene		4900 U	2400 U	1200 U	42000 J	4700 U	1300 U	870 U	18000 U
Chrysene		3100 J	1100 U	530 U	83000 J	13000 J	560 U	890 J	38000 J
Dibenzo[a,h]anthracene		2300 U	1100 U	560 U	11000 U	2200 U	600 U	400 U	8100 U
Fluoranthene		7000 J	2000 J	680 U	170000 J	25000 J	1800 J	2100 J	75000 J
Fluorene		7500 J	1800 J	620 U	200000 J	28000 J	660 U	2500 J	77000 J
Indeno[1,2,3-cd]pyrene		2300 U	1100 U	560 U	11000 U	2200 U	600 U	400 U	8100 U
Naphthalene		210000	110000	31000	1600000	160000	6200 J	32000	880000
Phenanthrene		21000 J	4900 J	1300 J	570000	79000	4600 J	7200 J	230000
Pyrene		9100 J	2400 J	660 J	220000	38000 J	2400 J	2800 J	99000 J
	Total PAH Concentrations:	343200	148500	41360	**4544000**	541200	23800	65330	**1972000**

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	GH-31 (SB7) 01/04/02 12-13	SB7-N2 01/09/02 4-5	SB7-S2 01/09/02 4-6	GH-21 (SB8) 01/04/02 7-8	GH-21 (SB8) 01/04/02 10-11	GH-21 (SB8) 01/04/02 13-14	BS-1 (SB9) 01/04/02 5-6	BW-1 (SB10) 01/04/02 7-8
2-Methylnaphthalene		580000	32000	75000	99000	26000	20000	900000	320000
Acenaphthene		170000 J	31000	22000	80000	16000	12000	530000	140000 J
Acenaphthylene		78000 J	14000 J	7200 J	7900 J	1100 J	900 J	43000 J	13000 J
Anthracene		110000 J	23000	18000 J	44000	7400 J	5300 J	230000 J	61000 J
Benzo[a]anthracene		78000 J	26000	11000 J	28000 J	4600 J	3100 J	120000 J	34000 J
Benzo[a]pyrene		61000 J	22000	7700 J	24000 J	3700 J	470 U	16000 U	7600 U
Benzo[b]fluoranthene		22000 U	10000 J	3000 J	9100 J	1500 J	1100 U	39000 U	18000 U
Benzo[g,h,i]perylene		9800 U	15000 J	3800 J	9500 J	580 U	500 U	17000 U	8100 U
Benzo[k]fluoranthene		23000 U	21000	4000 J	19000 J	2800 J	1200 U	40000 U	18000 U
Chrysene		83000 J	31000	13000 J	30000 J	5200 J	3300 J	120000 J	34000 J
Dibenzo[a,h]anthracene		10000 U	4400 J	1000 U	1800 U	620 U	530 U	19000 U	8500 U
Fluoranthene		140000 J	41000	13000 J	50000	8100 J	5300 J	230000 J	56000 J
Fluorene		140000 J	21000	15000 J	49000	7800 J	5300 J	260000 J	65000 J
Indeno[1,2,3-cd]pyrene		10000 U	12000 J	2300 J	8100 J	620 U	530 U	19000 U	8500 U
Naphthalene		1300000	120000	68000	120000	39000	29000	2100000	710000
Phenanthrene		410000	64000	60000	150000	26000	17000	800000	210000
Pyrene		210000	74000	30000	81000	13000	8900 J	350000	91000 J
	Total PAH Concentrations:	**3360000**	561400	353000	808600	162200	110100	**5683000**	**1734000**

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	BW-1 (SB10) 01/04/02 9-10	BW-1 (SB10) 01/04/02 14-15	BNW-1 (SB11) 01/04/02 7-8	BNW-1 (SB11) 01/04/02 11-12	BNE-1 (SB12) 01/04/02 6-8	BNE-1 (SB12) 01/04/02 8-10	BE-1 (SB13) 01/07/02 6-7
2-Methylnaphthalene		270000	8500	100000	290000	640 U	660 U	40000
Acenaphthene		120000	4900 J	43000	140000 J	340 U	640 J	13000 J
Acenaphthylene		10000 J	450 J	4000 J	12000 J	250 U	260 U	4700 J
Anthracene		49000 J	2200 J	17000 J	63000 J	270 U	280 U	3700 J
Benzo[a]anthracene		26000 J	1200 J	7600 J	34000 J	340 U	350 U	4000 J
Benzo[a]pyrene		3700 U	370 U	1900 U	10000 U	370 U	380 U	4100 J
Benzo[b]fluoranthene		8700 U	880 U	4500 U	24000 U	870 U	900 U	2500 J
Benzo[g,h,i]perylene		3900 U	390 U	2000 U	11000 U	390 U	400 U	3600 J
Benzo[k]fluoranthene		9000 U	900 U	4700 U	24000 U	890 U	920 U	3300 J
Chrysene		27000 J	1700 J	12000 J	35000 J	390 U	400 U	4300 J
Dibenzo[a,h]anthracene		4100 U	420 U	2100 U	11000 U	410 U	430 U	1100 U
Fluoranthene		42000 J	1700 J	10000 J	63000 J	500 U	520 U	6400 J
Fluorene		55000 J	2300 J	22000 J	67000 J	460 U	470 U	6300 J
Indeno[1,2,3-cd]pyrene		4100 U	420 U	2100 U	11000 U	410 U	430 U	2200 J
Naphthalene		560000	16000	170000	640000	730 U	1300 J	130000
Phenanthrene		160000	7700	64000	210000	550 U	570 U	14000 J
Pyrene		79000	3300 J	22000 J	92000 J	430 U	450 U	9000 J
	Total PAH Concentrations:	**1398000**	49950	471600	**1646000**	0	1940	251100

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	BE-1 (SB13)	CW-1 (SB14)	CW-1 (SB14)	CW-1 (SB14)	SB15	SB-15 SW	SB-15 SW	SB-15 SW
	Sample Date:	01/07/02	01/07/02	01/07/02	01/07/02	01/07/02	01/23/02	01/23/02	01/23/02
	Sample Depth (ft bls):	10-12	7-8	8-12	13-14	6-7	6-7	8-12	15-16
2-Methylnaphthalene		43000	1400000	500000	1200000	1300000	170000	130000	1400000
Acenaphthene		64000	530000	200000	540000	580000	43000 J	37000 J	530000 J
Acenaphthylene		5700 J	280000 J	81000 J	92000 J	160000 J	6000 J	5100 J	58000 J
Anthracene		33000	330000 J	110000 J	220000 J	280000 J	22000 J	18000 J	210000 J
Benzo[a]anthracene		28000	160000 J	51000 J	110000 J	140000 J	16000 J	13000 J	140000 J
Benzo[a]pyrene		23000 J	140000 J	43000 J	96000 J	120000 J	13000 J	11000 J	100000 J
Benzo[b]fluoranthene		9800 J	64000 J	18000 U	47000 U	52000 U	8700 U	5900 J	74000 U
Benzo[g,h,i]perylene		10000 J	60000 J	17000 J	35000 J	37000 J	6700 J	6700 J	48000 J
Benzo[k]fluoranthene		15000 J	96000 J	32000 J	72000 J	82000 J	8900 U	8000 J	77000 J
Chrysene		28000	170000 J	53000 J	120000 J	140000 J	17000 J	16000 J	160000 J
Dibenzo[a,h]anthracene		1400 U	23000 U	8700 U	22000 U	25000 U	4100 U	2100 U	35000 U
Fluoranthene		44000	360000 J	110000 J	240000 J	280000 J	24000 J	22000 J	230000 J
Fluorene		25000 J	370000 J	120000 J	270000 J	320000 J	31000 J	24000 J	260000 J
Indeno[1,2,3-cd]pyrene		8500 J	45000 J	13000 J	26000 J	30000 J	4700 J	5100 J	37000 J
Naphthalene		3400 J	3200000	1100000	2700000	2900000	340000	250000	3300000
Phenanthrene		100000	1200000	390000	860000	1000000	95000	81000	860000
Pyrene		71000	460000	140000 J	320000 J	400000 J	48000 J	41000	410000 J
	Total PAH Concentrations:	511400	**8865000**	**2960000**	**6901000**	**7769000**	836400	673800	**7820000**

Notes:

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

J - Estimated value

U - Analyte not detected

PAH - Polycyclic Aromatic Hydrocarbons

Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	CE-1 (SB17)	CN-1 (SB18)	DS-1 (SB19)	DS-1 (SB19)	DN-1 (SB20)	DN-1 (SB20)	DN-1 (SB20)	AN-10
	Sample Date:	01/07/02	01/07/02	01/07/02	01/07/02	01/07/02	01/07/02	01/07/02	03/13/02
	Sample Depth (ft bls):	5-6	5-6	6-8	11-12	7-8	8-12	14-15	14-16
2-Methylnaphthalene		2600000	7300000	710 U	170000	22000	660 U	750 U	660 U
Acenaphthene		1300000	3300000 J	900 J	110000	29000	350 U	2600 J	360 U
Acenaphthylene		190000 J	560000 J	280 U	12000 J	520 U	260 U	290 U	260 U
Anthracene		530000 J	1400000 J	310 U	45000	27000	280 U	320 U	280 U
Benzo[a]anthracene		270000 J	620000 J	380 U	21000 J	24000	350 U	400 U	360 U
Benzo[a]pyrene		240000 J	530000 J	410 U	18000 J	18000	380 U	430 U	380 U
Benzo[b]fluoranthene		98000 U	440000 U	970 U	7800 J	15000 J	900 U	1000 U	900 U
Benzo[g,h,i]perylene		82000 J	200000 U	430 U	6500 J	12000 J	400 U	460 U	400 U
Benzo[k]fluoranthene		170000 J	450000 U	990 U	12000 J	16000	920 U	1000 U	920 U
Chrysene		290000 J	670000 J	430 U	21000 J	23000	400 U	460 U	400 U
Dibenzo[a,h]anthracene		46000 U	210000 U	460 U	2200 U	4000 J	420 U	480 U	430 U
Fluoranthene		580000 J	1300000 J	560 U	43000	56000	520 U	590 U	520 U
Fluorene		620000 J	1600000 J	510 U	51000	22000	470 U	540 U	470 U
Indeno[1,2,3-cd]pyrene		63000 J	210000 U	460 U	4900 J	9500 J	420 U	480 U	430 U
Naphthalene		5600000	17000000	810 U	210000	61000	750 U	6200 J	760 U
Phenanthrene		2000000	5100000	610 U	160000	100000	570 U	640 U	570 U
Pyrene		780000 J	1900000 J	480 U	58000	46000	450 U	510 U	450 U
	Total PAH Concentrations:	**15315000**	**41280000**	900	950200	484500	0	8800	0

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	AN-10	AN-10	AN-11	AN-11	AN-11	AN-12	AN-12	AN-12
	Sample Date:	03/13/02	03/13/02	03/19/02	03/19/02	03/19/02	03/19/02	03/19/02	03/19/02
	Sample Depth (ft bls):	7-8	8-10	10-12	13.5-14.5	7-8	10-12	12-13	4-5
2-Methylnaphthalene		680 U	680 U	850 U	1200 U	920 U	780 U	690 U	600 U
Acenaphthene		370 U	370 U	1200 J	670 U	1700 J	470 J	550 J	320 U
Acenaphthylene		270 U	270 U	520 J	490 U	360 U	310 U	270 U	990 J
Anthracene		290 U	290 U	2000 J	1700 J	2400 J	410 J	310 J	660 J
Benzo[a]anthracene		370 U	370 U	3500 J	1900 J	4000 J	890 J	440 J	1400 J
Benzo[a]pyrene		390 U	390 U	3400 J	1600 J	3700 J	800 J	400 U	1600 J
Benzo[b]fluoranthene		930 U	930 U	2400 J	1700 U	2700 J	1100 U	940 U	1000 J
Benzo[g,h,i]perylene		410 U	410 U	2100 J	750 U	2100 J	470 U	420 U	1300 J
Benzo[k]fluoranthene		950 U	950 U	3200 J	1700 U	3500 J	1100 U	970 U	1600 J
Chrysene		410 U	410 U	4900 J	2600 J	5800 J	1200 J	580 J	2200 J
Dibenzo[a,h]anthracene		440 U	440 U	550 U	800 U	590 U	500 U	450 U	390 U
Fluoranthene		540 U	540 U	7500 J	5400 J	9600 J	1700 J	880 J	2200 J
Fluorene		490 U	490 U	1100 J	890 U	1600 J	560 U	500 U	430 U
Indeno[1,2,3-cd]pyrene		440 U	440 U	1800 J	800 U	1900 J	500 U	450 U	1100 J
Naphthalene		2500 J	2100 J	970 U	1400 U	1000 U	890 U	1900 J	690 U
Phenanthrene		590 U	620 J	7800 J	7100 J	11000 J	1500 J	1100 J	2000 J
Pyrene		460 U	460 U	8300 J	5300 J	8800 J	1900 J	1200 J	3200 J
	Total PAH Concentrations:	2500	2720	49720	25600	58800	8870	6960	19250

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	AN-4 02/07/02 10-12	AN-4 02/07/02 14-16	AN-4 02/07/02 4-6	AN-5 02/08/02 13-15	AN-5 02/08/02 4-6	AN-6 02/19/02 6-8	AN-6 02/19/02 10.5-11.5	AN-6 02/19/02 13-15
2-Methylnaphthalene		1600 J	920 J	33000 J	220000	1000 U	260000	340000 J	12000
Acenaphthene		5800	2800 J	150000	300000	530 U	65000 J	140000 J	35000
Acenaphthylene		330 J	320 J	7000 J	33000 J	840 J	160000 J	250000 J	1700 J
Anthracene		2300 J	5400 J	56000	140000 J	600 J	180000 J	300000 J	14000
Benzo[a]anthracene		1900 J	5800 J	30000 J	68000 J	2100 J	220000	280000 J	8400 J
Benzo[a]pyrene		1700 J	5800 J	25000 J	58000 J	2800 J	180000 J	220000 J	6900 J
Benzo[b]fluoranthene		980 J	3900 J	9700 J	23000 J	2500 J	82000 J	79000 J	2800 J
Benzo[g,h,i]perylene		270 U	3300 J	11000 J	17000 J	1900 J	91000 J	110000 J	3900 J
Benzo[k]fluoranthene		1200 J	4400 J	16000 J	40000 J	2800 J	100000 J	150000 J	4400 J
Chrysene		2000 J	6500 J	30000 J	76000 J	2500 J	320000	390000 J	8400 J
Dibenzo[a,h]anthracene		280 U	910 J	2100 U	11000 U	640 U	46000 J	39000 J	U
Fluoranthene		3500 J	14000	52000	140000 J	4300 J	280000	400000 J	15000
Fluorene		2200 J	2300 J	55000	160000 J	710 U	210000 J	520000	14000
Indeno[1,2,3-cd]pyrene		280 U	2600 J	9000 J	14000 J	1600 J	78000 J	78000 J	3000 J
Naphthalene		5400	2000 J	140000	720000	1100 U	250000	1400000	50000
Phenanthrene		9300	19000	240000	490000	1700 J	910000	1700000	65000
Pyrene		4700 J	15000	74000	200000	3500 J	780000	830000	23000
	Total PAH Concentrations:	42910	94950	937700	**2699000**	27140	**4212000**	**7226000**	267500

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	AN-6N	AN-6N	AN-6N	AN-6S	AN-6S	AN-6S	AN-7	AN-7
	Sample Date:	02/28/02	02/28/02	02/28/02	02/28/02	02/28/02	02/28/02	03/08/02	03/08/02
	Sample Depth (ft bls):	13.5-15	4-6	8-10	10-11.5	13-14	4-6	10.5-11.5	6-8
2-Methylnaphthalene		3300 J	2700000	1000000	150000 J	1700 J	2400000	120000 J	30000
Acenaphthene		1900 J	140000 J	72000 J	48000 J	3400 J	230000 J	150000 J	4500 J
Acenaphthylene		270 U	160000 J	130000 J	62000 J	290 U	340000 J	210000	15000 J
Anthracene		1400 J	270000 J	190000 J	89000 J	480 J	560000 J	300000	17000
Benzo[a]anthracene		660 J	390000 J	170000 J	87000 J	480 J	650000 J	290000	26000
Benzo[a]pyrene		390 U	250000 J	130000 J	67000 J	420 U	540000 J	190000	16000
Benzo[b]fluoranthene		940 U	130000 J	53000 J	29000 J	1000 U	270000 J	77000 J	7800 J
Benzo[g,h,i]perylene		420 U	180000 J	88000 J	34000 J	450 U	380000 J	110000 J	13000 J
Benzo[k]fluoranthene		960 U	180000 J	80000 J	42000 J	1000 U	330000 J	95000 J	9900 J
Chrysene		830 J	570000	240000	130000 J	640 J	850000 J	330000	28000
Dibenzo[a,h]anthracene		440 U	25000 U	12000 U	9000 U	480 U	47000 U	42000 J	5000 J
Fluoranthene		2100 J	640000	270000	140000 J	1200 J	1100000	320000	24000
Fluorene		1400 J	520000	270000	160000 J	1200 J	710000 J	410000	15000 J
Indeno[1,2,3-cd]pyrene		440 U	120000 J	61000 J	24000 J	480 U	270000 J	78000 J	10000 J
Naphthalene		12000	2500000	1100000	540000	12000	3600000	570000	18000
Phenanthrene		5300 J	3300000	1300000	650000	2200 J	3800000	1200000	66000
Pyrene		2900 J	1400000	600000	270000	1200 J	2000000	700000	60000
	Total PAH Concentrations:	31790	**13450000**	**5754000**	**2522000**	24500	**18030000**	**5192000**	365200

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	AN-7N	AN-7N	AN-8N	AN-8N	AN-9	AN-9	AN-9	AN-9N
	Sample Date:	03/08/02	03/08/02	03/12/02	03/12/02	03/13/02	03/13/02	03/13/02	03/13/02
	Sample Depth (ft bls):	7-8	8-10	6-8	8-10	14-15	6-8	8-10	10-12
2-Methylnaphthalene		420000	520000	660000	260000 J	660 U	1900 U	700 U	660 U
Acenaphthene		110000 J	150000 J	110000 J	130000 J	350 U	44000	380 U	350 U
Acenaphthylene		180000	290000	110000 J	170000 J	260 U	26000	280 U	260 U
Anthracene		250000	390000	230000 J	310000 J	280 U	58000	300 U	280 U
Benzo[a]anthracene		240000	350000	230000 J	240000 J	350 U	54000	390 J	350 U
Benzo[a]pyrene		160000 J	220000	170000 J	210000 J	370 U	29000	400 U	380 U
Benzo[b]fluoranthene		81000 J	100000 J	76000 J	84000 J	890 U	25000	950 U	900 U
Benzo[g,h,i]perylene		100000 J	150000 J	100000 J	110000 J	400 U	43000	430 U	400 U
Benzo[k]fluoranthene		90000 J	120000 J	110000 J	110000 J	910 U	31000	980 U	920 U
Chrysene		250000	390000	330000	350000 J	400 U	49000	430 U	400 U
Dibenzo[a,h]anthracene		38000 J	62000 J	14000 U	27000 U	420 U	7300 J	450 U	420 U
Fluoranthene		300000	410000	300000	320000 J	520 U	70000	680 J	520 U
Fluorene		330000	520000	380000	420000 J	470 U	36000	530 J	470 U
Indeno[1,2,3-cd]pyrene		79000 J	110000 J	76000 J	67000 J	420 U	27000	450 U	420 U
Naphthalene		860000	1400000	1100000	1000000	750 U	2200 U	800 U	750 U
Phenanthrene		870000	1400000	1600000	1700000	560 U	75000	600 U	570 U
Pyrene		770000	820000	800000	860000	450 U	130000	720 J	450 U
	Total PAH Concentrations:	**5128000**	**7402000**	**6382000**	**6341000**	0	704300	2320	0

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	AN-9N 03/13/02 12-14	AN-9N 03/13/02 5.5-7.5	CN-10N 02/28/02 4-6	CN-10N 02/28/02 8-10	CN-10S 02/28/02 10-11.5	CN-10S 02/28/02 13-15	CN-10S 02/28/02 6-8	CN-11 03/01/02 14-16
2-Methylnaphthalene		660 U	670 U	880 U	850 U	750 J	1800000	24000	710 U
Acenaphthene		350 U	4400 J	1600 J	460 U	620 J	380000 J	8400 J	380 U
Acenaphthylene		260 U	1300 J	350 U	330 U	530 J	100000 J	1100 J	280 U
Anthracene		280 U	6900 J	2500 J	840 J	910 J	450000 J	3700 J	520 J
Benzo[a]anthracene		350 U	4900 J	4400 J	5900 J	1500 J	220000 J	2300 J	1400 J
Benzo[a]pyrene		380 U	2400 J	4500 J	5200 J	1200 J	180000 J	2100 J	1200 J
Benzo[b]fluoranthene		900 U	2200 J	2900 J	4000 J	990 J	120000 U	1400 U	1100 J
Benzo[g,h,i]perylene		400 U	2100 J	2800 J	2500 J	840 J	54000 U	640 U	570 J
Benzo[k]fluoranthene		920 U	2200 J	3700 J	4600 J	1100 J	130000 J	1600 J	1200 J
Chrysene		400 U	5200 J	4600 J	6900 J	1700 J	230000 J	2700 J	1900 J
Dibenzo[a,h]anthracene		420 U	430 U	570 U	550 U	440 U	57000 U	680 U	460 U
Fluoranthene		520 U	10000	11000	13000	2800 J	590000 J	5300 J	2600 J
Fluorene		470 U	5800 J	1300 J	610 U	860 J	390000 J	4900 J	510 U
Indeno[1,2,3-cd]pyrene		420 U	1600 J	2100 J	2300 J	610 J	57000 U	680 U	460 U
Naphthalene		750 U	770 U	1500 J	970 U	2200 J	5100000	6800 J	820 J
Phenanthrene		570 U	5300 J	11000	2000 J	3500 J	1600000	12000 J	1600 J
Pyrene		450 U	16000	10000	11000	3600 J	620000 J	6600 J	2800 J
	Total PAH Concentrations:	0	70300	63900	58240	23710	**11790000**	81500	15710

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	CN-11	CN-11	CN-12	CN-12	CN-12	CN-4	CN-4
	Sample Date:	03/01/02	03/01/02	03/01/02	03/01/02	03/01/02	02/07/02	02/07/02
	Sample Depth (ft bls):	6-8	8-10.5	13-15	4-6	8-10	12-14	4-6
2-Methylnaphthalene		180000	1400 J	660 U	42000	830 U	240000	920000
Acenaphthene		120000	2200 J	350 U	18000 J	1300 J	150000 J	420000
Acenaphthylene		21000 J	760 J	260 U	10000 J	1200 J	37000 J	85000 J
Anthracene		69000 J	1900 J	280 U	11000 J	1800 J	260000	210000 J
Benzo[a]anthracene		40000 J	1700 J	350 U	21000	2600 J	250000	120000 J
Benzo[a]pyrene		35000 J	1400 J	370 U	13000 J	2000 J	200000 J	92000 J
Benzo[b]fluoranthene		17000 J	1100 U	890 U	10000 J	1400 J	180000 J	45000 J
Benzo[g,h,i]perylene		9600 J	550 J	400 U	13000 J	1000 J	130000 J	45000 J
Benzo[k]fluoranthene		25000 J	1200 J	910 U	14000 J	1800 J	200000 J	65000 J
Chrysene		44000 J	1800 J	400 U	26000	3100 J	270000	110000 J
Dibenzo[a,h]anthracene		5100 U	510 U	420 U	4000 J	530 U	35000 J	19000 U
Fluoranthene		80000 J	3300 J	520 U	31000	4100 J	670000	260000 J
Fluorene		65000 J	1500 J	470 U	21000	880 J	160000 J	240000 J
Indeno[1,2,3-cd]pyrene		7800 J	510 U	420 U	10000 J	730 J	120000 J	42000 J
Naphthalene		400000	4000 J	750 U	59000	1000 J	560000	1500000
Phenanthrene		230000	5600 J	570 J	81000	4200 J	980000	640000
Pyrene		120000	4000 J	580 J	71000	6600 J	600000	280000 J
	Total PAH Concentrations:	**1463400**	31310	1150	455000	33710	**5042000**	**5074000**

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	CN-4	CN-5	CN-5	CN-5	CN-6	CN-6	CN-6
	Sample Date:	02/07/02	02/20/02	02/20/02	02/20/02	02/06/02	02/06/02	02/06/02
	Sample Depth (ft bls):	8-10	10-12	14-15	6-8	10-12	14-15	5-6
2-Methylnaphthalene		18000	10000	2800 J	11000	860 U	960 J	910 U
Acenaphthene		8900 J	7100 J	3000 J	7000 J	460 U	1500 J	500 J
Acenaphthylene		1500 J	690 J	1100 J	1000 J	340 U	1100 J	360 U
Anthracene		7600 J	2900 J	11000 J	4100 J	370 U	4200 J	950 J
Benzo[a]anthracene		8900 J	1800 J	16000	3300 J	510 J	8900	1700 J
Benzo[a]pyrene		7400 J	1600 J	12000	3000 J	490 U	5800 J	1400 J
Benzo[b]fluoranthene		5000 J	980 J	10000 J	1800 J	1200 U	6400 J	1200 U
Benzo[g,h,i]perylene		7100 J	670 J	11000 J	1400 J	520 U	4600 J	640 J
Benzo[k]fluoranthene		6200 J	1300 J	13000	2600 J	1200 U	7300 J	1300 J
Chrysene		8400 J	2100 J	18000	3800 J	520 U	8600 J	1600 J
Dibenzo[a,h]anthracene		2000 J	460 U	2900 J	500 U	550 U	1300 J	590 U
Fluoranthene		20000	4100 J	34000	6600 J	1200 J	16000	4400 J
Fluorene		6200 J	3100 J	5900 J	4100 J	610 U	1700 J	680 J
Indeno[1,2,3-cd]pyrene		5900 J	500 J	9600 J	1100 J	550 U	4500 J	650 J
Naphthalene		39000	10000	7700 J	12000	980 U	5000 J	1000 U
Phenanthrene		26000	11000	45000	15000	1100 J	13000	3600 J
Pyrene		18000	6300 J	46000	9800	920 J	14000	3100 J
	Total PAH Concentrations:	196100	64140	249000	87600	3730	104860	20520

Notes:

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

J - Estimated value

U - Analyte not detected

PAH - Polycyclic Aromatic Hydrocarbons

Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	CN-7 02/20/02 12-14	CN-7 02/20/02 4-6	CN-7 02/20/02 8-10	CN-8 02/08/02 12-14	CN-8 02/08/02 6-8	CN-8 02/08/02 8-10	CN-9 02/06/02 10-12
2-Methylnaphthalene		810 U	780 U	770 U	670 U	710 U	790 U	26000
Acenaphthene		430 U	420 U	410 U	360 U	380 U	420 U	18000
Acenaphthylene		320 U	300 U	300 U	260 U	280 U	310 U	5000 J
Anthracene		350 U	640 J	330 U	290 U	310 U	340 U	13000
Benzo[a]anthracene		430 U	1200 J	410 U	360 U	380 U	420 U	9200
Benzo[a]pyrene		460 U	1200 J	440 U	380 U	410 U	450 U	7000 J
Benzo[b]fluoranthene		1100 U	1100 U	1000 U	910 U	970 U	1100 U	3200 J
Benzo[g,h,i]perylene		490 U	610 J	470 U	410 U	430 U	480 U	3600 J
Benzo[k]fluoranthene		1100 U	1300 J	1100 U	940 U	990 U	1100 U	5100 J
Chrysene		490 U	1500 J	470 U	410 U	430 U	480 U	8400
Dibenzo[a,h]anthracene		520 U	500 U	490 U	430 U	460 U	510 U	1100 J
Fluoranthene		630 U	2500 J	600 U	530 U	660 J	720 J	15000
Fluorene		580 U	550 U	550 U	480 U	510 U	560 U	12000
Indeno[1,2,3-cd]pyrene		520 U	500 U	490 U	430 U	460 U	510 U	3100 J
Naphthalene		920 U	890 U	880 U	770 U	820 U	900 U	31000
Phenanthrene		690 U	2700 J	660 U	580 U	810 J	1400 J	33000
Pyrene		550 U	2600 J	520 U	460 U	660 J	730 J	18000
	Total PAH Concentrations:	0	14250	0	0	2130	2850	211700

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 1. Summary of Polycyclic Aromatic Hydrocarbons Detected in Fill Material, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	CN-9	CN-9	CN-10	CN-10	CN-10
	Sample Date:	02/06/02	02/06/02	02/19/02	02/19/02	02/19/02
	Sample Depth (ft bls):	12-14	5-6	4-6	8-10	12-14
2-Methylnaphthalene		340000	250000	290000	4200 J	4200 J
Acenaphthene		130000	120000	180000	9000	6200 J
Acenaphthylene		27000 J	35000 J	13000 J	3300 J	870 J
Anthracene		84000	80000	81000 J	8400 J	8400 J
Benzo[a]anthracene		51000 J	60000 J	57000 J	8500 J	8700 J
Benzo[a]pyrene		35000 J	46000 J	51000 J	8000 J	7000 J
Benzo[b]fluoranthene		19000 J	26000 J	23000 J	4800 J	4600 J
Benzo[g,h,i]perylene		18000 J	23000 J	28000 J	6600 J	6200 J
Benzo[k]fluoranthene		32000 J	36000 J	36000 J	6800 J	5500 J
Chrysene		44000 J	53000 J	55000 J	10000	8900
Dibenzo[a,h]anthracene		6000 J	7300 J	U	1700 J	U
Fluoranthene		98000	120000	120000 J	17000	19000
Fluorene		90000	97000	76000 J	7500 J	5900 J
Indeno[1,2,3-cd]pyrene		17000 J	20000 J	22000 J	5400 J	4700 J
Naphthalene		490000	310000	760000	14000	16000
Phenanthrene		240000	240000	330000	28000	35000
Pyrene		98000	120000	120000 J	29000	22000
	Total PAH Concentrations:	**1819000**	**1643300**	**2242000**	172200	163170

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
PAH - Polycyclic Aromatic Hydrocarbons
Data highlighted in Bold represent total PAH concentrations that exceed the Site criteria of 1,000,000 µg/kg

Table 2. Summary of Volatile Organic Compounds Detected in Fill Material from Gasholder #1, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation: / Sample Date: / Sample Depth (ft bls):	GH1-A 03/15/02 13-17	GH-1A 03/19/02 18-20	GH-1A 03/20/02 22-24	GH-1B 03/18/02 12-16	GH-1C 03/18/02 16-17.5
1,1,1-Trichloroethane		0.6 U	1900 U	7400 U	3 U	74 U
1,1,2,2-Tetrachloroethane		1 U	2600 U	10000 U	5 U	200 J
1,1,2-Trichloroethane		0.6 U	1200 U	5000 U	3 U	49 U
1,1-Dichloroethane		0.6 U	1800 U	7200 U	3 U	71 U
1,1-Dichloroethene		0.6 U	1000 U	4000 U	3 U	40 U
1,2-Dichloroethane		0.5 U	4000 U	16000 U	2 U	160 U
1,2-Dichloroethene (total)		0.6 U	2200 U	8600 U	3 U	86 U
1,2-Dichloropropane		0.5 U	900 U	3600 U	2 U	36 U
1,3-Dichloropropene, cis-		0.5 U	1200 U	4900 U	2 U	49 U
1,3-Dichloropropene, trans-		0.5 U	1200 U	4700 U	2 U	47 U
2-Butanone		3 U	11000 J	30000 J	16 U	230 U
2-Hexanone		4 U	5400 U	21000 U	20 UB	210 U
4-Methyl-2-pentanone		3 U	6400 U	26000 U	16 U	250 U
Acetone		48 B	37000 U	150000 U	94 B	1500 U
Benzene		0.6 U	57000	380000	3 U	6000
Bromodichloromethane		0.6 U	1300 U	5300 U	3 U	53 U
Bromoform		0.7 U	1400 U	5700 U	3 U	57 U
Bromomethane		3 U	3200 U	13000 U	14 U	130 U
Carbon disulfide		1 J	120 U	470 U	1 U	5 U
Carbon tetrachloride		0.5 U	1900 U	7400 U	2 U	74 U
Chlorobenzene		0.6 U	2400 U	9600 U	3 U	95 U
Chloroethane		0.8 U	2200 U	8600 U	4 U	86 U
Chloroform		0.7 U	4400 U	18000 U	3 U	170 U
Chloromethane		0.9 U	2000 U	8200 U	5 U	81 U
Dibromochloromethane		0.5 U	1300 U	5300 U	2 U	53 U
Ethylbenzene		1 J	63000	440000	19 J	11000
Methylene chloride		1 JB	3800 U	15000 U	7 UB	150 U
Styrene		0.6 U	2300 U	91000	3 U	92 U
Tetrachloroethene		0.5 U	3000 U	12000 U	2 U	120 U
Toluene		1 J	9000 J	310000	12 JB	440 J
Trichloroethene		0.6 U	950 U	3800 U	3 U	38 U
Vinyl acetate		3 U	5900 U	23000 U	17 U	230 U
Vinyl chloride		0.5 U	3200 U	13000 U	2 U	130 U
Xylenes (total)		7	67000	620000	89	8700
	Total VOCs:	59	207000	1871000	214	26340

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
B - Compound detected in blank sample

Table 3. Summary of Semivolatile Organic Compounds Detected in Fill Material from Gasholder #1, Former 2nd Avenue Manufactured Gas Plant, Brooklyn, New York.

Parameter (Concentrations in µg/kg)	Sample Designation:	GH-1A	GH-1A	GH-1B	GH-1C	GH1-A
	Sample Date:	03/19/02	03/20/02	03/18/02	03/18/02	03/15/02
	Sample Depth (ft bls):	18-20	22-24	12-16	16-17.5	13-17
2-Methylnaphthalene		520000	4700000	2700 J	18000	620 U
Acenaphthene		250000J	560000 J	2500 J	11000	460 J
Acenaphthylene		29000J	1000000 J	910 J	4600 J	240 U
Anthracene		150000J	600000 J	4800 J	9200	1000 J
Benzo[a]anthracene		180000J	450000 J	5300 J	5400 J	1400 J
Benzo[a]pyrene		150000J	370000 J	5000 J	4400 J	1300 J
Benzo[b]fluoranthene		68000J	160000 U	3900 J	2000 J	1200 J
Benzo[g,h,i]perylene		43000J	99000 J	2200 J	1600 J	540 J
Benzo[k]fluoranthene		100000J	300000 J	4900 J	3600 J	1300 J
Chrysene		200000J	480000 J	5800 J	6300 J	1500 J
Dibenzo[a,h]anthracene		14000U	77000 U	960 J	610 J	400 U
Fluoranthene		330000	860000 J	13000	13000	3700 J
Fluorene		230000J	1100000 J	3400 J	8500	540 J
Indeno[1,2,3-cd]pyrene		36000J	79000 J	2400 J	1500 J	550 J
Naphthalene		930000	9200000	4500 J	26000	710 U
Phenanthrene		1100000	3300000	16000	31000	3600 J
Pyrene		630000	1700000	10000	12000	2600 J
Dibenzofuran		21000J	130000J	2000J	1200J	330U
Carbazole		17000U	94000J	2000J	530U	490U
	Total SVOC Concentrations:	4967000	24928000	92270	159910	19690

Notes:
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
J - Estimated value
U - Analyte not detected
SVOC - Semivolatile Organic Compounds

ATTACHMENT 1

Geologic Logs

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

1377 Motor Parkway
Islandia, NY
Telephone: 631 -232-2600
Fax: 631-232-9898

SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AN-3				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY			
S. Glash	**T. Mills**	**Brooklyn, New York**		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. /		**Area A**		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
4.25-in. / Auger	**6-inches**	**/ HSA**	**2" Split Spoon**	**1/21/02-1/21/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to medium SAND, trace Gravel, trace Wood, trace Brick; dry (fill)	23		
			36		
			30		
			28		
		Brown to gray fine to medium Sand and Gravel, trace Brick, trace Concrete; dry (fill)	16	19.8	
			17		
			21		
			13		
		Brown to black stained fine to medium SAND, trace Silt; dry (fill)	10		
5			15	67.1	5
			10		Slight odor.
			9	101	
		Brown to black stained fine to medium SAND, trace Silt, trace Gravel; dry (fill)	8		
			8	58.2	
			5		
		Brown to reddish brown Silt and fine Sand; (fill)	12	40.2	
		Black stained fine to medium Sand and Silt; (fill)	5		
			6	30.1	
			5		Free product.
10			9	60.2	10
		Dark brown to reddish brown fine to medium Sand and Silt, trace Clay; (fill)	2		
			2	59.1	
			2		Sheen.
			2	24.9	
		Dark brown to black stained fine to medium Sand and Silt; (fill)	1		
			1	58.5	
			1		Sheen.
			1	55.9	
		Dark gray to black stained fine to medium Sand and Gravel; (fill)	2		
15			1	55.9	Free product. 15
		PEAT	3		
			3		
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI~1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AN-4				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY	Brooklyn, New York		
S. Glash	D.Moss			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin		Area A		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-45 / Drive and Wash	2" Split Spoon	2/7/02-2/7/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Dark brown to tan medium to coarse SAND, trace Gravel, trace Brick, trace Concrete; moist (fill)	15 19 18 31		
		Dark brown to tan medium to coarse SAND, trace Gravel, trace Brick, trace Concrete; moist (fill)	15 15 30 27	7.9	
		Black stained fine SAND, little Silt, trace Gravel, trace Coal Fragments; moist (fill)	6 7		
5			6	55.2	5
		Black stained fine SAND, some Coal Fragments, little Gravel, trace Silt; wet (fill)	10 12 10		
			2	52.3	Trace free product.
		Gray fine SAND, little Coal Fragments, little Silt, trace Gravel; wet (fill)	2		
				12.8	Trace free product.
10		Dark gray to black stained fine to coarse SAND, some Gravel, little Silt, trace Glass; wet (fill)			10
				3.1	Odor.
		No recovery			
		Black stained medium to coarse SAND, little Silt, little Gravel; wet (fill)			Slight odor.
15		PEAT		6.9	15
					Bottom of boring 16 feet below land surface

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/17/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AN-6				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY	Brooklyn, New York		
S. Glash	D.Moss			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin		Area A		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-45 / Drive and Wash	2" Split Spoon	2/19/02-2/19/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to tan fine to coarse SAND, trace Silt, trace Brick, trace Concrete; dry (fill)	9 17 14 21		
			7 14 21 27	4.1	
		Brown fine to coarse SAND, little Silt, trace Gravel; moist to wet (fill)	9 9		
5			10	4.3	5
		Brown to black stained fine to medium SAND, little Silt, trace Gravel, trace coarse Sand; wet (fill)	6 6 5		
			10	18.1	Odor and trace free product.
		Black stained medium SAND, little Silt, trace Gravel trace, Ashalt-like material; wet (fil)	10 9 9		
			16	89.1	Odor and trace free product.
10		Black stained medium to coarse SAND, some Gravel, trace Silt, trace Ashalt-like material; wet (fill)	17 17 22		10
			25	57.2	Odor and free product.
		CONCRETE	50/1		
		Black stained fine to medium SAND, little Silt, trace Gravel; wet (fill)		78.7	
15		No recovery			15
		Peat and Clay; wet			
20					20

Bottom of boring 20 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AN-9				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY	Brooklyn, New York		
S. Glash	D.Moss			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / D. Pepe		Area A		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-75 / Drive and Wash	2" Split Spoon	3/12/02-3/13/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Tan to brown fine to coarse SAND, trace Gravel, trace Brick, trace Concrete, trace Wood; dry (fill)	18 20 23		
		Tan to brown fine to coarse SAND, trace Gravel, trace Brick, trace Concrete, trace Wood; wet at 4 ft. (fill)	20 23 18 30 45		
		Brown to red Sand and Gravel, little Concrete, trace Silt; wet (fill)	10 50/5		
5		CONCRETE			5
		Black fiine SAND, some Silt, trace coarse Sand, trace Gravel; wet (fill)			Odor and Free product.
		Brown to black stained fine SAND, some Silt; wet (fill)	5 3 1		Slight odor.
10		Brown to green fine Sand and Silt; wet (fill)	1		10
		Light brown fine SAND, some Silt, trace Gravel; wet (fill)	1 1 1 1		
		Light brown fine SAND and Silt, trace Clay, trace Gravel; wet (fill)	2 1		
15		Brown PEAT, and green to grey Clay	1 1		15 Bottom of boring 16 feet below land surface.

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AN-9N				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. /		**Area A**		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	**4-inches**	**CME-75 / Drive and Wash**	**2" Split Spoon**	**3/13/02-3/13/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Grout**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Dark brown medium to coarse SAND, trace Gravel, trace brick, trace Concrete; moist (fill)	11 14 19 17		
		Dark brown medium to coarse SAND, trace Gravel, trace brick, trace Concrete; wet at 4 (fill)	14 12 12 8	8.9	
		Green to brown fine SAND, some Silt, trace Gravel; wet (fill)	6 50/3	7.9	
5		CONCRETE			5
		Black stained fine SAND, some Silt, trace Gravel; wet (fill)	6 6 3 7/12	160	Strong odor.
		Red to brown fine SAND, little Silt, trace coarse Sand; wet (fill)	8 7 6 3	4.9	
10		Red to black stained SILT, some fine to medium Sand; wet (fill)	1 1 1 1	5.2	10
		Red to brown medium SAND, some Silt, trace Gravel; wet (fill)	1 1 1 1	4.7	
		PEAT; wet	1 1 1/12		
15					15
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
ANE-1				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	**4-inches**	**CME-45 / Drive and Wash**	**2" Split Spoon**	**1/21/02-1/21/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Grout**		

Depth, fee:	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to coarse SAND, trace Gravel, trace Brick; dry (fill)	11		
			9		
			18	6.3	
			18		
		Gray fine to medium SAND, trace Gravel, trace Ash; moist (fill)	4		
			5		
		Black stained fine SAND, trace Gravel, trace Roots; moist (fill)	8	1735	Strong odor.
			20		
		CONCRETE			Slight odor.
5					5
		Black stained fine to coarse SAND, little Silt, trace Gravel; wet (fill)	2		
			1		
			2	81.3	Slight odor.
			1		
		No recovery			
		Black stained fine to coarse SAND, some Gravel, trace Silt, trace Shells, trace, Glass; wet (fill)	1		
			1		
			1	21.8	Slight odor.
10			1		10
		Black Coal Fragments, trace Silt; wet (fill)	2		
			2		
			1	7.8	Slight odor.
			1		
			1		
		PEAT	1	14.4	
			2		
			3		

Bottom of boring 14 feet below land surface.

BORING/WELL ENDPOI~1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
ANW-1 (SB-3)				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / P. Barczak				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/2/02-1/2/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to medium SAND, trace Silt, trace Gravel, trace Coal, trace Brick; dry (fill)		0.0	
				0.0	
5		Light brown to black stained fine to medium SAND, trace Silt, trace Gravel; dry (fill)		49.5	Slight odor.
		Black stained fine to coarse SAND, some Silt, trace Gravel, trace Coal; wet (fill)		91.5	
		Black stained fine to coarse Sand and Silt, trace Gravel; wet (fill)		7.2	Slight odor and sheen on water.
10					
		Black stained SILT, little fine to coarse Sand, trace Gravel; (fill)		35.2	Slight odor.
15					
		Black stained Silt and fine Sand; wet		0.0	
		PEAT, little green to gray Silt, trace Sand; wet (fill)			Sheen on water.
20					Bottom of boring 20 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AS-2				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / P. Barczak		Area A		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/8/02-1/8/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to black stained fine to coarse SAND, trace Gravel, trace Brick; dry (fill)		0.0	
		Black stained fine to medium SAND, trace Gravel; dry to wet (fill)		6.7	
5				4.9	
				56.8	Trace free product.
		Black stained fine to coarse SAND, little Gravel, trace Silt; wet (fill)			
10				22.3	
		No recovery			
15					
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
ASW-1 (SB-2)				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / P. Barczak				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	**2-inches**	**/ Geoprobe**	**2" Macro-Core**	**1/2/02-1/2/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Fine to medium SAND, trace Silt, trace Gravel, trace Glass, trace Brick; dry (fill)		0.0	
				225	
		Black stained fine to coarse SAND, trace Brick; dry (fill)		71.2	Strong odor.
5				58.4	5
		Black stained SILT, trace fine to medium Sand, trace brick; wet (fill)		201	
				221	Free product.
		Black stained coarse to fine Sand and Silt, trace Gravel, trace Brick; wet (fill)			
10		Brown coarse to fine Sand and Silt, trace Gravel; wet (fill)			10
		Dark brown SILT, some fine to medium Sand, trace Gravel; wet			
15		PEAT			15
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
ASW-2				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / P. Barczak		Area A		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/8/02-1/8/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to black stained fine to medium SAND, trace Gravel, trace Brick trace Coal Fragments; dry (fill)		3.5	
				3.5	Strong odor.
		Brown to black stained SAND, some Silt, trace Gravel, trace Coal Fragments; dry to wet (fill)			
5				148	5
				237	Strong odor and free product.
		Gray to green Silt and fine Sand; wet (fill)			
10				32.9	10
		No recovery			
15					15
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/17/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AN-11				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY			
S. Glash	**C. Battista**	**Brooklyn, New York**		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / S. Miller		**Area A**		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
4.25-in. / Auger	**8-inches**	**Mobile Drill B-61 / HSA**	**2" Split Spoon**	**3/19/02-3/19/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Grout**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Light brown medium to coarse SAND, trace Gravel, trace fine Sand, trace Coal Fragments; dry to moist (fill)	7 8	3.1	
			7 10	0.8	
		Dark brown fine to coarse SAND, trace Silt, trace Gravel, trace Coal Fragments, trace wood; moist (fill)	7 6	0.0	
			7 6	3.2	
		Light brown to dark brown fine to coarse SAND, little Silt, little Gravel; moist to wet (fill)	10 2	0.0	
5			3 5	0.0	5
		Dark brown fine to coarse SAND, some Wood, some Organic Material, trace Gravel; wet (fill)		2.4	
				4.7	
		Brown to dark brown fine to coarse Sand and Silt, little Organic Material, little Coal Fragments, trace Ash; wet (fill)	3 2		
			1	2.6	
10		Dark brown to black stained SAND, some Gravel, some Silt; wet (fill)	1 3		10
			2 4		
		Brown to black stained fine to coarse Sand and Cinders, and Ash, some Coal Fragments; wet (fill)	6		
				2.6	Organic odor.
		Brown PEAT; moist			
15					15
					Organic odor.
					Bottom of boring 16 feet below land surface.

BORING/WELL_ENDPOI-1.GPJ ROUX.GDT 4/17/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
AN-12				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**C. Battista**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / S. Miller		**Area A**		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
4.25-in. / Auger	**8-inches**	**Mobile Drill B-61 / HSA**	**2" Split Spoon**	**3/19/02-3/19/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Grout**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Light brown fine to coarse SAND, trace Gravel, trace Silt, trace Brick; moist (fill)	11 9 8	0.0	
		Light brown fine to coarse SAND, trace Gravel, trace Silt, trace Brick; moist (fill)	12 10 6		
			5	0.0	
		Dark brown fine to coarse Sand and Gravel, trace Silt, trace Brick, trace Coal Fragments; moist (fill)	7 3		
5		Light brown fine to coarse SAND, trace Gravel, trace Silt, trace Brick; moist to wet (fill)	6 9	0.0	5
		Light brown fine to coarse SAND, trace Gravel, trace Silt, trace Brick; wet (fill)	4	0.0	
				0.0	
		Light brown to dark gray fine to coarse SAND, little Silt, trace Gravel; wet (fill)			
		Dark gray to brown and green Silt and fine Sand, some Organic Material; wet (fill)		2.4	Odor.
10		Brown to black stained fine to coarse SAND, little Silt, little Organic Material, trace Gravel, trace Coal Fragments; wet (fill)			10
				3.6	Odor.
		Black stained fine to coarse SAND, trace Gravel, trace Silt, trace Coal Fragments; wet (fill)		4.0	Odor.
					Bottom of boring 14 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/17/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
BNE-E-2				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY			
S. Glash	**D.Moss**	**Brooklyn, New York**		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / C. Battista				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	**2-inches**	**/ Geoprobe**	**2" Macro-Core**	**1/11/02-1/11/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Dark brown fine to coarse SAND, trace Silt, trace Gravel, trace Brick; dry (fill)		2.1	
		Brown to black stained fine to coarse SAND, some Brick, some Concrete; moist (fill)		7.0	
5		Black stained fine to coarse SAND, trace Silt, trace Coal Fragments, trace Ash; moist to wet (fill)		96.3	
				26.7	
		Black stained fine SAND, little Silt, trace Gravel; wet (fill)		5.5	
					Trace free product.
10		Green to gray Peat and Clay, trace Silt; wet			
		Green to gray Peat and Clay, trace Sand, trace Silt; wet			
15					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
BNW-2 (BOW-2)				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / P. Barczak				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	**2-inches**	**/ Geoprobe**	**2" Macro-Core**	**1/10/02-1/10/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Dark brown fine to coarse SAND, trace Gravel, trace Brick; dry (fill)			
				3.2	
					Free product.
		Gray to brown fine to medium SAND, some Silt, trace Gravel, trace Coal Fragments, trace Ash, trace Brick; moist to wet (fill)			
5					5
				61.4	
				126	
		Black stained fine to coarse SAND, some Silt, trace Gravel, trace Ash; wet (fill)			
10					10
				665	Free product.
		Black stained fine to medium Sand and Silt, trace Gravel; wet (fill)			
					Odor and free product.
				175	
					Refusal at 13 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
BS-1 (SB-9)				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Zebra Environmental Inc / L. Davis		**Area B**		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	**2-inches**	**/ Geoprobe**	**2" Macro-Core**	**1/4/02-1/4/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to coarse SAND, trace Gravel, trace Brick; dry (fill)		1.8	
		Black stained coarse Sand and Gravel, trace Silt, trace Brick; dry (fill)		253	
5		Black stained fine to medium Sand, and Silt, trace Gravel; wet (fill)		125	Strong odor.
		Gray Silt and Peat; wet		12.1	
		Gray SILT, little Sand, Little Clay; wet		11.8	
		Brown Peat and gray Silt, some Sand; wet		12.7	
10				6.1	
		Gray to brown SILT, little Clay, trace Sand; wet		13.2	Free product.
		Brown SILT, little Sand, trace Gravel; wet		234	
		Black stained Sand and Silt; wet		12.1	
		Brown to black stained Sand and Silt; wet		59.5	
15				28.7	
				37.2	

Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI~1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
BS-2				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / P. Barczak				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	**2-inches**	**/ Geoprobe**	**2" Macro-Core**	**1/10/02-1/10/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
1		Orange to brown fine to coarse SAND, trace Silt, trace Gravel, trace Concrete, trace Brick; dry (fill)		3.4	
2					
3					
4		Green to grey Peat and Clay, some Sand, some Silt;		7.6	
5					
6					
7					
8					Bottom of boring 8 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/17/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CB-1				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. /				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
4.25-in. / Auger	8-inches	CME-75 / HSA	2" Split Spoon	1/17/02-1/17/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
1		Brown fine to coarse SAND, trace Gravel, trace Concrete, trace Brick; dry (fill)	13	62.4	
2			26		
3			38		
4		Green to black stained fine to medium SAND, some Silt, trace Gravel, trace Brick trace Coal; moist (fill)	34		
5			8		
6		Brick and Gravel, trace Sand; moist to wet (fill)	8	650	Strong odor.
7			8		
8			16		
			31		
			46	960	Strong odor and free product.
			29		
					Refusal at 8 feet below land surface.

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CN-10N				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY			
S. Glash	**D.Moss**	**Brooklyn, New York**		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	**4-inches**	**CME-45 / Drive and Wash**	**2" Split Spoon**	**2/28/02-2/28/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Grout**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to tan fine to medium SAND, trace Gravel, trace Brick, trace Concrete; dry (fill)	17 32 35 42		
		Brown to tan fine to medium SAND, trace Gravel, trace Brick, trace Concrete, dry (fill)	48 45 39 47	1.4	
		Brown and green to black stained SILT, trace Sand, trace Gravel; wet (fill)	6		
5			2 2	0.0	5
		No recovery	2 2 3		
		Gray SILT, trace fine Sand, trace Gravel; wet (fill)	1 1 4 3 1	0.0	
10		Grey fine Sand and Silt, trace Gravel; wet (fill)	1	0.0	10
		No recovery	3 2 1/12		
		Peat and Clay; wet			
15					15

Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CN-12				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	**4-inches**	**CME-45 / Drive and Wash**	**2" Split Spoon**	**3/1/02-3/1/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Grout**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to tan fine to coarse SAND, trace Gravel, trace Brick; dry (fill)	12 15 25 31		
		Brown to tan fine to coarse SAND, trace Gravel, trace Brick; dry (fill)	24 30 36 42	4.5	
5		Green and brown to black stained fine Sand and Silt, trace coarse Sand, trace Gravel, trace Wood; wet (fill)	1 1 1 1	55.1	Slight odor.
		Brown to green fine to coarse SAND, little Silt, trace Gravel; wet (fill)	1 2 1 1	17.6	Slight odor.
		Dark brown to black stained fine to medium SAND, little Silt, trace Gravel; wet (fill)	1	37.8	
10		No recovery			
		No recovery			
		Brown fine to medium SAND, some Gravel; wet (fill)			
15				2.8	
		Green and gray Clay and Silt, little Peat; wet			

Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CN-5				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-45 / Drive and Wash	2" Split Spoon	2/20/02-2/20/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Tan to fine to coarse SAND, trace Gravel, trace Brick, trace Concrete; dry (fill)	8 21 23		
		Tan to black stained fine to coarse SAND, trace Gravel, trace Brick, trace Concrete; dry (fill)	31 15 17	5.2	Slight odor.
		Brown to black stained fine to medium SAND, some Silt, trace Gravel; wet (fill)	22 37 2	33.0	
5			2 1	4.0	Slight odor.
		Black stained medium to coarse SAND, little Gravel, trace Silt, trace fine Sand; wet (fil)	1	5.7	Slight odor.
		Brown to green SILT, little Clay, trace fine to coarse Sand, trace Gravel; wet (fill)		2.3	
10		Black stained medium to coarse SAND, little Gravel, trace Silt, trace Brick; wet (fill)		4.7	
		No recovery			
		Dark brown to black stained coarse Sand and Gravel, trace fine Sand, trace Silt; wet (fill)		3.8	
15		Peat and Clay, wet			
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CN-6				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY	**Brooklyn, New York**		
S. Glash	**D.Moss**			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Simmons				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	**4-inches**	**CME-45 / Drive and Wash**	**2" Split Spoon**	**2/6/00-2/6/00**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		CONCRETE			
		Black stained fine to medium SAND, trace Silt, trace Gravel, trace Brick, trace Coal Fragments; moist (fill)	20 38 25	9.7	Slight odor.
		Dark brown to black stained fine to medium SAND, some Silt; moist (fill)	15 12		
		Dark brown to black stained fine SAND, some Silt; moist (fill)	7 2		
5		Black stained coarse SAND, little Ash, trace Silt, trace Gravel; wet (fill)	2 3	1.5	5
		No recovery	1 2	2.1	
		No recovery	1 1 1 1 1 1		
10		Gray to black stained fine to coarse Sand and Gravel, trace Silt, trace Wood, trace Coal; wet (fill)		0.0	10
		Black stained coarse Sand and Coal Fragments, trace Glass; wet (fill)	6 3 3	0.0	
		Black stained coarse SAND, some Coal Fragments, trace Silt, trace Glass; wet (fill)	1		
15		PEAT		2.7	15

Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI~1.GPJ ROUX.GDT 4/18/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CN-7				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-45 / Drive and Wash	2" Split Spoon	2/20/02-2/20/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		CONCRETE			
		GRAVEL			
		Dark brown medium SAND, trace Silt, trace Gravel, trace Brick; moist (fill)			
		Black stained to tan medium SAND, little green Silt, trace Brick; moist (fill)		2.6	
5		Black stained medium to coarse SAND, little Silt, trace Gravel; wet (fill)	7 2 2 4	1.9	5
		Gray to black stained coarse Sand and Gravel, some Coal Fragments, trace Silt; wet (fill)	5 1 1 1	0.8	
		Gray coarse Sand and Gravel, trace Silt, trace Coal Fragments, trace Shell Fragments; wet (fill)		2.9	
10		Gray coarse Sand and Gravel, little Silt, trace Coal Fragments, trace Ash; wet (fill)	4 2 1	2.1	10
		Gray Gravel, little Sand, trace Shell Fragments, trace Ceramic Fragments; wet (fill)	1 4 3 2	5.3	
15		Peat and Clay; wet	1		15

Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CN-8				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY	Brooklyn, New York		
S. Glash	D.Moss			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / J. Philbin				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-45 / Drive and Wash	2" Split Spoon	2/8/02-2/8/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Gray to brown medium to coarse SAND, trace Gravel, trace Brick, trace Concrete; moist (fill)	8 16		
			17 26		
		Gray to brown medium to coarse SAND, trace Gravel, trace Brick, trace Concrete; moist (fill)	15 22		
			18 27		
		Grey coarse SAND, some Gravel, trace Silt; wet (fill)			
5					5
		Grey coarse SAND, some Gravel, some Silt, little Coal Fragments; wet (fill)			
		Grey coarse SAND, some Gravel, some Silt, little Coal Fragments; wet (fill)	1 1		
			1 1		
10		No recovery			10
		Grey medium to coarse Coal Fragments, little Silt; wet (fill)			
		Grey coarse Sand and Gravel, some Peat, little Clay; wet			
15					15
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/17/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING
CNE-3		

PROJECT NO./NAME	LOCATION
92401Y02 / FCRC 2nd Avenue MGP Site	124-136 2nd Avenue

APPROVED BY	LOGGED BY	
S. Glash	D.Moss	Brooklyn, New York

DRILLING CONTRACTOR/DRILLER	GEOGRAPHIC AREA
Aquifer Drilling & Testing, Inc. / Kari Carli	

DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/22/02-1/22/02

LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to coarse SAND, trace Gravel, trace Brick; moist (fill)		2.1	
5		Brown to black stained fine to coarse SAND, little Silt, trace Gravel; moist (fill)		65.0	5 Slight odor.
		Black stained fine to coarse SAND, little Brick, little Concrete, trace Silt; moist (fill)		183	Trace free product.
		Black stained fine SAND, little Silt, trace Brick; wet (fill)		171	
10				320	10 Odor and trace free product.
		Black stained fine to coarse SAND, trace Silt, trace Gravel; wet (fill)		57.4	
				72.4	
15		Red to black stained GRAVEL, little Sand, little Silt, trace Wood; wet (fill)		121	15 Free product.
		No recovery			
20					20 Bottom of boring 20 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/18/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
CW-1 (SB-14)				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		**124-136 2nd Avenue**		
APPROVED BY	LOGGED BY			
S. Glash	**D.Moss**	**Brooklyn, New York**		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Zebra Environmental Inc / L. Davis				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	**2-inches**	**/ Geoprobe**	**2" Macro-Core**	**1/7/02-1/7/02**
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	**(Feet BLS)**	**Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to medium SAND, trace Gravel, trace Brick; dry (fill)		8.1	
		Light brown fine to medium SAND, dry (fill)			
5		Black stained fine to medium SAND, trace Gravel, trace Silt; wet (fill)		272	5
				63.2	Free product.
		Black stained Sand and Gravel, trace Silt; wet (fill)			
10				37.1	Free product. 10
		Brown to green SILT, little Sand, trace Gravel; wet		75.2	
15		PEAT			15
					Bottom of boring 16 feet below land surface.

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
SB-15-SW				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY / LOGGED BY		Brooklyn, New York		
S. Glash / D.Moss				
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / Kari Carli				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/23/02-1/23/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to tan fine to coarse SAND, trace Gravel, trace Brick; moist (fill)		1.3	
5		Brown to black stained fine to medium SAND, trace Gravel, trace Silt, trace Brick; moist (fill)		44.7	5
		Green to black stained fine SAND, trace Silt, trace Gravel, trace Brick; moist (fill)		134	Odor and trace free product.
		Black stained to green Silt and fine Sand; wet (fill)		108	Odor and trace free product.
		Black stained to brown fine SAND, trace Silt, trace Gravel; wet (fill)			
10				73.2	10
		Brown to black stained fine Sand and Silt, trace Gravel; wet (fill)		127	
				138	Odor and free product.
15		Red to black stained fine SAND, some Gravel, trace Silt; wet		58.0	15
		Black stained fine Sand and Silt, trace Gravel; wet (fill)		139	Odor and free product.
				102	
					Free product.
20				180	20
					Bottom of boring 20 feet below land surface.

BORING/WELL ENDPOJ-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
DN-2				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / Kari Carli				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/23/02-1/23/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to black stained fine to coarse SAND, trace Gravel, trace Brick; dry (fill)		23.4	
		Grey fine SAND, trace Silt; dry (fill)			
		Tan to black stained fine SAND, trace Ash; moist (fill)		348	
5		Black stained fine SAND; wet (fill)			5
		Black stained SILT, some fine Sand, trace Gravel; wet (fill)		291	Free product.
		Black stained fine SAND, trace Silt, trace Gravel; wet (fill)		452	Strong odor and free product.
		Dark green to tan fine Silt and fine Sand, trace Clay, trace Gravel; wet (fill)		88.2	Free product.
10				37.8	10
		Green to black stained fine SAND, some Silt, trace Gravel; wet (fill)		21.2	
				78.8	Slight odor and free product.
		Green to tan fine SAND, little Silt; wet (fill)			
15				27.2	15
		Black stained fine SAND, some Silt; wet (fill)		237	Slight odor.
		Green to black stained Sand, and Silt; wet		522	
		Black stained fine SAND, trace Silt; wet		25.8	
20				179	Trace free product. 20
					Bottom of boring 20 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
DS-2				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY	Brooklyn, New York		
S. Glash	D.Moss			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / Kari Carli				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/22/02-1/22/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to gray medium to coarse SAND, trace Gravel, trace Ash; moist (fill)		12.7	
5		Brown to black stained fine SAND, some black fine to medium Sand, little Silt; moist (fill)			Strong odor.
				12.7	
		Brown SILT, little Sand, trace Gravel; wet (fill)		38.7	Trace free product.
10		Brown to dark green SILT, little fine Sand; wet (fill)		6.1	Sheen.
		Dark brown to black stained fine SAND, little Silt, trace Gravel; wet (fill)		31.7	
15					
		Dark brown fine SAND, little Silt; wet (fill)			Trace free product.
20					Bottom of boring 20 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
GH-21 (SB-8)				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY	Brooklyn, New York		
S. Glash	D.Moss			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Zebra Environmental Inc / L. Davis				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/4/02-1/4/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Grapnic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown medium to coarse SAND, trace Silt, trace Gravel, trace Brick; dry (fill)		0.4	
				13.3	
5		Black stained fine stained to coarse Sand and Silt, trace Gravel, trace Roots; moist (fill)		32.2	5
				20.1	Strong odor.
				59.9	
		Brown fine to medium Sand and Silt, trace Gravel, trace Brick; wet (fill)		19.4	
				38.3	
10		Black stained fine to medium Sand and Silt, trace Gravel, trace Coal Fragments, trace Brick; wet (fill)		10.2	10 Free product.
				55.8	
		Black stained fine to medium Sand and Silt, trace Gravel, trace Coal, trace Brick; wet (fill)		26.5	
				62.5	
				29.9	
15					15
				49.4	
		PEAT			Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
SB7-N2				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY	Brooklyn, New York		
S. Glash	D.Moss			
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Roux Associates Inc / P. Barczak				
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
2-in. / Drive Sampler	2-inches	/ Geoprobe	2" Macro-Core	1/9/02-1/9/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Cuttings/Bentonite Pellets		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
1		Brown fine to coarse SAND, trace Gravel, trace Brick; dry (fill)		1.9	
2					
3		Black stained fine SAND, some Silt; moist (fill)			
4		Black stained fine to coarse SAND, some Silt, little Gravel, trace Wood; moist (fill)		19.5	Slight odor. Slight odor.
5					Refusal at 5 feet below land surface.

BORING/WELL ENDPOI~1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO. **SB7-S2**	NORTHING	EASTING		
PROJECT NO./NAME **92401Y02 / FCRC 2nd Avenue MGP Site**		LOCATION **124-136 2nd Avenue**		
APPROVED BY **S. Glash**	LOGGED BY **D.Moss**	**Brooklyn, New York**		
DRILLING CONTRACTOR/DRILLER **Roux Associates Inc / P. Barczak**		GEOGRAPHIC AREA		
DRILL BIT DIAMETER/TYPE **2-in. / Drive Sampler**	BOREHOLE DIAMETER **2-inches**	DRILLING EQUIPMENT/METHOD **/ Geoprobe**	SAMPLING METHOD **2" Macro-Core**	START-FINISH DATE **1/9/02-1/9/02**
LAND SURFACE ELEVATION **(FT.)**	DEPTH TO WATER **(Feet BLS)**	BACKFILL **Cuttings/Bentonite Pellets**		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to coarse SAND, trace Gravel, trace Brick; dry (fil)			
		Black stained fine SAND, some Silt; moist (fill)		9.4	
5		Black stained fine to medium SAND, trace Silt, trace Gravel, trace Brick; dry (fill)		140	Strong odor.
		Brown fine Sand and Silt, trace Gravel; wet (fill)		56.8	
10		Gravel and Brick, some gray Silt, some Sand; wet (fill)			
		Brown to green Peat and Clay; wet			
15					
					Bottom of boring 16 feet below land surface.

BORING/WELL ENDPOJ~1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
GH-1A				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	R. Kovacs	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / D. Pepe		Gas Holder 1		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-45 / Drive and Wash	2" Split Spoon	3/15/02-3/20/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown to dark brown fine to coarse SAND, little Brick; dry (fill)		13.1	
		Brown to dark brown fine to medium SAND, some Brick; dry (fill)		27.7	
		Brown to dark brown fine to medium Sand; dry (fill)		9.8	Odor.
5		Light brown to dark brown fine to medium Sand, some Brick, little Ash; dry (fill)		11.7	
		Brown to reddish brown fine to medium SAND, some Brick, trace Gravel; dry (fill)		12.1	
10		Brown medium SAND, some Brick; dry (fill)		7.3	
		Brown medium SAND, trace Cobbles; dry (fill)		9.2	
		Brown fine to medium SAND, trace Brick; dry (fill)		9.1	
15		Brown fine to medium SAND, some Gravel, some Brick; dry (fill)		10.3	
		CONCRETE			
		Grey fine Sand and Silt, trace Gravel, trace Concrete; wet			
20		Black stained fine SAND, trace Gravel, trace Concrete; wet		179	
		Black stained fine SAND, some Concrete; wet			Free product.
					Bottom of holder at 24 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/19/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
GH-1B				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	C. Battista	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / S. Miller		Gas Holder 1		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
4.25-in. / Auger	8-inches	Mobile Drill B-61 / HSA	2" Split Spoon	3/18/02-3/18/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to coarse SAND, some Gravel, little Brick, little Concrete; dry (fill)			
		Brown fine to coarse SAND, some Gravel, little Brick, little Concrete; dry (fill)			
		Brown fine to coarse SAND, some Gravel, trace Brick, trace Concrete; dry (fill)		6.5	
5					5
		Brown fine to coarse SAND, little Brick, trace Coal Fragments, trace Concrete, trace Gravel; dry (fill)		2.9	
		Brown fine to coarse SAND, little Brick, little Gavel, trace Coal Fragments; dry (fill)		5.2	
10					10
		Brown fine to coarse SAND, little Brick, little Gravel, trace Concrete, trace Coal Fragments; dry (fill)		8.7	
		Brown fine to coarse SAND, some Gravel, little Brick, trace Coal Fragments; dry (fill)		12.3	
		Brown fine to coarse SAND, some Gravel, little Brick, trace Coal Fragments; dry (fill)			
15					15
					Bottom of boring 15 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/17/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
GH-1C				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D.Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / L. Adams		Gas Holder 1		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-45 / Drive and Wash	2" Split Spoon	3/18/02-3/18/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Brown fine to coarse SAND, trace Brick, trace Gravel, trace Concrete; moist (fill)			
		Brown fine to coarse SAND, trace Brick, trace Gravel, trace Concrete; moist (fill)			
5		Brown fine to coarse SAND, trace Brick, trace Gravel, trace Concrete; moist (fill)		2.3	
		Brown medium to coarse SAND, trace Gravel, trace Brick, trace Silt; moist (fill)		0.0	
		Brown medium to coarse SAND, trace Gravel, trace Brick; moist (fill)		0.0	
10		Brown medium to coarse SAND, trace Silt, trace Gravel, trace Brick, trace Coal Fragments; wet (fill)		0.0	
		Brown medium to coarse SAND, trace Silt, trace Gravel, trace Brick, trace Coal Fragments; wet (fill)		15.2	
15		Brown to tan fine to coarse SAND, trace Gravel, trace Brick, trace Concrete; wet (fill)		3.7	
		Tan to black stained fine to coarse SAND, trace Gravel, trace Concrete, trace Brick; wet (fill)		43.1	Odor.

Bottom of soil boring 17.5 feet below land surface.

BORING/WELL ENDPOJ~1.GPJ ROUX.GDT 4/22/02

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SOIL BORING LOG

WELL NO.	NORTHING	EASTING		
GH-3B				
PROJECT NO./NAME		LOCATION		
92401Y02 / FCRC 2nd Avenue MGP Site		124-136 2nd Avenue		
APPROVED BY	LOGGED BY			
S. Glash	D. Moss	Brooklyn, New York		
DRILLING CONTRACTOR/DRILLER		GEOGRAPHIC AREA		
Aquifer Drilling & Testing, Inc. / L. Adams		Gas Holder 3		
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	DRILLING EQUIPMENT/METHOD	SAMPLING METHOD	START-FINISH DATE
3 7/8 inch / Tri-Cone	4-inches	CME-75 / Drive and Wash	2" Split Spoon	3/15/02-3/19/02
LAND SURFACE ELEVATION	DEPTH TO WATER	BACKFILL		
(FT.)	(Feet BLS)	Grout		

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
1		Brown coarse to fine SAND, trace Silt, trace Gravel, trace Brick; dry to wet (fill)			Lithology from 0 to 5 feet interpreted from previous Site investigation.
2					
3					
4					
5		Black stained fine to coarse SAND, some Gravel, little Silt; wet (fill)	4		Odor and free product.
6			4		
7		Concrete and 1.5 inches of steel	50/1		
8		Wood and Concrete fragments; wet	80 38		Odor and trace free product.
9			25 21		
10		Peat			Free product in groundwater around sample in split spoon; no product observed within the sample.
11					Bottom of boring 11 feet below land surface.

BORING/WELL ENDPOI-1.GPJ ROUX.GDT 4/22/02

Langan
Engineering and Environmental Services

LOG OF BORING LB7

SHEET 1 OF 2

PROJECT: Loews @ Gowanus			PROJECT NO.: 1531601		
LOCATION: Brooklyn, NY			ELEVATION AND DATUM: approx. el 11 (BBHDD)		
DRILLING EQUIPMENT: Davey Kent DK50RA Track Rig			DATE STARTED: 11/19/98	DATE FINISHED: 11/24/98	COMPLETION DEPTH: 77 ft.
SIZE AND TYPE OF BIT: HW and NQ Rock Cores and Tri-Cone Roller Bit			NUMBER OF SAMPLES: DIST. 18	UNDIST. 1	CORE —
CASING DIAMETER (in): 4 1/2" OD 4" ID	CASING DEPTH(ft): 7		WATER LEVEL (ft.): FIRST ▽ ----	COMPL. ▼ ----	24 HR. ▼ 6.5
SAMPLER: Standard Split Spoon (SS) or Shelby Tube (ST)			DRILLING FOREMAN: Gus Suri/Mike Chizmar		
SAMPLER HAMMER	WEIGHT(lbs): 140	DROP(in): 30	INSPECTING ENGINEER: Gary L. Gleason		

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA: NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/6in	N-VALUE BLOWS/FOOT	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
approx. el 11	5" CONCRETE w/ wire mesh								"New York City SC Classification numbers in parenthesis
	5" CONCRETE								Started coring w/ water
	Inferred miscellaneous FILL (11-65)*			S1	SS	7	28 47 54 39	101	Lost some water D = 1.5'
	Gray/black f.-c. SAND, some silt (11-65)								PID = 400 ppm
									Petroleum like material odor
									On/off rig chatter D = 1.5' - 4.5'
	Black SILT/PETROLEUM LIKE MATERIAL, some c. sand, and white cement fragments, trace f.-m.		5						Petroleum like material in wash D = 4.75'
	sand and clay (11-65)			S2	SS	2	4 2 1 50/1"	3	Spoon refusal 50/1" w/ bouncing D = 5'
0.0	Piece of STEEL								PID = 480 ppm
	Inferred miscellaneous FILL (11-65)								A 16" x 4" x 1/4" piece of vertical steel on a 1/2" thick base plate D = 7' w/ 2" wide horizontal pieces of steel, which were cut, at the top inside and bottom outside D = 6' - 7'
0.0	0.5" STEEL			S3					
0.0	CONCRETE								
	Petroleum like material treated WOOD (11-65)		10	-	SS	0	WOR WOR WOR WOR	WOR	Lost some water D = 8' - 9.25'
	Inferred WOOD (11-65)								Added mud D = 9.25'
	Inferred Brown PEAT, some silt (11-65)								Drilled through WOOD and lost circulation D = 9.75'
									WOR: Weight of rods
									WOR went from D = 10' - 15'
	Inferred Brown PEAT, some silt (11-65)		15	S4	SS	0	WOH WOH WOH WOH	WOH	WOH: Weight of hammer
									Sample S4 SS tip material
									PID = 590 ppm
									WOH went from D = 15' - 17.5'
	Brown PEAT, some silt (11-65)			T1	ST	24	PUSH PUSH PUSH PUSH	PUSH	
	Brown/gray f. SAND, some silt (8-65)		20						Visible petroleum like material w/ odor
	Brown f. SAND, some silt (8-65)			S5	SS	19	1 3 3 4	6	Pushing became more difficult D = 19.25'
									Added mud D = 20'
									PID = 920 ppm
	Brown f. SAND, trace silt and clay (8-65)		25	S6	SS	11	34 42 33 45	75	PID = 700 ppm
									Trace wood fibers in wash D = 27' - 30.5'
									Tight fit for bit D = 27' - 30.5'
			30				3		
	Brown f.-m. SAND, trace silt (7-65)			S8 S7	SS	7	18 19 11 12	30	1" of WOOD FIBERS, trace f.-m. sand w/
									PID = 170 ppm in top of SS
									PID = 750 ppm
									Brown SILT, trace clay and f. sand in SS tip D = 32.5'
	Brown SILT, trace clay and f. sand (10-65)		35	S10 S9	SS	18	3 2 2 4	5	PP = 0.1 - 0.3 tsf
	Gray CLAY, some silt (9-65)								PID = 640 ppm
									PP = 0.6 - 0.9 tsf
									PID = 320 ppm
	Gray/brown CLAY, some silt, trace f. sand (9-65)		40	S11	SS	17	WOH 2 2 4	4	PP = 0.4 - 0.85 tsf
									PID > 2000 ppm

BORING 1531601.GPJ LANGANFL.GDT 22/2/58

Langan
Engineering and Environmental Services

LOG OF BORING LB7

SHEET 2 OF 2

PROJECT	PROJECT NO.
Loews @ Gowanus	1531601
LOCATION	ELEVATION AND DATUM
Brooklyn, NY	approx. el 11 [BBHDD]

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA: NUMBER	TYPE	RECOV. (in)	PENETR. RESIST. BLOWS/6in	N-VALUE BLOWS PER FT.	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Brown CLAY, some silt, trace f. sand (9-65)		45	S12	SS	10	4 4 4 4	8	PP = 0.5 - 0.65 tsf PID = 170 ppm
	Brown f. SAND, trace silt (6-65)		50	S13	SS	14	32 32 24 24	56	PID = 550 ppm
									Rig chatter D = 52.25' - 53'
	Brown f.-c. SAND, trace silt and f.-m. gravel (6-65)			S14	SS	10.5	28 20 24 24	44	PID = 710 ppm
			55						Added mud D = 57' - 58' Rig chatter D = 57.5 - 58'
	Red brown f.-c. SAND, trace silt and f.-m. gravel (6-65)		60	S15	SS	8	10 36 31 22	67	PID = 40 ppm
									On/off rig chatter D = 60' - 65'
	Red brown f.-c. SAND, some f.-m. gravel, trace silt (6-65)		65	S16	SS	8	28 42 22 14	64	PID = 640 ppm
									On/off rig chatter D = 65' - 70'
	Red brown f.-c. SAND, some f.-m. gravel, trace silt (6-65)		70	S17	SS	7.5	45 26 22 24	46	PID = 20 ppm
									On/off rig chatter D = 70' - 75'
	Red brown f.-c. SAND, some f.-m. gravel, trace silt (6-65)		75	S18	SS	8	50 28 22 22	50	PID = 540 ppm
	Boring terminated D = 77'								Borehole grouted upon completion
			80						
			85						
			90						

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

April 15, 2002

Scott Glash
Roux Associates
1377 Motor Parkway
Islandia, NY 11749

RE: Data Usability Summary Report for the Former 2nd Avenue site, Brooklyn, NY data packages STL-CT SDG Nos.200316, 200334, 200340, 200348, 200367, 200382, 200435, 200442, 200447, 200514, 200527, 200538, 200571, 200580, 200617, 200625, 200703, and 200742

Dear Mr. Glash:

Review has been completed for the data packages generated by Severn Trent Laboratories which pertain to samples collected 1/02/02 thrugh 3/1902 at the Brooklyn MGP site. This review was conducted on eighty three of the soil samples which were collected and analyzed for semivolatile PAH analytes by method USEPA SW846 8270C.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with limited review of sample raw data, and some review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, with guidance from the NYSDEC 1997 Guidance for the Development of DUSRs, USEPA Region 2 validation SOPs, and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Calibration Standards
* Instrument IDLs

Those items listed above which show deficiency are discussed within the text of this narrative All other items were determined to be acceptable for this level of review.

In summary, sample results are usable as reported, or with minor qualification as estimated due to typical matrix or processing effects.

The following text discusses data quality issues. Copies of the laboratory case narratives and sample identification summaries are attached to this text, and should be reviewed in conjunction with this report. Those samples undergoing this DUSR review are those with depths at the following locations: SB-2, SB-3, SB-8, SB-9, SB-14, AS-2, ASW-2, SB-7-N2, SB-7-S2, BNE-E-2, BNW-2, CB-1, AN-3, ANE-1, DS-2, CNE-3, DN-2, CNW-3, SB15 SW, CN-6, AN-4, CN-4, CN-8, AN-6, CN-5, CN-7, CN-10N, CN-12, AN-9, AN-9N, AN11, and AN-12.

Data Completeness

The required laboratory NYSDEC Sample Analytical Requirement Summary Forms were not included in the laboratory deliverables.

Accuracy and Precision

The matrix has not been evaluated for accuracy and precision due to the fact that no sample matrix spikes or field duplicates were performed.

Laboratory Control Sample (LCS) spiked blanks showed acceptable recoveries for all analytes, or elevated recoveries not affecting sample results, with the exception of one LCS (discussed below).

PAH Analyses by 8270C

Holding times, and surrogate and internal standard responses were within required ranges. Blanks showed no contamination.

The LCS processed with the samples in SDG 200538 showed very slightly elevated recoveries for 2-methylnaphthalene, acenaphthene, and fluorene (111% to 119%). The reported detected values of these three analytes in samples CN-8 6-8, CN-8 8-10, and CN-8 12-14 are therefore to be qualified estimated ("J"). The usability of those data is not significantly affected.

The LCS processed with the samples in SDG 200348 showed elevated recoveries (143% to 165%) for three of the analytes. The associated sample results were either nondetection or already qualified estimated, and no addition qualification is required.

Calibration standards showed acceptable responses, with the exception of outying linearity (38%RSD) and elevated continuing calibration responses (31%D) for three analytes either not detected or already qualified estimated due to value below CRDL. No additional qualification is necessary.

Samples exhibiting analyte concentrations in the parts per thousand range may have a low bias to the reported concentrations due to the fact that the solvency of the method may be exceeded.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

SAMPLE INFORMATION

Date: 01/21/2002

Job Number.: 200316
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200316-1	SB-1,6-7	Soil	01/02/2002	09:35	01/03/2002	09:20
200316-2	SB-1,8-10	Soil	01/02/2002	09:45	01/03/2002	09:20
200316-3	SB-1,12-16	Soil	01/02/2002	10:02	01/03/2002	09:20
200316-4	SB-2,7-8	Soil	01/02/2002	11:26	01/03/2002	09:20
200316-5	SB-2,9-10	Soil	01/02/2002	11:33	01/03/2002	09:20
200316-6	SB-2,12-16	Soil	01/02/2002	12:10	01/03/2002	09:20
200316-7	SB-3,6-8	Soil	01/02/2002	14:07	01/03/2002	09:20
200316-8	SB-3,8-12	Soil	01/02/2002	14:14	01/03/2002	09:20
200316-9	SB-3,12-16	Soil	01/02/2002	15:06	01/03/2002	09:20

SAMPLE INFORMATION

Date: 01/16/2002

Job Number.: 200334
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200334-1	SB7 7-8	Soil	01/04/2002	07:49	01/04/2002	19:30
200334-2	SB7 9-10	Soil	01/04/2002	07:55	01/04/2002	19:30
200334-3	SB7 12-13	Soil	01/04/2002	08:00	01/04/2002	19:30
200334-4	SB8 7-8	Soil	01/04/2002	09:08	01/04/2002	19:30
200334-5	SB8 10-11	Soil	01/04/2002	09:17	01/04/2002	19:30
200334-6	SB8 13-14	Soil	01/04/2002	09:30	01/04/2002	19:30
200334-7	SB9 5-6	Soil	01/04/2002	10:11	01/04/2002	19:30
200334-8	SB10 7-8	Soil	01/04/2002	11:20	01/04/2002	19:30
200334-9	SB10 9-10	Soil	01/04/2002	11:40	01/04/2002	19:30
200334-10	SB10 14-15	Soil	01/04/2002	12:40	01/04/2002	19:30
200334-11	SB11 7-8	Soil	01/04/2002	13:50	01/04/2002	19:30
200334-12	SB11 11-12	Soil	01/04/2002	14:12	01/04/2002	19:30
200334-13	SB12 6-8	Soil	01/04/2002	15:20	01/04/2002	19:30
200334-14	SB12 8-10	Soil	01/04/2002	15:50	01/04/2002	19:30

SAMPLE INFORMATION

Date: 01/30/2002

Job Number.: 200442
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200442-1	DS2, 6-8	Soil	01/22/2002	08:45	01/23/2002	09:50
200442-2	DS2, 8-12	Soil	01/22/2002	09:00	01/23/2002	09:50
200442-3	DS2, 12-16	Soil	01/22/2002	10:00	01/23/2002	09:50
200442-4	CNE2A, 7-8	Soil	01/22/2002	11:15	01/23/2002	09:50
200442-5	CNE2A, 9-10	Soil	01/22/2002	11:20	01/23/2002	09:50
200442-6	CNE2A, 14-15	Soil	01/22/2002	11:30	01/23/2002	09:50
200442-7	CNE3, 7-8	Soil	01/22/2002	12:30	01/23/2002	09:50
200442-8	CNE3, 8-10	Soil	01/22/2002	12:45	01/23/2002	09:50
200442-9	CNE3, 15-16	Soil	01/22/2002	12:55	01/23/2002	09:50
200442-10	CNW2A, 6-8	Soil	01/22/2002	13:50	01/23/2002	09:50
200442-11	CNW2A, 9-11	Soil	01/22/2002	13:58	01/23/2002	09:50
200442-12	CNW2A, 12-14	Soil	01/22/2002	14:05	01/23/2002	09:50

SAMPLE INFORMATION
Date: 01/31/2002

Job Number.: 200447
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200447-1	CNW3 6-7	Soil	01/23/2002	08:35	01/23/2002	18:20
200447-2	CNW3 9-10	Soil	01/23/2002	08:45	01/23/2002	18:20
200447-3	CNW3 12-16	Soil	01/23/2002	08:55	01/23/2002	18:20
200447-4	DN2 6-8	Soil	01/23/2002	09:35	01/23/2002	18:20
200447-5	DN2 8-9	Soil	01/23/2002	09:40	01/23/2002	18:20
200447-6	DN2 12-14	Soil	01/23/2002	09:50	01/23/2002	18:20
200447-7	SB-15 SW 6-7	Soil	01/23/2002	10:50	01/23/2002	18:20
200447-8	SB-15 SW 8-12	Soil	01/23/2002	10:58	01/23/2002	18:20
200447-9	SB-15 SW 15-16	Soil	01/23/2002	11:10	01/23/2002	18:20
200447-10	CN3 6-7	Soil	01/23/2002	12:20	01/23/2002	18:20
200447-11	CN3 8-12	Soil	01/23/2002	12:30	01/23/2002	18:20
200447-12	CN3 12-16	Soil	01/23/2002	12:45	01/23/2002	18:20

SAMPLE INFORMATION

Date: 01/29/2002

Job Number.: 200367
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200367-1	A02, 4.5-5.5	Soil	01/09/2002	08:31	01/10/2002	09:15
200367-2	A02, 11-12	Soil	01/09/2002	09:06	01/10/2002	09:15
200367-3	A02, 12-16	Soil	01/09/2002	09:23	01/10/2002	09:15
200367-4	SB7-S2, 4-6	Soil	01/09/2002	09:52	01/10/2002	09:15
200367-5	SB7-N2, 4-5	Soil	01/09/2002	12:17	01/10/2002	09:15

S A M P L E I N F O R M A T I O N
Date: 01/29/2002

Job Number.: 200382
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200382-1	BW-2, 7-8	Soil	01/10/2002	10:14	01/12/2002	10:20
200382-2	BW-2, 8-8.5	Soil	01/10/2002	10:24	01/12/2002	10:20
200382-3	B0W-2, 6-8	Soil	01/10/2002	11:08	01/12/2002	10:20
200382-4	B0W-2, 8-12	Soil	01/10/2002	11:17	01/12/2002	10:20
200382-5	B0W-2, 12-13	Soil	01/10/2002	11:35	01/12/2002	10:20
200382-6	B0E-E-2, 6-7	Soil	01/11/2002	13:11	01/12/2002	10:20
200382-7	B0E-E-2, 8-10	Soil	01/11/2002	13:25	01/12/2002	10:20

SAMPLE INFORMATION

Date: 02/12/2002

Job Number.: 200514
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200514-1	CN-6 5-6	Soil	02/06/2002	09:26	02/07/2002	09:30
200514-2	CN-6 10-12	Soil	02/06/2002	10:15	02/07/2002	09:30
200514-3	CN-6 14-15	Soil	02/06/2002	10:54	02/07/2002	09:30
200514-4	CN-9 5-6	Soil	02/06/2002	13:18	02/07/2002	09:30
200514-5	CN-9 10-12	Soil	02/06/2002	14:05	02/07/2002	09:30
200514-6	CN-9 12-14	Soil	02/06/2002	14:20	02/07/2002	09:30

SAMPLE INFORMATION

Date: 02/18/2002

Job Number.: 200527
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200527-1	CN-4, 4-6	Soil	02/07/2002	09:00	02/07/2002	19:40
200527-2	CN-4, 8-10	Soil	02/07/2002	09:40	02/07/2002	19:40
200527-3	CN-4, 12-14	Soil	02/07/2002	10:25	02/07/2002	19:40
200527-4	AN-4, 4-6	Soil	02/07/2002	13:20	02/07/2002	19:40
200527-5	AN-4, 10-12	Soil	02/07/2002	14:15	02/07/2002	19:40
200527-6	AN-4, 14-16	Soil	02/07/2002	15:00	02/07/2002	19:40

SAMPLE INFORMATION

Date: 02/20/2002

Job Number.: 200538
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200538-1	AN-5, 4-6	Soil	02/08/2002	08:40	02/08/2002	19:45
200538-2	AN-5, 13-15	Soil	02/08/2002	11:20	02/08/2002	19:45
200538-3	CN-8, 6-8	Soil	02/08/2002	14:50	02/08/2002	19:45
200538-4	CN-8, 8-10	Soil	02/08/2002	15:10	02/08/2002	19:45
200538-5	CN-8, 12-14	Soil	02/08/2002	15:48	02/08/2002	19:45

SAMPLE INFORMATION
Date: 02/28/2002

Job Number.: 200580
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200580-1	CN-7 / 4-6	Soil	02/20/2002	10:30	02/20/2002	17:35
200580-2	CN-7 / 8-10	Soil	02/20/2002	11:00	02/20/2002	17:35
200580-3	CN-7 / 12-14	Soil	02/20/2002	11:40	02/20/2002	17:35
200580-4	CN-5 / 6-8	Soil	02/20/2002	14:00	02/20/2002	17:35
200580-5	CN-5 / 10-12	Soil	02/20/2002	14:25	02/20/2002	17:35
200580-6	CN-5 / 14-15	Soil	02/20/2002	15:00	02/20/2002	17:35
200580-7	CN-10 / 14-14.5	Soil	02/20/2002	07:25	02/20/2002	17:35

SAMPLE INFORMATION
Date: 03/07/2002

Job Number.: 200617
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200617-1	AN-6N / 4-6	Soil	02/28/2002	09:11	02/28/2002	17:00
200617-2	AN-6N / 8-10	Soil	02/28/2002	09:40	02/28/2002	17:00
200617-3	AN-6N / 13.5-15	Soil	02/28/2002	11:40	02/28/2002	17:00
200617-4	AN-6S / 4-6	Soil	02/28/2002	08:40	02/28/2002	17:00
200617-5	AN-6S / 10-11.5	Soil	02/28/2002	10:20	02/28/2002	17:00
200617-6	AN-6S / 13-14	Soil	02/28/2002	10:55	02/28/2002	17:00
200617-7	CN-10N / 4-6	Soil	02/28/2002	13:40	02/28/2002	17:00
200617-8	CN-10N / 8-10	Soil	02/28/2002	14:20	02/28/2002	17:00
200617-9	CN-10S / 10-11.5	Soil	02/28/2002	13:55	02/28/2002	17:00
200617-10	CN-10S / 13-15	Soil	02/28/2002	14:55	02/28/2002	17:00
200617-11	CN-10S / 6-8	Soil	02/28/2002	13:15	02/28/2002	17:00

SAMPLE INFORMATION

Date: 03/07/2002

Job Number.: 200625
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200625-1	CN-11/6-8	Soil	03/01/2002	08:30	03/01/2002	17:10
200625-2	CN-11/8-10.5	Soil	03/01/2002	09:05	03/01/2002	17:10
200625-3	CN-11/14-16	Soil	03/01/2002	10:00	03/01/2002	17:10
200625-4	CN-12/4-6	Soil	03/01/2002	11:55	03/01/2002	17:10
200625-5	CN-12/8-10	Soil	03/01/2002	12:40	03/01/2002	17:10
200625-6	CN-12/13-15	Soil	03/01/2002	13:35	03/01/2002	17:10

SAMPLE INFORMATION
Date: 01/29/2002

Job Number.: 200340
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200340-1	SB13, 6-7	Soil	01/07/2002	08:28	01/07/2002	20:20
200340-2	SB13, 10-12	Soil	01/07/2002	08:31	01/07/2002	20:20
200340-3	SB14, 7-8	Soil	01/07/2002	09:24	01/07/2002	20:20
200340-4	SB14, 8-12	Soil	01/07/2002	09:31	01/07/2002	20:20
200340-5	SB14, 13-14	Soil	01/07/2002	09:48	01/07/2002	20:20
200340-6	SB15, 6-7	Soil	01/07/2002	10:35	01/07/2002	20:20
200340-7	SB17, 5-6	Soil	01/07/2002	12:14	01/07/2002	20:20
200340-8	SB18, 5-6	Soil	01/07/2002	12:52	01/07/2002	20:20
200340-9	SB19, 6-8	Soil	01/07/2002	13:34	01/07/2002	20:20
200340-10	SB19, 11-12	Soil	01/07/2002	13:40	01/07/2002	20:20
200340-11	SB20, 7-8	Soil	01/07/2002	14:27	01/07/2002	20:20
200340-12	SB20, 8-12	Soil	01/07/2002	14:34	01/07/2002	20:20
200340-13	SB20, 14-15	Soil	01/07/2002	14:42	01/07/2002	20:20

SAMPLE INFORMATION
Date: 01/24/2002

Job Number.: 200348
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200348-1	AS2 6-8	Soil	01/08/2002	08:40	01/08/2002	19:25
200348-2	AS2 8-12	Soil	01/08/2002	08:55	01/08/2002	19:25
200348-3	ASW2 7-8	Soil	01/08/2002	09:42	01/08/2002	19:25
200348-4	ASW2 8-12	Soil	01/08/2002	10:48	01/08/2002	19:25
200348-5	AOW2 5-6	Soil	01/08/2002	12:08	01/08/2002	19:25
200348-6	ASE2 7-8	Soil	01/08/2002	15:30	01/08/2002	19:25
200348-7	ASE2 8-12	Soil	01/08/2002	15:36	01/08/2002	19:25

SAMPLE INFORMATION

Date: 01/30/2002

Job Number.: 200435
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200435-1	SB5 5-7	Soil	01/21/2002	09:35	01/22/2002	09:25
200435-2	SB5 8-12	Soil	01/21/2002	10:20	01/22/2002	09:25
200435-3	SB5 12-13	Soil	01/21/2002	10:30	01/22/2002	09:25
200435-4	CB1 10.5-11.5	Soil	01/21/2002	10:45	01/22/2002	09:25
200435-5	AN 3 5-6	Soil	01/21/2002	13:30	01/22/2002	09:25
200435-6	AN 3 8-9	Soil	01/21/2002	13:45	01/22/2002	09:25
200435-7	AN 3 14-15	Soil	01/21/2002	14:15	01/22/2002	09:25
200435-8	ANE 1 4-4.5	Soil	01/21/2002	15:55	01/22/2002	09:25
200435-9	ANE 3 4.5-6	Soil	01/21/2002	13:10	01/22/2002	09:25
200435-10	ANE 3 8-12	Soil	01/21/2002	14:30	01/22/2002	09:25
200435-11	ANE 3 14-15	Soil	01/21/2002	14:50	01/22/2002	09:25

SAMPLE INFORMATION
Date: 02/27/2002

Job Number..: 200571
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200571-1	AN-6 / 6-8	Soil	02/19/2002	09:50	02/20/2002	09:20
200571-2	AN-6 / 10.5-11.5	Soil	02/19/2002	10:35	02/20/2002	09:20
200571-3	AN-6 / 13-15	Soil	02/19/2002	11:50	02/20/2002	09:20
200571-4	CN-10 / 4-6	Soil	02/19/2002	16:35	02/20/2002	09:20
200571-5	CN-10 / 8-10	Soil	02/19/2002	17:10	02/20/2002	09:20
200571-6	CN-10 / 12-14	Soil	02/19/2002	17:45	02/20/2002	09:20

SAMPLE INFORMATION
Date: 03/19/2002

Job Number.: 200703
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200703-1	AN-9/6-8	Soil	03/13/2002	08:15	03/13/2002	19:15
200703-2	AN-9/8-10	Soil	03/13/2002	08:50	03/13/2002	19:15
200703-3	AN-9/14-15	Soil	03/13/2002	09:40	03/13/2002	19:15
200703-4	AN-9N/5.5-7.5	Soil	03/13/2002	11:20	03/13/2002	19:15
200703-5	AN-9N/10-12	Soil	03/13/2002	11:45	03/13/2002	19:15
200703-6	AN-9N/12-14	Soil	03/13/2002	11:50	03/13/2002	19:15
200703-7	AN-10/7-8	Soil	03/13/2002	14:20	03/13/2002	19:15
200703-8	AN-10/8-10	Soil	03/13/2002	14:30	03/13/2002	19:15
200703-9	AN-10/14-16	Soil	03/13/2002	15:05	03/13/2002	19:15

SAMPLE INFORMATION
Date: 03/27/2002

Job Number.: 200742
Customer...: ROUX ASSOCIATES
Attn.....: Scott Glash

Project Number.....: 20000262
Customer Project ID....: MGP-92401Y02
Project Description....: MGP-92401Y02

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200742-1	AN-11/7-8	Soil	03/19/2002	10:50	03/19/2002	19:25
200742-2	AN-11/10-12	Soil	03/19/2002	11:00	03/19/2002	19:25
200742-3	AN-11/13.5-14.5	Soil	03/19/2002	11:20	03/19/2002	19:25
200742-4	AN-12/4-5	Soil	03/19/2002	12:00	03/19/2002	19:25
200742-5	AN-12/10-12	Soil	03/19/2002	12:20	03/19/2002	19:25
200742-6	AN-12/12-13	Soil	03/19/2002	12:30	03/19/2002	19:25

STL Report : 200316
ROUX-MGP

SEVERN TRENT SERVICES

STL Connecticut

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3541. No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

The Laboratory Sample ID's for the method blanks and LCS's on the forms 4,5,8 and the QC results forms are based on the Prep Batch. The Lab Sample ID on the surrogate recovery form is based on the analytical batch. For cross referencing purposes, the Prep Batch ID is also listed on the surrogate recovery form.

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

Sample ID	Dilution
SB-1,6-7	1:100
SB-1,8-10	1:20
SB-1,12-16	1:20
SB-2,7-8	1:100
SB-2,9-10	1:20
SB-2,12-16	1:20
SB-3,6-8	1:50
SB-3,8-12	1:50
SB-3,12-16	1:20

Sample Calculation:

Sample ID – SB-1,12-16
Compound - naphthalene

$$\frac{473114(40)500(20)}{435339(0.964)2(15.0)0.65} = 23125 = 23000$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Date Jan 21, 2002

SEVERN TRENT SERVICES

STL Report : 200334
ROUX-MGP

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature. STL Connecticut

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

The Laboratory Sample ID's for the method blanks and LCS's on the forms 4,5,8 and the QC results forms are based on the Prep Batch. The Lab Sample ID on the surrogate recovery form is based on the analytical batch. For cross referencing purposes, the Prep Batch ID is also listed on the surrogate recovery form.

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

Sample Calculation:

Sample ID – SB4 4-5 FEET
Compound - naphthalene

$$\frac{703730(40)500(20)}{342462(0.964)2(15.8)0.85} = 31744 = 32000 \text{ ug/kg}$$

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

Sample ID	Dilution
SB7 9-10	1:400
SB7 12-13	1:500
SB8 7-8	1:50
SB9 5-6	1:800
SB10 7-8	1:400
SB10 9-10	1:200
SB11 7-8	1:100
SB11 11-12	1:500

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Jan 16, 2002
Date

STL Report : 200442
ROUX-MGP

SEVERN TRENT SERVICES

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature. STL Connecticut

Organic Extraction - Samples were extracted according to method 3541. No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

Sample ID	Dilution
CNE3, 7-8	1:80
CNE3, 8-10	1:40
CNE3, 15-16	1:400

Sample Calculation:

Sample ID – DS2, 8-12
Compound – naphthalene

$$\frac{1958544(40)500(20)}{1321862(0.879)2(15.1)0.81} = 27563 = 28000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Jan 31, 2002
Date

STL Report : 200447
ROUX-MGP

SEVERN TRENT SERVICES

STL Connecticut

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3541. Samples CNW3 6-7, SB-15 SW 15-16 and CN3 12-16 would not concentrate to a final volume of 0.5 ml and so were brought to a final volume of 1 ml. Sample CNW3 12-16 would not concentrate to a final volume of 0.5 ml and so was brought to a final volume of 2 ml.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

Sample ID	Dilution
CNW3 9-10	1:200
CNW3 12-16	1:1000
DN2 8-9	1:25
SB-15 SW 6-7	1:200
SB-15 SW 8-12	1:100
SB-15 SW 15-16	1:800
CN3 12-16	1:500

Sample Calculation:

Sample ID – CNW3 6-7
Compound – naphthalene

$$\frac{5369656(40)1000(20)}{1707677(0.856)2(15.4)0.74} = 128936 = 130000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cheryl A. Cascella for
Jeffrey G. Curran
Laboratory Manager

Jan 31, 2002
Date

SEVERN TRENT SERVICES

STL Report : 200367
ROUX-MGP

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature. STL Connecticut

Organic Extraction - Samples were extracted according to method 3550B. No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

Sample A02 4.5-5.5 was analyzed at a 1:800 dilution due to the presence of high levels of target compounds. Samples A02 12-16, SB7-S2 4-6 and SB7-N2 4-5 were analyzed at a 1:50 dilution due to the presence of high levels of target compounds.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Jan 29, 2002
Date

STL Report : 200382
ROUX-MGP

SEVERN TRENT SERVICES

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature. STL Connecticut

Organic Extraction - Samples were extracted according to method 3550B. Samples BOW-2 8-12 and BOW-2 12-13 would not concentrate to a final volume of 1 ml, and so they were brought to a final volume of 2 mls.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

Sample ID	Dilution
BW-2, 7-8	1:200
BW-2, 8-8.5	1:100
BOW-2 6-8	1:400
BOW-2 8-12	1:800
BOW-2 12-13	1:400

Sample Calculation:

Sample ID – BOE-E-2, 8-10
Compound - naphthalene

$$\frac{57595(40)1000(20)}{925803(0.976)2(30.1)0.68} = 1245 = 1200 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Jan 29, 2002
Date

SEVERN TRENT SERVICES

STL Connecticut

STL Report : 200514
ROUX-MGP

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3550B. Sample CN-9 5-6 would not concentrate to a final volume of 1 ml and so was brought to a final volume of 2 mls.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

Sample CN-9 5-6 was analyzed at a 1:100 dilution and sample CN-9 12-14 was analyzed at a 1:200 due to the presence of high levels of target compounds.

All samples were analyzed without any apparent problems.

Sample Calculation:

Sample ID – CN-6 14-15
Compound - Naphthalene

$$\frac{(460270)(40)(1000)(20)}{(2040801)(.784)(2.0)(30.1)(.759)} = 5036 = 5000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Feb 12, 2002
Date

SEVERN TRENT SERVICES

STL Connecticut

STL Report : 200527
ROUX-MGP

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3550B. Samples CN-4 4-6, CN-4 8-10, CN-4 12-14, AN-4 4-6 and AN-4 14-16 would not concentrate to a final volume of 1 ml and so were brought to a final volume of 2 mls.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at an effective 1:20 dilution.

Sample CN-4, 4-6 was analyzed at a 1:400 dilution, sample CN-4,12-14 at a 1:200 dilution, and sample AN-4, 4-6 at a 1:200 due to the presence of high levels of target compounds.

The method blank, 3041-1MB, was analyzed and reported from three different instruments. The analysis from 02/11/2002 (Instrument "P") had one surrogate out of recovery criteria, but within laboratory sample acceptance criteria.

Sample Calculation:

Sample ID – AN-4, 4-6
Compound - Naphthalene

$$\frac{(1107250)(40)(2000)(50)}{(633063)(.970)(2.0)(30.0)(.84)} = 143105 = 140000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Feb 18, 2002
Date

SEVERN TRENT SERVICES

STL Connecticut

STL Report : 200538
ROUX-MGP

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3541. No problems were encountered. Due to limited sample volume, samples AN-5, 13-15 and CN-8,12-14 were extracted using half the usual volume and brought to half the usual final volume. The analyst inadvertently added full surrogate volume to the samples.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

Sample AN-5, 13-15 was analyzed at a 1:500 dilution due to the presence of high levels of target compounds.

Due to the surrogate spiking problems in the organic extraction department, the surrogate recoveries for sample AN-5, 13-15 and CN-8, 12-14 have been adjusted to reflect the actual amount added. The volume adjustments in extractions do not cause an elevation of the PQLs.

Two acid surrogates were outside recovery limits in the LCS. These surrogates do not affect the target compounds therefore the results have been reported.

The spike recovery for many of the target compounds were above recovery limits for the first analysis of the LCS. The LCS was reanalyzed with most compounds recovering within criteria. The compounds 2-methylnaphthalene, acenaphthene and fluorene were above the limits. The second analysis, which meets laboratory acceptance criteria, has been reported.

Sample Calculation:

Sample ID – CN-8,8-10
Compound - phenanthrene

$$\frac{(32546)(40)(1000)(20.0)}{(434768)(1.002)(2.0)(30.4)(.699)} = 1406 = 1400 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cheryl A. Cascella for
Jeffrey C. Curran
Laboratory Manager

Feb 20, 2002
Date

STL Report : 200580
ROUX-MGP

SEVERN TRENT SERVICES

STL Connecticut

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3550B. Samples CN-7 / 8-10 and CN-7 / 12-14 contained free water, which was decanted prior to extraction. No other problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at an effective 1:20 dilution.

Sample Calculation:

Sample ID – CN-7/4-6
Compound - Pyrene

$$\frac{(262554)(40)(1000)(20)}{(1393631)(1.343)(2.0)(30.5)(.71)} = 2591 = 2600 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Jeffrey C. Curran
Laboratory Manager

Feb 28, 2002
Date

STL Report : 200617
ROUX-MGP

SEVERN TRENT SERVICES

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature. STL Connecticut

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at an effective 1:20 dilution.

Samples CN-10S/ 13-15 and AN-6S/4-6 were analyzed at a 1:400 dilution, sample AN-6N/4-6 at a 1:200 dilution, sample AN-6N/ 8-10 at a 1:100, and AN-6S/10-11.5 at a 1:80 due to the presence of high levels of target compounds.

Sample Calculation:

Sample ID – CN-10/8-10
Compound - Naphthalene

$$\frac{(238713)(40)(1000)(20)}{(857599)(1.037)(2.0)(30.5)(.61)} = 5770 = 5800 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Jeffrey C. Curran
Laboratory Manager

March 7, 2002
Date

STL Report : 200625
ROUX-MGP

SEVERN TRENT SERVICES

STL Connecticut

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at an effective 1:20 dilution.

Sample CN-11/6-8 was analyzed at a 1:100 dilution and sample CN-12/4-6 at a 1:40 dilution, due to the presence of high levels of target compounds.

Sample Calculation:

Sample ID – CN-12/4-6
Compound - Naphthalene

$$\frac{(1384398)(40)(1000)(40)}{(876773)(1.022)(2.0)(30)(.744)} = 55375 = 55000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Jeffrey C. Curran
Laboratory Manager

March 7, 2002
Date

SEVERN TRENT SERVICES

STL Report : 200340
ROUX-MGP

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3541. Samples contained free water, which was decanted prior to extraction. Samples SB14 7-8 and SB17 5-6 would not concentrate to a final volume of 0.5 ml and so were brought to a final volume of 1 ml. Sample SB18 5-6 would not concentrate to a final volume of 0.5 ml and so was brought to a final volume of 2 mls.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

The following samples were analyzed at dilutions due to the presence of high target compounds:

SB13, 6-7	1:50	SB13, 10-12	1:50
SB14, 7-8	1:500	SB14, 8-12	1:400
SB14, 13-14	1:1000	SB15, 6-7	1:1000
SB17, 5-6	1:1000	SB18, 5-6	1:2000
SB19, 11-12	1:100	SB20, 7-8	1:40

Sample Calculation:

Sample ID – SB14, 7-8
Compound - naphthalene

$$\frac{(3208724)(40)(1000)(500)}{(875906)(.945)(2)(15.2)(.789)} = 323238 = 320000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Jeffrey C. Curran
Laboratory Manager

Jan 29, 2002
Date

STL Report : 200348
ROUX-MGP

SEVERN TRENT SERVICES

STL Connecticut

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3541. No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

Sample ID	Dilution
AS2 6-8	1:200
AS2 8-12	1:200
ASW2 7-8	1:400
AOW2 5-6	1:400
ASE2 7-8	1:400

Sample Calculation:

Sample ID – ASW2 8-12
Compound - phenanthrene

$$\frac{55527(40)500(20)}{934241(0.929)2(15.2).815} = 1032 = 1000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Jeffrey C. Curran
Laboratory Manager

Jan 24, 2002
Date

STL Report : 200435
ROUX-MGP

SEVERN TRENT SERVICES

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature. STL Connecticut

Organic Extraction - Samples were extracted according to method 3541. Samples SB5 5-7, SB-5 8-12, AN-3 5-6, AN-3 8-9, AN-3 14-15, ANE-3 4.5-6, ANE-3 8-12 and ANE-3 14-15 would not concentrate to a final volume of 0.5 ml and so were brought to a final volume of 1 ml. Sample ANE-1 4-4.5 would not concentrate to a final volume of 0.5 ml and so was brought to a final volume of 2 ml.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

SB5 5-7	1:50	AN 3 5-6	1:500
AN 3 8-9	1:50	AN 3 14-15	1:400
ANE 1 4-4.5	1:2000	ANE 3 4.5-6	1:100

Sample Calculation:

Sample ID – SB5 12-13
Compound - Naphthalene

$$\frac{(1440821)(40)(500)(20)}{(991096)(.963)(2.0)(15.0)(.644)} = 31255 = 31000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Chyl A. Curran for
Jeffrey C. Curran
Laboratory Manager

Jan 31, 2002
Date

STL Report : 200571
ROUX-MGP

SEVERN TRENT SERVICES

STL Connecticut

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3550B. Samples AN-6 / 6-8 and AN-6 / 10.5-11.5 would not concentrate to 1 ml, and so were brought to a final volume of 5 mls.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at an effective 1:20 dilution.

Sample CN-10/ 4-6 was analyzed at a 1:400 dilution, sample AN-6/10.5-11.5 at a 1:200 dilution, sample AN-6/ 6-8 at a 1:200, and AN-6/13-15 at a 1:25 due to the presence of high levels of target compounds.

The method blank, 3327-1MB, was analyzed and reported from two different instruments.

Sample Calculation:

Sample ID – CN-10/8-10
Compound - Naphthalene

$$\frac{(1195597)(40)(1000)(20)}{(1457804)(1.011)(2.0)(30.0)(.76)} = 14231 = 14000 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Cheryl A. Casella for
Jeffrey C. Curran
Laboratory Manager

Feb 27, 2002
Date

STL Report : 200703
ROUX-MGP

SEVERN TRENT SERVICES

STL Connecticut

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3550B. No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

Sample AN-9/6-8 was analyzed at a 1:50 dilution due to the presence of high levels of target compounds.

Sample Calculation:

Sample ID – AN-10/8-10
Compound - Naphthalene

$$\frac{(96932)(40)(1000)(20)}{(851279)(0.886)(2.0)(30.3)(.812)} = 2089 = 2100 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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Jeffrey C. Curran
Laboratory Manager

March 20, 2002
Date

STL Report : 200742
ROUX-MGP

SEVERN TRENT SERVICES

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature. STL Connecticut

Organic Extraction - Samples were extracted according to method 3550B. No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Method 8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

A 2ul injection was used for all samples and standards. The instrument was calibrated at 10ng/ul (20 ng), 25 ng/ul(50 ng), 40ng/ul(80ng), 60ng/ul(120ng) and 80ng/ul(160ng). Internal standards were added to all samples and standards were at 20ng/ul(40ng).

After discussions with the client, it was decided that the data quality objectives for this project could be met by starting the sample analysis at a 1:20 dilution.

Sample AN-12/4-5 had one surrogate out of recovery criteria, but within laboratory sample acceptance criteria.

Sample Calculation:

Sample ID – AN-12/4-5
Compound - Chrysene

$$\frac{(44119)(40)(1000)(20)}{(366997)(0.796)(2.0)(30.5)(.913)} = 2169 = 2200 \text{ ug/kg}$$

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

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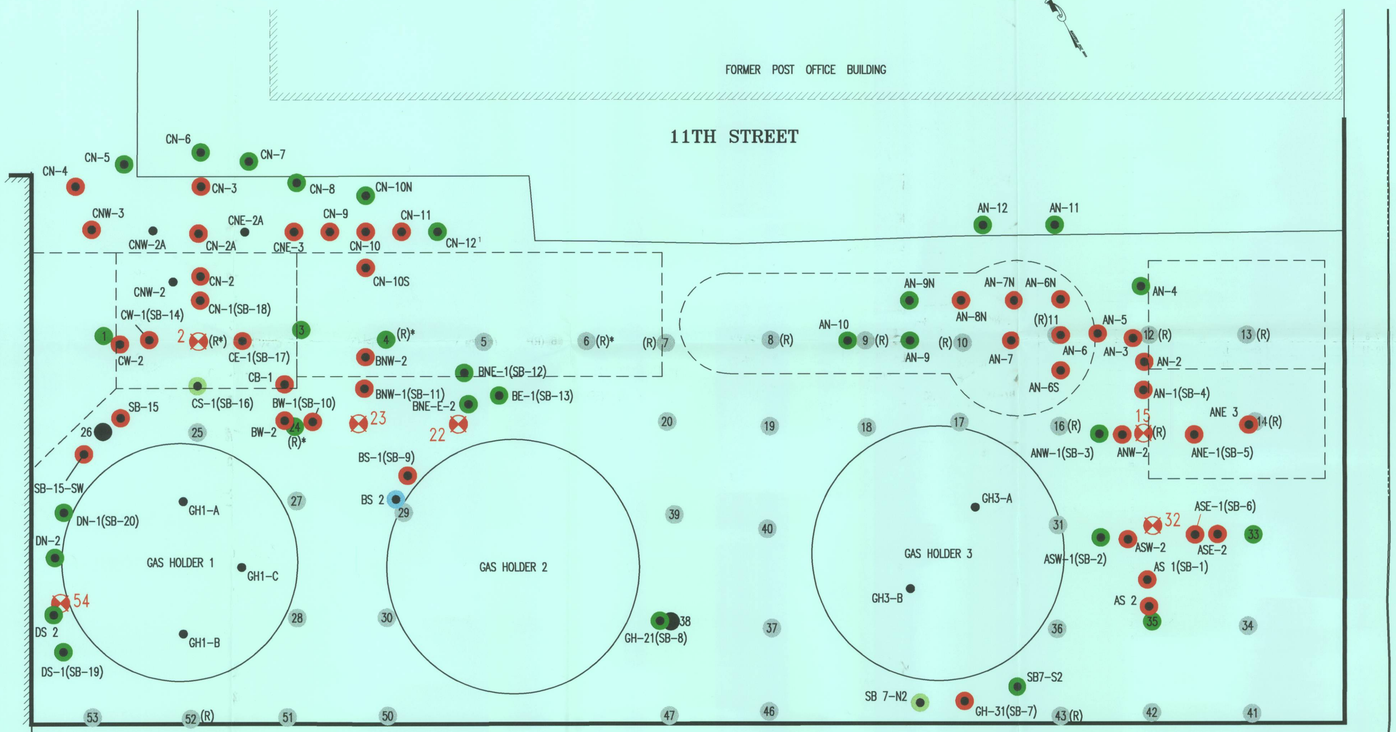
Jeffrey C. Curran
Laboratory Manager

March 27, 2002
Date



Date	Phase I Soil Boring Designation	Depth (ft bls)	Total Concentration of PAHs >1000 ppm (**)	Comments
1/2/2002	AS-1 (SB-1)	6-7	X	
1/2/2002	AS-1 (SB-1)	8-10		
1/2/2002	AS-1 (SB-1)	12-16		
1/2/2002	ASW-1 (SB-2)	7-8		Trace free product, yellow-red product stain on liner
1/2/2002	ASW-1 (SB-2)	9-10		
1/2/2002	ASW-1 (SB-2)	12-16		
1/2/2002	ANW-1 (SB-3)	6-8		
1/2/2002	ANW-1 (SB-3)	8-12		
1/2/2002	ANW-1 (SB-3)	12-16		
1/3/2002	AN-1 (SB-4)	4-5	X	Free product
1/3/2002	AN-1 (SB-4)	8-9		
1/3/2002	AN-1 (SB-4)	12-16		Trace free product
1/21/2002	ANE-1 (SB-5)	4-4.5	X	Lab sample desingated ANE-1
1/21/2002	ANE-1 (SB-5)	5-7		
1/21/2002	ANE-1 (SB-5)	8-12		
1/21/2002	ANE-1 (SB-5)	12-13		
1/3/2002	ASE-1 (SB-6)	5-6	X	Free product
1/3/2002	ASE-1 (SB-6)	9-10		Free product
1/3/2002	ASE-1 (SB-6)	13-14		Free product
1/4/2002	GH-31 (SB-7)	7-8		Free product
1/4/2002	GH-31 (SB-7)	9-10	X	
1/4/2002	GH-31 (SB-7)	12-13	X	
1/4/2002	GH-21 (SB-8)	7-8		
1/4/2002	GH-21 (SB-8)	10-11		Free product
1/4/2002	GH-21 (SB-8)	13-14		Free product
1/4/2002	BS-1 (SB-9)	5-6	X	Meadow mat at 6 ft bls
1/4/2002	BW-1 (SB-10)	7-8	X	Free product
1/4/2002	BW-1 (SB-10)	9-10	X	Free product
1/4/2002	BW-1 (SB-10)	14-15		
1/4/2002	BNW-1 (SB-11)	7-8		
1/4/2002	BNW-1 (SB-11)	11-12	X	Free product
1/4/2002	BNW-1 (SB-11)	12-16		1 inch of recovery, meadow mat only, no sample collected
1/4/2002	BNE-1 (SB-12)	6-8		
1/4/2002	BNE-1 (SB-12)	8-10		
1/4/2002	BNE-1 (SB-12)	12-16		Refusal at 10 ft and 13 ft bls, two attempts made, wood in observed core, no sample collected
1/7/2002	BE-1 (SB-13)	6-7		
1/7/2002	BE-1 (SB-13)	10-12		Free product
1/7/2002	BE-1 (SB-13)	12-16		Meadow mat at 12 ft bls, no sample collected
1/7/2002	CW-1 (SB-14)	7-8	X	Free product
1/7/2002	CW-1 (SB-14)	8-12	X	Free product
1/7/2002	CW-1 (SB-14)	13-14	X	Free product
1/7/2002	(SB-15)	6-7	X	Refusal at 7 ft bls, 2 attempts made, free product
1/7/2002	CS-1 (SB-16)	4-8		Refusal at 7 ft bls, no sample collected upon recommendation of the NYSDEC
1/7/2002	CE-1 (SB-17)	5-6	X	Refusal at 6 ft bls, free product
1/7/2002	CN-1 (SB-18)	5-6	X	Refusal at 6 ft bls, free product
1/7/2002	DS-1 (SB-19)	6-8		
1/7/2002	DS-1 (SB-19)	11-12		Trace free product
1/7/2002	DS-1 (SB-19)	12-16		No recovery, no sample collected
1/7/2002	DN-1 (SB-20)	7-8		
1/7/2002	DN-1 (SB-20)	8-12		6 inches recovery
1/7/2002	DN-1 (SB-20)	14-15		

Date	Supplemental Soil Boring Designation	Depth (ft bls)	Total Concentration of PAHs >1000 ppm (**)	Comments
2/6/2002	CN-6	5-6		
2/6/2002	CN-6	10-12		
2/6/2002	CN-6	14-15		2 inches recovery, meadow mat at 15 ft bls
2/6/2002	CN-9	5-6	X	Yellow-red product stain on glove
2/6/2002	CN-9	10-12		6 inches recovery
2/6/2002	CN-9	12-14	X	Free product
2/7/2002	AN-4	4-6		Trace free product
2/7/2002	AN-4	10-12		
2/7/2002	AN-4	14-16		
2/7/2002	CN-4	4-6	X	Trace free product
2/7/2002	CN-4	8-10		
2/7/2002	CN-4	12-14	X	
2/8/2002	AN-5	4-6		
2/8/2002	AN-5	8-10.5		Free product, wood observed in core, concrete at 10.5 ft bls, no sample collected
2/8/2002	AN-5	13-15	X	Free product
2/8/2002	CN-8	6-8		4 inches recovery
2/8/2002	CN-8	8-10		4 inches recovery
2/8/2002	CN-8	12-14		3 inches recovery
2/19/2002	AN-6	6-8	X	Trace free product
2/19/2002	AN-6	10.5-11.5	X	Free product
2/19/2002	AN-6	13-15		
2/19/2002	CN-10	4-6	X	
2/19/2002	CN-10	8-10		2 inches recovery
2/19/2002	CN-10	12-14		
2/20/2002	CN-10	14-14.5		Hold at lab, 3 inch layer of gravel with free product
2/20/2002	CN-5	6-8		
2/20/2002	CN-5	10-12		
2/20/2002	CN-5	14-15		
2/20/2002	CN-7	4-6		
2/20/2002	CN-7	8-10		
2/20/2002	CN-7	12-14		
2/28/2002	CN-10N	4-6		
2/28/2002	CN-10N	8-10		4 inches recovery
2/28/2002	CN-10N	12-15		No recovery, meadow mat at 15 ft bls, no sample collected
2/28/2002	CN-10S	6-8		

Date	Supplemental Soil Boring Designation	Depth (ft bls)	Total Concentration of PAHs >1000 ppm (**)	Comments
2/28/2002	CN-10S	10-11.5		
2/28/2002	CN-10S	13-15	X	Free product, 6 inches recovery
2/28/2002	AN-6N	4-6	X	
2/28/2002	AN-6N	8-10	X	Trace free product
2/28/2002	AN-6N	13-15		
2/28/2002	AN-6S	4-6	X	
2/28/2002	AN-6S	10-11.5	X	
2/28/2002	AN-6S	13-14		
3/1/2002	CN-11	6-8	X	Free product, 6 inches recovery
3/1/2002	CN-11	8-10.5		Trace free product, 4 inches recovery
3/1/2002	CN-11	14-16		3 inches recovery
3/1/2002	CN-12	4-6		
3/1/2002	CN-12	8-10		2 inches recovery
3/1/2002	CN-12	13-15		
3/8/2002	AN-7	6-8		
3/8/2002	AN-7	10.5-11.5	X	
3/8/2002	AN-7N	7-8	X	
3/8/2002	AN-7N	8-10	X	
3/12/2002	AN-8N	6-8	X	Trace free product
3/12/2002	AN-8N	8-10	X	Trace free product
3/13/2002	AN-9	6-8		Free product
3/13/2002	AN-9	8-10		
3/13/2002	AN-9	14-15		
3/13/2002	AN-9N	5.5-7.5		
3/13/2002	AN-9N	10-12		
3/13/2002	AN-9N	12-14		
3/13/2002	AN-10	7-8		
3/13/2002	AN-10	8-10		
3/13/2002	AN-10	14-16		
3/19/2002	AN-11	7-8		
3/19/2002	AN-11	10-12		
3/19/2002	AN-11	13.5-14.5		
3/19/2002	AN-12	4-5		
3/19/2002	AN-12	10-12		
3/19/2002	AN-12	12-13		

Date	Phase II and III Soil Boring Designation	Depth (ft bls)	Total Concentration of PAHs >1000 ppm (**)	Comments
1/8/2002	AS-2	6-8	X	Trace free product
1/8/2002	AS-2	8-12	X	8 inches recovery, yellow-red product stain on liner
1/8/2002	AS-2	12-16		Trace meadow mat in core, yellow-red product stain on liner, no sample collected
1/8/2002	ASW-2	7-8	X	Free product
1/8/2002	ASW-2	8-12		
1/8/2002	ASW-2	12-16		No recovery, no sample collected
1/8/2002	ANW-2	5-6	X	Free product
1/8/2002	ANW-2	8-12		No recovery, free product in liner, no sample collected
1/8/2002	ANW-2	12-16		1 ft recovery, meadow mat only, no sample collected
1/8/2002	ASE-2	7-8	X	Trace free product
1/8/2002	ASE-2	8-12		Free Product
1/8/2002	ASE-2	12-16		3 inches recovery, meadow mat only, no sample collected
1/9/2002	AN-2	4.5-5.5	X	Free product
1/9/2002	AN-2	11-12		
1/9/2002	AN-2	12-16		4 inches recovery
1/9/2002	SB7-S2	4-6		
1/9/2002	SB7-S2	8-12		No recovery, no sample collected
1/9/2002	SB7-S2	12-16		8 inches recovery, meadow mat only, no sample collected
1/9/2002	SB7-N2	4-5		Refusal at 5 ft bls, 3 attempts made, wood observed in core at 5 ft bls
1/10/2002	BS-2			Meadow mat at 4 ft bls, no sample collected
1/10/2002	BW-2	7-8	X	Free product
1/10/2002	BW-2	8-8.5		Refusal at 5.5 ft and 8.5 ft bls, trace free product
1/10/2002	BNW-2	6-8	X	Free product
1/10/2002	BNW-2	8-12	X	Free product
1/10/2002	BNW-2	12-13	X	Free product
1/11/2002	BNE-E-2	6-7		
1/11/2002	BNE-E-2	8-10		Meadow mat at approximately 10 ft bls, trace product above meadow mat
1/11/2002	CW-2	4-7.5		Bricks and free product only, no sample collected
1/15/2002	CW-2	12-12.5		Meadow mat at 12.5 ft bls
1/16/2002	CN-2	6-8	X	Sludge sample, refusal at 8 ft bls
1/17/2002	CNW-2	6-7.5		Refusal at 7.5 ft bls, free product, sample not analyzed
1/17/2002	CB-1	6-8	X	Free product
1/21/2002	CB-1	10.5-11.5		Meadow mat at 11.5 ft bls
1/17/2002	CN-2A	5-6	X	Free product
1/17/2002	CN-2A	11-12		Trace free product
1/17/2002	CN-2A	12-14	X	Free product
1/21/2002	AN-3	5-6	X	
1/21/2002	AN-3	8-9		
1/21/2002	AN-3	14-15	X	
1/21/2002	ANE-3	4.5-6	X	Trace free product
1/21/2002	ANE-3	8-12		
1/21/2002	ANE-3	14-15		
1/22/2002	DS-2	6-8		Trace free product
1/22/2002	DS-2	8-12		
1/22/2002	DS-2	12-16		
1/22/2002	CNE-2A	7-8		Free product, sample not analyzed
1/22/2002	CNE-2A	9-10		Free product, sample not analyzed
1/22/2002	CNE-2A	14-15		Free product, sample not analyzed
1/22/2002	CNE-3	7-8	X	Trace free product
1/22/2002	CNE-3	8-10	X	Trace free product
1/22/2002	CNE-3	15-16	X	Free product
1/22/2002	CNW-2A	6-8		Free product, sample not analyzed
1/22/2002	CNW-2A	9-11		Free product, sample not analyzed
1/22/2002	CNW-2A	12-14		Free product, sample not analyzed
1/23/2002	CNW-3	6-7		
1/23/2002	CNW-3	9-10	X	Trace free product
1/23/2002	CNW-3	12-16	X	Free product
1/23/2002	DN-2	6-8		Trace free product
1/23/2002	DN-2	8-9		Trace free product
1/23/2002	DN-2	12-14		Trace free product
1/23/2002	SB-15-SW	6-7		Trace free product
1/23/2002	SB-15-SW	8-12		
1/23/2002	SB-15-SW	15-16	X	Free product
1/23/2002	CN-3	6-7		
1/23/2002	CN-3	8-12		
1/23/2002	CN-3	12-16	X	Free product

ft bls – Feet Below Land Surface
PAHs – Polycyclic Aromatic Hydrocarbons
ppm – Parts Per Million
(**) – Blank box indicates total concentration of PAHs less than 1,000 ppm; samples were collected for laboratory analysis from each interval unless noted.

LEGEND

- AS1(SB-1) – SOIL BORING LOCATION AND DESIGNATION
  - ROUX ASSOCIATES DESIGNATION
  - AKRF DESIGNATION
- 2 – PREVIOUS RI SOIL SAMPLE LOCATION AND DESIGNATION (where PAHs were detected at >1,000 PPM)
- 26 – PREVIOUS RI SOIL SAMPLE LOCATION AND DESIGNATION
- 38 – PREVIOUS RI SOIL SAMPLE LOCATION AND DESIGNATION (Potential hot spot identified by NYSDEC in comments on 12/5/01 work plan)
- TOTAL PAH CONCENTRATION GREATER THAN 1,000 PPM
- TOTAL PAH CONCENTRATION LESS THAN 1,000 PPM
- TOTAL PAH CONCENTRATION LESS THAN 1,000 PPM (BORING NOT COMPLETED)
- BORING COMPLETED, MEADOW MAT AT 4FT BLS (NO SAMPLE COLLECTED)
- 3 – RI BORING, TOTAL PAH CONCENTRATION LESS THAN 1,000 PPM
- (R) – REFUSAL AT RI BORING (NO GEOLOGIC LOG AVAILABLE)
- (R)* – GEOLOGIC LOG INDICATES REFUSAL AT RI BORING RANGING FROM 4FT-12FT BLS
- APPROXIMATE EXTENT OF FORMER BUILDINGS
- SITE BOUNDARY
- RI – REMEDIAL INVESTIGATION
- PPM – PARTS PER MILLION
- FT BLS – FEET BELOW LAND SURFACE
- NYSDEC – NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NOTES

1. SITE BOUNDARY OBTAINED FROM CONTROL POINT ASSOCIATES, INC., AUGUST 25, 2000, TOPOGRAPHIC SURVEY DRAWING (FILE No. C00299) INCLUDING REVISIONS DATED; 9/15/00, 11/2/00, 1/24/01, 6/19/01, 6/20/01 AND 2/1/02.
2. GASHOLDER LOCATION INFORMATION OBTAINED FROM ALTA/ACSM LAND TITLE & TOPOGRAPHIC SURVEY, AUGUST 25, 2000, PROVIDED TO ROUX ASSOCIATES, INC BY AKRF ENGINEERING, P.C. (FILE No. C0029) REVISION 1, FIELD DATE 7/31/00.
3. FORMER BUILDING FOOTPRINT LOCATIONS OBTAINED FROM AKRF ENGINEERING, P.C., HAND DRAWN ON FIGURE 3: DELINEATION SAMPLE LOCATIONS, 12/20/01 FROM THE REVISED REMEDIAL WORK PLAN, DATED DECEMBER 5, 2001, PREPARED BY AKRF ENGINEERING, P.C.
4. SOIL BORING LOCATIONS OBTAINED FROM CONTROL POINT ASSOCIATES, INC., AUGUST 25, 2000 TOPOGRAPHIC SURVEY DRAWING (FILE No. C00299), REVISED 2/1/01.

30' 0 30'

Title:

SOIL BORING LOCATIONS MARCH 25, 2002

124-126 SECOND AVENUE
BROOKLYN, NEW YORK

Prepared For:
FOREST CITY RATNER COMPANIES
BROOKLYN, NEW YORK

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: W.F.	Date: 18APR02	PLATE	
Prepared by: G.M.	Scale: AS SHOWN	1	
Project Mgr: S.G.	Office: NY		
File No: FCR0111102	Project: 92401Y02		